A Case Study: Conservation Strategies Of Biodiversity In Konkan Region Of Coastal Maharashtra, India

Balwant Kumar
Department of Botany, DSB Campus,
Kumaun University Nainital (India)
E Mail: drbalwantkumararya@gmail.com

ABSTRACT: The present article is based on the training cum workshop organized by Applied Environmental Research Foundation (AERF), Pune, India, based on field survey in March 2008. In the workshop some strategies for conservation of biodiversity has been developed in Konkan region of coastal Maharashtra, India and were assessed. [New York Science Journal. 2009;2(4):31-32]. (ISSN: 1554-0200).

Keywords: Konkan valley, conservation, sacred groves, Maharashtra

INTRODUCTION

The word conservation strategy (IUCN, UNEP and WWF, 1980) defines conservation as "the management of human use of the biodiversity so that it may yield the greatest sustainable benefit to present generation while maintaining its potential to meet the needs and aspirations of future generations". India is well known for its plants diversity and has the second largest tribal population in the world after Africa (Jagtap, et al 2009). In addition the Trans Himalayan, Indian Desert, Semi-arid, Western Ghats, Deccan peninsula including Eastern Ghats, Gangetic plains, Northeast India, Coasts and Islands are the different biogeographic zones. Kharkwal (2008) reported that the floristic spectrum of India comprises of over 30,000 species (excluding fungi) of which the flowering plants with about 17,500 species constitute the dominant group representing about 7% of the flowering plant species of the world. However, 140 genera and 5285 species are endemic to the county. The tribals have good traditional knowledge about the conservation of natural resources. This knowledge is transmitted exclusively through oral communication from one generation to next using a scriptless language. The valuable knowledge is therefore, in an unwritten form and requires urgent measures of conservation. The main aim of the present case study was to evaluate some less known conservation efforts of plants by the tribals and to encourage preservation of their culture, conservation and sustainable utilization of the plant wealth of Konkan valley, Sadawali district Ratnagiri of Maharashtra, India. The aim of the study was also to prepare efficient management for conservation and development of bio resources and also for capacity building.

Sacred groves are the forest patches traditionally protected by local communities in the name of a local deity. The fragments of forest now form important repositories of regional biodiversity and have been known to retain viable population of rare and endangered plants. The field survey brought out many different clues for the development of sacred groves to conserve biodiversity of the area.

MATERIALS AND METHODS

Maharashtra is a central western part of India, located in the south of Madhya Pradesh. More than 25 participants attended the training workshop, organized by Applied Environmental Research Foundation (AERF), Pune, at Sadawali village; district Ratnagiri of Maharashtra, India. During the workshop a field survey was conducted and a long discussion provided by the participants and local villagers on various conservation strategies of local biodiversity has been documented. Two sacred groves (Devvani and Ujgawn) of the western Ghat region were visited during the survey. Devvani sacred grove is situated at 185m altitude (a.m.s.l.), there is a village temple of local God called Devvani (meaning Dev= Devta/God and Vani = Van/Jangal/Forest); forest of Gods. Ujgawn sacred grove is situated at 200m altitude (a.m.s.l.) there is also a temple of Devvani.

Distinguished coloured posters with detailed information about the temple and forest are provided by AERF on walls of these temples for the conservation of the sacred groves. In the backside of the Ujgawn temple, AERF team along with local villagers has developed a large plantation patch of different medicinal plants. The plantation patch is protected and surrounded by a wall. The boundary wall has been

prepared by the villagers of Ujgawn for the protection of the plantation patch. All the plants of this patch are very useful and they will certainly be helpful in improving livelihood of the villagers.

RESULTS AND DISCUSSION

In the recent years the awareness regarding conservation of flora and fauna among the local community and in peoples residing in the forest has helped in a large extend in protecting the forest of this area. The tendency of the people have changed as they conduct sacred groves conservation programme in Northern Western Ghats, i.e. eco-restoration of sacred groves, revival of traditional forest conservation practices, conservation assessment of rare medicinal plants, the great hornbill- a flagship species for forest conservation instead of destroying forests for various uses.

Applied Environmental Research Foundation (AERF), Pune, India is a non-profit organization registered under the India societies act 1860, has been working for last 13 years for conservation of natural resources and development of local community in Nothern Western Ghats. AERF publishes a Marathi annual issue named 'Sakav'. The word Sakav means a temporary bridge built on the rivulets, nallahs and rivers during the rainy season and it is a speciality of coastal Maharashtra. The material used for its construction is local *trees* and *climbers*. Building and repairing the Sakav is the most important community activity. There could not be any other appropriate metaphor for linking environment and development process in Konkan region of Maharashtra. AERF conducts programme regarding conservation of nature and flora in school and college together with local people.

AERF believes that conservation of biological resources is best achieved with the support of local communities. This in turn is possible when the community perceives an incentive for itself in the conservation effort. The approach of AERF, reflects this understanding i.e., when people are given alternative opportunities for income generation through non-timber forest products such as medicinal plants and have access to information and technical support, they have incentive to work towards long term conservation of biological diversity.

The conservation programme designed and implemented by AERF provides opportunity for income generation, for the local community, through decentralized bio-diesel resource centers for improving rural energy services and reduce poverty in India. AERF have promoted conservation of forest on private land, balancing conservation and livelihoods, capacity building for linking medicinal plants conservation and sustainable livelihoods in Western Himalayas, India. AERF has working on community resource center for medicinal plants conservation and development programme in Uttarakhand, and awareness for biodiversity act in Himanchal Pradesh. AERF is also promoting the plantation of the rare plant species of the forest to conserve their diversity as well as biomass in the area. All the activities of the AERF are the useful strategies for the conservation of the biodiversity and the development of the local community.

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