Economic valuation of environmental resources: A case study of the central zoo of Nepal

Tek Jung Mahat¹ and Madan Koirala²

Mountain Forum/International Centre for Integrated Mountain Development, Kathmandu, Nepal¹

Central Department of Environmental Science, Tribhuvan University, Nepal² 2004

tekjungmahat@gmail.com1

Keywords: natural resources management, protected areas, zoo, ecotourism, recreation, environmental services, economic valuation, travel cost method, Nepal.

Abstract

Economic valuation is a frequently applied measure of resource conservation in the developed world and its use is growing in the developing countries. It mainly aims to identify the role and importance of particular resources and to estimate their quantities. This is a very recent issue in Nepal, and has been used for the study of the Central Zoo, which is a major attraction for local and international tourists with the net annual visit of about 800,000. Some indicators show that the zoo needs further improvement and prompt action to improve its services. Less is known about how and where to start. There is an urgent need to assess the satisfaction level of the visitors and identify possible fund raising sources. The major objectives of the study include identification of the economic value of the zoo and the degree of relationship in between travel cost and the zoo visit. It further aims to investigate the management and financial status of the zoo, which could suggest sustainable measures to strengthen zoo facilities. To identify the economic value of the zoo the travel cost method was adopted and several other methods were applied to collect information on zoo management and the nature of the visitors. These methods include questionnaire survey, key informant interview, direct observation, direct count and focus group discussion.

The study shows that a higher proportion of school children, college students and adults visit the zoo in comparison to visitors of other age groups and professions. Brahmin, Chhetri and Newar are the dominant visiting castes. The zoo has an excellent public transportation access and it has achieved success in attracting a high proportion of visitors with relatively poor incomes. Public buses, tempos and microbuses are the widely used transportation facilities. There are limited numbers of visitors from SAARC countries and from the rest of the world. Visitor's level of education and their direct association with

environment related organizations is not a significant determinant of the number and nature of visits. It is concluded that there is an inverse relationship between the travel cost and the number of zoo visits. The per capita economic value of the zoo is estimated to be NRs. 226.286 (US \$ 3.15). It would be better to improve environmental hygiene inside the zoo premises and expand facilities provided by the zoo. The existing entry fee for the college students could be increased by NRs 5 to10 to raise funds for the zoo. It can strengthen economic strength of the zoo to improve its services. The zoo is found to be congested and needs expansion in its area. Greenery, peace, addition of animals, and availability of sufficient resting places are other major sectors for improvement.

Notes to readers

This is an abstract of first authors' M.Sc. thesis on "Economic Valuation of Environmental Resources: A Case Study of the Central Zoo of Nepal". The second author is the thesis supervisor. The full text of thesis is available from the Central Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal.

The Mountain Forum would like to thank Mr. Tek Jung Mahat and the Central Department of Environmental Science, Tribhuvan University, Nepal for permission to include this abstract in the Mountain Forum Online Library.

The Author may be reached at:

Global Mountain Forum Secretariat International Centre for Integrated Mountain Development Kathmandu, Nepal

Tel: +977 1 5525310/1 ext. 661 Fax: +977 1 5524509 or 5536747

Email: tekjungmahat@gmail.com OR tek@mtnforum.org OR tmahat@icimod.org

URL: http://www.tekjungmahat.tk