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Strengthening fisheries resources management through more inclusive fisheries management bodies, and economic resilience

Reflections on the Sea of Change project

KIT Royal Tropical Institute

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Colophon

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Executive summary

In Indonesia, small-scale fisheries make critical contributions to the lives and wellbeing of coastal communities, by providing incomes, and supporting food and nutrition security. However, these resources are under pressure from the use of unsustainable fishing practices, pollution and climate change. Aligned with the Indonesian decentralised fisheries governance model, the non-governmental organisation (NGO), Rare, implements its Fish Forever programme in Southeast Sulawesi in Indonesia, which aims to implement community-based fisheries management, for the benefit of the coastal communities involved, and for the long-term sustainability of marine resources. Through a project in partnership with KIT Royal Tropical Institute, and funded by the Netherlands Postcode Lottery, which ran from April 2019 to August 2022, this approach was further refined, and a gender strategy was developed. This project called “Sea of Change: improving coastal community livelihoods in Indonesia” aimed to improve the livelihoods of 5,000 fishing households across 20 communities in Indonesia’s Southeast Sulawesi province. The project aimed to: i) deliver community-based management for coastal fisheries by forming management bodies that are participatory, inclusive, equitable, accountable and transparent, and in which both men and women are able to design and implement fisheries management plans; ii) strengthen the rural economy by identifying opportunities to improve fish enterprises; and iii) build financial inclusion by promoting access to financial services, and extending the financial planning horizons and opportunities for fisher households and small businesses, by setting up savings clubs and offering financial literacy training for couples. The tailor-made gender integration approach was based on capacity development, technical assistance, and action learning and unpacked the project’s Theory of Change (ToC) from a gender perspective.

Qualitative fieldwork and a series of reflection workshops generated the findings presented in this report, which focus on the early outcomes that emerged and the major lessons learned on implementing the process. While important steps were made towards ensuring women become fully recognised participants in fisheries management decision-making processes, there were also challenges, in particular related to constraining gender norms. Both men and women were well informed about the rules around sustainable fishing

practices, and these practices were starting to be implemented. Enterprise development also started yielding results in relation to improved access to formal finance, and through improved practices with regard to product handling, could potentially lead to positive effects on fish prices and profits. There were concerns raised, however, about giving more responsibilities to already overburdened women.

The savings clubs and financial literacy trainings appear to have made the strongest impression on people, as knowledge, attitude and practice changes were pronounced with regard to financial management. They were however insufficient to fully avoid unsustainable practices associated with periods of peak demand for finances. COVID-19 restrictions posed challenges when engaging with partners and communities face-to-face. As well as limiting the group size, women were not able to self-select which groups they joined, which may have led to a lack of cohesion and conflict that was observed in some groups.

Overall, there are strong signs that a holistic approach to fisheries management that addresses inclusivity of fisheries management, and economic and financial resilience, leads to better and more sustainable results in improving fisheries resources and wellbeing in fishing communities. However, it is too early in the process to assess whether this will lead to lasting improvements to marine resources in the long term.

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1. Introduction

Small-scale fisheries make critical contributions to the lives and wellbeing of coastal communities around the globe, by providing incomes, and supporting food and nutrition security (HLPE, 2014; Béné et al., 2016). In Indonesia, it has been estimated that in 2016 almost 1 million households were engaged in capture fisheries (Stacey et al., 2021), and that in 2018 almost one third of Indonesia's total marine fisheries production of 6.7 million tonnes was contributed by small-scale fisheries (Fabinyi et al., 2022). At the same time, a disproportionately large share of fishing households are considered to be among Indonesia's poor (Stacey et al., 2021). The coastal resources they depend on are affected by overfishing, climate change and other pressures.

To manage small-scale fisheries, Indonesia has decentralised fisheries governance and has introduced spatial zones exclusive for small-scale fishers (Fabinyi et al., 2022). Territorial use rights for fishing coupled with no-take marine reserves (Territorial Use Rights for Fisheries (TURF) reserves) are being introduced to enhance the management of these resources (Afflerbach et al., 2014). This is a community rights-based fisheries management approach that provides coastal communities with exclusive access privileges for fishing in defined areas. Even though this approach is being implemented in many countries around the globe, major challenges remain, including communities' limited capacities to implement community-based fisheries and exercise their fishery rights (Lieng et al., 2018) and the potential of it leading to exacerbated power imbalances and elite capture (Béné et al., 2009). Community-based fisheries management processes may also inadvertently exclude or marginalise women from decision-making and even from the resources they are trying to manage (Kleiber et al., 2015). Finally, because community-based fisheries management will only generate potential benefits in the long term, social norm-based interventions are needed for behaviours to be changed and maintained in the short term, until such benefits start to manifest (McDonald et al., 2020).

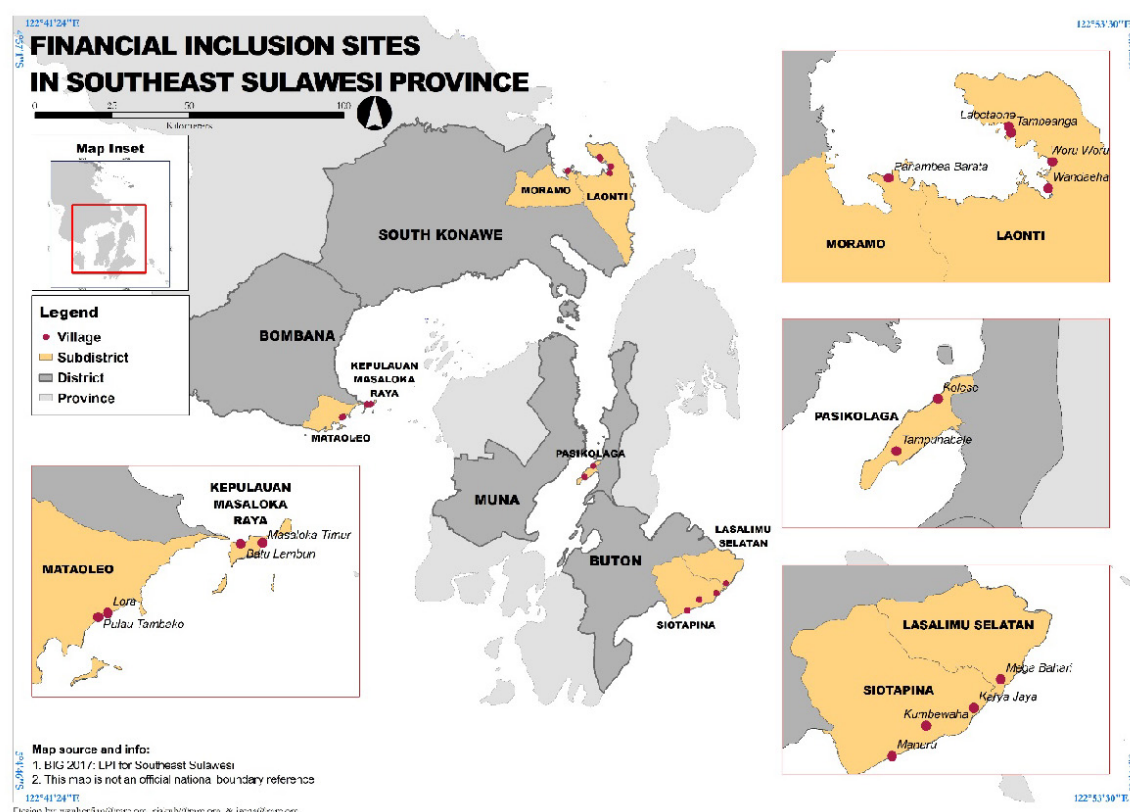
The NGO Rare implements the Fish Forever programme, which has proposed a holistic approach to community-based fisheries management that builds inclusive fisheries management bodies (FMBs) and economic resilience, and targets behavioural change. The ultimate goal is to successfully implement community-based fisheries management, for the benefit of the coastal communities involved, and for the long-term sustainability of the marine resources. Through a project in partnership with KIT Royal Tropical Institute, and funded by the Netherlands Postcode Lottery, this approach was further refined, and in particular a gender strategy was developed. The project "Sea of Change: improving coastal community livelihoods in Indonesia" aimed to improve the livelihoods of 5,000 fishing households across 20 communities in Indonesia's Southeast Sulawesi province¹. The project was implemented in four areas in Southeast Sulawesi² (Figure 1), and later on, in March 2022 expanded to three other areas³.

1 The project ran from April 2019 until March 2022, with an extension until September 2022, due to delays caused by the COVID-19 pandemic.

2 The four areas were a combination of sub-districts that share marine resources areas and therefore are part of the same fisheries management plan: Mataoleo and Kepulauan Masaloka Raya; Moramo Bay and Laonti; Pasikolaga and Pasir Putih; and Siotapina and Lasalimu Selatan.

3 Siompu-South Buton, Maginti-Muna, and Kapontori-Buton. This report does not cover this work.

Figure 1. Map of Southeast Sulawesi showing regencies, sub-districts and villages where financial inclusion strategies were implemented



Source: Rare

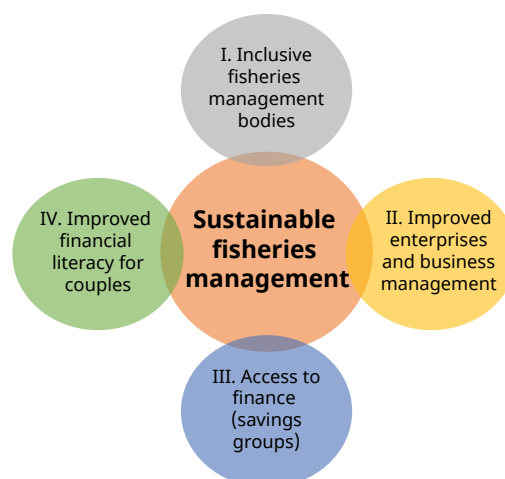
The specific goal of the Sea of Change project was to develop community-based management, financial inclusion, and enterprises while improving gender equity across 20 fishing communities in Indonesia. This project intended to serve as a model for the region in effectively connecting poverty alleviation with community-based natural resource management.

The project had the following objectives, captured in Figure 2:

1. Delivering community-based management for coastal fisheries by forming management bodies that are inclusively facilitated, are participatory, inclusive, equitable, accountable and transparent, and in which both men and women are able to design and implement fisheries management plans.
2. Strengthening the rural economy by identifying opportunities to improve fish enterprises, reduce postharvest losses, and improve household, micro, and small business management through training and the OurFish app to record financial and fisheries data.
3. Building financial inclusion by promoting access to financial services and extending the financial planning horizons and opportunities for fisher

households and small businesses by setting up savings clubs and through financial literacy training for couples.

Figure 2. Holistic and inclusive fisheries management approach



This learning report describes the processes involved in implementing this approach, and the results obtained until May 2022, just before the closure of the project. Section 2 describes the approach of the project and its activities. Section 3 presents the major findings by outcome area, with a summary of the outcomes achieved on the ToC at the end. Subsequently, Section 4 provides some conclusions and major lessons learned in the process.

2. Project approach, activities and Theory of Change

2.1 The Sea of Change project approach at community level

2.1.1 Gender integration in fisheries management

One of the key pillars of the wider Fish Forever programme is the setting up of community-based fisheries management bodies (FMBs) that are facilitated to provide inputs into fisheries management plans. These plans include the establishment of a network of marine protected areas and managed access to fisheries. An important component of the Sea of Change project was to improve gender equity in these processes by supporting greater visibility for women's contributions in Indonesia's small-scale fishing communities, and by ensuring their inclusion in FMBs and the formulation and eventual implementation of fisheries management plans.

The gender integration approach in this project, was based on a tailor-made approach developed by KIT Royal Tropical Institute, which takes the needs of a project as its starting point. In the approach, project partners' gender perspective and engagement is deepened and expanded, through capacity strengthening, technical assistance, and action learning. The tailor-made training applied in the Sea of Change project, unpacked the project's ToC from a gender perspective and tried to make key gender concepts relevant and meaningful to Rare.

The gender integration aim was to mainstream gender approaches into programme design, delivery, and monitoring. The desired result was to create a shift in the attitudes and behaviours of fishermen and fisherwomen, community members, and local and regional authorities so that:

1) both fishermen, fisherwomen as well as other community members involved in the fish value chain are able to sustainably manage their natural and financial resources; and 2) women's role is recognised, strengthened, and valued. To achieve that

goal, firstly, the knowledge, attitudes and practices of Rare and its implementing partners needed to become more gender aware.

2.1.2 Enterprise development

A second component of the Sea of Change project was enterprise development, which was targeted at both men and women fish buyers and processors and included the targeting of individuals and couples as business partners, where this was appropriate. The approach consisted of a number of elements:

- Technical support for businesses: coaching and mentoring, access to cost-effective technologies, technical training, and quality standards.
- Access to markets: market information and bargaining power.
- Capacity building on financial management and entrepreneurial skills (book keeping, accounting and business management skills), business planning (business plan, feasibility plan).
- Access to finance: through savings groups and making linkages to formal finance (see next section 2.1.3 Savings and lending clubs).
- Inclusion of women: creating an enabling environment for women (decision-making power) (see sections 2.1.3 Savings and lending clubs and Section 2.1.4 Financial literacy).

Technical support was provided to fish buyers, through two trainings on the following topics:

- Ecosystem-based Adaptation (EbA) principles, which is the use of biodiversity and ecosystem services to support communities to adapt to life in a less predictable climate system⁴.
- Hygienic and improved fish production practices, aimed at improving product quality. This included, among others, cleaning, gutting and handling practices as well as the use of ice.
- Business Model Canvas which is a strategic management template that helps businesses to describe, design and analyse their business models⁵.
- Business formalisation by assisting entrepreneurs

⁴ <https://www.sanbi.org/biodiversity/science-into-policy-action/mainstreaming-biodiversity/what-is-ecosystem-based-adaptation/>

⁵ <https://interaction.net.au/articles/business-model-canvas-template/#:~:text=The%20canvas%20was%20invented%20by,Pigneur%2C%20a%20Belgian%20computer%20scientist.>

to complete the online (governmental) registration forms, and printing their business licenses.

- Using WhatsApp and social media for marketing, which introduced fish buyers to these platforms for marketing, linking them to larger buyers, thereby also improving their bargaining power (by having more options to sell).
- Using the OurFish app⁶ for financial management. OurFish is an app designed by Rare, initially to record catches, and later expanded on to register costs and revenues associated with the fish business.
- Financial planning: fish buyers were taught how to separate business and household expenses and how to do financial planning based on a financial diary (similar to general financial literacy trainings). Fish buyers were also provided with information on the financial services on offer from formal financial institutions.

In addition to the trainings, one-on-one coaching was provided by Rare staff over the phone.

2.1.3 Savings and lending clubs (Fish Forever Savings Clubs)

Finance becomes (more) inclusive when it enables a beneficiary, such as a family, a young entrepreneur, or a larger firm to access a suite of relevant and affordable services and products, which respond to their specific needs. These products or services can be financial (e.g., credit, cashless payment systems, insurance, or transaction management), or non-financial (e.g., training, legal or accounting aid or business launch support). In the Sea of Change project, savings and lending clubs (referred to as Fish Forever Savings Clubs, or FFSCs) were established to enhance community-based informal financial services, and to potentially increase future demand for formal financial services. In addition, the savings clubs were linked to the FMBs, to promote investments by savings clubs in conservation activities, and at the same time increase their influence on fisheries management.

Savings and lending clubs are small group of 15-25 people, who make the decision to save together and take small loans from those savings for their day-to-day and small business needs. The purpose of a savings club is to provide simple savings and loan facilities in a community that does not have easy

access to formal financial services. The activities of the group run in cycles of 9-12 months based on agreement by members, after which the accumulated savings and the loan profits are distributed back to members.

The process involves community sensitisation on the savings clubs' objectives and activities, and supporting interested community members to form groups together with those that they trust. The groups are then provided with training over the first cycle, during which the group learns to self-manage.

The implicit assumption was that in the Sea of Change project, women in particular would benefit from these savings clubs, as generally women form the majority of members. A value chain analysis conducted by the project (Kwilasa et al., 2021) showed that in Southeast Sulawesi it is mainly the women who are in charge of financial management in their households. The study also showed that they did not always keep clear records of their finances and had poor access to finance. Through the savings clubs they were expected to gain access to capacity development on savings and financial management, and to informal finance, and to build their confidence. In other fisheries contexts, savings clubs have been found to have the potential to increase women's self-efficacy, and increase their voice in household and community decision-making (Cohen et al., 2016).

The process often requires extensive face-to face interactions, especially at the very beginning of the clubs' formation. In the Sea of Change project, this was challenging, given that the process of group formation was scheduled to start in April 2020, which was at the height of the restrictions in relation to the COVID-19 pandemic. As a result, the team had to make adjustments to the traditional formation process, which has been documented in Annex 1.

⁶ <https://portal.rare.org/en/program-resources/ourfish/>

2.1.4 Financial literacy training for couples

In addition to the savings and lending clubs, financial literacy was identified as an important tool to increase communities' economic resilience. A value chain and financial inclusion analysis, conducted by the project (see Section 2.2) confirmed a gap in financial skills, particularly in relation to calculating and budgeting expenses, record keeping, separating household and business income and expenses, and calculation of profits (Kwilasa et al., 2021). Women in Southeast Sulawesi play a key role in managing day-to-day household expenses as "household treasurers" (Kwilasa et al., 2021). It was noted that when trainings have been done in the past, it is mainly men that get invited to participate, given their more prominent role as fishers. The role that women play has not always been recognised, often to the detriment of the household business.

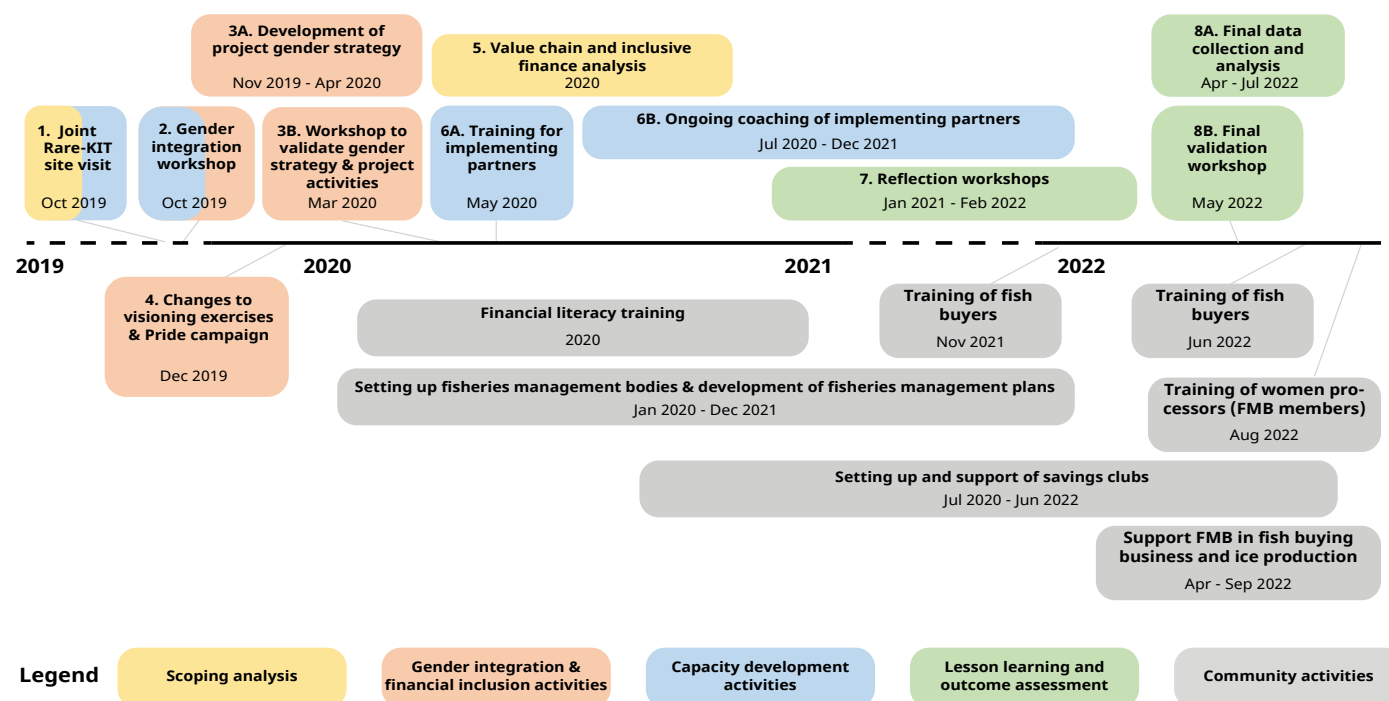
To address this issue, the project tested a model where both men and women managing fisheries businesses (as buyers or processors) were invited to financial literacy training and encouraged to make decisions jointly on their business and household expenses. Additionally, general community level training on financial literacy was initially rolled out to community members via mobile phones, because of COVID-19 restrictions; from October 2020 this was done in person. More on how these adjustments were made can be found in Annex 1. Furthermore, local champions were trained to become mediators in the village, who also were trained to provide financial literacy training in the community.



2.2 Activities

To implement the approach described, Rare and KIT jointly developed a process to integrate gender, and include inclusive finance and enterprise development throughout the Fish Forever programme in Indonesia. This consisted of eight main steps (Figure 3).

Figure 3. Timeline of gender integration, capacity development, and learning activities of the Sea of Change project



1. Joint site visit (October 2019)

In October 2019, the Rare and KIT teams jointly visited four villages in two sub-districts⁷ in Southeast Sulawesi. The community visit aimed to gain an understanding of local women's involvement in the small-scale fisheries sector, and the potential to foster change in their communities. It also aimed to gain a better understanding of the gender capacity development needs among Rare staff. The community visit comprised mainly of meetings with groups of women and men involved in fishing, fish processing and fish buying, and existing FMBs. In addition, informal interviews were held with key Rare staff, relevant implementing partners, and beneficiaries on the Rare approach, understandings of gender, issues related to the value chain and financial inclusion, and views on how gender can be addressed within the project. As an outcome of the community visit, Rare staff indicated that they had gained a better understanding of small-scale fisheries actors and the roles that women have within the value chain, how households work as a team, and the inclusive facilitation methods that were used during the group meetings.

2. Gender integration workshop (October 2019)

Immediately following the site visit, a gender integration workshop was held in Kendari, with stakeholders from the Marine Affairs and Fisheries Office, the Community and Village Empowerment Office, the Cooperative and SMEs Office, universities, and Rare staff. The purpose of this workshop was two-fold:

1. to introduce gender concepts, start a capacity development trajectory and foster enthusiasm for gender integration; and
2. to collect inputs on the key entry points to operationalise the gender strategy, to inform the work-plan for the gender strategy development process, and identify what was expected from the different team members to integrate gender.

Approaches and tools used during this workshop are presented in Box 1.

⁷ Rumba Rumba, Wandaoha and Ranooha Raya in Laonti sub-district, and Panambea Barata in Moramo sub-district. These two sub-districts are part of the same fisheries management plan.

Box 1. Approaches used during the gender integration workshop

Power walk exercise to highlight and raise awareness of structural differences brought about by gender and other factors such as age, location, and income. Participants become more aware of the real and perceived limitations and opportunities as they are given a chance to 'walk in the shoes of' a fictional character who may have more or less power in relation to the fisheries sector.

Introduction of **key gender concepts** such as the difference between sex and gender, gender relations, intersectionality, and the analytical concepts of gender division of labour, access and control over resources, decision making power, and gender and social norms (see McDougall et al., 2021).

The project's **Theory of Change** was discussed and adapted to identify and tackle the gaps in the integration of gender considerations and make assumptions more explicit. The key gender concepts (above), were applied in the process.

The **Reach, Benefit, Empower and Transform (RBET) framework** was introduced, which provides more clarity about the types of gender outcomes that are targeted by a project. These are the specific gender results aimed for, of which four types can be distinguished. The first three are related to changes for individuals, and the fourth to changes in society (systems or structures). The framework can also be used to formulate appropriate monitoring and evaluation indicators (see McDougall et al., 2021).

The **steps of participation** were introduced, which is based on work from WorldFish. It is a tool that helps differentiate between different levels of participation, to move away from the pitfall of assuming that attending a meeting is the same as having influence on decision making processes, which means focussing on the quality, instead of the quantity of participation. There are six steps: Attending, Understanding, Sharing, Being valued, Being involved in decision-making, and Accountability (see Kleiber et al., 2019).

3. Development of a gender strategy (November 2019 – April 2020)

With the inputs from the gender integration workshop, and the insights gained during the site visit, a gender strategy was developed for the project. This consisted of four key gender building blocks and concrete guidance on gender integration efforts in each of the four dimensions of the ToC (FMBs, enterprise development, savings groups, and financial literacy). This gender strategy was validated in an online workshop in March 2020 between the Rare and KIT teams.

4. Changes to the visioning exercises and Pride campaign (December 2019)

From the Fish Forever programme, Rare had material that was normally used to kick off the process of developing fisheries management plans, and for the behavioural change campaign to promote sustainable fishing practices (called 'Pride campaign'). These materials were adapted to make them more gender inclusive. These changes mainly related to the processes of inviting people and facilitating the fisheries management meetings (using the work developed by Kleiber et al., 2019), as well as to include the role of women in the visual materials for the Pride campaign, which had no women in their original form.

5. Value chain and inclusive finance analysis (2020)

To better understand the situation in the communities, the project conducted an analysis of existing practices with regard to finance and fish-related enterprises. The study, which was conducted in January – March 2020, grouped the findings into three categories:

1. the current practices and needs with regard to fish enterprises;
2. gaps in financial inclusion; and
3. issues and opportunities related to gender equity.

Data collection consisted of focus group discussions (FGDs) and semi-structured interviews in 15 villages among fishers, fish processors and fish buyers. The report yielded recommendations for project implementation in the three categories.

6. Training and coaching of implementing partners (May 2020)

Rare staff provided training and coaching to the site implementing partners on gender concepts and tools to improve gender integration, and trained local facilitators to set up and manage savings clubs. During implementation, this was followed up by coaching through regular phone calls.

7. Reflection workshops (January 2021 – February 2022)

Throughout 2021, seven workshops were organised, involving the KIT team and Rare staff. The first was intended to formulate an agreed list of outputs to be developed from the learning, and to plan reflection workshops (involving the same people). Subsequently, six reflection sessions were organised, alternating the themes of FMBs, financial inclusion and enterprise development, resulting in two reflections per theme. Different approaches were used to document learning including the use of MURAL guided by reflection questions such as ‘what happened?’, ‘why did it happen?’, ‘what are the implications?’, and ‘what action will we take?’. The reflections were used directly in the implementation of the project, and contributed to this report.

8. Final data collection, analysis and validation (April – July 2022)

Finally, data was collected among Rare staff, implementing partners, and in communities to collect (early) evidence on whether and to what degree the goals of the project at different levels were being achieved (according to the ToC). The main purpose was to document lessons learned that could be used for scaling this approach to other programmes, and that aimed to effectively connect poverty alleviation with community-based natural resource management.

The assessment was based on a qualitative approach that assessed a set of indicators for outcomes of the ToC at different levels, triangulated with other data sources, such as data from project surveys and the savings groups. Data collection took place through a combination of semi-structured key informant interviews (KIIs) (some face-to-face, some by phone) and FGDs, with different target groups (Table 1). The tools were developed in English based on the ToC and were then translated into Bahasa Indonesia by two local consultants who implemented data collection, and they were pre-tested with some of Rare's local facilitators to ensure that the questions were understandable.

To make data collection feasible, two out of four sites were selected for data collection, namely Mataleo, and Siotapina/Lasalimu Selatan. Respondents were selected from five different groups of actors: Rare staff, district fisheries officers, FMB executive committee members (women and men), fishers, processors, and buyers (women and men), and saving group members (women and men if available). A total of 17 FGDs and KIIs were conducted in the communities with a total of 48 participants (of which 58% were women), and ten interviews were carried out with Rare staff, and six more with implementing partners.

The interviews were transcribed and translated from Bahasa Indonesia into English. A first analysis of the qualitative data was conducted, based on a combined deductive and inductive approach, based on the ToC of the project, and the identified indicators (Figure 2), as well as an open analysis of any other themes that emerged. Responses from different respondent types, and across sites were also compared and contrasted. The initial analysis was presented to the Rare team for joint interpretation of the main findings.

Table 1. Overview of number of FGDs/KIIs and respondents at community level*

Site	FMB executive committee FGD		FMB members FGD		FFSC members - active FGD		FFSC members - closed KII		Fish buyers KII	
	W	M	W	M	W	M	W	M	W	M
Site 1	1 (2)	-		1 (2)	1 (5)	-	2 (2)	-	-	2 (2)
Site 2	1 (4)	1 (5)	2 (9)	2 (10)	1 (4)**	1 (1)**	1 (1)	-	1 (1)	-
Total	2 (6)	1 (5)	2 (9)	3 (12)	2 (9)	1 (1)	3 (3)	-	1 (1)	2(2)

Notes: * The numbers indicated are the number of interview activities (either FGDs or KIIs), the number in brackets is the number of participants. **Same FGD.

2.3 Theory of Change

The project strategy consisted of five components and aimed to develop the capacities of Rare staff and implementing partners for inclusive facilitation methods, enhance the appreciation of women's roles in fisheries, and ensure women are fully included in the executive committees of FMBs and as members. This should in turn lead to women's concerns being accounted for in the design and implementation of fisheries management plans, and to community members adopting sustainable fishing practices and monitoring of fisheries resources.

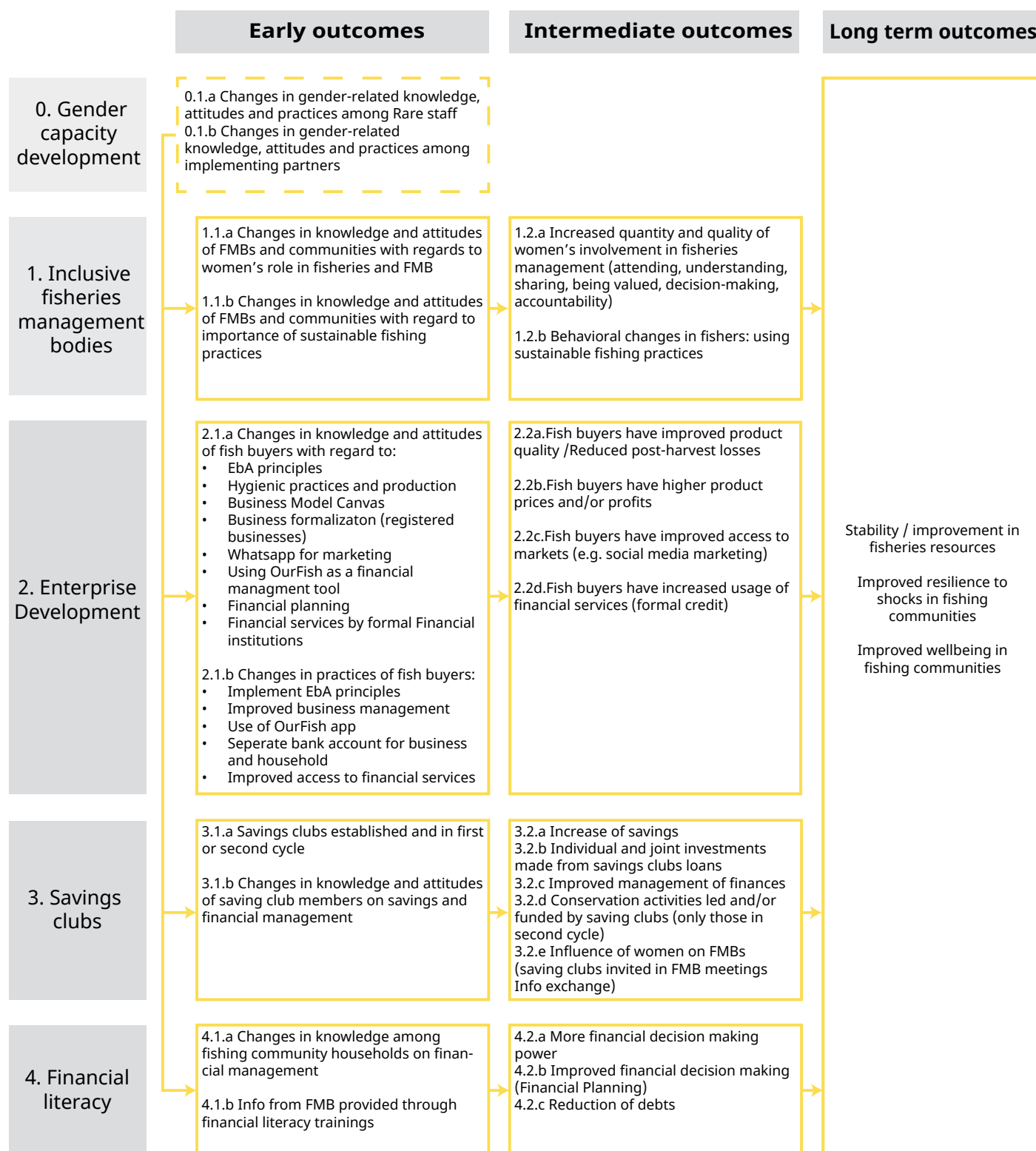
Fish buyers were trained on business and financial management practices, and supported to formalise their businesses. This should eventually lead to improved product quality, increased profits, improved access to markets and increased usage of formal financial services.

Furthermore, savings and lending groups were set up with a majority of women members, to enhance their access to finance and financial decision-making. Linkages were also intended to emerge between the savings clubs and the FMBs, including investments in conservation activities by the savings clubs.

Finally, both men and women from the same household (couples) were trained on financial literacy and business management, which should lead to more knowledge on these topics, and eventually improved financial decision-making, and reduction of debts. The ultimate goal of the project was to achieve stability or improvement in fisheries resources, and improved resilience to shocks and wellbeing in fishing communities.



Figure 4. Sea of Change project ToC



3 Outcomes

3.1 Gender Capacity Development

The gender capacity development (training and coaching) aimed to achieve changes in knowledge, attitudes and practices among Rare staff and implementing partners, to enable them to implement more inclusive processes to set up FMBs, and develop fisheries management plans, as well as implement the Pride campaign that aims to promote more sustainable fishing practices. In addition, this knowledge and these attitudes and practices were intended to be applied in the other three components of the project.

3.1.1 Rare staff

Ten of Rare's staff in different roles in the Fish Forever programme in general, and the Sea of Change project specifically, were interviewed about what they had learnt from their gender capacity training, and their perceptions about whether or not outcomes at different levels (of the ToC) were emerging. This included selected staff at Rare Indonesia's central office, those in the Southeast Sulawesi office in Kendari, and facilitators at community level.

First, Rare staff were questioned about their own changes in knowledge and attitudes around gender. There were a number of recurring learnings. Firstly, there were learnings around the diverse roles of women in fisheries. Secondly, a recognition developed that fish species that are important for processing or household consumption (connected to women's roles) also need to be protected. Thirdly, that it is important to provide the same information to men and women, and not assume that women will receive information from their husbands. Finally, there was a realisation that gender integration could be implemented throughout the whole project, and not just in the financial inclusion component. One Rare staff member also observed that men may feel that challenging existing roles and decision-making patterns puts pressure on them.

"Previously, I thought that the roles of men and women were compartmentalised, perhaps because of the influence of family upbringing. After the gender training activity, my perspective changed because everyone (man and woman) has the capacity and can complement each other." (KII, male, Rare staff member)

Secondly, Rare staff were asked about the implications that these learnings or changes in their own attitudes had for how activities in the Sea of Change project were implemented. This included having a clearer framework and a more deliberate and systematic approach to gender (e.g. media/Pride campaign materials, showing men and women, rather than just men). Many Rare staff also listed implications with regard to how meetings and trainings were conducted, and to who was invited.

Examples included giving more explicit attention to the gender balance in meetings, providing explicit invitations to women for meetings, accommodating women's responsibilities and schedules by inviting couples and ensuring that children can also attend and are taken care of, and adjusting meeting hours. Women's capacity was also built to attend meetings, for example by organising smaller group discussions to help women speak up more, and ensuring that their opinions are valued more. Rare staff also recognised the key role of the site implementing partners in promoting change in the communities. Rare staff therefore added a new element in the work with their partners to create a change in their mind set by providing training and coaching on gender integration.

Finally, there was a recognition that there are also structural gender barriers to women outside the control of the project. One example is that the occupation on women's identity cards is generally indicated as housewife, which does not recognise their roles in fisheries businesses. Finally, Rare staff also indicated that they now collect gender-disaggregated data, which now allows them to understand and monitor gender-based differences in relation to the use of fisheries resources and being involved in fisheries management, where they were hidden before.

The biggest challenges that Rare staff observed related to gender integration in the Sea of Change project. The difficulty of challenging long-held gender norms and attitudes, in particular among older implementing partners, and village leaders, was a hurdle. There is a realisation by Rare staff that such changes take time and that the short timeline of the project was not sufficient to fully achieve a change in attitude. In particular, younger Rare staff sometimes felt that they were not being taken seriously when trying to question the behaviours of older partners or community members towards women, and that they lacked the confidence to discuss (contentious) gender issues in the community in particular.

Another challenge, commonly faced by such programmes, is institutional in nature, and relates to staff retention among implementing partners. When staff leave, any capacity that has been built through the programme also leaves. Yet, the benefit is that these staff members will take their capacities with them to other positions they may fill and therefore gender capacity is not lost entirely. During the Sea of Change project, new implementing partners were also trained, however gender training was not institutionalised by the District Fisheries Office, and therefore such efforts will not continue beyond the life-time of the project.

Beyond the Sea of Change project, Rare also made changes in how it operates in other projects. The NGO conducted gender training for all Rare Indonesia staff, and at the global level Rare adopted gender guidelines. Internally, Rare developed more women supportive policies and more flexibility for both women and men staff members to take care of reproductive and care tasks. There is also more self-reflection on gender bias. The Rare Indonesia team sees themselves as “gender ambassadors”. As a result, there is more appreciation of different kinds of skills within the team (e.g., for community engagement), there are more interactions with the opposite sex as part of the work (in particular in communities), and as one Rare staff phrased it they have “become more curious about women’s data”. When developing new activities, a gender-lens is being applied, and gender integration practices have been rolled out to other parts of Rare’s programme (e.g. in Papua New Guinea), including with partners involved there.

3.1.2 Implementing partners

Similar questions were asked to the implementing partners (district fisheries officers). Among the six district fisheries officers interviewed, more recognition was observed of the importance of involving women in fisheries management processes, and a recognition of women’s roles in fisheries, and women’s rights in general. At a practical level, most implementing partners indicated that they have changed who they invite to meetings (including couples, and their children), to change meeting times and the venue to accommodate women’s schedules and preferences, as informal venues were seen to be more accommodating to women. Similar to Rare staff, they also highlighted the importance of mobilising and engaging with local gender champions.

In particular, implementing partners made changes in how they interacted with people, paying more attention to the social aspects of their work, such as the type of facilitation techniques to use and to visit individual households directly before organising a meeting. The challenges they faced also mainly included issues related to creating social change, such as barriers related to people’s low level of education, and language skills. They observed that attendance of women to meetings was not consistent, that persistent gender norms among religious leaders, husbands, and in the community were difficult to challenge, and that such changes take time, just as it also takes time to build the confidence of women and change their mind sets about themselves.



3.2 Inclusive fisheries management bodies

The logic of the project's ToC was that by making men and women more aware of women's roles in fisheries, and by ensuring that FMBs are more inclusive to women, women's voices would be heard, valued and taken into account in fisheries management. In turn, this should lead to their concerns being taken into account in the fisheries management plan. This should result in more sustainable fishing and environmental practices among both women and men and neither gender being excluded from the use of fisheries resources. To understand if, and to what extent, these outcomes emerged, data from communities (specifically the FGDs with FMB executive committees, FMB members, and fish buyers) were triangulated with responses from Rare and the implementing partners.

3.2.1 Women's roles in fisheries

The male FMB executive committee and the male FMB members provided similar answers about women's roles in fisheries. Women are now seen to have a role in fisheries that is valued by supporting their husbands fishing trips (e.g., by preparing food and ice), doing postharvest processing of fish (mainly salting), and by marketing the fish.

"The role of women is very important because they help their husbands, especially when men are tired after returning from the sea. [If] the wife does not prepare food or the fishing equipment before fishing, the fishing activity won't succeed. [...] If we are not supported by our wives, we will return empty handed. The women also manage the fish catch for selling. Now they have a group where they invite other women to process fish." (FGD, male, FMB members, Megabahari)

However, when women (both executive committee and members) were asked about changes in their knowledge and attitudes about women's roles in fisheries, they tended to provide responses related to changes created by the project, in particular around financial literacy and the savings clubs, and not in how they view their own roles in fisheries. As women were already aware of their own roles, this finding seems to indicate a change of perception among men in particular.

Participation of women in fishing varies across sites. In some areas women FGD respondents indicated that their roles in fishing were restricted by household responsibilities, while other women FGDs indicated they do go out to fish, in particular those of the Bajau people (boat dwelling people).



"Women are strong here especially in the coastal community. I think coastal communities don't differentiate between gender. There are even grannies who are still going to the sea for fishing by themselves, so we here are already respected, we are often asked for our opinion." (FGD, female, FMB executive committee, Lora)

"No, it is the men who went to Kendari. [...] No women came to the meetings. [...] For meetings, men are often contacted from the sub-district to attend but we were not informed even though our names are on the invitation letter. It seems that I was replaced by a man from the village, chosen by the village and the programme was not informed, nor was I informed that I was replaced by a man." (FGD, female, FMB member, Kumbewaha)

3.2.2 Women's participation in fisheries management (bodies)

Project data show that, overall, **31% of FMB members are women** (ranging between 20 and 43%). This only drops slightly to 30% when excluding the executive committee (Table 2). The qualitative data suggest, however, that these findings conceal some fundamental issues in the participation of women in some FMBs. Women members reported (and women from the executive committees confirmed) that they could not attend meetings because they were not informed, or because the timing of the meetings conflicted with their other responsibilities. In one site, initial issues were also raised around the motivation of women to attend meetings, driven by the transport allowance being provided, rather than an intrinsic motivation to participate in fisheries management.

This is different for the women that are part of the executive committees, who did report that they regularly attend the fisheries management meetings. According to Rare staff, village leaders in some communities have started recognising women's roles in fisheries and fisheries management, but in other communities they have not. A story was shared of a new village leader being elected who was less supportive of women's roles than his predecessor. This indicates the *challenges of genuinely embedding such changes*.

"The previous village head is open minded about women's roles. I think it is different now with the newly elected village head. Judging from his wife responses when we visited their house, I think this village head thinks that women only do home chores." (KII, Rare staff member)

Table 2. Men and women in FMBs as members and executive committees

Sub district	FMB members (incl. committee)					FMB executive committee					Women's role in FMB executive committee
	men		women		Total	men		women		total	
	N	%	N	%		N	%	N	%		
Moramo/ Laonti	24	75%	8	25%	32	6	75%	2	25%	8	Treasurer; Coordinator women's empowerment
Kepulauan Masaloka Raya/ Mataoleo	24	80%	6	20%	30	6	67%	3	33%	9	Treasure; Coordinator women's empowerment: Coordinator logistics and administration
Siotapina/ Lisalimu Salatan	17	57%	13	43%	30	4	57%	3	43%	7	Treasurer; Coordinator business; Coordinator community outreach
Pasi Kolaga/ Pasir Putih	32	67%	16	33%	48	6	67 %	3	33%	9	Treasurer; Coordinator business development; Coordinator fisheries management
Total	97	69%	43	31%	140	22	67%	14	33%	33	

Source: Project data, Sea of Change project, 2022.

Among the **FMB executive committees**, 33% are women (ranging between 25 and 43%) (Table 2). Women are mostly given specific types of roles, such as treasurer, coordinator women's empowerment, or coordinator business development, of which in particular the first two are considered more traditional roles for women. Some Rare staff were of the opinion that, while it is progress that women are included in the executive committee (whereas in the past their role may have been restricted to doing the catering), and their voices are heard, their role is mostly still confined to the more traditional women's roles, and is not that influential (yet).

"The involvement of women in FMB executive committees must be maximised. Women are not influential yet. The existence of the women empowerment division in FMB, the purpose and goal must be replicated, the role is still not much.

There is change but still, not much; they are currently more aware that they need to have a role in the executive committee." (KII, female, Rare staff member)

With respect to the **quality of people's participation in the FMBs**, a household survey conducted in 2021, among 2,025 fishing households across sites, showed no evidence of gender gaps between men and women in understanding and sharing of information in FMB meetings, and a feeling that everyone's opinions were being considered. About 60% of both men and women reported that they never, rarely or only sometimes understood the information provided in meetings, and more than 75% reported that they never, rarely or only sometimes shared their opinions in meetings. About 40% of men and women felt strongly or very strongly that their opinions and concerns were being considered during FMB decision-making processes (Rare, 2021). These findings suggest that not only women, but also men, face difficulties in understanding the information being presented, and making themselves heard in fisheries management processes.

The women that are part of the executive committees reported feeling valued in their roles, and now being more socially connected, or being sought after by other women to respond to questions.



"We observe many differences after the [Sea of Change project]. Before, if we talked with men especially in a village like this, there were many rules. But now, after there was FMB, we share the same vision and mission so we feel equal. As long as we can maintain our good manners. With regard to our opinion, men can respect us, and we also ask their opinion. Before gender activities in [the project], men respected women less." (FGD, female, executive committee member, Lora)

These findings were enriched by the perspectives of Rare and its implementing partners. Rare staff and partners highlighted how gender mainstreaming and addressing gender norms is a work in progress, and more challenging in some sites than others. They reported that some progress was being made, with fish processing being more recognised as part of fisheries activities, and women being given roles in the executive committees. Progress was also reported with respect to women's voice being increasingly heard and valued in FMB meetings, and women being directly asked for their opinions, although more work is needed. Challenges were also reported. Apart from prevailing gender norms which have been difficult to change, the COVID-19 pandemic also meant that activities could not be carried out as planned.

"Before, when women spoke, we could see that men don't give attention and respect. Now, men are more respectful, and they want to hear women."

There was women's representation in many meetings I attended, even though it is still a work in progress. To claim we have succeeded 100% in [women] having a voice and being heard, I cannot say that. This is part of the capacity building towards women that their quality [of participation] must be improved, not only a simple involvement.

There is change; at the beginning, women were involved only in preparing food, and now they are attending the meeting and part of the content. In Southeast Sulawesi, a culture shift is happening step by step, not a sudden improvement becoming advanced in 2 years. We are still in the process of improvement, but we are working towards that goal." (KII, male, Rare staff member)

3.2.3 Sustainable fishing practices

Both men and women respondents from the communities, appeared to be well informed about new regulations related to the rules around sustainable fishing practices and marine reserves, although men recalled more details, likely because they are out at sea to fish most often. Rules reported on, included: abstaining from the use of poisons, chemicals, anaesthetics or explosives; the use of approved gear only (i.e. nets of 2.5-3" mesh size and use of lines) no use of crow bars to move rocks; no fishing in the no-take zone; no fishing of juvenile fish or crabs with eggs; no catching of certain species; and protecting seagrass, coral reefs and coasts. However, male FMB executives also indicated that so far not everyone is aware of, or obeys, all of the rules. Women (excluding the FMB executive committee members) indicated that they mainly gained knowledge about sustainable fishing practices through word of mouth, rather than from meetings.

With respect to practices that have changed, some FMB members indicated having changed their nets, to one with a larger mesh size. However, others indicated that there still was a barrier to do so, because of the investments required to buy new ones. Some respondents also reported that they had already changed their nets to the required mesh size in response to an earlier project (not implemented by Rare). Several examples were highlighted of conservation activities now being carried out, such as an initiative of a local leader who led the protection of turtle eggs and oversaw their hatching, people reducing the consumption of turtle eggs, a reduction of cutting mangrove forests, and beach clean-up activities, all funded by the savings clubs.

While there is more awareness, that does not mean that practices are implemented consistently. While fish buyers were aware that littering on the beach and at sea should be avoided, and that discarded fish should be buried, they also indicated that either they or others in the community were not applying those practices.

"Rare suggested to bury fish, but I cannot do that because it takes time and efforts. So I'm not applying it." (KII, male, fish buyer, Lora)

"No one else is burning ice plastic, not even my fishers. They just throw that away in the sea. For example 'pagaek' [bigger boats], they use plenty of ice and they toss it in the sea. Same like my fishers." (KII, male, fish buyer, Tambako)

Rules are also currently difficult to enforce. FMB members narrated stories of fishers coming to fish from outside the management area, that are using harmful practices such as the use of explosives. They also reported being threatened with explosives by some of these fishers, when confronting them with their illegal activities.

"Now if you want to ban people from entering [the marine reserve] it's really difficult and almost impossible. We've also heard information that there were people trying to warn outsiders. The fisherman tried to tell them and they replied "what is your rank?" Don't let us be bombed. Yes if they are holding their bombs, they're ready to throw it at us when we get close. This is what people are afraid of." (FGD, male, FMB member, Megabahari)

While marine reserves were planned, they were yet to be formally established at the time of the interviews, and therefore no-take zones, and monitoring and surveillance were also not in place yet. Rare staff confirmed these issues, and indicated that FMBs have been informed that they do not have the authority to enforce rules, but have the ability to remind fellow fishers of the consequences of not obeying the rules.

"So the FMB also has a role in reminding their members, but not in taking action. We [Rare] have also tried to remind them that they as FMB members do not have the power to take action against people who violate the rules. But we do try to coordinate with authorities. FMB can remind fellow fishers in their neighborhood, for example, "Don't use this one as it can damage the fish so that it could rot faster, it can reduce the population faster, and it will make it more difficult for us to catch the fish because we have to look for it further away in the sea." Therefore, they have awareness.

So the change in maintaining sustainability is because they change their fishing gears and they also take better care of the quality of their catch, although not all of them do." (KII, male, Rare staff member)



3.3 Enterprise Development

The project's logic was that by providing fish buyers with training on several topics⁸, and by supporting them to formalise their businesses, fish buyers would eventually sell better quality products, have a higher profit margin, reduce postharvest losses and improve their access to formal financial services (Medianti et al., 2022). In turn, this should contribute to improved resilience to shocks. Fish buyers, implementing partners and Rare staff were interviewed to explore if these outcomes have been emerging. In November 2021, 18 fish buyers and their business partners (a total of 34 participants, of which 18 were men and 16 women) were trained. A second training on handling and hygiene practices was still to be carried out after data collection for this report. The representation of buyers in the sample for the field research is small, and therefore it is not possible to generalise the findings.

The most significant change that has been observed is that some fish enterprise owners have improved the financial planning and management of their business. Some of them now separate their household and business finances, and record cash flows in the OurFish app, which supports them in better understanding their profits. This change was attributed to the business training, and by one respondent also to her membership of a savings club.

"So now I know the profit and loss in sales, we can see it in the app; the price of fish and the price I sell. Before, I didn't know anything. I'm grateful I participated in the training in Kendari because I know my profit" [...] Probably I earned the same, but I didn't record it and didn't know the changes and earnings. Now I know it with writing financial records." (KII, female, fish buyer, Kumbewaha)

Twenty fisheries microenterprises also formally registered their businesses and obtained a so-called Nomor Induk Berusaha (NIB) or Business Identification Number, which supports their access to formal financial services such as their capacity to access higher loan amounts from banks, as a formally-registered business.

"Financial access for buyers is improved as we are now legally registered and have had the NIB [...] It gets easier and faster for me to access lending from a bank. So legal identification for our businesses makes it easier for us to access financial services that we can use to improve our business." [...] "I learned about online sales by using WhatsApp for business. I also sell fish on Facebook to other buyers. So now my business improves." (KII, male, fish buyer, Lora)

The savings clubs could be an alternative source of finance to invest in fish businesses. However, so far there are fund limitations for business investments from the savings clubs, beyond small investments, while larger sums are needed to upgrade business activities.

"[T]here's only a small amount of savings in the savings club. Savings club money must be used for business capital because most members are businesswomen here. We actually hope that the longer we save, the more loans that can be taken. If it's only a little money being kept, how are we going to take bigger loans? There will be more expenses (loans) given out than income." (FGD, female, savings club member, Mopaano)

A few fish buyers and processors have started selling fish through Facebook and WhatsApp, and one respondent noted that she had been able to sell to buyers in Bau Bau, Sampulawa, Kendari and Jakarta.

"I use boxes as packaging. It's delivered by boat and my customers would pay for the delivery costs around IDR 5,000 to 10,000 [USD 0.3-0.6]." (Female, fish processor, Mataoleo)

Yet, social ties and relationships seem to hamper some in seeking new market outlets and being more selective about what quality to buy. One buyer observed that it has been challenging for him to seek other buyers because of his loyalty and connections to existing buyers, while another noted that he sometimes feels morally obliged to buy lower quality or smaller sizes, to support the fishers that offer this product to him.

⁸ EbA principles, hygienic and production practices, business management principles, social media marketing, financial planning, and using the OurFish app for recording of financial data.

"From the training, Rare was focused on improving profits mainly by enhancing packaging and finding other buyers. But it's impossible for me because I am loyal [laughs]. I am already tied up by my buyers in Kendari and Kasipute. Fish business here cannot adopt such methods. If I seek other buyers, it means I am not loyal. My boss [buyers] would be disappointed if I sell the low quality fish while I sell the better ones to different buyers. Once they are disappointed, it's going to be difficult for me to find other buyers who are willing to take my fish." (KII, male, fish buyer, Tambako)

Product quality improvements have been marginal, however buyers from Mataoleo in particular, noted that they receive fewer fish that have been caught by using explosives. This increases the value of the fish by USD 0.13-0.26 per kilogram (IDR 2,000 to 4,000) as this fish retains freshness longer. One buyer also noted the positive effects on fish quality from the fact that more fishers supplying to him are now using ice to preserve the fish during their fishing trips. Among Rare staff and implementing partners there were mixed perspectives on whether or not fish quality has improved and profits have increased. Yet, some implementing partners have noted an increase in the number of people that have started building a house, indicating that there is more money to spend.

Rare staff and implementing partners also note limited change to market access among most fish buyers.



3.4 Savings and lending clubs

The project's ToC was that by establishing savings and lending clubs, and promoting participants' knowledge around financial management, financial record keeping would improve, savings would increase, and so would individual and joint investments.

Participation in savings clubs was also seen as a way to increase women's decision-making at household and community levels. Furthermore, collective savings were intended to lead to improved access to informal and eventually formal financial services among savings club members. In addition, it was expected that, by linking savings clubs and FMBs, savings clubs would start investing in conservation activities, and would have increased influence on fisheries management. The target for the programme was to reach 500 people through 20 savings clubs with at least 80% women members.

3.4.1 Establishment of savings clubs

At the start of the project, only one village in Siotapina reported the presence of a merry-go-round format of savings groups, locally referred to as 'Arisan' (Kwilasa et al., 2021). Others who were interviewed were not aware of the activities of any savings groups, let alone having access to savings through them. There was some anecdotal information about groups that had been dismantled in the past due to unscrupulous activities by those in charge of running the groups.

The Sea of Change project established a total of 32 savings clubs in four districts⁹, in four areas namely Moramo Bay, Pasikolaga, Siotapina-Lasalimu Selatan, and Mataoleo. At the time of writing, 16 were in their first cycle, five were in their second cycle, and 11 had closed down. In response to COVID-19 restrictions, the savings clubs were kept smaller than initially foreseen, however, even with the restrictions, the project was able to reach 520 members by May 2022, with 93% of them being women. The maximum group size of 15 members, and limits on the number of groups that could be formed in a given village, limited the ability of members to self-select who they would like to form a savings club with. This may have been part of the reason why some of the groups closed.

A factor that caused conflict in some of the savings clubs was the injection of external funding to some of them. Best practices guidelines (MCF, 2015) for running community-based savings groups show that

it is not encouraged to provide any capital injection to the groups within the first two cycles, to allow for groups to develop cohesion, including conflict management skills without interference from external actors.

"There were misunderstandings between the members. This group received donations from District Fisheries Office, but we could not manage it as a group. Some members prioritised themselves first, and there was a misunderstanding. If we work together, our group will grow [...]. The group consists of our people, but sometimes we have different principles and opinions; in the end, there was disbandment. Instead of being hurt and disappointed, we closed the savings club." (FGD, female, former savings club member, MegaBahari)

A key enabler for women to join and remain in a savings club was support from their husbands. This highlights the importance of showing that savings club activities are valuable to the entire household, as opposed to just for women.

"Based on our experience, if the husband didn't support it will be difficult. Looking back at one of the members who left the group, her husband did not support even though she still wanted to be in the group." (FGD, female, savings club member, Mopaano)



9 Muna, Buton, Konawe Selatan, and Bombana districts.

3.4.2 Knowledge and attitudes on savings and financial management

From the data collected, it was not possible to distinguish between the role of savings clubs and financial literacy training in creating changes in knowledge on savings and financial management. All of the evidence related to this outcome will therefore be reported in this section.

There was a clear and noticeable change of attitude towards savings and finances, including the reduction of (perceived) unnecessary spending on items such as cigarettes, lipstick and excess food.

"I used to shop as I wanted, but now I have savings. Now the method for spending is different. Now you have to think in advance about what to buy and what's left at home then we can buy it, it's more planned. Before we [used to] shop first, then save money, we receive cash and directly use it for shopping." (FGD, female, savings club member, Mopaano)

In addition, there was a noted increase in the understanding of the value of so-called 'frictions' (these are mechanisms that support the process of keeping your money saved) as a result of where and how people save. While respondents celebrated the ease of access to loans and their funds through savings clubs, they noted the importance of saving outside the home to ensure that they do not make thoughtless purchases.

"When we save at home, whenever we need something, we will pick the money; if we need to buy a fishing line or something else, we will use our savings at home. But now, in savings clubs, we will have it back after a year." (FGD, savings club member, women, Mopaano)

Savings clubs were also preferred over bank services, as the procedures and processes involved with accessing one's funds with savings clubs encourage keeping money saved, more so than with banks (i.e. savings clubs provide more 'friction' than banks).

"If we save in a bank, we can go to the ATM and withdraw anytime, we will take our savings." (FGD, female, savings club member, Mopaano)

In Tambako, there was also an increased awareness around debt, particularly on the impact of loans from financial institutions. Those that were aware of credit facilities that were available to them, such as the National Programme for Community Empowerment [Program Nasional Pemberdayaan Masyarakat] loans, were also aware of the heftiness of some requirements to access these loans, such as mandatory weekly repayments.



Woman processing dry shrimp (credit: J. Newton)

3.4.3 Increased savings and individual investments from savings clubs' loans

By the end of May 2022, groups had been able to save over USD 26,000 (IDR 383 million) in savings and loan funds in the first cycle, with an average savings of around USD 50 per person. This is similar to the average savings rate for similar savings groups in Indonesia¹⁰. Out of the total savings, around USD 1,500 (IDR 23 million) was collected as social fund. By the end of May 2022, the groups had collectively given USD 4,500 (IDR 68.2 million) in loans (Figure 5), of which USD 3,400 was disbursed in the first cycle.

The interviews with savings clubs members confirmed the increase in savings due to the clubs, with savings reported by all respondents.

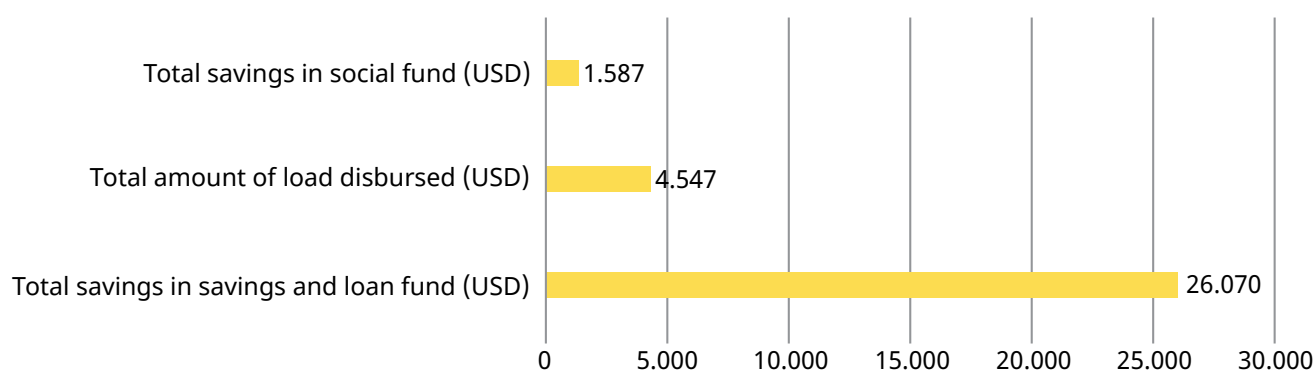
"[There is] increased savings as we now have savings clubs to save money. If we have 1 million, we set aside a little. We [give] it to the treasurer every 2 weeks. We save at least one share of 20,000 and 5,000 each time we hold savings club meeting."
(Female, Tambako).

This increase was credited partly due to increased positive peer pressure towards savings. The public nature of savings through savings clubs appears to serve as an accountability tool to save more each week.

"I still want to join the savings club. With savings club there, I have the work spirit. Now without savings club, I am more relaxed (with less motivation in earning more money to save). There is more saving at home, but there are daeng-daeng (sellers, usually selling buckets, house props, or clothes). We look at him, buy something, and pick the money at home. But with savings club, we save a lot. If you save much, you also get much. Now it is very different. There used to be hope, big money in savings. It's safe in savings club; no one opens it." (KII, female, closed savings club member, MegaBahari)

The fund utilization rate, which is the value of loans outstanding divided by the total value of members' savings is 17%, which is significantly lower than the average fund utilization rate for savings groups in Indonesia, which is 37%. The low rate of utilisation could partially be explained by the impact of COVID-19 restrictions, that may have limited investment options, but could also be related to the peer pressure on saving, explained above. The interviews suggest that new businesses were formed with some of the investments made from these loans, such as selling bread, ice and fish. However, there were not many of these new businesses as the amounts in the savings clubs were not considered enough to make large investments.

Figure 5. Rare FFSC total savings, loans disbursed and social funds, June 2022



Source: project data

10 According to the Savings group Information Exchange (SAVIX) database in July 2022 that puts the average savings per member in savings groups in Indonesia as USD 51. <https://mis.thesavix.org/dashboard/admin>

3.4.4 Improved management of finances

Similar to the attribution of changes in knowledge on savings and financial management, it was not clear from the data collected whether savings clubs or financial literacy training were most influential in creating changes in the management of finances. All the evidence on this outcome is reported in this section. There are several indications that the management of finances and financial planning have improved.

There is more awareness of finances in general and the value of managing spending and especially saving, particularly among women members of savings groups.

"At least now we know there are changes. Before we spent all the money we wanted, now we're more economical, mainly if my husband doesn't fish... once we earn some money, we have to save some for shares." (FGD, female, savings club member, Mopaano)

Some participants reported being able to make larger purchases that they did not think was possible before the trainings and participating in the savings clubs. They saw the knowledge they gained to be a key factor in their ability to purchase assets and build their houses.

"Now I can manage my expenses. Before I couldn't buy anything, now I can build my house little by little as the result of managing from profit. I divided IDR 100,000 to buy cement and another IDR 100,000 for rice." (KII, female, fish buyer, Kumbewaha)

This also came with a sense of pride among women about their increased ability to generate income for the household, compared to before the financial literacy training and the savings clubs.

"I am currently building a house. I used to think that I don't want to think about saving up for building this house. I thought just let my husband think where he can find the money for it. My role is just to manage daily expenses for my family that is all. Now that there is a savings club, I became more motivated how to support my husband. How to save up for raising my kids, building a house." (Fish processor, female, Mataoleo)

Value chain analysis (Kwilasa et al., 2021) revealed that, while there was a small group of fishers and processing business owners who kept detailed financial records, separating household and business expenses, a significant proportion of respondents did not do so. It was also noted that women do most of the financial recording for business and household expenses. Across the board they are regarded as the "household treasurers". Most of the record keeping is done on paper. Among all those who were interviewed, there was a change in the perception of the importance of record keeping, and increased financial planning, directly attributed to the financial literacy training.

"The financial literacy training is good as we are told how to save money, how to prioritise needs. If there are unnecessary needs, for example lipsticks while I have had some at home, these can be postponed. I didn't know how much my income and expenses are. Now that I know it, I can save up for this and that, for gasoline, for my children's school needs." (Female, Lora)

"[There has been] a change for the better, now [the money] has been divided... it has been separated [...]. We know how much money for what." (KII, male, Mopaano)

Women reported to have increased awareness about their finances related to the fish business.

"From my experience before the savings club, I didn't see the price of fish, I didn't know the price, even though my husband was a fisherman. But now that I have joined a savings club, I can see how much money we earn, we can count how much income, etc." (FGD, female, savings club member, Mopaano)

However, among some participants, there was also a sense of being overwhelmed about the amount of information that needed to be recorded as part of financial planning. There were also some that avoided accounting business revenues and expenses out of fear of being confronted by a negative balance.

"We were taught to record expenses and income; they gave us a book to record. But we are lazy to take notes. I'm confused about how to fill it as there are too many expenses. How am I supposed to fill it? I am afraid of seeing the minus balance. If you fill it honestly, it's horrifying. There are expenses for cigarettes, for fuel. We must record everything not just our daily expenses, but monthly as well." (Female, Tambako)

It was also noted that financial planning was abandoned during Eid preparations and celebrations¹¹. During this time, people seemed to be saving less and opting for higher loans and taking more risky credit.

3.4.5 Conservation activities led and/or funded by savings clubs

Traditionally, savings groups are encouraged to use social funds as a means to contribute to each other in the event of different emergencies such as illness, death in the family or other shocks. This prevents members having to utilise their savings in response to unexpected shocks. Members can choose to disburse these funds either as grants, or no interest loans for a fixed duration. Increasingly, a trend has developed where groups are using their social funds to finance community development activities. This was also the case in the FFSCs and was promoted by the project through the FMBs. As of May 2022, groups had contributed the equivalent of around USD 1,500 (IDR 27,234,000) to the savings group's social

fund. While groups primarily allocated these funds to internal use by members, all the groups interviewed also reported to have contributed a portion to FMBs for conservation activities. Additionally, some of the groups had organised and participated in at least one activity that involved marine conservation, such as beach cleaning activities. At the start of the savings clubs, most of the savings clubs' members did not see themselves as being a part of any conservation activities. Additionally, it had been challenging to finance conservation activities from their individual pockets, which is now easier to do with the social fund from the savings clubs. The conversations and learning in savings clubs also led to more ownership of the conservation activities by members, even when they do not directly participate in the FMBs.

"If we use our fund sometimes, we think, "why only me?" but now we have a social fund in the savings club where everyone agreed to contribute." (Male, Mopaano)



Woman preparing weights for fish nets (credit: J. Newton)

¹¹ Eid is the religious holiday that marks the end of the Muslim fasting month.

3.4.6 Influence of women from savings clubs on fisheries management bodies

There is no evidence that savings clubs had an influence on FMBs. The idea was that savings club representatives would be invited to FMB meetings, thereby being provided with an opportunity to learn about the FMB processes and influence them. In practice, however, the contact between the savings clubs and the FMBs was restricted to FMB executive committee members occasionally visiting savings clubs to provide information on sustainable fishing practices.

Communities have noticed the rise of prominent outspoken women champions from the savings clubs. These voices could be more deliberately integrated into FMBs, either as part of the executive committee or as regular members.

3.5 Financial literacy

Like the savings clubs, the trainings on financial literacy for fishers and fish buyers was meant to improve capacities for these households to track and better record their finances, improve their access to financial services, by providing them with information about the financial products and services available, and, where needed, facilitate their ability to access them (Campbell et al., 2021). This should lead to more financial decision-making power for women, better financial planning and a reduction of debts. The financial literacy trainings were also intended as a vehicle to convey information from the FMBs to the broader communities, thereby promoting the use of sustainable fishing practices. Additionally, training couples instead of individuals meant that spouses were able to sit and learn together, allowing them to make any decisions about changes to the business jointly.

The target for financial literacy for the project was to train 1,250 participants across four districts on financial literacy, with at least 50% of the participants being women. By May 2022, the project had trained 1,377 fishers and fish buyers, of which 715 were women. The trained participants came from a total of 729 households, with the project delivering the training to couples, as many fish business activities are carried out jointly by husband and wife.

3.5.1 More financial decision-making power for women

Overall women noted limited changes in the decision-making dynamics related to expenses for the household, such as food and other small household items. This is because, it was always seen as the role of women to manage household expenses. Decisions on expenses vary depending on the purchase. Food expenses for instance are the purview of women; any other expenses are discussed between husband and wife.

"In a household, it's usually the wife who manages the finances. Husbands barely know how to hold money. But us wives would ask our husband for expenses. The husband's job is to make money. [...] This is how financial decisions are made in households even before there were savings clubs. It has always been like this." (Female, Tambako)



There was one example of potential backlash for women in Lora, where one male buyer noted that after participating in the trainings, they made the household decision to separate the finances and have both the husband and wife manage one side of the expenses, pointing to a decrease in financial decision-making power of the woman in this household. A household survey conducted by the project in 2021 (Rare, 2021) also showed a slight shift in financial decision-making, from joint decisions to both men and women making more decisions on their own (Figure 6) which points to an increase in separation of household and business finances.

“Back then it was all controlled by my wife, now it is separated because it is more efficient.” (KII, male, fish buyer, Lora)

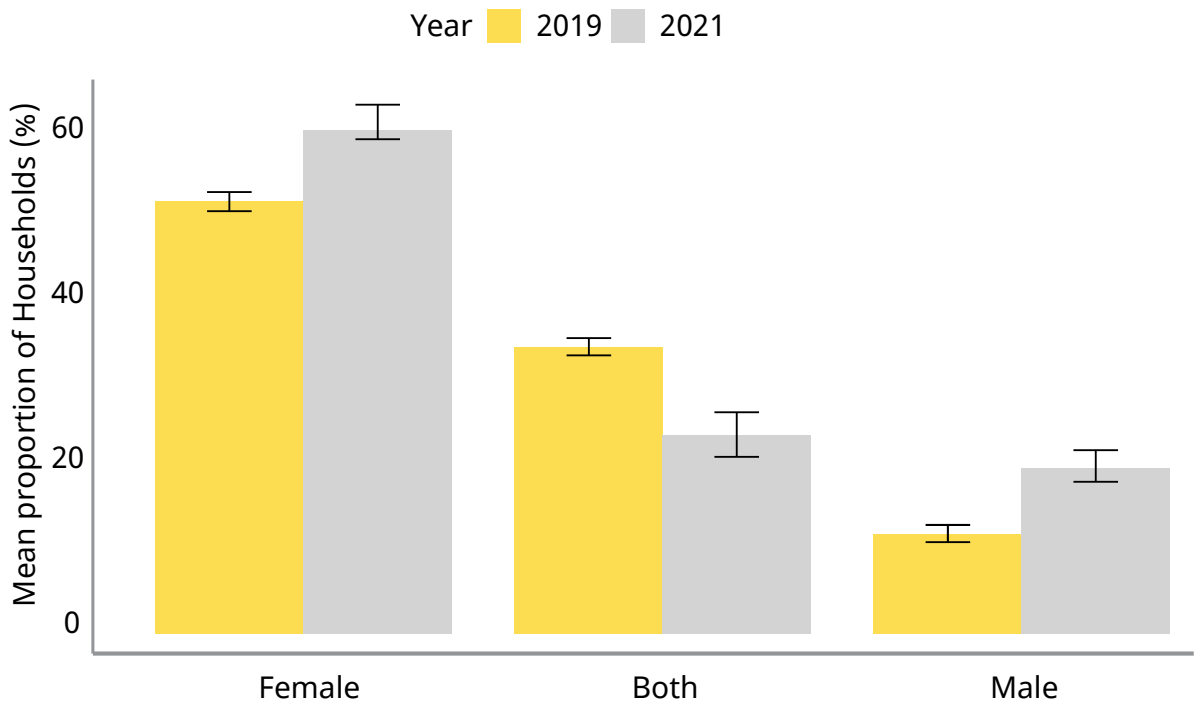
With respect to income-generating activities, savings club members reported an increased interest in understanding how the business works and recording expenses. There was an increase in women’s participation in fisheries activities, and other income-generating activities compared to before the project, driven by a desire to add to their savings. Such activities are now done more jointly and seen

as a household responsibility. This is a slight change compared to the value chain analysis which found a clear division of gender roles, with women in charge of gleaning, cleaning, processing and selling fish, while men took charge of all activities in relation to fishing. The effect on women’s workload and time burden was not assessed, and is a potential risk, if other (household) responsibilities have not been divided more equally.

“In the past three years, I stayed at home only expecting income from my husband, who went fishing, but after savings club, it is different. We try harder. Now also during high current when you can’t go to sea, your income will decrease... so we start helping to unload the fish.” (FGD, female, savings club member, Mopaano)

A potential downside and risk is the overburdening of women with additional work stemming from financial record keeping, savings club participation and more active participation in the family business, while not relieving any of their other (unpaid) reproductive tasks (i.e., household and care work). The value chain analysis already established relatively high levels of time poverty among women due to household work (Kwilasa et al., 2021).

Figure 6. Financial decision-making. Who makes the financial decisions in your household?



Source: Rare, 2021

3.5.2 Reduction of debts

Because of cultural sensitivities we were unable to ask directly about debts. Therefore, this section explores coping mechanisms, as an indirect means to assess any effects on debts. The value chain analysis examined the coping mechanisms that community members were using in response to shocks. It was noted that respondents were more readily prepared for health emergencies, which were largely covered through government provided insurance (BJPS); additional health insurance was also available for fishers, but this was more available to and used by men than women. However, non-health emergencies were a challenge and were fully dependent on personal savings and where none was available, on loans from fresh fish traders, family, neighbours and friends. A significant portion stated that they relied on pawning assets, including jewellery and other productive assets and valuables.

Savings have quickly overtaken other coping mechanisms since the inclusive finance interventions. High importance is placed on saving money as a household, especially in the savings clubs. In the targeted communities, savings clubs are seen as a household-level activity rather than an individual goal for members, such as is often the case in other contexts.

"[...] instead of going to borrow from our neighbours... we never know if they will lend us some money. Not to mention if that neighbour gossips about us "oh, she makes a lot of money, but she borrowed money too". In savings club, no one knows, only 15 of us know." (FGD, female, savings club member, Tambako)

3.5.3 Information from fisheries management boards provided through financial literacy training

Respondents reported regular visits from the local FMB committee representatives and local governments to train them on conservation practices in addition to financial literacy training. As a result of this information, respondents reported basic knowledge about conservation such as not littering in the sea (especially plastic), usage of poison in fishing, and usage of trawls and explosives. They also showed increased knowledge on the importance of maintaining coral as fish spawning grounds.

"Before the project, there were still people who lifted rocks during gleaning, now we forbid those fishing acts inside the project areas. Before there were no rules." (Female, fish buyer, Kumbewaha)

3.5.4 Behavioural changes in communities: sustainable fishing practises

While there was an understanding of the existence of the marine reserve for some community members, there was an acknowledgement that the use of explosives and other fishing practices was still prevalent, especially during times that there is a higher need for finances, such as ahead of Eid festivities. Having the marine reserve announced is not enough to stop the harmful practices, and respondents attributed the continuation of harmful practices to the absence of coastal guards.



3.6 Ultimate outcomes

According to the project's ToC, the early and intermediate outcomes described in the previous sections, should jointly lead to more stability or improvement in fisheries resources, and improved economic resilience and wellbeing in communities.

3.6.1 Stability and improvement of fisheries resources

It is clear that the ultimate outcome of stability or improvement of fisheries resources requires a longer-term outlook, as fisheries management plans have yet to be ratified and marine protected areas established and monitored, and eco-systems require time to recover. While some positive changes were observed in terms of mangrove planting, and fishing practices, it is too early for this to translate into improved resources. The FMB members, including those in the executive committee in particular, had yet to note any changes in the status of the fisheries. They observed that the catch is low and the size of fish has decreased over the past five years. The Sea of Change project has not yet managed to change that.

3.6.2 Improved economic resilience

The section on reduction of debts (Section 3.5) highlighted the improved economic resilience that (some) people experience as a result of having more savings to fall back on, generated by a more frugal mentality taught through the savings clubs and the financial literacy training. People's observed investment in asset accumulation, such as the building of houses, and the opening of small kiosks and other small businesses, also provide anecdotal evidence of this more stable position. However, limits to loans that can be taken from the savings clubs, and general limits in people's own savings, mean that with large social events such as weddings and Eid celebrations, people return to old habits, including the use of unsustainable fishing practices, such as the use of explosives. One respondent also voiced the opinion that there are too many new businesses, making them unviable in the long run.

3.6.3 Improved wellbeing in fishing communities

The improved management of finances, accumulation of assets, and the development of new businesses, and associated incomes, also point to an increased level of wellbeing among people. More frugal financial management also appears to lead to lower spending on items such as cigarettes and alcohol, which could improve general wellbeing as well. There was also a sense of positivity associated with having a more long-term outlook, as FMB members narrated how they are more aware of the importance of children's schooling and that they are setting aside more money for education. This could potentially lead to greater wellbeing in the future.

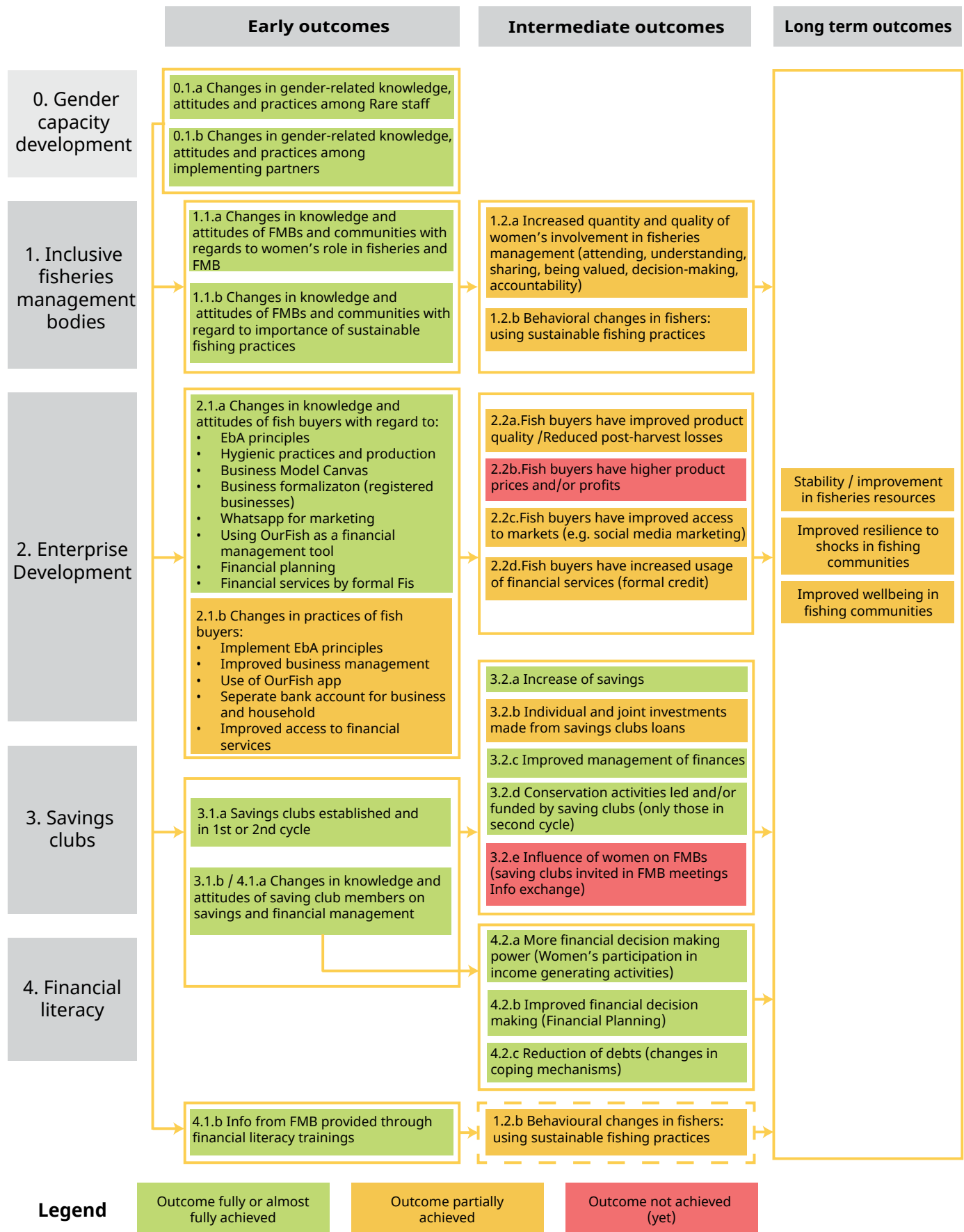
"Now we are trying to control [our spending] because now we understand that there are other needs. Now we have more spirit and the urge to work more. We work for our children to go to college, build our house, having enough capital to create business, adding more net for fishing. This all creates more spirit in life." (FGD, female, FMB member, Kumbewaha)

However, new activities and responsibilities could also potentially lead to overburdening women, if they are not relieved of other duties.

3.7 Summary of progress on the Theory of Change

The results presented, provide an understanding of the degree to which the outcomes, as foreseen in the project's ToC have started emerging. Figure 7 provides a summary of this assessment.

Figure 7. Assessment of progress on ToC



3.7.1 O. Gender capacity development

The results show that, perhaps with the exception of one or two implementing partners, the knowledge, attitudes and practices of most Rare staff (O.1.a) and implementing partners (O.1.b) have become more gender equitable.

3.7.2 I. Inclusive fisheries management bodies

Women's roles in fisheries have become more recognised among men in the FMBs, and women have become part of FMB executive committees and also attend FMB meetings (1.1.a). However, general female FMB members were not consistently included in FMB meetings (1.2.a). Awareness of sustainable fishing practices was apparent and spread through FMBs (1.1.b), as well as the financial literacy trainings, however this awareness did not necessarily translate into practices being implemented consistently, and by everyone (1.2.b). In particular, during times with high needs for funds (such as Eid), a resurgence of unsustainable practices was observed. Furthermore, people observed 'outsiders' practicing explosive fishing in the waters close to their communities. This highlights the importance of economic resilience to maintain practices, and authorities with the power to enforce the rules. The inclusion of women in building economic resilience is of key importance for households to manage their finances together.

3.7.3 II. Enterprise development

Fish buyers have developed their knowledge on financial management and record keeping (2.1.a), and to a degree are implementing these practices (2.1.b). However, there is also a reported sense of feeling overwhelmed by some participants, particularly women, over the amount of information that needs to be recorded on a regular basis. There is therefore a risk of overburdening women with additional tasks in record keeping, and more active participation in the family business, if unpaid household work remains the full responsibility of women. There is also anxiety about confronting a negative balance when all costs and expenses are more closely analysed.

The businesses of participating entrepreneurs have been registered (formalised) (2.1.a), and this has enabled a number of the entrepreneurs to apply for formal loans (2.1.b). Improved practices – including a reduction in explosive fishing, and increased use

of ice (2.2.a) – has also been seen by some to have improved the quality of fish, and led to higher prices, however evidence on this was mixed (2.2.b). There were a few examples of fish buyers accessing new markets, however, social ties hampered some buyers in rejecting poor quality fish and/or accessing new markets (2.2.c).

3.7.4 III. Savings and lending clubs

Despite COVID-19 restrictions, the project managed to reach its targets related to the setting up and running of savings clubs (3.1.a), although an injection of external funds created conflict in a few savings clubs that were forced to close as a result. Major changes occurred in people's knowledge and attitudes related to savings and financial management (3.1.b/4.1.a), also aided by the financial literacy trainings (4.1.a). While the savings clubs have generated substantial amounts of collective savings in line with national averages for per capita savings (3.2.a), the fund utilisation rate was found to be low (3.2.b). At the same time, participants observed fund limitations for business investments beyond small amounts, and for expenses related to weddings and festivities. Whether or not utilisation rates will increase as confidence borrow grows remains, as yet, unclear. A risk of the savings clubs is that they may produce excessive peer pressure for women to continue to save maximum amounts. Practices related to financial management and planning (3.2.d/4.2.b) have improved, although households are still challenged by the larger expenses associated with Eid preparations and celebrations. Around these times people save less and opt for higher loan amounts and taking more risky credit.

Savings clubs reported using a portion of the social fund to finance community service activities (e.g., to support the local mosque), including for local conservation activities (e.g., beach clean-up) (3.2.d). However, results suggest that the conservation activities were mainly funded because there was pressure from a FMB or the project to do so. This could pose a threat to the long-term sustainability of such activities.

There is no evidence that women from savings clubs have any influence on FMBs (3.2.e). They are not invited to FMB meetings, and if there is any contact between the two groups it is because FMB executive members visit the savings clubs rather than the other way around.

3.7.5 IV. Financial literacy

Information from FMBs has been provided through the financial literacy trainings (4.1.b), although this information focussed on sustainable fishing practices, rather than FMB decision-making processes. Women already held significant roles in financial decision-making in the household before the project, particularly in managing day-to-day expenses. The project therefore did not create that much change, although some women were seen to be moving into economic activities that were traditionally deemed to be 'men's' roles (4.2.a). There was however also one case where a woman was disempowered, and her husband took over the management of the business finances, now that he was aware of how much money was made in the family business. Evidence on coping mechanisms indicated that debts have reduced (4.2.c).

3.7.6 Ultimate outcomes

Overall, it is too early in the process to state with confidence that the long-term outcomes of improvement of fisheries resources, improved economic resilience and improved wellbeing will appear and can be maintained. However, there are some positive signs that the three outcomes are emerging. Impacts on time poverty of women should however be further examined to know how this will ultimately impact women's wellbeing.



Woman preparing shrimp for drying (credit: Newton)

4 Conclusions and lessons learned

This report provides a description of activities, outcomes and lessons learned from the Sea of Change project, implemented by Rare in partnership with KIT Royal Tropical Institute, and funded by the Netherlands Postcode Lottery. The project aimed to improve the livelihoods of 5,000 fishing households across 20 communities in four areas of Indonesia's Southeast Sulawesi province. The project approach was to build a more holistic approach to coastal fisheries management by forming inclusive management bodies for both men and women, by strengthening the rural economy by identifying opportunities to improve fish enterprises, and by building financial inclusion through savings clubs and financial literacy training for couples. The hypothesis behind this approach was that by including women in fisheries management, and by addressing other parts of people's livelihoods that otherwise lead to unsustainable fishing practices, that the long-term sustainability of the marine resources could be guaranteed. The analysis presented gave insights into the approach of gender integration and of building financial inclusion and the (early) results that emerged from this process. While implementing these activities, and based on the reflection workshops organised (see Section 2.2) a number of lessons were learned (see also Annex 2).

While steps were made towards ensuring that women become fully recognised participants in **fisheries management** decision-making processes, the results presented in Section 3 also highlight the challenges associated with achieving this. Most importantly, the process was hampered by constraining gender norms. Addressing those not only require specific capacity and activities to do so, that involve both women and men, but also the ability to engage long-term as it takes time for norms to shift. Several tools were introduced for gender integration that were adapted to the project and the context. These included the joint site visit, the gender integration workshop, the training and coaching for implementing partners, and the mobilisation of women champions in the communities. Overall, these tools were considered useful and effective, although some adaptations were also suggested to make them more useful, such as the type of stakeholders that were invited to the gender integration workshop. COVID-19 restrictions posed challenges to engage with partners and communities face-to-face, which also placed limitations on what could be achieved.

Enterprise development, which consisted among others of business formalisation and different types of trainings, was starting to lead to improvements in businesses and improved access to formal finance. However, effects on prices and profits of these businesses did not emerge yet. The **financial literacy training for couples** targeted the separation of business and household finances, which helped to strengthen enterprise development activities. The case where a woman's roles as financial manager was appropriated by her husband after he saw the business's financial records highlights that potential negative consequences and backlash need to be monitored, and potentially require additional actions. This was also demonstrated by the observation that the desire to save, as a result of the savings clubs and which led to the start of new micro-businesses, could potentially put more strain on already overburdened women.

Generally, savings-led community interventions seem to be an effective means of providing finance for people living in precarious environments (Kushardanto et al., 2022). In the Sea of Change project, supporting communities to form and manage **savings clubs** had a clear effect on knowledge, attitudes and practices, at least in the short term. This was supported by joint learning and (positive) peer pressure in the savings groups. However, the project also saw a number of groups close, largely due to unmitigated conflict that resulted from adjustments to how savings clubs were formed, because of COVID-19 restrictions. Those restrictions meant that group size was restricted to 15 members and the number of groups per village was limited. This in turn limited the ability of (potential) members to self-select their fellow savings club members, which may have led to a lack of cohesion and conflict in some groups. In addition, some groups had an injection of external capital which also caused conflict. Established principles for savings clubs should be adhered to, to prevent such conflict and the breakdown of groups in the future (see Annex 2). More work is still needed to increase options for financing, particularly during periods with a sudden peak in demand for cash, such as religious festivities. Savings clubs do not provide sufficient capital, especially with such peaks from several members simultaneously. Options include specific training and sensitisation around such moments, and the option for targeted savings for such purposes. Collaboration with other financial

services stakeholders could also help to ease this demand. Not addressing this issue risks the cyclical increase of harmful practices around certain times of the year.

At the start of the project, there was an ambition to test whether a holistic approach to fisheries management, that explicitly includes women leads to better and more sustainable results in improving fisheries resources, economic resilience and wellbeing in fishing communities. However, it is too early in the process to be able to do so. While the early signs are positive, more long-term follow up in the participating communities would be needed to assess this.

References

- Afflerbach, J.C., Lester, S.E., Dougherty, D.T., Poon, S.E. (2014). A global survey of "TURF-reserves", territorial use rights for fisheries coupled with marine reserves. *Global Ecology and Conservation* 2:97-106.
- Béné, C., Belal, E., Baba, M.O., Ovie, S., Raji, A., Malasha, I., Njaya, F., Andi, M.N., Russell, A., Neiland, A. (2009). Power struggle, dispute and alliance over local resources: Analyzing 'democratic' decentralization of natural resources through the lenses of Africa Inland Fisheries. *World Development*, 37:1935-50.
- Béné, C., Arthur, R., Norbury, H., Allison, E.H., Beveridge, M., Bush, S., Campling, L., Leschen, E., Little, D., Squires, D., Thilsted, S.H., Troell, M., Williams, M. (2016). Contribution of Fisheries and Aquaculture to Food Security and Poverty Reduction: Assessing the Current Evidence. *World Development*, 79:177-196. 10.1016/j.worlddev.2015.11.007
- Campbell, S.J., Medianti, E., Yuliani, A., Jakub, R., Setiawan, H., de la Rosa, E., Suherfian, W. (2021). Gender-inclusive financial literacy strategies: Unlocking the value of small-scale fishing communities. *SPC Women in Fisheries Information Bulletin* 33: 37-47. <https://purl.org/spc/digilib/doc/o7qbs>
- Cohen, P.J., Lawless, S., Dyer, M., Morgan, M., Saeni, E., Teioli, H., Kantor, P. (2016). Understanding adaptive capacity and capacity to innovate in social-ecological systems: Applying a gender lens. *Ambio*, 45(3): 309-321.
- Fabinyi, M., Belton, B., Dressler, W. H., Knudsen, M., Adhuri, D. S., Aziz, A. A., Akber, M. A., Kittitornkool, J., Kongkaew, C., Marschke, M., Pido, M., Stacey, N. Steenbergen, D.J., Vandergeest, P. (2022). Coastal transitions: Small-scale fisheries, livelihoods, and maritime zone developments in Southeast Asia. *Journal of Rural Studies*, 91: 184-194.
- HLPE. (2014). *Sustainable fisheries and aquaculture for food security and nutrition: A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security*. Rome: HLPE. http://www.fao.org/fileadmin/user_upload/hlpe/hlpe_documents/HLPE_Reports/HLPE-Report-7_EN.pdf
- Kleiber, D., Harris, L.M., Vincent, A.C. (2015). Gender and small-scale fisheries: A case for counting women and beyond. *Fish and Fisheries*, 16: 547-62.
- Kleiber, D., Cohen, P., Teioli, H., Siota, F., Delisle, A., Lawless, S., Steenbergen, D., Gomese, C., Tavue, R.B., Vachette, A., Neihapi, P., Sokach, A., Li, O., Wraith, L., Koran, D., Campbell, B., Tioti, R., Vanguna, T., Wate, J.T., Boso, D., Duarte, A., Batalofo, M., Andrew, N., Sukulu, M., Saeni-Oeta, J., Sutcliffe, S., Eriksson, H., Newton, J., McDougall, C. (2019). *Gender-inclusive facilitation for community-based marine resource management. An addendum to "Community-based marine resource management in Solomon Islands: A facilitators guide" and other guides for CBRM*. Penang, Malaysia: CGIAR Research Program on Fish Agri-Food Systems. Program Brief: FISH-2019-08. <https://hdl.handle.net/20.500.12348/3747>
- Kushardanto, H., Jakub, R., Suherfian, W., Subarno, T., Ansyori, A.I., Sara, L., Alimina, N., Fajriah, Kardini, L.O., de la Rosa, E., Yuliani, A., Medianti, E., Pradana, I., Setiawan, H., Muhammad, Y., Djafar, L.F., Box, S., Cox, C., Campbell, S.J. (2022). Household finances and trust are key determinants of benefits from small-scale fisheries co-management. *Marine Policy*, 145: 105284. <https://doi.org/10.1016/j.marpol.2022.105284>
- Kwilasa, M., Kruijssen, F., Buvelot, C., Newton, J., Medianti, E., Yuliani, A., Campbell, S., Jakub, R., Kushardanto, H., Pradana, I., Ansyori, A.I., Subarno, T., de La Rosa, E., Suherfian, W., Setiawan, H., Arango, C. (2021). *Financial inclusion, gender equity and enterprise development in small-scale fisheries in Southeast Sulawesi*. Report of the Sea of Change project. Amsterdam: KIT Royal Tropical Institute.
- Lieng, S., Yagi, N., Mori, A., Hastings, J.D. (2018). Savings-group improvements contribute to sustainable community-fisheries management: A case study in Cambodia. *Sustainability*, 10(8): 2905.
- MCF (2015). *Program Quality Guidelines for Savings Groups: A publication of the SEEP Savings-Led Financial Services Working Group (SLWG), The SEEP Network*. <https://www.rfilc.org/wp-content/uploads/2020/08/SG-guidelines.pdf>

McDonald, G., Wilson, M., Veríssimo, D., Twohey, R., Clemence, M., Apistar, D., Box, S., Butler, P., Cadiz, F.C., Campbell, S.J., Cox, C., Effron, M., Gaines, S., Jakub, R., Mancao, R.H., Rojas, P.T., Tirona, R.S., Vianna, G. (2020). Catalyzing sustainable fisheries management through behavior change interventions. *Conservation Biology* 34(5): 1176-1189.

McDougall, C., Newton, J. Kruijssen, F., Reggers, A. (2021). *Gender integration and intersectionality in food systems research for development: A guidance note*. Penang, Malaysia: CGIAR Research Program on Fish Agri-Food Systems. Manual: FISH-2021-26.
<https://digitalarchive.worldfishcenter.org/bitstream/handle/20.500.12348/5286/c4ca5c32ebb40be3f579997d18ab6f68.pdf>

Medianti, E., Yuliani, A., Sukmajaya, M.A., Jakub, R., Campbell, S.J. (2022). Adding value to small-scale fisheries businesses in Southeast Sulawesi, Indonesia. *SPC Women in Fisheries Information Bulletin* 35: 26-31. <https://spccfpstore1.blob.core.windows.net/digitallibrary-docs/files/d4/d463733ca7a3dc275b2e2ee3fbc4a14a.pdf>

Rare (2021). *Socioeconomic impact summary: Fish Forever Southeast Sulawesi Indonesia*. Indonesia: Rare.

Stacey, N., Gibson, E., Loneragan, N.R., Warren, C., Wiryawan, B., Adhuri, D.S., Steenbergen, D.J., Fitriana, R. (2021). Developing sustainable small-scale fisheries livelihoods in Indonesia: Trends, enabling and constraining factors, and future opportunities. *Marine Policy*, 132: 104654.

Annexes

Annex 1. COVID-19 implications for project implementation and recommended response for inclusive finance

Activity	COVID-19 implication	Recommendation	Assumptions
Financial literacy			
Design of basic financial literacy module	The means of delivery would be affected, hence there is a need to revise the content into SMS training modules.	<ul style="list-style-type: none"> Development of SMS based financial literacy model to be delivered remotely. Potentially revert back to in-person training if physical distancing requirements are eased/removed. 	
Roll out of financial literacy	It would be difficult to roll out basic financial literacy to communities in person as originally planned. This would remain the same for at least another three months..	<ul style="list-style-type: none"> Roll out of basic financial literacy through SMS. Between 30-90 participants in one to two villages will be trained on five modules over a two month period (number of modules to be confirmed). At the end of the financial literacy training, savings groups are introduced and people invited to form village-level groups. They are not required to form groups with only those who have participated in the training. 	Women have the same access to mobile phones as men and they are able to participate equally.
Savings groups formation and training			
Training Rare staff on village savings and loan associations		<ul style="list-style-type: none"> This should still happen in some form, virtually. It is critical, especially with the changes that need to happen due to COVID-19, that Rare staff have a clear understanding of the 'traditional' village savings and loan associations model. 	
Identification and training of locally-based trainers-	Due to challenges in congregating, in-person identification and group-training for locally-based trainers that would support savings groups would be difficult.	<ul style="list-style-type: none"> It would be difficult to meaningfully roll out savings groups without support at village level for the groups (and for Rare staff, especially given the potential demand). Given that groups will likely be formed in one to two villages at a time, Rare should identify local champions (from other forms of savings groups where relevant) or seek help from local government staff and train them on the savings group methodology to provide support at the beginning of group formation. 	There are either previous savings groups activities and/or local government staff available for this role in each village.
Training on group formation and saving/loans	For at least the first 12 weeks, it is important that groups receive consistent training and support on group activities. Given the challenges in meeting, it would be difficult to deliver training in the traditional methodology.	<ul style="list-style-type: none"> Consider smaller group sizes (10-15 instead of 25-30). While this would mean lower amounts saved, it would allow for physical distancing and shorten the duration of meetings. Consider recording video training to complement the training by the local trainer (or Rare staff). The video could be used during the meeting but would also be accessible by the group afterwards. The above could be revised as physical distancing requirements get relaxed over time. The internal financial inclusion working group would meet every four weeks to re-assess the situation. 	All/most group members have access to smart mobile phones to watch training videos.

Annex 2. Lessons learned

Topic	Lessons/Reflections
Tools for gender integration in inclusive fisheries management: JOINT SITE VISIT	<p>WHAT WORKED WELL:</p> <p>The joint site visit provided:</p> <ul style="list-style-type: none"> • A general overview and understanding of context and challenges. • Insights into the actual situation in the communities, rather than theory. • Insights which were used to fine-tune the gender integration workshop. • First-hand insight into probing on gender issues through focus groups and interview questions.
Tools for gender integration in inclusive fisheries management: GENDER INTEGRATION WORKSHOP	<p>WHAT WORKED WELL:</p> <p>The gender integration workshop provided participants with:</p> <ul style="list-style-type: none"> • Introduction to gender concepts and why integration matters. • A way to provide provincial-level government with the needed context. • Insight into gender integration entry points. <p>WHAT COULD HAVE BEEN IMPROVED:</p> <ul style="list-style-type: none"> • An initial internal workshop without partners to allow for more discussion. • Tried to cover too much (too many concepts and theories), suggestion to have more shorter events, or be more selective about concepts to introduce. • Choice of stakeholders invited (provincial level government) may not have been appropriate as they were not involved in the project implementation, and there was no follow up. • Missed opportunity to integrate gender into the baseline survey. Gender integration workshop should have been held in the early inception phase of the project.
Tools for gender integration in inclusive fisheries management: GENDER INTEGRATION IN PRIDE CAMPAIGN	<p>WHAT WORKED WELL:</p> <ul style="list-style-type: none"> • PRIDE campaign materials now have visuals that include women, e.g., in posters, banners and the snakes and ladders game. • Community mobilisation now includes more activities associated with traditional women's roles (e.g., cooking), while this may reinforce gender stereotypes, it was also a good entry point to get women to meetings in the first place. • Creativity because of the COVID-19 restrictions: use of digital means, e.g., TikTok and Facebook.

Topic	Lessons/Reflections
<p>Tools for gender integration in inclusive fisheries management: TRAINING FOR IMPLEMENTING PARTNERS</p>	<p>WHAT WORKED WELL:</p> <ul style="list-style-type: none"> The training for implementing partners was a useful strategy to engage fisheries officers and use their own ideas to include more women, including: <ul style="list-style-type: none"> A strategy to explore ideas and participation of women in their communities. Ideas to involve women in community meetings. Ideas that contributed to the gender integration cheat sheet. Starting with changes on mindset of Rare team members and implementing partners so that gender integration becomes intrinsic, rather than top-down. 'Cheat sheet' with tips on how to integrate gender was useful for implementing partners. Weekly calls with implementing partners were essential to provide coaching and reminders. Joint learning between implementing partners in group calls and group WhatsApp, was initiated by Rare. <p>WHAT COULD HAVE BEEN IMPROVED</p> <ul style="list-style-type: none"> Because of COVID-19 restrictions, the training was online, and this meant that there was limited time to connect and the training had to be repeated several times. A challenge remains with maintaining the capacity to engage women, because of staff turnover. This requires a more long-term strategy for building capacity.
<p>Tools for gender integration in inclusive fisheries management: ORGANISATION AND CONDUCT OF MEETINGS</p>	<p>WHAT WORKED WELL:</p> <ul style="list-style-type: none"> The women champions (women who are already in a more visible role in a community, e.g., teachers) were not an explicit strategy in the gender strategy, but were a key component in carrying out gender integration: <ul style="list-style-type: none"> The champions serve as an example to other women, serving as FMB executive members. They spoke more freely, thereby making other women feel more comfortable to speak up. Organisation of separate pre-meetings for women, to inform them about issues the men were already aware of, so that they were better prepared going into the main meeting. Spreading of information on FMB through other meetings, such as the savings clubs and financial literacy meetings. FMB meetings need to include joint sessions between men and women, including ice breakers, to ensure that men and women speak to each other about fisheries management issues. Use of simple materials and visuals in meetings to provide information and generate feedback. Building women's self-confidence was important to ensure that women became more comfortable in speaking up. Allowing for flexibility in the approach across sites.

Topic	Lessons/Reflections
<p>Tools for gender integration in inclusive fisheries management:</p> <p>ORGANISATION AND CONDUCT OF MEETINGS</p>	<ul style="list-style-type: none"> • Personal and direct invitations to meetings for women, that also involve informing the husband. • Choice of venue for meetings; outdoors rather than in a formal building to allow for children to come along. <p>WHAT COULD HAVE BEEN IMPROVED:</p> <ul style="list-style-type: none"> • More follow up on practices for inviting women, as it was not applied consistently in all sites. • More effort is required on addressing constraining gender norms and attitudes, with husbands, the general community and village/religious leaders. • Constraining gender norms continued to persist among some village leaders. This requires specific activities and more long-term engagement.
<p>Savings group formation and management</p> <p>CONFLICT AND DISBANDING OF GROUPS</p>	<ul style="list-style-type: none"> • Self-selection of membership: Group formation is fully left to members, they decide what group to join and in-turn, who to invite to save with. This is important because it builds and fosters trust between members, which is key, both for the financial success of the group but also for group cohesion. The strength of the cohesion of a group is a strong determinant of group sustainability. • No external capital injection/start-up funding: All the money circulating through loans should come from the members' own savings. If necessary, any injection of external funding should only be done after at least two cycles after the groups have had experience with solving their own conflicts successfully and have built group cohesion. Criteria for the selection of groups to receive external capital should be clear and transparently communicated so that it is clear to groups who do not receive this finance as to why they did not. • Savings-led model: It is critical that the basis of the groups' activities be savings-based. This ensures that each member is invested in the success of the group. • Accurate record keeping that is accessible to all members: All group recording is done in the presence of all members. Individual share purchase, loan and repayment is recorded in a stamp-based passbook, complemented with a recording in a central ledger. • Democratic governance structure: Groups should be encouraged to hold an election at the beginning of each cycle, to elect the leadership structure, based on roles that are clearly defined in the group's constitution. • Annual/cyclical audit, which is a share out: This is a way for everyone to see what is 'in the pot,' and get affirmation that they are getting what they are due.

Topic	Lessons/Reflections
Savings group formation and management CONFLICT AND DISBANDING OF GROUPS	<ul style="list-style-type: none"> • Transparency of decision-making: All transactions are done in the presence of all members. Group funds and records are stored in a central box, with locks that require more than one member of the 'key bearers' to open. Specific members are selected as 'money counters' to collect and count money submitted. Additionally, all records are made in a language and system that even the least literate member of the group can understand. • The selection of support providers for savings clubs needs to take into account the contextual background of the groups. Selection of members from the same community to provide support to avoid any prejudicial/stereotypical treatments.
Savings group formation and management: HARMFUL PEER PRESSURE	There were some instances of excessive peer pressure to save at the maximum level, which resulted in some savings club members prioritising saving over essential household expenses. Context-based lessons on collaboration could be added to the savings club trainings to foster a culture of encouragement and collaboration rather than competition.
Savings group formation and management: PEAKS IN DEMAND FOR CASH/ NEED FOR LARGER AMOUNTS	<p>Peaks in demand for cash, and demands for larger amounts could not be absorbed by the savings clubs. This could be overcome by two (complementary) options:</p> <ul style="list-style-type: none"> • Linkages with formal institutions for (mature) savings clubs to increase access to larger amounts for members. Readiness assessments should be done before groups are linked with formal financial institutions. • Setting up of specific separate savings ('sink' fund) for times of peak demand for cash (e.g., religious festivities).
FINANCIAL LITERACY	In some cases, increased understanding of family finances led to men taking over the management of the business finances from their spouses. It is critical to ensure continued household dialogue on the importance of joint decision-making.

Topic	Lessons/Reflections
<p>ENTERPRISE DEVELOPMENT</p>	<ul style="list-style-type: none"> • Added responsibilities related to financial record keeping and new enterprises led in some cases to additional burdens on already overburdened women. • Building of enterprises requires specific capacity and requires engagement with markets. Setting up businesses without knowing whether there is a market for the products or services will most likely result in failure of the business. • To ensure that women receive the same opportunities, and are not excluded, it is important to target both men and women (couples) with training with regard to enterprise development. • When attempting to set up group enterprises it is important to make sure that there are clear structures responsible to manage the group enterprise, that outlines the transparent election of the management structures as well as their tasks and responsibilities for management of any joint assets purchased. • Injections of external funds into enterprise development should be avoided initially when forming groups for group enterprises, as groups should form for the right reasons. Not doing so is likely to create conflict and a lack of long-term sustainability of groups.
<p>MONITORING AND EVALUATION</p>	<p>WHAT WORKED WELL:</p> <ul style="list-style-type: none"> • Joint reflections are important to adjust the approach and make it suitable for the context. • Accommodating women's tight schedules, when planning data collection. <p>WHAT COULD HAVE BEEN IMPROVED:</p> <ul style="list-style-type: none"> • Better integration of gender in the overall project monitoring framework, including baseline survey. • More targeted comparison between sites with and without gender integration activities, or savings clubs.

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