Finfish Management

An opportunity for Belize to be a model in small-scale fisheries





Finding the ways that work

Belize's System

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change



Provides Belize with a model law for innovative fisheries management

- Manage catch
- **Area-based management** & licenses.
- **Incentives for fishermen** to steward resources

Fisheries Resources Act

- Very comprehensive
- incorporates modern and relevant principles of fisheries management, while ensuring that legislation is aligned with national laws, regional policy and international obligation. (the Fisheries Act provides for specific regulations to be develop for all aspects of Managed Access (TURF system).
- Overarching objectives & principles:
 - Transparency & accountability; best practices requirements for consultation in the development of Fisheries Management Plans
 - Sustainable use and preserving the marine environment
 - Apply integrated approach of ecosystem-based management
 - Use of best available information and apply the precautionary approach
 - Prevention or elimination of overfishing
 - Effective enforcement to protect biodiversity

- Establishment of a fisheries advisory council - (wide representation from fisheries stakeholders including the Fishing Cooperatives, the Fishermen Associations and the co-managers of marine protected areas) and its roles in developing and implementing fisheries management plans.

Supports the building of resilient livelihoods for fishing communities in Belize .

*strengthens co-management of fishing areas

Benefits of Science-based Management

- It is Adaptive (constantly evolving. eg. as data becomes available, needs and priorities)
- It is a collaborative effort and requires all stakeholders to participate (stakeholder driven process)
- It takes into account social, economic, biological and Market needs
- It is based on science used in a practical way to ensure sustainability of the fishery resource and the associated ecosystem for the benefit of current and future generations (must work with the information we have at hand to make educated decisions and adapt as we learn more)

Belize has example of this in Conch and Lobster *Fishers input is vital *Fishers support must be accompanied by policy *Participatory science is crucial to guide management



Finfish Management is Complex

- We are dealing with multiple species (focus on 45 species)
- Some biological information for some species while for others there is limited or none
- Complex life cycles with different life stages using diverse habitats
- Have vulnerable life stages such as Spawning aggregations
- Limited information regarding deep-slope species
- Snappers and groupers are generally slow growing and late maturing fish, hence highly Susceptible to overfishing and slow to recover from population collapse eg. Nassau grouper







HEALTHY CORALS

GOLIATH GROUPER

SHARKS

Fish Spawning aggregation

What we know about our Finfish in Belize

- Deepslope fishery despite having started more 50 years ago is still in early stages of development
- There are several limiting factors affecting deepslope fishery (knowledge/understanding of the fishing grounds, limited experience, no export market or strong domestic market with right price year round)
- Management of the fishery is important to prevent overfishing
- Further research is needed to fully understand this deepslope fishery (social, biological, economic) but remember we must start somewhere...
- Snappers and groupers aggregate to spawn at predictable space and time
- (this makes them highly vulnerable to overfishing, protecting SPAGs protects sources of seeds)
- Essential habitats for finfish (mangroves, seagrass and coral reefs) are under increasing threats from human activities)
- Limited knowledge about deepslope habitat (replenishment zone expansion)
- It supports livelihoods, provides food, employment, income and recreation for our people





- Fishing activities are carried out in accordance to the areas specified in the license as per attached map. Boat captains should ensure that all fishers onboard should be licensed in accordance with the areas assigned to the vessel license
- Vessel marking should be in accordance with Regulation 41 of the Fisheries Act and the color coding assigned for each fishing area.
- Submission of catch data



Managed Access areas is a good platform for finfish management and building climate change resilience

Thank You

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