

Building Partnerships

The case of the Red Sea marine fisheries in Sudan shows how fishers' rights can be strengthened through partnership building, adaptive management and ecosystem approaches

How small-scale fisheries can best be supported by the international community is an issue that is currently being tackled by the Committee on Fisheries (COFI) of the Food and Agriculture Organization of the United Nations (FAO). The task of COFI is to identify international mechanisms that can help sustain small-scale fisheries, and this has been shaped by recommendations made at the Global Conference on Small-Scale Fisheries

- eradicate industrial fishing in the coastal zone;
- protect key fishery ecosystems (mangroves, river mouths, estuaries);
- regulate fishing gears and establish closed seasons; and
- establish fishery management plans developed and implemented jointly with artisanal fishers.

The Costa Rica Declaration and the recommendations from the Bangkok 4SSF assert that the human rights of fishing communities are indivisible for responsible and sustainable fisheries to be achieved, and crucial for the political, civil, social and cultural rights of fishing communities to be guaranteed. How this can be achieved and operationalized for small-scale fisheries is a major challenge for many governments. Some States fear that the freedoms endowed in human rights will undermine the current system of management that allocates rights through licensing or creates marine protected areas (MPAs), while others see human rights as a threat to State control and could destabilize authority over fishing communities and their resources.

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(4SSF) that took place in Bangkok in October 2008 as well as a series of workshops convened this year in Asia, Africa, Latin America and the Caribbean.

The Bangkok 4SSF Conference highlighted the principles of human rights as a critical factor in achieving sustainable development of small-scale fisheries, and this has recently been reaffirmed in a Civil Society Declaration presented by CoopSoliDar to the FAO at the Costa Rica workshop (see "Beyond Bangkok", page 41), which calls for States to:

- recognize the full and effective participation of fishing communities in sustainable fishing;
- recognize access rights to land and water;
- optimize societal benefits through an ecosystem approach;

Ecosystem approach

In the light of these issues, an intervention funded by the European Union (EU) in the marine fishery sector of Sudan is insightful and illustrates the benefits of promoting human rights within small-scale fisheries. The project applies an ecosystem approach to fisheries (EAF) through co-management, and shows that where there is meaningful participation of fishing communities in

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fishery governance, it can strengthen fishers' rights and provides fishers with greater freedom to participate in sustaining and managing their fisheries.

Sudan is situated in northeast Africa and is the largest and one of the most diverse countries in Africa. It constitutes just over 8 per cent of the African land mass and its varying climatic and habitat zones are reflected in its diverse ecosystems, which range from tropical rainforests in the south, to semi-tropical savannah and arid zones in the north. The least known and arguably least understood of its ecosystems is the marine tropical ecosystem, represented by the Red Sea that provides important livelihood opportunities for coastal populations from fishery resources, tourism, transportation and petroleum exploration.

The Red Sea forms part of the Rift Valley and is a narrow waterway running south-eastward for some 2,000 km, with an average width of 280 km. It represents a complex and unique tropical marine ecosystem with high biodiversity and a high degree of endemism. The Red Sea is shared by 10 coastal States, including Sudan, and is recognized as a Global 200 ecoregion as it contains geographically distinct assemblages of natural communities and species. Sudan has jurisdiction over 750 km of the coastline, from Egypt in the north to Eritrea in the south, and has an exclusive economic zone (EEZ) that covers an area of 91,600 sq km, including a shelf area of 22,300 sq km.

Sudan's coastline is characterized by lagoons fringed by mangroves and seagrass beds, and its coral reefs are regarded as the most diverse in the Red Sea, with fringing, outer barrier reefs and atolls. Despite small tidal variations (0.5 m), weak currents, low nutrient upwellings, high water temperatures (20-33°C), high salinity (39-56 per cent) and no permanent freshwater runoff, Sudan's Red Sea supports an estimated 200 species of soft and hard coral, 300 bony fish species, over 50 species of sharks and rays, and 1,000 species of

invertebrates. The coast also functions as an important feeding and breeding ground for the endangered dugong and sea turtle as well as for migratory and residential birdlife.

Fishing operations are conducted mainly by small-scale producers within the nearshore inlets and fringing reefs using traditional gear, craft and fishing methods. The main gears are handlines and gill-nets that target reef-associated fish species that account for 80 per cent of the 1,500-tonne annual catch. The locally constructed wooden

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and fibreglass open boats are powered by sail or outboard motor, with the majority of the approximate 600 vessels five to seven m in length and used by an estimated 2,000 fishers.

Fishing communities consist of indigenous people known collectively as the Beja. The Beja are an ancient nomadic tribe of Hamitic descent who have occupied the eastern desert region of Sudan, Eritrea and Egypt for over 4,000 years. Fishing does not have a long tradition in the Beja culture, and it is seen as a seasonal subsistence activity, contributing to a livelihood based on pastoral and agricultural activities.

Low consumption

The domestic demand for fish products is weak and the market small, which constrains the growth of fishery businesses. Sudan has one of the lowest annual per capita consumptions in the region, at 1.4 kg per person, compared to 14.2 kg in Israel, 9.9 kg in Saudi Arabia and 25.1 kg in Yemen. Despite fishing being an important source of livelihood to coastal communities, its contribution to the gross national product (GNP) is small, estimated at less than three per cent, with the main contributors coming from marine transport and petroleum.

Mechanisms to engage fishers in the fishery sector in Sudan were first introduced over 20 years ago, when co-operatives were set up to assist two projects supported by FAO and the United Kingdom's Overseas Development Institute (ODI). Both interventions worked through the Red Sea State's Fishery Administration to increase fishery production, and functioned by subsidizing inputs such as new equipment, fuel and ice, and by guaranteeing the purchase of fish for low-cost sale and distribution. Although the co-operatives facilitated project activities, they had limited impact in promoting fishers' rights or engaging fishers in governance issues.

Since the late 1980s, the fishery sector has seen little investment and support, which has resulted in a contracted public services and budget, loss of experienced staff, poor physical infrastructure and weak institutional capacity. With limited support from the State, the fishers' co-operatives collapsed and fishers have become dependent on local traders for all inputs (ice, food, fuel, loans), with repayments schemes that have kept them in debt. Fishing communities have few opportunities to promote rights, influence policy or participate in fishery management, which is compounded by continued low incomes and production.

To address the sector's malaise, the EU intervention has built a consensus

on the key management objectives for the fishery, and has developed partnerships between the State, traders and fishers. The Red Sea Fishery Co-ordination Group (RSFCG) has been set up under the State Ministry of Agriculture and functions as an advisory forum representing State institutions responsible for fishery resources. Representation includes the Red Sea University, the Fishery Administration, the Fishery Research Institute, the Ministry of Planning and Finance, Humanitarian Aid Co-ordination (HAC) and security agencies. The RSFCG has set up several co-management groups, which has required the State, private sector and fishing community to share responsibility for fishery management.

Engaging fishing communities in fishery management also involves building capacity, and this has been addressed through a programme of experimental fishing. New fishing technologies and techniques, such as longlines, fish traps, handreels, circle hooks, global positioning systems (GPS) and fish finders have been tested and data collected on the fishery and its users. This has included participatory fisheries stock assessment (ParFish) that has raised awareness and facilitated discussions on fishery management. The approach is bringing together government institutions, fishers and traders to test, collect and analyze fishery data, and is promoting the rights of fishers within the sector to determine the best fishing regimes to sustain the fishery.

A co-management group, representing fishers, traders, scientists and managers, has been set up to address the management of reef-associated finfish, and it agreed to apply management measures through the market to limit fishing effort during the spawning season of certain commercial species.

Sea cucumber fishery

The co-management arrangement for the sea cucumber fishery is currently providing the management model for Sudan. Commercial fishing for sea cucumber was stopped in 2009,

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A Sudanese fisherman with a sea cucumber. Participatory fisheries stock assessment (ParFish) helps estimate stocks of sea cucumber and other fish species

based on evidence provided to Sudan by the Regional Organization for the Conservation of the Environment of the Red Sea and Gulf of Aden (PERSGA). The decision to close the fishery created tensions and led to a workshop where broad management objectives were identified and a roadmap tabled that set out how to improve sea cucumber management. The roadmap presented a 10-point plan in which the ban on harvesting sea cucumber would be lifted if there was an agreement between traders, fishers and the State to set fishing effort limits and to work collaboratively to collect and share data during an experimental one-year harvest.

The Sudanese sea cucumber fishery has agreed to limit the number of traders and fishers engaged in the fishery as well as the location and period of the harvest. The process has involved the registering and marking of fishing boats and the licensing all fishers. The traders are supporting the initiative by funding the costs of government observers to remain in each of the processing camps to gather data. This has led to improvements in processing such as a ban on using mangrove wood and setting limits on the size and species harvested. The State is now collecting catch data and gaining a better understanding of the operational costs and benefits of the fishery. This arrangement means that the management costs and benefits are shared by members of the partnership and they have identified measures that can address marketing, production and equity concerns.

Importantly, the security agencies are engaged in the partnership process, despite initial reluctance. The security agencies are federally managed and monitor all movement and activities in the Red Sea State. This includes a requirement by all fishers to obtain maritime access licences before going to sea. The partnership approach has engaged the security agencies and encouraged them to share some of this responsibility with other stakeholders, including fishing communities. The Sudan case illustrates the importance of creating formal mechanisms in which fishing communities can effectively

participate in sustaining and managing their fisheries. Such mechanisms need to be combined with capacity building and dialogue between fishers, scientists and government that raises awareness and understanding about the fishery ecosystem and enables knowledge to be shared. Combining adaptive management with partnership building allows different fishing regimes to be tested so that the decisions are transparent and based on shared data and so that control measures employed can be identified and agreed on by all stakeholders.

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The Sudan case also highlights the importance of human rights and the implicit recognition by government institutions that fishery management cannot be implemented solely by the State, and that fishing communities and traders are central for responsible and sustainable fisheries to be achieved. The partnerships and mechanisms established have not undermined rights-based management through new freedoms to fishery resources but rather have reinforced such approaches. Furthermore, they have not destabilized government authority but, arguably, have strengthened the State's role in facilitating effective and good governance in the small-scale fishery sector.

For more



www.fao.org/fishery/countrysector/FI-CP_SD/en

Sudan: FAO Country Profile

marf.gov.sd

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