

A STORY BEHIND



SHAKHAI IN AIR WATER



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VASUNDHARA, The Association of Women

INTRODUCTION

Sal (*Shorea robusta*) is one of the most gregarious species of all Indian trees having a very high timber value and repeatedly coppicing character. Under degraded condition, it regenerates very fast with simple protection measures against grazing, fire and illegal cutting. Sal forests are quite extensive in India and occupy 13.3% of the total forested areas in the country. It is found mostly in the states like Orissa, Bihar, Jharkhand, West Bengal, Madhya Pradesh and Chhatisgarh. However, Orissa still has the highest spread of Sal forests in the country, covering more than 30% of the total Sal forest areas of India.

Sal tree has a number of economic uses. Traditionally, in central and eastern India it is being used as the most important construction material for its timber quality. Apart from this, Sal bark contains tannin that is used for cheap tanning with other tanning materials, Sal resin is used as a *puja samagri* as well as a mosquito repellent, Sal seeds contain 19 – 20% of a fatty oil which is extracted for domestic as well as industrial uses. Further, most importantly, Sal leaf is used to make leaf plates and cups for domestic as well as commercial use. This is one of the most important income generating activity of the tribal and marginal families residing near the forests. The tribal of Mayurbhanj, Keonjhar, Sundargarh, part of Balasore, Sambalpur and Deogarh districts of Orissa have adopted gathering and stitching of Sal leaf plates & cups as the major source of their livelihood. Here it may be added that this occupation is relatively young and has emerged as a key source of employment only since late 70s. This is not to say that people were not using Sal leaf plates and cups earlier to this but the use was limited to domestic & ceremonial use only. However, the past two decades have recorded a rapid & wider adoption of the occupation as well as expansion the related marketing set up / infrastructure.

SAL LEAF TRADE

- **Evolution and spread of the trade:**

The Sal leaf plate stitching skill & practice was prevailing in the area, especially with the rural mass since long. But the use was very much limited to day to day domestic purpose and occasional ceremonial use. The present trend of organised wider

trade can be traced back to late 70's when it really started picking up. A few traders from the neighbouring state of west Bengal come to the bordering areas of Balasore & Mayurbhanj district who started collection & transportation of the stitched plates to Midnapore district where they were pressed and the final product was being sent to Calcutta. Till mid 80's, the trade was growing in a very slow pace. But after '86 the trade has really boomed in the area and continue to be expanding every day both area as well as quantity wise.

Last two decades have recorded tremendous spread of Sal leaf plate making practice in the study area and have established its position as the best alternative for the landless, marginal and forest dependant communities. However, in the recent years this trade has also been adopted by comparatively better up people in the forest adjacent villages. Moreover, initially the practice was restricted within the villages having forest within their revenue village boundary or in close vicinity. But now people from far away places (at times >30 kms) come to specified forests to collect Sal leaf and make a living out of stitching. For example Rissia Reserve forest, Budhikhamari Protected forest and Sarbana forest are frequented by distant collectors during the pick period. Trucks that are often owned by a leaf plate trader take the leaf collectors from one or more nearby villages to the specified forest. Again in the evening the people with their plucked leaves are taken back to their village. The truck fare is paid in the form of stitched leaf plates. The rate varies from place to place and from trader to trader depending on the distance and other allied factors. In forests like Budhikhamari, a token revenue is also paid by the collector on a day basis.

However, in both the districts under this study, it was found that 100% villages having forest within their revenue boundary or within 1 km distance has got the plate making practice. In these villages the percentage of HHs involved varied from 67% to 100%. But villages having forest at a distance more than 2kms from their village recorded a HH involvement percentage range of 26% to 79%. It was also observed that the percentage of adoption of the practice is more dominating in the tribal villages than the mixed ethnicity villages.

- **Livelihood:**

The forest dependant tribals are usually devoid of much alternative life support systems and mostly earn their livelihood from locally available NTFPs. The scheduled NTFPs fail to compensate the minimum support price for the labour input for various factors starting from



A whole family in leaf stitching
– An evening activity

legal constraints to lack of conducive marketing channel. However, Sal leaf was a free commodity and was not considered as a scheduled NTFP till 1997, after which the FD started collecting a levy on the transportation as a charge for Transit pass. The absence of legal restrictions, rise in the demand for plates & cups, easy and round the year availability of leaves and prevalence of traditional knowledge in leaf plate making have resulted in wide adoption of this occupation. In all most all the Sal forested districts, leaf collection, plate & cup stitching and selling have emerged as the primary occupation. In Mayurbhanj and a portion of Balasore district, more than 58% of the population are tribals and 95% of these families are involved in the leaf plate making trade. In an average a household is engaged for 8 months a year in this activity. Normally all the members of the family are engaged in the process.

- **Stakeholders:**

As one examines all the operations involved in the sal leaf plate making trade, there are a number of stakeholders. The primary stakeholders are the leaf collectors and stitchers at the village level. They are mostly from the tribal groups, but members from the lower caste groups and marginalized section are also part of them. The other important stakeholders are the varieties of traders operating from village level to the final urban market. At the village level again there are number of traders who act as the collection agents of big traders operating from local business centres. The big traders of the local business centres are

normally man of means and provide advances for procurement to the village level agents. Some of them own pressing units where the final product is made. Then the same is being transported to the wholesalers who in turn sale the processed plates to the urban markets across the country. The third kind of stakeholder is the State Forest Department, which gets the revenue by issuing transit permit to the traders and the Sales Tax department who gets the Sales Tax from the business. However, the Eco-concerned urban consumers are also important stakeholders to this trade. Secondary or indirect stakeholders may include Railways, Transport agencies and exporters.

- **Processing Details:**

The green Sal leaves are collected mainly by women and children from the nearby forest and are shorted out in the village. However, involvement of man in leaf collection was dominantly recorded in the villages dependant on distant forests. Moreover, initially the practice was restricted to the villages having forest within their revenue village boundary or in close vicinity, but now people from far away places (at times >30 kms) come to specified forests to collect Sal leaf and make a living out of stitching. The women and girls stitch the leaves converting them into plates and cups (khali & dona). The demand for plates is much more than the cups. But in certain pockets like Jaleswar cluster cup making is exclusively done. Usually the leaf collectors go to the forest in the mornig, spend 4 to 6 hours in collection and come back before lunch time that is usually 2 PM. However, the people going to distant places for lesf collection take almost the whole day and use to spend more than 10 hours. Then the family combinedly starts stitching the plates late into the evening. Usually a day's collection is converted within the same day. In case some leaves are left out, next day the members staying in the house stitch them before noon. The stitched plates are Sun dried for two to three days depending on the season and availability of Sun light / radiation and are put under weight (usually stones). Then the dried plates are bundled that ususally consists of 80 to 100 pieces. These bundles are than sold to either the village Agent or nearby village Agent or to Agents coming to the weekly hats.

Collection:



Women & Children in the forest for collection of Sal leaf. In case of a distant forest, the group is bigger including males and the time is a bit longer i.e. returning time is usually 6 PM to 7 PM. Middle aged leaves are best for stitching plates, neither the tender leaves nor the hard leaves are suitable for stitching. The young coppicing bushes are the best for leaf collection and leaves are hand picked. People follow wrong / non-prescribed method for collection from taller

trees i.e. a branch is lopped down and then selective leaves are collected thus causing irreparable loss to the growth process of the forest.

Stitching:



Women & Children in plate stitching
- A pleasurable activity for them.

One person can collect 3000 to 4000 leaves in a day i.e. normal plucking time ranging from 4 to 6 hours in a normal season from a regenerating forest. Usually, a group of women and children start for the forest in between 8 AM to 9AM and return back with the plucked leaves at around 2 PM to 3 PM. However, in



Women returning home with their days collection of Sal leaf

The women and girls usually stitch the leaves converting them into plates and cups (khali & dona). The whole family including male members combinedly start stitching the plates late into the evening. Usually a

entrepreneurs have recently started pressing units for catering to the local need of Cuttack, Bhubaneswar and Puri.

Pressing:

The part processed plates are then taken to the pressing units where the final product is made. In the pressing units, sizably cut polythene sheet is put in between two part processed / only stitched plates and the pair is put under the manually operated pressing die and is kept for 5 - 10 seconds. As one half of the die is heated through electric heater, the polythene film melts and acts as a leak proof adhesive and the leaf plate shape is retained because of the heat treatment. As there is a cutting device attached to the die, the product is neatly cut to the desired shape and size. This heated die also serves as a disinfecting agent making the plates more hygienic for use.

These pressed products are cooled and bundled for market. However, if the part processed plates are kept for long time and gone dry, then they are soaked in water before pressing. The machine can take different sized and shaped dies as per the customer's requirement. Usually the plates are of 10", 12" and 14" diameter,

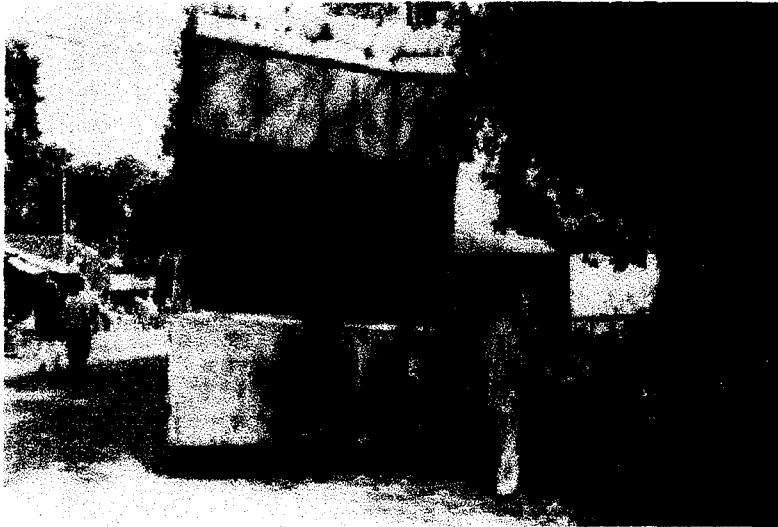


In the pressing Unit Leaf plates under final processing.

but rectangular trays are also made. Similarly the cup sizes vary from 3" to 5" diameter. As the Bureau of Indian Standards (BSI) has not yet fixed any standard on this product, they are manufactured as per the market / customer's requirements and as there is an initial screening of the leaves, the products are made almost faultless and perfect for the purpose. The process is entirely pollution free and hence does not attract any pollution control measures. More over the product is biodegradable and hence eco-friendly. Usually the pressed

plates are bundled into units of 1000 pieces packed in polythene sacks and are sent for inter-state export.

Export:



Outstate exports of processed Sal leaf plates

- Automobile carriages are preferred because of their extra size.

long trucks / covered trailers, those transport motor cycles & scooters are very often used in their return journey for leaf plate transportation because of the cost effectiveness. Traders even book a whole rack of railways wagons for transport along with small transportation of few wagons. However, the recent development in this sector suggests that the dependency on

The final product is exported to other state like AP, MP, Maharashtra, Gujrat, Bihar, West Bengal and Karnataka. The major quantity is exported through Railways from Basta, Jaleswar & Amarda road station. However, a portion is exported through trucks. The

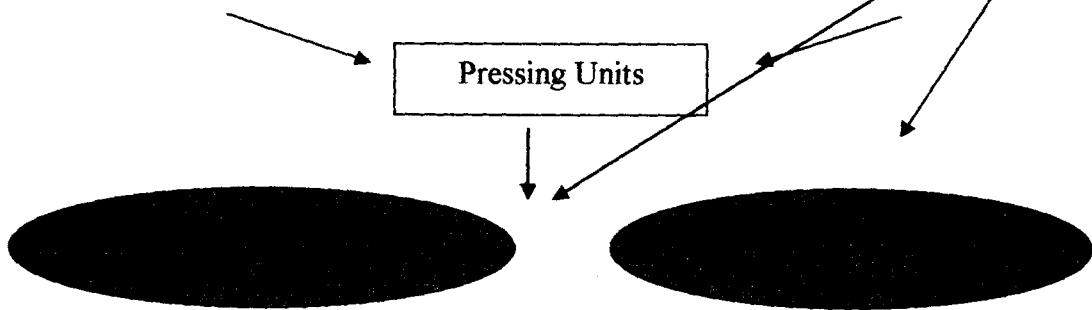
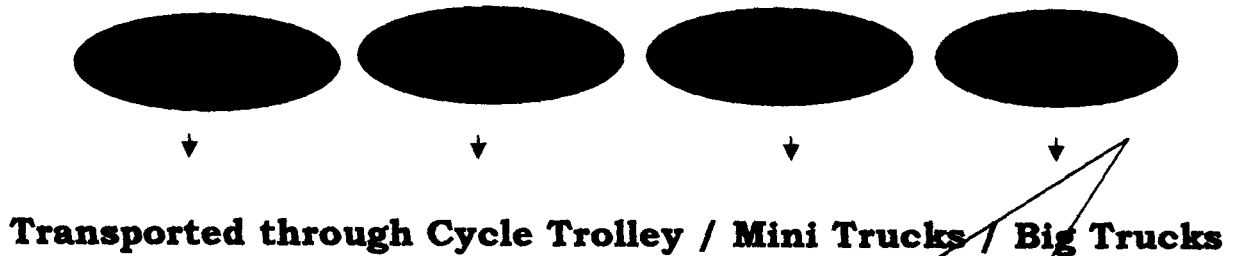
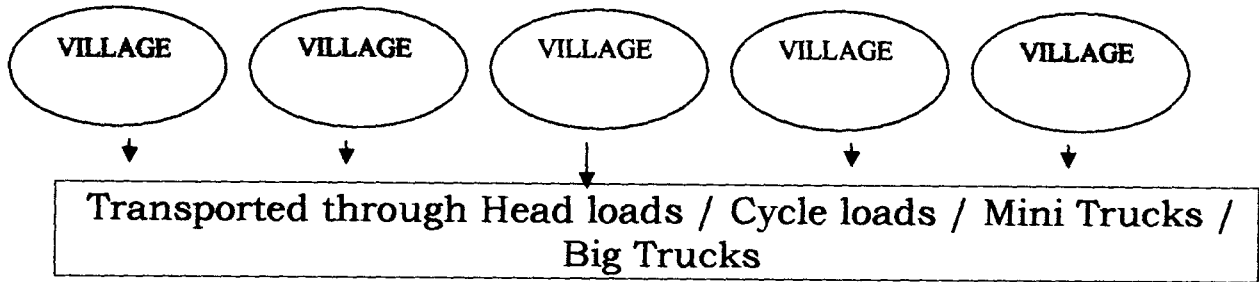


Outstate Exports of pressed Sal leaf plates

- A loaded truck at Basta ready to depart for Andhra Pradesh

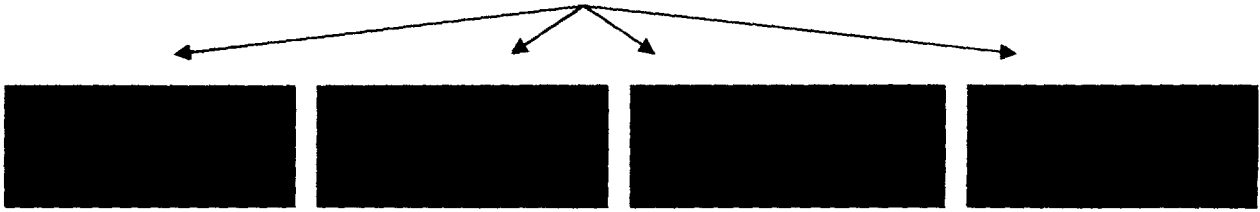
Railways has been reducing and more and more traders are preferring Road transport i.e. trucks.

• **Marketing channel:**



At Udala / Kaptipada / Bisola / Sajanagarh / Nilagiri / Mitrapur / Jaleswar / Baisinga / Jashipur / Tato / Bisoi / Bangiriposhi / Khunta / Dukura / Badasahi / Manitri / Haldipada / Raibania / Khuad / Hatigarh / Basta

Transported through Mini Trucks / Big Trucks



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WEST BENGAL	GUJRAT	UTTAR PRADESH	KARNATAKA	MAHARASTRA	BIHAR	ANDHRA PRADESH
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- **Economics of the trade:**

A primary collector gets a daily compensation of Rs 20 to 30 maximum for a total work of 10 hours on an average. A family of five members can stitch 400 to 600 plates in a day along with their domestic activities which may fetch them maximum of Rs. 30.00.

A man working in the pressing unit gets comparatively more than the primary collector. For a days work (8-10 hrs) a man gets Rs. 80 to Rs.100 as they are paid on per thousand basis. For one thousand pressed plates the machine operator gets Rs.25 to Rs.30 and for one thousand cups they get Rs.16 to Rs. 22 and a good hand can press 2500 to 3500 plates or upto 4500 cups in a day.

However, the village level agent appointed by the big traders gets a commission of 50 paisa on a bundle of 80 plates and Re.1/- for a bundle of 1000 pieces of cups. Cumulatively calculated for the village, a village agent earns Rs.1000 to Rs.2500 per week depending on the season and volume of collection.

A pressing unit owner gets a cut of Rs. 90 to 110 on every 1000 pieces of pressed plates that includes the electricity cost, polythene cost and other overhead charges. Ofcourse in these cases the transportation charge is also borne by the machine owners thus incurring an expense upto Rs. 30 – 45 and leaving a net profit of Rs. 60 – 65 per thousand plates.

The big traders get a wider range of margin because of the varied market demand and distance to the point of export. The rate per 1000 plates range varied from Rs.350 to 750, but the actual net benefit depends on the freight charges and other allied expenses. This could not be calculated exactly as the traders were reluctant to reveal all details. But it is clear that they have a still higher margin.

Problems and prospects:

Considering the existing exploitative marketing set up, the biggest problem is the non-remunerative return to the primary collector. The factors may be from the multi-tired marketing channel to high transportation cost and inaccessibility / direct

link of primary Collector to the final consumer market. The imposition of sales tax on the trade will still aggravate the situation thus transferring the load to the primary collector by reducing the return. The already imposed ban on transplantation of Sal leaf plate has influenced the trade causing a fall on the collection.

Policy environment:

Initially Sal leaf was not considered as a NTFP / MFP by the government and it was a free commodity for the common people. However, considering the volume of the trade, this item was included in the specified category by government.

The following is a sequence of the process of change that took place at the policy level of Orissa forest department. The initial JFM resolution, the steering committee recommendation, the amendments made to the JFM resolution etc. are few indicators of the place, frequency and quality of the changes being made. It depicts how the resolution develops over time, after the salient features are presented, detailed amendments have been in Appendix I.

1. 1988, August:

The State government of Orissa is considered as one of the pioneers to have issued a resolution facilitating involvement of the village communities in forest protection. The first such resolution was issued and published in the (1) Orissa gazette on 1st August 1988. The salient features of this Government resolution were as follows:

- Adjoining villages were assigned a specific role in the protection of Reserved Forests.
- The DFO would assign the peripheral Reserved Forest areas.
- The DFO would constitute the committee, Forest Protection Committee. It would include the Nayab Sarpanch as chairman, the local Forester as convenor, Revenue Inspector, village Level Worker and three other persons from the village.

- The FPC would furnish an undertaking to the DFO for upkeep and maintenance, fire protection, prevent illicit felling, thefts of forest produce etc..
- The minimum requirement of wood for households and agriculture would be worked out by the committee and no sale or barter permissible.
- Committee assigned the authority to issue a permit for the collection of timber and firewood, issued by two members of the committee. Validity - within limits of household boundary.

2. 1988, October:

In another (2) resolution, which followed shortly afterwards the following provisions, were amended.

Time period:

May to July 2001 (three months)

DETAILS OF SAL LEAF PLATE & CUP MAKING

1. Plant: *Shorea robusta*

2. Part: Green Leaves (medium age i.e. not very tender nor very hard)

3. Availability:

Peak:	1 st to 10 th Year of regeneration / coppicing
Moderate:	10 th to 20 th Year of regeneration / coppicing
Low:	After 20 th Year of regeneration / coppicing

4. Seasonality:

Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.
***	**	*	-	*	**	**	**	***	***	***	***

***- Peak, **- Moderate, *- Low

5. Who Collects:

Peak Months		Lean Months	
Who	Hours	Who	Hours
Women, Child & man	4 hrs.	Women & Child	6 - 8 hrs

6. Per day (4 – 6 hrs) collection (by one person) – 3000/ 4000 leaves

7. Per day (4 – 6 hrs) stitching : Plates – 300/ 500
: Cups – 3000/ 4000

8. Leaves required for one piece : Plates – 7 / 9 leaves
: Cups - 2 leaves

9. Plates required for one piece pressed : Plates – 2 stitched plate
: Cups - 2 stitched cups

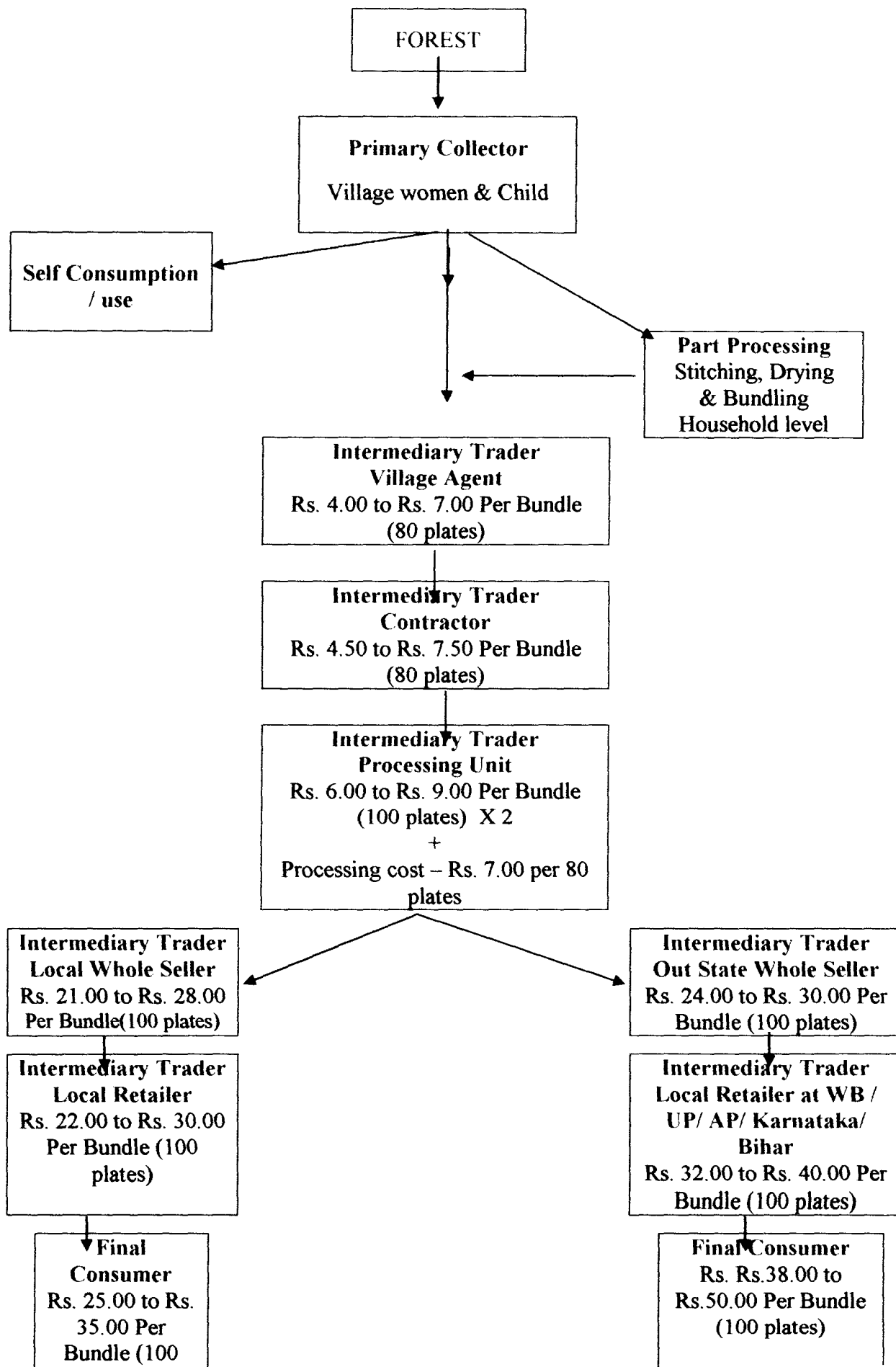
10. Sale price in local market (Only stitched):
Plate (One bundle of 80nos.) – Rs.4.00 - Rs.7.00

Cup (1000 nos.) – Rs.7.50 - Rs.8.00

11. Sale Price in local market (Pressed):
Plate (100nos.) – Rs.2 5.00 to Rs.35.00

Cups (100 nos.) – Rs. 5.00 to Rs. 10.00

MARKETING CHANNELS OF SAL LEAF PLATES



Details of Processing Cost

<u>Step</u>		<u>In State</u>	<u>Out State</u>
Step 1:	Leaf Collection:	2.00 - 3.00	2.00 - 3.00
Step 2:	Leaf Stitching:	2.00 - 3.00	2.00 - 3.00
Step 3:	Collection & Bundling (Village depot)	0.50 - 1.00	0.50 - 1.00
Step 4:	Transportation & Margin	0.50 - 1.00	0.50 - 1.00
Step 5:	Processing / pressing:	7.00	7.00
	Wage: Rs. 2.50		
	Paste (Polythene) Rs. 2.50		
	Electricity Rs. 1.00		
	Others/ Logistic Rs. 1.00		
	----- Rs. 7.00 -----		
Step 6:	Transportation & Margin	3.00 - 5.00	8.00 - 10.00
Step 7:	Transportation & Margin	3.00 - 5.00	4.00 - 5.00
Step 8:	Transportation & Margin	7.00 - 10.00	14.00 - 20.00
Step 9:	Final Consumer	25.00 - 35.00	38.00 - 50.00

List of traders involved in inter state export

Surya K. Kundu, Basta, Balasore
 Radhasyam Gupta, Basta, Balasore
 Satyanarayan Karnani, Basta, Balasore
 Gobinda ballav Mishra, Basta, Balasore
 Indrajit Ghosh, Amarda Road, Balasore
 Dhaneswar Sandh, Amarda Road, Balasore
 Niranjana Rout, Amarda Road, Balasore
 Chaitanya Das, Amarda Road, Balasore
 Gopal Ch. Sahoo, Amarda Road, Balasore
 Ajay Sahoo, Amarda Road, Balasore
 Rabi Mohanty, Amarda Road, Balasore
 Kamal Sur, Amarda Road, Balasore
 Titu Khandelwal, Amarda Road, Balasore
 Sapan Parida, Amarda Road, Balasore

Study Location details:

District	Forest Division	Forest Range	Village name
Balasore	Baripada	Nilagiri	Dwarika
	Baripada	Nilagiri	Naranpur
	Baripada	Nilagiri	Mahisapatta
	Baripada	Nilagiri	Daldali
	Baripada	Nilagiri	Khalia
	Baripada	Nilagiri	Kanthasimulia
	Baripada	Nilagiri	Bhaunriabad
	Baripada	Nilagiri	Siadimal
	Baripada	Nilagiri	Tenda
	Baripada	Nilagiri	Dalimbpal
	Baripada	Jaleswar	Khuad
	Baripada	Jaleswar	Kendukhunta
	Baripada	Jaleswar	Purunapani
	Baripada	Jaleswar	Chandabilla
	Baripada	Jaleswar	Begunia
	Baripada	Jaleswar	Chandrapur
	Baripada	Jaleswar	Baunsabani
	Baripada	Jaleswar	Bhola
	Baripada	Jaleswar	Kalda
	Baripada	Jaleswar	Upparkundi
Mayurbhanj	Baripada	Udala	Kundabai
	Baripada	Udala	Rangamatia
	Baripada	Udala	Nabra
	Baripada	Udala	Salamundali
	Baripada	Udala	Kutling
	Baripada	Udala	Dugdha
	Baripada	Udala	Dutikadeipur
	Baripada	Udala	Patpur
	Baripada	Udala	Kuanrpal
	Baripada	Udala	Kathuabeda
	Baripada	Udala	Kankadani
	Baripada	Udala	Pahadpur
	Baripada	Kaptipada	Badkhaman
	Baripada	Kaptipada	Anantapur
	Baripada	Kaptipada	Itagarh
	Baripada	Kaptipada	Kaliasul
	Baripada	Kaptipada	Nuhamalia
	Baripada	Kaptipada	Petasal
	Baripada	Kaptipada	Beguniapatta
	Baripada	Kaptipada	Patharkhani
	Baripada	Kaptipada	Chakradharpur
	Baripada	Kaptipada	Debala
	Baripada	Kaptipada	Nachhipur
	Karanjia	Jashipur	Kalapathar
	Karanjia	Jashipur	Nebda
	Karanjia	Jashipur	Dhulia
	Karanjia	Jashipur	Chhemundia (Nuadi)
	Karanjia	Jashipur	Badasialinai