Community-based fisheries management: Lessons learned from case studies worldwide.

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Introduction

Community-based fisheries management (CBFM) has emerged as an effective approach to addressing the challenges of overfishing, habitat degradation, and livelihood insecurity in fisheries-dependent communities [1]. By placing local stakeholders at the center of decision-making, CBFM promotes sustainable practices, fosters stewardship, and strengthens the social and economic resilience of fishing communities. Case studies from around the world provide valuable insights into the successes and challenges of this participatory management model [2].

In the Pacific Islands, traditional ecological knowledge and cultural practices have long played a central role in managing marine resources. The Locally Managed Marine Area (LMMA) network is a prime example of communitydriven conservation and fisheries management. Communities establish marine protected areas (MPAs), implement seasonal closures, and use traditional methods such as taboo zones to regulate fishing. These measures have led to increased fish biomass, biodiversity, and improved food security. Key lessons from the LMMA experience highlight the importance of integrating traditional knowledge with scientific data, building trust among stakeholders, and providing ongoing support for capacity building [3].

In Bangladesh, CBFM has been applied to manage inland fisheries, particularly in floodplain areas. Collaborative efforts involving local fishers, non-governmental organizations (NGOs), and government agencies have resulted in comanagement systems where communities take responsibility for enforcing fishing regulations and maintaining aquatic habitats. Projects such as MACH (Management of Aquatic Ecosystems through Community Husbandry) demonstrate how community participation can lead to improved fish production, equitable access to resources, and enhanced ecosystem health. One critical lesson from these efforts is the need for clear property rights and equitable benefit-sharing mechanisms to prevent conflicts and ensure long-term sustainability [4].

Latin America offers another perspective on CBFM, particularly in coastal fisheries. In Chile, the Territorial Use Rights for Fisheries (TURF) system allows local fisher organizations to manage designated areas, enforce harvest limits, and protect critical habitats. TURFs have been successful in rebuilding stocks of commercially valuable species such as shellfish and seaweed, while also promoting community cohesion and economic stability. However, challenges remain in scaling the approach and addressing external pressures such as market fluctuations and climate change. This case underscores the importance of securing legal frameworks, providing technical assistance, and fostering adaptive management to sustain community-led efforts [5].

Africa provides examples of CBFM in both marine and freshwater systems. In Malawi, Beach Village Committees (BVCs) play a key role in managing Lake Malawi's fisheries. These committees are tasked with enforcing gear restrictions, regulating fishing seasons, and resolving disputes among fishers. While BVCs have contributed to reduced illegal fishing and improved compliance with regulations, limited resources and weak institutional support often hinder their effectiveness. Lessons from this context emphasize the need for greater government commitment, financial support, and integration of CBFM into broader fisheries management policies [6].

Globally, CBFM initiatives share common challenges and opportunities. Empowering communities to manage their fisheries requires strong governance structures, inclusive decision-making processes, and equitable distribution of benefits [7]. Access to scientific data, training, and financial resources is essential for informed management and enforcement. Building trust and collaboration among stakeholders, including fishers, government agencies, NGOs, and researchers, is critical for overcoming conflicts and ensuring long-term success [8].

Despite its potential, CBFM is not a one-size-fits-all solution. The approach must be tailored to the specific ecological, cultural, and socio-economic contexts of each community. Adaptive management, where strategies are adjusted based on monitoring and feedback, is crucial for responding to changing conditions and uncertainties [9].

Case studies demonstrate that CBFM can deliver tangible benefits when implemented effectively. It enhances the sustainability of fish stocks, supports ecosystem restoration, and improves the livelihoods and food security of local communities. However, achieving these outcomes requires sustained investment, capacity building, and policy support at national and international levels [10].

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Conclusion

CBFM represents a promising pathway toward sustainable fisheries management and resilient coastal communities. The lessons learned from diverse case studies underscore the power of local action and collaboration in addressing the complex challenges facing global fisheries. As communities continue to innovate and adapt, their experiences will provide valuable guidance for scaling and replicating successful CBFM models worldwide.

References

- 1. Cudney-Bueno R, Basurto X. Lack of cross-scale linkages reduces robustness of community-based fisheries management. PloS one. 2009;4(7):e6253.
- Steenbergen DJ, Song AM, Andrew N. A theory of scaling for community-based fisheries management. Ambio. 2022;51(3):666-77.
- Wiber M, Berkes F, Charles A, et al. Participatory research supporting community-based fishery management. Mar Policy. 2004;28(6):459-68.
- 4. Yamamoto T. Development of a community-based fishery management system in Japan. Mar Resour Econ. 1995;10(1):21-34.

- 5. Sultana P, Thompson PM. Community based fisheries management and fisher livelihoods: Bangladesh case studies. Hum Ecol. 2007;35:527-46.
- 6. House J, Kleiber D, Steenbergen DJ, et al. Participatory monitoring in community-based fisheries management through a gender lens. Ambio. 2023;52(2):300-18.
- Ruddle K. The context of policy design for existing community-based fisheries management systems in the Pacific Islands. Ocean Coast Manag. 1998;40(2-3):105-26.
- 8. Lobe K, Berkes F. The padu system of community-based fisheries management: change and local institutional innovation in south India. Mar Policy. 2004;28(3):271-81.
- 9. Pomeroy RS. Community-based and co-management institutions for sustainable coastal fisheries management in Southeast Asia. Ocean Coast Manag. 1995;27(3):143-62.
- Islam GM, Yew TS, Viswanathan KK. Poverty and livelihood impacts of community based fisheries management in Bangladesh. Ocean Coast Manag. 2014;96:123-9.