

The Munda and their Lac Culture: A case study of Gullu Area of Murhu Block of Khunti District

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Introduction

The word “Jharkhand” is originated from original tribal language of the region, which means land of Jungles. The tribals population in Jharkhand state is 28%. Jharkhand has 32 tribal communities, with 8 primitive tribal groups.

The State is endowed with vast and rich natural resources mainly those of minerals and forest and 80% of its population residing in 32620 villages depend mainly on agriculture and small allied activities for their livelihood. In spite of being so rich in natural resources, the tribal regions in Jharkhand are amongst the poorest region of the country. Over 80% of the tribal population of the region is rural, and mostly dependent upon agriculture. In spite of the fact that most of them hold some land, agricultural practices are very much primitive and therefore productivity remains very abysmal. Subsistence agriculture coupled with population growth and many other hindering factors have put the tribal of the region at a very disadvantaged situation.

Most rural households here are engaged in subsistence farming under adverse environmental conditions. The families are often engaged in low paying non-agricultural activities as well. After the live saving paddy, migration to northern India is a normal phenomenon. The livelihood basket consists of agriculture (that meets food security only for few months in a year), income from forest (fuel wood and NTFP), livestock, and wage labour (local as well as migration). The weak links in the livelihood basket are low agricultural productivity, small and fragmented land holding, poor soil and water resource condition, degraded forest, lack of access to quality and certified seeds, fertilizers/compost, poorly/ non-managed CPR, lack of marketing linkages for forest produce and non availability of local wage labour.

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Economic development through the management of local resources is widely recognized as a major development intervention in this region to address issues of poverty. The state has huge potential in terms of creating livelihood opportunities for the disadvantaged tribe communities. There are equally great opportunities to develop and get control over market, which are existent all around particularly for the small and marginal farmers who are found in great numbers in the region.

The Munda

Munda Tribal Community is mainly concentrated in the Khunti District of Jharkhand State. The legal entity of this Munda tribe is the *Mundari Khuntkatti*, which gives them whole and sole rights for their socio-economic development, but in due course of the developmental process the entire rights of *Mundas* have subsided by the new Policies and Acts of the then Bihar, and now the Jharkhand Government. Different Policies regarding forest/ industry/ agriculture and Panchayati Raj implemented by the Government of Jharkhand is adversely affecting the local people in terms of their Basic Rights and control over their natural resources.

The Munda one of the scheduled tribes of Jharkhand, occupy third position in the numerical strength. They are one of the strongest Kolarian tribes inhabiting in the region of Chottanagpur. Racially they are proto-australoid and linguistically they speak Mundari dialect of Austro-asiatic family. They also speak Sadani.

The historical traditions reveals that the Munda were originally the inhabitants of north-western India. After Aryan invasion, they came to Azamgarh and from there they migrated to Chottanagpur, crossing the river Son. In Chottanagpur they cleared the virgin forest for cultivation. Each family occupied land for cultivation and the group of families, which constitute a village called it as Khuntakatti Hatu, the village of original settlers.

After few centuries, the Munda were driven out by a Dravidian tribe the Kurukh, who were later called as Oraon. The Munda fled to the deepest jungle where they are still found and maintain the Khuntakkatti system. They had passed the river Koel and settled near the village Murma. Their larger concentration is found in Khunti and Bandgaon of West Singhbhoom districts which

are situated on the Ranchi –Chaibasa main road at 50, and 60 kilometers south of state capital Ranchi respectively.

Present Situation

Since long, the day to day activities of this tribal community fully revolves around the forest and its produce, but in actual scenario they are harassed by the forest department in spite of their own right upon the forest produce.

The *mahajans* and the *mediators* generally control the market and thus the poor never get the competitive and accurate price of their own product in and around the market.

Majority of the tribal community inhabiting in this region are depends upon agriculture (32% of total income) and on forest produce (31% of total income) which supports them for almost 3 to 5 months. Rest is being met by their buffer as livestock and wage labour (23% of total income). Due to the undulating topography of the area the agricultural produce is very low. The agriculture in this part is fully dependent on rain and the cultivators go only for mono cropping. This also falls short to meet their basic needs for quit a considerable period and in such situation of distress local money lender used to lure them with for borrowings on high interest rate as this was one of the easily available option.

Land Category

Land Category of the Farmers in selected villages of Murhu Block									
Village	Don I	Don II	Don III	F.L	Tanr I	Tanr II	Tanr III	T.B	G.T.
Gullu	21.90	33.68	22.63	3.67	2.60	25.02	35.48	0.05	145.03
Siyangkel	13.86	13.25	30.07	6.89	6.32	36.41	22.24	0.03	129.7
Hatumundi	16.69	18.28	19.32	1.91	7.77	58.28	9.63		131.88
Jalasar	2.84	8.81	4.25	0.41	0.62	33.46	4.79		55.18
Turang	7.74	15.52	9.45	0.59	37.32	27.06	69.16		166.84
Lilikoto	14.05	10.24	35.77	21.33	1.89	11.80	121.22	0.34	216.64
Total	77.08	99.98	121.49	34.4	56.52	192.03	262.52	0.42	844.64

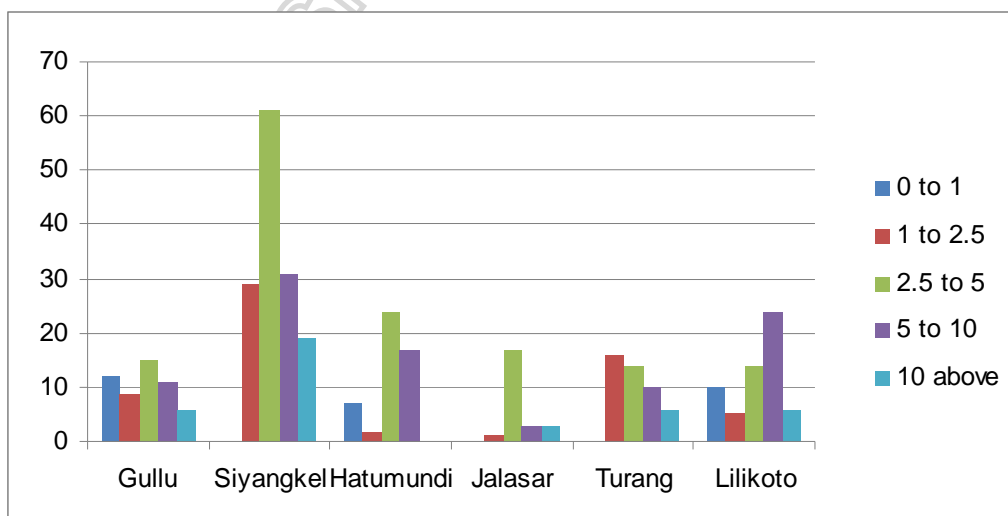
Village wise different category of land stated below envisage that cultivable waste is much higher than state average which should be brought under cultivation. Proportion of upland (Tanr-62.17%) is more than low land (Don – 33.49%) with no irrigation facility restricts per capita income from agriculture produce

Land Holdings:

The average land holding is 4.06 acres. 38.98% of beneficiaries are having 2.5 to 5 acres of land which keeps them in marginal category.

10.75 % of beneficiaries have landholding more than 10 acres and in some villages number of beneficiaries having land holding above 10 acres is very less. Thus it can be seen that 65% beneficiaries have land holding ranging from 2.5 to 10 acres.

Farmer's land holding in the selected villages (in acres)					
Village	Upto 1	1 to 2.5	2.5 to 5	5 to 10	10 above
Gullu	12	9	15	11	6
Siyangkel		29	61	31	19
Hatumundi	7	2	24	17	
Jalasar		1	17	3	3
Turang		16	14	10	6
Lilikoto	10	5	14	24	6
Total	29	62	145	96	40
% of total	7.795	16.67	38.98	25.81	10.75



10.75 % of beneficiaries have landholding more than 10 acres and in some villages number of beneficiaries having land holding above 10 acres is very less. Thus it can be seen that 65% beneficiaries have land holding ranging from 2.5 to 10 acres.

Village	Cultivable land other than community land	% Don	%Tanr	%Fallow	Number of plots
Gullu	144.98	9.26	7.47	0.43	2535
Siyangkel	129.04	6.77	7.69	0.82	2612
Hatumundi	131.88	6.43	8.96	0.23	1343
Jalasar	55.18	1.88	4.60	0.05	2203
Turang	166.84	3.87	15.82	0.07	3306
Lilokoto	216.30	7.18	15.98	2.53	2912
Total	1605.14	35.40	60.53	4.12	14991

The situation is more critical when the landholding are segmented according and its usability is seen (37 on an average). It is visualized from the data that only the big chunks from their segmented plots they bring into cultivation and rest either kept fallow or shared with others. (For example- Asao Nag of Gullu Village have 9.898 acres of land which is segmented into 62 plot). The distribution of plots is also highly scattered and hence not manageable. Further if total cultivable land is splitted into small pieces depicts agriculture sector as nonproductive.

People have no option then to depend on forest which gives them at least 12 months of food and fuel and with technical inputs the economy could be so enhanced that there is no need for putting worthless effort in growing paddy where land is fragmented and water is nil.

Growing lac can give guaranteed return if some technical inputs is given and market and middle man are controlled.

Lac Growing

Lac is one of the most valuable gifts of nature to man. It is also a unique material in as much as it is the only resin of animal origin, being actually the secretion of a tiny insect, *Laccifer laca*, Kerr.

Lac in India is of *puranic* antiquity. The house of lac in the Mahabharata, one would recollect, a date to over four thousand years. The first authentic descriptive account of lac, however, is to be

found in the report sent in 1596 by a traveler-adventure, John Huyghen van Linschoeten, to King of Portugal which contains a most comprehensive list of uses of lac in those far-off days.

It is remarkable that even thousands of years back, back people used to collect or regularly grow and put it to diverse use.

This belt of Khunti Sub Division is the major producer of Lac in India along with other non-wood forest products (NWFP). According to rough estimates about 6000 tons of Lac is procured by traders in the weekly and local hats of this Sub Division mainly by middleman.

Lac are scale insects (*Laccifer Lacca*) which live on trees called lac host trees where they secrete the lac resin which is scraped off and manufactured into shellac. To produce just 1 kilogram of lac resin around 300,000 insects lose their tiny lives. A scale insect is a common name for any of about 2000 insect species found all over the world that attaches themselves in great numbers to plants and trees. Scale insects range from an almost microscopic size to more than 2.5 cm.

India and Thailand are the main areas in the world where Lac is cultivated. Over 90% of Indian Lac comes from the States of Jharkhand, Chhattisgarh, Madhya Pradesh, West Bengal, Maharashtra and Orissa. Jharkhand is one of the major producers of Lac in the country. Within Jharkhand the principal Lac producing areas are Ranchi, West Singhbhum, Gumla and Simdega districts. In this area the principal host plants for the Lac insects are Palas (*Buteas monosperma*),, Kusum (*Schleichera oleosa*) and Ber (*Zizyphus Mauritania*). The Khunti Sub-division is an important production area with Khunti, Arki, Bundu, Tamar, Torpa, and Rania blocks producing a large amount of Lac every year. There is a number of Lac processing units in the area, which procure Lac from the farmers through a network of traders, many of whom use a credit trap to enhance Lac procurement

Subsequent buying and selling is done through the local weekly markets of Khunti, Murhu, Bandgaon Maranghada, Gullu, Birbanki, Hoonth and Soyko in large proportion. This is mainly done by middleman and the farmers are not getting the right price.

The local people do not have any control and hold over these markets. Dealing of Lac is in huge quantity in the market, the innocent local people get exploited every time they bring the forest product Lac to the market. The outsiders and the middlemen generally manipulate the market and the hat.

Hence we can say that the symbiotic relation between forests with the tribal are depleting day by day due to the above-discussed major problems. Now the tribal are in such a situation that they are neither getting enough produce from the land nor can they explore the forest freely.

Problems in Lac cultivation is the technical knowhow, so far Majority of the Lac is being collected instead of production. The collected Lac is not so developed to place itself in the market and thus they get low price value.

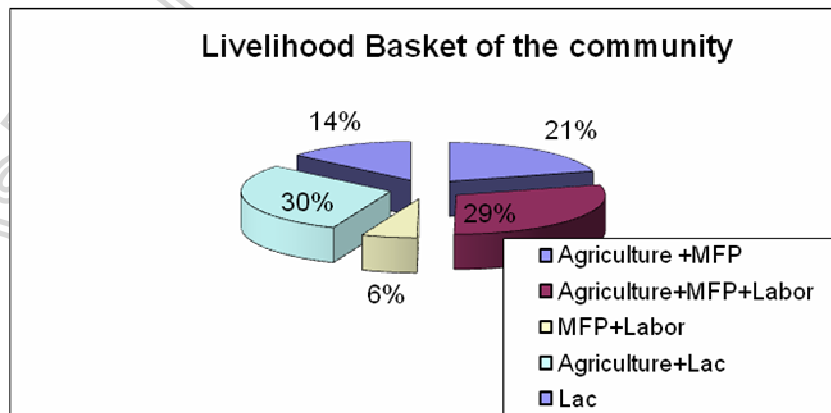
In the market, they are always being exploited due to lack of technical details of the product. They also so far didn't know the value of the product.

Problems of this sector in the recent past have been the instability of the prices and frequent price crash in the local market. This has led to Lack of interest among farmers to take up Lac cultivation and the production has come down drastically in the recent past. Experts in this field say that the Indian Lac industry is totally dependent on the export market and the uncertainty of production leading to the uncertainty of prices make foreign buyers wary to enter. This scenario is coupled with the low level of penetration of the training, capacity building and extension efforts on improved technology for Lac production by the various promoting institutions engaged in this sub-sector, i.e. NGOs, resources institutions and the State Government agencies. One needs to appreciate and understand that without intervention to stabilize the production, prices cannot be stabilized. Simply intervening in the market through procurement and other methods of price administration are not sufficient. Thus to bring in a stability to the entire sub-sector, stabilization of production through intervention in technology “availability” with the farmers coupled with backward (brood Lac producers) and forward linkages (community based Lac procurement agents) would be the key. This endeavor will *require convergence of efforts* from grassroots action organizations (NGOs/CBOs) and the state Lac promotion institution (state level producers apex federation).

Major causes of poor Lac cultivation are the lack of access to capital for purchase of Brood Lac. Credit support for introduction of quality Brood Lac is *essential* for the success of Lac growers.

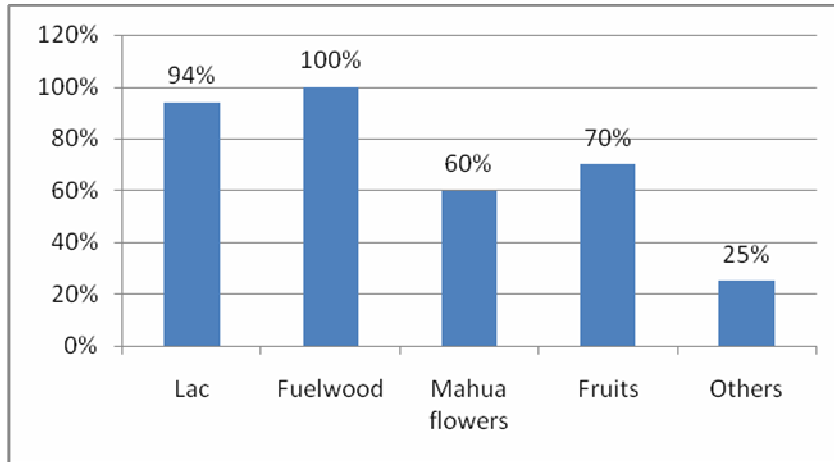
Cultivation

Lac culture is one of the important secondary sources of income for villagers and this is particularly more in this tribal districts. The important Lac producing areas in the state are Khunti, Murhu, Bandgaon, Chakradharpur and Gumla. Most of the tribal

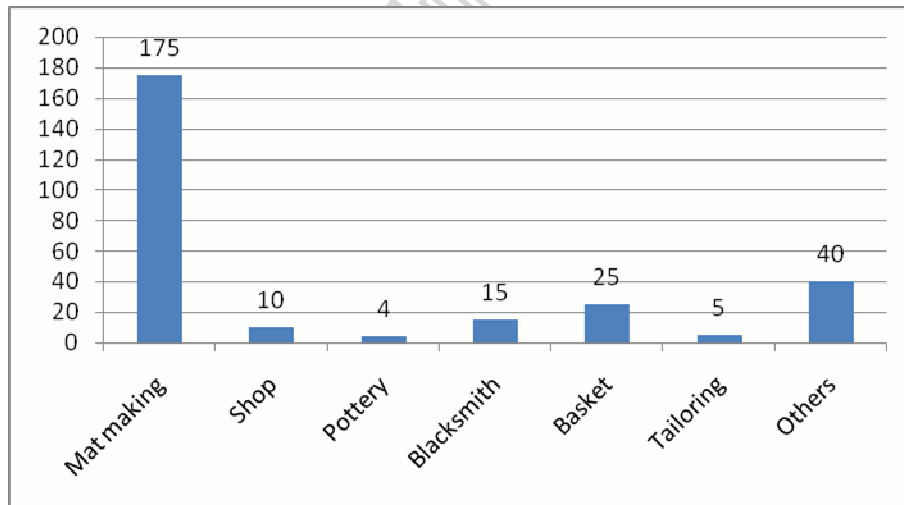


population who live in or around forests was traditionally practicing Lac culture. Of late due to displacement of tribal population from forests has led to reduction in production. However those who own trees that are suitable for Lac still take up cultivation of Lac. Vagaries of weather specially change in temperature and heavy hailstorms during critical stages of insect life cycle effects the crop badly. This climatic uncertainty acts as a major deterrent for poor farmers to invest in this enterprise.

The livelihood of the farmers is fully dependent in forest produces and actively involved in Lac Cultivation. 14% of them are solely cultivating lac and is fully dependent on it. 21% is practicing Lac cultivation along with agriculture, 29 % along with Agriculture, lac and Labour, 6% involved along with labour.

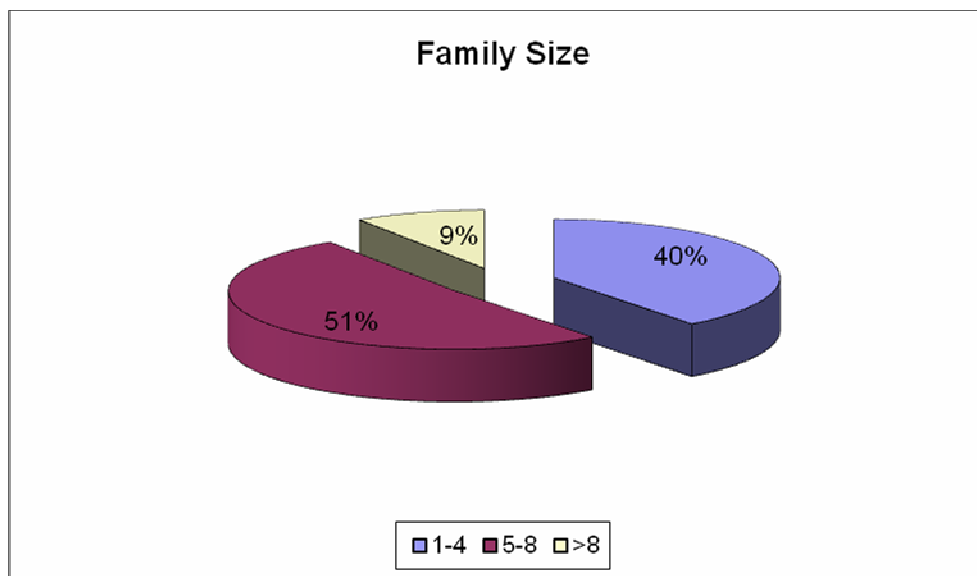


94% people are directly and indirectly involved in lac culture.



Out of 274 person found involved in practicing their own household level production for support in their livelihood, 175 person reported that they are involved in Mat making, 25 of them said that they are making basket, 10 have their own petty shop.

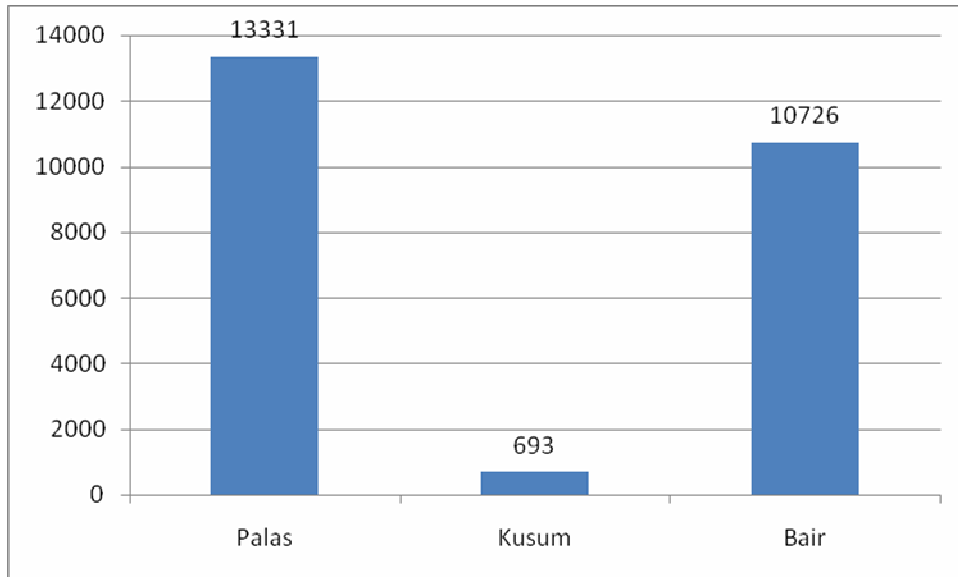
Majority (51%) of the Munda of this area belongs to a family having 5 to 8 members followed by 1 to 4 (40%)



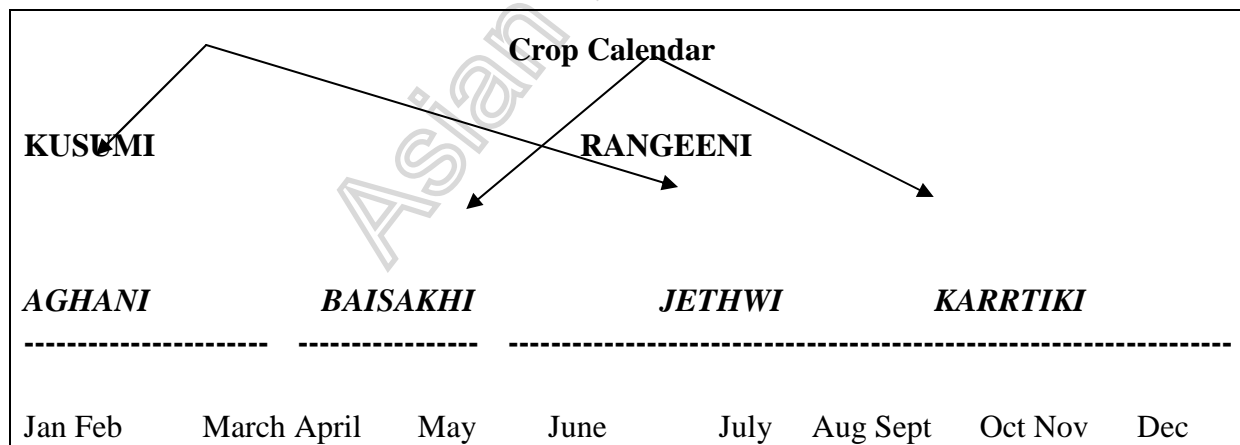
The main problem with the Lac exploitation is its production. Up to the beginning of the nineties, each family was able to produce a minimum of 200 kg of Stick Lac in a year's time but now this quantity is falling to a maximum of 100 kg per family only. This fact is the result of both the decrease of forest cover and also the climatic changes.

Markets	Approximate quantity in tones/year
Marangada	504.00
Khunti	414.40
Bandgaon	1040.12
Murhu	420.00
Tapkara	542.08
Seiko	980.80
Jaltanda	150.58
Gullu	150.00
TOTAL	4201.98

Lac in the Murhu area is cultivated traditionally and is majorly grown mainly on Palas Tree. Generally each and every family of this area possess host tree. The seed is sown two times a year, and is harvested for two purposes- Seed and Raw Material. The seed is kept for sowing next crop and the Raw material is sold either by scraping or with branch the stick lac.



The Lac is sown two times a year the, on Kusum (*Schleichera oleosa*) it is sown in the month of January to February and on Ber (*Zizyphus Mauritania*) and on Palas (*Buteas monosperma*) it is sown in the month of June to July.



Tree	Sown	Harvesting Month	
		For Brood Lac	For Raw Material
Kusum	January-February	January- February	December-January
Ber	June-July	June-July	April-May
Palas	June-July	June-July	April-May

The Brood Lac, which is purchased or cut from the tree are kept in the courtyard in the shade or in the platform outside the main house (Patti). It is sown either by men or women as according to the engagement in other important work. Anytime before mid-noon the whole family along with children proceeds towards the forest where their trees are. They live the child and the aged at the house. They carry with them- dauli (cutting instrument), Paga (rope), Turam Dang (long thick and strong stick).

The woman of the house carries the bundled brood lac on their head. The rest if left is carried by the men on their shoulder. Before proceeding for sowing the whole family consume the handmade chappati, *Ildanlad* made of Marua. They have a strong belief that when they consumed this handmade chappati, the Lac resin that settles will become as thick and strong as the person who consumes it.

After reaching a particular tree the man climbs the tree, the women and the children remain below. The women cut the brood into pieces of required length and hook the brood lac to the Turam Dang (Stick) and raise it towards the men above. The men on the other hand unhook the Lac and cautiously place the Brood to a thick branch not more than one inch thick in such a position where two such branches meet. He neatly ties the brood to the joint of the branch so that when the insect emerges from it will scattered forward towards the head of the branch and the lac thus settle will be thick homogeneous and long.

After seven days the brood is shifted to another branches, this process is carried out several times as long as there is no insect left in the brood. On an average 10 to 15 brood of seven to twelve inches length are rotated in almost all the branches of the tree. Gradually the insects settle on the branches of the whole tree.

After six months of long and anxious wait the lac is ready for harvesting. There are two types of harvesting done one, which is for seed i.e. brood lac, and other is for Raw material, which is for direct sale. The crop from the Kusum is harvested in the month of January-February for brood and in December-January for raw material. From Ber and Palas it is harvested in the month of June-July for brood and in April-May for raw material.

For harvesting, the family again proceeds towards the forest. During that day no member will apply oil, bath and comb their hair if only they are going to harvest for brood. They believe that if applied oil, bath and comb the lac insect will fall from the stick lac as the dirt and the lice from the hair, and thus the brood will be of no productive value.

Reaching the respective tree the male member climbs the tree cuts the branches with the dauli. Women and the children below gather the Lac and pack it into bundles. Which are then carried

back to the house. If the purpose of cutting is for seed then after two days it is again sown to the different tree in the forest with the same process. If the harvest is for raw material lac then it is scraped and then sold. When there are enough bundles collected in the house, the women member stays back in the house and the male member along with the children moves for more harvesting. In the meantime the women arranges for scrapping (Aere Uri).

First a place in and around the house, where there is shade is cleaned and the floor is applied with cow-dung. Then a dauli, tunki (bamboo basket) and gandu (made of wood for sitting) along with a single bundle of stick lac are kept at the cleaned place. Women in a group from the single family sit together and start scraping. The thin branches are twisted vertically and the Lac deposited on the branch comes out and falls on the ground. But if the branches are thick and cannot be twisted are scrapped with the dauli. After harvesting all the lac from the trees the male member assists in the work of scrapping. Then starts the market.

The scrapped lac is brought to weekly market at each market day. Where they face all kind of harassments and exploitation.

The Lac and the Market

The middlemen, who belong from the same community and outsiders, generally control the market; in general they are outsiders (diku). The local people do not like these men but they have no other option then to sell their product to these middlemen. These middlemen also control the price of the product and as always it is not fixed and varies day to day from 80 to 125 rupees per kilogram. There are three stages of middlemen in a single particular market who are primary- who buy the product directly from the villagers, secondary-who buy the product from the primary buyers, and tertiary- who buy from the secondary buyers. The price differentiates from 20 to 25 rupees from primary to tertiary. Then finally tertiary buyers carry the product in truck directly to the factory where they sell the product at the minimum difference of 5 rupees. So the local villagers suffer a loss of 20 to 25 rupees per kilogram at each market.

As a typical characteristic of Lac that it dries very fast leading to weight loss, the middlemen takes the benefits of this as the villagers cannot guess the percentage of weight loss. The middlemen always cheat these innocent villagers giving them 80 to 100 grams less per kilogram from the actual weight saying that it had dried, differentiate the weight by 80 to 100 grams per kilogram.

As soon as the middlemen sees these people coming with their product they run towards them and starts pulling and snatching the product from them. They even do not bare the women. These innocent people a complete mismatch to this type of environment ultimately has to leave their stuffs in the hand of the middlemen.

There are also a few outside men who buy the product at high rate and in return gives them few paper currencies and more change. In the mean time the people count the change and find twenty to thirty rupees short they elope from there to another position doing the same thing. Though this

has been controlled to some extent through the initiatives of Gram-sabha but still one or two cases to this types happens at each market.

Formation of Lac Cooperative

Gullu is one of the potential markets in Khunti District from where the approximate transaction of lac is 650 tons per year. But the local people do not have any control and hold over this market. The innocent local people get exploited every time they bring the forest produce to the market and the product is literally being snatched from them.

The peoples of villages – Gullu , Roro, Jalasar, Koyongsar , Hatumundi and Kankusi were fed up of this exploitation as one day one of the woman villager was harassed so badely by the middlemen in the market that she has to leave her stuffs and ran back to the village. The Gram Sabha of Gullu came to know about this and decided to call upon a inter village meeting which rarely happens.

Nearly 300 people gathered in that meeting with a rigid thought to stop this harassment. Fortunately some representative of Nav Bharat Jagrit Kendra (NGO) was also present. They told them to strengthen their organization and form Cooperative and every sale and purchase of Lac will be done under this cooperative. The people came to understand the future prospect and decided to form *Adivasi Ede Baha Jo Utpadak Evam Vyabsaee Samiti* in the form of Lac cooperative. They also collectively decided to ban the sale of Lac to outsiders.

Every family of these villages became the member of this Lac Cooperative. They generated a fund of Rs. 214500/- through membership and equity share (currently 665 members). The members who are not being able to contribute in cash are contributing in kind (lac) at the time of procurement. The cooperative is now collecting the lac from the area with the help of the women group and community based collectors (*Sahyogi*). This collected lac is then sold directly to the main market. The cooperative has set following objective -

- Get control over the local market.
- Get control over the selling of NWFP.
- End the exploitation.
- Eradicate the concept of middle men
- Make the women self-dependent and economically strong.
- Give the women a better social status.

The cooperative has made a profit of **Rs 101747/-** by transaction within a short period of two months by marketing of Lac from its members. Till now a total of 800 families are getting benefit from this cooperative through collection and selling of lac. They have hired accountant who is maintaining the financial part of this cooperative. They are also hiring resource person to provide technical inputs

Josfina tanibading D/o Jetha Tanibading - village Kankusi, Water Bodra S/O Marshal Bodra – village Hatumundi, Lalita Bodra D/O Mikhayel Bodra – village Kankusi, Peter Paul Horo S/O Nirmal Horo – Village Kumhardih are some children who have been able to access better education whose parents are member of cooperative.

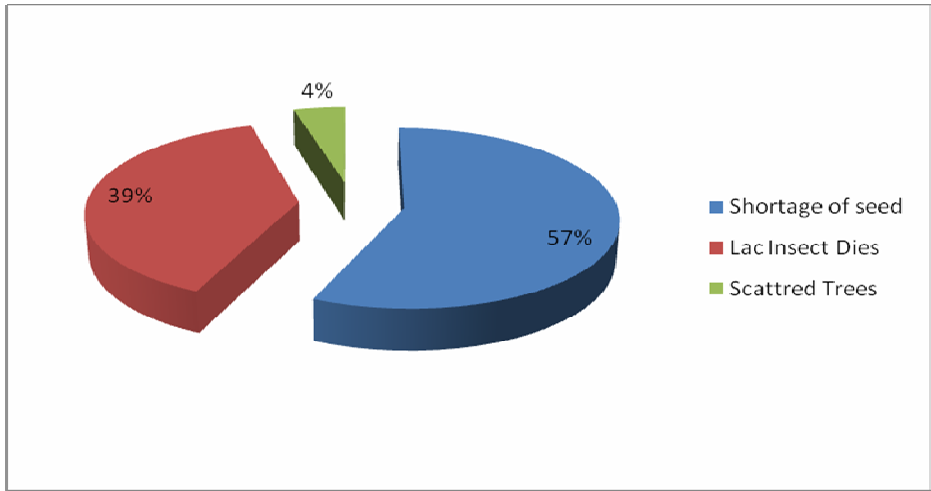
This cooperative has created a model in this region of Jharkhand. The role of middlemen in lac transaction has been reduced. Some of the families have now admitted their children in schools. This model could be replicated in whole of Jharkhand as this cooperative has shown the strength of systematic organization.

Lac Culture problem and Prospect

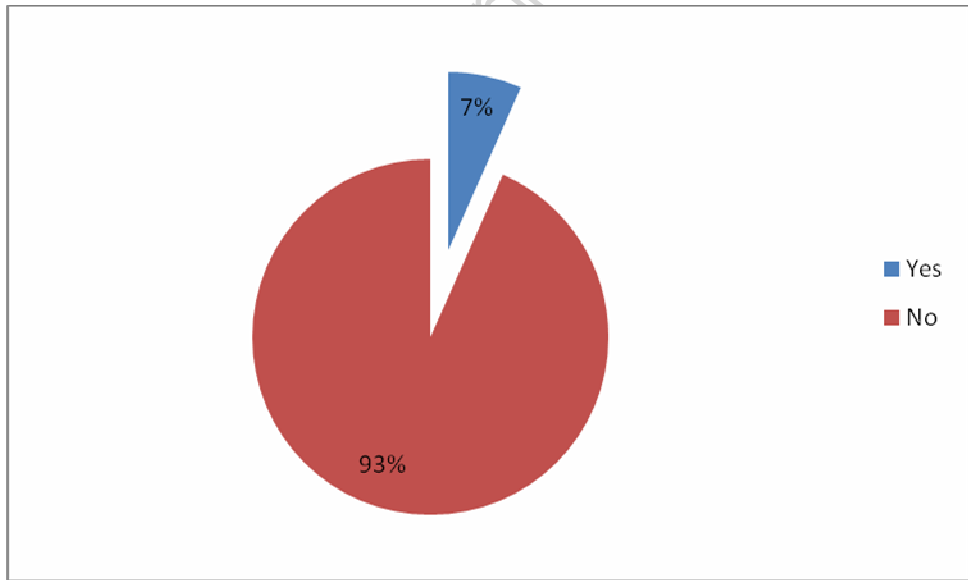
The cultivation practices followed by the Munda lac cultivators are essentially the same throughout India except for slight deviation here and there to suit local conditions. It consists of taking repeated partial lac crop on the same tree after allowing a few shoots, carrying lac for self-inoculation every time or when the crop is harvested. Keeping the trees under continuous lac inoculation and heavy pruning of branches repeatedly to collect lac crop, leads to general loss of vitality of the trees. Also the self inoculation of the trees lead to over-infection on the twigs and this quite often results in whole sale mortality of the crop in season of extreme summer. Besides, this helps multiplication of enemy insects of lac resulting in failure of crops, which ultimately forces the cultivator to abandon cultivation on most of the lac host trees. In such seasons brood lac is not readily available for purchase and if at all, a very high price has to be paid which the cultivator cannot afford to pay. The cultivator usually purchases his brood to the extent he can afford at that time and puts it on a few trees and start cultivation cycle afresh. In favorable seasons, he reaps his crops and inoculates more of his trees and continues the self inoculation repeatedly till the crop fails again

A majority of farmers (57%) responded that there is a shortage of seed for lac cultivation, 39% responded that the lac insect dies and 4 % said that their trees are scattered so they find it difficult to cultivate.

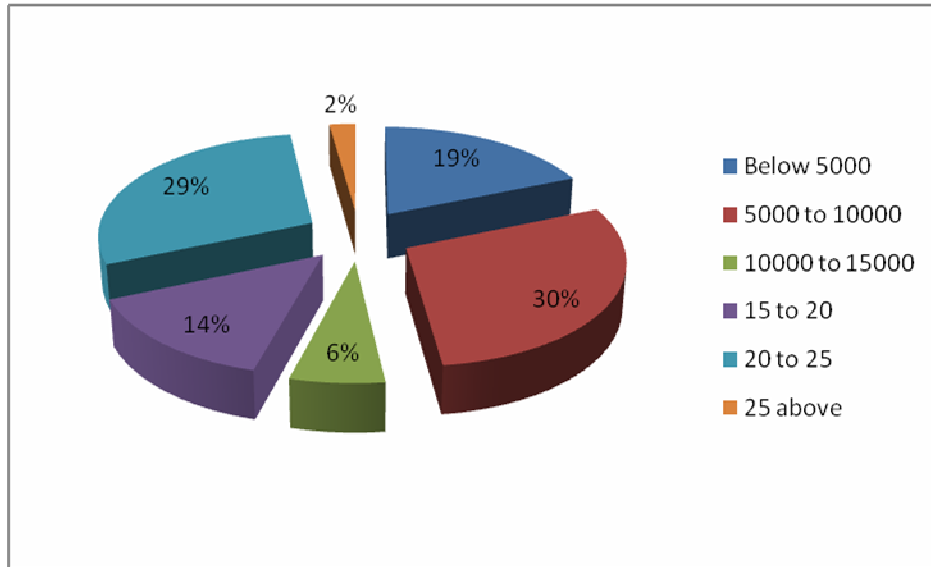
Problem faced by Farmers for Lac Cultivation



Training received by the farmers



Only 7 % of the lac grower framers received any sort of training either by NGOs or from the Government.93 % did not received any training on lac growing.



Annual Income of the Lac Growers

Annual income of the framers is somewhat scattered and falls to different categories. Only 2% earns above 25 thousand and 49% falls in the category of below five to 10000 thousand.

Lac culture is quite simple and low cost. It also can be done giving part-time labour. However, the local practice is often too crude and also does not yield the return it should give. Many of the practices result in weakening of the plant and ultimately reduce the productivity. Also often the self-inoculation practice (also called the natural inoculation) leads to heterogeneous infestation of nymphs, which results in wholesome mortality of the brood in seasons of extreme heat, and thereby, the cultivator is forced to abandon lac cultivation. This has in many areas wiped out the availability of brood lac, forcing tribal to give up the cultivation. During our field visit some glimpse of this also came to our notice.

The middlemen, who belong from the same community and outsiders, generally control the market; in general they are outsiders (diku). The local people do not like these men but they have no other option than to sell their product to these middlemen. These middlemen also control the price of the product and as always it is not fixed and varies day to day from 80 to 125 rupees per kilogram. There are three stages of middlemen in a single particular market who are primary- who buy the product directly from the villagers, secondary- who buy the product from the primary buyers, and tertiary- who buy from the secondary buyers. The price differentiates from 7 to 10 rupees from primary to tertiary. Then finally tertiary buyers carry the product in truck directly to the factory where they sell the product at the minimum difference of 5 rupees. So the local villagers suffer a loss of 10 to 15 rupees per kilogram at each market.

Conclusion

Though Munda are settled agriculturist but still majority of their food comes from the forest directly or indirectly during the Lean period, as the agriculture does not meet their food-producing economy. Due to fast depletion of the forest they have compelled themselves to adjust to a new situation, the labour.

Our Government has launched several schemes of development and welfare for the schedule tribes. Christian missionaries have also played significant role in providing education to the Mundas. Government has also opened schools for the Mundas. Village level Health centers and Sub- centers have also been started. But inspite of different developmental activities and welfare schemes there are still many villages of the Munda, which are still backward, and far away from the mainstream of development.

The Mundas from the remote area are the most vulnerable to exploitation especially from the middlemen. They don't have any access to proper road; organized markets and other awareness programs run by the government and other NGO, as a result they are still miles away from the mainstream society. There are many villages where no government development has reached so far.

They don't get the maximum value in return as input for the growing of Lac. It takes hard labour and time and they only get minimum money along with harassment from the middlemen.

Though the Mundas know the value and importance of the Lac in this area but still they cannot produce it as according to their will and thus they take the Lac as granted. Lac is one of the important forest produce of this region and with great economic value and the people of this region will have to understand this and should take control over the local market. Then only they could get the maximum return for their effort.

One of the major problems of this sector in this area is the instability of the prices and frequent ups and downs in price made by the middlemen in the local market. The prices have been dramatically manipulated by the middlemen and are under total control of these people. This has led to Lack of interest among farmers to take up Lac cultivation and the production has come down drastically in the recent past. This is also coupled with the low penetration of trainings, capacity building and extension efforts to enhance improved quality of Lac production by the various promoting institutions engaged in this area. Unless and until proper and serious intervention to stabilize the production is not taken into account, market and prices cannot be stabilized and the people will continuously get exploited.

Now only the area of gullu has succeeded in breaking the age old tradition of market, middlemen and the community. But it could be replicated setting this cooperative an example. The concept of promoting cooperatives to provide sustainable livelihood in whole of Jharkhand will be a good developmental approach as due to lack of rain and undulating topography, agriculture produce in the tribal region is almost nil.

Suggestion

The access to and control of Munda community over natural resources should be strengthened to improve the livelihoods these poor people. Increased capacity of self-initiated community institutions to exercise their rights and responsibilities in forest management should be encouraged.

Increased opportunities, trainings, capacity building should be done through different NGOs working in this area and other CBOs and Government Organisations, to access and market forest and non-forest products.

Local groups such as Gramsabha, SHGs, Joint liability group and other local organization should be encouraged and supported through capacity building efforts in community-based planning, financial management, natural resources management, and marketing. The Government along with other organization should support income generation activities, increased Lac productivity through improved access to modern technology and market. Thus linking with other institutions and organization to purchase and encourage Lac cultivation.

The Gramsabha should be given the sole right, without any outer intervention to plan, manage and market Non Wood Forest Produces there by maintaining their ecosystem. The Forest Department will have to adopt new procedures and develop appropriate and new skills in communication and technical assistance to ensure community based Lac production and management.

Government should provide open market for Lac and other NWFPs through counters, stalls, and other channels in each market and village/panchayat level, for direct purchasing the Lac and other NWFPs at the actual rate.

High tech trainings, in-farm trainings, capacity building workshop, taking consideration of the present capacities of the community and the individuals, in local language should be encouraged to enhance Lac production.

Presently the brood lac is not easily accessible so government should entertain and develop Brood lac firm at local level so that the people could get easy access to Brood Lac. Government should also facilitate crop insurance so that the farmer could get into cultivation without any crop failure phobia.

Government should fix a Minimum Support Price (MSP), for Lac to encourage and ensure Lac cultivation.

Intensive capacity building and awareness is needed to empower the Munda Community towards their right, liabilities and responsibilities, to get direct access over the natural resources and local Market and get rid of manipulation and exploitation done by the middlemen. This is only possible when Government and other organization prioritize its policies in enhancing capacities of this community and organize regular trainings, workshop and provide easy access to brood lac in cheaper rate to encourage Lac production.

Formation of Cooperatives at village level should be encouraged to get hold on NWFP in local level and thus get control over the market, middlemen and prices.

PRIs can definitely play a role to promote Lac cultivation and schemes like NREGS can help in promoting saplings like 'semialata' and spread out the message of growing brood lac through this species. The SHGs promoted in the villages by the federations can help in providing credit requirements for purchase of brood and hiring of needed instruments. A mission approach would make this possible.

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