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# Economic Empowerment of Tribes Through Marketing of Non-Timber Forest Products (Ntfps) in Alluri Seetharamaraju District, A.P

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#### **ABSTRACT**

Tribal populations across the world rely on non-timber forest products (NTFPS) for their livelihoods, including food, fuel, fodder and litter. Organizations report that many rural people are dependent on forest resources, with around 80% of the developing world using NTFPs for their health and nutritional needs. NTFPs are also important for reducing poverty, conserving biodiversity and promoting economic growth in rural areas. In India, over 50 million people rely on NTFPS for income and subsistence, with NTFPS contributing to 50% of household livelihoods and income for 20-30% of the agency population, particularly for tribes. NTFPs form a significant source of income and food for many tribal communities, making up 70% of forest-based export income and 50% of forest revenues in some countries. Tribal communities have a strong connection to the forest and depend on NTFPS for their cultural and socioeconomic needs. The main objective of the study was to measure the economic impact on marketing of NTFPs and understand the perception of the respondents who are engaged in collection and marketing. This is a descriptive study and it aimed to demonstrate the importance of NTFPS in the economy of forest dependent communities in ASR district of Andhra Pradesh. These strategies can help create more sustainable and equitable markets for NTFPs, benefiting both local communities and the wider economy.

Keywords: Marketing, Globalization, PVTG tribes, NTFPs, Tribal culture.

#### INTRODUCTION:

The tribal economy revolves around the forest environment. Tribal economy is also associated with culture and social organization. Forests are the main natural resource base with forests for tribal livelihoods in all tribal areas of the country. Tribals rely on forests to meet their basic needs. Tribal people use forest resources with the help of simple tools without much technical support. In the outer world they eat roots, fruits, honey, vegetables, pigeons, insects, fish, pigs, flowers, hares etc. from the forest for their consumption. Forest dependence of tribals in the country is different from their economic typology (according to Ray (1976) the Birhors of Chattanagpur, Chenchus of Andhra Pradesh, Juangs of

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Odisha, Kadar of Kerala), The Poles and Paniers of Tamil Nadu depend on forests for their survival Maximization of maintenance of profits is the ultimate goal of economic transactions of the modern capitalist economy. But the profit motive is absent in its financial transactions in the tribal economy of India, So this study was carried on to find out whether or not there is any opportunity in economic empowerment of tribal community through new business model for non-timber products.

Forests are closely associated for the commercial and social life of Indian tribes. The rural people live in a wide variety of environmental and geographic climatic conditions Tribal livelihoods vary widely between different regions and between different ethnic groups as this may be due to environmental ancient and social factors. Tribal people have primarily lived in forest areas away from the mainstream since time immemorial and maintain a harmonious and symbiotic relationship with nature.

The "Green Revolution" takes substantial role in growth of food production yet a large part of the world's population goes hungry. NTFPs (Non-timber forest products) can help close this gap by providing income and food security. Forests are crucial for meeting basic food and livestock needs and they can also help maintain food security during crisis situations like natural disasters or droughts. However, there is growing concern about the changing role of NTFPS in the economy and its effects on daily life and sustainability.

NTFPS (Non-timber forest products) hold significant economic and social significance for those living in forest areas. They provide additional income to around 100 million people in the country. However, NTFPS groups face low profits due to underdeveloped, unregulated and monopolized marketplaces. They are often taken advantage of by local traders and unable to negotiate fair prices, leading to the sale of their goods at a low cost.

NTEPS play a crucial role in increasing rural incomes and reducing poverty. It is estimated that over 100 million people, primarily those who live and rely on NTFPS for necessities such as food, shelter, medicine and income benefit from them. It is estimated that 25 to 50% of the of tribals income are met by NTFPs.

#### **Review of Literature:**

Dwarikadhish Churpal et al., (2020) deals with the average cost of collection of various NTFPs, per tribal household, in the different geo-climatic conditions of Chhattisgarh. They observed the costs per household as under: Mahua flower: Rs3172.50, Mahua seeds: Rs1965/-, Sal seeds: Rs2842.50, Aonla: Rs.600/-, Bahada: Rs510/- Hara: Rs412/-The researchers state that the forests of Chhattisgarh are home to about 200 varieties of NTFPs for collection and processing throughout the year, in which the tribal women play a vital part. They observe that the tribes of this state are heavily dependent on the NTFPS for their nutrition.

Zenebe Reta et al., (2020) the study states that the contribution of NTFP's in the total household income of tribes is substantial and that NTFPs play an important role in the food security of the villagers living in and around forests. He collected secondary data from district forest office and analyzed them by SPSS. A large number of villager-respondents of them had participated in his survey. He found out that most of the villagers are actively engaged in collection of NTTPs and almost all of them devote more time and energy in sales and marketing of those products than anything else. The author has suggested the authorities to arrange for the up gradation of skills of the villages for collection and marketing of NTEPS

Worship Mugido (2017) the researcher conducted a study on 15 different areas in South Africa to find



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out the factors which affect and influence the market prices of NTFPs. He found 15 different areas in South Africa. He found that the factors which play a major role in determining the market prices of NTEPs are costs of transportation, processing, stock-maintenance and, of course, the profit motive of the tribes. He observed that areas which had a sound policy of forest management collected increased amount of NTEPS.

#### **Statement of problem:**

The contribution of NTFPS to the Andhra Pradesh Mountain and tribal peoples' household economies is insufficient as they are not receiving the premium price for their market value in regional, national and international marketplaces. NTFPs (Non-Timber Forest Products) play a key role in local rural incomes in the tribal area because these are the only natural resources accessible i.e very little agriculture, livestock and sheep, but no adequate support or facilitation has been provided so far. Similarly. NTTPs are seen as supplementary for livelihoods and generation of cash income. There are significant gaps in the administration of NTFP collection and marketing.

Collectors are unable to obtain actual prices for their products since the NTTPS market is dominated by traders. There are various middlemen involved in the marketing of NIFPS, including wholesalers, district trader suppliers, road-lead dealers and village traders. These intermediaries have a significant network for NTFPS marketing. Collectors view the long and clandestine marketing chain as inefficient and pricey. The current market chain does not provide collectors and producers with an appropriate share of revenues. In the region, there are numerous technical, economic marketing institutional and legal barriers to the growing and selling of NTFPs Collectors love a limited understanding of the end price, final consumer and final destination of their purchases. The following are the primary obstacles for sustainable management of NTFPs spices.

- Fluctuation in market pricing of NTFPs due to the middleman trader's control over the market.
- Farmers' inadequate bargaining power.
- Poor access to the Management Information Systems (MIS).

Such fluctuations in demand have resulted in uneven harvesting of various species, such as over-harvesting and premature harvesting. As a result, there is an uneven distribution of product and price distribution among benefit and other routes of distribution. As a result, there is an urgent need to investigate existing NTFPS markets and marketing systems, as well as to more it effective, in order to regulate the discrepancies in NTFPs demand and supply, as well as the uneven distribution of pricing. As a result, the current study attempts to close this gap through tribal economic empowerment, contributing to the social upliftment of collectors, producers, merchants and end-users while safeguarding NTFPs resources.

### **Employment through NTFP's in India:**

Non-timber forest products (NTTPs) are a variety of resources and services derived from forests, excluding wood. These resources include medicinal plants, fruits, nuts and berries, as well as non-edible items such as resins, fibers and handicrafts Harvesting and sale of NTPs can serve as a vital source of income and livelihood for rural communities, especially in developing countries where alternative economic options may be lacking One of the key advantages of NTIP is that they can't be harvested sustainably, with the need for clear cutting or other destructive practices.



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### **Objectives of the Study:**

The study is undertaken with the following objectives

- 1. To identify the factors influencing the collection of NTFPS (Non-timber forest products) by the tribal communities.
- 2. To analyze the economic contribution of NTFPS for the sustainable livelihood and empowerment in the study area.

#### Research methodology:

The respondents were selected from about ASR district of Andhra Pradesh in the first stage, 4 mandals (chinthapalli, koyyuru, G.K. Veedhi and G. Madugula) were selected for the study in second stage, in third stage two villages selected from each mandal and  $\alpha$  the sample size is selected from the population. This often leads to confusion about the size of the sample. Although, it is very difficult to determine the exact sample size fit for any particular study, the same can be calculated using Yamen formula which was formulated by statistician Yamen in 1967.

### $N/(1+\alpha^2 N)$ : where,

N-Total population of the study area- 2,38,146 (2011 census)

<sup>α</sup>=Standard Deviation (SD)=0.05

Sample size =  $2,38,146/(1+(0.05)2 \times 2,38,1461-399$ 

Nis the total size of population in our area of study (2.38.146 is the total number of ST Population in ASR district).

And  $^{\alpha}$  is the standard error. Normally we are taking 05 as the standard error. This deviation is not unusual as the researcher is dealing with samples, not the population.

Therefore, it is important to choose a sample size of 399 to get an effective result to collect data from NTFP collectors; the researcher conducted interviews and distributed questionnaires among 600 of them but after getting the response from them. it was found that 399 questionnaires were filled correctly and correctly by the NTFPS collectors.

The researcher followed the purposive sampling technique and stratified sampling techniques to select the respondents for primary data collection. Relevant Secondary data collected from articles, media source, journals, other official reports from government, ect. The primary data were analyzed on the basis of certain standardized statistical tests which include – percentage analysis, graphical representation, Chi-square test, Likert's scale test and cross tabulation. All the statistical methods were carried out through the SPSS.

#### **Analysis of the data:**

### 1. Age-wise demographic distribution of the respondents

The below table/figure no 1 shows NTFPs collectors different age groups. There are five different groups as presented in the table (4.1). There are 31 (7.8%) below 20 years, 74 (18.5%) between 20-30 years. 114 (28.6%) between 30-40 years 125 (31.3%) between 30-40 years, \$5 (13.8%) above 50 between years. The maximum number of respondents of them are found in the age group of between 40-50 years and minimum of below 20 years.

Table No .1: Age-wise demographic distribution of the respondents

Age	Frequency	Percentage
Below 20	31	7.8



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20-30	74	18.5
30-40	114	28.6
40-50	125	31.3
Above 50	55	13.8
Total	399	100.0

Source: primary data

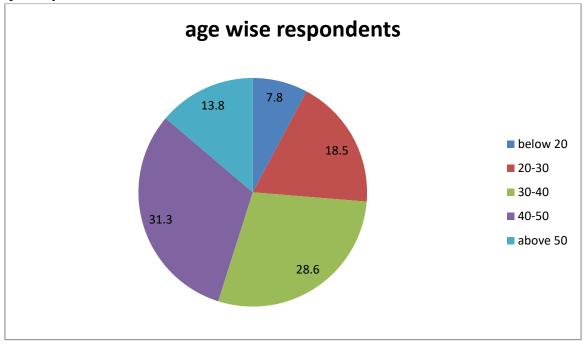


Figure: 1. Age-wise demographic distribution of the respondents

### Table:2, Annual family income from NTFPs by respondents

In the below table/figure no 2 shows the respondents of them annual family income from NTEPS was 62.2% and the average annual income is above Rs. 50,000. 2nd group respondents of them 21.6% fall under the respondents of them earning between Rs. 31,000 and Rs. 50,000. 3 group of respondents of them 11.5% fall under Rs. 10,000-Rs. 30,000. Last group of the respondents of them was only 4.8% fall under the respondents of them earning between Rs. below 10,000. Majority of the respondent's annual family income from NTFPs Rs.50,000.

Table No 2: Annual family income from NTFPs by respondents

Age	Above 50k	31k-50k	10k-30k	Below 10k	Total
Below 20	19	4	5	2	30
	(4.8)	(1.0)	(1.3)	(0.5)	(7.5)
20-30	45	16	12	1	74
	(11.3)	(4.0)	(3.0)	(0.3)	(18.5)
30-40	77	20	12	6	115
	(19.3)	(5.0)	(3.0)	(1.5)	(28.8)
40-50	76	28	14	7	125
	(19.0)	(7.0)	(3.5)	(1.0)	(31.3)
Above 50	31	18	3	3	55
	(7.8)	(4.5)	(0.8)	(0.8)	(13.8)



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Total	248	86	46	19	399
	(62.2)	(21.6)	(11.5)	(4.8)	(100.0)

Source: primary data

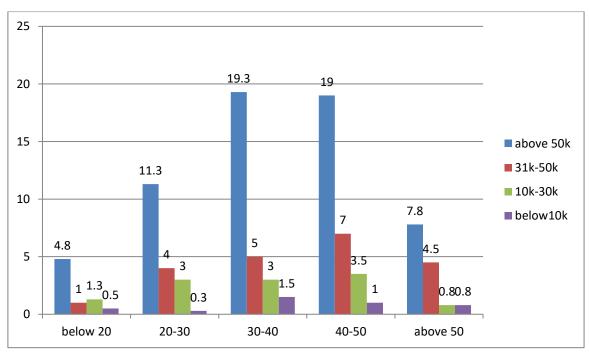


Figure: 2. Annual family income from NTFPs by respondents

### Table:3. Value of collections (Rs) per trip by the respondents

In the below table/figure no 4.10 shows the different Value of collections (Rs) per trip incomes of the respondent. It can be observed from the table that the per trip income is minimum Rs. 100/- and maximum above 1000 and their frequency is 54.8 % and 15.3% respectively. The respondent whose per trip income is between Rs.100- 500 is 18.6.%. Whose per trip income between Rs. 5,00-Rs. 1,000 is only 11.3 %.

Age	No / %	Rs. 100	Rs. 100-	Rs. 500-	Above	Total
			500	1000	5000	
Below 20	Count	21	3	5	1	30
	% of Total	5.3	0.8	1.3	0.3	7.5
20-30	Count	29	14	12	19	74
	% of Total	7.3	3.5	3.0	4.8	18.6
30-40	Count	67	19	10	18	114
	% of Total	16.8	4.8	2.5	4.5	28.0
40-50	Count	70	26	15	14	125
	% of Total	17.6	6.5	3.8	3.5	31.4
Above 50	Count	31	12	3	9	55
	% of Total	7.8	3.0	0.8	2.3	13.8
Total	Count	218	74	45	61	399
	% of Total	54.8	18.6	11.3	15.3	100.0

Source: primary data



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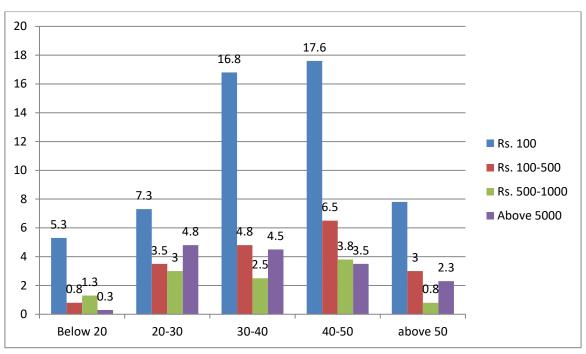


Figure: 3. Value of collections (Rs) per trip by the respondents

### Table No 4: Amount of risk while collection of NIFPs by the respondents

The below table/figure no 4. shows that, 60.4% (241) of respondents of them say that High risk at time of NTFPs collection, 25.3 % (101) Moderate risk, that keep safe to Forest dwellers moderately, 11.5% (46) of the respondents of them Risk zone during collecting. 1.8% (72) the respondents of them were face low risk and 1.0% (39) had no risk while collection of NTFPs.

Age	No / %	No risk	Low risk	Risk	Moderate risk	High risk	Total
Below 20	Count	0	0	3	7	20	30
	% of Total	0.0	0.0	0.8	1.8	5.0	7.5
20-30	Count	0	3	10	19	42	74
	% of Total	0.0	0.8	2.5	4.8	10.5	18.5
30-40	Count	2	3	12	31	67	115
	% of Total	0.5	0.8	3.0	7.8	16.8	28.8
40-50	Count	1	0	12	34	78	125
	% of Total	0.3	0.0	3.0	8.5	19.5	31.3
Above 50	Count	1	1	9	10	34	55
	% of Total	0.3	0.3	2.3	2.5	8.5	13.8
Total	Count	4	7	46	101	241	399
	% of Total	1.0	1.8	11.5	25.3	60.4	100.0

Source: primary data



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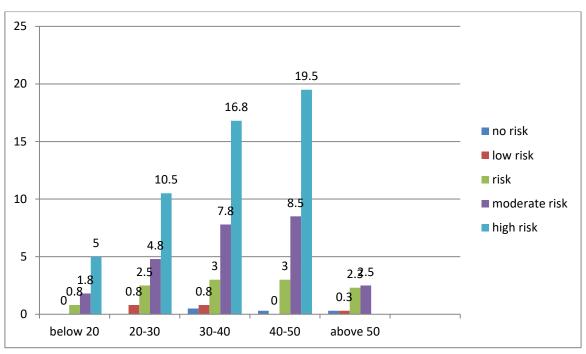


Figure No 4: Amount of risk while collection of NIFPs

# 5. Are you receiving any facilities from government agency support with respect to collection and marketing of NTFPs by respondents?

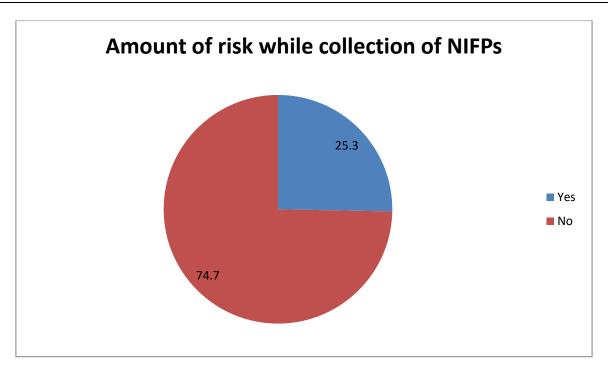
The below table/figure no .5 shows that, whether the tribes are providing any facilities from government agency support with respect to collection and marketing of NTEPs. Results suggest 74.7% (298) is not aware about support facilities and 25.3% (101) are well aware about the scheme facilities which make them more empowerment.

Age	No / %	No	Yes	Total
Below 20	Count	23	7	30
	% of Total	5.8	1.8	7.5
20-30	Count	51	23	74
	% of Total	12.8	5.8	18.5
30-40	Count	87	28	115
	% of Total	21.8	7	28.8
40-50	Count	90	35	125
	% of Total	22.6	8.8	31.3
Above 50	Count	47	8	55
	% of Total	11.8	2.0	13.8
Total	Count	298	101	399
	% of Total	74.7	25.3	100.0

Source: primary data



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### 6. Covid-19 lockdown has increased the collection quantities of NTFPS opinions by respondents

The below table/figure no 4.26 explains the opinion of the respondents of them about the statement 'Covid-19 lockdown has increased the collection quantities of NTFPs' So, 0.5% of the respondents of them strongly disagree, 3.3% of them disagree and 11.0% of the respondents of them are neutral. The respondents of them who agree with this statement are 32.1% of them. The respondents of them who strongly agree with the statements are 53.1% which determined that the Covid-19 lockdown-has increased the collection quantities of NTFPS.

Table No 6: Covid-19 lockdown has increased the collection quantities of NTEPS opinions by respondents

Age	No / %		Strongly	Disagree	Neutral	Agree	Strongly	Total
			disagree				agree	
Below 20	Count		0	1	3	8	19	31
	%	of	0.0	0.3	0.8	2.0	4.8	7.8
	Total							
20-30	Count		1	3	8	23	39	74
	%	of	0.3	0.8	2.0	5.8	9.8	18.5
	Total							
30-40	Count		0	7	13	35	59	114
	%	of	0.0	1.8	3.3	8.8	14.8	28.6
	Total							
40-50	Count		0	1	13	45	66	125
	%	of	0.0	0.3	3.3	11.3	16.5	31.3
	Total							
Above 50	Count		1	1	7	17	29	55
	%	of	0.3	0.3	1.8	4.3	7.3	13.8
	Total							



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Total	Count	2	13	44	128	212	399
	% of	0.5	3.3	11.0	32.1	53.1	100.0
	Total						

Source: primary data

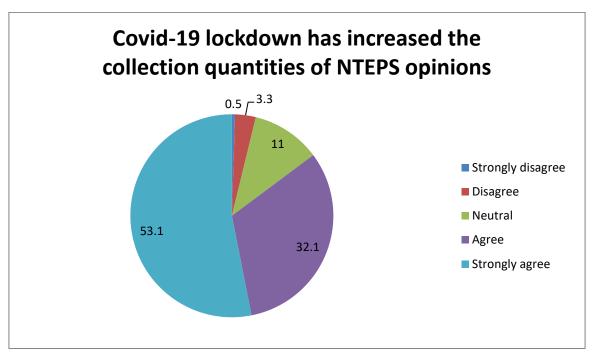


Figure No 6: Covid-19 lockdown has increased the collection quantities of NTEPS opinions

# 7. NTFPS has a good potential to generate income and therefore living standard of the tribals opinions by respondents:

The below table/figure no 4.27 explains the opinion of the respondents of them about the statement NTFPs have a good potential to generate income and therefore living standard of the tribals. So, 1.3% of the respondents of them strongly disagree, 3.5% of them disagree and 14.5% of the respondents of them are neutral. The respondents of them who agree with this statement are 13.3% of them. The respondents of them who strongly agree with the statements are 67.4% which determined that NTFP's have a good potential to generate income and therefore living standard of the tribals.

Table7: NTFPs has a good potential to generate income and therefore living standard of the tribals opinions by respondents

Age	No / %		Strongly	Disagree	Neutral	Agree	Strongly	Total
			disagree				agree	
Below 20	Count		0	0	2	7	22	31
	%	of	0.0	0.0	0.5	1.8	5.5	7.8
	Total							
20-30	Count		1	2	11	8	52	74
	%	of	0.3	0.5	2.8	2.0	13.0	18.5
	Total							
30-40	Count		2	6	18	14	74	114
	%	of	0.5	1.5	4.5	3.5	18.5	28.6



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	Total							
40-50	Count		2	6	15	20	82	125
	%	of	0.5	1.5	3.8	5.0	20.6	31.3
	Total							
Above 50	Count		0	0	12	4	39	55
	%	of	0.0	0.0	3.0	1.0	9.8	13.8
	Total							
Total	Count		5	14	58	53	269	399
	%	of	1.3	3.5	14.5	13.3	67.4	100.0
	Total							

Source: primary data

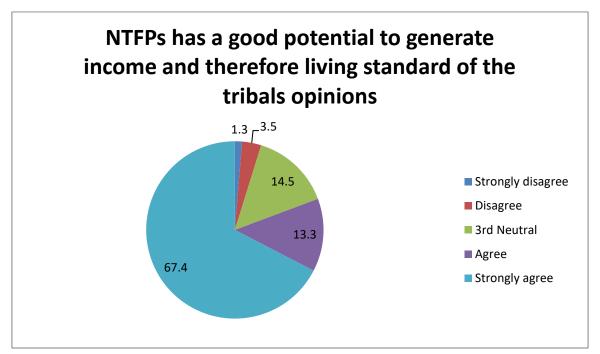


Figure 7: NTFPs has a good potential to generate income and therefore living standard of the tribals opinions

#### **Suggestions:**

### More training among the women NTFPS collectors to be provide

The importance of female respondents in respondent households in NTEPS collection is evident from the gender distribution. Only few of women is received skill training. It displays the kind of training that the female members have undergone. They only have NTFPs collection, storage and processing training.

#### **Transportation required**

The majority of respondents of them collect NTFPS from deep forests with no road access or other means of transportation requires for collection of NTFPs (Non-timber forest products)

#### Middleman Problem must be avoided

Observations suggest that the disorganized nature of trade in the market results in an uneven distribution of profits among tribal farmers. As a result, tribal members often receive low cash income while middlemen reap huge profits. This is one of the reasons why income from NTFPs (Non-timber fores



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products) has declined for tribals Middleinen take advantage of the unorganized market for NTFPS while traders engage in waiting tactics, unfair trading practices and opportunistic pricing offering lower prices to NTFP's collectors. Furthermore, many fariners sell their produce separately without bundling it, making them vulnerable to exploitation by traders and middlemen.

#### More suitable tools required

Most communities cannot afford the machine necessary for the initial lacquer processing, which has intial cost. So, they are unable to increase lac's value. NTEPS collectors do not use any machinery to process the produce they live gathered from the forest.

### **Providing credit facilities**

It has been noted that tribal women are unable to launch mini-enterprises like farms and forests, which would benefit them financially and socially, due to a lack of financial support. It boosts their self-esteem and instils an entrepreneurial spirit in them. More of respondents of them were uninsured, while any of them received financial aid This is a significant barrier to helping tribal families who are collecting NTFPs.

#### To avoid the barter system of trade.

The practice of barter system of trade is still observed in certain states. However, it can be challenging to gauge the exact value of a product that will be exchanged for another. In some cases, middlemen may engage in abusive practices to drive up the value of small forest products. The barter trade primarily involves the exchange of staple food items and private traders typically provide electronic weighing machines without any assurance of their accuracy,

### Government officials can lead to apathy towards selling NTFPS

It has been demonstrated that in the process of selling their goods, collectors do not go to the local market: rather, buyers come to their villages and purchase the products at varying prices. One of the reasons why collectors prefer selling their wares to private buyers over government buyers is that the former provides them with immediate.

#### **Conclusion:**

There is a significant population of tribal people who have been residing in and around forests for many generations and have been dependent on the collection of NTFPS (Non-timber forest products) for their livelihoods. Unfortunately, the government has not yet recognized their rights over the forest lands they occupy and it is crucial to take immediate steps to empower these communities economically. To ensure the quality of NTFPs, the government must establish backward and forward linkages, including transportation, storage, scientific grading and primary-level processing. Additionally, greater awareness about the importance of NTFPs in the region is necessary. To increase the value proposition for NTFPS collectors, the government should support marketing of NTFPs in areas where they are grown.

#### **References:**

- 1. Vidyarthi, L.P. and Rai. Binay Kumar. 1976; the Tribal Culture of India New Delhi: Concept Publishing Company.
- 2. Hamilton, L. S., Juvik, J. O., & Scatena, F. N. (1995). The Puerto Rico tropical cloud forest symposium: introduction and workshop synthesis. In Tropical montane cloud forests (pp. 1-18), Springer US.



E-ISSN: 2582-2160 • Website: <a href="www.ijfmr.com">www.ijfmr.com</a> • Email: editor@ijfmr.com

- 3. World Health Organization, & Joint FAONACA WHO Study Group on Food Safety Issues Associated with Products from Aquaculture. (1999). Food safety issues
- 4. Hiremath, A. J. (2004). The ecological consequences of managing forests for non-timber products. Conservation and Society, 2(2), 211-216.
- 5. Triguero-Mas , M. , Olomi-Sola , M. , Jha , N. , Zorondo-Rodriguez , F. , & Reyes-Garcia , V. (2009). Urban and rural perceptions of protected areas: a case study in Dandeli Wildlife Sanctuary, Western Ghats, Conservation, 36(3), 208-217, India. Environmental
- 6. Singh, A., & Sadangi, B. N. (2012) Livelihood Patterns and Resource Base of Tribals in Koraput and Rayagada District of Odisha, Indian Research Journal of Extention Education, 12(15), 307-12,
- 7. Singh, A., & Sadangi, B. N. (2012) Livelihood Patterns and Resource Base of Tribals in Koraput and Rayagada District of Odisha, Indian Research Journal of Extention Education, 12(15), 307-12,
- 8. Adam, Y. O., Pretzsch, J., & Pettenella, D. (2013). Contribution of Non-Timber Forest Products livelihood strategies to rural development in drylands of Sudan: Potentials and failures. Agricultural Systems, 117, 90-97.
- 9. Ahmed, M. U., Jana, S. K., & Roy, S. D. (2016). Marketing of non-timber forest products a study in Paschim Medinpur district in West Bengal, India. Int. J. Market. Res. Rev. 4, 330-337.
- 10. Verma, S. K., & Paul, S. K. (2016). Sustaining the NTFPs (Non-timber forest products) based rural livelihoods of tribals in Jharkhand: Issues and Challenges. Jharkhand Journal of Development and Management Studies, 14(1), 6865-6883.
- 11. Van den Boog, T., Bulkan, J., Tansey, J. & van Andel, T. R. (2018). Sustainability issues of commercial non-timber forest product extraction in West Suriname. Journal of ethnobiology and ethnomedicine, 14(1), 1-16.
- 12. Sharma, K., Sharma, R., & Devi, N. (2019), NTEPs (Non-timber forest products) and livelihood security: An economic study of high hill temperate zone households of Himachal Pradesh. Economic Affairs, 64(2), 305-315.
- 13. Sheppard, J. P., Chamberlain, J., Agúndez, D., Bhattacharya, P., Chirwa, P. W., Gontcharov, A., & Mutke, S. (2020). Sustainable forest management beyond the timber-oriented status quo transitioning to co-production of timber and non-wood forest products a global perspective. Current Forestry Reports, 6(1), 26-40,
- 14. Talukdar, N. R., Choudhury, P., Barbhuiya, R. A., & Singh, B. (2021). Importance of NTFPS (Non-timber forest products) in rural livelihood: A study in Patharia Hills Reserve Forest, northeast India. Trees, Forests and People, 3, 100042.
- 15. Hansda, R. (2022). COVID-19, India, small-scale farmers and indigenous. Adivasi commCaities-the answer to the future lies in going back to the basics, In Gender, Food and COVID-19 (pp. 22-32). Routledge.