

## Establishing a sustainable model for the long-term conservation of the elephant in Sri Lanka

Ravi Corea

The conservation of large vertebrates will be one of the biggest challenges that would be faced by conservationists in the new millennium. Shrinking habitats mainly due to human population pressures are creating a situation that is making even the most ardent conservationists feel current efforts can end as dismal failures. A reoccurring lament is how could the Asian elephant (*Elephas maximus*) be saved in numbers large enough to sustain it amidst such a discouraging and impossible situation?

The last large populations of the endangered Asian elephant share space with some of the most marginalized groups of people in the elephant's range countries. For example, in Sri Lanka the population is 78 percent rural and the elephant shares space mostly with rural farmers. Marginal lands are increasingly brought into agriculture production even though agriculture is the least dynamic sector of the economy, accounting for only 19.4% of GDP in 2001 as shown by a survey conducted by the Asian Development Bank. So nearly 70% of rural farmers are marginalized and live in significant poverty. A Participatory Rural Appraisal conducted by Sri Lanka Wildlife Conservation Society (SLWCS) sociologist, Zeenath Khalid of the Weheragalagama village in the Wasgamuwa region showed that 65% of the population moved in a constant debt cycle. Such low and unpredictable incomes are key features of poverty.

Adding to the considerable suffering of these people is the human-elephant conflict. Human-elephant conflict is perhaps one of the biggest environmental issues Sri Lanka is facing today. Elephants being the largest terrestrial mammals frequently range outside the borders of even the largest national parks in Sri Lanka. Thus setting aside enough habitats to support a large population of such a highly mobile animal as the elephant is almost impossible. Current research conducted by the SLWCS in the Wasgamuwa region shows that there are more elephants outside the Wasgamuwa National Park substantiating the claim that nearly 70% of the elephants in Sri Lanka roam outside the protected areas. Obviously the number of elephants that can be supported by a conservation area and its buffer zone will depend on the tolerance of the people who share their land with the elephants. People will tolerate elephants in their backyard only if they can reap tangible benefits from their presence or if they are provided protection from the frequent elephant attacks on their crops, property and lives or adequately

compensated for their losses. Ensuring the long-term survival of such a large and highly mobile animal as the elephant outside the network of protected areas though difficult is critical for the long-term conservation of the elephant. It is also highly unlikely that one government department will ever have the capacity to handle an issue of such magnitude alone. Private-public partnerships will play an important role in ensuring a future for the Sri Lankan elephant in the new millennium. At the government level, there must be a sincere effort to appreciate and accommodate the contributions of private organizations and individuals for elephant conservation. Policies must be developed to encourage such public-private partnerships. Collaboration and sharing of information between individual researchers and conservation organizations is also vital to support these efforts. Additionally the international donor agencies that support elephant conservation should provide incentives for such collaborative efforts and public-private partnerships.

There is a need to develop an innovative approach to elephant conservation in Sri Lanka if elephants are to survive in significant numbers outside the system of protected areas. At present there are no incentives at all for rural people to support elephant conservation.

In the efforts to conserve the elephant some of the biggest and pressing issues are:

1. How can the need to conserve and protect the elephant be reconciled with issues such as human elephant conflict and with the needs and aspirations of stakeholders who are most impacted by elephants.
2. How to develop economically and logistically feasible solutions that are sustainable as well as support the lifestyles and culture of the people of an area.
3. How to protect the last remaining habitat of elephants outside the protected areas.

At present most conservation measures have been developed as reactive measures in response to the proximate issues of elephant conservation, which are: protection, management and establishment of protected areas. Most of these efforts though have been applied in an *ad hoc* manner and have not contributed greatly to conserve the elephant, or address the ongoing issues of human elephant conflict. There is also an urgent need to apply conservation measures in a proactive manner especially in areas where conflict is still low in intensity

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and there is still opportunity to set benchmarks for elephant conservation. An example of such an approach to elephant conservation is the Somawathiya Chaitiya Temple Project of the SLWCS, which was initiated this year.

Another mostly ignored issue is how to sustain projects that are initiated with donor funding. There is a vital need to understand that while donor funding is critical to keep the processes of conservation moving forward and to initiate new projects, it would be a misjudgment to believe that this periodic infusion of donor funds dispersed annually would suffice to protect elephants or help maintain projects over the long term. Currently there is a tendency to focus solely on projects and their immediate outcomes and ignore other issues such as:

Institutional infrastructure  
 Individual researcher capacity  
 Operations and administrative overheads  
 Institution/individual capacity building  
 Long-term funding  
 Sustainability

As much as there is a need to help the elephant, there is a critical need to help the individuals and organizations that are committed to long-term *in-situ* elephant conservation.

A good example is the efforts to mitigate human elephant conflict. There is no definite pathway to resolve human-elephant conflict one hundred percent even with community participation. Considering it is a human endeavor, these efforts are always challenged by new concerns, issues and problems. The whole human-elephant conflict resolution effort is an exercise in incremental learning where we are constantly learning new things about working with rural communities as well as about the ingenuity of elephants. So it is necessary to have an adaptive management approach to apply lessons as they are learned through ongoing research efforts. The most important lesson the SLWCS has learned is that you cannot just erect an electric fence or initiate a project and then walk away. It is important to be involved in the project throughout either directly or indirectly so as to make sure there is accountability, as well as monitoring and evaluation of these efforts continuously over time, as well as to make sure that these efforts stay current by applying new concepts as they are developed from lessons learned in the field. For an individual researcher or an organization to invest such an amount of time on a project means they need to have the resources to keep them in operation over the long term. This lack of operational support is what has curtailed the success rate of efforts to conserve the elephant in the wild as well as to resolve human elephant conflict successfully.

While there is heightened awareness internationally in regard to the need to conserve both the African and Asian elephant – there seems to be a conflict of interest between *in-situ* and *ex-situ* conservationists as to how to

move forward in this regard. International institutions such as zoos, safari parks and circuses have been investing most of their resources on *ex-situ* conservation efforts, obviously in an attempt to circumvent the increasing global objection to the capture of wild elephants for trade, they have a critical need to develop a sustainable captive population to fulfill their needs. The irony of this is that for conservationists who are working on *in-situ* elephant conservation, breeding elephants is not an issue – in fact elephants breed too well in the wild contributing to the overall problem. The issue for *in-situ* conservationists is to save as much of the remaining habitat available for elephants especially outside the protected areas. So while zoos, safari parks and circuses are investing millions of dollars on developing artificial insemination techniques and trying to understand the estrus cycle of female elephants, the *in-situ* conservationists receive only a fraction of this amount for their efforts to save the last wild elephants and their habitat. A major effort must be made to reconcile and integrate the efforts of both parties so that the captive elephants in these institutions can be a conduit to channeling more resources for the *in-situ* conservation of their wild cousins. Other international donors such as WWF, CI, etc., are more interested in safeguarding their corporate images than actually funding *in-situ* conservation initiatives! False labeling has become pandemic - where stickers with the corporate emblems of these organizations are widespread even in countries where they are not active giving a false impression that elephant conservation is receiving more support than it is really getting.

The Sri Lanka Wildlife Conservation Society (SLWCS) for the past 8 years have been developing a sustainable *in-situ* conservation model for elephant conservation in Sri Lanka under its flagship project, Saving Elephants by Helping People (SEHP). The SLWCS practices a holistic approach to conservation. The Society helps local people who are the most affected by wildlife and who in turn most affect wildlife since if we are to effectively conserve nature through research based conservation strategies, then we need to create local support for these projects and programs. Even after eight years the SEHP project stands out as one of the most successful attempts to resolve human elephant conflict in Sri Lanka in an area where humans and elephants share space. By integrating economic incentives such as nature, recreational and responsible tourism to its projects SLWCS is generating revenue to attain sustainability to its elephant conservation, research and community development efforts. The revenue generated helps to:

- Maintain field projects
- Employ local field staff
- \*The advantages of training villagers as opposed to employing non-locals as field assistants are:
  - Facilitation of long-term monitoring and surveying of wildlife by providing resident researchers.
  - Capacity building increases the ability of villagers to gain revenue through conservation.
  - Increased environmental awareness and appreciation

of nature by locals who are otherwise likely to have adverse impacts on the environment.

- To obtain local support for the entire project and avoid conflict that often arises between local habitants and non-local scientists as a result of their differing interests.
- Reduced costs in conducting long term field research
- Maintain electric fences
- Defray costs of community development programs
- Develop education and awareness programs
- Provide micro loans
- Set up community cooperatives for sustainable development
- Establish insurance and compensation schemes
- Develop grassroots environmental organizations.

The SEHP project integrates ecological research, applied conservation, community participation, community development and sustainable economic development. It is the first community based elephant conservation and research project in Sri Lanka and has received continuous support from the Asian Elephant Conservation Fund of the US Fish & Wildlife Service, Disney Wildlife Conservation Fund, International Elephant Foundation and from Sanjay Kumar and Computer Associates, Inc., of the USA. While the SEHP project is the longest operating program of the Society, the SLWCS has several additional projects for elephant conservation that are at various stages of operations and development.

A project to cultivate crops such as citrus that are not desired by elephants but still have the potential to bring farmers a decent income is in the developmental stages. By encouraging the cultivation of such crops it is possible to buffer farmers from total economic ruin when their fields and homes are raided and damaged by elephants.

The SLWCS has just completed Phase 1 of a broad ranging program at Somawathie Chaitiya National Park with funding support from the Alexander Abraham Foundation. Phase 1 was building an electric fence to avoid the eventual conflict that would have resulted between the increasing number of pilgrims and elephants. The Somawathie Chaitiya temple is 2300 years old and is one of Sri Lanka's oldest temples, lying just north of the Polonnaruwa Archeological/UNESCO World Heritage site and is situated right in the middle of a national park, which consist of prime elephant habitat. The SLWCS built an elephant friendly fence, which does not prevent the elephants from moving in and around the temple premises and Chaitiya but prevents them from harming pilgrims and temple property. The Somawathiya Project offers an incredible opportunity to apply proactively all the knowledge, experience and skills SLWCS has gained from its ongoing elephant research and human elephant conflict resolution projects.

At the request of the Department of Wildlife Conservation a project was initiated recently to resolve human-elephant conflict at one of Sri Lanka's smallest national parks, the Lahugala Kitulana National Park,

which is 1,500 ha in extent but has one of the largest populations of elephants numbering over 250. The US Fish & Wildlife Service, Disney Wildlife Conservation Fund and the International Elephant Foundation are providing the funds for this project. Lahugala will be the culminating point of all the experiences that the SLWCS has gained from its community-based human elephant conflict resolution projects. The Society is bringing together for the first time in Sri Lanka the national and local government officers such as the Divisional Secretary, Department of Wildlife Conservation, Grama Niladharis, Police Department; Provincial Administrators, Provincial Council officers & members, villagers and village level societies to develop and maintain a human elephant conflict resolution project.

To achieve environmental conservation goals today it has become important to move away from a purely protectionist method of conservation to a multidisciplinary science. The final outcome of our collective efforts will be measured by how well we have balanced the needs of people while at the same time preserving nature. At the same time it is imperative that conservation must be practiced at a scale that will provide protection to the most diversity of species and ecosystems to ensure sustainable livelihoods for people over the long term. The Sri Lankan elephant is a flagship for the diminishing biodiversity of Sri Lanka. It is also an inherent artifact of Sri Lankan culture, folklore and religion thereby the elephant is a representative of the cultural traditions and history of Sri Lanka. By focusing attention on the elephant's plight we are providing protection to a multitude of other species, habitats, ecosystems as well as conserving some of the cultural traditions of Sri Lanka.

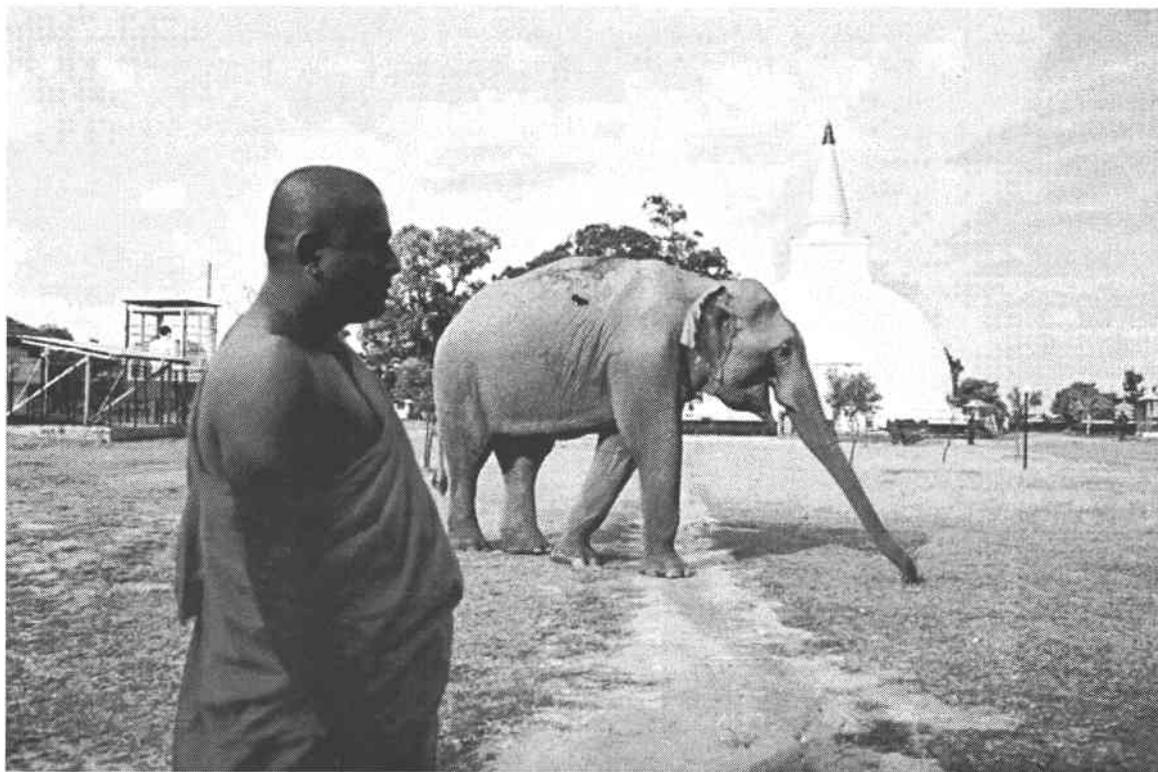
For the past one-year the SLWCS has been integrating responsible travel initiatives to make its projects sustainable over the long term as well as to develop economic incentives for the local people at our project sites to support as well as benefit from the elephant conservation and research efforts of the Society. All these efforts fall into the goals SLWCS have for long-term elephant conservation work in Sri Lanka. We are stressing that community development and sustainable economic development must be ultimate goals that coincide with our conservation and scientific research efforts. The education and sustainable economic development of rural communities is imperative for the co-existence of both elephants and humans over the long-term. If wildlife conservation is to really work then it must move from the administration, management and operations domain of private and public conservation institutions into the hearts, minds, outlook and aspirations of local stakeholders. SLWCS projects offer great opportunities for regular people to get involved in actual field research, *in-situ* conservation, community development and capacity building programs. Further information on how to get involved is available in the Society's website at [www.SLWCS.org](http://www.SLWCS.org).

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Before the electric fence there was no boundary to separate elephants and humans



The fence provides a non-lethal and safe boundary between elephants and humans