

# MAHAWELI ENTERPRISE DEVELOPMENT

## MED/EIED PROJECT

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### DEVELOPING NATURE TOURISM IN PROTECTED AREAS

by

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## **P R E F A C E**

The preparation of this report was undertaken in response to a request to MED/EIED from the Director Development of Wildlife Conservation for assistance in developing a master plan for nature dependent tourism within the National Parks bordering the Mahaweli areas. This was of interest to MED/EIED given the possible potential of a nature dependent approach to generate sustainable employment opportunities.

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## EXECUTIVE SUMMARY

Sri Lanka has yet to exploit its potential for eco-tourism, the fastest growing form of recreation travel worldwide. Sri Lanka's many national parks, sanctuaries, and other protected areas designated for conservation of biological diversity can be developed to accommodate low-impact visitation by both domestic and international tourists. Such programs, if carefully planned and implemented to avoid excessive environmental impacts, can be compatible with conservation objectives. These visitation programs, facilities, and amenities must also be innovative to make Sri Lanka's parks competitive with many of the other regional parks which already offer attractive facilities.

However, since the primary objective of the parks is conservation of flora, fauna, and habitats, it is also essential that the visitation programs have built-in monitoring systems to assess environmental impacts, so that timely mitigatory actions can be taken to address these adverse impacts. Failure to do so will result in the demise of both conservation objectives as well as the visitation programs which are dependent on the viability of the natural ecosystem processes.

A policy that clearly states these priorities and management objectives is also needed. This management policy should also include express provision to manage buffer zones around parks and provide direct and indirect economic benefits to the people living within the buffer zones from park visitation through employment, small business opportunities, concession operations, and as nature guides, etc.

This plan focuses on designing nature tourism and visitation programs compatible with the long-term conservation objectives in four parks in the Mahaweli region; namely Wasgomuwa, Uda-Walawe, and Maduru Oya national parks and Randenigala sanctuary. A diverse selection of visitation amenities and activities have been suggested, including elephant safaris, boat safaris in rivers and lakes, hiking trails, bird-watching blinds, and bait-sites and salt-licks for wildlife viewing.

Other amenities include bathing and picnic sites and visitor centres at selected sites within the buffer zones. Guest-houses and camp-sites have been proposed, but in buffer zones bordering the park; it is strongly suggested that no guest-houses be built within the park boundaries. Management of the guest houses and all other concessions will be through cooperatives or NGOs representing the communities within the buffer zones. The mechanism for operating these concessions, and revenue disbursement will be developed by a project team consisting of a conservation biologist/ecologist, a rural development specialist, a tourism specialist, and an economist, with additional input from other experts as deemed necessary by the project team. It is imperative that the local communities benefit economically from the visitation programs.

Wasgomuwa National Park has been chosen as a pilot project site for development and the plan outlines a strategy for initial project implementation in this park.

## 1.0 INTRODUCTION

Nature- and soft-adventure tourism are now among the most popular forms of recreation travel worldwide. (Boo 1990). A World Wildlife Fund poll conducted in Latin American international airports indicated that 47% of travellers interviewed considered nature and natural attractions as important factors in planning vacations and destinations (Brooke 1991). These eco-tourists are also relatively more wealthy and likely to spend more money than the average tourist (Whelan 1991).

Conservationists have also increasingly begun to take a favorable attitude towards eco-tourism in protected areas, (see Dixon and Sherman 1990, Robinson and Redford 1991, Sherman and Dixon 1991, Panayotou and Ashton 1992, Gianecchini 1993), and now include visitation strategies and tourist facilities in conservation management plans for protected areas. The reason is obvious; because of the increasing demand for land to accommodate the needs of a rapidly growing human population, if some perceivable benefit is derived from protected areas, it will be easier to ensure their existence into the future (Hales 1989, Drake 1991).

An economic benefit from eco-tourism in wildlife and wild lands will provide a cogent case to counter alternate land-use practices less compatible with conservation (see Boo 1990, Redford and Robinson 1991). This is not to imply that wildlife and natural forest lands have to be valued solely in terms of monetary worth, but merely means that benefits specified in direct economic terms are more comprehensible to policy makers, who have to make decisions based on monetary indicators. In fact, protected areas in some countries owe their existence to eco-tourism revenues (see WCMC 1992).

Economic benefits from parks will also provide incentives to the resident people in and around the protected areas to tolerate and conserve natural resources and wildlife. Therefore eco-tourism within the parks must also provide economic benefits to the local communities.

Eco-tourism is not without inherent negative environmental and cultural impacts. But, if properly designed, implemented, and monitored, it is a land-use practice more compatible with conservation than most others. Therefore, to ensure long-term success, eco-tourism development in protected areas must take place within the framework of integrated conservation and development management plans for the protected areas and the surrounding 'buffer zones'.

Four protected areas in the Mahaweli region have been identified for development for nature tourism. The protected areas are; Wasgomuwa National Park, Maduru Oya National Park, Uda-Walawe National Park, and the Victoria-Randenigala-Rantambe Sanctuary. All these protected areas are open for visitation; but all lack comprehensive plans for tourism. These parks have few amenities and have never had monitoring and evaluation programs to monitor the effects of tourism on the parks.

This plan will focus on designing nature tourism and visitation programs compatible with the long-term conservation objectives of these parks. The plan will propose a diverse selection of visitation amenities and activities to make these parks competitive with other parks in the Asian region; will design a monitoring and evaluation system to monitor the effects of visitation on the park habitat and wildlife; suggest how the effects of tourism on the communities can be monitored; will propose strategies on how to involve local communities in the visitation programs; and how these communities can benefit financially from park visitation. The plan will then focus on infrastructure and programme development in Wasgomuwa National Park, which has been identified as a site for initial development, as a pilot project.

## 2. **PROTECTED AREAS.** (Descriptions adapted from IUCN 1990).

Maduru Oya NP. The park is located between the Polonnaruwa-Batticaloa and Mahiyangana-Padiyatalwa roads in the Amparai, Badulla, and Polonnaruwa districts. The park is 588 sq km in extent.

There are Mahaweli development settlements on the western and northern sides, but the southern and eastern sides are bordered by plantation forests and secondary forests, which are used for chena cultivation.

The park vegetation consists primarily of tropical monsoon forest. The mammal fauna consists of species characteristic to the dry-zone forests of Sri Lanka, and include elephants, leopards, sloth bear, water buffalo, spotted deer, sambar, macaques, grey langur, fishing cats, muntjaks, pangolins, and jackals. The bird life is rich, and includes large bird species such as painted stork, white-bellied sea eagles, peacocks, pelicans, and other noteworthy birds such as jungle fowl, broadbilled rollers, black-hooded orioles, and the rare red-faced malkoha. There are also a number of large reptiles such as the water monitor, bengal monitor, and crocodiles.

About 15% of the park consists of lakes, with the largest being the Maduru-Oya reservoir. This 61 sq km lake has the potential to be used for boat safaris within the park. The 8km long range of rocky mountains which dominates the south-west of the park may be suitable for hiking trails.

Several ancient ruins of shrines, temples, dagobas, statues, hermitages, and inscriptions from different eras, and parts of an irrigation system dating back to the 6th century BC and before are also of potential touristic value.

Wasgomuwa NP. The park is located in the Polonnaruwa and Matale districts, approximately 50km north-east of Kandy and 10km from Polonnaruwa. The eastern boundary is demarcated by the Mahaweli Ganga, the eastern and northern boundaries by the Amban Ganga, and the southern boundary by the Dunuwila Oya.

The vegetation is primarily tropical monsoon forest, with savanna in the eastern and south-eastern parts of the park.

The mammals include elephants, leopards, sloth bear, water buffalo, spotted deer, sambar, wild boar, macaques, grey langur, fishing cats, muntjaks, pangolins, and jackals. The birds include red-faced malkoha, trogons, the endemic yellow-fronted barbet, and drongos, among others. Large reptiles such as the water monitor, bengal monitor, crocodiles, and pythons are present. Overall the fauna is similar to that of Maduru-Oya NP.

The rivers which border the park provide an opportunity to develop river safaris. Hiking trails can be planned in the Sudukanda range of hills in the western part of the park.

Areas of cultural and historical significance of touristic value include ruins and statues which date back almost 2000 years, and ancient irrigations systems.

Uda Walawe NP. The park is in the Sabaragamuwa and Uva provinces.

The vegetation consists of tropical monsoon forest, grassland, and thorn scrub. The fauna is similar to that of Yala National Park. The mammals include elephants, leopards, bear, spotted deer, sambar, water buffalo, wild boar, and langurs, among others. The bird life is especially rich. And because the forest is relatively open, the park will lend itself well to bird trails.

The Walawe River, which flows through the park and into the Uda-Walawe Reservoir, provides the potential for river safaris.

Randenigala Sanctuary. The sanctuary is located in the Kandy, Nuwara-Eliya, and Badulla districts. The topography is mountainous, with narrow valleys between the ridges. The sanctuary provides catchment protection to the Victoria and Randenigala reservoirs, which are contained within it.

The sanctuary is in the intermediate zone, between the dry and wet zones, and the vegetation consists of diverse forest types, from dry monsoon forests to montane broadleaf forests and patana grasslands.

Because of the diverse vegetation, the fauna is rich. The mammals include elephants, leopards, macaques, langurs, otters, sambar, spotted deer, and wild boar. The bird life is especially rich, and includes several endemic species as well as several migratory species.

The sanctuary is close to several sites of cultural and historical significance.

### **3. POLICY FOR PARK AND BUFFER ZONE MANAGEMENT**

Although the 1993 Amendments to the Fauna and Flora Protection Act include Buffer Zones as a category of protected area, the Act does not specify a management policy. This proposed plan for nature tourism requires a legislated policy which governs buffer zone management, to allow for participation of local communities in the visitation programme and for controlled developments within the buffer zone. Policy should also prescribe that conservation of the park habitat and wildlife, and maintaining the ecological integrity of the park is the primary consideration.

#### **► Buffer zone management**

Buffer zones are areas with restricted development and/or sustainable resource use, adjacent to or within protected areas. Buffer zones will provide an additional layer of protection to the park by preventing unrestricted extractive development right to the park boundary.

DWLC should define buffer zones around the parks, and collaborate with local communities, NGOs, and other governmental agencies to manage the buffer zones. Integrated Conservation Development Projects (ICDP) should be prepared for buffer zone development.

According to Section 6, subsection 1, of the 1993 Amendments to the Fauna and Flora Protection Ordinance, no tourist hotels can be constructed, and no services or facilities similar to tourist hotels can be provided within Buffer Zones.

This requires amendments to allow for local community-owned and local community-operated tourist concessions, such as tourist lodges, elephant safaris, souvenir shops, etc. within the buffer zones. A limit to the extent of the operation, such as the number of rooms per tourist lodge, can be placed. A monitoring programme, conducted or facilitated by the Department of Wildlife Conservation, to monitor the impacts of the concessions and tourism on the park, wildlife, and habitat should be made mandatory. In the event of excessive negative impacts mitigatory actions should be taken to alleviate these effects.

#### **► Community participation and involvement**

Long-term conservation will be an easier task with the support of local communities. This requires that; the local communities must derive some perceivable benefit from the park; must be involved in its management; and must accept its existence.

Therefore, policy should dictate that any development within the buffer zones has to favour the local communities by;

- placing restrictions on outside developments, while allowing only local communities to operate lodges and other concessions related to park visitation.

- giving priority to persons from the local communities when hiring park personnel.
- training non-DWLC tour-guides for the lodges and concessions.
- buffer zone management decisions being made jointly by DWLC and local community leaders.

▶ **Visitation policy in national parks**

DWLC must make use of the present visitation policy in national parks, which allow hiking trails, elephant safaris, and boat rides, etc. in designated areas.

Visitation areas should be zoned to define intensive use and core areas. Concessions and lodges should be allowed in intensive-use areas only. Visitors should be allowed to walk in designated hiking trails if accompanied by a guide.

#### **4. VISITORS AND VISITATION**

The best available data for visitors and visitation trends are for Yala National Park. Data for other parks which are, or have been, open for visitation are either non-existent or are not readily available. Nevertheless, the trends in Yala National Park indicates a tremendous growth and the potential for nature tourism in national parks.

#### **5. ADVANTAGES AND CONSTRAINTS**

##### **5.1 Advantages**

- ▶ None of the parks under consideration have extensive visitation facilities, and, unlike Yala National Park, they are not overburdened with a large number of visitors or an extensive, unplanned network of motorable roads and guest-houses. Therefore it is possible to start with a 'clean slate' and develop these parks for different visitation facilities such that there will be a core area for conservation and a peripheral intensive use area for tourism.
- ▶ The stability of Sri Lanka's political climate since the 1980's has resulted in an increase in the numbers of tourists coming into the country. Several tour operators who used to bring in specialized eco-tour groups in the 1970's are now beginning to do so again.
- ▶ There is a big demand among Sri Lankan nationals for soft-adventure and nature tourism. This demand has already overburdened Yala National Park, which remains the primary destination of these tourists.

## 5.2 Constraints

- ▶ Ideally tourism programs in national parks should be developed in accordance with prescriptions set out in a long-term, goal-oriented, conservation management plan for the protected area. However, none of the four parks have such conservation management plans. Therefore, visitation strategies have to be undertaken cautiously, with inbuilt monitoring and evaluation programs and mitigatory strategies. It is strongly recommended that visitor facilities be located in the periphery, preferably in the buffer zone outside the park.

Moreover, the input of a conservation biologist should be sought, so that all developments are considered within the context of overall habitat and wildlife management strategies.

- ▶ The lack of infrastructure and visitor programmes is a major constraint to exploiting the international tourism market.

Several countries in Asia offer many innovative visitor facilities in their national parks, and have a lot more to offer international visitors than Sri Lanka can offer at the present. For instance, India and Nepal have well organized elephant-back safaris for viewing tigers and rhinos. India also has boat excursions in protected areas which surround large lakes. Nepal, India, Bhutan, Malaysia and Thailand offer treks in their protected areas.

- ▶ Nature-based tourism requires well trained, knowledgeable guides and good interpretive services. Most international nature tourists are very knowledgeable and well informed, and the guides have to be able to cater to them. Sri Lanka has to organize training programmes to ensure that guides can meet these high standards.
- ▶ Many tourists visit for a short period of time, and generally do not like to spend much time on the road, getting from one place to another. Therefore, good road access to the parks is necessary.
- ▶ Unlike most countries in the region, Sri Lanka is not promoted in the international media targeting nature and soft-adventure tourists. Neither are the parks heavily promoted in the national markets.
- ▶ During preliminary interviews with several leading tour operators, they indicated that Sri Lanka lacks a coherent long-term policy governing tourism and tourism practices. As a result any long-term plans for promoting tourism are constrained.

## **6. VISITOR FACILITIES AND INFRASTRUCTURE**

### **6.1 Lodges and camp-sites**

Lodges and camp-sites can be built in the buffer zones. There should be a limit to the number of lodges and camp-sites for each park. The designs of lodges must suit the environment and blend with the natural surroundings. There can be different levels of accommodation -- dormitory style, cottage type, etc. -- with different price ranges to accommodate different budgets and groups sizes.

The lodges and camp-sites should be operated by local NGOs or cooperatives, representing the villages within the buffer zone. DWLC can obtain the assistance of the Ceylon Hotel School and other relevant agencies to train staff at all levels.

### **6.2 Amenities for wildlife viewing and related activities**

If the parks are to be developed for tourism, especially for the international market, they should offer something other than a jeep ride in the park. It is possible to implement a variety of viewing facilities, most of them which are more environmental friendly than motor vehicles, within the parks. Not all may be appropriate for all the parks; but, those which are suitable for a particular park can be identified and developed where appropriate. Facilities include the following:

#### **▶ Elephant safaris**

Elephant safaris are a popular means of viewing wildlife in several national parks in India and Nepal. Elephant safaris can be used in several parks in Sri Lanka. It is more environmental friendly, less polluting, and a more exotic way of promoting visitation in national parks than using motor vehicles. This can also help to promote conservation because the elephant is a 'flagship species' in Sri Lanka, and using it in a prominent way in a conservation-related setting will make visitors and the local people, (who would operate the safari enterprises), more aware of conservation issues and needs. Moreover, this will be one way to use elephants in a captive management setting while maintaining overall genetic diversity.

Elephant safaris can be run by community cooperatives. The cooperatives will pay the DWLC a park entrance fee. The elephants will be corralled outside the park, in the buffer area. The safaris and community-run guest houses can be located together. Trails will lead from the guest houses into the park. Park revenue will be collected by a beat officer, from a beat located near these guest houses. The beat officer will also be responsible for ensuring that the cooperatives, mahouts, and visitors obey park rules and regulations.

▶ **Bullock-carts**

Bullock carts can be used both within and outside the park. If cart treks are organized within the park, some consideration should be given to the response of the bullocks when confronted by wild animals. Therefore, cart safaris should be tried inside the parks on an experimental basis to ascertain its feasibility.

However, cart treks can be organized to take visitors on day trips to nearby villages and other sites of interest close to the guest-houses.

▶ **Pony rides**

Pony rides can be promoted in parks where scenery is the prime attraction, such as at Randenigala. Pony rental concessions can be operated by local NGOs.

▶ **Boat-safaris**

Boat safaris can be organized in the parks, since they all have large bodies of water. Rentals can include conventional boats, canoes, and rubber and bamboo rafts.

▶ **Fishing**

Fishing can be promoted in parks with large reservoirs. Visitors can go fishing with villagers in their boats, and use local gear --e.g. '*kittul-pitta*' -- which will be especially exotic to foreign visitors.

▶ **Hiking trails**

Hiking trails for nature walks, bird watching, and to places of historical and cultural interest should be identified and established.

▶ **Vehicle roads**

Some vehicle roads can be built in parks which now lack such a network of roads. However, these roads should be well planned and kept to a bare minimum.

▶ **Night-time viewing platforms**

Platforms can be constructed at water holes and salt-licks for nighttime viewing. These should be carefully situated and constructed, with adequate facilities for a group of tourists to occupy the platform comfortably, and without disturbing animals. A policy for behavior and occupancy should be established.

▶ **Bait-sites**

Several parks in Asia have bait sites to attract animals for visitor viewing, (e.g. tigers in Chitwan National Park, Komodo dragons in Komodo National Park). Although there is some controversy about the practice, it very likely affects only a few animals and the visitation revenues derived from the attractions provides a net benefit.

In Sri Lanka, bait-sites can be established for monitor lizards in the buffer zone. These large lizards are exotic to many foreign visitors. Bait sites can be established near guest houses, but far enough away (1km) so that neither the attracted animals nor the bait used will impact negatively on the guest houses. Carts can be used to transport visitors from the guest houses to these baitsites.

▶ **Salt-licks**

Artificial salt-licks can be established in the parks to attract animals. Creating artificial salt-licks is a form of habitat management, and the expected effect would be to increase the density of wildlife populations around the salt-licks. This may have adverse effects on the habitat, such as overgrazing and trampling. Therefore, initially only one salt-lick per park should be established on an experimental basis, and the effects of artificial salt-licks should be monitored. If there are no significant adverse impacts to wildlife populations nor the habitat, others can be established.

▶ **Bird watching blinds**

Blinds should be constructed for bird watching and for photography.

▶ **Scenic spots and vistas**

Scenic spots for photography and enjoying the view should be identified.

▶ **Bathing and Picnic spots**

Bathing and picnic spots should be identified in intensive use zones. Many visitors enjoy and require these facilities, and they should be made available to them. These activities, if available in the intensive use zones will also take some visitor pressure off other areas of the park, since many visitors will prefer to spend their time using these facilities.

▶ **Visitor center**

A visitor center is a 'must' for each park. The visitor center should provide visitors with a short history of the park. It should inform visitors about the ecosystems, flora, and fauna that occur in the park. This information can be presented using photographs and other 'non-perishable' exhibits. There should be no taxidermy mounts, since it is

virtually impossible to maintain good taxidermy exhibits in parks. Information about the amenities offered, park rules and regulations (in a easy-to-read attractive, graphic format - not as a list), and the potential dangers should be offered. Any ongoing research programs should be highlighted. It should also inform visitors about any sites of cultural and historical significance.

The visitor center can be located near the main entrance to the park. However, visitors should be informed of the park rules and regulations, and the potential dangers at all entrances. These instructions can be printed in the entry permit, which can be produced in an attractive brochure format that can be kept as a souvenir.

## **6.2 Infrastructure: Location and policy**

Suitable locations for lodges and other concessions can be identified through surveys and consultations with park personnel, local community members, sociologists, conservationists, travel-guides, tour operators, and any other relevant consultants.

All lodges and concessions should be located in the buffer zone, immediately outside the park. Lodges within the park should be built only after conservation management plans have been prepared for the parks, and then in accordance with the prescriptions of the management plans.

Trails for hiking and elephant safaris can originate at the lodges, and enter the park at points close to the lodges.

No bait-sites should be permitted within the park.

The number of salt-licks should be limited to one-per park until the management implications are monitored and evaluated. Salt-licks locations should be determined by conservation biologists.

## **6.3 Interpretation and guide staff**

- ▶ Guides for tour groups should be recruited from local communities. These guides need not be recruited as regular DWLC staff. But DWLC should arrange for training programs, to train guides to DWLC and Tourist Board approved standards. Guides will be accredited by the Tourist Board and will carry licenses issued by DWLC authorizing them to guide visitors within the parks.

The park-warden, as the senior DWLC representative in the park will have the authority to revoke a guide's license if park rules and regulation are contravened.

In addition to being able to identify the flora and fauna of the parks, the guides must be familiar with their natural history, and also local folklore, cultural practices, history, etc.

The guides can be 'employed' by the lodges and other concessions. They will be paid a salary by the lodge or concession, but the guide-fee levied from tour groups will go into the cooperative concession treasury.

## **7. MONITORING AND EVALUATION PROGRAM**

Eco-tourism can be a double-edged sword. Therefore, it is critical that a monitoring program be initiated to evaluate the effects of visitation and concessions on the habitat and wildlife; the attitudes of the local people towards visitation and towards the park; the operation of the cooperative concessions; and the administration of the parks. The monitoring programs can also be used to improve the facilities and streamline the operational logistics. The monitoring programme should operate at several levels and can be established in collaboration with universities or research-oriented NGOs.

### **7.1 DWLC will initiate the following:**

- ▶ Determine visitor carrying capacity and monitor the effects of tourism and visitation on the park habitat and wildlife.

Although 'visitor carrying capacity' is defined as 'the maximum level of visitor use an area can accommodate with high levels of satisfaction for visitors and few negative impacts on resources', it is better to consider 'tolerable levels' of visitation, which can be better sustained over time (Boo 1990).

Carrying capacity should be monitored in ecological and aesthetic terms (Boo 1990). Indicators of ecological impacts can include changes wildlife behaviour, habitat degradation, erosion, pollution levels, inter alia.

Aesthetic indicators will include the number of vehicles, litter, and the number of people, etc. The attitudes of visitors can be used as an indicator to gauge aesthetic carrying capacity.

If negative impacts are detected, DWLC should not hesitate to modify visitation practices. Changes can include: reducing visitor density; using alternative visitation areas to allow the impacted areas to recover; or even terminating the activity until the park recovers.

Conservation is, and should remain, the primary objective.

- ▶ Regular surveys should be conducted in villages to assess the attitudes of the local communities towards the park, wildlife, DWLC, tourism, and community-park relationships. These surveys should also address socio-economic issues to determine if the visitation programmes have resulted in socio-economic benefits to the local people, and if not, to determine why and how such benefits could be realized.

## **7.2 DWLC will facilitate the following:**

- ▶ DWLC should enlist the services of a social organization to monitor cultural and social changes in the local communities.

Throughout the world, foreign tourism has had an adverse effect on the indigenous cultures and social fabric of local communities. Therefore it is important to monitor and evaluate the cultural and social changes which take place in the local communities, to ensure that any changes stay within acceptable limits and terms. Appropriate education programmes should be initiated to mitigate adverse effects.

- ▶ The services of visitor facilities should be maintained to meet prescribed standards. DWLC should enlist the services of an appropriate agency to monitor the standards of lodges and other concessions in the buffer zones.
- ▶ The smooth operation of the concessions and fair distribution of revenue to the local communities will make a big difference in facilitating park management. Thus it is in DWLC's interest to arrange for independent audits of lodge and concession accounts.

## **7.3 DWLC to participate in the following:**

- ▶ Regular meetings should be organized to provide a forum for dialog and discussion of progress, problems and new ideas among representatives from village communities, local NGOs (operators of local visitor facilities), tour operators, and DWLC.

Meetings should be held monthly. If, after the first year, the parties concerned feel that monthly meetings may be too frequent, they can decide on a different schedule to suit them. The decision should be reached by consensus.

The agenda should include any problems with concession operations on the part of DWLC, the local communities, and the concession operators. New ideas and progress should be discussed. These meetings should also be used to foster good relations among the various parties.

The tour operators who use the concessions and the parks should also attend these meetings. It is essential that tour operators contribute to the logistical streamlining of the concessions operations.

## 8. COMMUNITY DEVELOPMENT AND INVOLVEMENT

### 8.1 Form village cooperatives/local NGOs to operate the following where appropriate:

- ▶ Elephant safaris
- ▶ Boat safari services
- ▶ Guide services using local people. (national NGOs such as March for Conservation, the Young Zoologists Association, and the universities can be solicited for training and advisory purposes).
- ▶ Operate and maintain low-impact safari villages and camps with personnel recruited from local communities.
- ▶ Operate theme parks for:
  - Butterflies. These, in addition to the tourism revenue could also provide revenue by breeding approved species of butterflies for sale and export under permit. The trade should be in species which conform to CITES regulations. The concessions should be obliged to mount only captive bred butterflies, and the operation should be monitored and controlled by DWLC.

Butterfly parks can be created in villages near guest houses. These parks will serve to:

- derive revenue to the community fund through visitation.
  - raise conservation awareness among the people in the area
  - provide employment to members of the local communities.
  - by requiring release of at least 10% of the butterflies hatched in the park, will provide some conservation benefit.
  - can provide eggs to individuals for hatching and mounting for export and thus earn revenue.
  - will encourage villagers to maintain home-gardens with plant diversity for raising butterflies.
- Plants. Village cooperatives can be encouraged to grow and breed plants for exhibit and sale. These can include ornamental plants, trees for reforestation and afforestation programs, and species of special concern for conservation.

The revenue from these services will go to the community cooperative.

**8.2 Individual or group businesses which cater to the tourism market, such as commodities, souvenirs, etc.**

**9. REVENUE DISBURSEMENT**

- ▶ Revenue from the village cooperative operated ventures will remain within the local communities. Equitable and fair distribution of the revenue within the local communities around the respective protected areas has to be ensured. A disbursement strategy will be developed by the project team. This may involve placing the proceeds in a rural bank or trust fund, which will provide low-interest loans for community, group, or individual development, or providing a dividend from a 'company share issue'.
- ▶ A percentage of the park revenue should go to the local government. The local government should ensure that all access infrastructure to the park (access roads) are maintained.
- ▶ Other revenue will go to the central government.

**10. VISITATION STRATEGIES IN THE CONTEXT OF A NATIONAL OR REGIONAL PLAN**

Development of parks for tourism should be undertaken with an eye towards a national or a regional plan for nature tourism. For instance, multi-day trek routes which cover an array of attractions such as the hill country (tea estates, vistas), cultural triangle, etc., as well as the parks can be established. Permanent camp-sites can be setup along the way, at distances of a day's trek from each other. These camp-sites can also be operated and maintained by village NGOs so that local communities away from parks can benefit. Local communities can also provide pack animals, rafts (bamboo), carts, elephants, etc so that treks can be organized with different modes of transport.

## **PART II. Wasgomuwa National Park. Strategy for Project Implementation.**

### **11. SITE FOR PILOT PROJECT**

A pilot visitation and tourism project will be developed in Wasgomuwa National Park. This park was chosen as the site for the pilot programme for the following reasons:

- ▶ The park is known for its wildlife and elephant populations.
- ▶ The park has been open for visitors, and now receives day visitors.
- ▶ The park is safe for visitation.
- ▶ The park is close to other tourist attractions, including the cultural triangle, and thus has the potential of attracting the national and international tourists who visit these sites.
- ▶ There are several hotels nearby, and thus the park can attract foreign tourists who will patronize concessions such as trails, elephant safaris, and souvenir shops.

### **12. PROJECT IMPLEMENTATION**

The following are considered as necessary activities to implement the pilot project:

- ▶ Recruit a project team, representing experts from several fields.
- ▶ Identify, demarcate, and gazette a buffer-zone around Wasgomuwa National Park.
- ▶ Draft an amended policy prescribing development in the buffer zone. This policy has to be gazetted.
- ▶ Conduct field surveys to identify potential sites for infrastructure.
- ▶ Conduct socio-economic and attitude surveys in the buffer zone.
- ▶ Liaise with local governmental authorities and leaders to apprise them of the project and gain their support and input.
- ▶ Conduct awareness workshops to apprise the local people about the buffer zone policy, the tourism programme, and the potential benefits and constraints to the local communities.

- ▶ Develop strategies for operating tourism-related concessions in a way that will provide maximum benefits to the local communities, but will have minimal negative impacts on the park.
- ▶ Organize or facilitate the organization of training programmes for the local people so are able to participate and can be recruited into the tourism programme in various capacities.

### **12.1 Personnel and technical expertise**

The project implementation phase will require inputs from several experts. These experts will form a technical advisory team. The team will be headed by a Team Leader, who will be responsible for coordinating the project and providing technical input.

A Project Manager will be recruited on a full time basis to implement the project. The Project Manager will be responsible for implementing activities and helping to develop strategies, coordinate with the various organizations, governmental departments, and implementing agencies.

Contributions from the other team members will be solicited as needed; thus their involvement will not be full-time. The advisory team should comprise of the following experts:

- ▶ conservation biologist/ecologist (Project Manager)
- ▶ rural development specialist
- ▶ tourism specialist
- ▶ economist

The team should meet periodically to develop strategies, provide advice to the local NGOs and other agencies, and review and evaluate progress of the project.

Terms of reference for the experts are presented in Appendix 1.

The conservation biologist/ecologist will provide technical input into the implications of tourism to park and wildlife management, impacts on the park habitat and wildlife, design monitoring and evaluation strategies to assess the impacts of tourism and tourism-related programmes on the park and wildlife, help design trails, water-holes, salt-licks, bird-watching blinds, etc.

The ecologist/conservation biologist will also be in a position to liaise and coordinate various aspects of the project with the Department of Wildlife Conservation, the local NGOs, local governmental agencies, and other relevant agencies. Moreover, since Wasgomuwa National Park does not have a long-term conservation management plan and conservation is the primary objective of the project, it is recommended that the ecologist/ conservation biologist be the project manager.

The rural development specialist will be responsible for designing and implementing socio-economic surveys, designing management strategies for visitor facilities, inter alia.

The tourism specialist will help to design visitor facilities, assist and advice with logistics related to visitation, inter alia.

The economist will design a concession operation strategy which will maximize the economic benefits to the local communities.

Other experts, such as social foresters, agriculturists, architects, engineers, et. al will be recruited as required on short-term consultancies.

The team should work closely with the local governmental and non-governmental agencies, the Department of Wildlife Conservation, Forest Department, the Ceylon Tourist Board, the hotels in the area, travel and tour operators.

The project team, with input from DWLC, local NGOs, and local governmental authorities, should develop the strategies and plans outlined in the following sections.

## **12.2 Buffer-zone demarcation**

Together with the Department of Wildlife Conservation and local governmental authorities and local NGOs, the project team should identify the buffer zone around the park. The buffer zones should then be surveyed on the ground and assessed for feasibility. Finally, the buffer-zones should be notified and gazetted and demarcated on the ground to provide a visual reference.

The buffer zone will be developed for visitation and tourism, and will contain the infrastructure to support the programme. The people presently living within the buffer zone will be provided with the opportunities to avail themselves of economic benefits from tourism within the park.

The Department of Wildlife Conservation and the project manager will hold village level meetings to inform the local people of the benefits the buffer zones will bring the local communities and provide the initiative to involve them in the tourism programme. The meetings should also inform the local people that the tourism programme is to be an alternative source of income to more intensive land-use practices which are incompatible with conservation objectives. Moreover, it should also be made clear that the tourism programme itself, which is dependent on conservation of the park and buffer-zone resources, may fail if intensive land-use practices are continued.

### **12.3 Amendments to the Buffer-Zone management policy**

The Department of Wildlife Conservation should develop a policy for buffer-zone management. The policy should include the following:

- ▶ Tourism and tourism-related developments which are managed by local residents may be allowed in buffer zones, subject to approval by the Director, Department of Wildlife Conservation.
- ▶ All developments should be subject to Environmental Impact Assessments as per Regulation 772/22 (Gazette Extraordinary, 24 June 1993) under 1988 amendment to the National Environmental Act.
- ▶ All developments should be subject to a regular monitoring programme to assess the impacts on the natural and cultural environment.
- ▶ In the event of negative or adverse impacts, any such operations or developments should be discontinued or modified to mitigate the negative impacts.

These proposed amendments should be reviewed and refined by the project team.

Then, the proposed amendments should be submitted for gazetting into law.

### **12.4 Village field surveys**

Conduct socio-economic and attitude surveys in the villages and local communities in the 'buffer zone' to:

- ▶ Determine if and what NGO's, voluntary organizations, community groups already exist. This information will guide the formation and mobilization of community groups and NGOs to operate concessions.
- ▶ Determine the social conditions, incomes, education levels of local people to evaluate their ability to become involved and participate in the project and operate concessions. The data will also provide insights into necessary training and recruitment programmes.
- ▶ Evaluate the attitudes of the local people towards the park and a community-based visitation project. These data will be the basis for implementing education, awareness, and community relations programmes.

The services of a socio-economist or rural development specialist should be sought to conduct these surveys. The surveys should be conducted in collaboration with DWLC, and the local people should be apprised of the reasons for the surveys and informed of the benefits from tourism in the park and buffer zones.

## 12.5 Surveys for infrastructure development

Identify locations for tourism infrastructure. Suitable locations should be identified using large-scale maps (topographic and land-use maps available from the Survey Department).

The locations should be selected for the following concessions and amenities:

- ▶ Lodges.
- ▶ Permanent tented camps.  
Both the lodges and tented camps can be clustered and will include restaurant facilities, souvenir stands, etc.
- ▶ Hiking and bird trails originating from the lodge site. These should be 2 and 4 hour trails which loop back to the lodge site.
- ▶ An elephant safari concession with 2-3 hour trails.
- ▶ Feeding sites for monitor lizards (probably near or within villages).

## 12.6 Tourism and visitation strategy

The project team, in collaboration with DWLC, local NGOs and community and local government representatives will develop a detailed strategy for concession operation by the local communities and for revenue disbursement. This strategy should address the following:

- ▶ The management of tourism-related facilities should economically benefit the local communities.
- ▶ The concession operation should employ people from the local communities at all levels. If suitable persons are not available within the local communities, especially to fill the upper-level management positions or skilled positions, short and longer-term training programmes should be conducted as needed. A goal should be that, within 5-7 years all concessions will be operated by local community members.
- ▶ Conservation of the park will remain the primary consideration. Thus developments will not be extensive or excessive so that the integrity of the park is compromised.
- ▶ The local communities are made aware that the economic benefits from tourism is an alternative, more environmental-friendly land-use option than one which involves extensive land-clearing.

The strategy for concession operation and ownership should be planned in detail, within the

above requirements, by the project team, the Department of Wildlife Conservation, and representative from the local communities and NGOs. This planning can be done in a series of meetings with all players present.

### **12.7 Training needs**

The staff positions needed to operate the tourism concessions will be identified. Then, based on the village surveys, those positions which can be filled immediately or within the near-term by local people should be identified.

Relevant training programmed should then be organized and appropriate resource organizations, personnel, and finances to provide the required training identified.

## **13. PROJECT STEERING COMMITTEE**

A steering committee, (Project Committee), will be formed to oversee and direct project activities. This committee will comprise of persons from the following departments:

1. Department of Wildlife Conservation
2. Ceylon Tourist Board
3. Mahaweli Authority of Sri Lanka

The respective heads of the departments should nominate suitable persons to the committee.

## REFERENCES

- Boo, E. 1990. Eco-tourism: The potentials and pitfalls. Vol. 1. Washington, D.C.; World Wildlife Fund-US.
- Brooke, J. 1991. Brazil's forests in the balance. *New York Times*, Travel Section. May 19, 1991.
- Dixon, J.A. and P.B. Sherman. 1990. Economics of protected areas. A new look at benefits and costs. Island Press. Washington, D.C.
- Drake, S.P. 1991. Local participation in eco-tourism projects. *In: Nature tourism. Managing for the environment. Ed. T. Whelan. Island Press, Washington D.C.*
- Gianecchini, J. 1993. Eco-tourism: New partners, new relationships. *Conservation Biology*. 7:429-432.
- Hales, D. 1989. Changing concepts of national parks. *In: Conservation for the twenty-first century. Eds: D. Western and M. C. Pearl. Oxford University Press. New York.*
- IUCN. 1990. IUCN directory of South Asian protected areas. IUCN. Gland. Switzerland and Cambridge, U.K. xxiv+294pp.
- Panayotou, T. and P.S. Ashton. 1992. Not by timber alone. Economics and ecology for sustaining tropical forests. Island Press. Washington D.C.
- Redford, K.H. and J.G. Robinson. 1991. Subsistence and commercial uses of wildlife in Latin America. *In: Neotropical wildlife use and conservation. Eds: J. G. Robinson and K.H. Redford. The University of Chicago Press. Chicago, USA*
- Robinson, J.G. and K.H. Redford. 1991. The use and conservation of wildlife. *In: Neotropical wildlife use and conservation. Eds: J. G. Robinson and K.H. Redford. The University of Chicago Press. Chicago, USA*
- Sherman, P.B. and J.A. Dixon. 1991. The economics of nature tourism: Determining if it pays. *In: Nature tourism. Managing for the environment. Ed. T. Whelan. Island Press, Washington D.C.*
- WCMC. 1992. Global bio-diversity: Status of the Earth's living resources. Chapman and Hall, London. xx+594pp.
- Whelan, T. 1991. Eco-tourism and its role in sustainable development. *In: Nature tourism. Managing for the environment. Ed. T. Whelan. Island Press, Washington D.C.*

## **Terms of Reference for the Members of the Project Team**

### **Project Manager**

Under the general supervision of the Project Committee, the direct supervision of the Team Leader, and in close collaboration with the Department of Wildlife Conservation (DWLC), the Project Manager will:

1. Implement the recommendations and strategies outlined in this plan.
2. Identify visitor facilities and locations in Wasgomuwa National Park, including lodges, trails, elephant safari concessions, etc.
3. Assist DWLC identify and demarcate buffer zone boundaries.
4. Work with DWLC to coordinate activities with the village communities and NGOs to operate and manage tourist facilities.
5. Coordinate and work with the socio-economist in conducting surveys, designing and implementing visitor concession operations.

Qualification: A conservation biologist or ecologist with a post-graduate degree and a minimum of 2 years of field experience. Experience working with village communities and NGOs is an added qualification.

Duration: 2 years with extensions as necessary.

## **Rural Development Specialist**

Under the general supervision of the Project Committee, the direct supervision of the Team Leader, and in close collaboration with the Department of Wildlife Conservation and the Project Manager, the Rural-Development Specialist will:

1. Help to design the visitor facility management strategies.
2. Help to identify visitor facilities and locations in Wasgomuwa National Park.
3. Assist DWLC identify and demarcate buffer zone boundaries.
4. Work with DWLC to coordinate activities with the village communities and NGOs to operate and manage tourist facilities.
5. Coordinate and work with the project manager in conducting surveys, designing and implementing visitor concession operations.
6. Facilitate the formation of local NGOs and village-level organizations to operate concessions.

Qualification: A degree in sociology, rural development, or relevant field. Experience working with village communities and NGOs is necessary.

Duration: Six man-months, intermittent for 2 years with extensions as necessary.

## **Tourism Specialist**

Under the general supervision of the Project Committee, the direct supervision of the Team Leader, and in close collaboration with the Department of Wildlife Conservation and the Project Manager, the Tourism Specialist will:

1. Help to design the visitor facility management strategies.
2. Help to identify visitor facilities and locations in Wasgomuwa National Park.
3. Provide technical advice to address operational logistics of visitation strategies and programmes.
4. Work with DWLC to coordinate activities with the village communities and NGOs to operate and manage tourist facilities.
5. Coordinate and work with the project manager in conducting surveys, designing and implementing visitor concession operations.

Qualification: Five years of experience in the tourist and travel industry. Working with village communities and NGOs is an added qualification.

Duration: Six man-months, intermittent for 2 years with extensions as necessary.

## **Economist**

Under the general supervision of the Project Committee, and direct supervision of the Team Leader, and in close collaboration with the Department of Wildlife Conservation and the Project Manager, the Economist will:

1. Help to design the visitor facility and concession management strategies.
2. Design fund management and revenue disbursement strategies.
3. Provide technical assistance in coordinating activities with the village communities and NGOs to operate and manage tourist facilities.

Qualification: A degree in economics with experience in designing small businesses, especially in a rural development setting. Experience working with village communities and NGOs is necessary.

Duration: Six man months, intermittent for 2 years with extensions as necessary.

## MED/EIED PUBLICATIONS AVAILABLE

- Non Farm Small Scale Enterprise Credit on Selected Mahaweli Systems*, Geoffrey Peters and M.W. Panditha (December 1990)
- Report on the Gherkin Project*, W. Pack (June 1991)
- Crop Profiles - Spices, Herbs and Aromatics*, L. Denzil Phillips (July 1991)
- Study of the Tourism Development in the Uda Walawe*, (July 1991)
- Potential for Silver Skin Onions in the Mahaweli*, Walter Nueberg (August 1991)
- Nursery Development of Papaya and Mango, Papaya Growers' Guide and Technical Notes for Business Plan for Mixed Fruit Cultivation Investment*, Ben Hatfield (November 1991)
- An Evaluation of the Entrepreneur Development Programmes*, Susan Exo and Hina Shah, (December 1991)
- Agro-Business Financing Review*, Dennis De Santis (December 1991)
- Integrated Fruit Drying, Juicing, Pulping Project - Pre Feasibility Study*, Michael Smedley, Ben Hatfield and Wanchai Somchit (December 1991)
- Report on the Commercial Farms in the Mahaweli System B*, Jayantha Jayewardene (March 1992)
- Processing Tomatoes in Mahaweli C and H*, Peter Florence (April 1992)
- A Study of Air Freight Rates and Space Availability for Perishable Horticultural Products and Live Fish*, C. Whittle (March 1993)
- A Study of Commercial Options for the Draught Animal and Dairy Development Programme Farms and Action Plan*, Cedric F. Nott and Hiran Perera (March 1993)
- Cashew Development*, Ian Duncan (June 1993)
- A Guide to Formation and Management of Savings and Credit Societies under the MED Project*, M.W. Panditha (November 1993)
- Sustainability Assessment of Mahaweli Enterprise Development Project*, Richard Huntington (May 1994)
- The Impact on Sri Lanka's Agricultural Sector of the Uruguay Round of GATT*, (June 1994)
- Rural Business Centers: A Preliminary Account of the Centers in the Mahaweli Areas*, James R. Finucane (September 1994)
- Microenterprises in the Dry Zone: Structure and Dynamics of Non-Farm Enterprises and Employment in Mahaweli Areas*, James R. Finucane (September 1994)
- Packhouse Quality Assurance Manual*, K.D. Brandon (September 1994)
- Financial Services and the Poor*, James R. Finucane, (October 1994)
- Contract Farming in the Mahaweli Areas of Sri Lanka*, Bechir Rassas, (December 1994)