

Is the elephant an important part of our environment and is its continuance necessary? Should we prevent it from becoming extinct, if this is a part of the evolutionary process? The Dodo became extinct but nobody misses it now — most don't even know what a Dodo was. Superficially there do not seem to be many valid reasons for us to ensure the continued existence of the elephant in Sri Lanka, especially since it competes with man for land and food. However, this is not a decision that we can and should take. People from all parts of the world and all walks of life are interested in the elephant and its welfare. Many efforts are being made to ensure that the elephant continues to live for posterity. This interest is as a result of the association that elephants have had with man for a very long period of time. In fact the elephant appears in his myth, legend and fable. It has a place in most religions, if not, at least a mention in religious writings. The elephant must therefore be conserved to continue as a part of our environment.

Elephants are the largest living terrestrial mammals. There are two species left in the world today. These are descended from the Woolly Mammoth and the Mastodon and other pachyderms before them. The two species that exist today are the African elephant (*Loxodonta africana*) and the Asian or Indian elephant (*Elephas maximis*). The numbers of both species are dwindling very fast. The African elephants numbers have come down from approximately 1.3 million in 1979 to between 800,000 and 600,000. The Asian elephant population has dropped from around 200,000 at the turn of the century to less than 50,000 today. At the beginning of the 19th century Sri Lanka had an elephant population of over 10,000. This declined rapidly and in the 1950's the numbers were estimated at 2,000. They have now picked up and at present stand at between 2,500 and 3,000.

The main reason for the drop in the population of the Asian elephant is because its jungle habitat is being steadily reduced to feed and accommodate a fast growing third world population. The same reason has contributed to the drop in the African elephant population but in this instance the main reason is that the African elephant is hunted for the ivory that it carries in its tusk. Though the ivory trade has been banned worldwide, poaching goes on unabated and continues to affect elephant populations in Africa.

In Sri Lanka there is only a small loss of elephants through poaching for their ivory. This is because only a small 2 to 5% of the male elephants in the Sri Lankan species has tusks, whereas all the males and females of the African species have tusks.

THE ELEPHANT — A PART OF OUR ENVIRONMENT

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In Sri Lanka the biggest problem is that development projects have taken up and continue to take up forest land which is the habitat of the elephant. The forest cover in the island has dropped to 24% of the land area today, with an annual deforestation rate of 30,000 ha. Population pressures for land and food make development projects necessary. One of the adverse results is that due to the clearing of jungles without proper planning and an awareness of the needs of conservation, many elephant herds have got pocketed and have now become a threat to the people who have settled in the newly developed lands.

The elephant needs large quantities of food to sustain itself. It consumes over 500 pounds of green matter per day. It also needs over 60 gallons of water a day. It has a very inefficient digestive system and therefore needs much more food material than it actually assimilates. The elephant's eating habits tend to destroy the habitat in which it lives. As a result the elephant needs a vast range to be able to feed itself and to be able to breed. The food of the elephant, which is entirely vegetarian, consists of leaves, twigs, creepers, barks, fruits, roots, sedges and grasses. One advantage is that elephants can utilize coarse green matter, especially grasses, which are not taken by other animals.

Upto the time the British captured the Kandyan Kingdom, there were elephant populations spread in the forests all over the country. With the British opening up the hill country first to plant coffee and later tea, they had to clear the forests in the hills. This is where the conflicts between man and the elephants began. Upto this time all activity connected with elephants was the capture of elephants by the Sinhalese Kings and later the Portuguese followed by the Dutch. With the advent of



the British to the coastal areas displacing the Dutch, the killing of elephants was started as a sport an even encouraged by government payments for every elephant killed, as they deemed elephants agricultural pests.

In the man elephant conflict in the hills many elephants and a few humans were killed. Through loss of habitat the remaining elephants were driven down to the forests in the lowlands. At present only a few elephants remain in the montane forests and it is believed that they too migrate seasonally to their old habitats from the foothills. The experience in most other Asian countries is conversely that the elephants are driven from the lowlands to the hills because of advancing development.

In Sri Lanka the conflict between man and elephant keeps on increasing even though the numbers of the elephant seem to be decreasing. This is because of man's steady march into the elephant habitats and because of the pocketing of elephant herds due to ill planned development and human activity. When the jungles are cleared for agriculture and settlement, if thought and

consideration is given to the effect that this development would have on the fauna and flora, then a plan to mitigate the adverse effects can be worked out. Unfortunately, except for the Mahaweli programme, such consideration was not made in advance and decisions and solutions were effected only as and when the problems came up. Unfortunately in the case of the elephant problems that come up, there are no ready solutions available for most of these problems.

The elephant population, driven to the lowlands, now faced a new problem. The government decided to rehabilitate the dry zone irrigation reservoirs that had fallen in to disuse with the fall of the early Sinhala kingdoms. This was in order to resettle the growing populations from the wet zone of the country and where population pressure was increasing. With the restoration of these tanks and the land under them coming under cultivation, the elephant habitat was again under pressure through a decrease in area. The herds of elephants, short of food in a reduced habitat, started rading the new cultivations for food. Here they found an easy source of tasty food. Bananas, papaw and grains

like kurakkan, maize and paddy were new food that they acquired a taste for. Naturally the farmers resisted the incursions of the elephants into their lands which they had worked hard to cultivate.

Initially, in their confrontations with man, the elephants will move away when chased. They are not savage or aggressive animals by nature. The fact that an elephant when captured can be tamed easily is evidence of this. However, when the elephants are constantly driven back and they have nowhere to go, they will naturally retaliate. At first the charges and attacks will not be severe or dangerous but they get more and more aggressive progressively. Various efforts have been made by farmers and settlers to protect their crops and habitations, but it is a losing battle considering that the elephants need food and have nowhere else to go. The farmers band themselves together to make their efforts at crop protection more effective. They beat drums and tom toms and generally make a loud noise. They also light fires to keep the elephants out as most elephant forays are at night.

When the shouts, fires, fireworks, drums, tom toms etc are not sufficient to repel these animals, then guns will necessarily have to be used. Guns in inexperienced hands will not kill as intended but will only maim and injure the animals. They will be repelled temporarily but the animals will return. With the farmers shooting at the elephants in retaliation, a number of elephants will turn into rogues and become dangerous inevitably ending in their deaths. Most elephants become rogues due to the extensive pain that is caused to them by festering gunshot injuries. Due to gunshot injuries most of these animals are maimed whilst the wounds of others fester and cause the animals great pain. Sometimes these wounds are aggravated and cause the death of the animal. There are also many instances where whole herds have caused damage consistently and extensively.

Man needs the environment to survive. He therefore needs to protect his environment and also protect the elephant which is a part of this environment. In the effort to protect the elephant, man has to find ways and means of the elephant and himself living very necessary that man's area of activity and the elephants habitat are clearly demarcated. Man can be prevented from trespassing into the elephants habitat. This will have to be done by ensuring that each habitat can maintain its elephant population in terms of food and water.

Efforts have to be made to assess the elephant populations in each area and enrich the habitats to

increase their carrying capacity. In necessary some herds may have to be moved from the thickly populated jungles to areas where there is a low elephant density and which can take in more elephants.

A very important aspect of elephant conservation in this country that has hitherto been neglected is the participation of the community directly effected by elephant depredations, in the elephant conservation effort. Initially they must be compensated for the losses they incur through elephant damage. Together with this they have to be given an orientation and education on the value of the elephant as a part of our environment. This is an urgent need. Equally important is the fact that they must be shown the benefits that could accrue to them through the presence of elephants in habitats close to the villages. An effort must be made to pass on the benefits from the tourism potential in these elephant habitats to the village communities. With a potential income the villagers attitudes towards the elephants will change and they will be prompted to assist in the conservation effort. However it is essential that their opinions and ideas be considered when formulating conservation plans, if farmer participation in the conservation effort is anticipated.

What is urgently required is a Plan of action and the effective implementation of the actions in that plan. Otherwise, as at present, only attempted solutions to problems as and when they arise, will be made. There are too many elephant problems now and no problem is solved satisfactorily. The Department of Wildlife Conservation is now swamped with elephant problems from all over the country, which they cannot cope with.

Initially a census of the present elephant population has to be carried out. At present the figures we have are, at best, guesstimates. Together with the census the elephant habitats available have to be assessed to ascertain their carrying capacity. The recurring problems from all parts of the country must be recorded and prioritised in terms of the urgency of their need for solutions. With this information a Master Plan for elephant conservation and management has to be worked out.

Once such a Plan is formulated the separate actions can be prioritized and phased out in terms of urgency. An assessment has also to be made of the manpower, financial, equipment and vehicle resources available when formulating the action plan. With the funds and other resources presently available the urgent actions can be taken immediately.