

PART 11

IMPLEMENTATION

Summary

- Responsibility for implementing the management plan for the Semporna Islands Park will lie with Sabah Parks, but needs to closely involve the local community. Various specialist Management Committees (e.g. Fisheries, Land Use, Tourism Development) could usefully assist in this task, in addition to the existing Advisory Committee.
- A detailed financial plan for the Semporna Islands Park needs to be put together as soon as possible. Basic funding will be provided through the State government once the park is gazetted, but it is recommended that in the longer-term there should be considerable emphasis on raising funds from users.
- Additional staff will be required once the park is gazetted, and it is recommended that local people are employed as far as possible. Appropriate training will be a high priority.
- Objectives for the park will be met only if there is good compliance with the regulations. It is important to have an awareness and education plan in operation that ensures everyone is aware of the regulations. This should increase compliance, reduce misunderstandings and misinterpretations, and reduce the numbers of infringements.
- Establishment of a 'Surveillance and Enforcement Unit' is recommended, involving the Police, Navy, Fisheries Department, local communities and tour operators. Equipment and resources necessary for enforcement need to be made available early on.
- A monitoring and research programme should be established, in order to provide up-to-date information on the condition of the park, and the impact of human use and management strategies. It will be very important to ensure that the results of the monitoring programme are interpreted and made available in a format that is useful for the Park Management team.
- It is recommended that a *Notice of Intention to Gazette the Semporna Islands Park* is published after submission of this plan. A public hearing has to be held within 3 months of the notice being published, and during this time the plan will be made widely available and comments invited.
- Modifications will be made to the plan on the basis of this consultation, and the amended Management Plan produced at the same time as the park is finally gazetted. The park could be established by May 2001, allowing Sabah Parks to begin to bring in new staff, develop a financing strategy and draw up plans for the Park Centre.
- It is anticipated that the rest of the year 2001 will be spent organising staff, establishing committees and developing budgets, while working on the park plan and regulations. The awareness and education programmes should begin in these early stages, as well as plans for the Park Centre. If progress is good, the park could be fully operational by 2005.

11.1. Co-operative Management

During the course of the project, many people and organisations have been consulted and the management objectives and options for the Semporna Islands Park have been openly discussed. Informal and formal meetings, educational events, workshops and other activities have been carried out, involving the following:

- Local people, through the Local Community Forum set up under the project.
- Other user groups and individuals (e.g. fishermen).
- Semporna area schools and general public.
- District Office Semporna, and other local government offices.
- Relevant ministries and government departments.
- Tour operators.
- Authorities and groups concerned with natural resource management
- Specialists and experts

Implementation of the management plan should be successful if this type of approach is pursued. It is particularly important that people living in the park continue to be fully involved in the planning processes and can see that they will share the benefits of implementing the management plan. Other interested parties also need to have the opportunity to comment on management strategies and put forward their points-of-view.

Another reason why co-operative management is necessary is that the Semporna Islands Park is a large and complex area in which many activities will be taking place. Successfully managing these activities and ensuring all the objectives for the park are met will be a major challenge. The task can be made easier if as much expertise as possible is harnessed. This expertise resides not only with Sabah Parks, but also with various institutions and government departments in Sabah, as well as in local and international non-governmental organisations. The park will work more effectively if this expertise is used.

It is recommended that the *Advisory Committee* and *Local Community Forum* established under the project should both continue to operate. The Advisory Committee provides expert, independent advice on various issues and has proved invaluable during the evolution of the management plan. The Community Forum provides a mechanism for ensuring there is effective communication between Sabah Parks and people living within the protected area. It is especially necessary because some of the land within the park will be under Native Title, rather than vested in Sabah Parks. Activities in these parts of the park will need to be regulated in order to maintain the integrity of the park. The regulations will probably best be established through *Co-operative Management Agreements* between the land owners and Sabah Parks.

In addition, it is recommended that a number of *Management Committees* are established to help with development and management of the park, enforcement of regulations and other aspects. This will entail co-opting people and organisations from outside Sabah Parks, and will require funding. The following are recommended:

Fisheries Committee to discuss harvesting of marine resources in the park, agree on harvesting methods and catch limits and organise a system for recording catch and monitoring stocks. This should include Sabah Parks, the Department of Fisheries, Sabah Fisheries and Fishermen's Development Corporation and representatives of the various fishing groups and local communities.

Mariculture Committee to discuss culture of marine resources in the park, and how best to prevent environmental impacts while maximising opportunities for local people. This should include Sabah Parks, the Department of Fisheries, Sabah Fisheries and Fishermen's Development Corporation, managers of the various mariculture operations and representatives from the workforce.

Land-use Committee to look in detail at the best ways of using the land currently under cultivation and the measures that should be taken to prevent environmental degradation. This group should also have the mandate to address land-based pollution (e.g. sewage, solid waste, pesticides, fertilisers) and co-ordinate monitoring programmes. This should involve Sabah Parks, agriculture experts, District Office, relevant local authorities and local communities.

Tourism Development Committee to help direct implementation of the tourism plan for the park, formulate guidelines, co-ordinate monitoring programmes and deal with management issues. This should involve Sabah Parks, the District Office, Ministry of Tourism Development, Environment, Science and Technology, Sabah Tourism Council, tourism enterprises and local communities.

Culture and Heritage Committee to help promote cultural aspects and traditional activities. This should involve Sabah Parks, local communities, Sabah Museum and the Ministry of Tourism Development, Environment, Science and Technology.

Environmental Awareness and Education Committee to promote and co-ordinate educational activities. This should involve Sabah Parks, the Education Department, District Education Office, local schools, Universiti Malaysia Sabah and non-governmental organisations such as WWF Malaysia and the Sabah Nature Club.

11.2. FINANCING

A detailed financial plan for the Semporna Islands Park needs to be put together as soon as possible. It is not uncommon for Protected Area management to fail because of a lack of financial resources. Hopefully, this situation should be relatively easily avoided for the SIP with a combination of government funding, private investment and public contribution through visitor fees. Basic funding will be provided through the State government once the park is gazetted, but it is recommended that in the longer-term there should be considerable emphasis on raising funds from users.

The Bonaire Marine Park in the Dutch Antilles is an example of one of the first protected marine areas in the Caribbean to become entirely self-financing through levying of admission fees on scuba divers (De Meyer, 1997). These fees support ongoing, active management of the park's natural ecosystems, as well as educational activities. By law, the monies realised through the sale of admission tickets can be used only for the management of the Marine Park. They pay for upkeep and maintenance of all facilities, including public moorings, provision of all interpretive materials, educational activities for local schoolchildren, for the park's research and monitoring activities, and for law enforcement.

Visitor fees are already charged for entry to Marine Parks in Sabah. The fee is relatively low - RM 2.00 for Malaysian adults in all the parks (Pulau Tiga, Tunjku Abdul Rahman Park and Turtle Islands Park) and RM 3.00 for foreigners. Visitors to the Semporna Islands Park will also pay a fee, at a rate yet to be decided. It may be sensible to apply different rates to different activities, for example a higher rate could be charged for diving in the Sanctuary Zone than elsewhere, partly as a mechanism for lowering demand in more sensitive areas.

Funds raised by visitor fees should be channeled directly back into conservation and education initiatives in the park. It may also be appropriate to set up a *Community Fund* that receives a percentage of the income generated by tourism and is used specifically on projects and activities that will benefit local people.

11.3. PARK FACILITIES AND INFRASTRUCTURE

Development of the Park will entail provision of facilities and infrastructure, as outlined in previous sections of this document. Some of these are of higher priority, for example the Park Centre and Visitor Centre should be completed before any visitor accommodation units or facilities such as pontoons are constructed. A staged approach for these is advisable, rather than pushing ahead with all the developments at once (see 11.9).

There are two options with regards to the construction of facilities in the park:

- a) Sabah Parks requests government funding to build them,
- b) Sabah Parks leases out a specified area to private companies and they come forward with their own investment funding.

Due to lack of government funding, the second option has been the preferred choice in recent years.

Tenders for the development of tourist facilities should be invited once the park is established. Private companies will be required to adhere to regulations and restrictions stipulated in the Management Plan or agreed to by the *Tourism Development Committee*, for example relating to size of developments, location, access, visitor numbers and other operational details.

An independent impact assessment will also be required before the concession is granted, and development will be allowed to go ahead only if the impact assessment is satisfactory. Priority should be given to private companies that put high environmental standards at the top of their agenda. Once established, the facilities and their operation should continue to be monitored to ensure that there is compliance with the terms of the concession agreement.

Careful planning will be needed to ensure that adequate infrastructure is in place before the park begins to encourage people to visit. Not only will accommodation, transport, toilets, mooring points, jetties and so on need to be operational, but administrative details will also have to be organised. For example, once a limit on numbers has been decided (see section 9.9.2), a computerised system should be set up whereby availability of permits for particular days can be checked. It will be necessary to have information on bookings available at a number of locations (e.g. tourist offices and Sabah Parks offices in Kota Kinabalu, as well as locally in Semporna). If the day-limit for permits was reached, then prospective visitors would need to be given priority for another day. A fair system will have to be introduced which ensures that agents do not 'block book' hundreds of permits in advance, leaving no availability for independent travellers and local people.

11.4. PARK STAFF AND TRAINING

Currently the number of Sabah Parks staff employed to cover the proposed Semporna Islands Park is small because the site has yet to be gazetted. Additional staff will be required as soon as the park is established, and subsequent recruitment will need to be phased to match the rate of development of the park. Eventually, the park may employ in the region of 60 – 80 staff (134 are currently employed in the Kinabalu Park) but it will take some years before this figure is reached. It is recommended that, where possible, local people should be employed.

The following posts are anticipated:

- Park warden
- Assistant Park Warden
- Senior Park Rangers
- Park Rangers
- Community development officer(s)
- Education officer(s)
- Education assistants
- Research officer(s)
- Research assistants
- Clerical staff
- Drivers
- Boatmen
- Field staff
- Temporary assistants

Sabah Parks has long experience in running protected areas in the State, and the existing staff have a wide range of skills. However, management of the Semporna Islands Park will present many new challenges, particularly because this will be the first park in Sabah that has a resident population, and supports activities such as mariculture that are not permitted in other State Parks. Park Staff will need to be trained so that they can implement the plan and deal effectively with a wide range of management issues.

The aim of training will be to ensure that Park staff have the capacity to implement the management plan, monitor its progress and respond to events and changing needs. It is important that training is carried out at all levels, from senior management to field staff and technical assistants.

At the outset, all staff should have basic training to ensure they are familiar with the objectives for the park, the zoning scheme, regulations and other aspects. The type of further training required will depend on the responsibilities of the member(s) of staff concerned, but could be expected to cover aspects such as resource management, conflict resolution, effective communication and interpretation, how to deal with infringements and so on.

11.5. SURVEILLANCE, ENFORCEMENT AND SECURITY

Objectives for the park will be met only if there is good compliance with the regulations. Regulations will apply to activities that range from littering to building of jetties and provision of drinking water. Checks will have to be made on development plans and day-to-day operations to ensure that regulations are being respected, and there are no loopholes. Surveillance and enforcement will play a vital role in ensuring successful implementation of the management plan, and it is important that park users are aware from the outset that Sabah Parks puts a high priority on these aspects.

It is important to have an awareness and education plan in operation that ensures everyone is aware of the regulations, and why they have been applied. This should increase compliance, reduce misunderstandings and misinterpretations, and minimise the numbers of infringements.

In cases where regulations are broken, a variety of different approaches may be applicable. In the first instance, it is preferable to provide information and explanation rather than be heavy-handed. However, if the infringement is serious (e.g. fish blasting) or repeated regardless of prior warnings then the perpetrators should be apprehended and prosecuted.

Surveillance and enforcement will be most effective if it is a joint effort led by Sabah Parks, but also involving the Police, Navy, Fisheries Department, local communities, tour operators and possibly others. It is recommended that a *Surveillance and Enforcement Unit* should be established, and a detailed plan of action drawn up to define the responsibilities of each party.

The Police, Navy and Fisheries Department already operate in the area, and local communities have expressed an interest in being involved in the enforcement programme. Whilst there is clearly a risk of the watchdogs themselves breaking the law, this potential disadvantage should be outweighed by the benefit of having more 'eyes and ears' keeping a check on activities.

Successful enforcement of park regulations will be one of the key factors in ensuring the success of the park. A strict enforcement regime with regular patrols should also help greatly to promote security and protection against other unlawful activities not connected with the park.

It is important that the equipment and resources necessary for enforcement are made available early on. This means having trained and motivated staff, fast and well equipped boats and strong educational back-up.

11.6. MONITORING AND RESEARCH

Many studies were carried out during the course of the Semporna Islands Project, covering biological, ecological, socio-economic and cultural features of the proposed park and its inhabitants. The results of these and earlier studies provide the basis for the management recommendations made in this plan.

However, it is vital that management of the park is adaptive and responds to changing needs and circumstances. Appropriate responses can be made only on the basis of accurate, up-to-date information, and it is for this reason that a monitoring and research programme should be set in place.

A coral reef monitoring programme has already been started (Wood *et al.*, 2001) and needs to be continued and expanded, while others can be built on the baseline surveys undertaken for the Semporna Islands Project in 1998-1999. For example, the Forest Research Centre recommend the establishment of a system of monitoring long-term forest health and dynamics by using permanent plots that would be re-enumerated every 5 to 10 years.

The park management regime includes various interventions aimed at conserving biodiversity while allowing for sustainable use. Some areas will be 'left alone', while others will be closed for fishing or used for specific purposes such as seaweed farming or reef recreation. The monitoring and research programme needs to cover all these aspects over a range of disciplines. Basic parameters such as climate and water quality should be monitored, and projects also need to be developed to track the use of the park and its resources and answer questions such as 'Is the quality of the environment improving?', 'what is the impact of this development?' , and 'what is the effect of the park management regime on _____?'

Numerous aspects could be monitored or investigated, for example:

- Comparative studies of vegetation in Preservation and Sanctuary Zones on the main islands.
- Comparative studies of reef condition in Preservation and Sanctuary Zones.
- Resource use patterns e.g. who fishes where, for how long, and what is their catch?
- Studies of fish populations (numbers, size, species diversity) in no-take and fishing zones.
- Location of fish spawning aggregation sites
- Population studies of sea cucumbers, giant clams and other commercially important invertebrate species
- Studies of reef condition before, during and after pontoons and/or moorings are installed.
- Recovery of corals after bleaching or attack by crown-of-thorns starfish.
- Changes in reef condition at popular dive sites.
- Environmental change caused by nature trails.
- Changes in socio-economic status of local people.

Design and execution of the monitoring programmes should be a joint effort between Sabah Parks and relevant experts and institutions, especially those who were involved in the baseline surveys. Experienced ecologists or other professionals in their field of interest should establish the protocols, train Sabah Parks staff as necessary, and ensure the monitoring is carried out regularly. Hopefully, in the long term, many of the programmes can be run by Sabah Parks, but it will also be useful to retain and use outside experts.

It will be very important to ensure that the results of the monitoring and research programme are interpreted and made available in a format that is useful for the Park Management team. This should help to indicate whether changes are needed in the management regime – for example, added protection for certain sites or species.

A permit will be required to conduct monitoring and research programmes in the park. Application for a permit will require submission of a research proposal to Sabah Parks in a set format. This needs to be developed, but an important component is to show the benefit of the research to the management of the area.

11.7. EVALUATION AND REVIEW

The plan will need to be revised, expanded and improved at regular intervals. The aim of this will be to examine if the recommended actions have been implemented, how well they are working, and if good progress is being made towards meeting the overall objectives for the park. This will require assessing progress against various performance criteria.

11.8. TIMETABLE FOR IMPLEMENTATION

Many targets have been set for establishment of the park and implementation of the management plan. It will take a number of years for all these targets to be met and for the management plan to be fully implemented. The aim of this section is to indicate where the priorities lie and how the various elements of the plan can be taken forward.

The sequence of events outlined below assumes that the State Government will approve the concept of the Semporna Islands Park on the basis of this draft Management Plan. A public hearing has to be held within 3 months of the notice being published, and during this time the plan will be made widely available and comments invited. Modifications will be made to the plan on the basis of this consultation, and the amended Management Plan produced at the same time as the park is finally gazetted.

It is anticipated that the rest of the year 2001 will be spent in organising staff, committees and budgets, while working on the development plan and detailed regulations. It is also important that the awareness and education programme begins in these early stages, as well as plans for the Park Centre. If everything progresses well, the park could be fully operational by 2005.

SHORT-TERM TARGETS	YEAR 2001					
	January	February	March	April	May/Sept	Oct/Dec
Finalise draft Management Plan	■					
Submit draft Management Plan to State Government		■				
Publish notice of intention to gazette the park		■				
Establish special commission to investigate land issues		■				
Draft Management Plan made publicly available		■				
Advisory Committee meeting to discuss draft Management Plan		■	■			
Local Community Forum meeting to discuss Plan		■	■			
Public comments on draft Management Plan invited		■	■			
Public meeting held to discuss draft Management Plan		■	■			
Modifications made to Management Plan		■	■			
Final Management Plan completed and submitted		■	■	■		
State Government approves final Management Plan		■	■	■		
Park is gazetted		■	■	■		
Advisory Committee meeting to discuss future plans			■	■		
Sabah Parks establish Management Committees			■	■		
Financing strategy discussed and established			■	■	■	
Staff requirements established for phased development			■	■	■	
Advertise for and appoint first batch of additional staff			■	■	■	
Train staff as necessary				■	■	■
Work on Environmental Awareness and Education programme				■	■	■
Work on Development Plan for the park				■	■	■
Develop detailed regulations				■	■	■
Work on overall design concept for Park Centre				■	■	■

LONG-TERM TARGETS	2002	2003	2004	2005
Construction of Park Centre	■			
Land claims and residency issues resolved	■			
Awareness and education programme launched	■			
Plans made for alternative livelihoods	■			
Intensive campaign to introduce regulations	■			
Surveillance and enforcement programme devised and launched	■			
Monitoring programme devised and launched	■			
Pilot giant clam farm project developed and launched	■			
Tourism development plan finalised	■			
Construction of Visitor Centre	■	■		
First phase of visitor facilities and infrastructure completed	■	■		
Tourism promotion begins	■	■		
Second phase of visitor facilities completed	■	■	■	■
Review and revision of Management Plan	■	■	■	■

