Progress report on the pelagic fisheries project

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Objectives of the project

The Pelagic Fisheries Development Project aimed to introduce an alternative livelihood to the communities in and around Komodo National Park (KNP), in an effort to steer them away from using destructive fishing methods. The three main opportunities for alternative livelihood development for local coastal communities, as described in the 25-year management plan for KNP, are in the fields of a). pelagic fisheries, b). eco-tourism, and c). mariculture. The development of eco-tourism and mariculture in and around KNP are being covered in separate projects, in cooperation with expert partners. The presently described project specifically aimed to develop a fishery for large coastal pelagic fish was expected to result in income levels competitive to other non-destructive small-scale fisheries in coastal areas, and well above the poverty line of US\$1 per person per day. An important secondary objective of this project was to serve as a vehicle for carriers of the conservation message in awareness and constituency building programs. The project was to build close working relationships with communities in the conservation area, and to win the trust of the key players within those communities.

Implemented modules, December 1998 – February 2000

The pelagic fisheries project has been working together with local fish traders, fishermen and expert contractors, to enhance the establishment of the fisheries. Fishing techniques, post harvest practices, fish processing techniques and marketing of large coastal pelagic fish (mainly Spanish mackerel, wahoo, barracuda and trevallies) have been developed. In order to increase the number of fishing locations, to hold migrating true pelagics (mainly dolphinfish, yellowfin, skipjack and eastern little tuna) in the area and to increase overall catch rates, FADs were deployed in offshore areas. Six deep-water (1,000 - 1,200 m) and five shallow-water (70 - 100 m) FADs have been deployed in the area north of the Park.

The project included a three-month training program for fishermen and for women from fishing communities. Participants in the training program and their moneylenders (local traders) have signed an agreement to refrain from destructive fishing practices in the future. The training program was essential to the project since it created the momentum that was needed for successful development of the fishery. Whereas YPAN and TNC were responsible for the overall project coordination, expert contractors from the fishery sector carried out the training program. Fishermen from different areas in Indonesia have been hired to teach a variety of skills which are needed in this fishery (from Sumatra: construction of traditional FADs and skipjack/tuna fishing; from Flores: live and dead bait still-fishing; from Sulawesi: artificial bait trolling; from Sape: natural bait trolling).

An initial number of 40 local boats have been equipped with insulated ice boxes and basic gears to catch large pelagic species. Around 2/3 of the project participants are still presently involved in the pelagic fishery, mostly on a part-time basis. Demersal fishery is still very important although this is also shifting to areas outside the Park. The number of the pelagic fishing boats increased when price for Spanish mackerel increased and is expected to increase further when protection and enforcement escalates inside the National Park. Many fishermen have enjoyed the benefit of the fishery for large coastal pelagic species (especially mackerel), in comparison to other legal and non-destructive fisheries.

The training program for fishing communities also contained a post-harvest component, covering a variety of techniques from fish handling on the boats to fish processing on shore. Although a large portion of the catch is destined for sale as a fresh chilled product, there is also considerable potential for the production of various kinds of processed fish. Examples are traditionally steamed tuna (ikan pindang), fish ball, dried fish, and various kinds of preserved fish (dendeng, abon). The project has trained several groups in local fishing communities, including many women, to prepare these products. The project also supplied some of the basic tools. By introducing these 'new' value-added products, the fishermen now have a better chance of increasing their income in the pelagic fishery.

Implemented modules, February – May 2000

Over the period February – May 2000, 5 additional FADs were installed to replace FADs that got lost (Fig. 1). The last FAD was installed on May 4, 2000. These FADs have a different design that makes it easier for local villagers to maintain them. Also, they are deployed in deeper water (ca. 1500 m) to improve their efficiency.

The new FADs were built at Seraya Besar. The implementing team consisted of Pak Purnomo (team leader), his assistant, and two local workers. Whereas the activities of this team until May 4 mainly consisted of manufacturing and deployment of the FADs, the focus was shifted to maintenance, inspection and socialization thereafter. Also, slight adjustments to the design were made at sea to protect the FADs against theft.

On May 1 2000, KM Cakalang 33 from Usaha Mina arrived to buy fish from the Seraya fishermen. This operation is subsidized by YPAN at a rate of 20 million per month, for a period of three months. Apart from the ship's crew, there are three staff from Usaha Mina who work together with the Seraya fishermen: one coordinator, one accountant (who keeps track of the fish sales), and one fish processing specialist (who trains fishermen to keep their catch in good condition).

Planned activities, May 15 – June 15 2000

The FAD team coordinator, together with one local worker will conduct routine inspections of the FADs, replace missing appendages, and make the necessary repairs. The team will continue to inspect the positions of the FADs (at least once a week), to evaluate whether they are properly anchored. The FAD team coordinator will also work together with Usaha Mina and the Seraya community to socialize FAD maintenance and replacement, so the FAD operation can be sustained by the Seraya community in cooperation with Usaha Mina.

Additional projected costs for the period May 15 – June 15 2000

Personnel	Rupiah
coordinator	3,150,000
local worker	400,000
Materials (estimated)	5,000,000
TOTAL	8,550,000



Figure 1. Location of the Fish Aggregating Devices that were installed in the period February – April 2000.