

Positioning Brief

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Executive Summary

This positioning brief aims to catalyze a renewed global agenda for financial inclusion — one that recognizes the centrality of the blue economy to livelihoods, climate resilience, and food security. Despite the ocean's immense economic and ecological value, financial inclusion efforts have historically overlooked coastal communities and small-scale fishers. Most contributions to this field date back nearly two decades and remain fragmented, with recent initiatives yet to coalesce into a unified global agenda. This brief argues that the time has come to place financial inclusion for the blue economy firmly on the global development agenda.¹

We make the case for a new, integrated agenda that bridges the longstanding divide between environmental conservation and financial inclusion. Too often, these two fields have operated in parallel, missing critical opportunities to align incentives and strengthen outcomes for people and the planet alike. This brief aims to highlight the centrality of financial inclusion in fisheries and position it as a priority within emerging blue economy strategies. It draws primarily from recent research and fieldwork conducted by Rare and the Center for Financial Inclusion (CFI) in the Philippines, a country whose fisheries sector exemplifies both the promise and the precarity of life in the blue economy. While grounded in the Philippine context, the insights have global relevance for coastal communities around the world.

Our research shows that financial services can both support and undermine marine conservation, depending on how they are designed and deployed. In the absence of savings, insurance, or credit, small-scale fishers often resort to harmful coping strategies — such as overfishing or taking on high-interest debt — that can further deplete marine ecosystems and entrench economic vulnerability. Evidence from our research in the Philippines shows that fisher households that could access loans from MFIs or savings groups after a crisis were able to use them for consumption and repairing damaged assets. However, discussions with local mayors and government officials revealed that access to credit could also lead to investments in unsustainable gear or practices if not paired with conservation safeguards. Yet when appropriately structured, financial tools can enable fishers to diversify their livelihoods, adopt climate-resilient strategies, and

The purpose of this positioning brief is to build awareness, generate more conversation and action, and bring together stakeholders from the climate and financial inclusion worlds to support the millions of low-income, vulnerable coastal populations relying on the blue economy for sustenance.

 $reduce\ pressure\ on\ marine\ resources-strengthening\ both\ economic\ security\ and\ environmental\ sustainability.$

Advancing this agenda will require greater collaboration across sectors, new financial instruments tailored to the realities of small-scale fisheries, and policy frameworks that align conservation and inclusion goals. The path forward must involve innovation, investment, and a reimagining of how financial inclusion can contribute to ocean sustainability. This positioning brief offers a foundation for that journey — and a call to action for the global community to move from neglect to momentum.

This brief builds on research conducted by the Center for Financial Inclusion (CFI) in partnership with Rare, aiming to lay the foundation for a new global financial inclusion agenda for the blue economy. The brief is divided into four key sections. It begins by highlighting the importance of the blue economy in supporting multiple development goals, from food security to climate resilience and marine conservation. It then examines the role of inclusive finance, acknowledging existing knowledge gaps and the need for further research. The brief also presents insights from the Philippines, where CFI and Rare conducted research to strengthen marine conservation efforts, focusing on the role of inclusive financial services in supporting community-led and -managed sustainable fisheries. Finally, it discusses key building blocks for advancing this agenda, emphasizing the importance of financial innovations, policy approaches, and collaborative efforts needed to accelerate financial inclusion in the blue economy.

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Fishers in the Blue Economy: A Critical Agenda for Global Development

The "blue economy" refers to the sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of the ocean ecosystem.²

It encompasses a wide range of economic sectors and related policy areas, including fisheries, aquaculture, tourism, maritime shipping, renewable energy, seabed extractive activities, marine biotechnology, and bioprospecting.³ While the blue economy is diverse and rapidly evolving, the livelihoods of coastal communities, particularly those engaged in small-scale fisheries,⁴ are central to its future and its challenges. These communities often remain excluded from formal financial systems despite their strong dependence on ocean resources and vulnerability to environmental and economic shocks. This positioning brief focuses on small-scale fishers as a critical entry point for advancing financial inclusion within the blue

Jongman, B., Gutiérrez Goizueta, G., Van Zanten, B., & González Reguero, B. (2021, February 24). Blue barriers: A nature-based solution to build resilience. World Bank Blogs. https://blogs.worldbank.org/en/climatechange/blue-barriers-nature-based-solution-build-resilience.

World Bank and United Nations Department of Economic and Social Affairs. (2017). The Potential of the Blue Economy: Increasing Long-term Benefits of the Sustainable Use of Marine Resources for Small Island Developing States and Coastal Least Developed Countries. https://hdl.handle.net/10986/26845

According to the FAO, small-scale fisheries are "traditional fisheries involving fishing households (as opposed to commercial companies), using a relatively small amount of capital and energy, relatively small fishing vessels (if any), making short fishing trips, close to shore, mainly for local consumption." See: Small-Scale Fisheries Hub. (n.d.). About Small-scale Fisheries. https://ssfhub.org/about-ssf-hub/about-small-scale-fisheries

economy, strengthening their resilience, supporting sustainable resource use, and enhancing their role in emerging blue economy strategies.

The blue economy is vital to global food security, economic stability, and climate resilience. Oceans and coastal ecosystems support inclusive growth, provide essential nutrition, and serve as a critical safety net for millions, particularly in low-income countries. They generate an estimated \$2.5 trillion annually in goods and services,⁵ and over 500 million people rely on smallscale fisheries for their livelihoods,6 nearly half of whom are women.⁷ Additionally, fish and seafood provide the primary protein source for over 3 billion people worldwide, particularly in low-income coastal regions.8 Yet fishing communities, often low-income and located in climate-vulnerable areas, face growing risks and financial precarity due to high-income volatility, lack of formal employment structures, and exposure to climate and economic shocks. Financial services such as savings, microinsurance, and credit can help stabilize their livelihoods and reduce reliance on harmful coping strategies like

overfishing or selling assets at distressed prices.9

Children in small-scale fisher households, 10 particularly those under five, face high levels of undernourishment and malnutrition. About one in four people, particularly those living within 12 miles of a waterbody, rely on smallscale fisheries for nutrition." However. the reality is more complex, and many fishing households experience high rates of food insecurity. Studies in Ghana¹² and Indonesia¹³ highlight the prevalence of malnutrition among children in fishing communities. Limited access to financial services exacerbates this issue, as households struggle to smooth consumption, invest in balanced diets, or afford healthcare. These challenges worsen when fisher households experience climate or economic shocks and are compelled to reduce consumption. Expanding financial inclusion could help address these challenges by enabling fishers to save, access credit for essential goods, and invest in more sustainable income sources.

⁵ United Nations Conference on Trade and Development. (2021). Advancing the potential of sustainable ocean-based economies: Trade trends, market drivers and market access. https://unctad.org/publication/advancing-potential-sustainable-ocean-based-economies-trade-trends-market-drivers-and

⁶ FAO. (2023). International Year of Artisanal Fisheries and Aquaculture 2022. https://doi.org/10.4060/cc5034en

World Fish Center. (2025, January 16). New Study in Nature: Small-Scale Fisheries Essential to Global Nutrition, Livelihoods. https://worldfishcenter.org/press-release/new-study-nature-small-scale-fisheries-essential-global-nutrition-livelihoods

⁸ FAO (2023)

Tietze, U., & Villareal, L. (2005). Microfinance in Fisheries and Aquaculture: Guidelines and Case Studies; Part II. FAO. https://www.fao.org/4/v5045e/v5045e06.htm; ~text=Not%20much%20has%20been%20written, field%20is%20still%20evolving%20and

[&]quot;Small-scale fisher household" refers to a family unit whose primary livelihood depends on fishing, often using small, labor-intensive fishing gear and vessels. They are typically rooted in local communities and often fish for direct consumption or within a local market.

Basurto, X. et al. (2025). Illuminating the multidimensional contributions of small-scale fisheries. Nature, 657, 875–884. https://doi.org/10.1058/s41586-024-08448-z

Bandoh, D., Manu, A., & Kenu, E. (2018). Lacking in abundance: undernutrition in a Peri-urban fishing community in Coastal Ghana. BMC Nutrition, 4(20). https://bmcnutr.biomedcentral.com/articles/10.1186/s40795-018-0229-8#:~:text=Conclusions,be%20 extended%20to%20these%20communities

Gibson, E., Stacey, N., Sunderland, T.C.H., & Adhuri, D. (2021). Coping or adapting? Experiences of food and nutrition insecurity in specialised fishing households in Komodo District, eastern Indonesia. BMC Public Health, 21(1), 355. https://pmc.ncbi.nlm.nih.gov/articles/PMC7885255/



Climate change disproportionately impacts coastal fishing communities.

Rising sea levels, extreme weather events, and shifting fish stocks threaten marine-dependent economies. Financial tools play a crucial role in adaptation; indemnity insurance can help cover damages to assets and life, while parametric insurance can support communities with rapid payouts after typhoons, and targeted credit programs can enable fishers to invest in climate-resilient livelihoods such as aquaculture or sustainable tourism. Studies in the Philippines and Rare's programmatic efforts¹⁴ show that fishers with access to savings and insurance recover more quickly from climate shocks, underscoring the link between financial resilience and environmental adaptation.¹⁵ While still in the early stages, Nature-based Insurance Solutions (NbIS)¹⁶ can be a powerful mechanism to protect natural ecosystems like mangroves and coral reefs, which act as natural defenses against climate impacts.

Rare has pioneered a community-driven ecosystem-based adaptation (EbA) approach called managed access with reserves (MA+R) that balances sustainable use of marine resources and protection by providing local fishers with exclusive access to fish in the "managed access" areas and identifying "reserves" that are off limits for fishing.

Ocean Risk and Resilience Action Alliance. (2022). Strengthening the Financial Resilience of Small-Scale Fishers – Project Summary. https://oceanriskalliance.org/project/strengthening-the-financial-resilience-of-small-scale-fishers/#:~:text=There%20 are%20approximately%2050%20million.storms%20and%20other%20unexpected%20events

⁶ GIZ Manila. (2024). Report on Ecosystem-based Adaptation (EbA) and Nature-based Insurance Solutions (NbIS) in the Philippines and Asia. https://www.giz.de/fachexpertise/downloads/giz2024-en-report-eba-nbis-philippines-asia.pdf

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Financial inclusion in the fisheries and coastal sector remains an underexamined area, both in research and in development policy. Fishing communities have long been subsumed under agriculture or broader rural finance despite facing distinct challenges such as income volatility, common-pool resource management, and high exposure to climate risk. A 2020 Marine Policy study found that improved financial access could reduce vulnerability among fishing households, yet structural barriers remain poorly addressed. Unlike farmers or urban entrepreneurs, small-scale fishers have rarely been a focus of global financial inclusion efforts, even though they play a critical role in food security and marine sustainability. As early as two decades ago, the UN Food and Agriculture Organization noted the lack of attention to microfinance for fisheries — an observation that still holds today.

This brief argues that financial inclusion can play an important role in marine conservation, biodiversity, climate resilience, and food security, shaping fishers' decisions about resource use, risk management, and livelihood strategies. As harvesters of a common-pool resource, fishers face incentives that can lead to overfishing when financial insecurity is high. Evidence from the Philippines shows that well-designed financial services, combined with financial education, can promote sustainable fishing and income diversification through activities like aquaculture, tourism, or fish processing. At the same time, interviews with local mayors in the Philippines revealed that credit and subsidies

¹⁷ Tietze & Villareal (2003)

Pomeroy, R., Arango, C., Lomboy, C. G., & Box, S. (2020). Financial inclusion to build economic resilience in small-scale fisheries. Marine Policy, 118. https://doi.org/10.1016/j.marpol.2020.105982

Center for Financial Inclusion. (2024). Inclusive Finance for the Blue Economy [Panel discussion]. https://www.centerforfinancialinclusion.org/fiv_resource/inclusive-finance-for-the-blue-economy/#:~text=This%20session%20summary%20was%20AI,using%C2%A0NoteGPT

could fuel harmful practices, such as fishers investing in gear that depletes fish stocks or harms the environment.²⁰ Without environmental safeguards, financial inclusion risks accelerating marine degradation. These findings underscore the importance of aligning financial incentives with conservation goals through sustainability training and mechanisms like Payments for Ecosystem Services (PES) and blue carbon credits.

The evidence base for building a financial inclusion agenda for the new economy is still thin, and many questions remain underexplored: What financial products work best for fishers? How do we balance increasing access to credit with preventing overfishing? How can we reach remote islands with digital **financial services?** This relative paucity of research and documented practice underscores the need for more attention. A recent independent evaluation of the World Bank Group's work on the blue economy from 2012 to 2023²¹ notes that while the term "blue economy" lacks a universally agreed-upon definition, it marks a shift away from siloed, sectoral approaches toward integrated, cross-sectoral solutions. Momentum is also building through initiatives and partnerships such as the 30x30 agenda,22 the World Bank's PROBLUE initiative,23 and the Ocean Risk and Resilience Alliance (ORRAA),24 among others, and the increasing convergence of climate and financial inclusion agendas,25 suggesting that the coming years will

see a richer understanding of how financial inclusion can transform coastal economies. These evolutions create space — and urgency — for embedding inclusive finance as a core enabler of resilience, sustainable livelihoods, and marine conservation.

2.1 WHY FISHERIES REQUIRE A DISTINCT FINANCIAL INCLUSION APPROACH

While much of the conversation around inclusive finance for the blue economy has focused on broad linkages to conservation and resilience, it is equally important to ground this agenda in the specific economic realities of fishing communities (see Table 1). Smallscale fisheries are not simply a rural livelihood variant. They are shaped by a distinct set of features — ecological, economic, and institutional – that differentiate them from both farming and informal urban enterprises. Fishers rely on a common-pool resource whose health is influenced not only by natural variability but also by collective behavior and regulatory enforcement. Fishing is a seasonal activity. Most small-scale fishers' earnings from fishing, as well as agriculture and related activities, are volatile and irregular, determined as much by tides and weather as by skill or labor. Physical risk, seasonal income shocks, and lack of landownership further complicate their relationship with formal finance. These realities shape how financial services are used and whether they help fishers move toward greater resilience or deeper vulnerability.

²⁰ Bergseth, B. (2022, June 8). Overfishing fix needs more than money. 560 Info. https://360info.org/overfishing-fix-needs-more-than-money/.

²¹ World Bank, Independent Evaluation Group. (2024).

²² Convention on Biological Diversity. (2022). Kunming-Montreal Global Biodiversity Framework (GBF). https://www.cbd.int/gbf

World Bank. (2022). The World Bank's Blue Economy Program and PROBLUE: Supporting integrated and sustainable economic development in a healthy ocean. https://www.worldbank.org/en/topic/environment/brief/the-world-banks-blue-economy-program-and-problue-frequently-asked-questions.

Ocean Risk and Resilience Action Alliance. (n.d.). Homepage. https://oceanriskalliance.org/

Totolo, E., & Goronja, N. (2024). 2025: Financial Inclusion Entering a New Era. Center for Financial Inclusion. https://www.centerforfinancialinclusion.org/2025-financial-inclusion-entering-a-new-era/

Designing effective financial services for fisheries requires moving beyond generic financial solutions and toward context-specific solutions that reflect these structural conditions. Savings, credit, and insurance cannot be designed around monthly income flows or land-based collateral when these are absent or inconsistent. Likewise, digital delivery models must account for the remoteness and mobility of many fishing communities. Gender dynamics, informal labor arrangements, and regulatory constraints further complicate inclusion. Savings, credit, and insurance cannot assume predictable income flows or land-based collateral when these are often absent. Digital delivery models must also reflect the geographic isolation and mobility of fishing communities. Table 1 summarizes key features that make small-scale fisheries distinct. It offers a starting point for understanding the structural conditions that shape fisher livelihoods and aims to prompt deeper discussion on how financial service design and policy must evolve to support inclusive and sustainable outcomes in the blue economy.

TABLE 1: CONTEXTUAL REALITIES OF SMALL-SCALE FISHERS

FEATURE	WHY IT MATTERS
Common-pool resource dependence	Fish stocks are shared and finite, making fishers' incomes vulnerable to overfishing and ecological collapse. Unlike farmers or traders, their success depends on collective resource stewardship.
Extreme income volatility and seasonality	Daily earnings vary widely due to catch size, weather, and bans. Fishers may have no income for weeks during closed seasons, making regular loan repayments or steady savings difficult.
Exposure to multiple compounding risks	Fishers face physical danger, climate shocks (storms, rising seas), gear loss, and sudden regulatory restrictions — risks often more acute and multi-dimensional than those in farming or trade.
Exclusion from credit and identity infrastructure	Many fishers lack IDs, land titles, legal identifiers, or formal income records. They operate outside government databases and are often excluded from formal finance, social protection, and disaster relief. Boats, engines, and nets are frequently rented, jointly owned, or easily damaged. Even when owned, they may not qualify as acceptable collateral, limiting access to formal credit channels.
Dependence on informal patronage systems	Fishers frequently rely on credit and sales relationships with intermediaries, who offer loans in exchange for exclusive buying rights. These systems fill a financing gap but perpetuate debt dependency.
Geographic isolation and occupational mobility	Coastal and riverine communities are often far from banking infrastructure. Fishers may travel frequently or stay at sea for days, limiting access to fixed-location services.
Gendered division of labor and decision making	Women play central roles in processing, marketing, and managing household finances, but their role is often not recognized. Furthermore, given their household responsibilities and access to proper fishing boats and gear, women tend to practice nearshore fishing and gleaning, which are considered secondary to fishing.
Regulatory constraints tied to natural resource governance	Conservation laws (e.g., seasonal bans, marine protected areas) directly affect when and how fishers can earn. Financial desperation can drive unsustainable practices (e.g., illegal fishing to repay debt), creating a feedback loop between economic exclusion and environmental degradation.

The Philippines as a Case Study: Financial Inclusion at the Intersection of Livelihoods and Conservation

The Philippines exemplifies the challenges and opportunities of integrating financial services into the blue economy. As an archipelagic nation with over 7,600 islands, the country is home to one of the world's richest marine ecosystems. The fisheries sector is critical in food security and economic stability — fish is a primary protein source for over 50 percent of Filipino households. In 2025, the industry contributed 1.5 percent of the Philippines' GDP and employed 1.6 million people, accounting for 4 percent of the national labor force. There are over 2.5 million registered local fisherfolk operating more than 476,000 fishing vessels, most of which lack sails or gear. The vast majority — over 85 percent — are small-scale fishers engaged in municipal capture fishing within 15 kilometers of the shoreline.

Despite its importance, the small-scale fisheries sector remains highly vulnerable to economic and environmental shocks, exacerbated by limited access to financial services. An estimated 34 percent of small-scale fishers live below the poverty line, lacking access to credit, insurance, and savings mechanisms.³⁰ This financial exclusion leaves them unable to recover from climate shocks, invest in sustainable practices, or upskill and transition to alternative, climate-resilient livelihoods.

World Bank. (2025, May 50). New Fisheries Initiative Will Benefit Over a Million People in the Philippines [Press release]. <a href="https://www.worldbank.org/en/news/press-release/2023/05/51/new-fisheries-initiative-will-benefit-over-a-million-people-in-the-phi#:~:text=Despite%20its%20 importance%2C%20the%20sector,impacts%20from%20land%2Dbased%20activities.

²⁷ Statisa. (n.d.). Number of municipal fisherfolk in the Philippines in 2022, by type of livelihood. https://apastyle.apa.org/style-grammar-guidelines/references/examples/webpage-website-references#6

Van Anrooy, R. et al. (2022). World review of capture fisheries and aquaculture insurance 2022. FAO Fisheries and Aquaculture Technical Paper No. 682. https://doi.org/10.4060/cb0491en

²⁹ Rare. (n.d.-a). Fish Forever in Phillippines. Retrieved August 21, 2024, from https://rare.org/program/philippines/

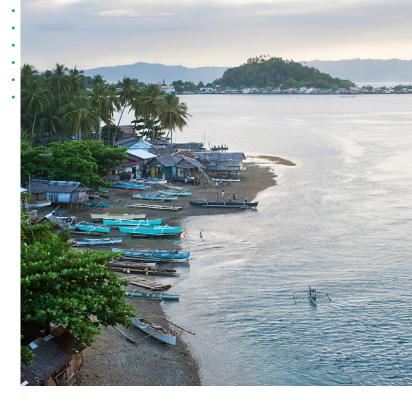
Macusi, E. et al. (2022). Factors that influence small-scale Fishers' readiness to exit a declining fishery in Davao Gulf, Philippines. Ocean & Coastal Management, 250. https://doi.org/10.1016/j.ocecoaman.2022.106578.

3.1 LIVELIHOOD THREATS AFFECTING SMALL-SCALE FISHERS

Small-scale fishers in the Philippines operate in a highly uncertain environment, facing financial instability, climate risks, and policy gaps that limit their ability to build sustainable livelihoods. This section examines five key factors shaping their financial vulnerability: climate change and environmental degradation, overfishing and unsustainable fishing practices, limited market access and human capital, economic shocks, and weak governance. These challenges are deeply interconnected, reinforcing cycles of financial insecurity and environmental strain. While this analysis focuses on the Philippines, similar patterns are evident across other parts of the world, where small-scale fishers struggle with limited access to financial services, declining marine resources, and weak institutional support. Understanding these dynamics is essential to designing financial solutions that enhance resilience while supporting sustainability in the blue economy.

a. Climate Change is Undermining Livelihoods

The Philippines is the most disasterprone country in the world, experiencing an average of 20 typhoons annually, with at least five causing severe destruction.³¹ Climate change is intensifying these



risks, contributing to declining fish stocks, causing coastal erosion, damaging crops, and destroying houses and fishing assets. Over the past decade, some 75 percent of Philippines waters have been overfished, 32 leading to a 20 percent decline in the fish population. 33 Climate-related stressors and overexploitation have helped accelerate the decline.

Extreme weather events leave many fishers without the financial capacity to recover. Fernando Gatan, a small-scale fisher in Del Carmen, Siargao, lost his entire fleet of 12 boats to Typhoon Odette in 2021.³⁴ "Everything changed after Typhoon Odette; we lost all our boats and coconut trees. Now, our income is just enough to meet basic needs," he recalled. Without savings or insurance, fishers like Fernando often

Auer Frege, I. et al. (2023). World Risk Report 2025. Bündnis Entwicklung Hilft, & Institute for International Law of Peace and Armed Conflict (IFHV). https://weltrisikobericht.de/wp-content/uploads/2025/10/WRR_2025_english_online161025.pdf

Lagniton, L. (2022, July 28). Philippine Ocean Conservation Group Sounds Alarm Over Dwindling Sardine Stock. Maritime Fairtrade. https://maritimefairtrade.org/philippine-ocean-conservation-group-sounds-alarm-dwindling-sardine-stock/

International Collective in Support of Fishworkers. (n.d.). Philippines fisheries to decline by up to 50% by 2050 due to climate change researchers. http://www.gmanetwork.com/news/story/588519/scitech/science/phl-fisheries-to-decline-by-up-to-50-by-2050-due-to-climate-change-researchers

Names have been changed to preserve confidentiality.

resort to distress coping mechanisms

— reducing consumption, taking on
high-interest debt, or intensifying fishing
efforts, exacerbating marine depletion.

b. Overfishing as a Coping Strategy

In order to cope with declining incomes and few lucrative financial alternatives, many fishers respond by intensifying fishing efforts. In particular, fishers are likely to intensify fishing efforts immediately after experiencing a shock, indicating that overfishing is not only an environmental problem but also a survival mechanism for those with no safety nets.

Additionally, illegal, unreported, and unregulated (IUU) fishing remains widespread, and in addition to depleting fish stocks, it causes considerable damage to the marine ecosystem. The Bureau of Fisheries and Aquatic Resources (BFAR) in the Philippines estimates that 50 percent of municipal fishing vessels are unregistered, and up to 40 percent of total fish caught — valued at \$1.5 billion annually — comes from illegal sources. Unsustainable practices include:

Cyanide and blast fishing: Destroys coral reefs and marine habitats

- Fine mesh net fishing: Captures juvenile fish and prevents stocks from replenishing
- Fishing in Marine Protected Areas: Disrupts conservation efforts

The persistence of these practices is

often attributed to weak regulation, but economic insecurity is also a key driver. Financial exclusion forces fishers into a short-term survival mode, making long-term sustainability an unthinkable luxury.

c. Limited Market Access and Economic Mobility

Beyond environmental pressures, small-scale fishers face several structural barriers to improving their economic position. Many rely on traditional supply chains dominated by intermediaries, limiting their bargaining power and ability to secure fair prices. Without cold storage, processing facilities, or direct market access, fishers must sell their catch immediately, often at suboptimal rates.

Additionally, diversifying income remains difficult. In Siargao, where tourism has grown rapidly, most fishers lack the education or training required for skilled jobs. While some have transitioned into informal tourism-related roles — such as boat operators or fish processors — these opportunities are limited, seasonal, and highly competitive.

High population growth rates further exacerbate poverty in small-scale fisher households. Fieldwork conducted by CFI and Rare in Siargao revealed that the long periods fishers spend at sea leads to social isolation, which may hinder their ability to advocate for their rights. Subsistence fishers, particularly women and older fishers, who fish solely to meet their consumption needs, have limited

U.S. Embassy in the Philippines. (2021). BFAR-USAID Study Calls for Public Support to Combat Illegal Fishing. https://ph.usembassy.gov/bfar-usaid-study-calls-for-public-support-to-combat-illegal-fishing/

access to resources and income-earning opportunities and are, therefore, more vulnerable.

Access to financial services could help break these constraints, but existing products often fail to account for the volatility of fisher incomes. Microfinance models tailored to farming do not always translate well to fisheries, where earnings are highly irregular and tied to shifting marine conditions. Furthermore, most fishers lack IDs and access to collateral and technology, further limiting their access to financial services.

d. Inflation and Rising Costs Are Making Fishing Less Viable

Economic pressures have further eroded fisher livelihoods. Introducing new fuel taxes in 2023 increased operating costs, forcing some fishers to reduce trips or take on additional financial risks. At the same time, rising prices for basic goods — driven in part by Siargao's expanding tourism sector — have made essential items less affordable.

While financial services could help smooth consumption and buffer shocks, the absence of tailored savings and insurance mechanisms exposes small-scale fishers to financial instability. Without predictable income or credit histories, traditional banking systems view them as high risk, further limiting their options.

e. Institutional Barriers and Weak Governance

The World Bank's recently published Making Waves report acknowledges that ocean and coastal resources are in a state of emergency due to poor institutional capacity and fragmented policies.36 This was evidenced in the Philippines, where although fisheries management was decentralized, local government units (LGUs) often lacked the resources or technical capacity to enforce regulations effectively. Conservation policies and marine protection measures vary widely between municipalities, leading to inconsistent enforcement. In some areas, weak governance has allowed commercial fishers to encroach on municipal fishing grounds, intensifying competition over depleting stocks.

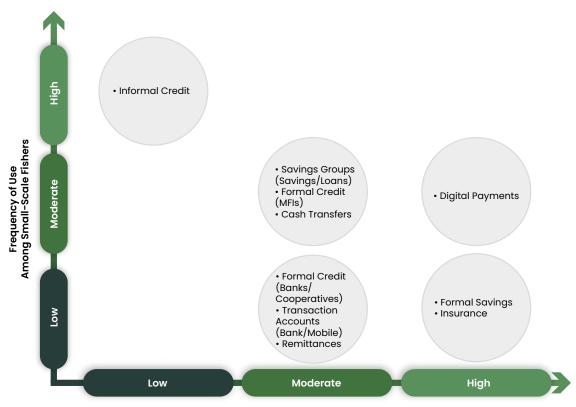
Fishers frequently report violations of Marine Protected Area (MPA) regulations—not only by fellow small-scale fishers but also by larger, politically connected operators, including those responsible for monitoring compliance with MPA regulations. Without better governance mechanisms, financial incentives for conservation, and stronger enforcement structures, regulation alone will not be enough to ensure marine sustainability.

3.2 THE ROLE (AND GAPS) OF FINANCIAL SERVICES IN SUPPORTING SMALL-SCALE FISHERS IN THE PHILIPPINES

Financial services are vital in shaping small-scale fishers' resilience and adaptive capacity to climate shocks and stressors, yet their accessibility and effectiveness vary widely. Figure 2 presents findings from primary

research conducted in the Philippines, mapping different financial tools based on their frequency of use among fishers and their perceived effectiveness in building resilience and supporting long-term adaptation.

FIGURE 2: USE AND PERCEIVED EFFECTIVENESS OF FINANCIAL SERVICES USED BY FISHERS IN SIARGAO



Perceived Effectiveness for Resilience and Longer-Term Adaptation

The figure highlights a key challenge: Despite the widespread use of informal credit, its effectiveness in strengthening the resilience of vulnerable populations is limited, primarily due to high costs, short repayment cycles, and exploitative terms. In contrast, financial tools with higher potential for long-term security — such as formal savings and insurance — are often unavailable or accessible. Understanding these usage patterns is crucial for designing inclusive financial services that meet the needs of small-scale fishers while promoting sustainability.

3.2.1 BRIDGING THE FINANCIAL INCLUSION GAP

Despite the Philippines' progress in financial inclusion, small-scale fishers remain among the most underserved groups. Formal financial tools — including savings accounts, insurance, and credit from banks — are often out of reach due to

barriers such as lack of collateral, documentation requirements, and geographic isolation. A FAO study found less than 50 percent of surveyed fishers used formal financial services, and 29 percent had bank accounts.³⁷ Rare's 2019 household survey with small-scale fishers in Surigao Del Norte, where this study took place, found that while 29 percent of surveyed fishers reported having access to microfinance institutions, less than 7 percent had bank accounts.³⁸

Savings groups, widely used in coastal communities, offer an entry point to formal finance by helping fishers develop financial literacy, build emergency funds, and access small loans. However, savings groups have limited reach, and their financial capacity is often too small to enable large investments in livelihood diversification or climate adaptation or support communities when catastrophic risks occur. Integrating these informal mechanisms with formal banking systems could help fishers access larger capital pools and structured financial products supporting resilience and sustainability.

3.2.2 THE CHALLENGE OF CREDIT: GROWTH OR OVEREXPLOITATION?

Formal credit remains largely outside the reach of local fisher

communities. Most small-scale fishers relied on informal credit from friends and family, local moneylenders. businesspeople, wholesalers, and fish buyers. While these arrangements were convenient and provided immediate access to money, they also introduced the risk of predatory lending, which could trap fishers in a vicious cycle of overexploitation and exacerbate their vulnerability.39 The Philippines Small Farmers and Fisherfolk Indebtedness Survey (SFFIS) 2016–2017 found that even though over 90 percent of the respondents recognized the importance of credit for advancing fishing activities, only 38 percent had access to formal credit. Kev demand-side barriers include a lack of awareness about institutions lending to fishing segments, concerns about not being creditworthy, and fears about becoming over-indebted.40 Moreover, the 2022 Countryside Bank Survey⁴¹ found that while almost half of the participating banks offered loans for agriculture and fisheries, small-scale fishers formed a negligible proportion of their borrowers--only 3% across all bank categories and 16 percent in the case of rural and cooperative banks.

Local officials see access to credit as a double-edged sword in small-scale fisheries. Our research revealed that access to credit can either accelerate or hinder conservation efforts depending

⁵⁷ Badiola, J.A.R. et al. (2021). Financing small-scale fisheries in the Philippines. Food and Agriculture Organization (FAO). https://doi.org/10.4060/cb8029en

Rare. (n.d.-b). Fish Forever Data Portal. Retrieved February 25, 2025, from https://portal.rare.org/en/

Grace, L., & van Anrooy, R. (2019). Guidelines for micro-finance and credit services in support of small-scale fisheries in Asia. A handbook for finance and fisheries stakeholders. FAO. https://openknowledge.fao.org/server/api/core/bitstreams/db549605-0519-4589-82f8-c8d1516ea5a6/content

⁴⁰ Badiola et al. (2021)

Department of Agriculture - Agricultural Credit Policy Council (DA-ACPC), & Bangko Sentral ng Pilipinas (BSP). (2025). The 2022 Countryside Bank Survey Report. https://www.bsp.gov.ph/Media_And_Research/Countryside_Bank_Survey/2022_Countryside_Ba



on how it is structured. On the one hand, it allows fishers to invest in new equipment, expand their businesses, and transition to alternative livelihoods. Conversely, informal or poorly structured credit can over-leverage borrowers and drive overfishing, as fishers take on loans to purchase larger nets, mechanized boats with powerful engines, or other efficiency-enhancing tools that increase short-term yields but deplete fish stocks. This tension emphasizes that inclusive finance goals must be intertwined with sustainability goals, ensuring that fishers are not trapped in a cycle of overfishing and debt accumulation and that coastal ecosystems are protected.

The solution is not limiting credit but better aligning lending

with sustainability goals. While governments and multilateral institutions have introduced blue bonds, debt-for-nature swaps, and other instruments, nature-positive financial instruments targeting communities and households are still nascent.42 Financial institutions could introduce conservation-linked loans, where access to credit is conditional on completing sustainability training, using sustainable fishing methods, or investing in alternative livelihoods such as aquaculture, fish processing, or tourism services. Seacology's microfinance program in Sri Lanka is an example of an approach combining credit provision and livelihood training with mandatory training and participation in mangrove restoration and protection programs for women from coastal communities.43

Ring, J., Stefanova, M., Roebiono, R., & Stodulka, K. (2025). The Mangrove Breakthrough Financial Roadmap: Unlocking investment at scale in critical coastal ecosystems. Systemiq. https://www.mangrovealliance.org/wp-content/uploads/2023/11/Mangrove_Breakthrough_Financial_Roadmap_Finance_Coastal_Ecosystems_2025.pdf

⁴³ Ring et al. (2023)

However, more evidence is needed to understand the impact of these initiatives. Market-based incentive mechanisms that reward community members for protecting the ecosystem or offer them subsidized insurance and other financial services can also catalyze nature-positive outcomes; however, these mechanisms must be designed carefully to prevent longer-term market distortions. This approach would ensure that financial inclusion supports, rather than undermines, marine conservation efforts.

3.2.3 INSURANCE AND SOCIAL PROTECTION: THE MISSING SAFETY NETS

Insurance is one of the most underutilized financial tools among small-scale fishers, despite the Philippines having one of the world's most developed microinsurance markets. 44 The Philippine Crop Insurance Corporation (PCIC) offers subsidized coverage for fishers, yet uptake remains low due to limited awareness, lack of registration, 45 and slow claims processes. 46 Furthermore, existing insurance products often fail to cover income losses due to climate shocks, leaving fishers unprotected against their most significant risks.

Similarly, social protection programs — such as the 4Ps cash transfer program — could significantly strengthen fisher resilience. The 4Ps Program, established in the



Philippines in 2008, is one of the world's most extensive cash transfer programs, providing conditional cash transfers to low-income households, including fishers, to support health and education needs. 47 However, many fishers remain excluded due to a lack of formal documentation or access to digital payment systems. Expanding these safety nets and integrating them with financial services could similarly help fishers cope with climate shocks, manage consumption, and invest in long-

With 57:75 million insured lives, the Philippines has the highest percentage of the population covered by microinsurance. For more details see: GIZ Manila (2024)

Despite impressive strides by the government to enroll over 85 million people in the Philippines Identification System (PhilSys), interviews with fisher communities in Siargao suggest that last-mile access continued to be a challenge in the islands.

⁴⁶ Van Anrooy, R. et al. (2022); Badiola et al. (2021)

World Bank. (2017). FAQs about the Pantawid Pamilyang Pilipino Program (4Ps). https://www.worldbank.org/en/country/philippines/brief/faqs-about-the-pantawid-pamilyang-pilipino-program

term adaptation strategies.

Given the challenges of last-mile

outreach, indexed or parametric insurance products could help address covariate risks and support communities during natural disasters. However, the design and delivery of these products can be complex. Rare's partnership with WTW to pilot a parametric insurance solution with fishers in the Philippines is an example of a novel approach to support communities coping with income losses during prolonged periods of adverse weather when they cannot fish.48 Efforts are also being made to pilot anticipatory insurance and nature-based insurance products. More evidence is needed to understand the longer-term impacts of these products on community resilience.

3.2.4 SCALING DIGITAL FINANCE TO CLOSE ACCESS GAPS

Expanding mobile money platforms in the Philippines could offer a promising pathway to improve financial inclusion among fishers.

Digital payments can facilitate remittances, savings, insurance payouts, and government transfers, reducing reliance on cash-based and informal financial systems. Digital payments are central to the Bangko Sentral ng Pilipinas' efforts to enhance financial

inclusion and resilience among vulnerable communities.49 Following the COVID-19 pandemic, digital payments soared globally and in the Philippines, reaching 53 percent of retail transactions in 2023, primarily catalyzed by the growth in e-wallets that fueled a 68 percent growth in person-to-person transfers in 2023.50 This growth was also observed in Siargao, where fishing communities reported using GCash and other mobile payment services to send money to children studying outside the island. Some fishers also reported receiving remittances during emergencies; however, this number was minimal as most fishers had limited social networks outside the island. Efforts are also underway to digitize fishing and agricultural value chains, enhancing financial services, credit access, social protection, and marketbased incentive mechanisms, such as Payment for Ecosystem Services (PES).51 Despite these initiatives, digital literacy, internet accessibility, cost, and security concerns hinder coastal communities' access and use of digital payments. 52

Investing in building digital financial capabilities and infrastructure could bridge this gap, ensuring fishers can access and benefit from digital financial tools. Members of small-scale fisher communities often have

Ocean Risk and Resilience Action Alliance (ORRAA). (n.d.). Weather Index-Based Parametric Insurance for Small-Scale Fishers

- Rare and WTW. Retrieved January 7, 2025, from https://oceanriskalliance.org/project/weather-index-based-parametric-insurance-for-small-scale-fishers/

⁴⁹ Bangko Sentral ng Pilipinas. (2020). BSP Digital Payments Transformation Roadmap 2020–2025. https://www.bsp.gov.ph/Media_And_Research/Primers Faqs/Digital Payments Transformation Roadmap Report.pdf

Bangko Sentral ng Pilipinas. (2024). 2025 Status of Digital Payments in the Philippines. https://www.bsp.gov.ph/
PaymentAndSettlement/2025_Report_on_E-payments_Measurement.pdf

House, B. (2025, December 1). GCash and Mayani unite to bridge Philippines' \$6B agri-fisheries credit gap. The Fish Site. https://tobseps.com/articles/gcash-and-mayani-unite-to-bridge-philippines-6b-agri-fisheries-credit-gap

Better than Cash Alliance. (2019). The State of Digital Payments in the Philippines. https://btca-production-site.s3.amazonaws.com/document_files/505/document_files/The State of Digital Payments in the Philippines.pdf?1577119102



low literacy levels, which translates to limited financial literacy. Financial capability training can enable fishers to understand the concepts, benefits, and risks of various financial products, budgeting, cash management, and other skills, and learn to use digital payments. These trainings equip fishers with skills to use financial services effectively, helping them better understand and manage risks, particularly when using digital financial services. Strengthening mobile banking partnerships with fishing cooperatives and community organizations could also help build trust and adoption, providing fishers with easier access to formal financial services.

O4 Building Blocks of a New Inclusive Finance Agenda for the Blue Economy

Advancing financial inclusion in the blue economy requires a structured agenda that bridges existing knowledge gaps, fosters innovation, and aligns financial services with the specific needs of small-scale fisheries. The following key areas are building blocks for a more inclusive and sustainable financial ecosystem for coastal communities that balances livelihood strengthening with enhancing fishers' resilience and adaptive capacity.

4.1 DEEPENING UNDERSTANDING OF SMALL-SCALE FISHERIES' VALUE CHAINS

A critical first step in strengthening financial inclusion for the blue economy is gaining a deeper understanding of small-scale fisheries' value chains. Mapping these largely informal value chains — from harvesting and processing to distribution and market access — helps identify financial barriers and opportunities for intervention, partnership, and aggregation. Financial services can be pivotal in unlocking efficiencies, such as through targeted credit for sustainable fishing gear or insurance products that safeguard against climate-related losses. However, these interventions must be carefully designed to ensure they do not over-leverage fishers or incentivize overfishing or unsustainable practices.

For example, financial support to expand operations can sometimes lead to environmental degradation if not paired with conservation safeguards. Conversely, well-structured financial products — such as credit for sustainable fish processing or access to digital marketplaces — can enhance economic security while preserving marine resources. Understanding these nuances is key to shaping

a financial inclusion agenda that balances economic and environmental sustainability.

4.2 PROMOTING LIVELIHOOD DIVERSIFICATION AND TRANSITION

Livelihood diversification is essential for many small-scale fishers to reduce their dependence on increasingly fragile marine resources. Financial exclusion often forces them to intensify fishing efforts, leading to environmental degradation and economic instability. Financial services must be integrated with broader livelihood development strategies to support more sustainable transitions.

There have been initiatives to support fishers in developing alternative livelihoods, such as the IGAD Promoting Sustainable Fisheries for Alternative Livelihoods program, which provides training and support to help fishers transition into new income-generating activities. 53 However, many of these initiatives remain disconnected from financial inclusion efforts, limiting longterm sustainability. Bridging this gap by providing tailored financial products such as microloans, savings mechanisms, and insurance, coupled with livelihood development opportunities, can enhance economic resilience and environmental sustainability.

In Siargao, for instance, growing tourism allows fishers to diversify their incomes and work as tour guides, boat operators, surfing instructors, and hospitality. However, alternative strategies—such as

aquaculture, seaweed farming, or valueadded fish processing – can be explored in other coastal regions where tourism is not viable. Integrating financial inclusion and livelihood transition programs is critical to ensuring fishers have the skills and financial tools to transition into more stable, climate-resilient occupations. It is equally crucial to test assumptions about fisher behavior⁵⁴ and the pathways to enable them to build resilience, adapt current livelihoods, or transition to more climate-resilient occupations, as well as the consequent impacts of these efforts on the marine ecosystem.

4.3 BUILDING A STACK OF INCLUSIVE "BLUE" FINANCIAL SERVICES

Access to a range of financial services is critical for enabling small-scale fishers to protect assets, adapt to climate shocks, adopt sustainable fishing practices, and diversify their livelihoods. Access to IDs is a fundamental building block for helping fishers access financial and other government services. Financial service providers (FSPs) can partner with local organizations to help fishers navigate the registration process. Furthermore, given fishers' low literacy levels and reliance on informal lenders. it is imperative to build their digital and financial capabilities so they develop an understanding of savings, credit, and insurance products, as well as the various risks associated with them, and make intentional decisions. Fishers with sound financial literacy will also be more

⁵⁵ Intergovernmental Authority on Development. (2024). Promoting Sustainable Fisheries for Alternative Livelihoods. https://igad.int/promoting-sustainable-fisheries-for-alternative-livelihoods/

World Bank, Independent Evaluation Group. (2024).

likely to engage with the formal financial system and practice sustainable fishing.

Credit, in particular, can be vital in helping fishers make productive investments and avoid harmful coping strategies after a shock; however, credit can be a double-edged sword. Partnerships between FSPs and local NGOs or fisher organizations can help providers understand the local context and design products that protect vulnerable fishers from becoming overindebted, improve their understanding of sustainability practices, and offer them incentives and preferential terms to encourage them to adopt good fishing practices and conservation measures.

CFI and Rare's research in the

Philippines has shown the vital role of savings groups in providing members with a safety net and helping them access credit during emergencies. Strengthening savings groups by facilitating linkages with formal FSPs, providing financial literacy and sustainability training, and creating livelihood opportunities for members can further enhance their capacity to support fisher communities during climate and other shocks.

Insurance is another crucial risk transfer mechanism to help small-scale fishing communities cope with shocks. Yet most fishers are unaware of its benefits and lack access to it for various reasons — from lacking IDs to engaging in unsustainable fishing practices that increase the riskiness of their



livelihoods. Building fishers' awareness about how insurance can protect their lives and assets during unforeseen events and help them recover from catastrophic events, coupled with simplifying insurance processes and developing a contextual understanding of fisher livelihoods and the associated risks, will enable the development of tailored products and encourage more fishers, including women, to adopt insurance.

4.4 LEVERAGING TECHNOLOGICAL INNOVATIONS TO EXPAND ACCESS

Innovations in financial services and outreach models are essential for expanding financial access to remote fishing communities. One notable example is Bank Rakyat Indonesia (BRI), which introduced floating bank branches a decade ago to serve communities in remote islands.55 These floating branches provided essential financial services to areas lacking traditional banking infrastructure. More recently, BRI has expanded its digital capabilities, investing in mobile and digital banking solutions to broaden outreach to remote coastal populations. This shift underscores the importance of leveraging physical and digital infrastructure to ensure financial services reach the most isolated communities. Beyond emerging markets, learning from innovations in high-income economies is equally necessary. For example, the European Union's digital transformation of

precision fishing is introducing new tools to enhance sustainability and economic viability through data-driven decision making. These models provide insights into how digital monitoring, AI, and smart tracking systems can optimize fishing efforts, improve regulatory compliance, and create new market opportunities for fishers.⁵⁶

Embedding financial services within digital platforms can potentially integrate small-scale fishers into broader market systems. Digital tools can provide fishers with direct access to buyers, transparent pricing, and logistical support, reducing reliance on intermediaries who can be exploitative and dictate unfavorable terms. Several initiatives have attempted to develop digital marketplaces to link small-scale fishers with buyers and processors, ensuring they receive fairer prices and improved access to financial services. However, the business models for these platforms remain unclear, and scalability remains a challenge. The SDG Investor Platform highlights efforts to develop Fishers' Digital Marketplace Applications. Yet, many of these solutions struggle with adoption due to infrastructure limitations, digital literacy gaps, and unclear revenue models.⁵⁷ Further research is needed to determine how financial incentives can support the long-term viability of such platforms, ensuring they provide lasting benefits for both fishers and value chain actors.

The Jakarta Post. (2015, August 5). BRI launches 'floating bank' for people on coasts, remote islands. https://www.thejakartapost.com/news/2015/08/05/bri-launches-floating-bank-people-coasts-remote-islands.html

Directorate-General for Maritime Affairs and Fisheries. (2024, November 7). Revolutionising precision fishing through digital transformation. European Commission. https://oceans-and-fisheries.ec.europa.eu/news/revolutionising-precision-fishing-through-digital-transformation-2024-11-07.en

Private Finance for the Sustainable Development Goals. (n.d.). Fisher's Digital Marketplace Applications. UNDP. https://sdg-investor-platform/fishers-digital-marketplace-applications

4.5 STRENGTHENING REGULATORY AND POLICY FRAMEWORKS TO ENHANCE RESILIENCE

Regulatory frameworks and public policies must play a more substantial role in building a financially inclusive and climate-resilient blue economy. Governments have a unique role in ensuring that financial inclusion initiatives align with sustainability goals, providing incentives for conservation-friendly investments while preventing the overexploitation of marine resources.

A promising policy innovation is using anticipatory cash transfer programs to protect vulnerable populations from climate shocks. These programs provide preemptive financial assistance before disasters occur, allowing communities to take preventive measures and avoid extreme losses. For example, Kenya's Hunger Safety Net Programme has integrated early warning systems with digital cash transfers, ensuring at-risk communities receive support before droughts and floods. Similar models could be adapted for small-scale fishers vulnerable to typhoons, rising sea levels, and ecosystem disruptions.

Policymakers must also focus on harmonizing financial regulations, promoting sustainable lending practices, and ensuring financial institutions integrate environmental risk assessments into their portfolios. Strengthening the links between financial regulations and climate policies will be critical in shaping an inclusive finance agenda that safeguards economic security and marine ecosystems.

4.6 A ROADMAP FOR AN INCLUSIVE AND SUSTAINABLE BLUE ECONOMY

Building a new inclusive finance agenda for the blue economy requires a multidimensional approach integrating financial inclusion, technological innovation, and policy reform. The challenges facing small-scale fishers are deeply interconnected, necessitating coordinated efforts across financial institutions, development organizations, digital platforms, and policymakers. By advancing livelihood diversification, embedding financial services within digital ecosystems, investing in financial innovation, and ensuring supportive regulations, stakeholders can create an enabling environment where fishers and marine ecosystems can thrive.

The goal of this positioning brief is not just about expanding financial access—it is about aligning financial incentives with sustainability and ensuring that financial inclusion does not come at the cost of marine degradation but instead supports long-term resilience and economic transformation.



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