

CASE STUDY ON COMMUNITY PARTICIPATION IN THE MANAGEMENT AND CONSERVATION OF THE BUNDALA NATIONAL PARK

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Proceedings of the South and Central Asian MAB Meeting of Experts on Environmental Conservation, Management and Research, Hikkaduwa, Sri Lanka 15-18 October 2002

Summary: Wildlife Protected Areas (PAs) are generally vast forest jungle areas, managed by a handful of wildlife officers with a limited amount of resources. It has been proved that the management of PAs would be more effective, if the participation of the people who live around, is obtained. Current trends in PA management are to pave the way to share the benefits of PA resources with the people who live in the vicinity, through participatory management, formulation and implementation of strategies to reduce their dependency on the natural resources.

The Bundala National Park (BNP) is a comparatively small coastal wetland area in the Hambantota District of Southeastern Sri Lanka. Being a Wildlife Sanctuary in the past, of which the legal status is more flexible, the peoples dependency on the natural resources of Bundala was heavy, and thus resulted in damage to the natural systems. During the last couple of years, participatory activities carried out at BNP have led to a close rapport with the people living around, and this has provided direct benefits to them. Employment opportunities generated through tourism and conservation activities are some of them. Different groups of society such as school children, farmers, fishermen and even soldiers from the Sri Lanka Air Force, have joined hands with the park authorities in the conservation activities launched.

Policy planners and PA authorities should explore the possibilities of escalating the opportunities by which the contribution and participation of the people can be effectively obtained for PA management. The benefits should then be shared with them, in order to reduce their dependency on natural resources.

Introduction

Management of Protected Areas (PAs) in the past was considered to be the sole responsibility of a handful of government officers, who were appointed for the purpose. Enforcement of laws by such officers kept the people away from PA resources and prevented them from getting involved in the management affairs of the PAs. Income generated from PAs drifted away from the people, bringing them no direct benefit.

It was under these circumstances, that friction between the people who lived around PAs and the PA authorities developed. People who depended heavily on

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natural resources, found no alternative but to illegally exploit natural resources, deepening the confrontation with the PA authorities.

It was only a few decades ago, that policy planners for natural resources management, realized that the management of natural resources could be more effective, if the contribution and participation of people living around PAs are allowed and accepted. The concept of peoples participation in natural resources management gradually evolved initially in the international arena, and soon became popular among the national policy planners of countries around the world. It proved to be quite fruitful in certain parts of the world, especially in the developing countries, where the peoples dependence on PA resources is heavy. National policies of countries around the world on natural resource management, were adjusted to make room for peoples participation, and PA managers were trained accordingly to be more courteous towards the people. Training courses on the concept of participatory management of PAs have a heavy demand today.

Tools such as Participatory Rural Appraisal (PRA) were developed to explore the traditional knowledge and experiences of the rural people in natural resources, and to determine ways and means of harnessing them for PA management. PRA allows the PA planners and people to sit together and discuss strategies for reducing the dependency of people on PA resources. A PA planner or a manager with a creative mind and an open heart will soon come up with effective strategies for providing alternatives to meet the demand for natural resources of people, and for the upliftment of their socio-economic status.

Even before the National Wildlife Policy of Sri Lanka, within which the peoples participation in PA management is widely accepted, was introduced in 1991, the Department of Wildlife Conservation (DWLC) allowed the people in the vicinity of PAs, to be benefited by providing them with employment opportunities. They were recruited as labourers and most of them rose to higher ranks, becoming directly involved in the conventional framework of PA management.

In recent times, the DWLC has expanded the opportunities for local people to participate and contribute to PA management, thus building a strong rapport with them. A large number of young people from the vicinity of several PAs have been employed as volunteer guides.

One of the leading PAs of Sri Lanka, namely the Bundala National Park (BNP), has gone far beyond recruiting voluntary guides, and has set an example in effective participatory management of PAs, during the last couple of years.

The objective of this paper is to review and evaluate the activities carried out at BNP with the participation of people, as a case study.

Bundala National Park (BNP)

With an extent of 6,216ha, BNP falls within the southeastern arid zone of Sri Lanka, where the annual rainfall is around 1,074mm. The mean annual temperature is about 27.1°C. The area falling within BNP was first declared as a sanctuary in 1969 with the objective of protecting a coastal wetland area in the Hambantota District, heavily utilized by migratory and local aquatic species of birds. Apart from the rich array of bird species, almost all species of mammalian and reptilian species of the low country dry zone of Sri Lanka have also been recorded within BNP, including elephants and two crocodile species. The dominant vegetation type of the park can be described as thorny scrub jungle, peculiar to the dry parts of the country.

The Bundala Sanctuary was upgraded to the status of a National Park in 1992, and the value of BNP was further recognized by its addition to the list of Wetlands of International Importance, by the "Ramsar" International Convention. Subsequently, the infrastructure of BNP was gradually developed to accommodate the heavy influx of local and foreign tourists. BNP today being conveniently located close to the Hambantota - Kataragama highway, and the tourist center of Hambantota, is one of the National Parks which brings in the highest income.

Peoples Dependence on BNP

In the past, as the BNP was a sanctuary, people living around it had no scruples with regard to the exploitation of its resources. Sanctuaries have a more relaxed set of laws and regulations under the Fauna and Flora Protection Ordinance, where the people are allowed to move freely. The following are some of the resources used by the people living around BNP, before it was declared a NP:

- Fishing in the five lagoons within the PA
- Fishing in the deep sea off the Bundala Sanctuary
- Shell mining
- Unregulated tourism in the sanctuary
- Collection of turtle eggs
- Fuelwood collection
- Livestock grazing
- Illegal poaching

It is obvious that the damage caused by such unregulated utilization of natural resources was immense. Most of these activities were brought under control, since its declaration as a NP and the deployment of DWLC staff on the periphery of the park. Although this reduced the human pressure on park resources to a considerable extent, even minor damage caused to the park over a period of time could not be ignored. A limited number of officers, who carried out the conventional protective

strategies against illegal activities of villagers, was successful only to a certain extent. It became obvious that the illegal exploitation of park resources by people could not effectively be prevented solely by law enforcement and other preventive measures.

Realizing the need to change the attitude of the people towards conservation, it was decided to launch a series of programmes to build up a rapport between the park staff and the people. The objective of this was to regularize the utilization of renewable resources in the park and to obtain the contribution and participation of the people in the management affairs of the park.

Some of the activities carried out during the last couple of years which led to the establishment of a more harmonious relationship between the park authorities and the people living around BNP, are outlined below.

Employment opportunities

A batch of 17 young school leavers from the surrounding villages have been recruited as volunteer guides, and are being deployed at the Park head quarters. They accompany the visitors into the park and educate them on the park's resources, thus helping to make their visit more educative and meaningful.

These young employees have shown a keen interest in participating in other park activities too, such as in the development of visitor facilities.

Regulation of fishing in the park

A series of discussions were organized with the fishermen to develop a regulatory mechanism for fishing in the lagoons within the park and using park beaches for deep-sea fishing. It was agreed to limit the number of permits issued for fishing within the park, and to demarcate landing areas for boats. This has effectively reduced the impact of the fisheries industry on the park resources, especially on the bird community of the park.

Promotion of conservation awareness among people

The contribution of school children towards the promotion of conservation awareness among the public was immense. A series of conservation education and extension programmes were launched with the participation of school children during the last couple of years. World Wetlands Day was marked with a massive conservation march from Hambantota to park headquarters. Hundreds of school children from the schools in the surrounding areas of BNP participated in the event.

A two week long conservation awareness programme was successfully carried out at Kataragama, in line with the annual Esala Festival in the year 2001. This

programme included various items such as street dramas, songs, distribution of leaflets, exhibitions, etc., produced by the school children themselves. These activities were quite effective in creating conservation awareness among the millions of pilgrims who converged at Kataragama from every part of the country.

Awareness programmes are regularly conducted for school children around BNP. A series of ten programmes were to be completed within the year 2002.

Peoples contribution to habitat management

The long drought which prevailed during the dry spell in the year 2001, severely affected the water dependant species of wild animals in the park, especially the mammals. Alternative artificial water sources were developed in the park and these had to be constantly replenished. People living around the park extended their fullest cooperation in achieving this task, by supplying fresh water and vehicles for transportation.

Turtle conservation project

Out of the seven species of turtles in the world, five species have been recorded in Sri Lanka. The number of turtle species recorded on the beaches of BNP are five, namely, Loggerhead, Green, Hawksbill, Olive Ridley and Leatherback.

In the past, a turtle conservation project was carried out by a NGO on the Bundala beach, through which turtle nests were protected from poachers and natural predators, until the hatchlings were released into the sea. This project has been restarted and is being carried out on a larger scale under the supervision of the park authorities. Fifteen villagers have been employed in the project on a casual basis and are keeping vigilance round the clock. Turtle nests on the beach are demarcated and they record the data on the hatchlings released into the sea. The number of nesting turtles observed since the inception of the project was 139, and more than 5,000 hatchlings released into the sea were observed. It is proposed to develop this project as a tourist venture, under which the villagers would be encouraged to establish a cultural centre, managed by a villagers' society.

Control of invasive plants

Invasion of exotic plant species such as *Prosopis juliflora* and *Opuntia dillenii*, has become a major threat to the natural habitats within BNP. It was observed that control of *Prosopis* is the most urgent requirement in order to keep intact the natural plant communities in the park.

Villagers were encouraged to remove the massive *Prosopis* trees, which serve as excellent fuelwood. Removal of *Prosopis* is carried out in selected plots, under the

close supervision of park authorities. Villagers have agreed to pay a fee of Rs. 1,500/- per hectare, which is credited to the wildlife preservation fund. This meets the fuelwood demand of local people.

In addition, school children and the fishermen in the area have launched a "shramadana" (voluntary) campaign to remove *Prosopis* within the park. School children have already cleared 3ha in low-density areas, while the "Siribopura Dheewara Samitiya", a society of the fisherman community, has cleared 6ha in middle-density areas. The total area to be cleared within this year is 10ha.

A group of soldiers from the nearby Weerawila Air Force Camp have extended their support to remove the cactus species, *Opuntia dillenii*. On an experimental basis, they removed *Opuntia* in a plot of 1ha. It was realized that specially designed tools are required for the removal of *Opuntia*. The removal of *Opuntia* on a large scale will be done after the necessary tools are obtained.

Conclusions

Protected areas are normally vast jungle areas, which are kept under the control and protection of a handful of officers. Generally, there is only a limited amount of resources and facilities which is hardly sufficient to provide adequate protection to PA resources. It has been proved beyond doubt that the protection of PA resources can be more effectively ensured, only with the willing participation of the people living around the PAs.

This needs a good rapport between the park authorities and the people, which can be achieved only by building up a healthy attitude towards each other. Park authorities should genuinely be interested in sharing the benefits of the PA resources with the local people who live around the parks. Once the people realize that the longterm existence of PA resources will provide more and more benefits to them, they would not hesitate in coming forward to help in the protection of the resources.

Policy planners and PA authorities should explore possibilities of enhancing the opportunities through which the contribution and participation of the people can be adopted for effective PA management.