



Food and Agriculture  
Organization of the  
United Nations

# Coastal Fisheries Initiative

Promoting sustainable  
fisheries in coastal areas

## CFI Talks 2 | Knowledge Sharing

Marine Spatial Planning  
18 July 2022

Brief Report



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## **1. INTRODUCTION**

Event facilitator Xavier Chalen from Conservation International Ecuador introduced the webinar, extending a special welcome to participants from the organizations present, both those participating in CFI activities and those from other organizations and institutions. The planning of a CFI Talk devoted to Marine Spatial Planning (MSP) illustrates the fact that this approach already plays an important part in the management of coastal areas and fisheries in several of the countries where CFI is being implemented. Mr Chalen hoped that the discussion will create an opportunity to compare approaches from different countries and organizations and enhance people's understanding of MSP.

Mr Chalen, speaking on behalf of CFI Global Partnership Project (CFI-GPP) Chief Technical Advisor Fatou Sock, provided an overview of the development, definitions, and applications of Marine Spatial Planning. The challenges faced by planners working on coastal areas are significant as the coast represents an interface between physical, institutional, and socio-economic systems. Actions undertaken in one sector will often have impacts on other sectors that operate in either adjacent or overlapping areas. This can lead to development activities working in disharmony, waste of resources and negative impacts on the ecosystems that local communities depend on for their food and livelihoods.

In fisheries for example, management efforts sometimes deliver suboptimal results because activities in other sectors (water management of inland and coastal waters, agricultural development, industrial development, power and energy, oil exploration and mining, urban development, waste management and pollution, marine transport, land reclamation, etc.) can impinge on fisheries, undermining even the most carefully planned and implemented management activities.

Marine Spatial Planning was therefore developed and adopted by organizations such as UNEP and UNESCO as a tool to allow better harmonization between planning efforts in different sectors and different ecosystems. Marine Spatial Planning has proved particularly valuable in identifying options for coastal and marine management and development that accommodate the priorities of different sectors.

## **2. COMMUNITY-DRIVEN INTEGRATED MARINE COASTAL PLANNING IN PERU**

Oscar Lazo, Specialist in the Management of Coastal Marine Zones in the General Directorate of Environmental Territorial Planning of the Ministry of Environment, Peru, presented experience in the the development and implementation of an Integrated Management Plan for the Coastal Marine Zone of Sechura, in northern Peru. This plan received approval from the local municipality in early 2021 and was the fruit of an extended process of systematic engagement, analysis and discussion among stakeholders in Sechura. A key element in this process was the gathering of data and information to identify Coastal Marine Ecological Units that would form the basis of management activities. In Sechura, this resulted in the identification of 16 Marine Ecological Units and 27 Coastal Ecological Units.

This exercise enabled a detailed analysis to be carried out, in close consultation with local stakeholders and communities, of the current uses of different coastal areas, potential alternatives, as well as the threats affecting different areas. An evaluation of the ways in which different



Ecological Units were being used was also carried out to highlight compatibilities and conflicts between different activities. All of this then fed into the detailed marine coastal area plan that established zones for different activities in the area, including productive activities and conservation.

### **3. MARINE SPATIAL PLANNING AND FISHERIES MANAGEMENT IN INDONESIA**

The next presentation was delivered by Mr Api Priyanto from the Ministry of Marine Affairs and Fisheries (MMAF) on behalf of Mr Ir. Suharyanto, Director of Marine Spatial Planning at the MMAF, Indonesia.

Mr Priyanto started off by highlighting the relevance of MSP in the Indonesian context where the extensive areas of national waters are subject to a wide range of threats while also supporting the highest levels of marine biodiversity on the planet and the second largest fisheries worldwide. The proliferation of multi-sectoral conflicts and inappropriate use of marine resources have led to the prioritization of the use of Marine Spatial Planning as part of marine policy in the country.

In Indonesia, the definition of MSP that is adopted follows that of UNESCO: “Marine Spatial Planning is a public process of analyzing and allocating the spatial and temporal distribution of human activities in marine areas to achieve ecological, economic, and social objectives that usually have been specified through a political process.” The MSP process is seen as a practical way to implement good governance of marine and coastal areas. It involves a series of interlocking planning activities undertaken at different administrative levels: national, inter-regional and provincial.

The key elements included in the plans produced through MSP are: a statement of objectives, policies and strategies; a spatial structure plan and spatial pattern plan; a spatial utilization plan; and a spatial utilization control system. Stakeholders are involved in the preparation of these plans at various levels. Focus group discussions, public surveys, thematic data validation and public consultations are all key steps in the MSP process, and stakeholder agreement on strategic issues, objectives, policies and strategies, zoning arrangements and plans for use, is critical.

The integration and harmonization of the plans generated through MSP with ecosystem-based fisheries management is also critical. Fisheries management in Indonesia is based on a division of the country's marine areas into Fisheries Management Areas (FMAs) and these are carefully taken into account during the MSP process. Particular attention is paid to how ecosystem services that impact fisheries are affected by current or planned uses of different areas so that impacts of coastal and marine activities outside fisheries on fisheries and fisheries management can be fully incorporated into planning procedures. MSP has allowed planners in Indonesia to take far fuller account of the interactions of activities in different sectors and so improve the harmonization of different activities in coastal and marine areas.

Following this presentation, Mr Chalen opened the floor for questions.

Leah Karrer (GEF Secretariat) thanked participants and organizers for their involvement and asked how discussions with stakeholders during the MSP process address the costs and benefits of different uses of marine and coastal areas. Mr Priyanto (MMAF Indonesia) responded by emphasizing the importance of detailed data collection before undertaking public consultations about planning options so that discussions can be informed by accurate and complete information.

This data collection process needs to include data that will enable the relative values of different ecosystem services to be assessed and discussed with stakeholders. Mr Lazo (MoE Peru) mentioned the importance of comprehensive involvement of all local stakeholders in discussions about marine spatial plans. In the context of the work conducted under CFI, the COVID epidemic obviously created difficulties in achieving this but detailed discussion of the compatibility of different activities with ecosystem capacities was carried out. The need for more detailed economic analysis of different use options was also highlighted.

Civil society participants from Côte d'Ivoire (*Wakata Tomshile and Ouattare Kpatouma Achille*) asked how MSP can be used to keep artisanal and industrial fishing zones separate. In Indonesia, it was mentioned that artisanal and commercial fishing areas are already defined in law but participatory mapping exercises at the community level play an important role in ensuring that zoning properly takes account of local use patterns. In Peru, areas within five nautical miles of the coast are reserved for artisanal fishing. The process of properly understanding patterns of stock availability and fishing practices within this area is still underway and this needs to continue so that appropriate forms of regulation of artisanal fisheries can be introduced.

The facilitator, Mr Chalen (CI), asked how sectoral authorities at different levels are involved in the MSP process. Mr Lazo (MoE Peru) described how this takes place at different levels: a national multi-sectoral committee with representatives of different ministries and at the local level coordination with a range of public and private entities to take into account sectoral issues such as tourism and local industrial development. Mr Priyanto (MMAF Indonesia) explained that the arrangements in his country are similar, integrating different sets of sectoral interests at the different levels of the planning process.

After this session, a video was shown produced by the MMAF Indonesia describing some of the key processes involved in MSP in Maluku Province.

#### **4. GLOBAL MANGROVE RESTORATION GUIDELINES AND MARINE SPATIAL PLANNING**

Celine van Bijsterveldt from Wetlands International presented the work of her organization and the Global Mangrove Alliance to develop a compendium of guidelines on mangrove restoration. The idea is to provide those involved in mangrove conservation worldwide with a one-stop-shop for detailed guidance on how to approach different aspects of mangrove restoration.

The range of different ecosystem services that mangroves provide was highlighted along with the threats they face and the key causes of their degradation. Increased awareness of these issues has led to a significant increase in efforts worldwide to restore mangrove areas particularly in the wake of the 2004 Indian Ocean *tsunami*, which highlighted the vital role that mangroves played in saving many coastal communities from the worst impacts. Several hundred thousand hectares have been planted as a result, according to Ms van Bijsterveldt. As well, the important contribution that mangroves can make to carbon sequestration and therefore carbon markets have further increased the popularity of mangrove rehabilitation among NGOs, government agencies, communities and the private sector.

However, success rates in mangrove restoration are often disappointing because of mistakes made in site or zone selection, the choice of species, planting densities, site condition, and the level of community engagement. This has led to the development of the Ecological Mangrove Restoration

approach that encourages those involved to take better account of factors that will both promote expansion and growth and limit factors that can place stress on expansion and survival of mangroves. For example, it is important to considering both the 'seaward' side of mangrove belts and the often-ignored 'landward' side, where patterns of hydrology, land use and pollution can place very significant stress on mangroves.

While a range of technical guidelines for mangrove restoration have been developed, these are often difficult to access and not widely applied by potential users. This has encouraged the Global Mangrove Alliance to work on ensuring that the best practices for mangrove restoration are made available to the right users at the right level. It is envisaged that a generic set of guidance on mangrove restoration will be supported by a set of supporting modules that focus on specific sets of objectives. These will certainly include modules on mangrove restoration for Blue Carbon initiatives, for coastal protection and, working with the CFI, for sustainable fisheries management.

## **5. MARINE PROTECTED AREAS AND MSP**

Dieynaba Seck, Project Manager at the *Centre de Suivi Ecologique* (Ecological Evaluation Centre) in the Ministry of Environment, Senegal, presented Senegalese experience on using MSP for the management of marine protected areas. Senegal's coastline is characterized by a diversity of habitats, ecosystem services and use patterns, all of which play key roles in the economy and food security of the country. The need to harmonize planning for this diversity of zones in the coastal area has encouraged the Government of Senegal to adopt a range of tools for their planning processes. This has included Marine Spatial Planning, which helps to address the intensification and diversification of interactions between marine and terrestrial uses of the coastal space.

In Senegal, MSP has been promoted since 2017 following a series of capacity-building events that introduced staff at the Ministry of the Environment to the approach. This has led to the development of a road map for initiating the Marine Spatial Planning process in the country and the establishment of a working group to promote MSP.

MSP is also seen as complementing other approaches already being implemented in coastal areas. These include marine protected areas, where MSP can play an important role in defining zones for priority protection and mapping ecosystem impacts. Likewise, MSP can play a key role in developing protected fishing zones and is seen as a key tool for operationalizing the Ecosystem Approach to Fisheries (EAF).

Mr Chalen then invited questions from the participants, starting with a question of his own relating to MSP in Senegal: how do you plan to support the establishment of MSP in Senegal?

Ms Seck (MoE, Senegal) answered by pointing out that MSP still requires an appropriate legislative and regulatory framework in Senegal to be effective. At the moment, it is not clear which authority will take the lead and a feasibility study is underway to look at institutional and legal options.

Stefania Fumo (CFI Communications Specialist) asked Ms van Bijsterveldt (Wetlands International) for a comment ahead of International Mangrove Day on 26.07.2022. In response, Ms van Bijsterveldt noted that up until now, the focus of restoration efforts and awareness raising has tended to be on the seaward edge of mangroves. This has led to the perhaps more pressing issues facing the landward edge of mangrove areas being ignored. In the future this landward edge, where



most of the conversion of mangroves to other uses and their degradation takes place will need to be the subject of greater attention. Financing for mangrove restoration will also be a key issue. There is great potential in generating long-term finance through blue carbon credits, given the well-established importance of mangroves in carbon uptake. Livelihood diversification among mangrove communities will also be important in the future and can help to support better mangrove protection.

Jim Kalthor (CFI Indonesia) asked Ms van Bijsterveldt (Wetlands International) about the replication of positive lessons in mangrove protection and restoration in northern Java. The importance of these lessons was highlighted and the fact that they have been replicated in some other countries, but in the specific case of northern Java, efforts to improve sediment entrapment and restore mangrove areas are being undermined by the extremely rapid rate of coastal area subsidence. This illustrates the importance of fully understanding the context of mangrove restoration efforts, Ms van Bijsterveldt said.

## **6. SUMMARY AND WRAP UP**

CFI Science to Policy expert Philip Townsley provided a short summary of the discussions and presentations during the day. He called participants' attention to the detailed presentations on MSP use in Peru and Indonesia at the beginning of the session and highlighted the importance of appreciating the complexities involved in MSP. While its principles are relatively clear and self-explanatory, the realities of implementing the approach in a dynamic and complex environment need to be taken into account. In particular, the presentations showed how the process must engage with a wide range of stakeholders and institutions. The fact that coastal areas often represent an area of poorly defined or overlapping administrative and institutional responsibilities clearly adds to these difficulties. MSP therefore requires significant long-term engagement and the allocation of resources and time in order to successfully involve communities and user groups at the ground level as well as local, regional and national institutions.

The presentation about the recent development of the MSP process in Senegal also highlights some of these issues. It was noted that the lack of an institutional and regulatory framework for MSP in the country had been identified as an obstacle and should not be underestimated. Getting institutions to collaborate and work together is often extremely challenging and can go against deeply ingrained institutional cultures.

The presentation of the Global Mangrove Alliance guidelines on mangrove restoration was also greatly appreciated, particularly as it focused attention on some of the detailed technical issues that those working on mangrove restoration need to address. The mention of the importance of thinking about interactions between mangroves and development on their landward side was also appreciated and the potential role of MSP in supporting this understanding was noted.

Mr Chalen (facilitator) brought the session to a close, thanking the presenters, the organizers, and the participants.

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