

Community-based ecosystem approach to fisheries management (CEAFM) and climate change adaptation in the state of Yap, FSM



Current status of marine resources in Federated States of Micronesia (FSM)

In FSM, recent surveys have indicated that catches of fish and shellfish have been declining in lagoons and inshore reefs. The main reasons for this decline are:

- overexploitation due to increasing population;
- use of overly-efficient and sometimes destructive fishing gear and practices;
- other land-based activities, such as near-shore infrastructure development, affecting marine habitats; and
- impacts of climate change, which are expected to add to the already existing local threats to mangroves, coral reefs, sea grasses, and inter-tidal flats, resulting in declines in the quality and area of all habitats.

Projections show progressive decline in productivity of all components of coastal fisheries. To address this problem, national and state governments, municipalities, and island communities implemented a CEAFM programme with technical assistance from the Secretariat of the Pacific Community (SPC) and in partnership with non-governmental organisations.

The CEAFM programme represents a combination of three different perspectives:

- fisheries management;
- ecosystem management; and
- community-based management.

Therefore CEAFM embraces the management of fisheries, within an ecosystem context, by local communities supported by governments and other partners

SPC/GIZ CCCPIR's support

Since mid-2012, the regional SPC/GIZ¹ programme Coping with Climate Change in the Pacific Island Region (CCCPIR) has been supporting CEAFM with the aim of improving community awareness on climate change impacts and assisting communities in maximising opportunities to adapt to social, economic and environmental effects of climate change. This will strengthen the capacity of local communities to respond to climate change impacts through the application of integrated coastal resource management, conservation and adaptation. Thus, the resilience of marine ecosystems will be improved, as well as the livelihoods of people depending on them.

¹ GIZ is a federally owned enterprise that supports the German government in the field of international development cooperation. For more than 30 years, GIZ has been cooperating with Pacific Island partners in strengthening the capacity of people and institutions to improve the lives of communities for this generation and generations to come. GIZ is an implementing agency providing support through technical cooperation to balance economic, social and ecological interests through multi-stakeholder dialogue, participation and collaboration

Under the supervision of the FSM national government, the State of Yap was chosen to begin the project. Three communities in the state were selected as pilot sites: Riken/Wanyan, West Fanif, and Rumung Island.

Activities

1. Coastal fisheries resources management

Community consultations were undertaken and community fisheries management plans were developed. Management activities included:

- Strengthening of marine protected areas;
- Control of destructive fishing gear and practices;
- Control of land-based activities that impact the marine environment;
- Rehabilitation of critical habitats;
- Strengthening of community enforcement and monitoring;
- Identifying and developing alternative livelihoods (deployment of fish aggregating devices [FADs] and post-harvest activities) with the aim of diverting fishing pressure from coastal fisheries to offshore areas and facilitating climate change adaptation; and
- Strengthening of community leadership and governance.

2. Alternative livelihoods and adaptation

Fish aggregating devices (FADs)

FADs improve access for coastal subsistence and artisanal fisheries to skipjack, yellowfin tuna and other pelagic fish as coral reef production declines because of climate change. FADs can be used for management purposes as they alleviate fishing pressure on inshore areas by facilitating access to offshore fisheries. They also provide alternative livelihoods for local communities. Activities included:

- community training on FAD construction, management, deployment and maintenance;
- ongoing data collection and monitoring activities to evaluate social and economic benefits of FADs;
- community training on FAD fishing gear and technology; and
- stockpiling materials for repair, maintenance and new deployments.



Training on FAD's rigging, construction, maintenance and deployment for Yap communities.

3. Capacity building

Capacity building is being undertaken through training attachments for state counterparts at SPC headquarters on resource management planning processes and monitoring.

Next steps for CEAFM and climate change adaptation programme

- State-wide awareness campaigns/climate change open day.
- Official launch by national and state government, partners and communities.
- Capacity building for FSM national researchers to conduct resource monitoring and scientific observations in all states.
- Exploration of post-harvest and preservation options for value adding and to extend shelf life of catches.
- Vulnerability and adaptation assessments for selected communities.

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