

Biodiversity for Sustainable Development and Livelihood Promotion by ITC Limited

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Introduction

Extreme weather swings triggered by climate change, devastating loss of biodiversity and life-giving ecological systems make the future more vulnerable especially for those mired in chronic poverty. The report by the Intergovernmental Panel on Climate Change (IPCC) has warned of an increased risk to security of food and drinking water due to the impact of global warming, drought, floods and erratic rainfall. India, Bangladesh and China, home to a large section of the world's population are said to be particularly at a higher risk. Therefore, growth strategies that nations and corporations employ must embrace a distinct effort to preserve and replenish precious environmental resources.

Nearly 700 million people living in rural India have a direct and symbiotic dependence on climate sensitive sectors (agriculture, forest, fisheries) and natural resources (water, bio-diversity, mangroves, coastal zones, grasslands) for their subsistence and livelihoods. Limited options of alternative off-farm employment combined with endemic poverty continue to imperil the livelihood security of millions of small and marginal farmers, mainly in the rain-fed agricultural regions

About ITC

ITC Limited is one of India's private sector companies with businesses in FMCG, Hotels, Paperboards & Specialty Papers, Packaging, Agri-Business, and Information Technology. The company's Agri-Business is one of the largest exporters of agricultural products. E-Choupal, an initiative by the company that has enhanced the competitiveness of Indian agriculture by empowering farmers through the internet. This

strategy has already become the subject matter of a case study at Harvard Business School.

Management Approach for Biodiversity

ITC recognises that the preservation and nurture of biodiversity is essential to ensure the long-term sustainability of not only farming communities but the agricultural sector itself. ITC has accordingly implemented several initiatives to address the issues of revival and nurture of native species of flora and fauna, thereby leading to large scale replenishment of natural resources and ensuring a sustainable future for the communities residing in the Company's catchment areas ITC approaches the whole initiative of Biodiversity as, 'Biodiversity conservation for Sustainable Development and livelihood promotion'

Bio-Diversity Conservation Promotion

This initiative is approached majorly through a two pronged approach

1. Biodiversity Risk and Opportunity Assessment and Planning
2. Promote biodiversity conservation in commons and private lands - aimed at asset creation and livelihood generation for the village communities

Biodiversity Risk and Opportunity Assessment and Planning

ITC's Agri Business Division has undertaken a detailed risk analysis of its impacts on biodiversity. It has spearheaded the implementation of the Biodiversity Risk and Opportunity Assessment (BROA) process across its entire operating region. For this purpose the Business has partnered with





Earth Watch Institute, UK, an international non-profit organisation specialising in Biodiversity Risk & Opportunity Study. The objective is to identify the impacts and dependencies of crop development on terrestrial, soil and aquatic biodiversity in agricultural landscapes; assess and prioritise the risks and opportunities arising from those impacts and dependencies; produce Action and Monitoring Plans for the business to address them. The agricultural landscape level approach would encompass not only farm sites and immediate area of production, but also the wider features that agricultural production depends upon. For this assessment, ITC has engaged with many internal and external stakeholders including farmers, local communities, Department of Agriculture, Forest Department, local Universities, NGOs and suppliers

Promote biodiversity conservation in commons and private lands

The maintenance and nourishment of common pasturelands assume critical significance for rural communities. Livestock is not only a means to a secondary income, but also a safety net, especially in times of hardship like drought or floods. In that respect pasturelands become a common property of villages. However changes in land use and the 'Tragedy of the Commons,' have put these pasturelands in constant threat of encroachment and degradation, thereby adversely affecting the communities' dependent on them. ITC has got into the restoration and conservation of the commons on the lines of biodiversity conservation by working with village institutions and by forging multi stakeholder partnerships with technical and Government bodies

ITC's Case of Bio-Diversity conservation in Bhilwara district, Rajasthan

Background : ITC had initiated a multi-stakeholder partnership with the Government of Rajasthan and Foundation for Ecological Security (FES) for restoration of degraded lands in Kalyanpura taluka of Bhilwara district through watershed development, with community ownership at the

centre stage. Through this unique partnership, an appropriate conservation and restoration strategy was developed for the area to sustain the long term viability of biodiversity; the integrity of ecosystems including production systems, ecological functions and the human communities that depend upon them. This initiative also gave special focus to the strengthening of village community based governance of ecosystem and water resources through rules, regulation and mechanisms evolved by community institutions at grassroots level.

Activities Implemented : In a 5 year period, 1.55 lakh CMT of in-situ soil moisture conservation works like cattle prevention trenches, continuous contour trenches and drainage line treatment were implemented covering over 4,200 ha to prevent soil erosion and improve the moisture regime of the soil. 77 water bodies were created which provided 7.3 Lakh CuM of water and irrigation potential for 878 ha, in addition to playing a vital role in groundwater recharge, drinking water for livestock and domestic use. Assisted natural regeneration was done in 17 pastures covering 1,141 ha. by planting 1.85 lakh native trees

17 pasture-land committees in 17 villages were formed for its development. These institutions formed rules and regulations for the protection of pasture-lands like removal of encroachments, protection against grazing, illicit felling, lopping, pollarding of trees and saplings, fire, and diseases. They also ensured that adequate watering of the plants was done during dry spells.

The committees imposed fines on offenders found guilty of destroying pasture in any manner. They also developed a Benefit Sharing arrangement of the fodder grown in the plots

Impact created :

- Increase in area of Tree outside Forest from 36 ha to 146 ha in Agricultural land & 206 ha to 460 ha in Open Forests
- Improvement in species richness and regeneration Canopy cover: 20-25%



Visual Impact : Pratapgarh



Biodiversity Plot in East Godavari dt., AP



Progress Till Date

Bio-diversity promotion	Progress till date	States Covered
No. of Plots	79	Rajasthan, Madhya Pradesh, Maharashtra, Andhra Pradesh, Telangana & Karnataka
Area Covered (No. of Hectares)	3,191	

- Species diversity index (Simpson's index) thus increased by 336%, from 1.00 to 4.36. Overall species dominance and frequency increased by 248% and 525% respectively, thereby, taking the Importance Value Index (IVI) to increase by 567%, from 89.90 to 600
- % increase of Organic carbon in regenerated

plots- 10-13%, Total organic matter added in to soil - 969.47 Tones and total carbon dioxide sequestered - 1454.2 Tones

- Among fauna: birds species doubled, from 40 to 86, including migratory birds. 13 butterfly species, 2 spiders species, 11 herpetofauna species, and 14 species of mammal were found





Pastures Developed in Bhilwara Distt., of Rajasthan

Similarly ITC has taken up programmes to conserve and improve biodiversity in its catchment areas elsewhere, which would not only revive and enhance native floral and faunal biodiversity, but also contribute to livelihood and employment generation. ITC has spearheaded this programme to develop biodiversity plots by motivating local communities to plant native tree species, implement soil and water conservation measures, and adopt livelihood and employment generation

activities through pisciculture, apiculture and other related activities. In the past few years, ITC has developed biodiversity plots involving farmers and community members in various states and this initiative has helped in conserving many floral and faunal species. Many species of birds have started nesting in the area, which has also become a breeding ground for reptiles, amphibians and butterflies. These biodiversity plots have also helped in improving ground water level and soil fertility thereby enhancing the livelihood generation opportunities of local communities

*The vast possibilities
of our great future will
become realities only
if we make ourselves
responsible for that
future.*

– Gifford Pinchot



Purple Sun Bird

