



IMPORTANCE OF AMCHOOR PRODUCTION IN TRIBAL ECONOMY A CASE STUDIES OF AKKALKUWA TAHSIL IN NANDURBAR DISTRICT

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Abstract

The Tribes Bhil, Pawra, Dhanka, Tadvi Dhanka are known for the production of Amchoor of Satpura ranges in Nandurbar District. They are specially relying on this production. The present paper aims to explore the process of Amchoor production and contribution for source of economy in tribal livelihood. Amchoor production from raw unripe wild mangoes, that are peeled and fresh cut sliced then sun dried. The dried Amchoor is sold in the local market. The Tribes are unknown about the other market subsequently they have to depend on the local market rates and local trader's policy. The market price is decided by the local traders. The local traders take advantages of their illiteracy and do not pay them the handsome of amount as per the weight and measures. The local traders exploit the producers economically. Amchoor powder has a pleasant sweet-sour aroma of the dried fruits. It has a cooling effect and is good for digestion.

Keywords – Tribal economy, Amchoor Production, NTFPs, Exploitation, Local Traders.



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Introduction:

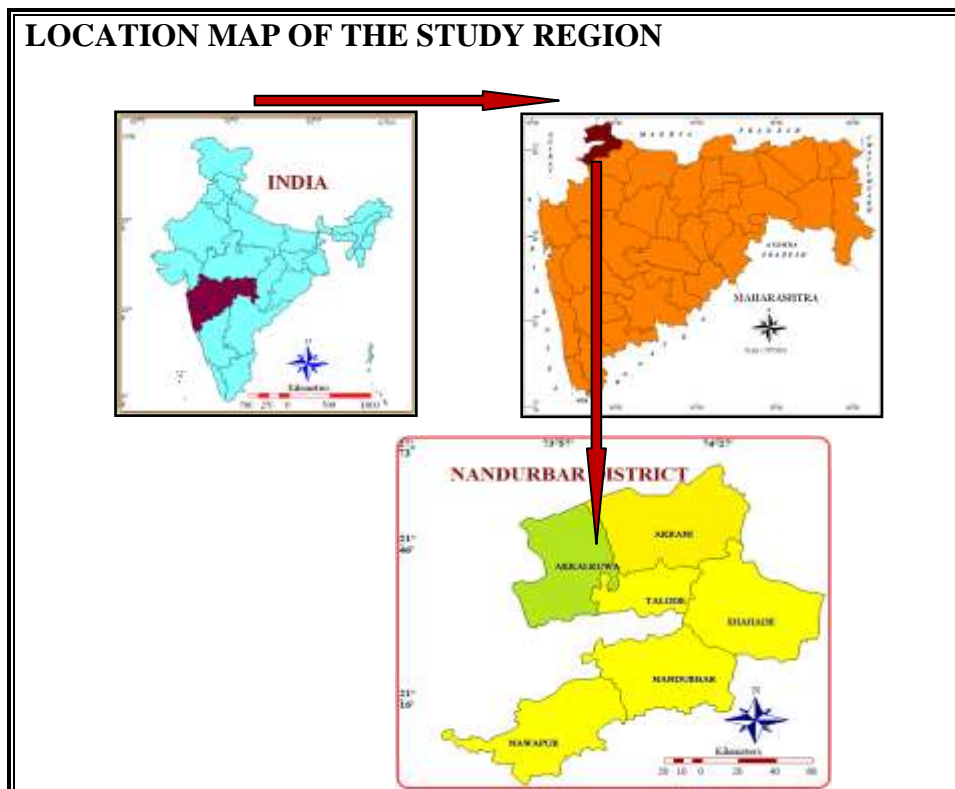
The Tribes in western Satpura are mainly dependent on the Agriculture and support themselves by Amchoor production and collection of NTFPS like Hirada, Behda, Amla, Mahoo, Charodi, Tendu leaves, Charoli etc. The present study aims to explore the process of Amchoor production and contribution for source of economy in tribal livelihood. The tribes are involved in the Amchoor production. Each of the farmers belongs to 3 to 10 as an average mango trees for Amchoor production. The process of Amchoor starts with the raw green mangoes (9 to 10 weeks after fruit sets) in a traditional way. The market price is decided by the local traders. The local traders take advantages of their illiteracy and do not pay them the handsome of amount as per the weight and quality. The local traders exploit the producers economically. The contribution of the source of cash from the Amchoor is higher than the other NTFPs as a part of their arts of livings. The available mango trees grow in a natural way and result for not a grown size of the fruits. So the quality production is restricted.

Data Base and Methodology:

The present study is based on both primary and secondary data. The primary data is collected through interview questionnaires, observations and personal discussions with villagers of dominant Amchoor producer; the researcher has conducted the intensive fieldwork in financial year 2014-15 to 2015-16. Out of 94 villages of Satpura Mountain area in Akkalkuwa tahsil 11 villages are selected as sample villages by random sampling method. Near about 309 (9.34 percent) households were selected as sample household engaged in Amchoor production. It has helped to better understand Amchoor production processes, market price and cash income to identify importance of Amchoor production in Tribal Economy in study area. The secondary data is collected through the unpublished record of the government and various publications such as district census handbook of Nandurbar and Dhule district 1991, 2001, and 2011 etc and socio economic abstract of Nandurbar district in 2016. The collected data is used to analyze through the various a standardize techniques.

Study Area:

Nandurbar district extends between $21^{\circ} 0'$ to $22^{\circ} 03'$ north latitudes and $73^{\circ} 33'$ east to $74^{\circ} 32'$ east Longitudes. The Nandurbar district lies in the North Western part of Maharashtra with geographical area of 5034 Sq.km. has an amorphous shape. The district is bounded to the South and South-east by Dhule district, to the west and north is the state of Gujrat, to the north and north-east is the state of Madhya Pradesh. Akkalkuwa Tahsil extended $21^{\circ} 30' 45''$ north to $21^{\circ} 54' 30''$ north latitudes and $74^{\circ} 47' 15''$ east to $74^{\circ} 7' 30''$ east longitude. Akkalkuwa tahsil lies in the north western part of Nandurbar district as well as Maharashtra state. Most of this region is covered by Satpura mountain ranges, and between Narmada valley in the north and Tapi valley in the south.



Objectives:

1. To understand and study the importance of Amchoor production in Tribal Economy in study area.
2. To analyze the methods of collection, processing and marketing of Amchoor.
3. To estimate the contribution of Amchoor to in cash income of tribals.
4. To find out the problems faced by tribal communities engaged in Amchoor production.

Discussion:

a) Review of Literature:

Ashoush and Gadallah (2011), elaborately explain utilization of mango peels and seed kernels powders as sources of phytochemicals in biscuit. *Banerjee (2011)*, summarise the economics of mango cultivation. *Goyal and Manikantan (2006)*, elucidated thin-layer drying kinetics of raw mango slices and its various uses in killnery. *Kittiphoom (2012)*, shows the various uses of Mango seed in his research. *Rao and Satyanarayana (2012)*, classify the chemical characterization of raw mango and various storage methods. *Sompong and Silman (2009)*, find out the nutritive value and nutrient digestibility of ensiled mango

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byproducts. *South African Mango Growers' Association (2003)*, systematic studies on mango fruit beverages and processing with mango products. *Nile and Padvi (2016)*, analyse the role of non-timber forest products in forest dweller's economy in Western Satpura region.

b) Amchoor Production Process:

Amchoor the word derived from Hindi word 'Aam' means unripe mango (*Mangifera indica*) and 'Choor' means small pieces. It means the small pieces of the unripe mangoes known as Amchoor or Amchur. The process of Amchoor starts with the raw green mangoes (9 to 10 weeks after fruit sets) during summer season (March to May). Amchoor is made from raw unripe wild mango that they are peeled and the fresh cut in to 4-5 slices then dried into open place for 2-3 days in the sunlight. After drying Amchoor is sold in the local market.

Table No. 1 Nandurbar District: Totals And Average Amchoor Production In Selected Sample Villages.

Sr. No.	Name of Sample Village	Total Household in the Village	Number of Selected Household	Proportion of Selected Household	Production in Kg./Year.	
					Total	Average
1	Bagda	317	30	9.46	847	56
2	Bardi	366	30	8.20	3441	143
3	Barisurgas	110	22	20.00	2046	102
4	Dab	697	35	5.02	1399	54
5	Dahel	443	23	5.19	2275	108
6	Jangthi	344	34	9.88	1481	59
7	Kewdi	199	30	15.08	524	58
8	Kuwa	299	30	10.03	1672	75
9	Nandwane BK	56	14	25.00	843	70
10	Veri	344	34	9.88	2698	96
11	Wadibar	135	27	20.00	2184	84
	Total	3310	309	9.34	19410	82.27

Source: Household questionnaires.

Most of the households in all sample villages have wild mango trees on their homestead or farm land and forest area; there is a lot of market demand and higher sale price for Amchoor. Table No.1 clearly shows the distribution of Amchoor production in the sample villages. The highest total Amchoor production is found in Bardi Village with 3441kg and

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followed by Veri 2698 kg, Dahel, Wadibar, Barisurgas, and Kuwa with 2275, 2184, 2046, and 1672 kg/year respectively. And lowest Amchoor production is found in Kewdi sample village with 524kg.per year.

The highest average production of Amchoor is found in Bardi sample village with 143 kg. Followed by Dahel, Barisurgas, and Veri with 108, 102, and 96 kg. per years respectively. And lowest is in Dab village with 54 kg per year. The average Amchoor production is depends upon availability of mango trees. The higher availability of mango trees with higher Amchoor production, e.g. Bardi, Barisurgas, Dahel, Veri, Wadibar and Kuwa sample villages are found higher numbers and dense mango trees.

c) Marketing of Amchoor:

Most of the tribal households which are involved in the production of Amchoor in the study area sale their production in the local market. The sale of Amchoor is a major source of income for local tribal households throughout the study area. The dried Amchoor is sold in the local market center (Molgi in Akkalkuwa, Nandurbar district). Amchoor rates are decided by their grade, quality.

Table No.2 Nandurbar District: Purchas And Sale Price Of Amchoor By Private Traders. (Average And Tentative Sale And Purchas Price Rs/Kg.).

Amchoor Grade	Average Price received by producer.	Selling price by middlemen/ Consumer.	Selling price by Traders/ Wholesaler.	Price difference between traders and producer.	Percentage appreciation
Grade 1	120.00	140.00	-	20.00	16.66
Grade3	100.00	120.00	-	20.00	20.00
Grade 3	60.00	80.00	-	20.00	33.33
Grade 1	120.00	-	500.00 (TP)	380.00	316.66
Grade 2	100.00	-	400.00 (TP)	300.00	300.00
Grade 3	60.00	-	300.00 (TP)	240.00	400.00

Source: Household and traders interview questionnaires.

This is evident from the price differentials between the sale price and purchase price of the trader for Amchoor presented in Table No.2. It seen that the sale price of the trader varied more than two times in Amchoor grade 1(316.66 %), Amchoor Grade 2 (300 %), Amchoor grade 3 (400 percent). Amchoor is sent (Export) in the national level market by local traders in the places like Vadodara, Ahmadabad, Jamnagar, (Gujrat) Jaipur, Jodhpur

(Rajasthan), Indore, Gwalior (M.P.) Delhi, Kanpur and Lucknow (U.P.) and Nagpur (Maharashtra) etc.

The local tribes are very committed to the Amchoor production. Hence they sincerely involve in the production process. In the process of Amchoor production the tribe doing hard work. But market price is decided by the local traders. The local traders take advantages of their illiteracy and do not pay them the handsome of amount as per the weight and quality.

The local traders exploit the producers economically. The Tribes are unknown about the national level market subsequently they have to depend on the local market rates and local trader's policy. The market price is based on various criteria such as tentative production, quality, and size of Amchoor. But the market price is decided by the local traders, it is based on the grades. The grade one is Rs.120 to 250 and grade two is Rs. 60 to 160 respectively. The researcher has observed that there is the low rate for Amchoor comparatively in other markets. Apart from that the production is more (increased) the rate/prices are declined in local markets. The fluctuations in rates are found in the local market mainly in Molgi and Dhadgaon market. The production is also affected by the change in weather (Climate) and insect infection.

d) Cash income from Non-Timber Forest Products:

Non-Timber Forest products (NTFPs), FAO (1999) explains "*Non-wood forest products consist of goods of biological origin other than wood, derived from forests, other wooded land and trees outside forests*". A large variety of forest resources were traditionally available in the Satpura of tahsil Akkalkuwa and Akrani in Nandurbar district. Some of these forest products such as leafy vegetables, roots and tubers are locally consumed while some others such as Mahua flowers and seeds, Chiranji (Charoli), Amchoor were partially utilized and partly sold in the nearby local market. A large number of the study area are generating income from various forest products such as Amchoor and seeds products from wild unripe mango, Mahua flowers and seeds, Chiranji (Charoli), Jamun, Oalame, Hirada and Palm trees (Tadi).

The cash income received by the sample households from different Non-Timber forest products are presented in Table 3. The researcher has observed that on an average, income from NTFPs per year is around Rs.18, 517.00 household per annum. The table reveals that contribution of Non-Timber forest products varied from as low from as Jamun
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and Olame to the extent of Amchoor about 60.19 percent in sample villages in the study area, as regards the sources of income to the total income. Followed by Mahua flowers, mahua seeds, Hirada and Chironji (Charoli), with 35.54, 3.56, 1.99 and 0.55 percent respectively to the total cash income from the Non-timber forest products.

Table No.3 Composition of Household's Annual Cash Income from Different Non-Timber Forest Products (Inr/Hh/Year)

Name of Sample Village	Annual Cash Income From Different Non-Timber Forest Products (INR/HH/year).							
	Amchoor	Mahua Flowers	Mahua Seeds	Chironji Nut	Hirada	Jamun	Olame	Total Cash Income
Bagda	7061	3968	383	0	0	0	0	11412
Bardi	22637	1314	422	70	0	0	0	24443
Barisurgas	16201	5699	871	0	0	0	0	22771
Dab	5489	0	0	0	4050	275	55	9868
Dahel	16517	7559	1554	0	0	0	0	25630
Jangthi	5377	18163	710	1053	0	0	0	25302
Kewdi	2058	22692	1641	0	0	0	0	26391
Kuwa	9219	4214	276	0	0	0	0	13709
Nandwan Bk.	9586	507	29	0	0	0	0	10121
Veri	14917	2413	658	0	0	0	0	17988
Wadibar	13544	1796	708	0	0	0	0	16048
Average	<i>11146</i>	6211	659	102	368	25	5	18517
Percentage	60.19	33.54	3.56	0.55	1.99	0.14	0.03	100

Source: Household interview questionnaires.

It has been observed that in the sample households the contribution of the source of cash income from Amchoor is in an average (Rs.11146/HH/year) as per earning from different NTFPs and it is highest contribution than all the sources. The highest proportion of income from Amchoor is found in the Bardi village INR. 22637/HH/year, while lowest is found in Kewdi with Rs.2058 HH/Year. Beside that income vary in Dahel, Barisurgas, Veri, Wadibar, Nandwane Bk., Kuwa and Bagda sample villages with Rs. 16517, 16201, 14917, 13544, 9586, 9219 and 7061 Rs. HH/Year respectively.

e) The Uses of Amchoor Powder:

The use of Amchoor powder is confined chiefly to Indian cookery, where it is used as an acid flavoring in curries, soups, chutneys, marinades and as a condiment. The dried slices add piquancy to curries and the powder acts as a souring agent akin to tamarind. It is

particularly useful as an ingredient in marinades, having the same tenderizing qualities as lemon or lime juice. However, where, for instance, three tablespoons of lemon or lime juice are required, one teaspoon of Amchoor will suffice. Chicken and fish are enhanced by Amchoor and grilled fish on skewers, machli kabab, is well worth trying. It is used to make refreshing drinks including jal jeera etc. It is also used for tenderizing poultry and meat. The unripe fruit has acidic, astringent and ant scorbutic properties.

Conclusion:-

In Satpura ranges tribals are mainly depend on the Agriculture and support themselves by animal husbandries and collection of Non-Timber forest products. Most of the households in study region have wild mango trees on their homestead or farm land and forest area; there is a lot of market demand and higher sale price for Amchoor.

The total Amchoor production in selected sample villages was 19410 Kg. per annum. The highest total and average production of Amchoor was recorded in Bardi Village with 3441 and 143 kg. The average Amchoor production is depends upon availability of mango trees.

The market price is based on various criteria such as tentative production, quality, and size of Amchoor. The market price is decided by the local traders as per grades. The grade one is Rs.120 to 250 and the grade two is Rs. 60 to 160 respectively. The sale price of the trader varied more than two times in Amchoor grade1 (316.66 %), Amchoor Grade 2 (300 %), Amchoor grade 3 (400 percent). Amchoor is sent (Export) in the national level market by local traders.

The researcher has observed that on an average, income from NTFPs per year is around Rs.18,517.00 household per annum. The source of cash income from Amchoor is in an average Rs.11,146/HH/year to the total cash income from different NTFPs and it is highest contribution than all the sources.

The local Tribes are very committed to the Amchoor production. As they sincerely involve in the production process. The local traders take advantages of their ignorance, simplicity and illiteracy. Hence do not pay them as per the weight and by giving them very less margin of it. The local traders exploit the tribes economically. The Tribes are unknown about the national level market prices subsequently they have to depend on the local market rates.

Remarks: -

- 1) To guide and create awareness among tribals regarding the Government Schemes about newly mango trees plantation to increase production.
- 2) Govt. declare fix rate and develop market place, along with manufacturing center.
- 3) Motivate and provide the tribes economically to encourage them for Amchoor production.
- 4) There is a need to plant high quality mango trees to increase production and conserve the old mango trees.

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