Marine protected areas: Interactions with fishery livelihoods and food Security

A joint FAO-IUCN/CEM/FEG initiative

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Marine protected areas: Interactions with fishery livelihoods and food security 603



FAO Fisheries and Aquaculture Department (FI)

• **FAO priority:** Achieving food security for all

The right to food and a human rights based approach to development

Fl vision: A world in which responsible and sustainable use of fisheries and aquaculture resources makes an appreciable contribution to human well-being, food security and poverty alleviation.



Why FAO interest in fisheries and MPAs

- MPAs usually a tool for biodiversity conservation with increasing importance in global fora and also promoted as fisheries management tool.
- Spatial-temporal-gear closures are historically some of the most common fisheries management measures but MPAs is one fisheries management tool among many others and is not always the preferred one.
- Increasing recognition of the need to reconcile conservation and fisheries objectives at ecosystem level (EAF).
- Fishing communities and small-scale fishers often bear the conservation costs, while receiving only a (small) part of the benefits.
- What are the implications for livelihoods and food security?



Examples of FAO work

VOLUNTARY GUIDELINES ON THE

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Responsible Governance of Tenure OF LAND, FISHERIES AND FORESTS IN THE CONTEXT OF NATIONAL FOOD SECURITY

CFS





Food and Agriculture Organization of the United Nations FAO FSHERIES AND AQUACULTURE TECHNICAL PAPER 603

Marine protected areas: Interactions with fishery livelihoods and food security





Background: World Parks Congress - WPC

- IUCN & Parks Australia
- Sydney 12-19 November 2014

Collaboration: IUCN/CEM/FEG & FAO Fisheries & Aquaculture Department

Stream 4: Supporting Human Life

- MPAs and sustainable livelihoods
- MPAs as a tool for food security
- Connecting the dots: MPAs and small-scale fisheries (side event)
- Sustainable hunting and fishing in protected areas
- Tenure, food security and conservation: advancing the agenda in protected areas (some marine elements)



Technical Paper

- Selected contributions from sessions organized by FAO and IUCN/CEM/FEG
- Focused on interactions (positive or negative) of MPAs with fisheries, livelihoods and food security
- First known publication explicitly examining impacts of MPAs on fisheries and food security.

Westlund, L; Charles, A.; Garcia, S.; Sanders, J. (eds). 2017. Marine protected areas: Interactions with fishery livelihoods and food security. FAO Fisheries and Aquaculture Technical Paper. No. 603. Rome, FAO.

Contents: case studies

- MPA and fisheries: food security and livelihoods in Indonesia
- Small-scale fishery development within <u>Costa Rica</u>'s MPA system.
- Freshwater protected areas to protect biodiversity and food security in the <u>Philippines</u>
- Fishermen and conservation: case study of Hinase, <u>Japan</u>
- Changes in fisheries production following large scale expansion of notake closures within the Great Barrier Reef, <u>Australia</u>
- Fishery products from Banc d'Arguin National Park (Mauritania)
- The positive relationship between Ostional's community and the conservation of olive ridley sea turtle in <u>Costa Rica</u>
- Integrating conservation and development in <u>Madagascar</u> MPAs
- Fishermen's livelihoods and Solitary Islands Marine Park, Australia
- Impacts of MPAs on livelihoods and food security of the Bajau as an indigenous migratory people in maritime <u>Southeast Asia</u>.

Contents:

impact assessment & conclusions

- Marine reserves (no-take): how to assess the impact on food security
- Conclusions: observed outcomes of aquatic protected areas (PAs), problems and solutions

A note on terminology: It is important to keep in mind that the definitions of PAs and MPAs vary and there are different types of PAs.

Conclusions: Five Key Insights

- 1. MPAs: positive or negative effects on food security depending on the context (geography, ecological / socioeconomic conditions, etc).
- Interactions between conservation and human development and impacts of MPAs on food security of neighboring populations, are not well enough understood.
- 3. Vulnerable populations depending on aquatic resources will be adversely impacted in the short-term by MPAs but MPAs, if designed and implemented appropriately, may provide a vehicle for improved long-term food security.
- 4. MPAs are one tool among many available measures, not an end in themselves.
- 5. MPAs established in populated areas do not produce successful conservation unless they also benefit communities concerned.

Conclusions: Eight Key Requirements

- 1. Adequate policies: where relevant, food security and poverty alleviation need to be seen as integral and complementary to conservation objectives.
- 2. Clear objectives: planning MPAs should integrate both ecological and human well-being objectives.
- Participation: communities and other stakeholders need to be engaged in MPA planning, implementation, monitoring and enforcement.
- Capacity building: the capacities required to participate should be developed.

Conclusions: Eight Key Requirements

- 5. Management measures: MPA and fisheries management need to be combined.
- 6. Traditional knowledge: fishers' and communities' knowledge should be considered and used.
- 7. Communication and knowledge: improved knowledge needs to be generated and applied, and communication channels established.
- 8. **Compensation**: need for financial compensation and/or alternative livelihoods and income-generating activities.

THANK YOU!

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