RECENT ELEPHANT CONSERVATION EFFORTS IN SRI LANKA
A Tragic Story

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Elephas maximus was once present in all the forest tracts, both in the central hill region as well as in the lowland parts of Sri Lanka. During the British occupation of the country, elephants got progressively eliminated from the wet and fertile regions mainly due to large scale forest clearance, at first for cultivation of coffee and later for tea, and uncontrolled shooting. Since gaining independence in 1948, despite the authorities taking some meaningful steps to give special protection to the elephant, the situation has not improved to any appreciable degree. The total elephant population in Sri Lanka today is estimated to be about 2,500 elephants. They are found scattered in disjointed ranges in the north, north central, north western, east and south eastern parts of the country. This drastic decline in the elephant ranges is basically due to habitat loss through:

(a) major irrigation - settlement schemes embracing river valley basins;
(b) cultivation - both legal and illegal encroachment;
(c) change in forest composition by silvicultural practices, and
(d) loss of habitat through man-made construction.

In unfamiliar surroundings, the movement and behaviour of elephants change drastically. Such elephants are compelled either to wander aimlessly for a few years until they find a new route back to their old haunts, or to remain confined to the new areas. Man-made barriers, habitat discontinuity and deterioration can lead to a group becoming isolated from the original population and finally ending up in an unexpected area. In either situation, the result is increased frequency of human-elephant interaction.

It is common knowledge that the Asian Elephant has drastically declined in numbers in almost all the countries it is still found during the past two hundred years, and today the total population is estimated to be not more than 56,000 elephants in the whole of Asia. The problems connected with the preservation of the elephant are common to all these countries and in that context an Action Plan for the preservation of the Asian Elephant was prepared in 1990 and was commended to the respective Governments by the Asian Elephant Specialist Group (AESG). The chapter on the Sri Lankan elephant in the Action Plan gives a fair and comprehensive assessment of the present status of the Sri Lankan elephant, and with over 3 decades of experience as a field worker in the Department of Wildlife Conservation, I may venture to say that the recommendations made there in are sound and practical and form a scientific basis for guiding and developing the future elephant conservation plans and programmes. It is in this context that I am making an attempt in this paper to evaluate and assess the ongoing elephant conservation efforts since 1990, by the Sri Lankan authorities vis-a-vis the recommendations made by the AESG in its Asian Elephant Action Plan.

It has been long accepted in Sri Lanka that all management decisions should be based on scientifically sound, but practical data and guidelines, and there is no gainsaying that in the past several decades, the Government policy was directed towards that end, though funds and manpower requirements provided to the department were minimal. During the past two or three years, however, sufficient funds have been provided.

The Smithosonian Elephant Survey activities carried out between 1966 and 1972 and the short term studies carried out by the local Universities over the years, on the biology and ecology of the elephant, have contributed in no small measure to help and guide the department to plan and develop practical elephant management strategies.

One of the main recommendations made in the Action Plan is the necessity to undertake a long-term monitoring programme to assess numbers, population trends, ecological requirements, movements and human/elephant conflicts to provide a scientific basis for all management decisions. Regrettably, the department does not seem to have taken up this recommendation seriously. The authorities however, have done away with the separate elephant conservation unit which existed from 1980 and which had overall responsibility for Elephant conservation activities, as well as the elephant control units that functioned fairly effectively by responding promptly, among other things, to the complaints of farmers. Today, that responsibility has devolved on the 5 Regional Assistant Directors, whose decisions and recommendations are undoubtedly influenced by the regional interests and requirements, rather than those of the country as a whole.

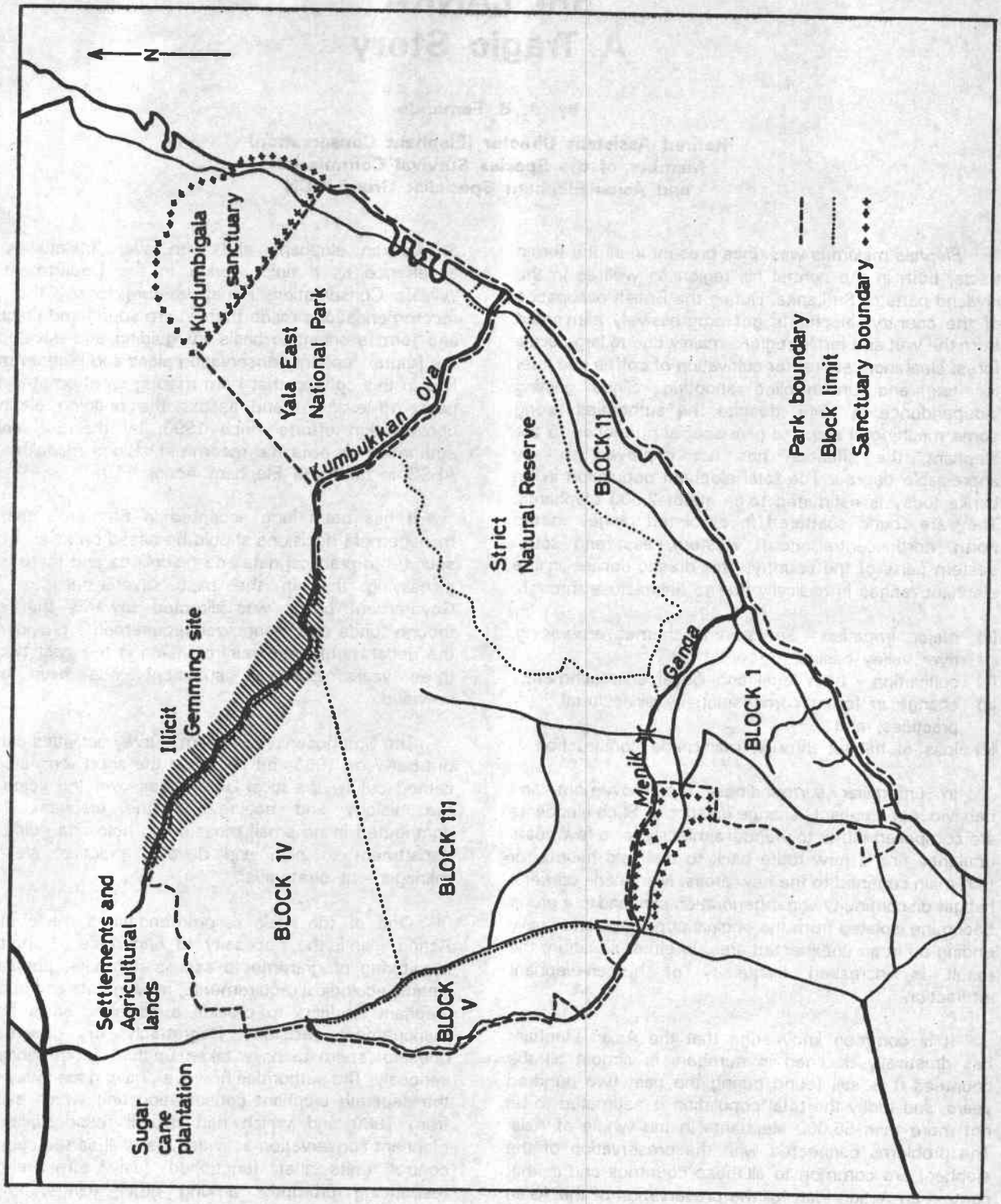


Fig. 1. Map of Ruhuna National Park, Sri Lanka, showing Blocks I - V.

In this situation, it is surprising that the present administration has embarked on an *ad-hoc* and haphazard elephant capture/translocation programme to remove from conflict areas, single male elephants, which are alleged to be crop-raiders and mankillers. Which elephant that is displaced from its traditional habitat and forced to live in inhospitable pockets surrounded by cultivations and human habitations, is not a crop raider? one may ask. It is however, ironical that the department's target is to capture and translocate into safe areas (National Parks) 500 such males said to be roaming about in conflict areas in the country! Even this programme is being carried out by fits and starts in far flung regions and since 1990 some 30 odd adult males have been captured and removed from the Mahaweli Scheme area and from Northern and Southern Regions. At the start, the captives were transferred to a holding centre at Kurunegala for taming before disposal by public auction. The department's statistics indicate that out of 11 elephants captured between January and March 1991, 5 animals had died of severe rope cut wounds. In reply to a question raised by a member at a meeting of the Provincial Council, the Chief Minister had said that out of 10 elephants brought to the holding centre, 4 animals died due to deep wounds on the legs, massive internal haemorrage and weak hearts. While one adult male still remains at the holding centre, the others were sold to the public post-haste. It is not known as to how many of them have survived. It is understood that His Excellency and his Cabinet of Ministers had viewed this exercise with alarm and stopped the scale of any captives in future. Since then, the Department is translocating, or I may say just releasing the captives, in any convenient location in any National Park. Regrettably no action is being taken to monitor these releases in their new homes.

That there is no method or consistency in this exercise is obvious from the following cases:-

i Initially 5 or 6 adult males were captured in Dimbulagala area, close to Maduru Oya National Park, in the Mahaweli Scheme Region; and 4 or 5 adult males were captured in several locations in the Northern Region and were removed to Kurunegala in 1990/91 for taming. According to the Department's press release, it proposes to capture and remove 20 adult males from Maduru Oya area.

ii Two young male elephants were captured in February 1991, at Sela Kataragama in the south on the immediate southern border of Yala NP Block III, and they were released in Block II. Incidentally a photograph of one of these animals taken in Yala Block I, 30 days after its release by a wildlife enthusiast, shows its pathetic condition.

iii In April 1991 capture operations were shifted to the 'H' area of the Mahaweli scheme in the Northern Region, and 3 or 4 adult males were captured in different locations from the pocketed elephants there. The captives were released in Wilpattu NP, which is closed since 1988 due to security reasons. It is therefore, doubtful whether they were released well into the interior in Wilpattu NP away from cultivations and human habitations or near its borders.

iv In July-August 1991 capture activities again shifted to the South. Ten adult males including a tusker were captured in Pelwatte Sugar Cane Plantation and its environs, claiming that they were causing problems to the plantations. The Pelwatte sugar cane plantation is located in the immediate southern borders of Yala NP Blocks III, IV and V and at any given time over 100 elephants concentrate around there. The tusker was taken and released in Yala NP Block I. The other 9 elephants were taken and released at Uralawewa in Yala NP Block III, which is not more than 10-12 miles away as the crow flies, from the place of capture. Their movements were not monitored. It is generally known now that these elephants have returned to Pelwatte soon after they were translocated in Block III. The criteria on which this area was selected for the translocation of Pelwatte captives is not known. However, it is to be noted that no elephant, whether resident, migrant or 'translocatee' would have stayed in Yala NP Block III, as the Sri Lanka Army, with the permission of the Department, was conducting Jungle Training camps there for their recruits. The Army had held several such training camps in Block III and in the adjoining Katagamuwa Sanctuary in July, August and September 1991.

v In September 1991, the Department captured 5 adult males in Bundala Sanctuary in the South and also 3 or 4 males in areas outside Bundala. Two of them were captured at a place called Galwakkada close to Hambantota. One of them is known to have died at the site before retrieval. All these captives too were taken and released at Uralawewa in Block IV. Why the 5 loners that were claimed to be harmless and very popular with tourists to Bundala Sanctuary, were removed from there, while one or two really troublesome males in the periphery were allowed to remain, is a mystery!

vi Late in 1991 another 2 or 3 males were captured at different locations in H2 area (Mahaweli II). One of them was taken and released in Maduru Oya NP, where the human-elephant conflict is said to be serious. Others were released in Wilpattu NP.

vii One adult male that was captured in January 1992 in Resvehera area (H2) was also taken and released in Maduru Oya NP.

viii In March '91, a subadult tusker was captured in Resvehera (H2) and removed all the way to Yala NP in the south, and was released there. Incidentally, it is understood that the Capture Team was on a mission to capture a crop raiding adult tusker in Resvehera,

when it captured the young tusker. The adult tusker which is claimed to be a crop raider is at large there even today.

ix In March 1992, an adult male in Resvehera jungle pocket which was on a crop raiding spree in a village 4 miles away accidentally fell into a home garden well. Police and villagers promptly contacted the Capture Team which was on a capture mission close by, and requested the animal to be removed. The Capture Team for some reason or other, did not remove it, but released it to go free back to Resvehera over settlements and continue its ravages.

x It is understood the Capture Team is presently engaged in a mission to capture an adult tusker carrying only one tusk in Puttalam District. This Particular tusker was one that was moved out along with 70 odd other elephants by driving on foot in 1982 from Resvehera to the southern part of Wilpattu NP. This animal is known to move between the southern boundary of Wilpattu NP (Kala Oya) and Resvehera regularly.

The adult male elephants that are being captured by the Department claiming to be crop raiders and mankillers, are not all from pocketed herds. If they are habitual crop-raiders and mankillers, is it advisable to translocate them to the National Parks? Would these crop-raiders settle down in the National Parks without coming out to the cultivations and habitations that surround them? Would they integrate with the local elephants? Would they not be subjected to some degree of stress in the new area, in the absence of their related and known associates? What would be the long term effects of such arbitrary removal of dominant breeding males from scattered small elephant populations or herds? These are some questions that are being posed by the conservationists, scientists, and even by a large segment of the educated public, for which reasonable answers are not forthcoming from an insensitive administration.

Past experiences show that adult captives suffer serious rope cut wounds when bull-dozers and other machinery are used to tether, move and load them for transport. In the ongoing operations however, the department is using bulldozers to handle captives, and it is suspected that most captives suffer serious leg wounds due to the manila ropes constricting and damaging the muscles and flesh. People with experience have, for a long time advocated the use of tame elephants instead of bulldozers and other heavy machinery in handling captives.

The use of bulldozers and other mechanical equipment in the handling of animals is not possible without cruelty and damage to the beasts. Machinery is unfeeling and unyielding, and it is unlikely that machines of this type are used anywhere in the world either in the capture or movement of animals, whether wild or domesticated. Tame elephants are always preferable to heavy machinery for handling of captives and they are not unavailable in Sri Lanka.

In 1979 when the Department captured and translocated the Deduru Oya herd in Wilpattu NP, tame elephants were used instead of bulldozers, with success. The Committee on Translocation of Elephants in its report dated 1st February, 1985 had also recommended the use of domesticated elephants for movement of immobilized elephants after re-mobilization, instead of bulldozers.

The press statements made by the Department indicate that the elephants targeted for capture were mankillers and crop-raiders. One animal captured in Maduru Oya area was claimed to have killed 18 people, while another captured in Puttalam District was claimed to have killed 13 people. Yet another animal captured was claimed to be a lone female mankiller!

It is generally known that some solitary males which live away from the herds for most of the time become persistent crop raiders. The herds which comprise of adult females, subadults and calves, unless when pocketed, are not known to enter human habitations for crop raiding. But single males become habitual mankillers very rarely. In my 30 odd years of service, the Department had declared as mankillers not more than 4 or 5 males. The last one which was declared in 1988 and destroyed, had a record of having killed 13 people. It had a file dating from 1983, and some of the killings apparently were mere accidents. At the time of my retirement in mid 1990, there was no record of any mankillers at large in the country. While on the subject of mankillers, I may say that generally per year not more than 10 to 15 human deaths in the country are attributed to elephants, and majority of them occur due to chance meetings and other similar reasons, where the people involved are to be blamed more than the elephant.

For 1992, the department had targeted to capture 30 male elephants as follows:

12 elephants in the North Western Province
8 elephants in the North Central Province
5 elephants in Monaragala and
5 elephants in Buttala in the Southeast

Strangely neither the identity and location of the elephants, nor where they are to be translocated after capture, has been made available even to the Ministry. This capture/translocation activity appears to be more a 'conservation gimmick' adopted to bluff the public and the authorities, than a genuine effort to save the endangered elephant.

Crop damage in some elephant infested developed areas may have increased in the recent past. It could be attributed partly to the former elephant control units

not functioning, and partly to the increasing number of exaggerated complaints being made by the farmers and developers with the ulterior motive of obtaining their guns back or to activate the department to capture and remove elephants. Whilst on the subject of crop damage by wild elephants, let me quote the late R. S. V. Poulier CBE., a former civil servant. In a talk delivered at a symposium at the Natural History Society in 1953 he had said:

> " In this matter of crops and wild elephants I fear I see too much of both sides of the question; as an Assistant Government Agent for 6 years in the Mannar, Vavuniya and Mullaitivu districts, I saw at first hand the damage done to cultivations and the problems of fencing and watching; I held numerous inquiries into the shooting of elephants both lawfully and unlawfully. There were ten fantastic stories of damage for each genuine one. Since those far off days the number of elephants has diminished so rapidly that we are all anxious to save some in the wild state "

My experiences of complaints of crop damage in every elephant infested part of the country were not different to those of Poulier, and I may add that is largely true even today.

According to information released by the Department, its target is to capture 500 elephants, and that the decision was taken to capture all troublesome elephants to ensure the safety of human life and property, as well as to save an endangered species from extinction. This is a very interesting statement, since the country has an elephant population estimated to be between 2500 and 3000 elephants, which live in scattered groups. According to Dr Kurt (Smithsonian Elephant Survey) who studied the elephant populations in Yala and Lahugala areas in the South eastern part of the country: 11-20 years age class has 7% males and 12% females, and 21 years and above age class has 6% males and 23% females. Since most troublesome adult males fall into 21 years and above age class, one is not certain as to how the Department has arrived at the figure of 500 troublesome males in the country for capture. Even if the Department is to include the younger animals in the 11-20 years age class as well, it is not possible to find 500 troublesome males. This clearly shows this figure of 500 troublesome elephants is not accurate, and not based on any informative field data. In the course of his survey Kurt also had examined for age, some 49 skulls collected from dead elephants in the field, and interestingly he had concluded that they all had died before reaching 40 years of age.

It has to be noted that generally over 90% of the 60 odd elephants that die annually due to various causes, are adult males, and majority of them are recorded from isolated populations living in and around cultivated areas. In such populations, rate of recruitment to adult male class cannot keep pace with the annual loss. In this situation in most areas today, animals over 25-30 years have got eliminated, and the sex ratios in scattered populations have already become heavily biased in favour of females. Therefore, it could be concluded that the Department's on-going programme of capturing the so called troublesome adult males is likely to accelerate the demise of Sri Lanka's small elephant populations.

Another important recommendation made in the Action Plan is the creation of Jungle corridors over the elephants' traditional migratory routes to interlink the isolated National Parks. The concept of Jungle Corridors, which had even been recommended by the Committee on Wildlife Preservation in Sessional Paper XIX of 1959, does not appear to have received any favourable consideration of the authorities. The need for the elephant to move from one feeding ground to another according to change of seasons has been known to the peasant-cultivator for thousands of years, though scientific study of this phenomeon is of recent origin. Sri Lanka is recognized as the pioneer in the establishment of Jungle Corridors. In 1970 it created the first Jungle Corridor to ensure the safe passage of elephants from Omunagala F. R. to Kandakadu (Somawathiya Sanctuary) in the lower Mahaweli river basin and back seasonally. Since then, this Jungle Corridor has been taken over from development under Systems B and C of the Accelerated Mahaweli Programme (AMP). In 1984 under the Mahaweli Environment Programme (MEP), which was funded by the USAID and GSL, Flood Plains N. P. was legally created to interlink Wasgamuwa N. P. and Somawathiya N. P. and ensure free movement of elephant herds. But from the inception, the authorities allowed this National Park to be invaded by hordes of tobacco cultivators, brick makers and other encroachers. As the removal of the tobacco cultivators and other sundry pests is being delayed day by day, by the authorities, the Flood Plains N. P. is losing its identity and integrity, including the purpose for which it was created.

Interlinking of Maduru Oya NP and Galoya NP; Galoya NP and Lahugala NP; and Yala NP and Uda Walawe NP in the south-east, and Wilpattu NP and Madhu Road Sanctuary in the north with Jungle Corridors have been on the cards for the past 10-15 years. They have been investigated, plans prepared and amended several times, but nothing is being done to give them the necessary legislative protection, while encroachers continue to ravage them daily. Plans for the establishment of the Lunugamvehera NP and the Lunugamvehera-Uda Walawe Jungle Corridor were completed in 1989. The plan and Gazette notification were approved by the Survey General and by the Legal Draftsman. The ADB released funds under Phase II of the KOISP, for the survey of the boundaries. But so far, this National Park has not been legally established.

Surprisingly the authorities think that to ensure their future survival, all free-ranging elephants should be confined in small, but isolated National Parks with habitat enrichment and by putting up electric fences right round them. Since approximately 70% of the total elephant

population of 2500+ is presently free-ranging in developed areas outside the National Parks consequences of such an arbitrary exercise can be detrimental to the very survival of the National Parks. In the absence of proper long-term studies on population dynamics, carrying capacity and influence and effects of large scale habitat enrichment on the natural vegetation and on other animal communities in the isolated National Parks, this policy of keeping elephants restricted to National Parks in the future cannot be accepted to be based on any scientific data and therefore as practical.

It is understood that already funds have been allocated for the construction of some 160 km of electric fences around the National Parks and Sanctuaries during the current year. The plan is to collect all elephants now free-ranging in the peripheral areas into the National Parks and Sanctuaries and keep them boxed in them with the help of electric fences. In the south the Department proposes to construct electric fences along Wellawaya-Wirawila road and along Hambantota-Tissamaharama road to seal off the western boundary of the proposed Lunugamvehera National Park and the northern boundary of the Bundala Sanctuary. In the north-west it proposed to seal off a part of the southern boundary (Kala Oya) of Wilpattu N. P., and also Resvehera jungle pocket from Kahal-Balaluwewa area. It is preposterous to expect the Department to collect all free-ranging elephants and herd them in the National Parks closeby, in one clean sweep. In the last abortive elephant drive in the south in 1991, the department was not able to collect and drive to Lunugamvehera more than 50% of the elephants free-ranging in village areas situated between Walawe and Kirindi Oya lower basins. But they returned to the former haunts within weeks, despite the valiant efforts of the staff to hold them in Lunugamvehera proposed N. P.

The proposed electric fence along the southern boundary (Kala Oya), of Wilpattu NP will cover only the section of the boundary from Nadunawila to Aliwadiya, a distance of some 10 miles. The sections of the boundary from Nadunawila to the sea-coast (Eluwankulama) and from Aliwadiya to Thunmodera (Pannikkankulama) are being kept open. The Department expects to collect and bring all elephants now free-ranging in the forests south of Kala Oya which include Mi Oya and Nanneri Oya basins, and keep them boxed in the southern sector of Wilpattu NP. This section of Wilpattu NP has not been provided with fresh water holes large enough to meet the needs of large numbers of elephants. Besides, Wilpattu NP is subjected to one short and one long, severe drought periods annually. So if the plan is carried out, the elephants will be compelled to concentrate along Kala Oya, resulting in them escaping back to their old haunts, either through the gaps kept open or by breaking the electric fence itself. It is naive to expect them to stay in Wilpattu NP to destroy the vegetation there!

The electric fence is not a 100% elephant proof barrier. Its effectiveness depends on its ability to bluff elephants. By and large, its success depends on night patrolling round the clock, and regular maintenance by staff. Electric fence of the magnitude proposed by the department needs large numbers of staff for daily patrolling and maintenance, in addition to hard to get funds. The resources available to the department for this grandiose programme could be better utilized to maintain 4 or 5 Elephant Control Units effectively in problem areas. Furthermore, such a move will be not only helpful and acceptable to the peasant-cultivator, but also will be beneficial to the survival of the much harassed elephant.

Another matter that needs to be discussed in this paper is the propriety of the development of Yala NP Block IV undertaken by the department with NORAD aid, without first developing Block III, which is situated more to the interior. Yala Block III is bordered by Block IV and V on the west. They act as buffer zones to Block III, and they are surrounded right round by village settlements, cultivations and by the Pelwatte Sugar cane fields. Development of edges without first developing core areas of reserves is countrary to all principles of conservation practices. Such activities like restoration or construction of tanks, roadways and pasture development attracts wild animals, particularly the elephants from the core areas to the edges and to the adjoining cultivations and settlements. This results in increased human-elephant interaction.

The proposal for development of Block IV was no doubt prepared and recommended by the Monaragala District Environmental Committee. But it was not subjected to any critical examination at a workshop by the department, before submitting it to NORAD for funding. The result is the development of the wrong place in Yala NP, which in the not too distant future, would lead to serve elephant problems. Probably the authorities may be compelled to submit another proposal to NORAD for funds to erect electric fences round Yala Blocks IV and V as well!

A long felt need in the conservation of the elephant in Sri Lanka was the creation of the necessary Regulations for the registration of elephants in captivity, and for the registration of tusks and tushes of elephants. While regulations for the registration of tusks and tushes have yet to be created, the Regulations for the registration of elephants in captivity were passed by Parliament in 1990. However, so far no action appears to have been taken to get the elephants in captivity registered.

From the foregoing recent elephant conservation efforts, it is apparent that the policies being followed by the department, though grandiose, are neither scientifically sound nor practical. For this situation it is incorrect to totally blame the department. The Director who is qualified and knowledgeable in wildlife conservation matters, is being compelled to work under severe political and bureaucratic pressure in finding instant solutions to elephant problems in the country. Further, almost all senior hands with field experience have in recent years, left the department on retirement.

Since the government is committed to the preservation of the elephant, the present tragic situation can be largely corrected by the Fauna and Flora Advisory Committee. For this conservationists, scientists and NGOs should come forward with practical suggestions and support. The department has honest and dedicated staff yet, and also the necessary funds. They only need correct motivation and direction, and also some unobtrusive supervision.

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