

Combating illegal, unreported, and unregulated fishing practices

Guidance to navigate communities to sustainable use of aquatic resources and empower fisher livelihoods

RELEVANCE

The global issue of illegal, unreported, and unregulated (IUU) fishing affects both marine and freshwater ecosystems. IUU fishing includes **illegal** activities like fishing without a license or using prohibited gear, **unreported** catches that bypass official records and **unregulated** fishing without management strategies like fishing beyond the maximum sustainable yield or neglecting fishing seasons. As a major driver of overfishing, IUU activities jeopardise the economic backbone of the sustainable fisheries sector. Globally, IUU fishing practices lead to significant economic losses, estimated at USD 23.5 billion annually, mainly caused by industrial fleets. However, little is known about the impact of artisanal fisheries to fish stocks in coastal areas or inland waterbodies, which often remain unmanaged due to the absence of authorities or resources for data collection, reporting and surveillance. The same goes for small-scale fishers, who may struggle to comply with legal requirements such as using approved fishing gear, due to its unavailability and price. IUU fishing operations are furthermore often linked to other associated crimes, like the lack of safety regulations, fair working conditions and even the use of forced labour, to reduce costs and maximize profits.



Artisanal fisherman caught Nile perch on Lake Victoria, Uganda.

The Global Programme “Sustainable Fisheries and Aquaculture” is implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on behalf of the German Federal Ministry for Economic Cooperation and Development. The aim of the programme is an increase of fish supply from sustainable and resource-friendly fisheries and aquaculture to boost a healthy and diverse nutrition in Cambodia, India, Madagascar, Malawi, Mauritania, Uganda and Zambia. Sustainable production and processing techniques are promoted along the value chain in order to create jobs and income, with a special focus on youths and women. Local organizations are strengthened in their capacities to carry on programme interventions on a long-term basis. And policy advice is contributing to favourable framework conditions for a sustainable development of the fisheries and aquaculture sector in the implementing countries.



Due to the relevance of combating IUU fishing, the FAO published many documents, including the [Code of Conduct for Responsible Fisheries](#), the [International Plan of Action to Prevent, Deter and Eliminate IUU Fishing](#) and [Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries](#). Our approach follows these guidelines in promoting human rights and fair access to resources. By addressing IUU fishing, we also contribute to the Sustainable Development Goals (SDGs) 1 and 2 (no poverty, no hunger) and SDG 14 (life below water). Other global efforts, such as the Conference of the Parties (COPs), Global Alliance for Food Security and the Blue Food Alliance, emphasize the urgent need for integrated and standardized operations. With this knowledge product, we wish to help others to support sustainable fishing practices in artisanal fishing communities and preserve aquatic resources for generations to come.

APPROACH

Addressing IUU practices in artisanal fishing requires a coordinated approach between different stakeholders involved in the fishing sector and includes a variety of strategies and actions. The foundation of this approach is the **establishment of multi-stakeholder platforms (MSP)** that bring together government institutions, the private sector and civil society to collaborate and develop a legal framework for sustainable fisheries management. This also includes fisherfolk and community members, particularly women. Regarding marine fisheries, the importance of trans-regional dialogue and agreements must be taken into account, due to the interconnected nature of the marine environment. MSPs encourage an integrated approach to governance, as they ensure all kinds of perspectives are

considered and that the management strategies are effective and beneficial to all involved.

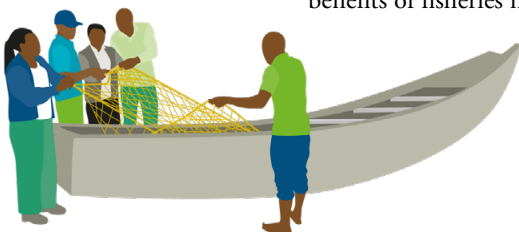
Regular meetings of the MSPs reinforce the exchange among the various actors.



The next step is the collection and management of **accurate baseline data**, which is crucial for understanding the extent of the issue and for monitoring progress. As local research institutes may already assess data on catch and stock estimations, their role is vital for sustainable management of fish resources. However, they are often under-equipped, understaffed and need initial capacity building and investments. Supporting these institutions with technical equipment and methodological training will also provide better and more transparent catch assessments during and after the project implementations. During this first phase, recognizing traditional knowledge is crucial for understanding the history of local fisheries.

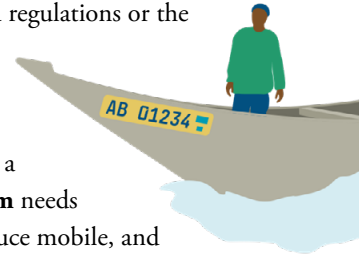


Measuring the initial state of fish stocks and regulations will likely highlight imbalances between fish availability and the licensing landscape. Low proportions of legally operating fishers emphasize the need for **training to encourage legal fishing practices**. The training content includes information on harmful fishing practices, such as the use of fine-meshed mosquito nets or poison. Additionally, the benefits of fisheries management are



explained, which promotes the long-term stabilization of fish populations through sustainable fishing methods. To address the causes of IUU fishing, the training should consider the viewpoints and perspectives of fishers, as IUU practices in artisanal fishing often result from a lack of access to appropriate gear: what is needed to resort to legal fishing? This might include adapted regulations or the availability of appropriate fishing gear.

As a key measure to raise transparency within small-scale and artisanal fisheries, a **robust registration and licensing system** needs to be put in place. It is advised to introduce mobile, and if possible, community-led, on-site licensing initiatives, providing immediate support for licensing with registered tax numbers. This enhances the accessibility of the licensing process and compliance among fishers, due to a sense of community ownership. In cooperation with a dedicated governmental body, such as the Department of Fisheries and the local research institute, a digital management system should be developed. This central database helps to monitor licenses and registrations from multiple locations and thus enables conclusions to be drawn about the status of fish populations.



In tandem with the technical measures, building cooperative and **community-based management structures** has proven to be very successful. Such communities establish rules and regulations for accepted fishing methods but also facilitate stakeholder engagement to encourage local fisherfolk and associations to participate actively in fisheries management. Training programmes for the management structures focusing on organizational and technical capabilities are essential, equipping beneficiaries with the necessary skills to sustainably manage their waterbodies. In certain regions, the approach has included restructuring local management systems into cooperatives. This ensures that they have legal status and a well-defined management plan, thereby validating their operations. It also improves their ability to manage resources and increases their access to financial support through various funding opportunities.



Controls and inspections are key principles of curbing IUU fishing. Improving the quality of patrols through specialized training for inspectors is essential to monitor fishing activities directly on board or after landing.



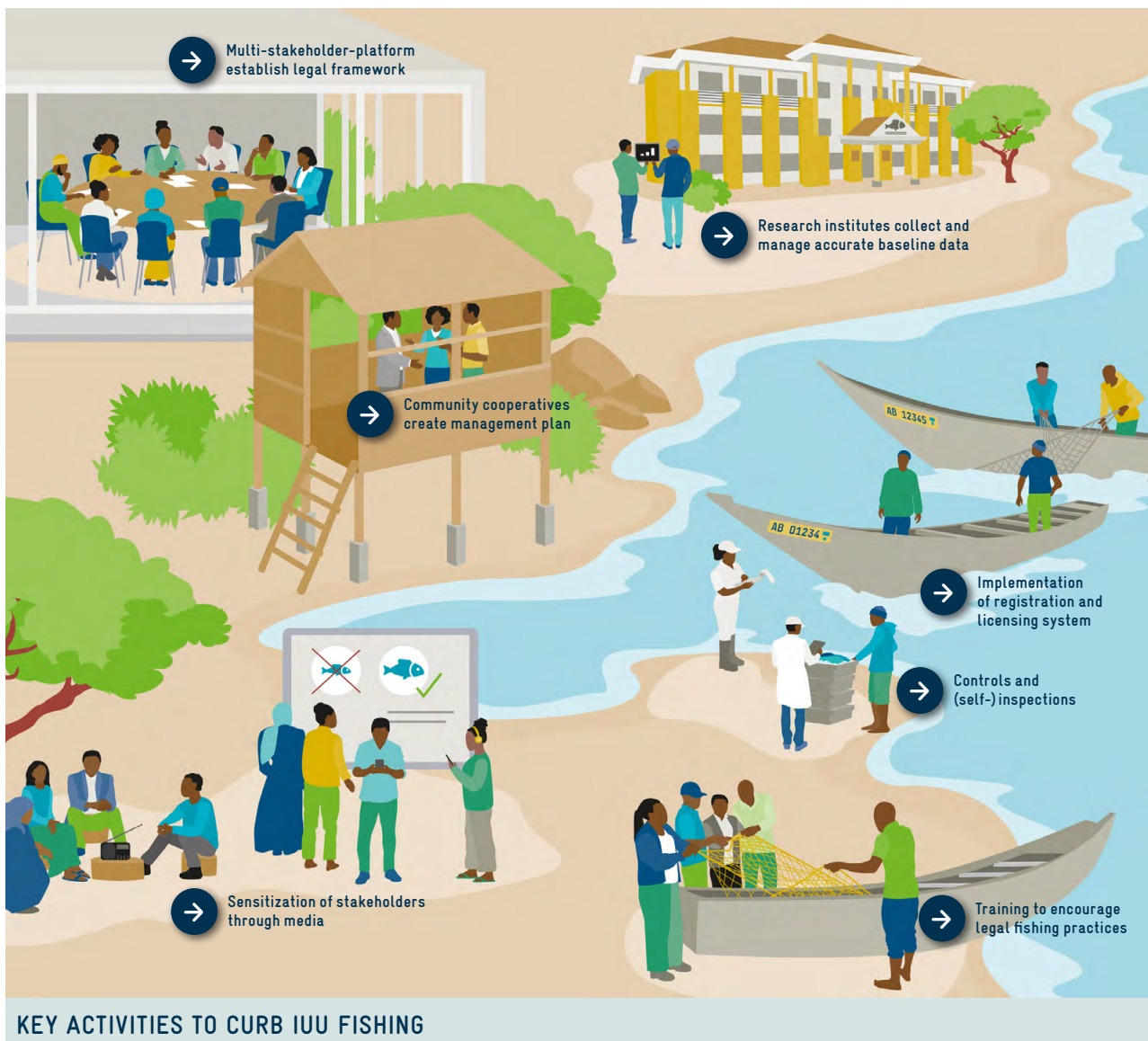
Additionally, processors are encouraged to conduct self-inspections to prevent the processing of undersized fish and enforcing regulations in their businesses, thereby reducing reputational risks in the industry. The development and/or revision of standard operating procedures for these controls ensures that they remain relevant and effective in the face of changing IUU fishing practices.

Sensitization of stakeholders and the general public is another major activity in the context of combating IUU fishing. Information campaigns, such as videos explaining data collection at landings and the role of inspectors, contribute to raising awareness about the importance of sustainable fishing practices and the dangers of IUU fishing.



These campaigns can be spread through national television, social media platforms or radio programmes to reach a wide audience and foster compliance and accountability. Public engagement initiatives, like consultation workshops, are essential for disseminating information on licensing, legislation, and the consequences of non-compliance. Especially focus group discussions further strengthen a sense of responsibility among fishers. Key factors for success include integrating local knowledge, establishing clear and enforceable regulations, and raising awareness of the consequences of compliance (sustainable fish stocks) and non-compliance (penalties).

Potential risks such as resistance to change, insufficient funding, and the complexity of monitoring vast and remote fishing areas need to be continually addressed through adaptive management and stakeholder collaboration.



IMPACT

The effective application of the suggested activities to curb IUU fishing is expected to bring benefits on three levels: ecological, economic, and social.

Ecological sustainability

From an ecological standpoint, the foremost benefit is the restoration of fish populations, as legal fishing gear allows young fish to survive and reproduce. Therefore, implementing sustainable fishing practices will help in maintaining biodiversity and health of marine and freshwater environments for future generations. Notably, transparent catch assessments will further enhance the quality and accuracy of research that is conducted, ensuring that it reflects the true state of fish stocks and contributes to more effective management decisions.

Economic stability

Economically, the shift to sustainable practices promises to stabilize and potentially enhance the profitability of the fishing sector. For small-scale and artisanal fishers, this means a long-term reliability and abundance of catches, leading to sustained income and improved financial security of fisherfolk. Additionally, aligning the fishing sector to market standards of small-scale fisheries opens paths for business development.

Social empowerment

The foreseen outcome from the social point of view is the uplift of livelihoods and responsibility of fishing communities. Next to long-term prospects of fish abundance and income generation in the sector, this includes ensuring safety in fishing activities, thereby valuing the health of fishery workers. Aligning fishing activities with the legal framework conditions furthermore ensures stability and security for fisherfolk, processors and vendors. Due to decriminalization in each step of the fish value chain, abiding to legal fishing practices cuts ground to IUU-associated crimes like bribery and corruption.



A fisheries inspector checks the fishing boats and nets before the boat can be registered and licensed.

Finally, the establishment of more robust, clear, and enforceable fishing laws and regulations is coupled with enhanced transparency in the fisheries sector, ensuring that fishing activities are monitored, reported, and regulated more effectively. Improved transparency not only helps combating IUU fishing but also builds trust among stakeholders, from fishers to consumers, and aligns the industry with international standards of operation.

CASE STUDY

In Eastern Province, Zambia, a significant transformation of fishing practices in small waterbodies was achieved under the Fish for Food Security (F4F) project. This change involved reducing the use of illegal fishing gear among local fishers, aligning their activities with the FAO's Guidelines for Sustainable Small-Scale Fisheries.

Initially, the management of these fishing practices faced challenges, including a lack of baseline data on fish stocks and the use of harmful small-meshed nets (mosquito nets) or poison. To address these challenges, the F4F project adopted a multi-stakeholder approach, partnering with entities like the Aquatic Ecosystems Services Consultancy for fish stock assessments. Likewise, they worked on restructuring the Dam Management Committees (DMCs) in collaboration with the World-Wide Fund for Nature (WWF) and Zambia Governance Foundation (ZGF), ensuring the inclusion of fisherfolk representatives.

The F4F further developed a training manual on sustainable fisheries management of small waterbodies and rolled out the trainings to the DMCs, fisherfolk and traditional leaders with support from the Department of Fisheries (DoF). Among others the topics varied from 'Leadership' and 'Financial Management' up to 'Fishing Practices', which attracted a lot of discussions especially from fishers.



Fishermen use an approved net to fish in a dam-lake in Eastern Province.

Later, the community and DoF set up regulations on restricting the use of illegal fishing gear and encouraged the use of wide-meshed cotton nets. The involvement of the fisherfolk has helped curb illegal and unregulated fishing, as they understand the adverse effects on the fish stocks, the environment, and the sustainability of their business.

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