Willingness to pay for conservation of Asian Elephants in Sri Lanka

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Short title: Human-elephant conflict mitigation through insurance scheme, Sri Lanka

Key Message: An innovative insurance scheme – linking species conservation, corporate engagement and community benefits – would make Asian elephant conservation in Sri Lanka a corporate social responsibility.


1. What is the problem?

The combination of rapid population growth and several decades of violent conflict has exacerbated one of Sri Lanka’s major poverty-related rural problems: human-elephant conflict. Elephants consume 150kg of food daily. For this reason, crop raiding is a serious problem. Defense strategies (such as watchtowers and firecrackers) in densely populated areas have not, to date, presented viable long-term solutions. According to many studies\(^1\), the total economic value of crop and property damage caused by elephants (for the entire elephant range in Sri Lanka) is Rs. 561 million per cropping season and Rs. 1121 million per annum. Every year, approximately 150 elephants and 50-70 humans die because of this conflict (Oswin Perera, 2009) and farmers with few resources often turn to poison, traps, guns and live electric wires to hinder elephant destruction.

2. Which approach was taken?

Ceylinco Insurance presented a scheme, based on corporate social responsibility and willingness to pay, to reduce conflict and the growing problem of crop raiding. Within the scheme, Ceylinco intended to add a small amount to premium payments of life/vehicle policyholders. This money would feed a trust for monetary compensations to affected rural communities. A sample of 300 residents (from three housing schemes in Colombo) were surveyed to determine the urban population’s willingness to pay for elephant conservation – an incentive that had strong potential for financing an insurance scheme.

3. What ecosystem services are considered, and how?

In this case study, elephant conservation was the key issue on the agenda because forest

\(^1\) Combined study by Bandara and Tisdell (2002b), Jayawardene (1998), and De Silva (1998)
elephants play an important role in maintaining forest dynamics. In fact, they are often described as the 'engineers' of the forest. They contribute to the ecological functioning of the forest because they physically transform it as they move through it. The elephants create light gaps by knocking down trees; keep the undergrowth clear by trampling vegetation and speed decomposition by shattering rotting logs. They also disperse seeds and fertilize the soil with their dung; they compact the forest floor with their feet; and cultivate it with their tusks. In addition to the ecological impacts of their behavior, they are an integral part of the dynamics of society. They are commonly part of local cultural and religious festivals.

4. What input was required?

A number of factors were required to ensure that the Ceylinco insurance scheme was feasible. These included creating an adequate amount of willing investors, the existence of a market to absorb funds, willingness among farmers to participate and the scheme’s ability to garner support from the local government.

Creating the market

Survey respondents were presented with background information and with the issue of program finance and the need for general public support to establish a ‘trust fund’ necessary to undertake the conservation program. Moreover, they were informed of the potential benefits to them if the program was successfully implemented. These included opportunities to domesticate more elephants for religious festivals, opportunities for local tourism, and the potential to increase agricultural crop production (due to the mitigation of human-elephant conflict) in the main agricultural dry regions of the country.

Determining willingness to pay

A substantial proportion of the respondents (89%) expressed their willingness to join the proposed insurance scheme. The estimates revealed that urban dwellers were willing to pay (in principle) Rs 2012 million per annum in perpetuity for the conservation of wild elephants. This figure far exceeded the total economic value of annual crop and property damage caused by elephants (Rs 1121).

Local roles and benefits

To ‘establish ownership’ of the scheme, farmers would be expected to pay a nominal annual fee of Rs 650 (less than US$6). Payments were Rs 200,000 for death, Rs 50,000 for death of spouse, Rs 25,000 for property damage and Rs 20,000 for crop loss. Other benefits included built-in policies relating to children and their education. One of the most progressive aspects of the scheme would be that policyholders would not be required to own land in order to qualify.

The government’s role

The scheme was designed to function in partnership with either local government or the department of wildlife conservation. A commission of 10% was set aside for government agencies or organizations selected by the wildlife conservation department. The purpose of the

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2 [http://www.wcs-congo.org/01ecosystemthreats/01biodiversity/102foresteles.html](http://www.wcs-congo.org/01ecosystemthreats/01biodiversity/102foresteles.html)
commission was to compensate organizations for the implementation costs of setting up the scheme in remote areas.

6. **What was the policy uptake and what were the conditions for this effort to influence public management?**

The Ceylinco insurance scheme was a novel and unique private sector initiative that captured willingness to pay and combined it with corporate social responsibility. While the ecological science was sound and the scheme feasible, it was not implemented due to management failure. However, the proposed concept is an excellent example of how linkages may be drawn between species conservation, corporate engagement and community benefits.

**References**


Oswin Perera, B.M.A., 2009 The Human-Elephant Conflict: A Review of Current Status and Mitigation Methods

**Acknowledgement:** Sanjib Kumar Jha ([sanjib.gist@gmail.com](mailto:sanjib.gist@gmail.com)) for compiling the case and J.P. Edirisinghe ([ipediri@pdn.ac.lk](mailto:ipediri@pdn.ac.lk)) for reviewing the case