

**ECOCLUB.com E-Paper Series, Nr. 6, March 2003**

**“Why Ecotourism Has To Be Included In The Syllabus Of B.Sc. Forestry Programme Of Kerala Agricultural University, India”**

by

**Animon. M.M**  
**Assistant Professor**  
**College of Forestry, Kerala, India –680 656**  
[animonmm@sancharnet.in](mailto:animonmm@sancharnet.in)

**ECOCLUB.com Expert Member**  
<http://ecoclub.com/experts/muhammed.html>

The ECOCLUB.com E-Paper Series is available on the Internet at  
the ECOCLUB.com Ecotourism Library:  
<http://ecoclub.com/library/>

## **Why Ecotourism Has To Be Included In The Syllabus Of B.Sc. Forestry Programme Of Kerala Agricultural University, India**

By Animon. M.M, Assistant Professor, College of Forestry, Kerala, India-680 656

### Back Ground

Protected Areas have figured prominently in biodiversity conservation in the human dominated landscape of the tropics. Protected Areas are at the forefront of efforts to conserve biological diversity in India. Well-designed and managed Protected Areas can form the pinnacle of nation's efforts to protect biological diversity and also provide opportunities for recreation and tourism.

The Fourth World Congress on National Parks and Protected Areas in 1992 recognized that the Protected Areas can not exist unless the interest of local communities are protected (McNeely, 1993). The approach of 'guards and gun' is slowly changing to 'care and share'. There are successful stories from Periyar Tiger Reserve in Kerala where the illegal collectors of *Cinnamomum* bark turned into true protectors of forests when involved in ecotourism. Forest Protection Committee of tribes of Vazhachal Forest Division helped to reduce pollution created by tourists, at the same time enhanced the annual income by 8.46 lakhs rupees while generating 1090 man-days of work (KFWD, 2002). There is a dire necessity for similar models, which decentralize conservation roles and responsibilities. Social security, diversity and stability are foundations for sustainable conservation and management of natural resources, and they rely on increased social equity among all stakeholders as envisaged in the Social Policy Programme of the IUCN.

Ecotourism means responsible travel to natural areas, which conserves the environment and improves the welfare of local people. It is not simply disposition but is destination management. Scientific studies are *sine qua non* for planning ecotourism in Protected Areas as done in Thenmala ecotourism project in south Kerala by Sankar (1999), which can be a model for other destination development programmes. In Protected Areas, hardships of indigenous communities can be mitigated by developing forests as recreation spots. This will provide monetary returns to the public exchequer, while protecting bio diverse patches with the support of the local community. Thus the new paradigm elevates cultural and social elements of environment and under this rationale, role of local people in the design of Protected Area is a prerequisite. This is because the Government owns more than 95 percent of forest in India where people do not have many rights. Policing seems to be a failure in several instances. The rules and regulations pertaining to forests and wildlife always alienated people and private sector from using such resources suitably.

The main motivation behind ecotourism development is the employment of tourism receipts for protection of resources, which represent as a magnet for tourists and also to provide income by which Conservation International can finance 'debt for nature swaps'. More over, it may justify the USE IT OR LOSE IT policy as envisaged by the IUCN. It shall also be remembered that tourism is the world's largest industry employing 127 million people worldwide and expected to double by the year 2005 (WTTC, 1992). As a developing and resource rich state in India, Kerala cannot keep away from the picture of ecotourism. More over national policy of tourism stipulates that tourism should become a unifying force nationally and internationally, fostering better understanding through travel.

### Relevance of Ecotourism for India and Kerala

Currently, India has 88 National Parks and 490 Wildlife Sanctuaries. Update of the Rodgers and Panwar (1990) report by Rodgers *et al.* (2000) suggested that the Protected Area Network of India be enhanced to 160 National Parks and 698 Wildlife Sanctuaries accounting for 5.69 % of the country's geographical total. But how far expansion of Protected Areas may affect the economy of the state and make negative impact on the livelihoods of the indigenous people has to be studied in detail. It shall be remembered that the country is the home to around 1,027 million people constituting 16.7 % of the world's population in just 2.4 % of the world surface area (GOI, 2002). Major chunk of the population is contained in rural areas and is below poverty line. Hence how far conservation efforts will be successful in the long run with out generating income from Protected Areas and how best we will be able to justify such an extent of reserves in a highly populated country like India are the real concerns.

The picturesque state of Kerala forming part of the Western Ghats, contains a strictly Protected Area of 2324 km<sup>2</sup> in two National Parks and 12 Wildlife Sanctuaries. (Covers 6% of the total geographical area of the state compared to 5% national standard). About 26.6 % of the total geographic area of the state is under forest(compared to 19.4% for India). Ecotourism is a sustainable management option for all

Protected Areas in Kerala. In spite of all this, as of now, there are major lacunae in information pertaining to Western Ghats monsoon forests in Kerala (which is identified as a Hot Spot of Biodiversity) as a popular destination of ecotourism. World Conservation Monitoring Center's Threatened Plants Unit (TPU) catalogued 150 botanical sites as the world's centres of plant diversity (IUCN, 1987). Of the five locations issued for India, the Agasthyamalai Hills, Silent Valley and Periyar National Park are from Kerala. In tourist's parlance, Kerala is often described as the "God's Own Country" and experiences high influx of tourists every year. The tourism inflow to Kerala was 50 lakhs during 1997, which was 13% more than the previous year. The tourism traffic to Kerala shows an increasing trend over past few years (GOK, 1999). In the year 2001, 2.09 lakhs of domestic tourists and 50 lakhs of domestic tourists visited Kerala. The annual revenue from tourism industry in Kerala is roughly around 4000 crores at present (Thomas, 2002). The Government plans to increase earning from tourism by 10 percent and create at least 10,000 new employment every year. This will be a boon for a state like Kerala where 67.7% of the population face problem of unemployment whereas literacy rate is about 90%. It is also proposed to increase the population of domestic and foreign tourists by 10 percent and seven percent respectively.

A major part of tourists paying visit to Kerala are visiting the Protected Areas. In Periyar Tiger Reserve alone, more than 2,38,047 tourists visited in 1991-92, of which foreign tourists accounted for 8.4 % (Manoharan, 1996). Similar high influx of tourists is observed in Vazhachal forests also (Animon *et al.* 1997). But still, the available data is alarmingly inadequate to provide a lucid picture of the ecotourism potential of Protected Areas in Kerala. Due to lack of publicity and proper planning, most of our Protected Areas, which would have become ecotourism destinations are unnoticed and ignored by the domestic and international tourists. Hence initiatives to develop ecotourism in Protected Areas are the need of the hour. Simultaneously, we may also think of developing some criteria and indicators of ecotourism and a protocol for its monitoring. Environmental Impact Assessment and Carrying Capacity studies are a must for the success of ecotourism. In Sabarimala, forming part of the Periyar Tiger Reserve in Kerala, pilgrimage tourism has exceeded the carrying capacity and has affected detrimentally the species composition and structure of flora and distribution of fauna (Animon, 2001). Traces of plastics deposited by the pilgrims were commonly detected in the droppings of wildlife (Animon, 2002). The negative impacts of unscientifically planned ecotourism on wildlife and their distribution pattern in Vazhachal Forest Division was reported by Animon (1996).

The short-term financial gains outweigh the long-term benefits of conservation. Economic justification is warranted to convince policy makers about economic viability of Protected Areas for making unbiased decisions with respect to developmental projects. Preliminary studies in this aspect have been initiated in Periyar Tiger Reserve (Manoharan, 1996). George (2000) estimated the ecotourism value of Peechi-Vazhani Wildlife Sanctuary. Several concepts like green accounting and international pricing are emerging in the field of ecological economics, which may be applied in our Protected Areas also.

#### Need of the hour

It is needed to perform zonation in Protected Areas in Kerala for better planning and implementation of different components of ecotourism. Site-specific action plan may be formulated for ecotourism development and thereby enable pumping of "tourism dollars" to alleviate chronic problems like under budgeting and understaffing of Protected Areas. Reliable estimates of carrying capacity shall be worked out and Environment Impact Assessment may be done in all the Protected Areas so as to avoid the ill effects of tourism. Also, total economic valuation of Protected Areas may be attempted in order to justify conservation and to avoid biased decisions with respect to development and to prioritize conservation strategies based on importance. It is also a prerequisite to develop monitoring mechanisms as well as criteria and indicators for sustainable use of Protected Areas through ecotourism.

Hence ecotourism has to develop as an academic subject and enough trained manpower in the field is indispensable for development of ecotourism industry in Kerala.

#### Why ecotourism be included in the syllabus of B.Sc.Forestry and M.Sc.Forestry

The B.Sc. Forestry graduates of Kerala Agricultural University are directly recruited as Forest Range Officers in the State Forest Department. They are also getting selected to the Indian Forest Service after a test. Since the major chunk of Forests (more than 95%) is owned by the Government and managed by B.Sc. Forestry graduates, it is very essential to train them so as to tap the benefits of ecotourism.

The employment opportunities of B.Sc. Forestry graduates are getting narrowed because of reduction of posts in public sector. Absence of investments in forestry sector by private entrepreneurs aggravates the situation. The private sector can be involved in biodiversity projects as the development of

forest areas for tourism or in the setting up of nature parks and interpretation centres or in bio-prospecting agreements which may create employment chances for people. However, the current policies of the Government do not encourage investments by private entrepreneurs in forestry. In spite of this, the recently held Global Investor's meet called for proper development of ecotourism in Kerala for which potential investors readily agreed. If private investments are sought for developing ecotourism in Protected Areas, the job opportunities of B.Sc. Forestry graduates will get widened. In order to meet the demand of trained manpower for the private sector, there shall be B.Sc. Forestry graduates with thorough knowledge of ecotourism. Also they will have a leading role in marketing ecotourism.

Current National Forest Policy (1988) emphasizes the right of local people living in and around forests. For creating a win-win situation for forest managers and forest dependent rural folk, ecotourism is a good alternative option. It may help managing our forests sustainably whereas providing direct economic benefits to the local people. Through such practices the local people can become partners in conservation of resources. The graduates of College of Forestry who turn as middle level forest managers has to fully utilize the potential of ecotourism for sustainable forest management and hence they shall be properly trained in the right track to meet the goals of ecotourism. They will be able to organize training programmes to prepare the local people for taking up various vocations relating to ecotourism.

The only option for using Indian wildlife as per existing Indian wildlife protection act is through ecotourism. At present, there is no institutionalized system or channel through which public can see the forest. The quick visit to a Sanctuary can not be called as ecotourism, but can be termed as mass tourism. So a more focussed strategy is needed which is supply-driven and small group-oriented. Hence all wildlife managers has to be good ecotourism managers also so as to reap the benefits for betterment of the state. Hence the graduates of College of Forestry who are becoming wildlife managers has to be properly equipped with skills by which they can diversify the tourism products in order to facilitate fast growth of ecotourism.

The Protected Areas can act as centres to inculcate awareness among public about wildlife conservation. There shall be provision for learning process for a visitor in the ecotourism destination. Well-trained B.Sc. Forestry graduates can act as good extension worker who can arouse interest for conservation among the public. Also they can help them to practice ecotourism codes.

The Alumni of College of Forestry also agreed to this view because they are currently facing the problem due to lack of knowledge of ecotourism and its options while implementing the ecotourism projects in their area of Jurisdiction. Hence it is highly needed to mould a young group of foresters with adequate background knowledge of ecotourism for meeting the challenges and potentials of ecotourism in the "Gods own country".

Ecotourism research is still in its infancy stage in Kerala. A core team of M.Sc. Forestry Graduates trained in ecotourism may devise management strategies and site specific action plan for ecotourism in all Protected Areas in Kerala through which financial benefits can be accrued for running parks and indigenous communities are benefited, while conserving our biodiversity. Several M.Sc. Forestry students of College of Forestry have started doing research in this line. This may help in formulating strategies for eco-development aiding long-term conservation. This will help to develop all the Protected Areas as ecotourism destinations with properly planned design.

It is essential to develop an ecotourism network in the Western Ghats and B.Sc. and M.Sc. Forestry graduates of the Kerala Agricultural University can take a prominent role in this regard so as to evolve a culture of ecotourism in the Western Ghats, which may pave way for the development of the country by generating income and employment.

Employment of forests for recreation has not been an important feature of forest management in India. If wide range of resource and visitor management techniques, ecotourism concepts and tools are developed, it may result in development of Kerala as an "ecotourism hub" where the B.Sc. and M.Sc. Forestry graduates will have a leading role to play.

## References

- Animon, M.M.1996. Habitat utilization of animals and their parasitic burden with special reference to elephants in Vazhachal Forest Division, Kerala, India. *M.Sc. Forestry Thesis*. College of Forestry, Kerala, India: 101-103.
- Animon, M.M., Jacob, V.Cheeran and Rajesh, K. 1997. Ecotourism as a sustainable way for conservation of natural resources-Experiences from Vazhachal Forest Division. *Abst. Proc. National Symp. Nat. Resource Manage.* Trichy: 76.
- Animon, M.M. 2001. Comparison of savanna grasslands and similar habitats converted with *Eucalyptus* in Periyar Tiger Reserve, *Research Report*, Kerala Forest Department, Thekkady. P. 50.
- Animon, M.M. 2002. Phytosociological studies of Poongavanam area of Periyar Tiger Reserve, *Research Report*, Kerala Forest Department, Thekkady. P. 80.
- George, B. 2000. Ecotourism value of Peechi-Vazhani Wildlife Sanctuary, *B.Sc. Forestry Project Report*, College of Forestry, Kerala Agricultural University, Thrissur.p.33
- GOI. 2002. *India, 2002*. Ministry of Information and Broadcasting, Government of India, New Delhi. P.853.
- GOK. 1999. *Ecotourism in Kerala*. Department of Public Relations, Government of Kerala. P.87.
- IUCN, 1987. *Centres of Plant Diversity: A Guide and Strategy for their Conservation* (An outline of a book being prepared by the Joint IUCN-WWF Plants Conservation Programme and IUCN Threatened Plants Unit).
- KFWD. 2002. *Kerala Forest and Wildlife Newsletter* June 2002. Kerala Forest Department, Kerala, India.p.4.
- Kunhi. K.V.M. and Sankar, S.2002. Environmental Impact of pilgrimage in Agasthyamala region. *KFRI Research Report No.211*. KFRI, Peechi.
- Manoharan, T.R. 1996. Economics of Protected areas- a case study of Periyar Tiger Reserve. *Ph.D.Thesis*, Forest Research Institute, Dehradun. P.115.
- McNeely, J.A.1993. *Parks for Life*. Report of the fourth world congress on National Parks and Protected Areas, IUCN, Gland, Switzerland.
- McNeely, J. A. 1988. *Economics and Biological Diversity: Developing and Using Economic Incentives to Conserve Biological Resources*, IUCN, Gland, Switzerland.
- Pearce, D. and Moran, D. 1994. *The Economic Value of Biodiversity*, IUCN, Gland, Switzerland.
- Prabhu, R., Colfer, C.J.P. and Dudley, R.G.1999. *Guidelines for developing, testing and selecting criteria and indicators for sustainable forest management*. The Criteria and Indicators Toolbox Series No.1. CIFOR, Bogor, Indonesia.
- Rodgers, W.A. and Panwar, H, S. 1990. *Planning a Wildlife Protected Area Network in India, Vol.1& 2*, Wildlife Institute of India, Dehradun.
- Rodgers, W.A., Panwar, H, S. and Mathur, V.B.2000.*Wildlife Protected Area Network in India: A Review (Executive Summary)*. Wildlife Institute of India, Dehra Dun. 44 pp.
- Sankar, S.1999. Environmental Impact Assessment of Thenmala ecotourism development project. *KFRI Consultancy Report*. KFRI,Peechi. P. 202.
- Shelby, B., and Heberlein, T.A.1986. *Carrying capacity in recreation settings*. Oregon State University Press, Corvallis, Oregon.
- Thomas, K.V. 2002. Kerala Tourism- Noothana Saraniyilekku. *Janapatham*.October, 2002. Department of Public Relations, Government of Kerala: 4-5
- WTTC. 1992. *The World Travel and Tourism Council Report: Travel and Tourism in the world economy*, Brussels, Belgium.