Food and Agriculture Organization of the United Nations

Ecolabelling, certification and small-scale fisheries and aquaculture

Update with summary of findings and recommendations

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INTRODUCTION

This document summarizes findings and practical recommendations to enhance inclusive market access. The findings emphasize targeted, localized solutions driven by small-scale producers, government leadership, industry innovation and reinforced local institutions capable of adapting to regional contexts and the needs of small-scale fisheries (SSF) and aquaculture sectors. This summary is associated with a recent study conducted by the Global Sustainable Seafood Initiative (GSSI) in collaboration with the Food and Agriculture Organization of the United Nations (FAO), which addresses challenges faced by SSF through a comprehensive analysis of ecolabelling certification for small-scale operators (Martinez Fabiani and Del Castillo Munera, forthcoming).

The study report has been drafted and is currently under review prior to publication. The research –conducted between December 2024 and May 2025 – combines a desk review with 41 stakeholder interviews that were held across Africa, the Americas, Asia and Europe with producers, certification bodies, retailers and other key experts. The study also builds on a webinar organized by CIHEAM Zaragoza,[1] in collaboration with FAO, which discussed sustainability certification in the context of SSF and aquaculture.

Small-scale fisheries (SSF) and aquaculture are critical contributors to global food security, economic resilience and environmental sustainability, particularly in developing regions. Despite their substantial role, employing over 90 percent of the world's fishers (FAO, Duke University and WorldFish, 2023), small-scale producers face systemic barriers, such as fragmented fisheries management and supply chains, limited infrastructure, gender disparities and vulnerability to climate change.

Ecolabelling can play an important role in promoting environmental sustainability by incentivizing improvements and enhancing market access. Furthermore, ecolabelling certifications have increased awareness of environmental and sustainability issues and helped meet consumer demand for greater transparency and the ability to make informed choices. However, they represent just one of many market-based approaches aimed at advancing the sustainability of SSF and aquaculture. Over time, scheme owners have adapted their models to better accommodate the specific contexts and needs of SSF and aquaculture operations.

The findings from the forthcoming study reveal an increasing need to move from one-size-fits-all models to context-specific sustainability solutions, and to reassess ecolabelling and certification to improve market access.

[1] International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM) through the Mediterranean Agronomic Institute of Zaragoza (CIHEAM Zaragoza)

MAIN CHALLENGES

Resource pressures and data limitations

Small-scale producers are particularly vulnerable to overexploitation and climate change, which threaten resources, disrupt traditional fishing grounds and deepen socioeconomic risks. The lack of stock assessment data tailored to data-limited environments compounds this vulnerability and, under current certification practices, can penalize producers for gaps in fisheries management systems rather than for the sustainability of their own activities. The stakeholder interviews conducted for the study across the regions echoed these pressures, with producers and producers' organizations citing environmental and governance challenges at both the cross-border and regional level.

Cost and design mismatch between certification schemes and small-scale operations

Markets increasingly demand environmental sustainability certification and digital traceability, posing significant challenges for small-scale producers who typically lack the resources, technical skills and infrastructure to meet these standards.

Many certification schemes were originally developed with larger industrial fisheries in mind. Full assessment costs reportedly range from USD 15 000 to USD 200 000 or more, depending on the scheme and fishery complexity. Such costs are structurally incompatible with the margins and cash-flow profiles of most small-scale operations.

The urgent need for sustainable, locally-led solutions is underscored by the reliance on external donor funding for certification and improvement initiatives, which are typically calibrated to 2–3 year project cycles that fall well short of the 3–15 year cost recovery horizon documented in the literature.

Weak collective institutions, infrastructure and digital capacity

The institutional infrastructure required to support SSF participation in formal market channels remains underdeveloped in most developing country contexts. Formal producer organizations with administrative capacity, basic post-harvest infrastructure – such as cold storage, ice provision and processing facilities – and affordable digital traceability tools are unevenly available across the regions reviewed.

Whereas collective institutional models such as the Spanish Cofradía system have enabled small-scale operators in Southern Europe to participate in group certification, equivalent legal-administrative structures are rare in most of the African, Asian and Latin American settings reviewed. This institutional gap constrains the feasibility of group certification, the coordination

of Fisheries and Aquaculture Improvement Projects and the uptake of digital traceability platforms that could otherwise offer SSF a low-cost route to market differentiation.

Social exclusion in market access and governance

Women represent close to half of the SSF workforce when post-harvest activities are included, yet they hold fishing tenure rights in fewer than 10 percent of cases globally. Despite this central role, they remain systematically under-represented in certification governance.

Traditional fishing communities in several regions further report displacement by industrial fishing and blue economy coastal development projects that restrict their access to fishing grounds and decision-making processes.

RECOMMENDATIONS

Achieving equitable and sustainable market access for the small-scale sector requires a shift from externally driven one-size-fits-all certification programmes to context-sensitive, locally-embedded frameworks. Policymakers, industry actors and civil society must collaborate to support solutions that are designed to reflect regional specificities, resource constraints and social dynamics. To achieve this, key strategies include:

Strengthening producer organizations and enabling resource co-management

Policymakers and stakeholders should prioritize and direct capacity development and financial assistance towards producer organizations to enable sustainable resource co-management and effective market engagement. In addition, strengthened support for existing producers' cooperatives or associations is essential, recognizing the pivotal role they play in empowering producers, enhancing collective bargaining and facilitating access to markets and resources.

Group certification offers a practical modality for mutualizing the fixed costs of assessment, supported by targeted investment in cooperative registration, administrative capacity and data management systems.

Building durable local institutions and inclusive governance

Transitioning from financially dependent support models towards approaches that strengthen local institutions and governmental involvement fosters sustainable leadership and long-term resilience. Civil society and development agencies can support these efforts by facilitating knowledge exchange, enhancing local capacity and promoting community-driven improvement initiatives.

This shift away from financial dependence is best achieved through structural, multicycle financing arrangements, such as government co-financing and endowment-type mechanisms, rather than short project-based grants. There is also a critical need to combine traditional knowledge with scientific research and to promote policies that safeguard the rights and active participation of traditional fishing communities – including Indigenous Peoples and other marginalized groups – in decision-making processes.

Investing in post-harvest infrastructure and inclusive buyer sourcing

Strategic investment in infrastructure and technology, driven by the public and private sectors, is essential. Targeted infrastructure improvement could include cold storage, processing facilities

and affordable technologies for traceability and market compliance. Furthermore, industry stakeholders, including retailers, processors and buyers, can make significant contributions by adopting sourcing policies that support small-scale producers in establishing trust-based networks and investing in supply chain improvements. Such sourcing commitments are most effective when expressed as time-bound acceptance policies for Fisheries and Aquaculture Improvement Projects, supported by transparent improvement trajectories and co-investment provisions. They should also be complemented by aggregation models that consolidate small-scale supply to meet volume and consistency requirements, in a manner consistent with the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines).

Adopting gender-transformative approaches

Adopting gender-transformative approaches through interventions that address the root causes of inequality has become essential because they challenge and transform harmful social norms and power dynamics. Ensuring women's active participation in governance bodies by providing targeted financial and technical support for women-led associations and addressing gender-specific barriers are necessary to achieve inclusive market access and recognition. Operationally, this calls for an explicit minimum allocation of certification and improvement programme funds to women-led organizations, the systematic collection of gender-disaggregated data and the gender-responsive co-design of digital tools.

Re-evaluating certification outcomes and ensuring equitable benefit distribution

A re-evaluation of certification outcomes in small-scale operations is warranted. Ongoing research is necessary to determine whether certification improves market access for small-scale producers in the international trade of aquatic products. Furthermore, stakeholders should develop mechanisms to ensure that the benefits of ecolabelling and other certification schemes are equitably distributed. These mechanisms rest on two modalities in particular: a peer-reviewed evidence-based analysis of the economic returns of certifications for small-scale producers, disaggregated by scheme, region and gender; and the application of the proportionality principle, including, where appropriate, differential fee structures for small-scale entities.

Recognizing and supporting national and local market access programmes as the most effective pathways for SSF

Local and national programmes, such as certifications, financial support, infrastructure development, proximity and regional ecolabels, and participatory guarantee systems assist small-scale producers more effectively than the global certification schemes that currently dominate the sector but are structurally calibrated to industrial-scale operations. Therefore, it is highly recommended to reassess and balance the respective benefits of global, local and national market access initiatives and certification programmes to support informed decision-making and empower stakeholders to pursue improvements tailored to the needs of the SSF and aquaculture sector.

Practical modalities include national co-financing facilities, the simplification of record-keeping through community-level data collection and the legal recognition of participatory guarantee systems and proximity ecolabels as legitimate sustainability assurance. Governments are encouraged to create enabling regulatory environments for these market access programmes within the framework of the SSF Guidelines.

Harnessing digital traceability, narrative marketing and consumer education

It is imperative to leverage digital tools and marketing strategies effectively. Support should be redirected towards digital platforms, storytelling initiatives and product identity marketing to empower small-scale fishers and aquaculture farmers. Consumer education initiatives led by the sector can help raise awareness of the benefits of supporting small-scale producers and foster demand-driven incentives for sustainability.

Low-cost digital traceability and packaging-based storytelling are particularly suited to domestic and hospitality channels, where verifiable provenance can be communicated without the cost of a formal certification audit.

COLLECTIVE COMMITMENT FOR LONG-TERM IMPACT

Achieving inclusive and sustainable market access for SSF and aquaculture requires coordinated actions and commitments from governments, the private sector, civil society, scholars and local communities. The Sustainable Food System Framework (Nguyen, 2015) and sustainable value chain development methodologies (Neven et al., 2025) offer relevant analytical approaches, particularly given the recognition that aquatic food provides essential nutrients and micronutrients alongside other vital livelihood contributions, as detailed in *Illuminating Hidden Harvests* (FAO, Duke University and WorldFish, 2023). In addition, the development of National Plans of Action for Small-Scale Fisheries (NPOA-SSF) provides a pathway for all stakeholders to adopt systemic, participatory approaches to address cross-cutting challenges while engaging in and promoting sustainable solutions for SSF.

Building on the recommendations above, the roles and responsibilities of different actors converge around the following key areas: policymakers are encouraged to prioritize regulatory frameworks and funding mechanisms that empower local actors and formally recognize national and local market access programmes alongside global third-party schemes; industry stakeholders should support adaptable sourcing strategies and contribute to consumer awareness; and civil society and development agencies should champion capacity-building efforts anchored in local leadership, transitioning from project-based to structural, multicycle financing arrangements.

Through a collaborative, locally-driven approach that emphasizes community strengths, gender-transformative approaches and multistakeholder cooperation, SSF and aquaculture can overcome existing barriers, ensuring equitable and sustainable market participation that supports millions of livelihoods and contributes to global food security.

The findings of the GSSI and FAO study align with recommendations and advice from the Sub-Committee on Fisheries Management (FAO, 2024) on the need to adapt and tailor measures and initiatives to the local socioeconomic and cultural context and effectively serve the community livelihoods dependent on fishing and aquaculture activities. They also align with the *Guidelines for Sustainable Aquaculture* (FAO, 2025) regarding the need to support small- and medium-sized enterprises and producers through value chain and market-based measures. Likewise, it concludes that stakeholders can play a key role by supporting capacity development, enhancing market access and engaging the community through long-term collaboration.

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