



Women octopus fishers in Indonesia. © Stuart Campbell

Gender-inclusive financial literacy strategies: Unlocking the value of small-scale fishing communities

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Abstract

Gender-inclusive financial assistance programmes assist with empowering coastal communities and their financial resilience by enabling equitable decision-making roles within households and communities. This can involve building knowledge and capacity in using the tools needed to manage household and business finances, and making access to financial services available. In this article, we describe a programme in Southeast Sulawesi Province in Indonesia, that works with coastal communities to improve the financial literacy of fishers, fish traders and fish processors who largely operate in the informal economy. The approach aims at increasing: 1) savings habits, 2) financial planning skills, 3) knowledge, and 4) access to financial services and social protections. Gender outcomes are incorporated within each of the programme components of financial literacy,

establishing savings institutions and improving small business enterprises. The strategies also provide knowledge of the benefits and challenges of the various pathways to integration with the formal economy. Gender inclusion in the financial reform of fishing communities also legitimises and fosters the adoption of village co-management bodies that have been allocated access rights over their small-scale fisheries, which are currently being established in over 200 fishing villages in Southeast Sulawesi Province.

Introduction

Human wellbeing in coastal areas is closely coupled with primary productivity from small-scale fisheries and agriculture (Lawless et al. 2019). Sustained progress and improvements in natural resource management (Cinner et al.

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2012) requires that this production be beneficial to coastal livelihoods through the generation of income and food security (Nielsen et al. 2013), thus driving improvements to wellbeing (Vijaya et al. 2014). A lack of sustainable financing and economic reforms within small-scale fishing communities that recognises gender use and empowerment over assets and natural resources (Mangubhai and Lawless 2021), hampers long-lasting and comprehensive reforms in natural resource management. Of critical importance is that without gender and socially inclusive financial and economic strategies, newly formed sustainable fishing regulations are unlikely to be accepted (Wierderkehr et al. 2019).

As financial products, services and markets are becoming more sophisticated, diverse and available in remote coastal areas, being equipped with the knowledge and skills to use and access financial tools and products is essential for individuals to efficiently capture and build the wealth they gain from natural resources (Kimiyaaghalam and Meysam 2015). Financial literacy is the knowledge of financial concepts, the capacity to manage personal finances, the skills in making financial decisions, and the confidence in future financial planning (Remund 2010).

Within coastal households in Indonesia, both women and men have primary decision-making roles in different components of financial planning for their households and businesses. Accounting for the financial conditions under which both women and men can access and control resources, is a key feature of empowering rural economies (Okali and Bellwood-Howard 2017; Danielson et al. 2018). Many gender-inclusive strategies or approaches in small-scale fisheries reach women but are not designed to benefit, empower or transform their lives (Mangubhai and Lawless 2021). Distance and geography can also limit access to financing, as many services are based in large towns and cities that are remote from coastal communities. To optimise financial decision-making, gender-transformative approaches address underlying gender norms and relations that can serve as barriers to gender inclusion. They can improve household and business financial literacy and skills in the use household cash flows, business management and other financial tools. In this way, the decision-making needs of both women and men can be met, and thereby shift gendered patterns so that they address fair division in labour and improved access and control over assets and resources in communities (Elmhirst and Resurrección 2009; Danielson et al. 2018).

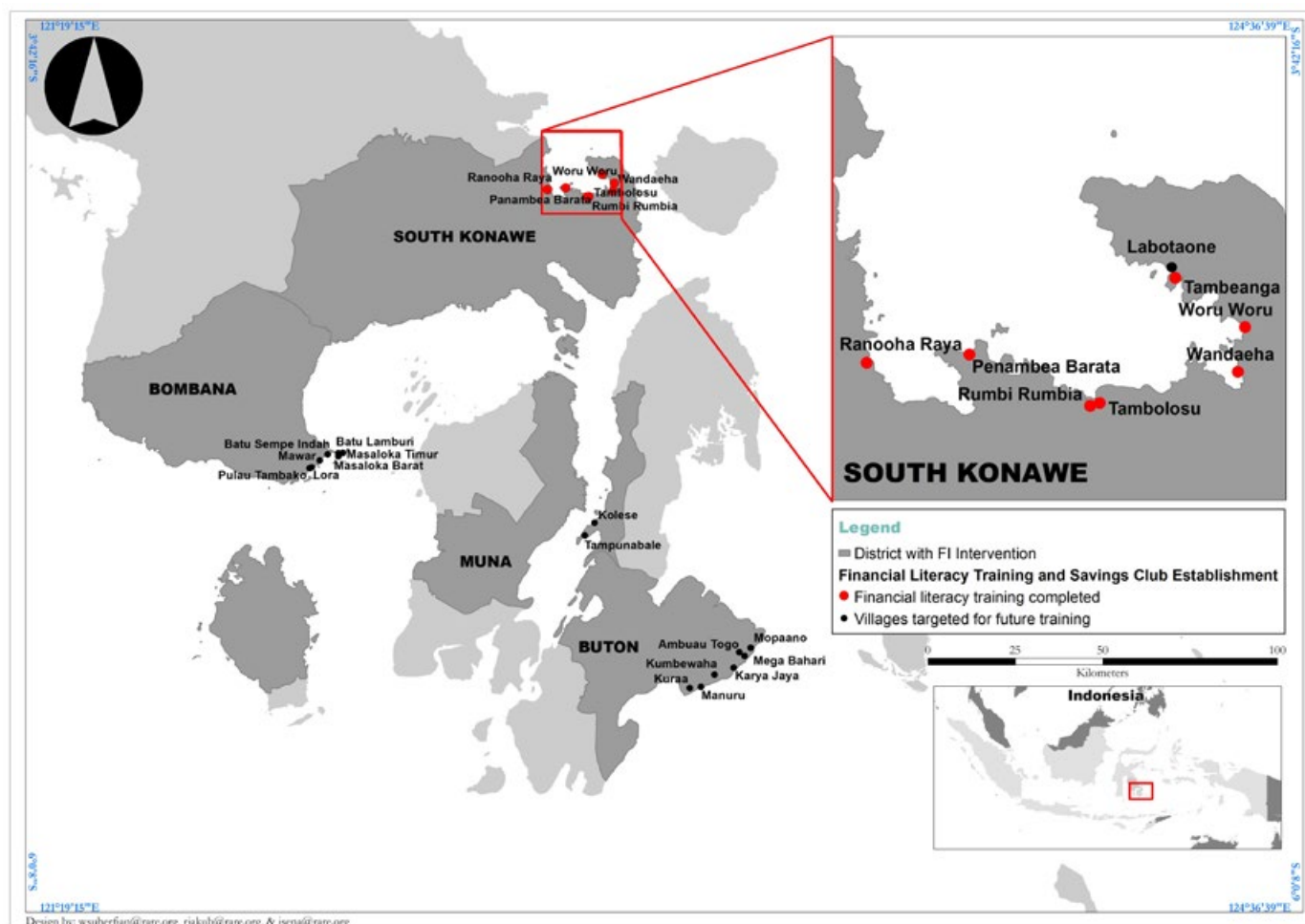


Figure 1. Location of villages from four districts in Southeast Sulawesi Province, Indonesia that are involved in and adopting financial inclusion training and strategies.



Women fish traders selling fresh and processed (dried, salted, smoked) fish in a market in Southeast Sulawesi Province, Indonesia. ©Januar Sena

In Indonesia, law No. 7 of 2016 concerning the “Protection and Empowerment of Fishermen, Fish Cultivators, and Salt Farmers” provides the legal basis for empowering fishing communities, in theory removing barriers to improvements in financial literacy, capacity and development for women and men (Azza et al. 2019). Access to various informal and formal financial institutions, including banks and microcredit can build financial literacy, and reduce dependence on high-interest, long-term loans. Government systems such as the national fisher registration system (*kartu pelaku usaha perikanan dan laut* or *kusuka*) allows fishers and fish workers to access government emergency and life insurance benefits, and subsidies for fuel and other needs (Azza et al. 2019). Many fishers and small fisheries-related businesses in Indonesia, however, still have low and irregular income and poor access to infrastructure and knowledge of financial tools and services that may not suit their seasonal fishing patterns (Azza et al. 2019). For example, from a survey of 6007 households across Southeast Sulawesi Province, 23% of households had access to formal financial services such as banks, while 5% accessed informal microfinance services such as cooperatives and credit unions, and 6% accessed other informal loans (unpublished data).

The desire, however, for households to enter into formal economies is often related to the development of larger businesses, building upon social support networks, improving economic conditions and social protections (Becker 2004). The new omnibus bill in Indonesia intends to deregulate the many laws related to business activities across the country. By minimising the number of licenses and permits, the bill

aims to reduce barriers that obstruct investment growth in Indonesia (Sembiring et al. 2020). For small enterprises in fishing communities, this means that access to a formal business identity, through obtaining a business identity number (*nomor identitas bagi sebuah perusahaan*), will be streamlined, deleting many of the administrative and financial requirements needed to enter the formal economy (Sembiring et al. 2020).

In Southeast Sulawesi Province, more than 40,000 small-scale fishers and fish workers reside in 947 coastal fishing villages. Households practice fishing and buy and trade in live, fresh and processed fish (Campbell et al. 2020). With the purpose of empowering coastal communities in Southeast Sulawesi Province to manage their fisheries sustainably, we describe here an approach to improve the financial literacy of fishers, fish traders and fish processors who largely operate within the informal economy. The approach will help to increase savings habits, financial planning skills, knowledge and access to financial services and social protections. Gender outcomes are explicitly acknowledged for each of the programme components, which include training in financial literacy, establishing village savings and loan associations, and assisting village business enterprises. These economic initiatives can also provide knowledge of the benefits and challenges of the various pathways to integration with the formal economy. In addition, these strategies help legitimise village-based co-management bodies of small-scale fisheries, which are now being established throughout Southeast Sulawesi Province.

Methods

Location

Gender-inclusive financial strategies have been initiated in four districts and 23 villages in Southeast Sulawesi Province. Financial literacy training and the establishment of savings clubs have taken place in the villages of South Konawe District (Fig. 1).

Targets and outcomes for financial inclusion strategies

A schematic of interventions by the gender-inclusive financial resilience programme and the barriers to financial inclusion it attempts to address is shown in Figure 2. The targets and outcomes proposed for this gender-inclusive financial resilience programme include: 1) 50% of registered fishers and their household spouses in the geographical area have received training and adopted new behaviors, including improved understanding of financial management and financial services available; improved access to and use of (digital) financial services and products to improve their family well-being; 2) 30% of women in the identified villages in four districts have increased financial literacy and decision-making power for their family finances and household enterprises; 3) establishment of a minimum of 20 savings clubs in 20 villages, with approximately 225 to 300 members (90% women), representing more than 80% of coastal villages within four districts (Fig. 1); 4) 250 households within the fishing communities benefit from value chain improvements, thereby strengthening the role of women in decision-making; and 5) women are actively participating in 20 village-based fisheries management bodies.

Small-scale fisheries value chains

To better understand specific community needs related to fishing enterprises, as well as the gaps in financial inclusion and the needs and opportunities for investing in gender equity, we conducted a value chain analysis of small-scale fisheries at selected villages within four districts in Southeast Sulawesi Province. In total, eight focus group discussions were conducted (between December 2019 and January 2020) with 67 fish buyers and processors (39 women, 28 men) from six villages: Panambea Barata, Labotaone and Wandaeha (South Konawe District); Lora (Bombana District); Karya (Buton District); and Kolese (Muna District) (Fig. 1). Key informant interviews were conducted with 36 fish buyers and processors (26 women, 10 men) across these six villages to gain fine-scale information on the species they trade, including volumes, seasonality, prices, revenues and cash flows of their business operations.

Selection of village communities for financial inclusion strategies

We examined sex-disaggregated data on household access to financial services and participation in fishing, fish processing and trading, collected from 6007 households in 11 districts of Southeast Sulawesi (Rare, unpublished data) in order to identify 4 districts and 23 villages, that were suitable to pilot financial inclusion interventions with community households. Households for inclusion in the training were identified using a registration database for fishers and fish workers. The database, developed by government partners and Rare, is based on their interaction with the Ourfish app, an android-based application used by fish traders to record purchase records of fish at the first point of sale,

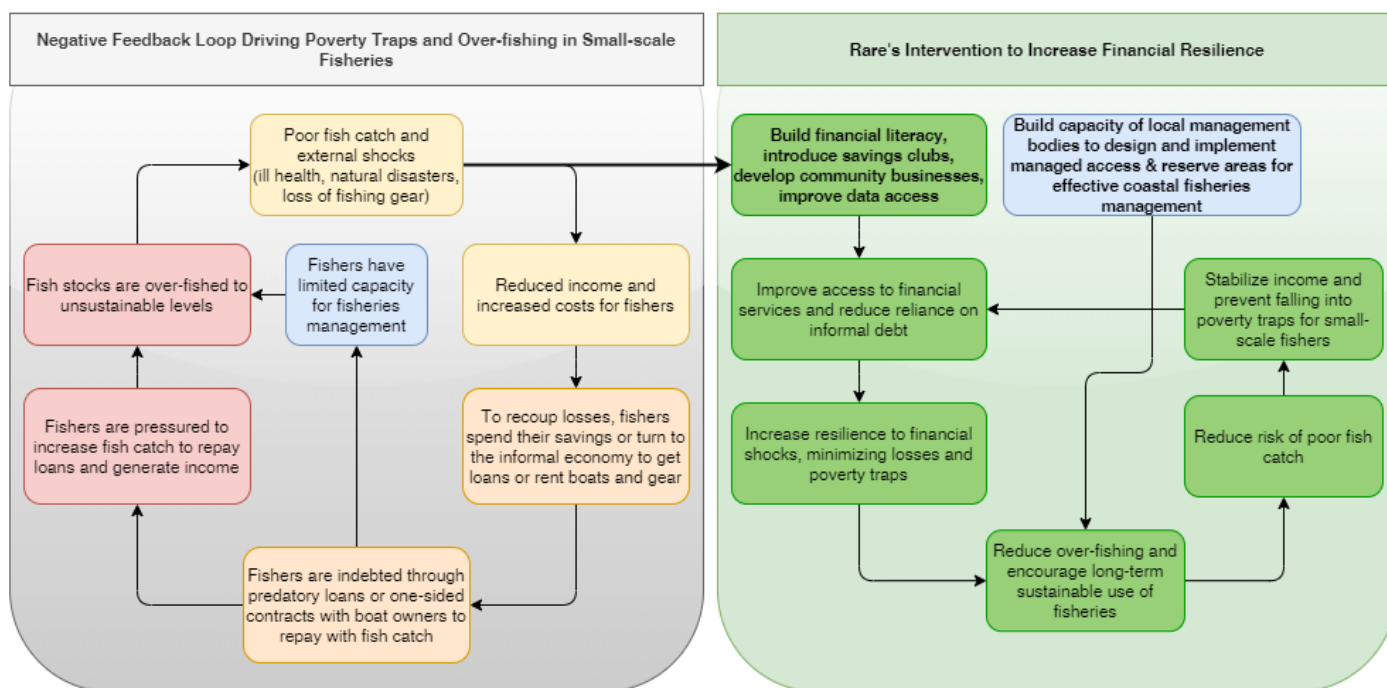


Figure 2. Barriers to financial inclusion and resilience, and interventions to address these issues.

Financial literacy training

Household revenues from fisheries-related practices

Results

Small-scale fisheries value chains

The main groups of fish and invertebrates caught and traded fresh and processed include groupers, mackerels, snappers, rabbitfishes, trevallies, breams, fusiliers, mud crabs and shrimp. Fish are caught at village landing sites and enter various supply chains. During peak fishing seasons where there is a high supply of fish, the majority are sold in markets in the villages and district, and some are transported to the provincial capital for trade. Some high-value species are sold to national and international markets. During peak periods of fresh fish supply, prices received by village fishers and traders for fresh fish may decline, and many households salt, dry or smoke the oversupply to preserve the fish for future household consumption. Other households have a fish processing business year-round, where fresh fish is bought from local fish traders and fishers, and the processed products are sold to local households, local markets and provincial city markets as both edible products and souvenirs (Fig. 3).

Financial literacy training modules and content

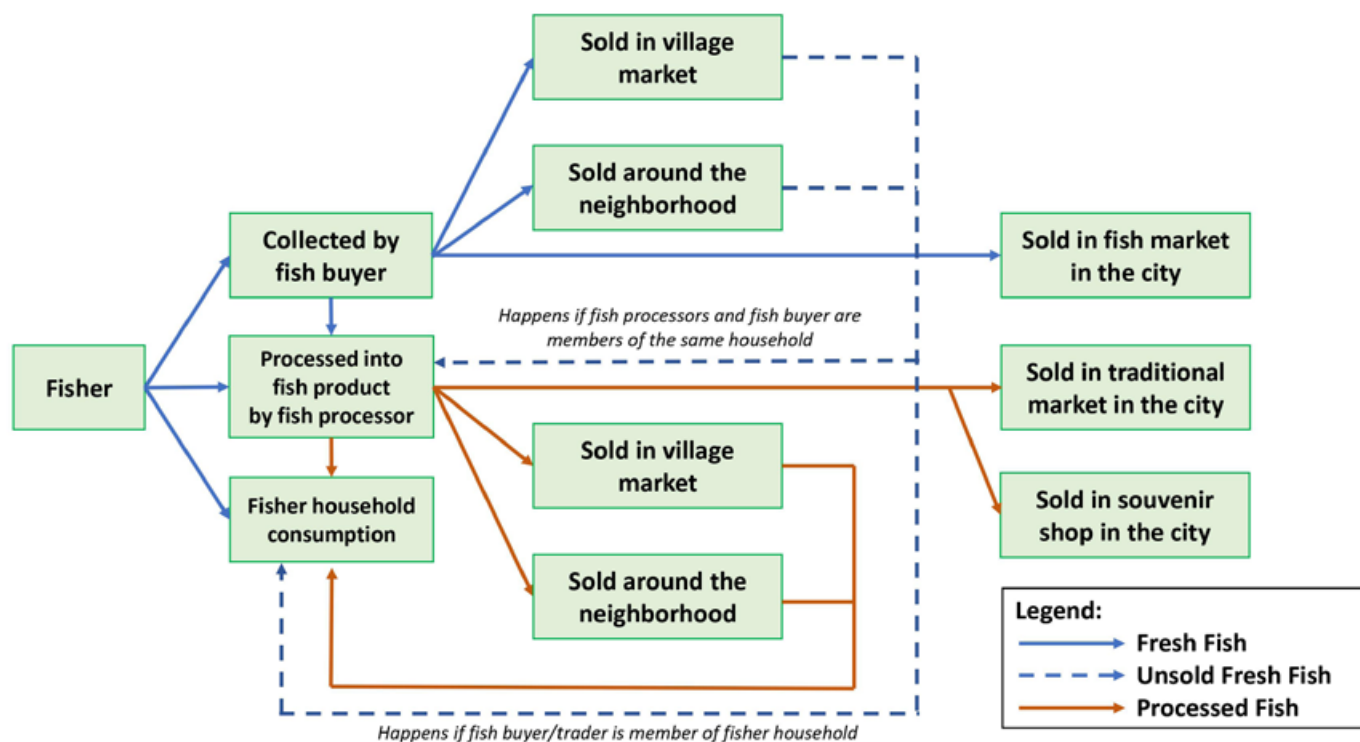


Figure 3. Small-scale fisheries value chains in Southeast Sulawesi Province, Indonesia.



Octopus trader in Southeast Sulawesi Province in Indonesia, using the Ourfish app to record her purchased catch. © George Stoyale



Participants undertaking financial literacy training in Southeast Sulawesi Province in Indonesia using training modules. ©Udin

Three training modules have been delivered on: 1) concepts of financial literacy; 2) calculations of various household revenue streams; and 3) household finances, savings and

loans and village saving and loan associations. A fourth module with a focus on training microhousehold businesses or enterprises was initiated in December 2020 (Table 1).

Table 1. List of financial literacy modules and description of training content.

Training Module	Training Content
Concepts of financial literacy, income and expenditure (Module 1)	<ul style="list-style-type: none"> Financial literacy: Importance of financial literacy, its linkage with resilience, and fisheries management Financial institutions, financial services available Income: What is income, who can contribute to household income, steps to calculate your weekly income Expenses: What are expenses, essential and unessential expenses, prioritising expenses and decision-making related to expenses, steps to calculate expenses
Calculation of weekly family income and expenses (Module 2)	<ul style="list-style-type: none"> Tools and methods available to calculate household income and expenses Tools and methods used to prioritize household expenses
Household expenditure, savings and loans (Module 3a)	<ul style="list-style-type: none"> Concepts of expenses, revenue, profits and losses Savings concepts, types and uses Financing products available Financing products to cover losses Prioritising financing products to service household and business needs How to avoid and breakout from high interest, long-term loans Functions, establishment and operations of village savings clubs
Establishing a savings and loan group (Module 3b)	<ul style="list-style-type: none"> Calculation of income and expenses Concepts of profit, savings, cash reserves and assets such as property, livestock, gold, fishing gears, boats. Concepts of loss and selling of assets, mortgage assets, reduction in non-priority expenses Overview savings club concepts Participants are interested in joining savings club as a forum for learning financial management Savings assist family households to manage their finances and small fishing and processing businesses more effectively Savings and credit facility; nine-month savings cycles Social funds (e.g. communal capital, infrastructure, livelihood projects) Emergency funds
Business training with targeted household enterprises (Module 4)	<ul style="list-style-type: none"> Value adding, hygiene, quality control, product diversification Access to finance from local banks including e-platforms Access to finance from informal finance institutions, including co-operatives, credit unions, village-owned enterprises Ourfish app as a financial planning and monitoring tool Digital money transfers, digital supply and sale platforms Formalisation of business, including benefits and barriers, financial identity, legal processes, capital needs Government training and support programmes



Household revenues from fisheries

Weekly household gross income, expenses and net income revealed that, on average, weekly gross income ranged from USD 25 to USD 70 per week, while net incomes per household were less than USD 25 per week. For some households in Tambeaga and Tombolosu, net income was negative based on their fishing-related revenues (Fig. 4). On average, across all villages, the gross weekly income for men (USD 28) from fishing-related revenues, was higher than for women (USD 20) (Fig. 5).

Village savings and loan associations (savings clubs)

Following the initial training in financial literacy, trainees determined if they had a group of people who would like to establish village savings and loan association (VSLA) or savings club. These groups consisted of 10–25 people who save together and take small loans from those savings for about nine months, after which accumulated savings and profits are shared among the members, according to the amount each member saved. Savings clubs hold biweekly meetings. Resources and assistance are being provided to

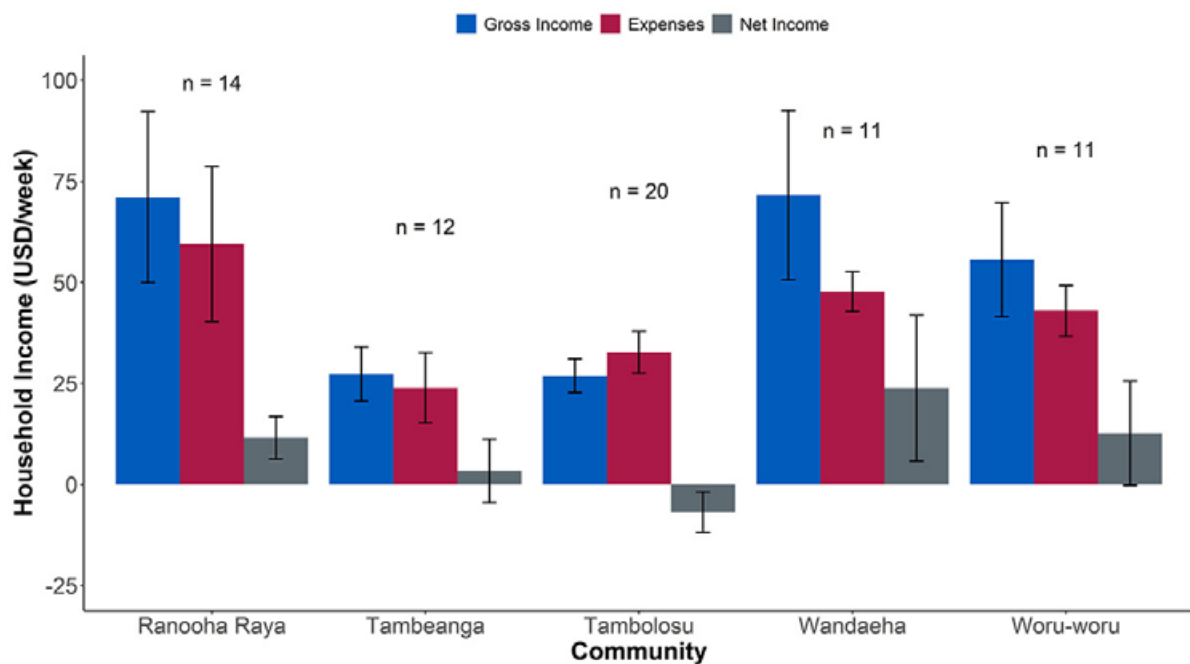


Figure 4. Weekly household gross income, expenses and net income (mean \pm SE) from fisheries for five villages in Laonti subdistrict, South Konawe District, Southeast Sulawesi Province, Indonesia.

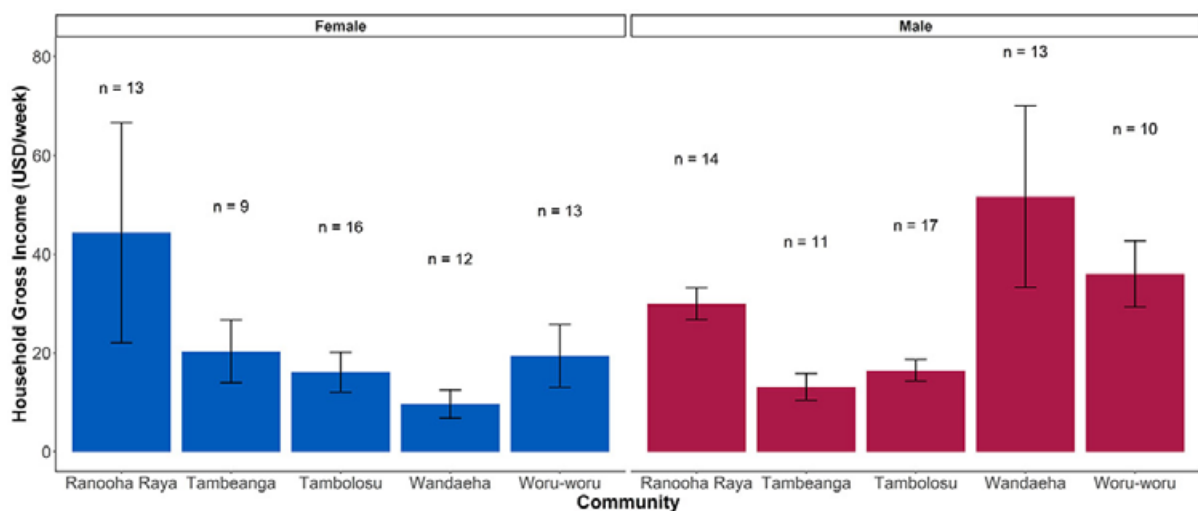


Figure 5. Weekly household gross income by gender (mean \pm SE) from fisheries for five villages in Laonti subdistrict, South Konawe District, Southeast Sulawesi Province, Indonesia.



First savings club established in Laonti subdistrict, South Konawe District, Southeast Sulawesi Province, Indonesia. ©Udin

groups to formally establish their savings clubs, and support ongoing operations, including share purchasing, short-term loans (~three months) and payment schemes. At the end of a cycle of 9–12 months, savings and profits are to be shared based on each member's contribution, and a new cycle can then resume. A social fund and an emergency fund also cover agreed-on collective community activities (e.g. joint livelihood projects, fisheries management projects) and emergency assistance for households in need. To date, five savings clubs have been established, one each in the villages of Labotaone, Tameanga, Tambolusu, Rumbi-Rumbia and Wandaeha in Laonti subdistrict, in South Konawe District.

Discussion

The gender-inclusive approaches to improving household financial management applied here attempt to empower coastal communities by building on existing decision-making roles within households, ensuring the tools to manage financial dealings are available, and enabling active participation in village fisheries management bodies. Allowing women and their spouses, and women and men without spouses, to self-select and participate in training, was a preferred strategy of all participants from all villages. Women and men from the same household often manage different financial components of the household, with general household finances and the separate fisheries-related businesses they manage. By working together, we found this built a joint knowledge of the savings behaviour and financial tools required for their households, and could assist with joint decision-making for both household and business finances at the household level (Lawless et al. 2019).

The extremely low weekly revenue of households who participated in financial literacy training, with women earning about 30% less than men, highlights the need for building financial literacy in an ongoing manner, thus ensuring that households are equipped with the tools to effectively manage their finances, whether from fishing, trading or processing. Empowering women, while noting that existing social norms may differ across and within villages, may not necessarily involve increasing their income relative to men. Yet in the appropriate social contexts, the ability of women to negotiate and be independent with their own household and business incomes (Lawless et al. 2019) can lead to positive outcomes for gender inclusion in financial management, empowerment processes and management of natural resources (CGIAR 2020).

Further work may be required to ensure access various financial services and digital technologies, which can help with managing household finances and businesses. The negative net income of some of the fishing households, while likely to be supplemented by other income streams, is consistent with studies elsewhere, where daily incomes of fishing households are financially disadvantaged compared with those who have other income sources (Kronen et al. 2010). These low household income flows of fishing households in Southeast Sulawesi Province, is, therefore, likely to be a key factor driving support by women for the establishment of village savings clubs.

Currently, the five savings clubs established in each of the five villages have been established by women. Compared with men, we found that women often have had more recent experience and familiarity with village-based savings funding

groups. For example, we found that *arisan*, a rotating savings and credit association, had once existed in some villages, but often they were defunct or did not provide sufficient savings for individual livelihood needs or for community requirements related to the fisheries sector (e.g. providing fishing gear for women's groups). In the fishing villages where financial literacy training took place, formal and informal credit institutions such as bank branches and cooperatives do exist, yet they can be geographically dispersed and not easily accessed by all villagers. Access to financing from some microfinance institutions, of up to IDR 25 million (USD 1760) per household is available. Yet knowledge and other barriers exist, with only a small percentage of households (12%) in these villages having formal savings accounts in banks, 2% having insurance and 0.4% having access to microfinance through credit unions or cooperatives (Rare, unpublished data).

Therefore, savings clubs can often be a bridging institutional framework where fishing communities, often remote and lacking knowledge of financial services, can develop the habits and practices of sound account-based financial management (Narasimhan and Matthews 2014).

As the savings clubs build liquidity and the safety of the cash may become a problem, these informal institutions may be best served by opening bank accounts to deposit excess cash to ensure its safety and security (Narasimhan and Matthews 2014). Over time, savings clubs may evolve into other institutions such as a microcredit facility or cooperative, creating linkages with formal financial services, markets and support from government and the private sector.

Nonetheless, for many households, communities and small enterprises that have small cash turnovers, the tax implications and complexity of financial regulations and procedures, can be barriers to accessing formal financing (de Beer et al. 2013). Many households and village enterprises that have low-income flows may still desire undocumented income. Through the community lens, informality can create a sense of independence, where access to labour is flexible, providing a competitive advantage in pricing of products below formal market prices (de Beer et al. 2013). Until access to financial services and their benefits are perceived in a positive way, and the advantages of technology-based mobile banking and digital trading platforms manifest, a savings club culture can offer convenient financial access in a cost-effective manner, improve skills in the practices of modern financing (Narasimhan and Matthews 2014), and build financial resilience in communities to deal with external macroeconomic shocks.

Conclusion

In developing new pathways for enhancing small-scale fishery economies, households and communities seem willing to embrace gender-inclusive financial strategies, which can help legitimise their co-management of fisheries resources (McDonald et al. 2020). Legal mandating of village governance bodies that represent the entire fishing community, also increases trust between local governments and communities, as principles of representation, participation and transparency are applied to local governance. Building financial literacy promotes recognition of women's roles in the fisheries sector, challenges some gender norms and stereotypes that women do not fish, and highlights their roles in pre-harvest and post-harvest activities.

The gender-inclusive programme described here has only recently been initiated over the past year. We recognise that improvements in capacity building, institutional learning and the application of financial tools and services for fishing communities is required in order for financial empowerment to be achieved. Savings clubs and dedicated leadership roles and spaces for women to actively participate in fisheries management bodies can provide opportunities for women to have meaningful decision-making and financial agency in households and community governance (Lawless et al. 2019). Monitoring of the steps, processes, benefits and outcomes that gender inclusion delivers for households and communities will include tracking how income from fisheries is building the wellbeing of households, and how the agency of women in financial resources and planning is improving. Through this we can understand the social norms that are enabling, and those that are barriers, to gender-inclusive strategies.

As advances in both economic and social reforms are fast-tracked by the rapid uptake of new technologies, and the replication of these approaches is implemented through fishing villages, we believe that communities with gender-inclusive approaches are best equipped to capture, retain and build value from their small-scale fisheries. The work described here has provided some insights into the pathways that some fishing communities are taking in Indonesia.

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