CHAPTER - I

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‘TREE IS LIFE; man appeared in the world as a part of the nature system’, his symbiotic relationship with forests and forest products exists since the creation of Adam and Eve with the Garden of Eden. Forests constitute a significant component of the natural capital of an economy. The forest products are classified into two broad categories namely, timber and non-timber forest products (NTFPs). In India where there has been massive deforestation over the last 150 years, approximately 50 million people depend on forests for their existence (Bawa, 1992). India has varied climatic conditions with rich biodiversity. It is reported about 3,000 plant species of economic importance yielding products that provide food, clothing, shelter, medicines and others for the well being of communities living in and around forests and beyond (Shiva, 1993).

The term NTFPs refers to a broad spectrum of biomass related products, food, fibre, fodder, gums and resins, medicinal plants, structural materials and a range of other items of sustenance and economic value. These products may come from the leaf, flower, fruit, seed, twig, pod, stem, root tuber and bark of plants (Campbell, 1993). They are truly the people’s products and their use and trade form integral components of the local economies and cultures.
Man's dependence on forests is age old and he utilized NTFPs in some form or the other in his daily routine since birth to his last journey of life. The naturally regenerating forests had only been commensurate with needs of the people till appropriate balance of population and forest resources existed. The ever increasing population of human and livestock and their growing needs have exerted increasing stress on forests and depletion of their products. India has over 16 per cent of the global human population and over 20 per cent of the livestock population but has only 2.4 per cent of the global land area. The rapidly declining forest resource base has laid a profound socio-economic impact on forest dwellers and local rural communities who depend upon NTFPs for their living. This necessitates the need for sustainable forest management, which can provide adequate food, fodder, fuel, fibre, timber and wood for local industrial uses besides maintaining ecosystem. The forest survey report of 1987 has observed that India has only 11 per cent forest of adequate density and less than 4 per cent land available for pasture grazing. The State Forest Report 1989, brought out by Forest Survey of India has indicated that the country has only 64.01 million hectare of actual forest cover which is about 19 per cent of the total land area in India. With the depletion of forest, the NTFPs have also been dwindling fast as the forest management cared only for production of wood for timber, pulp wood for paper and fuel. The NTFPs did not
receive attention of the forest managers, as they deserved. It was only during the seventh five year plan in 1980's that the importance of NTFPs was realized and in December 1988, the National Forest policy was formulated. This revised policy laid stress on NTFPs development as an essential item of forest management, which is yet to be implemented in its true spirit. It was recommended that special attention need be paid for protection, regulation and optimum collection of NTFPs along with institutional arrangement for marketing of such produce.

Interest in NTFPs has been mounting for several reasons. First there is a growing recognition that the reliance of rural communities on a wide variety of plant and animal species for their substance needs may make it possible to seek their participation in conservation of tropical biodiversity. Second, continuing deforestation in the tropics, where such species are heavily concentrated, threatens to wipe out hundreds of species during the next few decades. Third, the commercialization of NTFPs is viewed as a means to improve their rural income and the well being of the indigenous societies that have utilized NTFPs for thousands of years. Fourth, many species that yield NTFPs are assumed to be a potential source of new genes as well as new products, particularly drugs and thus are extremely valuable to the international pharmaceutical industry. Lastly, it is now increasingly realized that the full economic variation of endangered
tropical forest ecosystems is not possible without the variation of the NTFPs.

Though NTFPs have been old friends to human beings in all communities, it was the forest dwellers, mostly tribals, who have been related to them most, as they depend entirely on the forests.

About 60 per cent of the production of NTFPs is consumed by about 7 crore tribals in the country. NTFPs constitute about 10 to 40 per cent of tribal household earnings (Shiva, 1993).

In India, excluding the value of tree products used by the forest dwellers themselves, the Government generates revenues approximating 135 million US dollars a year from this products (Bawa and hall, 1992). Rough calculations based on valuation of NTFPs indicated an average return of Rs.2720 per hectare per year (Campbell, 1993). On a global basis, the value of NTFPs is estimated to be approximately 55 US dollars per hectare (Godoy and Lubowski, 1992). In India, over 50 per cent of forest revenues and 70 per cent of export income from forest come from NTFPs (Campbell, 1993). NTFPs provide 50 per cent of income for 20 to 30 per cent of rural people in India (Sekhar et al., 1993).

The tribals in India present a variety of ecological, socio-economic and techno-cultural settings. Each tribal area presents a more or less unique situation in terms of resource endowments, resource use patterns, technological levels and levels of living. Thus
on the one hand, there are oceanic tribes who are in the primitive stage of food gathering, hunting and fishing and on the other hand there are tribals who are good farmers. Settled cultivation is the primary source of livelihood for majority of the tribal population. However, in the North east Himalayan region and other parts, major portion of the area is still under shifting cultivation.

The tribals, forest dwellers and other hill people depend on the natural resources like forests, wild life, pastures and grazing lands for their sustenance. Increasing requirements of fast growing populations both human and livestock, poor management of the natural resources and lack of technological and scientific input in their management have contributed to the forests getting degraded and their productivity decreasing. The natural resources such as land, forests, pastures and grazing lands, which provide life support system to the tribals, are losing their carrying capacity. Therefore, the most important issue in tribal and hill development is that of sustainability.

Extraction of NTFPs may be economically sustainable if the value adjusted for inflation increases overtime. However, economic sustainability need not imply ecological sustainability. For example over-harvesting may lead to continuous decline of plant population, but persistent demand may keep value constant. As the population of NTFPs species becomes depleted and the products
become scarce, there may be an increase in economic return, if the demand remains the same. Of course, with complete resource depletion, there will be no sustainability of any kind but only local extinction of population and ultimately extinction of the species. The effects of non-sustainable extraction take a long time to be detected, especially for long lived trees, and take much longer to be reflected in declining economic returns. Therefore, it is the ecological sustainability rather than economic sustainability, which is of prime concern.

The NTFPs harvesting would be sustainable as long as the rate of extraction is kept at pace with the rate of regeneration of the plant species. In ecological terms, extraction is considered sustainable if the harvest has no long term-negative effect on the population being harvested. In order to assess sustainability of harvesting, knowledge of the natural distribution, abundance, population structure and dynamics of the plant species and their variance among habitats is required.

Measurement of extraction of NTFPs by the forest dwellers/tribals will aid in the assessment of sustainability. A study on forest dwellers/tribals will provide a fairly deeper understanding of relationship between the forests, man and ecological phenomenon. Kollegal taluk in Chamaraja Nagar district (previously Mysore district) of Karnataka State has been the name of wild aboriginal tribe of
Soligas since ancient times. The Soligas have continuous intimate interaction with the forest vegetation as they have been deriving most of their basic requirements such as food, fodder, fuel, fruit and fibre from the forest.

They had been inhabitating in isolated hamlets (locally called Podu) in the most inaccessible areas for centuries without any exposure to the outside world till recent times. They had been practicing shifting cultivation until recently when they were shifted from the heart forest to the periphery and rehabilitated. However, the efforts of the Government aiming at their rehabilitation did not seem to be successful as some of them still continue to dwell in interior parts of the forest. They are dependent on the forest to a greater extent, harvesting the NTFPs almost throughout the year.

Extraction, processing and marketing of NTFPs is the source of employment and income to a vast majority of these tribal people. NTFPs, however, have certain inherent disadvantages with regard to exploitation. They are bulky and most of them do not occur in compact areas but widely scattered making economic exploitation difficult. They are often found in difficult and inaccessible terrain where mode of transport is non-existent or primitive. All these factors are bound to increase the cost of collection and transport. Some of these products are easily perishable and they present serious problems in harvesting and storage. Lack of precise information on
the best season and proper methods of collection, their processing, drying, grading and storage and such other factors have stood in the way of proper exploitation and utilization of a number of products. Very often NTFPs are collected haphazardly without looking into the quality and sustainability of the produce. It is also common that many of the collectors do not know where and to whom to sell their produce, for want of this information and partly without realizing the need for quality. They sell the produce locally at whatever price is offered to them with the consequent low revenue to the collectors as well as to the state. Therefore, in the best interest of the state and collector, the latter will have to be educated on the scientific exploitation and marketing of NTFPs. It is also essential to study the problems faced by the tribals in the scientific exploitation and marketing of NTFPs in order to improve their standard of living.

Forest is one of the most important bio-productive ecosystems on this planet. This vital life sustaining system has always acted as a significant natural resource base for the socio economic as well as the ecological necessities of the associated population. Forests, which occupy more than one quarter of the world's land area (Giri et al., 2001), are not merely sources of timber and other tangible benefits; they also perform a wide range of social and ecological functions. Before the start of organized agriculture, pre-historic nomads satisfied their needs of food from forests.
Forests have traditionally met, and still can meet specific dietary needs. Man, ever since his appearance on this planet, has looked at forests as a food stock gifted by nature. A passable share of the population, living in and around or directly associated with the forests, is below the poverty line (Chandra, 2002). Forest products form an important base of survival and sustenance for this population as food and items of limited commerce, along with acting as a source of employment for them during the lean periods. Ten to forty per cent of the earnings of the forest dwellers are from sale of forest produce collected by them (Chandra, 2002). Recently studies have shown that millions of tribals and landless people depend heavily on the gathering and sale of products from forest for cash income, with which they buy food.

Tropical forests account for only 7 per cent of the earth's land area and contain over 50% of the earth's bio-diversity (Anonymous, 2003). Most of such forests face degeneration (both in terms of quality and quantity) as extreme pressure for fuel, fodder, green manure, timber, medicinal products, bamboo, non-timber forest produce (NTFP) and developmental infrastructure is building up. Continuing deforestation leads to profound consequences, notably climatological changes affecting water and food security and loss of bio-diversity, thereby affecting rural livelihoods.
India's forests collectively account for about 1.63 per cent of the world forest area and contain an estimated five lakh of the 30 million plants and animal species on earth (Anonymous, 2003). India is a country with a comparatively lower forest productivity (0.7 cubic metre per ha per year), low per capita forest availability (0.09 ha) and high rural dependence on bio-energy (68%). At the same time Indian forests are rich in flora and fauna (4000 species of trees, 15000 plant species in 64 million hectares of forests) and with a century-old management system. The country displays tremendous potential to develop the non-timber forest products for the benefit of people and forests in a sustainable manner (Mahapatra and Mitchell, 1997).

India, with its vast geographical area, variety of climates and soil, is blessed with diverse forest types, from tropical to alpine. It is estimated that over 16,000 species of higher plants that occur in different geographical and / or ecological regions of the country, about one third are economically important. There are vast number of benefits gathered from forest including nuts, leaves, flowers, fruits, roots and tubers, gums, fungi, honey and wild animals including insects, rodents, wild games and fish. Collectively, they provide protein, energy, fiber, vitamins and essential minerals to human diet. Some products are simply gathered and eaten raw, while others must go through some processing in order to be made available for consumption.
Revenue realization from forests has undergone drastic changes in the last century. Under the colonial administration and in the first few decades of independence, commercial timber extraction thieved as the major source of revenue from forest. With the impact of rapid degeneration of the forest cover, the global community awakened to the realization that forests in any part of the globe can be crucial to the overall healthy existence of the planet. Plantations were raised to meet the requirement of wood and related products, but many non-wood products continued to be tapped from the forest, and hence becoming scarcer, day-by-day.

1.1 Forest Resource of Karnataka

As per the Forest Survey of India Report, Karnataka has a forest area of 3.87 million hectare, which constitutes 20.19 per cent of the geographical area of the state (19.17 million ha) (Bhaskar and Lakshminarayan, 2001). Reserve Forest constitutes of 73.88 per cent (2.85 million ha) out of this, Protected forest of 10.16 per cent (0.39 million ha) and unclassified forest of 15.96 per cent (0.63 million ha). Karnataka, ranks seventh in its forest cover with 5.05 per cent of the total forest cover of India and ranks fourteenth in terms of per capita forest cover having per capita forest cover of 0.077 hectare (Anonymous, 2003).

The main forest types of Karnataka are evergreen, semi-evergreen, moist deciduous, dry deciduous, scrub, thorny and un-
wooded. The growing stock varies from 25 cubic metres to 175 cubic metres per hectare in the evergreen forests (Anonymous, 2003). The most important tree species are *Dipterocarpus, Lophopetalum, Hopea, Toona, Calophyllum, Canarium, Vateria*, etc., in the evergreen forests and *Dalbergia, Tectona, Terminalia, Pterocarpus, Albizia, Lagerstroemia*, Bamboos and canes are the most deciduous forests (Anonymous, 2003).

Most of the forests in Karnataka are situated in the Western Ghats belt starting from Belgaum in the North and ending at Mysore in the South. Joint Forest Management was initiated in Karnataka during 1993 in forest areas, where the canopy density was below 0.25. At present, a total of 1,212 village Forest Committees (VFC) are managing an area of 12,800 hectare of forest area in Karnataka.

The important NTFP found in Karnataka are *Acacia concinna* (pods), *Phyllanthus emblica* (berry), tamarind, gallnut, *Eucalyptus citriodora* oil, *Terminalia chebula* (nuts), broom stick grass, marking nuts, *Annona sqamosa* (fruits), *Buchanania lanzan* (fruits), *Vateria indica* (resin), *Ailanthus malabaricum* (risin), jigat (bark of *Cinnamomum* and *Persea macrantha*), seegekai and honey. (Bhaskar and Lakshminarayan, 2001).
Forest View

Dense Forest View
1.2 Meaning of NTFP

NTFP consist of goods of biological origin other than timber that are extracted from forests (Anonymous, 1995). They are also known as 'Non Wood', 'Minor', 'Secondary' and 'Special' or 'Specialty' forest products.

All usufructs/utility products of plant, animal and of mineral origin, except timber obtainable from forests or afforested/domesticated land areas, are termed as Non-Timber Forest Products (NTFP). Services for tourism and recreation including wildlife watching are also attributed to NTFP resources in the modern concept (Shiva, 1993).

NTFP have been defined by FAO as 'all goods for commercial, industrial or subsistence use, derived from forests and their biomass, which can be sustainably extracted from a forest ecosystem in quantities and ways that do not downgrade the plant community's basic reproductive functions'.

In a broader sense, NTFP refer to everything that is obtained from forests other than timber. Under such a context, they include even minerals obtained from forests (Shiva, 1993).

NTFP are often gathered from natural forests, otherwise they may be produced with varying degrees of cultivation and domestication, either within a forest ecosystem or as part of a planted forest system such as a plantation or an agro-forest.
NTFP represent income opportunities from forests and forestry that do not involve cutting down trees for wood products. In most cases, management of forest for NTFP does not preclude the option to harvest some timber as well. Traditional management systems of forest peoples and modern scientific experience with multiple-use management suggest that, with careful planning and monitoring, forests can yield both timber and non-wood products on a sustainable basis (Anonymous, 1995).

1.3 The Importance of NTFP

NTFP are traditionally important to people of many cultures worldwide. NTFP provide essential food and nutrition, medicine, fodder, fuel, thatch and construction materials, mulch and non-farm income. NTFP provide important products for local, national and international markets, and these markets are growing rapidly and steadily (Wilkinson and Elevitch, 2000). Non-Timber resources have great potential for enhancing sustainable rural development and diversified economic growth. These products are vitally important for sustained economic growth, cultural endurance, and environmental health. At the same time, NTFP represent the means to meet environmental objectives such as the conservation of forests and biological diversity.

India having 16,000 recorded plant species of which 3,000 of them yield NTFP (Joshi, 2003). Nearly 500 million people
living in and around forests in India depend on NTFP for sustenance and as a supplement to their income. NTFP based small-scale enterprises provide up to 50 per cent of income for 20-30 per cent of the rural labour force in India. 55 per cent of employment in the forestry sector is attributed to the NTFP sub-sector (Joshi, 2003).

Non-Timber Forest Products were earlier known as Minor forest Products because of their small contribution to the state forest revenue as compared to timber in most cases. However, for the rural community, these products have always been crucial life support systems (Chandrasekharan, 1998; Mukherji, 1998 and Lal, 1998). They provide year-round source of livelihood. Inspite of the fact that NTFP provide a substantial revenue to the state, there are only a few studies, which justify that in most cases Non-Timber Forest Products contribute a larger overall economic returns than timber (Malhotra et al., 1991; Campbell et al., 1997; Prasad et al., 1999 and Giri et al., 2001).

Over 50 per cent of the revenue earned by the forest department is derived from NTFP. Growth of revenue from NTFP has usually been 40 per cent higher than that of timber. The share of total export earnings from NTFP ranges from 56.5 per cent to 75 per cent to the total exports of forest produce including timber (Joshi, 2003).
Agriculture Land with Forest

Agriculture Land with Forest
1.4 Environmental, Economic and Cultural Importance of NTFP

NTFP have been essential for subsistence and commercial activities around the world. They are also among the oldest of internationally traded commodities, dating back thousands of years to ancient times and still continuing in the era of liberalization (Anonymous, 1995).

According to the United Nations Food and Agricultural Organization (Anonymous, 1997), it has been estimated that:

i. Eighty per cent of the population of the developing countries uses NTFP to meet some of their health and nutritional needs

ii. Several million households worldwide depend heavily on NTFP products for income; and

iii. The estimated total value of World trade in NTFP is approximately US $ 1,100 Million.

Recently, the importance of NTFP is being recognized. Forests are being valued not simply for their timber, but as intricate systems capable of sustained generation of a great diversity of resources and services. NTFP are found to be of substantial environmental, economic and cultural impacts (Wilkinson and Elevitch, 2000).

1.5 Environmental Utilities

NTFP represent a way to meet the environmental objectives such as conservation of forests, watersheds, biological diversity, and genetic resources. A growing body of scientific research
suggests that NTFP can help communities meet their needs without endangering forest ecosystems (Anonymous, 1995).

By complementing timber-based management, NTFP offer a basis for managing forests in a more sustainable way. NTFP based activities hold prospects for integrated forms of development that yield higher rural incomes while conserving the forest and its diversity.

Recognition of the value of diverse NTFP species may also improve the conservation of forest genetic resources that might otherwise be overlooked.

1.6 Economic Utilities

Timber products have overshadowed NTFP as major forest commodities in modern times. However, the important contribution of Non-Timber forest Products to food and resource security and to financial well being is gaining increasing recognition. The growing appreciation for NTFP stems from an understanding that diverse investments and diverse ecosystems are a strong foundation for sustainable economic development.

In some areas, the financial impact of NTFP may be even greater than that of timber. For example, a study in Zimbabwe revealed that small scale NTFP based enterprise employed 2,37,000 people, compared to only 16,000 employed in conventional forestry and forest industries in the same year (Anonymous, 1995).
In local, urban, national and international markets, forest foods and medicines contribute substantially to national economic growth. The NTFP sector has been estimated in over a Billion US Dollars, and is growing rapidly, perhaps faster than the timber industry. For example, the market for NTFP has grown by nearly 20 per cent annually over the last several years, and the related herbal medicine market at a rate of 13-15 per cent annually. Approximately, 150 species of wild plants consumed in India, Malaysia and Thailand have been identified as source of emergency foods by the FAO (Anonymous, 1984). These include kernels of *Shorea robusta*, bark of *Acacia leucophloea*, *Bombax ceiba* and *Premna mucronata* and grains of several grasses. 157 wild plants have been identified and listed as source of emergency food in India (Solanki, 1981 and Chandra, 2002).

Future development of NTFP offers excellent potential for increasing income, expanding opportunities, and diversifying enterprises in rural areas. An important concept in realizing these prospects is adding value locally, usually through some form of rural processing, to ensure that a fair portion of a product's market value accrues to the people who manage the forest resource (Anonymous, 1995).

### 1.7 Cultural Utilities

NTFP are also of great cultural importance. They are basic cash and subsistence commodities in many cultures. The
preservation of NTFP is fundamental to the maintenance and continuation of many traditional ways of life.

The recognition of intellectual property rights is another important cultural issue for many NTFP. The fields of herbal medicine and biomedical research are growing rapidly. Often people who used them traditionally studied the plants, their uses and techniques for harvesting and processing over generations. As these discoveries blossom into lucrative industries, an equitable share of the benefits is due to the people, communities and countries from which they originate.

1.8 Research Problem

Forests provide a range of Non-Timber Forest products, which can play an important role in the food security and as an income earning source for the rural communities. These forest dependant communities have been deriving sustenance from the goods and services since ages. Often these NTFP are considered to constitute the life support system in the rural areas; but due to lack of integrated forest management, neglect of NTFP, unsustainable harvesting and uncontrolled removal of forest product; functioning of the forest is disturbed. In this milieu, the present study aims to evaluate the dependence of traditional collectors of NTFP on the resource for their employment and household incomes.
PODU

BUNNY TREE TRIBALS WORSHIP
The increased attention paid to NTFP in recent times stems from a number of factors. One is the much heightened interest in the value of biodiversity, carbon sequestration and other environmental functions provided by tropical forests, and associated concerns with the consequences of the use of these forests in ways which lead to their destruction or degradation.

A second factor has been the growth in awareness that use or sale of NTFP form important parts of the livelihood systems of very large number of people, outside as well as inside the tropical forests. There has also been heightened commercial demand for many Non-Timber outputs of tropical forests – rattan, oils, resins, pharmaceutical extracts, etc., and a realization that it is likely that there are other species and products of significant industrial value in such a rich and diverse genetic resource.

The subject of management of tropical forests for NTFP is thus a complex one, characterized by multiple objectives, multiple products and usually multiple users. The equally complex patterns of use and change created by human demands on, and interventions in, the forests add a further complicating element.

1.9 Scope of the Research

Even though a number of studies have been undertaken to assess the contribution of NTFP in the income and household employment of the collectors, they have tended to study them only in
those areas, which have a substantial forest cover and having a considerable NTFP resource. The local communities have access to most of the NTFP for harvesting, collection, processing and value addition, which has been supported by the National Forest Policy, 1988.

Though NTFPs have been old friends to human beings in all communities, it was the forest dwellers, mostly tribals who have been related them most, as they depend entirely on the forests. The tribals in India present a variety of ecological, socio-economic and techno-cultural settings. They had been inhabiting in isolated hamlets (locally called podu) in the most inaccessible areas for centuries without any exposure to the outside world till recent times. They had been practicing shifting cultivation until recently when they were shifted from the heart forest to the periphery and rehabilitated.

The NTFPs harvesting would be sustainable as long as the rate of extraction is kept at pace with the rate of regeneration of the plant species. Extraction is considered sustainable if the harvest has no long term negative effect on the population being harvested.

Extraction, processing and marketing of NTFPs is the source of employment and income to a vast majority of these tribal people. NTFPs, however have certain inherent disadvantages with regard to exploitation. They are bulky and most of them do not occur in compact areas but widely scattered making economic exploitation
difficult. They are often found in difficult and inaccessible terrain where there is no mode of transport. Some of these products are easily perishable and they present serious problems in harvesting and storage. Lack of precise information on the best season and proper methods of collection, their processing, drying, grading and storage and such other factors have stood in the way of proper exploitation and utilization of a number of products. Very often NTFPs are collected haphazardly without looking into the quality and sustainability of the produce. It is also common that many of the collectors do not know where and to whom to sell their produce for want of its information and partly without realizing the need for quality. They sell the produce locally at whatever price is offered to them with the consequent low revenue to the collectors as well as to the State. Therefore, in the best interest of the State and collector, the latter will have to be educated on the scientific exploitation and marketing of NTFPs. It is also studied the problems faced by the tribals in the scientific exploitation and marketing of NTFPs in order to improve their standard of living.

1.10 The Basic Facts of the Study

1. There is a growing recognition that the reliance of rural communities on a wide variety of plant and animal species for their subsistence needs may make it possible to seek their participation in conservation of tropical diversity.
2. Continuing deforestation in the tropics, where such species are heavily concentrated, threatens to wipe out hundreds of species during the next few decades.

3. The commercialization of NTFPs is viewed as a means to improve their rural income, the well being of the indigenous societies that have utilized NTFPs for thousand of years.

4. Many species that yield NTFPs are assumed to be a potential source of new genes as well as new products, particularly drugs and thus are extremely valuable to the international pharmaceutical industry.

5. It is now increasingly realized that the full economic variation of endangered tropical forest ecosystems is not possible without the variation of the NTFPs.

1.11 Objectives of the Study

1. Identification of the important NTFPs and temporal pattern of supply.

2. To estimate the income and employment generation in the collection, processing and marketing of Non-Timber Forest Products in the tribal economy.

3. To analyze the methods of collection, processing and marketing of NTFPs and associated costs.

4. To study the marketing channels in the marketing of NTFPs.

5. To identify the factors influencing the collection of NTFPs by the tribal households.
6. To Analyze The Linkages of NTFPs sector with other sectors of the tribal Economy.

1.12 Hypotheses of the Study

With respect to the above said objectives, the following hypotheses were formulated for the study:

1. The NTFPs play a key role in the life and economy of tribal communities living in and around forests.

2. The availability of different NTFPs in seasonal nature.

3. During lean period farm labour would be the major source of employment and income.

4. NTFPs collection and marketing will increase the income and employment generation of the tribal households.

5. The NTFP collectors are better off / realizing better returns than the non-collectors.

6. The marketing system for NTFPs in this region is highly unorganized and lack of scientific marketing.

7. NTFP fetch higher price when sold through formal channels as compared to informal channels.

8. The private trade in NTFPs is often exploitative.

9. Incomes of the tribals can be improved if LAMP takes up value addition at the collectors level.

1.13 Limitations of the Study

1. The study concentrated four ranges of the Kollegal Taluk of Chamaraj Nagar district.

2. The collection of data from tribal household is tedious because some tribal colonies are inside the forest.
3. NTFPs have certain inherent disadvantage with regard to exploitation, they are widely scattered, bulky and most of them do not occur in compact areas.

4. NTFPs collections are haphazardly without looking into the quality and sustainability of the produce.

5. The private contractors of the NTFPs in the study area, they do not give correct picture of volume of transaction.

6. The study was not able to assess the end use of the produce and to reach the final consumers of the produce.
Tribal colonies' (Podu)