

IDENTIFICATION OF EXTENT OF FOREST LANDS IN FOREST FRINGE VILLAGES

Rainfed areas have less than 30 % irrigated land and receive up to 800 mm rainfall annually. Rainfed agriculture plays an important role in India's economy. Rainfed crops account for 48 % of the total area under food crops and 68 % area under non-food crops in the country. The crop-wise analysis shows that major coarse cereals are grown in rainfed areas. The crop production in rainfed areas is low and people are dependent on the forests and other common property resources for their livelihood. This is particularly true for forest fringe areas in India. This nationwide study covered 275 districts in 27 Indian States and 1 Union Territory.

OBJECTIVES

i) Fringe forest and forest fringe villages

Identification and mapping of the fringe forest; extent and distribution of forestlands in rainfed areas. number and names of forest fringe villages, forest types occurring in the study area, and areas supporting open and/or dense forests.

ii) Ecological status of the forest

Information on the vegetation forest communities, including community structure, species diversity, regeneration status, and identification of top three species using importance value index (IVI).

iii) Socio-economic status of forest fringe villages

MAJOR NATIONAL LEVEL FINDINGS OF THE PROJECT

The study' was completed with active support from 10 Indian Council of Forestry Research and Education (ICFRE) institutes, which have pan-India presence. **Total study area was divided in to north, south, east, west, central and north-east zones for the preparation of zonal reports.**

- Paddy, wheat, and tapioca among food crops and rubber among the plantation crops are dominant crop types in the study districts.
- Highest number of forest fringe households practice agriculture in Telangana, followed by Karnataka and Nagaland, while lowest is in Nagaland.
- Kerala has highest percentage of the skilled labourers population, while Andaman and Nicobar (A & N) islands has the least.

- The unemployed percentage of population in fringe area is highest in Uttar Pradesh (UP), followed by Himachal Pradesh (HP) and Arunachal Pradesh, while it is lowest in A & N islands.
- U.P. has highest number of fringe households with a monthly income range of < 30,000, followed by M.P., while Goa has the least.
- Goa has highest number of households with higher income ranges, while Kerala tops all study states with highest range of income, i.e. above 1,80,000.
- Generally, the average household size in fringe villages is higher than the state average and Bihar has the highest, while Andhra Pradesh (AP) has lowest.
- Kerala tops the states with highest monthly income of 21,087, while U.P. has the lowest of 3,253.
- Most favored livestock in the fringe villages is cow throughout India, while chickens and pigs are preferred in the north-east and goats in Rajasthan, Madhya Pradesh (MP), Jharkhand, and A &N Islands
- Maharashtra extracts highest percentage of fodder from the forests, followed by Bihar, and Manipur, while Kerala the lowest.
- The source of fuel wood and fodder for majority of the fringe villages is forest. Only exception is Karnataka, where most of the fodder comes from private pasture and Kerala, where it is from own land.
- Monthly fuel wood consumption is highest in, Nagaland villages and lowest in A & N. Islands.
- Highest amount of NWFPs are extracted in MP, followed by Odisha, and West Bengal, while lowest in Mizoram.
- The percentage of NWFPs sold for cash income is highest in Maharashtra, followed by MP and Bihar, while lowest in Meghalaya.
- The species regeneration is adequate in A & N, Meghalaya, and Karnataka fringe forests while it is inadequate in Arunachal Pradesh, Assam, Kerala, Mizoram, Punjab, Rajasthan, Tripura, UP, and West Bengal (WB).
- Generally, arid to semi-arid states have inadequate regeneration. Arunachal and Assam appear to be an exception.
- Regarding Shannon's Index of plant diversity, the highest index value of 4.5 was noticed in A & N Islands and Manipur, followed by Meghalaya (4.04) and Assam (3.98). Other states have lower diversity index values. Punjab has lowest (0.01).

RECOMANDTIONS

- **Resorting to modern day diversified agriculture, horticulture, floriculture, apiculture, organic farming, etc. are some of the viable options for raising the livelihood standards in the forest fringe villages.**
- **There is need to impart training to local people on skill development for enhancing their employability, which would help them get better jobs as alternate livelihood options. Joint forest management through effective involvement of the forest fringe communities should be given top priority. These measures are also expected to reduce the pressure on the forests.**