

Contribution of legal architecture toward strengthening co-management platforms in small-scale fisheries in Sri Lanka

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Abstract The importance of a robust and supportive legal framework to encourage community involvement in resource management is undeniable. The legal landscape of Sri Lanka's fisheries sector is examined in this paper, with a specific focus on co-management - a collaborative approach involving fishers, government agencies, and other stakeholders for sustainable fisheries management. A systematic review of relevant Acts, Regulations, and other related literature explores how the existing legal framework enables the establishment and function of co-management platforms. The appropriateness and sufficiency of current legal provisions towards implementing "co-management good practices" outlined in the FAO's Assessment Sheet for co-management design and performance and the practical application of legal provisions aimed at promoting co-management are also examined. The Fisheries and Aquatic Resources Act No. 35 of 2013 emerges as the cornerstone legislation supporting co-management. Particularly significant is the provision for establishing Fisheries Management Coordinating Committees within designated Fisheries Management Areas. These Fisheries Coordinating Committees include representatives from village-level Fisheries Management Committees, government bodies, and key stakeholders appointed by the Director General of the Department of Fisheries and Aquatic Resources. This represents a crucial step towards collaborative management of fisheries resources. The analysis reveals satisfactory compliance of existing legal provisions with the FAO's "co-management good practices". However, some deficiencies and practical limitations have been identified. For instance, there is no legal mandate to make Fisheries Management Committees or Fisheries Coordinating Committees compulsory within designated Fisheries Management Areas, nor is there a requirement for regular meetings. While the legal framework generally supports co-management, there is substantial room for improvement. The paper recommends that the government should address legal and administrative challenges that hinder the effective implementation of co-management initiatives.

Keywords: Co-management, legal framework, Small-scale fisheries

INTRODUCTION

Sri Lanka's fisheries industry is a vital engine of economic and social development, accounting for 1.3% of GDP and supporting the livelihoods of over 2.7 million people through direct and indirect employment (Ministry of Fisheries, 2023). Its contribution to food security, animal protein intake, livelihoods, and poverty alleviation is substantial (Amarasinghe and Bavinck, 2017). The marine

fisheries industry is divided into three main subsectors: coastal, offshore, and deep sea, and inland and aquaculture (Maheepala, 2016). The coastal fisheries sector, which is also known as the small-scale fisheries sector is the most significant, accounting for over 56.1 % of the total marine fish catch (Ministry of Fisheries, 2023).

However, sustainable management of resources in the fisheries remains a notable challenge, particularly in contexts of poverty, high dependence of increasing populations on ecosystem services,



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economic globalization, and climate change (Evans *et al.*, 2011). Overexploitation of resources has been recognized as a primary issue in the fisheries sector since the 1990s (Basurto *et al.*, 2017). Therefore, sustainable use of resources has become a primary area of concern, especially in the small-scale fisheries (SSF) sector (Dahlet *et al.*, 2021). In Sri Lanka, the small-scale fisheries sector faces formidable challenges due to the emergence of the tourism industry and other commercial activities in coastal areas (Deepananda *et al.*, 2016). Nevertheless, it is widely accepted that the active involvement of communities in the decision-making process is an important step in sustainable resource management (Ostrom, 1990; Cox *et al.*, 2010; Sandstrom and Rova, 2010). Having an enabling environment including appropriate policies and laws is a requirement to involve communities in the decision-making process (Pomeroy *et al.*, 2022). With the view to managing these issues amicably and ensuring sustainable use of resources, Amarasinghe (2020) highlights the need for recognizing the coastal zone as one ecosystem to ensure the involvement of all relevant stakeholders in the process of management decision-making at all levels. He further suggests establishing co-management platforms at the local level and rising to the national level to ensure the sustainability of the SSF sector.

Fisheries co-management is a collaborative process that involves all stakeholders, including fishers, government agencies, and scientists. It aims to ensure that fisheries are managed sustainably, for the benefit of both the environment and the people who rely on them (Pomeroy *et al.*, 2022). Co-management has been recognized as an appropriate participatory mechanism to manage SSF (Pomeroy, 2003; Pomeroy and Rivera-Guieb, 2005; Jentoft, 2014; Trimble and Berkes, 2015; Pittman *et al.*, 2019; Tilley *et al.*, 2019).

In 2022, FAO introduced a methodology to evaluate the co-management implementation process by introducing the Guidebook for Evaluating Fisheries Co-management Effectiveness (Pomeroy *et al.*, 2022). It provides a structured methodology with the help of 29 good practices for evaluating the performance of fisheries co-management systems in delivering benefits and contributing to environmental, social, and economic sustainability and good governance (Pomeroy *et al.*, 2022).

Supportive legislation is recognized as a major prerequisite to establishing co-management (Macfadyen *et al.*, 2005; Pomeroy *et al.*, 2022). The main objective of this study is to explore how the existing legal framework in Sri Lanka supports co-management initiatives in the fisheries sector to get an overview of the legal implications of community involvement in resource management. An attempt is made to examine whether the existing legal provisions are sufficient for effective co-management platforms and to examine legislative and administrative gaps that hinder effective co-management platforms.

MATERIALS AND METHODS

A systematic desk review of current Acts, Regulations, and related literature was conducted to assess whether the existing legal framework is appropriate and sufficient to promote co-management. The study explored how Sections 31, 31 A, 31 B and 32 of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013, which is the main enactment related to co-management, contribute to the implementation of “29 co-management good practices” given in the FAO Guidebook for Evaluating Fisheries Co-management Effectiveness (Pomeroy *et al.*, 2022) by examining whether the legal provisions support these good practices. Then, the good practices were categorized into four groups, i.e., good practices that are supported by the existing legal provisions, good practices that are partially supported by the existing legal provisions, good practices that are not specifically supported, and the good practices that are not in any way supported by the legal provisions to fully understand the contribution of the legal framework toward strengthening co-management. Relevant information on the practical implementation of laws was obtained from the Management Division of the Department of Fisheries and Aquatic Resources.

RESULTS

Legal Framework related to fisheries in Sri Lanka

The findings of the desk review revealed that all countries have the sovereign right to exploit the resources under their environmental policies, according to Principle 21 of the 1972 Declaration of

the United Nations Conference on the Human Environment, Principle 2 of the 1992 Rio Declaration on Environment and Development, and Article 193 of the United Nations Convention on Law of the Sea (UNCLOS), which has been a long-standing rule of international law. Accordingly, Sri Lankan lawmakers have attempted, from time to time, to enact appropriate laws to manage marine resources.

The primary legal instrument for the management of the fisheries sector in Sri Lanka is the Fisheries and Aquatic Resources Act, No. 2 of 1996, which has been amended several times, by Acts No. 4 of 2000, No. 4 of 2004, No. 22 of 2006, No. 35 of 2013, No. 2 of 2015, No. 2 of 2016, and No. 11 of 2017. The first three amendments have been largely designed to promote the sustainable utilization of fishery resources and protect the livelihoods of those who depend on them (Maheepala, 2016). Amendments No. 35 of 2013, No. 2 of 2015, No. 2 of 2016, and No. 11 of 2017 to the Fisheries and Aquatic Resources Act were formulated to address international fisheries management initiatives (Maheepala, 2016). These legal provisions directly contribute to the sustainable utilization of natural resources, the preservation of fisheries' livelihoods, and the effective application of international fisheries management initiatives (Maheepala, 2016).

The review of legal instruments finds that the Fisheries and Aquatic Resources Act 1996 is a comprehensive piece of legislation that governs the management, regulation, conservation, and development of fisheries and aquatic resources in Sri Lanka. The Act consists of 67 sections divided into 10 Parts.

Legal Provisions promoting co-management

One significant step toward co-management in the Act in sections 31 and 32 is the provision authorizing the Minister of Fisheries to issue regulations establishing Fisheries Management Areas (FMA) and Fisheries Management Committees (FMC) in particular FMA with the involvement of local fishers. Section 31 indicates that the Minister may, by Order published in the Gazette, designate prescribed areas of Sri Lanka waters or land adjacent to it or both such waters and land as FMAs, and designate the FMC in respect of any FMA as the fisheries management authority of

that area. However, the provisions to empower the FMC to engage with the government or other stakeholders to establish co-management platforms are lacking in the 1996 Act.

Fisheries and Aquatic Resources (Amendment) Act of 2013, which is an amendment to the Fisheries and Aquatic Resources Act no. 2 of 1996 repeals section 31 of the original Act. New section 31 of the amended Act empowers the Director General of Fisheries to designate FMCs on his motion or a request made by the fishers of any area provided that the Director General is satisfied that there are threats to the sustainability of fish and other aquatic resources in that area. One salient feature of the newly added section 31 A of the amended Act No. 35 of 2013, is the establishment of a Fisheries Coordinating Committee (FCC) for every FMA designated by an Order and appointed by the Director General of the Department of Fisheries and Aquatic Resources. This can be considered an official recognition of co-management in the legal framework of the fisheries sector in Sri Lanka. Section 31B of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013 makes it an obligation of the Fisheries Coordinating Committee (FCC) to prepare a Fisheries Development and Management Plan in respect of the respective FMA. A Fisheries Development and Management Plan prepared by a Coordinating Committee needs to include any or all of the following proposals:- (a) proposals for the division of the Fisheries Management Area into zones for particular uses; (b) proposals for the prohibition or regulation of the use of particular types of fishing gear or equipment for the taking of fish and aquatic resources in the Fisheries Management Area; (c) proposals for the prohibition or regulation of the use of particular methods for taking of fish or aquatic resources in the Fisheries Management Area; (d) proposals for the prohibition of the taking of particular types of fisheries and aquatic resources in the Fisheries Management Area; (e) proposals for the declaration of closed seasons for fishing in particular parts of Fisheries; (f) proposals for regulating the times at which fish or aquatic resources may be taken in the Fisheries Management Area; (g) proposals for the preservation of locations of scenic beauty or cultural or ecological significance in the Fisheries Management Area; (h) proposals for the improvement of the sustainability of fish and other

aquatic resources in the Fisheries Management Area; (i) proposals to address research, post-harvest and marketing and development aspects related to the Fisheries Management Area; (j) proposals for monitoring, compliance and surveillance; and (k) proposals for consultation and review.

Implementation of legal provisions

According to the information obtained from the Management Division of the Department of Fisheries and Aquatic Resources, the Minister of Fisheries has designated only 18 FMAs throughout fisheries districts in Sri Lanka and 13 out of them are lagoon-based FMAs. The Following three out of the other five FMAs did not have FMCs at the time of the study.

- a. North West Coast (Puttalam and Mannar District) Fisheries Management Area designated under Extraordinary Gazette No. 1665/18 and dated 04-08-2010.
- b. East Coast (Batticaloa District) Fisheries Management Area designated under Extraordinary Gazette No. 1801/29 and dated 14-03-2013.
- c. East Coast (Ampara District) Fisheries Management Area designated under Extraordinary Gazette No. 2036/27 and dated 13-09-2017.

The FMCs of the other two coastal FMAs are comprised of fishermen involved in target fisheries, as given below. Therefore, their scope and intentions are limited.

- a. South Coast (Hambantota District) Fisheries Management Area, established under Gazette Extraordinary No. 1745/6 and dated 13 February 2012. All FMCs comprise people involved in catching Chank and lobsters.
- b. South Coast Fisheries Management Area (Matara and Galle Districts), established under Gazette Extraordinary No. 1743/8 and dated 31 January 2012. All FMCs comprise people involved in catching live ornamental fish and lobsters.

Only 13 lagoon-based FMAs have strong FMCs established with the patronage of the Department of Fisheries and Aquatic Resources. The information obtained from the Management Division of the Department of Fisheries and Aquatic Resources confirms that there were no regular meetings of FCCs even in the areas, where they were established. Even though section 31 A of the amended Act No. 35 of 2013 makes provisions for the Director General of the Department of Fisheries and Aquatic Resources to appoint FCCs by order, none of the FCCs have been established by orders published in the gazette. Therefore, the legitimacy of existing FCCs is also questionable.

Contribution of the legal provisions to implement co-management good practices

Good Practices of the Fisheries Co-management Effectiveness Evaluation Process given in the FAO Guidebook for Evaluating Fisheries Co-management Effectiveness (Pomeroy *et al.*, 2022) were applied for the assessment. Table 1 shows how the existing legal framework is supportive to implement co-management good practices. Table 2 shows the legal provisions, which are partially supportive, and Table 3 depicts the good practices that are not specifically supported by the legal framework. Nevertheless, it is observed that some of these good practices can be implemented by FCCs and FMCs established under existing legal provisions. Only eight good practices out of 29 are not supported by the legal framework as given in Table 4. The analysis reveals a strong legal foundation for co-management. Provisions readily exist for implementing 11 Good Practices, with partial provisions available for an additional five. Although some provisions are not specifically available in the legal framework, there is no barrier for the FMCs and FCCs to implement such good practices thanks to other existing provisions. In total, about 55% of Good Practices find support within the current legal framework. Notably, only 27.5 % lack explicit coverage, demonstrating the legal system's overall supportiveness for co-management implementation.

Table 1. Good practices in the FAO Assessment sheet for the evaluation of the design and performance of the fisheries co-management, which are supported by the legal framework

FAO Good Practice	Relevant Legal Provision of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013
Enabling policies and legislation for fisheries co-management	Sections 31, 31 A, 31 B, and 32 ensure the participation of government officers, fishers, and all other stakeholders in the decision-making process.
Support of government and political/economic elites:	Section 31 A ensures appropriate representation from the government and political authorities in FCCs.
Membership and rights clearly defined	Section 32 ensures the participation of relevant fishers in FMCs.
Accountability: co-management conducted in an equitable, open, and transparent manner	Sections 31 A and 31 B ensure the participation of diverse stakeholders in FCCs and the preparation of fisheries development and management plans jointly by the members of the FCC.
Clearly defined boundaries of the co-management system	Section 31 ensures the formation of FMA in a particular area. There are clearly defined boundaries in an FMA.
Existence of a co-management plan developed and agreed upon by resource users/co-management participants	Section 31B ensures the preparation of fisheries development and management plan jointly by the members of the FCC.
Mutually beneficial alliances and networks:	Sections 31A, 31 B, and 32 ensure the formation of FMCs, and FCCs and the preparation of joint development and management plans.
Participation by those affected:	Section 32 ensures the participation of fishers in FMCs.
Coordination: forum (meeting or assembly) for cooperation	Section 31A ensures the formation and assembly of FCCs.
Existence of a legitimate (as recognized by the local people) community or people's organization	Section 32 ensures the formation of FMCs.
Individual incentive structure	Section 32 (2) ensures the formation of FMCs, which assist members in obtaining boats, gear, and equipment, and carry out infrastructure development and welfare activities to improve the living standards of fishing communities.

Table 2. Good practices in the FAO Assessment sheet for the evaluation of the design and performance of the fisheries co-management, which are partially supported by the legal framework

FAO Good Practice	Relevant Legal Provision of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013
Authority of government on the right to organize, and make management rules: resource users have the legal right to formulate rules	Sections 31, 31 A, 31 B, and ensure the participation of fishers in FMCs and FCCs to make management decisions and preparation of management plans for the particular area.
The existence of a mechanism to address conflicts	Section 31 A ensures the participation of different stakeholders in FCCs to make it a conflict management mechanism.
The existence of a singular individual with entrepreneurial skills, highly motivated, legitimate, and respected as a local leader	Section 32 provides necessary provisions for the election of office-bearers, which gives an opportunity for people to choose local leaders.
Appropriate scale: scale should be appropriate to the area's ecology, people, and level of management	Section 31 ensures the formation of FMA in a particular area to address specific issues in that area.
Regular interaction: regular, active, and participatory meetings of co-management partners	Section 31A ensures the meetings of the FCC. However, there are no provisions to make them regular, active and participatory meetings.

Table 3. Good practices in the FAO Assessment sheet for the evaluation of the design and performance of the fisheries co-management, which are not specifically available in the legal framework

FAO Good Practice	Availability of provisions in Legal Framework to operationalize good practices
Adequate financial resources/budget: the existence of a financial sustainability mechanism	Not specifically available
Clear goals and objectives from a well-defined set of issues: clarity and simplicity of goals and objectives to steer the direction of co-management	Not specifically available
Monitoring and evaluation: participatory, indicators, targets and baselines	Not specifically available
Group/social cohesion: similar characteristics in terms of kinship, norms, trust, fishing gear type, etc. among the resource users	Not specifically available
Congruence: the scale and scope of rules are appropriate to local conditions	Not specifically available

Table 4. Good practices in the FAO Assessment sheet for the evaluation of the design and performance of the fisheries co-management, which are not available in the legal framework

FAO Good Practice	Availability of provisions in Legal Framework to operationalize good practices
Tenure rights of the co-managed fishery resources: formal and recognized rights to the fishery resources are granted to the co-management unit	Not Available
Knowledge of resources: Stakeholders have a good knowledge and there is recognition of traditional knowledge	Not available
Adaptive management: a focus on systematic learning-by-doing	Not available
Activities for individual and resource user group empowerment and skills development to actively participate in co-management	Not available
Equity: equal opportunity and fair access to the fishery among the various resource users and between different user groups	Not available
Inclusiveness: recognition and involvement of different resource users and community members, including youth, women, Indigenous Peoples and others	Not available
Management rules enforced: a self-enforcement system of penalties imposed by strong operational rules designed, enforced and controlled by local users	Not available
Graduated sanctions: sanctions increase with the number or the severity of offences	Not available

Table 5. Summary of compliance of existing legal provisions with the good practices of the FAO Assessment sheet for the evaluation of the design and performance of the fisheries co-management

Category	No. of Good Practices
Provisions are adequately available for the implementation of Good Practices	11
Provisions are partially available for the implementation of Good Practices	05
Provisions are not specific enough for the implementation of Good Practices	05
Provisions are not available for the implementation of Good Practices	08

DISCUSSION

Results revealed that there is formidable support from the legal framework to implement co-management good practices within the system of FMAs. However, some FMAs still do not have FMCs, which are essential for ensuring the participation of fishers in the decision-making process. Moreover, according to the information obtained from the Management Division of the Department of Fisheries and Aquatic Resources, even though more than 10 years have passed since the introduction of the amended Act in 2013, effective, active, and smoothly-running FCCs have not been established in any of the FMAs.

There are some limitations in the legal framework that may have contributed to this situation. For example, there are no provisions to make FCCs compulsory within stipulated FMAs or to mandate regular meetings of FCCs. Additionally, even though FCCs have been established in some areas, regular monthly meetings are not held as per the provisions of the Act, mainly due to administrative issues, such as the lack of influence and authority of conveners appointed by the Department of Fisheries and Aquatic Resources to call various state officials and political representatives for meetings. The legitimacy of existing FCCs is also questionable as they have not been formulated by orders published in the gazette.

The composition of the FCCs may have also contributed to their inactive nature. There are several top-level officers, such as the Director General of Fisheries, District Secretary, and political Heads of local governments, on the FCCs, which could result as an obstacle to ensure their presence for frequent meetings. It is also not practical to conduct monthly meetings with a large number of officers as stated in Section 31A (2) of the Act. Additionally, District Secretaries regularly conduct District Coordinating committees with the participation of all government organizations in the District, so they may not find it necessary to have a separate monthly meeting for fisheries matters. Most of the members of the FCC may not consider fisheries as a priority subject. Given this situation, it seems a daunting task for a convener appointed by the Director General of Fisheries to convene regular meetings.

CONCLUSIONS

The legal framework of Sri Lanka supports co-management in fisheries, particularly through Sections 31, 31A, and 31B of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013. The introduction of FCCs in FMAs with the participation of community members, Department of Fisheries and Aquatic Resources and political representatives, and state officials of the area is a significant step towards co-management. The satisfactory level of compliance with existing legal provisions with the good practices of the FAO Assessment sheet for evaluating the design and performance of the fisheries co-management is a positive sign.

The findings of the study reveal that some of the provisions of the legal framework need to be amended to make the co-management process more effective. Specifically, the following actions are needed:

- a) Section 31 A of the Fisheries and Aquatic Resources (Amendment) Act No. 35 of 2013 needs to be amended to make provisions to establish FMAs, FMCs, and FCCs in all fisheries areas of the country, irrespective of whether there are threats to the sustainability of fisheries resources.
- b) Revisiting the composition of the FCCs. It is not practical to involve senior officers such as the Director General, Department of Fisheries and Aquatic Resources, and the District Secretary in the FCCs, as this makes it difficult to conduct regular meetings. FCCs can function effectively with middle-level government officers and the representatives of FMCs. Section 31 A of the Act should be amended to make provisions for such an FCC. If necessary, the annual meeting of the FCC can be held with the participation of the Director General, Department of Fisheries and Aquatic Resources, and the District Secretary of the area providing higher-level support for the FCC.

- c) Establishing every FCC by order published in the gazette to make them legally acceptable.
- d) Making the establishment of FCCs compulsory and mandating regular meetings of FCCs if they need to be effective co-management platforms.
- e) Addressing administrative issues such as the lack of authority to convene meetings and the ignorance of fisheries issues by other stakeholder organizations through appropriate high-level policy decisions.

Implementing these actions would strengthen Sri Lanka's legal framework to effectively support co-management in fisheries.

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