# Significance of SAL Tree in the Livelihood of Tribal People of Srirampur and Bansayer Village under Dubrajpur Forest Range of Birbhum District.

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Abstract: The various parts of Sal tree which are collected by the tribal people as a Non-Timber Forest Produces (NTFPs) play a crucial and significant role in the livelihood and socio-cultural life of tribal people. Most of the tribal people of Birbhum district use various parts of Sal tree as an important NTFPs. Dubrajpur Forest Range of this district is a typical example of this research study where a large number of local tribal people collect various parts of Sal tree as NTFPs from the Sal forest of this Forest Range. The study area i.e. the Forest Range is purposively selected as a sample area and the two villages and household under this Forest Range are selected after multi-stage random sampling. The main aim of this paper is to find out the role of various parts Sal tree in the life and livelihood of tribal people. The study is based on quantitative and qualitative data collected during field survey. After detailed analysis of collected data it has been found that for income generation and livelihood, Sal tree play an important role among the tribal peoples life and livelihood. This paper also highlights some important suggestions for betterment of livelihood of tribal people using Sal tree as an important forest based resource and NTFPs.

**Key Words:** Sal tree, NTFPs, Forest Range, multi-stage random sampling, tribal people, livelihood, forest resource.

#### 1. INTRODUCTION:

As a NTFPs (Non-Timber Forest Products) the various parts of Sal tree play an important role in the life and livelihood of tribal people from their birth to death since time immemorial. Sal tree naturally and abundantly found in Chotanagpur Plateau and at its adjoining pockets and in this geographical location tribal people specially the Santhal, Munda and Kora exclusively, uses the various parts of Sal tree for their domestic and commercial utilization. The present study Dubrajpur Forest Range is one of the parts of Chotanagpur plateau and it is also part of erstwhile Santhal Pargana. The research topic is tries to highlight the significance of Sal tree on the economic, social and cultural aspect of tribal people.

## 2. AIMS AND OBJECTIVES:

- (i) To delineate the tribal population in that particular villages of the study area.
- (ii) To record field data in order to analyse the role of SAL tree among these tribal people.
- (iii) To analyze what extent of SAL tree fulfill the socio-economic, religious, cultural and ethno medicinal requirements of tribal people.
- (iv) Finally, recommended some developmental strategies and measurements of tribal people.

## 3. STUDY AREA:

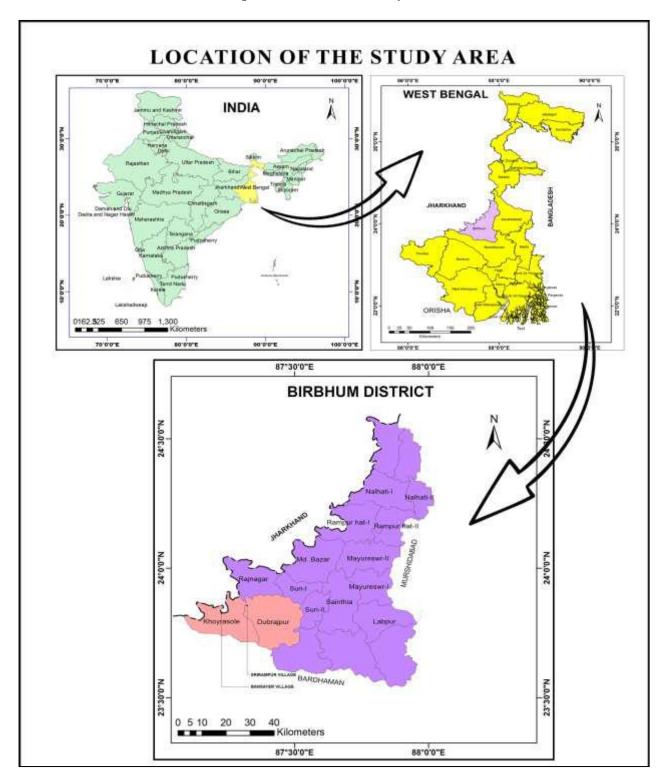
Birbhum is enriched with 16644.542 ha total forest area (DFO, Birbhum 2016) covering MD. Bazar, Sainthia, Rajnagar, Suri, Bolpur, Dubrajpur and Rampurhat Forest Range under Birbhum Forest Division. Birbhum forests dominant tree is Sal tree. In this study selected two villages- (i) Bansayer and (ii) Srirampur is under Dubrajpur Forest Range. Bansayer village is from Khoyrasole block and Srirampur village is from Dubrajpur block. Both villages are situated on south-western part of the district Birbhum. Bansayer is a fringing village of Khoyrasole block and situated at northern part of this block. Srirampur village is situated on north-western part of Dubrajpur block. The latitudinal and longitudinal extension of the study villages' are-

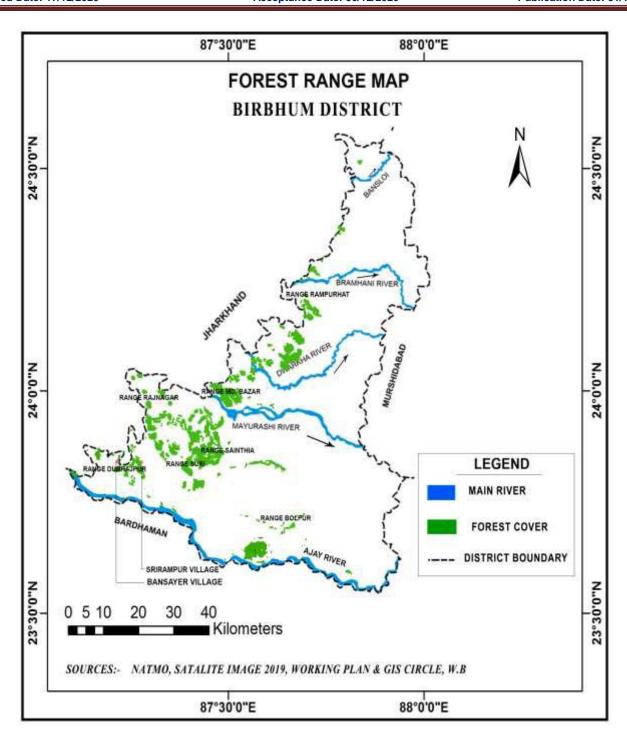
## 3.1 JUSTIFICATION FOR THE SELECTION OF THE STUDY AREA:

Sl No	Village Name	Latitudinal Extension	Longitudinal Extension	
1	Bansayer	23°50'0" N to 23°51'30"N	87°9'0" E to 87°10'30"E	
2	Srirampur	24°15'30" N to 24°16'30"N	87°48'10" E to 87°49'10"E	

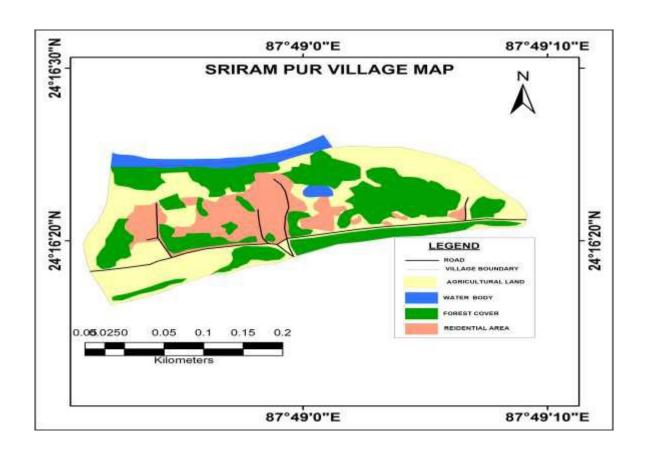
- (i) The studied villages people are mainly tribal people especially in Srirampur village. Among 252 total populations, 207 is tribal population in this village and enriched with Sal tree. But Bansayer village is not a tribal village but it enriched with Sal tree. In totality this villages have 876 populations, among them 222 is tribal population. So the linkages between tribes and Sal tree in their livelihood pattern and socio-cultural and economic life.
- (ii) Low level of literacy
- (iii) Approximate 50% and above population of these villages are lived in a Below Poverty Line (BPL)
- (iv) Remoteness from market area and city.

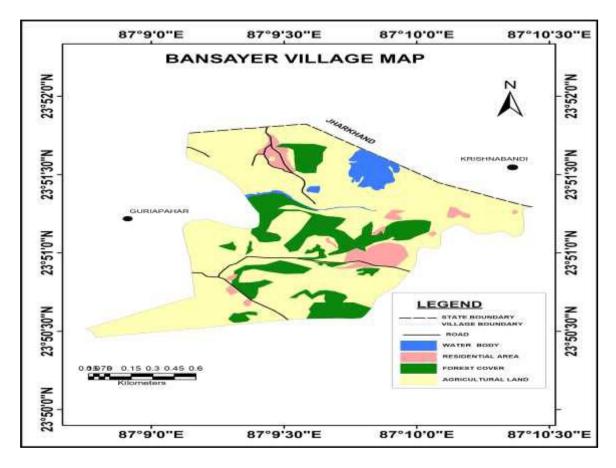
Map 1: Location of the Study Area





Map: 2 Study Villages under Dubrajpur Forest Range





Map: 3 Village Maps of Bansayer and Srirampur

#### 4. METHODOLOGY:

The present study area is covering two sample villages to fulfill the aims and objectives of this research study. The research study mainly conducted with qualitative and quantitative primary data and at some point secondary data is also applied.

## **Primary Data Collection:**

- (i) Field survey conducted with prescheduled questionnaire.
- (ii) Survey Method: Throughout all the forest range of Birbhum district, Dubrajpur Forest Range has choosen purposively. Dubrajpur Forest Range have 4 Beats (Bakreswar, Hetampur, Khoyrasole and Rasa), out of which two forests beats (Bakreswar and Rasa) have been choosen purposively. Two villages from two forests beats have been selected for this research work through multi-stage random sampling. In case of selection of household from each village a multi-stage random sampling method has also been applied. The interview was conducted with household heads, eldest member or female member of the family. Elder members have chosen because they had a strong connection with forest since before. To get the detailed information and actual picture, group discussion, participant observation, household survey have executed along with interviews.

# **Secondary Data:**

Secondary sources of data collected from District Census Handbook (2011), staffs of Forest Department (beat officer and forest ranger) and the member of Forest Protection Committee (FPC). The present research work is cover up with two sample villages-

(i) Bansayer Village (**Khoyrasole Block**)
(ii) Srirampur Village (**Dubrajpur Block**)

Dubrajpur Forest Range

For better outcome of the result of this research work, use collected data with statistical and geographical representation and for conducted survey method applied multi-stage random sampling method. During this research survey follows two criterions-

- (i) Given much more importance on above 50 years old people because they had a strong connection with forest since before.
  - (ii) And selected female members because they play a vital role to collect forest products (NTFPs) of the study area.



## 5. DISCUSSION AND RESULTS:

**Table: 1 Description of the Research Villages** 

General Description	Bansayer	Srirampur
Grampanchayet	Babuijore	Parulia
Block	Khoyrasole	Dubrajpur
Subdivision	Suri Sadar	Suri Sadar
District	Birbhum	Birbhum
State	West Bengal	West Bengal

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Area	355.57	151.8
Household	195	52
Nearest Town	Dubrajpur	Suri
Literacy Rate	65.87%	49.07%

Source: 2011 Census Data and other Data compiled by the author

Table: 2 Village-wise Tribal Population and Forest Distribution

Sl No.	Village Name	Total Population	Total ST Population	ST Male	ST Female	Total Forest Area in ha
1	Bansayer	876	222	112	110	25.87
2	Srirampur	252	207	105	102	31.29

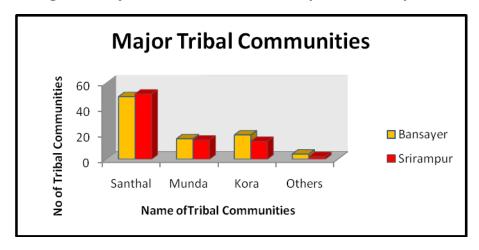
Source: Census 2011, DFO Birbhum 2016 and compiled by the author

Table: 3 Major Tribal Communities Surveyed in the Study Area

Sl No	Village Name	Santhal	Munda	Kora	Others	No. of respondent
1	Bansayer	49	16	19	4	88
2	Srirampur	51	15	14	2	82

Sources: Field Survey January, 2020

Figure: 1 Major Tribal Communities Surveyed in the Study Area



Sources: Field Survey January, 2020

Table: 4 Choosen Sample Sizes of the Studied Villages

SL No	Village Name	Total ST	Sample Size	
1	Bansayer	222	88	
2	Srirampur	207	82	

Sources: Field Survey January, 2020

## **5.1 DOMESTIC AND ECONOMIC SIGNIFICANCE:**

- (i) Sal wood used as a pillar structure, door, window and furniture
- (ii) Dried Sal leaves, sal twigs and branches are used as a fuel
- (iii) Sal leaves used as a fodder for their domestic animal
- (iv) Sal leave used as local plough, handle of axe, saw and hammer
- (v) Sal seed used as a vegetable or oil extraction (oil used for burning lamps and also as cooking oil)
- (vi) Roasted sal seeds are edible
- (vii) Sal leaf used for sal plate making, and bowl making, small baskets

- (viii) Sal leaves also used for preparing rice cakes
- (ix) Sal tree resins are used for in festive ceremonies for burning incense
- (x) Sal twigs used for tooth cleaning
- (xi) Cigar of sal leaves are used for smoking purpose

Table: 5 Various Used of SAL by the Tribals in Domestic Livelihood System of Bansayer and Srirampur Village

Sl. No	Parts Used	Purpose	Gender Involved
1	Sal Wood	Pillar, structure, death & marriage	Adult Male/Female
2	Sal dry & green leaf	Fuel, plate & bowl making, cigar	Female
3	Sal Twigs	Tooth brush	Male
4	Sal Flower	Festival	Female
5	Sal Seed	oil extraction, use as a vegetable	Male/Female
6	Sal Resin	Medicinal Purpose	Male/Female

Sources: Field Survey January, 2020

Sometimes tribal people collect sal leaves, seeds, woods and twigs for domestic purpose and sometimes for commercial purpose for their livelihood support. In this study it also shows that tribal people are engaged in traditional sal plate and bowl making, especially tribal women.

Table: 6 Seasons and Economy of Sal Commonly in Two Villages

Seasons	NTFPs Collection for Commercial	Economy		
April-June	Sal Seeds	All forest dwellers tribal tribal people work 90 days full employment with average earning 3500-6500 per family		
Jan, June, July, Oct	Sal Resins	Minimum 60 days full employment (June-July) with average earning 2000-4500 per family		
Jan-Feb, May- June & Oct-Dec	Sal leaf  More or less 8 months employment for collection & sal leaf with average earning 2500-3500 per far			

Sources: Field Survey January, 2020

Sl No.	Name of the Products	Availability	Monetary Value	Rank
1	Sal Leaves	8 months	15-20/100 plates	4
2	Sal Seeds	3 months	6-8/tin	3
3	Sal Resins	4 months	60/kg	2
4	Sal Twigs	4 months	12/bundles	1

Table: 7 SAL Used as NTFPs for Their Economy by the Tribals

Sources: Field Survey January, 2020

(N.B. 4=Highly Important, 3= Moderately Important, 2= Less Important

**And 1= More less Important)** 

At first tribal people especially tribal women i. Collect sal leaves, ii. Stitching of leaves, iii. Drying of plates, iv. Packaging of plates, v. Transportation of plates, vi. Seasonality (except March-April and July-August) and finally vii. Marketing. From the above data it has been said that among all the parts of sal used as a NTFPs, sal leave is highly important and tribal people especially tribal women can earn more money from it and with it sal seeds and resins are also important part of sal used as NTFP by the tribal people.

#### **MARKETING:**

Firstly tribal people have sold their collected NTFP through middle man. But now a day the role of middleman is not active as before. Because that time tribal people was not get right price for their collected NTFPs. In recent times tribal co-operative societies play a significant role for selling and marketing of NTFPs of tribal people. Tribal LAMPS (Large Area Multipurpose Societies) play a especial role for this. Different SHGs (Self Help Groups)

is working under LAMPS. Now tribal people especially tribal women sold their collected NTFP to SHGs and the members of SHGs processed their collected raw materials and value added and finally ready for marketing. Different SHGs have support tribal people financially. They give them loan for less interest and give machine for making sal plate. Different SHGs sold NTFPs directly in market or give it to state wholesaler or state wholesaler gives it to nationwide (According to WBKVIB-West Bengal Khadi and Village Industries Board). At the same time to boost up their sale they replace plastic product and promote bio-degraded product for green and pollution free environment.

Table: 8 Collection Season and Trading Season of Sal Leaves, Sal Seed and Sal Resin Commonly in Two Villages

Name of the Commodity	J	F	M	A	M	J	J	A	S	o	N	D
Col Cood				С	С	С						
Sal Seed				Τ	Т	Τ						
Cal Loof	С	С			С	С			С	С	С	С
Sal Leaf	Т	Т			T	Т			Т	Т	T	T
Sal Resins	С					С	С			С		
	T					T	T			T		

Sources: Field Survey January, 2020

(C= Collection and T= Trading; J=January in this way the first letter of every 12 month name in a year)

Table: 9 Distances Covered by Tribals for Collection & Seeds and Marketization of Sal Leaf

Sl No.	Village Name	Name of the Forest Products	Distance Covered for Collection	Distance Covered for Marketization
		Green leaf & dry leaf sal	5 to 5.8 km	10 km
1 Bansayer		Seeds	5.5 km	10 km
		Resins	5.6	5-10 km
		Green leaf & dry leaf sal	4.5 to 5 km	8 km
2	Srirampur	Seeds	5km	8km
	_	Resins	4.8 km	5-8 km

Sources: Field Survey January, 2020

After analyzing table 8 it has been observed that the collection and trading period are the same in these studied villages. Sal leaves collection and trading period is higher than sal seed and sal resins. After examined the table 9 it has been seen that the both villages tribal people have covered 5 or more than 5 km to collect NTFPS and whenever they sold their collected NTFPs by own they covered 5-10 km for marketing.

#### 5.2 SOCIO-CULTURAL AND RELIGIOUS SIGNIFICANCE:

Sal tree is worshiped by many tribals of Birbhum especially Santhals.

- (i) During marriages the bride and groom have to sit on the wood of this tree for getting blessing of God and making their future life successful
- (ii) Tribal people used sal leaves as a marriage invitation card with turmeric
- (iii) At the birth ceremony of tribal child sal leaves play an important role
- (iv)When Santhal are died their bodies is covered under Sal Dal (branches of sal) and say to god that when you call your parts you forgive him/her.
- (v) In spring season when sal flower appear in sal trees-they worship god for their protection and betterment for their life.
- (vi) Their cultural programme and performance are held with a branch of sal tree in the middle of the open ground and their stage also made with sal branches and leaves.
- (vii) 'Baha Porob' means flower in Santhali, people communicate with nature at the month of Falguna (Feb-March). Before Baha Porob tribal people do not use sal flower for their need. This festival is celebrated for two days.
- (viii) In their traditional dancing moments they used sal leaves; especially tribal women used it as hair accessories.

#### **5.3 MEDICINAL SIGNIFICANCE:**

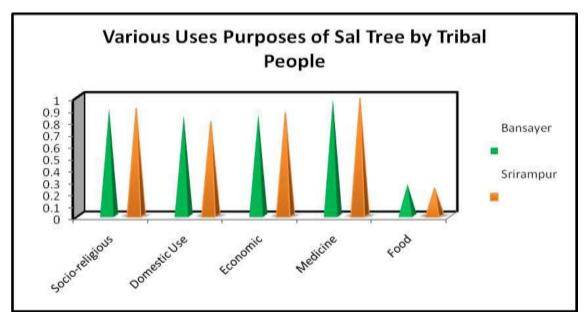
- (i) Sal resins used in producing Ayurvedic medicine for diarrhea and dysentery.
- (ii) Sal resins also used for reduces swelling and controls bleeding
- (iii) It also used for making ointments for skin diseases and other skin related problems. It also used for wound healing with honey mix.
- (iv) Sal seeds used for fat extraction, treating dental problem and used for hair wash
- (v) Sal twigs used for tooth brush
- (vi) Fruits of sal trees used for chlorosis, epilepsy and excess salivation
- (vii) Bark powder of sal tree and honey mix used for manage female disorders like irregular internal bleeding and white discharge. It is also used for joint pain and arthritis.

**Table: 10 Various Uses Purposes of Sal Tree by Tribals** 

Sl No.	Village Name	Socio- religious	Domestic Use	Economic	Medicine	Food
1	Roncover	79	74	75	86	23
1	Bansayer	89.70%	84.09%	85.22%	97.72%	26.24%
2	Srirampur	74	65	71	81	19
		90.24%	79.26%	86.58%	98.78%	23.17%

Sources: Field Survey January, 2020

Fig: 2 Various Uses Purposes of Sal Tree by Tribals



Sources: Field Survey January, 2020

After analyzing table no. 10 and figure 2 it has been observed that tribal people are used NTFPs mostly as a medicinal purpose in both of the research villages and then socio-religious, economic and domestic purpose chronologically.

## **5.4 GENERAL OBSERVATION:**

- (i) After this research study it has been observed that the various parts of Sal tree which are being collected by the tribal people from the forest as a NTFPs play an important role in the life of the tribal people.
- (ii) Tribal women have greater participation than tribal men as far as collection of Sal leaves, Sal seeds and dried Sal branches (used as firewood) are concerned from the forest as important NTFPs.
- (iii) It has been seen that as far as formation and management of SHGs is concerned for selling and marketing of various Sal products, contribution of tribal women is more than tribal men.
- (iv) It has also been observed that tribal cultural rituals are largely involved with the precious Sal tree.
- (v) It has also been found that various parts of Sal tree are extensively used by the tribal people as a traditional medicine.

## 6. RECOMMENDATIONS AND SUGGESTIONS:

In order to execute the livelihood development of tribal people, the Sal forest must be developed by the Government and Non-government Agencies. The following recommendation and suggestion may be implemented in this regard.

- (i) Sal forest cover should be increased by converting the waste land into Sal forest land. Here, in this case Sal seed and Sal Saplings should be distributed to tribal people for plantation and management of Sal forest should also be carried out by the tribal people with the supervision of forest department.
- (ii) The various parts of Sal tree which are being collected by the tribal people as important NTFPs should have Minimum Support Price (MSP) in the local market.
- (iii) The various items (such as Sal plate, Sal bowl etc.) which are being produced from Sal tree by the tribal people should be purchased by the TRIFED (Tribal Cooperative Marketing Federation of India), LAMPS or SHGs through proper price.
- (iv) The tribal people should be aware about the sustainable uses of Sal tree and its various products as NTFPs.
- (v) Tribal people especially the tribal women should be included in forest conservation and management system.
- (vi) The various eco-friendly end products such as Sal plates, Sal bowls produced from Sal tree by the tribal people should be used and promoted as a biodegradable product.

## 7. CONCLUSION:

This research study reveals that the Sal tree play a crucial role in the socio-economic and cultural aspects of tribal people in the Sal dominated forest areas. But due to lack of marketing facilities, minimum support price, training for production of various items from Sal trees, the income generation from Sal tree as NTFPs is comparatively not up to the mark among the tribal people. If marketing facilities of various products of Sal tree, Minimum Support Price, training for production of various items from Sal tree would have been improved, then the livelihood of tribal people will be better.

## **ACKNOWLEDGEMENT:**

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