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NON-TIMBER FOREST PRODUCTS (NTFPS) FOR FOOD AND LIVELIHOOD PROTECTION: A STUDY OF TRIBAL FINANCIAL SYSTEM IN SESHACHALAM FOREST (PALAKONDALU) OF ANDHRA PRADESH

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Abstract:

Non- Timber Forest Products play a vital role in livelihood of people in and around the forests. NTFPs comprise medicinal plants, dyes, mushrooms, fruits, resins, bark, roots and tubers, leaves, flowers, seeds. They are also known as Non-wood, minor, secondary, special or line forest products. Non-timber forest products (NTFPs) are wild plant and animal products harvested from forests, such as wild fruits, vegetables, nuts, edible roots, honey, palm and medicinal plants, poisons snails and bush meat. The type, number and nature of NTFPs vary from one geographical area to another based on the local geo-physical circumstances. NTFPs are highly variable in components, quantities and locations. NTFP harvesting is generally a seasonal activity, with only a few species existing most of the year. At global level, more than two billion people are dwelling in forest, depending on NTFPs for subsistence, income and livelihood security. NTFPs are well thought-out to be important for at the bottom of rural livelihoods, reducing rural poverty, biodiversity conservation, and facilitating rural economic growth. An estimated 80 per cent of the population of the developing world uses Non-Wood Forest Products (NWFP) to meet some of their health and nourishing needs. It is an important source of income for the poor in many developing countries. In addition, several opportunities for improved rural development are linked to NTFP. In India over 50 million people are dependent on NTFPs for their subsistence and cash income. This provides 50 per cent of household income for 20 to 30 per cent of rural population particularly for tribal. Potentially around 3000 species of forest products are found to be useful, but only 126 have developed marketability. Around 50 per cent of forest revenues and 70 per cent of forest based export income of the country comes from NTFPs. Thus it can be depicted that NTFPs form one of the mainstays of income and sustenance for many tribal communities. Forests are associated with socio-economic and cultural life of tribal's in India.

Introduction:

The Non- Timber Forest Products play a vital role in livelihood of people in and around the forests. NTFPs comprise medicinal plants, dyes, mushrooms, fruits, resins, bark, roots and tubers, leaves, flowers, seeds, honey. They are also known as Non-wood, minor, secondary, special or specialty forest products. According to FAO, NTFPs defined as "all goods for commercial, industrial or subsistence use derived from forest and their biomass". Historically, non-timber forest products1 (NTFPs) were usually considered to be of little importance, a status reflected in their designation as 'minor' forest products. Much of their use was seen as being primarily of only local interest, and such commercial operation as took place was characterized as associated with lack of assets and know-how and often with unequal use of labour. However, during the last 10–20 years there has emerged growing interest in attributes of NTFPs that appeared to be relevant to the growing focus on rural development and conservation of natural resources. This was pronounced in three main propositions. One was that NTFPs contribute in important ways to the livelihoods and welfare of populations living in and head-to-head to forests. Another was that taking advantage of NTFPs is less economically destructive than timber harvesting and other forest uses, and could therefore provide a sounder base for sustainable forest management. The third was that greater than before commercial harvest of NTFPs should add to the professed value of the tropical forest, thereby growing the encouragements to retain the forest resource.

Definition:

Non-timber forest products (NTFPs) are wild plant and animal products harvested from forests, such as wild fruits, vegetables, nuts, edible roots, honey, palm and medicinal underbrush, poisons snails and bush meat. The type, number and nature of NTFPs vary from one geographical area to another based on the local geo-physical conditions. NTFPs are highly variable in machinery, quantities and locations. NTFP gathering is generally a seasonal activity, with only a few species obtainable most of the year.

There are a number of definitions of NTFPs. Forest Stewardship Council(FSC) currently defines NTFPs as "All forest products, eliminating timber, including other materials obtained from trees such as resins and leaves, as well as any complementary plant and animal products". NTFPs are an significant livelihood source for several populations, for the most part those living in forest fringe villages. About 400 million people

in India depend on NTFPs for sustenance and supplemental income. Government revenue realized from NTFPs is in the order of Rs 20 billion per year. In subsistence and rural economies, NTFPs have diverse uses, for example, as food, fodder, fiber, fertilizer, herbal medicine, cosmetic, and cultural products. In terms of income, it has been predictable that up to 35per cent of the income of tribal households in India comes from the collection of unprocessed NTFPs. Also, since NTFPs involve a large variety of seasonal products, returns are common and relatively constant. Small-scale forest-based enterprises, many of them based on NTFPs, make obtainable up to 50per cent of income for 20 to 30per cent of the rural labour force in India. In accumulation to survival and income-generating potential, NTFPs also provide food security to large low-income populations, their livestock and other domestic animals, for the most part during droughts or food shortage.

NTFPs and Tribals:

At global level, more than two billion people are place to stay in forest, depending on NTFPs for subsistence, income and livelihood security. NTFPs are considered to be important for sustaining rural livelihoods, plummeting rural poverty, biodiversity conservation, and facilitating rural economic enlargement. Projected 80 per cent of the inhabitants of the increasing world use Non-Wood Forest Products (NWFP) to meet some of their health and relating to diet needs. It is an imperative source of income for the poor in many developing countries. In addition, several opportunities for better-quality rural development are linked to NTFP.

In India over 50 million people are at the mercy of on NTFPs for their subsistence and cash income. This provides 50 per cent of household income for 20 to 30 per cent of rural population particularly for tribal. Possibly around 3000 species of forest products are found to be useful, but only 126 have developed marketability. Around 50 per cent of forest revenues and 70 per cent of forest based disseminate income of the country comes from NTFPs. Thus it can be depicted that NTFPs form one of the backbones of income and sustenance for many tribal communities. Forests are associated with socio-economic and inspirational life of tribals in India. These tribal groups make your home in wide ecological and geo-climatic environments in different concentrations throughout the country. Tribal livelihood systems vary significantly between different regions as also among the different ethnic groups, depending on ecological, historical and cultural factors. These tribal groups of people largely occupy the forest regions since time immemorial, living in leave-taking from the mainstream life, maintaining harmony and a symbiotic relation with nature. The collection of NTFPs by tribals was primarily for meeting their subsistence needs. Over time, these NTFPs acquired money-making value resulting from huge trade communication and income levels due to increasing demand. Buy and sell in NTFPs can act as an incentive for forest management by provided that a source of income from possessions that might otherwise appear to have little financial price.

Importance of NTFPs:

NTFPs make available important goods for local, national and intercontinental markets. These markets are growing rapidly and steadily. Non timber resources have great potential for attractive sustainable rural development and diversified economic enlargement, cultural staying power, and environmental health. Few NTFPs have low cash values and hence are used for consumption, rather than for sales. Whereas rest NTFPs have highly commercial value. NTFPs are significant particularly for poor, because they are available at low cost on general property lands. They are second-hand by people because they have less alternative access to food and income. In a country like India, which has supplementary than half of its population in rural areas and a large tribal population unconfirmed on forest produce for their nourishment, NTFPs play a major role. At the same time, NTFPs collection should not hamper the

The expected world forest area is 4.03 billion hectares and more than 800 million people worldwide live in or near tropical forests and savannas, and rely on these ecosystems for fuel, food and income. At global level, more than two billion people are apartment in forest, depending on NTFPs for subsistence, income and livelihood security. About 80per cent of the population of developing countries uses non timer forest products (NTFPs) to meet some of their health and nutritional needs. In India alone, it is expected that over 50 million people are dependent on NTFPs for their subsistence and cash income. In almost all tropical countries, the collection of NTFPs is a major economic activity. Multiplicity of the forest bio-mass ensures food security and protects the 'safety net of the people, especially the forest dwellers. It is estimated that of the 6.2 bil1ion world population, about 25 percent are dependent on forest resources including plant and animal products.

About 4000-6000 commercially important NTFP's are described worldwide. In India, there are with reference to 15,000 plant species out of which almost 3000 species (20per cent) yield NTFPs. on the other hand, only about 126 species (0.8per cent) have been commercially developed. In India 50 millions of forest dwellers, most of them tribals, harvest substantial quantities of NTFPs for their subsistence and low-volume trade. Moreover 200 to 300 million non-tribals are also at the mercy of on NTFP to a lesser degree.

Andhra Pradesh:

Andhra Pradesh, located in peninsular India, accounts for roughly 7.4per cent of the country's population and 8per cent of its area. The recorded forest area in the state is approximately 6.38 million hectares, which is about 23per cent of the state's geographical area. Based on satellite data, actual forest cover has been predictable to be about 16.15per cent of the total geographical area. Andhra Pradesh has a significant presence

of Scheduled Tribes, who are highly dependent on the forests for their resource of income needs. NTFPs are not only an important source of income for many rural family circlesbut also generate significant revenue for the state.

The annual revenue from tendu leaves traded by the Andhra Pradesh Forest Development Corporation and other NTFPs traded by the Girijan Cooperative Corporation is estimated to be Rs 620 million. In terms of financial value, bamboo, tendu leaves, mahua, and tamarind are the most important NTFPs. Together, these selected products account for over 75per cent of the total value of NTFPs (in terms of revenue) in the state. Bamboo forests are spread over approximately 10,000 square kilometers. There are two major bamboo species in the state viz. Dendrocalamus stratus (Sadanam or solid bamboo) spread over 9,125 square kilometers and Bambusa bambos (Mullem or hollow bamboo) spread over 755 square kilometres.

In addition, there are small patches of Dendrocalamus Hamiltonin a couple of districts. The total annual production of bamboo is estimated to be 300,000 metric tonnes out of which about 200,000 metric tons is consumed by the paper and pulp industry and the remaining 100,000 metric tons by the domestic sector. Andhra Pradesh is the fourth largest producer of tendu leaves in the country and accounts for 10per cent of the national output. Tendu leaf collection generates about eight million person days of employment every year for which about Rs 400 million is paid as wages. In addition, about 50 million person days of employment is generated for rolling beedies. Mahua trees occur on both forest and private lands. In 2005-06, 13,706 quintals of mahua flowers (worth Rs 8.4 million) and 6,188 quintals of mahua seeds (worth Rs 6.5 million) were procured by GCC, the official tracking down agency. The bulk of mahua flowers and seeds, however, are directly used for domestic/ home consumption. Andhra Pradesh produces about 700,000 quintals of tamarind, out of which the bulk comes from the farm sector. The Scheduled Tribes collect only about 40,000 quintals. It is estimated that around 110,000 families are involved in retail sale of tamarind through GCC distribution network and auction cum tender process. About 20,000 families are getting benefit through bulk sale of tamarind seed. Sal seed is not an important NTFP in Andhra Pradesh. The three key agencies involved in the management and trade of these NTFPs are FD, GCC and APFDC. The FD is dependable for the management of forests, including NTFPs, in the state. The GCC was conventional by the state government in 1956 to promote the welfare of Scheduled Tribes. It has been granted monopoly rights to gather, process, and market 25 NTFPs. The list includes mahua (flower and seed) and tamarind. APFDC was established in 1975 to raise institutional finance for forestry. APFDC has raised bamboo plantations over 12,000 hectares. It also acts as an agent of the government for collecting tendu leaves.

Andhra Pradesh started its Joint Forest Management (JFM) programme in 1992 through which the state government sought to involve local communities in the management of state forests. Under this programme, community-based forest protection committees known locally as Vana Samrakshana Samathi (VSS) were established to protect and manage the forest resources. The involvement and powers of the communities were increased in 2002 when the Community Forest Management (CFM) programme was launched. Both JFM and CFM programmes have received support through large World Bank-funded projects. A number of hard works to pick and choose up NTFP authority in the state have been initiated under these programmes. For the purpose of the study, one district was selected on the basis of level of production for analyzing production and management issues related to each of the selected NTFPs, viz. (1) Adilabad (tendu and mahua), (2) East Godavari (bamboo) and (3) Visakhapatnam (tamarind). In addition, information was also collected from enterprises processing these NTFPs. Two enterprises were selected per product.

Kadapa District:

Kadapa is located in the southern part of Andhra Pradesh. It falls in Rayalaseema region of the state. The district has distinction of being home to red sanders, a highly threatened species. Sainagar is situated in Kanapalli panchayat and Chintakammadinne mandal. Total numbers of families in three villages were 150, belonging to Yanadhi and Sugali tribes and landless. The primary occupation of Yanadhis and sugalis is collection of forest products. In the year 2014 Vana Samrakshana Samathi (VSS) was formed through VSS, activities related to soil humidity conservation, plantation and village development were under taken. Due to protection and restriction on fuel wood smuggling and regulatory forest fires, renewal helped growth of the forest.

Thirty-one minor forest products are composed by Yanadhis in this area. Drumming of gum is one of the major activities and income understood from sale of secretion maximum. The gum is extracted from different five species. Of this the commercial value of gum collected from tapsi is uppermost. This is available throughout the year. But pitter-patter is mostly circulated from August - March. The accessibility of gum during summer is low and during monsoon it is avoided due to rains and competition from wild animals, which consume gum oozing out of the tree wound. At an average the number of days spent by the collectors for tapping gum is about seventy days. For tapping, a semicircular cut is made on bark of the tree. Generally tapping is carried out from trees over twelve years old. The gum collected is dried over plastic covers. Then it is carried to the GCC depot at Guvalacheruvu on other side of the hill ranges at a distance of 20 Kms.

Maredu Gaddalu is the 2nd most important item in the village. Maredu Gaddalu is collected from the climber Aegle marmelos. It is cut into smaller pieces and dried in sun for over a day. Then it is marketed to GCC as well as to traders. The traders are forming Rayachoti. There are about seven private traders involved in this business. The price on condition that by traders ranged between Rs. 15-25 per kg. The traders in turn sell this at Chittoor and Tirupathi at a price four to five times higher. The storage by the traders is done at Rayachoti itself. Most of this trade is carried on with neither licensing nor legal registration. Nanari Gaddalu is very specific and unique to this place. This is a root. It is extracted and the four roots are separated and sold. This is used to prepare local soft drink called nanari. It gives relief from tiredness and heat. This is mainly sold to traders. The other major NTFP sold to the traders are thatch grass, palagaddalu, sarapapu, karakai, bodha, usiri, tamarind, soap nut, eetha fruits, guthi fruits, Chella ginjalu, and musthi ginjalu. The middlemen pay advances for collecting high value items like palagaddalu, maredu gaddallu, musthi ginjalu to the collectors and repay the rest after the produce is handed over to them. The middlemen have linkages with traders as far as in the Kerala and Tamil Nadu for selling these plants. In this village where NTFP play a crucial role in the livelihoods of the Yanadhi community of the total income in a family, NTFP contribute about 80per cent. Five out of the twenty-six families are completely dependent on NTFP collection. The maximum annual income form the NTFP is Rs. 77,000 and smallest is Rs. 1830. The wide variation is explained by the fact of number of eligible members a family has for collecting NTFP. The person who earns the minimum is an old widowed lady, who still engages in NTFP collection.

Objectives of the Study:

- ✓ To study the Socio economic Conditions of the NTFPs collection by tribals in the study area.
- ✓ To analyze the contribution of NTFPs to tribal income and employment in the study area.

Sample Design

Kadapa is located in the southern part of Andhra Pradesh. It falls in Rayalaseema region of the state. The district has distinction of being home to red sanders, a highly threatened species. Sainagar is situated in Kanapalli panchayat and Chintakammadinne mandal. Total numbers of families in three villageswere150, belonging to Yanadhis and Sugali tribes. The primary occupation of Yanadhis and sugalis is collection of forest products. In the year 2014, Vana Samrakshana Samathi (VSS) was formed. Through VSS, activities related to soil moisture conservation, plantation and village development were under taken. Due to protection and restriction on fuel wood smuggling and controlling forest fires, regeneration helped growth of the forest.Data were collected through interviews questionnaire administered on 110 randomly selected household respondents from the villages and around the forests of Kamalapuram taluk, which have highest number of STs Colonies.

Table 1: Age-wise analysis of the respondents in the study area

S.No	Age	Respondents	Percentage to total
1	Below-35 years	70	63.63
2	36-55 years	35	31.81
3	56 And above years	05	04.54
Total		**110**	**100.00**

Source: Primary data

Most of the respondents were in the age of below 35 years (63.63 per cent), followed by 36 to 55 years age group (31.81 per cent) while the age group of 56 and above years contained the least respondents (4.54 per cent). The tribes in the age of 35 to 55 years (95 per cent) constitute main workforce who employ in collection of NTFPs, agriculture, wage earning and allied activities. On the other hand the tribes above 56 years are on the odd occasion involved in such activities.

Literacy Level:

Table 2: Educational status of the sample respondents in the study area

S.No	Education	Respondents	Percentage to total
1	Illiterates	80	72.72
2	Below-5th class	20	18.18
3	6th to 10th class	10	9.09
Total		**110**	**100.00**

Source: Primary data

Education has a great impact on the economic life of the people. It makes the citizen very responsible in their business activities. Education creates better thoughtful of work. The table-2 presents that the 80 respondents (72.72 per cent) are illiterates, 20 respondents (18.18 per cent) have below 5th class, 10 respondents (9.09 per cent) have 6th to10th class education It is concluded that 72.72 per cent respondents are illiterates.

Table 3: Livestock of the sample respondents

S.No	Livestock Rearing	Respondents	Percentage to total
1	Cow	20	18.18
2	Poultry	05	4.54

3	Goat	28	24.45
4	Bullocks	30	27.27
5	No Livestock's	27	24.54
Total		**110**	**100.00**

Source: Primary data

About 75 per cent of the tribal population owns livestock. The reason for high number of livestock is due to the practice of agriculture and availability of free fodder in the forest lands. The poultry reared per household was quite low (4.54 per cent), since this is considered as common characteristic among the tribals. In addition, 18.18 per cent of the tribals own cows. In general having animals is a kind of an economic safety for forest dwellers.

Table 4: Livestock of the sample respondents

S.No	Activities	No. of Respondents	Percentage to total
1	NTFPs	110	100.00
2	Agriculture	30	27.27
3	Livestock's rearing	28	25.45
4	Wage earnings	73	66.36
5	Service and allied activities	10	9.09

Source: Primary data

The tribals bump into food and income needs from collection of NTFPs, wage producing, agriculture, livestock background and amenities and allied activities. Table-4 indicates that, all tribal households are traditionally involved in NTFPs collection. In each household depend on this activity. In accumulation, tribals also be determined by on wage earning (66.36 per cent) followed by agriculture (27.27 per cent), livestock rearing (25.45 per cent) and services and allied activities (9.09 per cent). In conclusion, NTFPs is the important activity in terms of labour contribution.

Table 5: Employment details of the different sectors in the sample respondents

S.No	Activities	Employment Generated Days/HH/Year
1	NTFPs	40.47 (22.70)
2	Agriculture	25 (14.02)
3	Livestock's rearing	20.23 (11.34)
4	Wage earnings	78.29 (43.91)
5	Service and allied activities	14.29 (8.01)
Total		**178.28 (100.00)**

Source: Primary data

Associating employment generation in a number of sectors, the wage sector produced the utmost employment (78.29 per cent) trailed by NTFP (22.70 per cent), and other sectors. He reported average employment of 40.47 man-days 30 from NTFPs collection. The agricultural sector (14.02 per cent), livestock rearing (11.34 per cent) and services and associated activities (8.01 per cent) were other foundations of employment accessible for the gatherers in the area.

Explain the table-6 the next significant income source was NTFP contributing 25.98 per cent (Rs. 6850.65) to the total income. They found that, the average income contribution from NTFPs Rs.6850.65. Other sectors, like agriculture (5.91 per cent) and services and allied activities (3.41 per cent) are also important income producing activities. Agricultural production in the region tends to be quite low because of the small land holdings, lack of irrigation, and poor soil quality. With the small farms and low production, most households foodstuffs crops predominantly for home feasting. Not surprisingly, therefore, the contribution of agriculture to cash income was small. Livestock (2.08 per cent) pay for the least to the total annual income but led to a higher feasting of livestock products at the household neck and neck.

Table 6: Composition of average annual household income derived from the different sectors (Households/Year)

S.No	Activities	Average income generated in the HH/Year	Percentage to total
1	NTFPs	6850.65	25.98
2	Agriculture	1560.25	5.91
3	Livestock's rearing	550.58	2.08

4	Wage earnings	16500.80	62.59
5	Service and allied activities	900.85	3.41
Total		**26363.13**	**100.00**

Source: Primary data

Table 7: Sector-wise income distribution of the sample respondents in the study area (Household income/year)

S.No	Type	NTFPs	Agriculture Income	Livestock's Income	Wage Earnings Income	Service And Allied Activities	Average Total Income
1	A	6850.65 (100.00)					6850.65 (100.00)
2	B	6850.65 (81.44)	1560.25 (18.55)				8410.9 (100.00)
3	C	6850 (76.44)	1560 (17.41)	550.58 (6.14)			8961.48 (100.00)
4	D	6850.65 (26.90)	1560.25 (6.12)	550.58 (2.16)	16500.80 (64.80)		25462.28 (100.00)
5	E	6850.65 (25.98)	1560.25 (5.91)	550.58 (2.08)	16500.80 (62.59)	900.85 (3.41)	26363.13 (100.00)

Source: Primary data

A = NTFPs B = NTFPS+ Agriculture C = NTFPS+ Agriculture +Livestock's

D = NTFPS+ Agriculture +Livestock's +Wage earnings

E = NTFPS+ Agriculture +Livestock's +Wage earnings + Service and Allied activities

Distribution of income from the different sectors the contribution of income from various sectors is presented in table-7. All the sample households in the study area depend on NTFPs collection for their subsistence. However, tribals cannot depend on a single source for their income and employment. Since NTFPs collection provides employment for few days in a year. For instance, according to the current study, currently tribals are receiving income from NTFPs collection, agriculture, livestock, wage earnings and services and allied activities. Among these sectors, the average income from NTFP per year is around 6850.65, the income from agriculture (Rs.1560. 25) will increase the total average income level to 8410.9, which adds around 18 per cent to the total income. Further, average income from livestock is negligible (Rs. 550.58) and adds around 6 per cent to the total income. Wage earnings, which form one of the major incomes, contributed 64.80 per cent (Rs. 16500.80) to the total income (Rs.25462.28). Additionally, the income from services and allied activities contributes 3.41 per cent to the total income and raises the average total income level to Rs.26363.13. Thus approach of sector-wise income distribution point out the prominence of each sector to the total income of tribal households. Comparing income levels from various sectors indicates: (i) NTFPs collection followed by all households nevertheless of income contribution and (ii) income contribution from wage earning forms the highest income followed by other sectors.

Table 8: Contribution of the NTFPs employment generation in the study area

S.No	NTFPs	Season	Employment Generated (Days/HH/Year)
1	Honey	April-May	4.69 (11.58)
2	Shikakai	February-May	20.90 (51.64)
3	Soapnuts	March-April	3.18 (7.85)
4	Nellikai	December-February	4.27 (1.055)
5	Forest Mango	March-May	5.11 (12.62)
6	Bikkikakai	September-November	2.25 (5.48)
Total			**40.47 (100.00)**

Source: Primary data

The above table-8 it indicates season-wise income contribution from NTFPs. Shikakai, soap nuts, honey and turmeric are harvested during spring and summer season which coincide highest cash income. This cash income may provide a Looking at the table-8, it indicates season-wise income contribution from NTFPs.

Shikakai, soap nuts, honey and Bikkikaya are harvested during spring and summer season which coincide highest cash income.

Conclusion:

There are a number of definitions of NTFPs. Forest Stewardship Council (FSC) presently describes NTFPs as "Completely forest products, except timber, including other materials obtained from trees such as resins and leaves, as well as any other plant and animal products". NTFPs are an important livelihood source for several communities, particularly those living in forest fringe villages. Around 400 million people in India depend on NTFPs for sustenance and supplemental income. About 80per cent of the population of developing countries uses non timer forest products (NTFPs) to meet some of their health and nutritional needs. In India alone, it is estimated that over 50 million people are dependent on NTFPs for their subsistence and cash income. In almost all tropical countries, the collection of NTFPs is a major economic activity. Maredu Gaddalu is the 2nd most important item in the village. It is cut into smaller pieces and dried in sun for over a day. Then it is marketed to GCC as well as to traders. The traders are forming Rayachoti. There are about seven private traders involved in this business. The price provided by traders ranged between Rs. 15 - 25 per kg. The traders in turn sell this at Chittoor and/or Tirupathi at a price four to five times higher. The storage by the traders is done at Rayachoti itself. Most of this trade is carried on with neither licensing nor legal registration. Nanari Gaddalu is very specific and unique to this place. Contributes 3.41 per cent to the total income and raises the average total income level to Rs.26363.13. Thus the approach of sector-wise income distribution indicates the importance of each sector to the total income of tribal households. Comparing income levels from various sectors indicates: (i) NTFPs collection followed by all households irrespective of income contribution and (ii) income contribution from wage earning forms the highest income followed by other sectors.

Suggestions:

- ✓ In the study area NTFPs collected works be responsible for substantial employment and income circumstance to the poor forest dwellers. However possessions turn down is also reported due to commercial pulling out, logging and fire hazards. This destabilizes the NTFPs based income. There is a strong need for controlled management and exacting monitoring of forest capitals. Besides, local people should also be educated about the ill effects of man-made fire in the forest and fire fortification should be proactively.
- ✓ LAMPs have the monopoly over the NTFPs trade. The LAMPs agents reportedly followed pocket weighting of the products and LAMPs retained higher boundaries through sales as specified through price spread analysis. Therefore apprehensive authorities of LAMPs should ensure fair practices in the trade of NTFPs and explore the possibilities of increasing price benefit to the collectors.
- ✓ Crop raid by elephants over agricultural farm is a major problem which is restricting agricultural activities of the tribals. Government should safeguard proper compensation for the loss and take up effective protecting measure against gather raids.
- ✓ Scientific studies have to be carried out to assess the short and long run impact of NTFPs drawing out on forest and ecosystem. Based on this, tribals have to be educated on supportable ways of harvesting NTFPs.
- ✓ The forest laws prevent drawing out of NTFPs in the National Parks and Wildlife sanctuaries. In such cases, tribal people should be given appropriate alternative sources of livelihood outside the nearing extinction forests and also government should explore the opportunity for voluntary rearrangements open-air the forest.
- ✓ The troubled government authorities should ensure that the assistances of the development strategies and programs targeted exclusively at the forest inhabitants should meritoriously reach the needy people. Besides health, education and infrastructures facilities should be ensured to people with in the accessible provisions.

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