Case Study: Bunaken National Park: Participatory Management in Zoning

Bunaken National Park, in North Sulawesi, is a 89,000 hectare reserve covering 6 islands and mainland coastline. It has diverse coastal and marine habitats, including extensive coral reefs and mangroves, supporting such species as dugong, sea turtles, giant clams, and a species of coelacanth. It offers some of the best scuba diving in Southeast Asia, and provides livelihood to a population of 20,000 people in local communities.

The main section of the park was declared a provincial park in 1980, and was combined with a southern section in 1991. The early process of planning the park was a process of sparring between the provincial government, local dive operators, and the central government (represented by the Ministry of Forestry). The local communities, an important stakeholder, were not included in the process.

The provincial government's primary interest was tourism development, supported by a long-held misconception that the tourism value of the park greatly outweighed its value to local fisher people. Further, there was a belief that the park was suitable for mass beach tourism such as at Bali, though the beaches in the park were small and not suitable for this. The local dive operators were based outside the park, and had long lobbied for a ban on tourism facilities inside the park, due to fears that whoever gained concessions inside the park would gain an unfair advantage. The national government's primary goal was conservation. Thus all three players had incompatible goals. In addition, all three of these players viewed the local community as an obstacle that had contributed to damaging the coral reefs since the reefs' "discovery" in the mid-1970's.

In 1991 the northern and southern sections were combined into a single park, and a new management planning process began in collaboration with USAID, which actively encouraged community participation. it was quickly realized that because local communities had long-established use practices, it was imperative that they become involved in planning and management. It was considered unfair that they be relocated out of the park (as proposed by both local and national government) when, after more than 100 years of use, the coral reefs of the park were found to still be in good condition. In fact, there was strong evidence that the reef damage since the 1970's was due to tourism, not to local community use.

After a participatory planning process involving all of these stakeholders, four types of marine zones were established:
(1) Core (or sanctuary) zones. There was strong pressure from communities to place these relatively close to villages, which has not been the usual practice. The reasoning was that local communities could more effectively monitor and prevent violations of zone regulations.
(2) Dive zones. An informal equilibrium had already been established between dive areas and fishing areas before formal zoning; this served as the basis for development of these zones.
(3) Traditional use zones for limited use by local communities; this was the majority of reef flat areas.
(4) Use zones for small and medium scale industrial fishing. This covers open sea areas within the park that are at least 200m from coral reefs.

The resultant zoning plan was spatially more complex than that originally envisaged, with more zones that were individually smaller in size. However, outreach and enforcement costs were reduced because all users had "bought into" the plan. Local communities now assist in sharing rights and responsibilities for sustainable management of the park, through Community Conservation Agreements (CCAs) that cover the extent and type of activities in buffer zones.

Dive operator support has also increased. In 1991, rivalries between dive operators thwarted attempts to establish good management practices. A mooring buoy program begun in 1993 failed because of these rivalries. However, since 1996 several new 4-star hotels with professional dive operations have opened. These hotels and diving companies rely on a healthy national park to ensure their financial success, and are now working together to support conservation management of the park. Park management and dive operators are developing a partnership to support a wide range of conservation activities. This partnership includes development and dissemination of park information materials, as well as a new mooring buoy program. A formal user-fee system is being designed. In the meantime, the dive operators have started to collect monthly membership fees, which are then donated to the national park to cover costs of patrolling and outreach.

However, the need for active and adaptive management continues as new changes occur. First, the rapid spread of seaweed farming has led to dramatic changes in local resource management. This has resulted in reduced pressure on fishing resources within the park, as local people switch to seaweed farming, but an increased pressure on mangrove habitats. it is essential for the park to support the economic aspirations of poor local communities, and to ensure their support for broader economic goals. Therefore, park staff are trying to reduce negative impacts of seaweed farming, while encouraging positive ones. A second development is the arrival of major new tourism operators who were not involved in the initial planning process. A third is the economic crisis in Indonesia, which has reduced government funding for parks, and has led to a greater occurrence of destructive fishing practices by outsiders. A fourth is a move toward decentralization in Indonesian government, which may affect the legal status of the park.