

# CHAPTER 1

# INTRODUCTION

## 1.1 BACKGROUND

Forests have a central role to play as the world confronts the challenges of climate change, food shortages, and diminishing livelihoods for a growing population. It is predicted that the world will need to shelter, feed, clothe, and provide livelihoods for another two billion people by 2050. This presents a staggering challenge, particularly given the estimate that by 2025, two-thirds of all nations will confront water supply stress affecting nearly 2.4 billion people. (World Bank report)

Forests are strongly linked to the maintenance of ecological balance, water conservation, biological diversity and environmental stability. For centuries, forests have served as a kind of natural safety net for communities during times of famine or other events that impact agricultural and food production; they provide fruits, leaves, gum, nuts, timber, and wood for fuel. Forests feed the many people that depend on them for sustenance and livelihood.

Many of the world's forests are under increasing threat because of human activities and related climate change. The world is losing about 14.5 million hectares of forests each year. Some 240 million people live in forested regions. In developing countries, forest-based activities provide jobs to about 30 million people in the informal sector. (Centre for international Forestry Research (CIFOR) report)

To reverse deforestation trends, a change in policies and laws, institutions, and incentives, in and beyond the forestry sector is required. This "landscape" approach embraces activities such as restoring degraded forest land, boosting agricultural productivity, realigning farm and forest incentives to protect forests from being converted into farmland, introducing assisted regeneration, and involving local communities more directly in the design and oversight of forest management.

If countries are able to pursue inclusive green growth strategies, the deforestation that has historically accompanied development could be slowed, making an important contribution to climate change mitigation. If the world is to confront the challenges of climate change while meeting the demands of a rapidly-growing global population, it is vital that a balance is found between conserving and regenerating forest areas with simultaneous local economic growth for poverty reduction. (World Bank report)

Widespread changes in forest governance are occurring that favour strengthened local rights over forest resources and more secure land tenure. These have the potential to improve access, sustainable resource use and management, and intensification of production. (CIFOR)

## 1.2 FORESTS AND LIVELIHOODS IN INDIA

India's current forest and tree cover is estimated to be 78.29 million ha, constituting 23.81% of the geographical area of the country. As per the India State of the Forest Report (ISFR)

2011, forest cover has declined by 367 sq. km compared to the forest cover in the preceding ISFR in 2009. In the forested landscapes of India, the livelihoods of the people, especially the indigenous communities, living close to forest and within the forests are inextricably linked to the forest ecosystem. People depend on the forest for a variety of forest products for food, fodder, agriculture, housing, and an array of marketable minor forest products which can potentially degrade forests, if harvested unsustainably. People living in these forest fringe villages depend upon forest for a variety of goods and services. These includes collection of edible fruits, flowers, tubers, roots and leaves for food and medicines; firewood for cooking (some also for sale in the market); materials for agricultural implements, house construction and fencing; fodder (grass and leaf) for livestock and grazing of livestock in forest; and collection of a range of marketable non-timber forest products. Thus, this increasing degradation of forest is hampering the basic human right to life and livelihood of the local communities, especially the indigenous community whose life is closely linked with the resources and environment amidst which they live.

(Livelihood of local communities and forest degradation in India: issues for REDD, A Policy Brief by Bhibhu Prasad Nayak, Priyanka Kohli, and Dr J V Sharma, TERI undated)

The World Bank has also emphasized the benefits from integrating different farming approaches – including crop production, livestock, and tree farming – into one area, to diversify livelihoods, increase resilience to economic and climate shocks, and capitalize on natural synergies.

### 1.3 JOINT FOREST MANAGEMENT

To attain this objective, Joint Forest Management (JFM) was started in India for partnerships in forest movement involving both the state forest departments and local communities. The policies and objectives of Joint Forest Movement are detailed in the Indian comprehensive National Forest Policy of 1988 and the Joint Forest Movement Guidelines of 1990 of the Government of India.

Joint Forest Management (JFM) programme in the present form can be traced to the Arabari experiment initiated by foresters in the state of West Bengal. This experiment provided a strong feedback for incorporation of the system in the National Forest Policy of 1988. In many locations people's voluntary groups were engaged in protection of forests without any initiative from the Government. Subsequently, based on the experience, the process of institutionalizing people's participation in forest protection and regeneration began. This type of collective endeavour in protection and management of forests through people's involvement was became increasingly popular and other countries too adopted this method for forest conservation.

Although schemes vary from state to state and are known by different names in different Indian languages, usually a village committee known as the Forest Protection Committee (FPC) and the Forest Department enter into a JFM agreement. Villagers agree to assist in the safeguarding of forest resources through protection from fire, grazing, and illegal

harvesting in exchange for which they receive non-timber forest products and a share of the revenue from the sale of timber products.

Forest preservation and Poverty are interlinked, poverty is a cause of degradation of forests and degradation of forests causes poverty. Since independence the Government of India is intervening constantly for eradication of poverty through its various departments and schemes.

The State Development plans also points out the importance of poverty alleviation and assistance to the poor including the Scheduled castes and tribes through suitable utilization of forest resources such as land, water and forest biomass.

Even though the JFM programme has been under implementation for about two decades by various state governments, the process of degradation of natural resources continues unabated. The benefits achieved so far do not appear to be commensurate with the efforts made and the resources utilised for the purpose.

#### 1.4 TRIPURA

Tripura is a small state in the North Eastern part of the country. The third-smallest state in India, it covers an area of 10,491 square kilometres. It has an international border with Bangladesh to the north, south and west, and the states of Assam and Mizoram to the east. This region is characterised by remoteness, poor connectivity and infrastructure, almost non-existence of industry, and under-development of the economy.

However, the region has a high forest cover (6294.3 sq km) and rich biodiversity with a high annual rainfall (2241 mm). Tripura has a population of 36.71 Lakh (2011 Census) with a rural population of 27.1 Lakh (73.8 %). A sizeable portion of the population resides in and around the forest areas and has little or no means of livelihood.



Figure 1.1 MAP OF TRIPURA SHOWING ITS GEOGRAPHICAL ISLATION

These forest fringe dwellers living in and around the forest areas are essentially poor people who mainly use the forest produce for their livelihood. Deterioration of forest occurs due to over harvesting and shifting cultivation activities. As a result soil erosion and reduction in water retaining capacity occurs. Even bio diversity is threatened. Unsustainable use of the forest causes its further depletion and a cycle of further poverty results for the forest fringe dwellers.

The Joint Forest Management (JFM) Programme was initiated in Tripura in December 1991, and since then there has been reasonable progress in involving the people living around the forests in protecting and improving them, and in improving their share of the benefits therefrom.

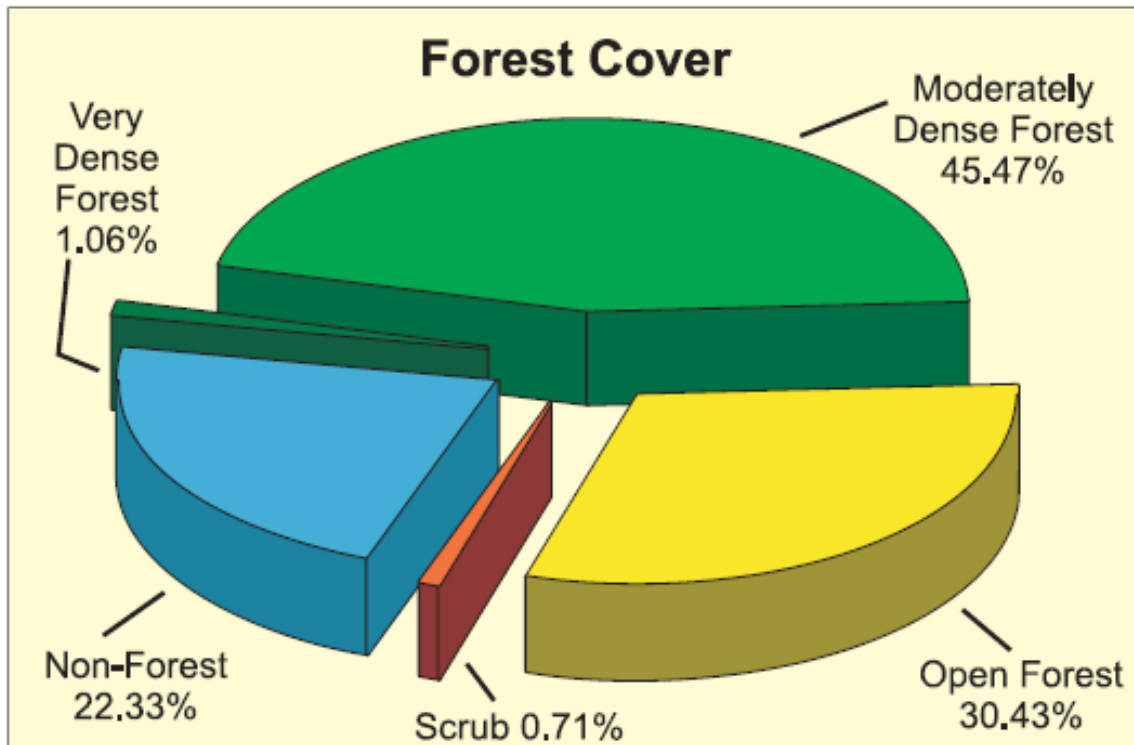


Figure 1.2 FOREST COVER: TRIPURA FOREST DEPARTMENT

Recently, the state, in an effort to ensure the preservation of the rich natural resource base on one hand, and wean the local population away from illicit tree felling on the other hand, has taken up initiatives for poverty alleviation through the Tripura JICA project entitled “Tripura Forest Environmental Improvement and Poverty Alleviation Project”. The strategy adopted is mainly through capacity development of the forest fringe dwellers, for income generation activities, utilising the locally available rich natural resources such as Bamboo and other Non Timber Forest Produce. The project has outlined certain activities like sustainable fishery, piggery, mushroom farming, making of bamboo handicrafts, making of incense (agarbatti) sticks, brooms etc. by the local people using the locally available material. The project also aims at value addition of the produce and marketing of the products.

## 1.5 INTRODUCTION TO JICA

The Japan International Cooperation Agency (JICA) was earlier called the JBIC (Japan Bank for International Cooperation). When the project was conceptualised, it was an agreement between the Government of Tripura and the then JBIC. Subsequently when the JBIC dropped the tag of Bank and became JICA, the project came to be known as the Tripura JICA project.

The current President of JICA, Shri Shinichi Kitaoka has stated that Japan, largely depends upon its relationships with the rest of the world. It is a matter of national interest for them that the world be peaceful, stable and prosperous. If Japan can put its experience and expertise to work for world poverty reduction and economic growth, its presence will grow. JICA thinks it is important to promote international cooperation that contributes to Japan's own growth

and development by implementing development cooperation that encompasses various actors, including the Japanese government, local governments, private companies, civil society, universities and research institutes. Recognizing this, JICA will work to strengthen the strategic aspect and comprehensiveness of its cooperation. Specifically, they will strive to develop the following themes based on the 2015 Development Cooperation Charter:

- 1) quality growth and mitigating disparities,
- 2) promoting peace-building and the sharing of universal values,
- 3) strengthening operational engagement on global issues and the international aid agenda,
- 4) expanding and deepening strategic partnerships, and
- 5) supporting an active role for women and their empowerment in developing countries.

The stated Vision of JICA is that of Inclusive as well as Dynamic Development, wherein “Inclusive” is defined as an approach to development that encourages all people to recognize the development issues they themselves face, participate in addressing them, and enjoy the fruits of such endeavours. "Dynamic development" refers to the creation of self-reinforcing virtuous cycles of mid- to long-term economic growth and poverty reduction in a constantly changing environment of developing countries where a variety of issues arise simultaneously and get entangled each other. JICA will strive to provide creative, highly effective support toward this end

The stated missions of the JICA are addressing the global agenda, Reducing poverty through equitable growth, Improving governance and Achieving human security

The Strategies include Integrated and seamless assistance, Promoting development partnerships and Enhancing research and knowledge-sharing.

The Tripura JICA project is one such project to achieve these goals. The aims and objectives of the project include restoration of degraded forests and to provide sustainable livelihoods to the forest dependent communities through Joint Forest Management Committees. The Project aims at the double pronged strategy of restoration of forests and alleviation of poverty. The Tripura JICA Project is a registered society under the name of "Tripura Forest Environment Improvement and Poverty Alleviation Society".

## 1.6 STATEMENT OF THE PROBLEM

The State of Tripura is more of hills and forests and less of plains. Moist deciduous tropical forests, thick patches of ever green forests and substantial growths of bamboo groves form a greater part (60 percent) of the State of Tripura. The rich forest resources are under threat of degradation and decimation due to natural causes like forest fires, and man-made causes like population explosion, methods of cultivation used and plundering of resources by smuggling

etc. Further, there is a large gap between potential and actual productivity of forest resources in the State.

The fast depleting forest resources have necessitated an effective Joint Forest Management technique which would facilitate in sustaining the forest resource base against the growing population pressures of both human and livestock. Appreciating the need of Joint Forest Management, the Forest Department, Govt. of Tripura, has entered into an agreement with 'Japan International Cooperation Agency (JICA)' earlier (JBIC) for sustainable management of the forest wealth of the State through improvement of the density and quality of the forest cover of the State. The objective of the project is to restore degraded forests and improve the livelihood aspects of villagers, including tribal families engaged in traditional shifting cultivation and promoting sustainable forest managements through JFM, thereby improving environment and alleviating poverty. The project is for a period of 10 years and is currently in its last year.

### 1.7 OBJECTIVE OF THE STUDY

Forest degradation and Poverty are interlinked, poverty is a cause of degradation of forests and degradation of forests causes poverty. Since independence the Government of India is intervening for eradication of poverty with its various departments and schemes. Though the schemes are aimed towards the same goal, there is no clear cut policy provided by the Central and State Governments on convergence of the schemes.

The state government of Tripura, in an effort to ensure the preservation of the rich natural resource base on one hand, and wean the local population away from illicit tree felling on the other hand, has taken up initiatives for poverty alleviation through the Tripura JICA project titled "Tripura Forest Environmental Improvement and Poverty Alleviation Project". The strategy adopted is mainly through capacity development of the forest fringe dwellers, for income generation activities, utilising the locally available rich natural resources such as Bamboo and other Non Timber Forest Produce.

The Japan International Cooperation Agency, (JICA), earlier called the Japan Bank for International Cooperation (JBIC) in its mission statement has espoused the cause of poverty reduction globally through equitable growth. It states that impoverished people in developing countries are particularly susceptible to the effects of economic crisis, conflict, and disaster and are constantly exposed to the risk of even deeper poverty. Moreover, growing wealth gaps are a destabilizing factor in societies. Helping people to escape poverty and lead healthy, civilized lives is a vital task not only for the growth of developing countries but also for the stability of the international community. To reduce poverty, employment opportunities must be expanded through equitable growth that gives proper consideration to impoverished members of society, and public services like education and healthcare must be enhanced. JICA will provide support for human resources development, capacity building, policy and institutional improvements, and provision of social and economic infrastructure, thereby pursuing sustained poverty reduction through equitable growth.

The Japan International Cooperation Agency is providing financial assistance for a livelihood program for forest fringe dwellers which aims to restore the degraded forests and improve the livelihood conditions of villagers including tribal families engaged in traditional shifting cultivation. It also aims to promote sustainable forest management through Joint Forest Management (JFM) thereby improving environment and alleviating poverty. The project known as Tripura Forest Environmental Improvement and Poverty Alleviation Project (TFIPAP) is designed to promote interventions to directly address the issue of poverty prevailing under forest dependence.

The major economic benefits envisaged and mentioned in the project documents are:

- a) Promotion of Non Timber Forest Produce (NTFP) as a means of livelihood for the masses on a sustainable basis and to develop bamboo and cane based entrepreneurship including assisting in marketing of products.
- b) Augmentation of improved farming practices for cultivation and management of bamboo, cane and medicinal plants and value addition for poor forest fringe dwellers.
- c) Capacity building of forest fringe dwellers for harnessing the rich bio diversity of the region.
- d) Production of fodder, grass and fuelwood.
- e) Prevention of soil erosion as a result of increased vegetative cover by plantation and soil moisture conservation structures.
- d) Carbon dioxide sequestration by afforestation.
- e) Income generating activities like pisciculture, piggery, horticulture, integrated farming, vermiculture, duckery, incense stick making, edible bamboo shoot processing, bamboo mat weaving etc

Apart from economic benefits some other tangible benefits are expected like improved forest cover, water conservation in forest soil, protection of endangered/threatened species of animals, biodiversity conservation and forest rehabilitation activities.

The project is based on creation of Self Help Groups (SHGs) through the Joint Forest Management and the project imperatives are development of livelihood assets, enhancing access to services and enterprise promotion. Project also fosters activities for livelihood enhancement not only by forming new SHGs but also reviving of existing SHGs in the project area, building their capacities, grading them and involving them in income generating activities by dovetailing funds from other Government schemes as well. The aim has also been to implement scientifically designed agro forestry models in Recognition of Forest Rights (RFR) land.

The current study would assess independently the impact of the programme on the augmentation of income of the forest dwellers. The purpose of the study is to examine the impact of the Tripura JICA Project, in augmenting the income of the forest fringe dwellers, through the livelihood generation activities promoted by the project.



The study will also analyse the sustainability of the institutional mechanisms established by the project at the field level in one district.

## 1.8 RESEARCH DESIGN

The research design is exploratory. The methodology would be mixed i.e both qualitative as well as quantitative methods would be applied. The data sources would be both, collection of primary data as well as extensive use of secondary data. The Secondary data will include the Tripura JICA project documents, baseline study, and progress reports of the project.

The project is essentially managed by the Forest Department of Govt. of Tripura. The existing Joint Forest Management (JFM) and the Self Help Groups (SHG) under the JFMs are being utilised for implementation of the project. Some new JFMs have also been formed. The work is monitored by the forest officials and there are periodical progress report prepared in the field. It is proposed to analyse and collate these reports for evaluating the impact and effectiveness of the project.

Primary data will be collected through:-

- (a) Administration of a structured questionnaire to JFM presidents, SHG members and forest fringe dwellers (Sample size-50 in each village)
- (b) Focus Group discussions and semi structured interviews with other stakeholders including the CEO of Tripura JICA project and the concerned officials in JICA Delhi office.

## 1.9 RESEARCH QUESTIONS

The study will attempt to address the following questions:

What are the traditional livelihoods of forest fringe dwellers of Tripura?

What are the alternate livelihood generation opportunities promoted by the JICA project.

Has the implementation of this project affected the traditional livelihood activities of the forest fringe dwellers and resulted in augmentation of their income.

What are the institutional mechanisms established by the Tripura JICA Project that would lead to sustainability of this project.

## 1.10 SCOPE AND DELIMITATIONS

As mentioned in the project information document, the project is covering about 40 Forest Ranges (Range Management Units) in seven districts of Tripura. These are located in 8 Forest Divisions or DMUs (Divisional Management Units). These are spread over 35 Blocks and the project is targeting 456 villages/ hamlets.

The present study will however be conducted in only 2 selected villages of Sepahijala district of Tripura. Also within these villages, a sample size of only 50 villagers will be taken for administering a structured questionnaire. This delimitation is due to time and resource constraints.

#### 1.11 CHAPTERISATION SCHEME

In Chapter 1 , the topic will be introduced giving the background of the subject, relationship between poverty and forest degradation, brief about the Joint Forest Management practices, formation of Self Help Groups and their role in implementation and convergence of various schemes and programmes will be discussed. The Statement of the Problem, Purpose or Objectives of the study, Research Design, Rationale for the study, Research Questions and Scope /Limitations/ Delimitations of the study would also be given.

In Chapter 2, review of existing literature on the broad area would be done. Journal articles on related topics would be reviewed and their findings discussed. The articles would be selected so that various aspects of the study, be it forest management or poverty alleviation or livelihoods generation are covered. The national as well as international perspective on the area would be covered. For each article, the Research gap would be identified so that the focus of the current study becomes sharp.

In Chapter 3, an analysis of the project under study will be done. The baseline study and other secondary data will be examined.

In Chapter 4, the research findings will be discussed. The assessment of the institutions established for the project based on the findings of the research will be done. The research questions will be answered and the impact of the project on the augmentation of the income of the forest fringe dwellers will be assessed.

In Chapter 5, recommendations and suggestions based on the research findings will be given