Report of the State-level Workshop On Promotion of Lac-based Livelihood

Venue: Hotel Suryansh

Bhubaneswar

Date: 8th-9th November 2010



Organized by:

Regional Centre for Development Cooperation (RCDC) A/68, FIRST FLOOR, SAHID NAGAR, BHUBANESWAR Website: www.rcdcindia.org; www.banajata.org

1. Background

Lac has been one of the few forest products in which India used to have monopoly in the international market. However, discovery of synthetic substitutes followed by emergence of Thailand as India's competitor adversely affected the lac trade in and after World War II. Still India has been the prime producer of lac in the world.

Princely states in Odisha used to provide special support for promotion of lac cultivation. Odisha used to have a good production of lac, and artisans here, known as *lakhara, sankhari*, or *jaura* used to make various products from lac. After the end of feudal administration gradually the patronage for lac was withdrawn by the government. This and other factors like theft of lac from trees discouraged the people involved in the business for generations, and now many of the lakhara/sankahri/jaura families have abandoned the practice.

Lac used to be a monopoly item under feudal rule, and the government Forest Department used to lease it out. In March 2000 the NTFP policy banned commercial lease of vulnerable NTFPs like gums & resins except to government agencies and that too if sustainability is ensured. Although there is no mention of the term 'lac' in this policy document, since the commercial leasing of gums & resins was restricted, hence lac was also affected. No more leases for lac collection were granted thereafter. However, this policy restriction totally ignored the fact that a lot of production of lac comes from trees on private lands. On the other hand, the Orissa Timber & Other Forest Produce Transit Rules,1980 clearly restricted transit of lac without permit(vide section 5-i). Hence, private growers are not free to sell their produce.

In neighbouring state of Jharkhand a major factor responsible for the booming lac business is the withdrawal of restriction on lac. There is a lot of lac production in that state, and also the Indian Lac Research Institute (now Indian Institute of Natural Resins & Gums or IINRG) is also situated at Ranchi. Odisha has been facing shortage of brood lac, and when agencies like TRIFED or individuals try to bring brood lac from neighbouring states for promoting cultivation here, the restriction of the Forest Department virtually kills the spirit. And, lack of raw material is one of the reasons responsible for the dying lac artisanship in the state.

While there is a lack of coordination among the cultivators/collectors and artisans of lac, there are challenges for marketing of lac-based handicrafts. Sankha, a traditional form of lac-based bangle extensively used till few decades ago, seems to have lost its demand to the designer and fashionable bangles; and the knowledge of preparing this traditional item is now confined only to few individuals of the old generation sankharis who have abandoned the practice. In such a backdrop, a state-level workshop was planned to address some of the major issues in the sector with an objective to come out with some viable solutions.

2. Workshop

The two-day workshop was organized by RCDC in Hotel Suryansh, Bhubaneswar on 8th and 9th of November 2010. The objectives of the workshop were as under:

(a) To provide a platform to unite various stakeholders of lac, particularly the primary collectors/ cultivators, processors and traders for a common cause i.e. promotion of lac based livelihood in the state that already has a rich tradition of lac based activities.

(b) To prepare a set of recommendations for submission to the government so that a pro-poor policy to this effect can be adopted.

The workshop was supported by Key Stone Foundation, Kotagiri. More than 80 participants from different parts of the state attended this programme majority of whom were cultivators and artisans.

3. Proceedings of the Workshop

At the beginning, Mr. S. Chandrasekhar, Regional Manager of RCDC, Nabarangpur¹ welcomed all the participants and briefed about the objective, strategies and activities of RCDC. He also elaborated the objective of workshop.



Mr. Chandrasekhar welcoming the participants

3.1 Inaugural Session

The event was formally inaugurated by the chief guest Mr. Dinesh Singh, Additional Principal Chief Conservator of Forests, Odisha alongwith Dr. A.K. Jaiswal, Head, Technology Transfer Division, IINRG, Mr. P.K. Panda, Regional Manager, TRIFED, and some representatives of the lac-dependent communities.

Inaugural deliberation

In his inaugural address, **Mr. Dinesh Singh, APCCF, Odisha** gave the participants an idea about the prospects and other specifics about lac and allied livelihood options. He told that the lac insect feeds on the juice of tender branches of trees like palas and kusum, and produces the lac resin. Before half a decade or so, the collection of lac was considerably high. Nation-wide 40,000 metric ton lac was being

¹ Nabarangpur has been holding a strategic position in lac trade since decades, thanks to the patronage received from the erstwhile Maharaja of Jeypore. It is only here that a large number of lac artisans are still found active with their traditional practices. This district also has some key supplying areas of raw lac.

produced, and Maharashtra, Gujrat and West Bengal were the leading producing states. During 1950s, the demand of lac and lac products was high in the markets.

In the later period, demand for plastic, synthetic and ceramic sore high due to their wide use, and the industries preferred these to lac-based products. At one time, Odisha was contributing to 1.5 % of the national production. Now this has been reduced to as low as 0.05 %.



Mr. Dinesh Singh delivering his inaugural address. To his right is Bikash Rath.

Mr. Singh told that now the good time is approaching. Synthetic resins are not found eco-friendly. So even if it is costly, prospects are good for lac. In cosmetics, electrical, gums and leather industries, there are new innovations and prospects. In collection of gums and resins there are government restrictions as the collection of these is harmful for the tree. But it is not so in the case of lac. Lac is not part of a tree. It is produced by an insect, so the collection

of it does not lead to harmful effects on the tree. The Forest Department has only transit restriction on lac. "If the farmers will

come forward, then the government will help them in trade of lac," said Mr. Singh. Later in the programme, he said that since the Orissa Timber & Other Forest Produce Transit Rules, 1980 provided a scope for the government for specifying a limit upto which no permit would be required for transit of lac, hence the government might consider if a recommendation would be submitted in this respect.

Mr. Bikash Rath, Senior Programme Manager of RCDC referred to the 'golden era' of lac trade in the state when the lakhara community of Boinda(Athmallik) used to earn lot of money from its collection. This was possible because lac had a good market demand then, and the lakhara/sankhari community had a monopoly right(granted by the Rajas) to collect this produce. It was the time when traditional occupations were strictly confined to respective castes(communities), and other caste people were not expected to get involved in this occupation. After independence, while the monopoly right was discontinued by the government, other caste people also came forward to take advantage of the lucrative trade. The Government of Orissa had some supporting & promotional activities on lac which were gradually withdrawn with the falling demand of the produce. The production of lac is said to have reduced from about 130 MT during 1947-48 to 25 MT during 1995-96. The struggle for survival of lac-based livelihood then became acute, and restrictions on its transit in the state further affected the trade. On the other hand, the liberal policy in some neighbouring states like Jharkhand has helped flourish the business there.

He therefore strongly appealed to the Government of Odisha to withdraw or liberalize the present restrictions on lac.

He further mentioned that after the NTFP policy of 2000 there is no clear stand on lac by the government in the state. The commercial exploitation of resins is banned, and lac virtually became a restricted item since it is considered to be a resin. There are nearly 10,000 cultivators and 400 artisans of lac in Odisha. The lac-based conventional products fetch a poor market. Most of the *sankharis* of Angul and Kendrapada have renounced their family occupation. This has become more or less a seasonal trade. Good quality lac brood is hardly available in the state, and it is mostly procured from other states, especially from Ranchi whereas the restriction in transit creates problem in its delivery.

He made a special reference to a traditional lac-based product alta, and said that even the artisans did not know that alta, known as laksha-rasa in Sanskrit(*laksha* meaning lac), was actually prepared from lac. The currently marketed lac is a synthetic product, and RCDC wants to revive the lac-based alta with technical support from IINRG, Ranchi which has started working on the standardization of the same on request from RCDC.

Dr. A.K. Jaiswal, Head, TT Division, IINRG delivered the keynote address in which he said that climate of Odisha is very much suitable for cultivation of lac, and that Odisha has also a great potential for lac cultivation. While lac cultivation is neither labour-intensive, nor does it require irrigation or any other major & regular investment, it gives a very good return. Although Odisha's contribution to the total production of the country is negligible, we can increase it upto 10% making optimum utilization of the favourable conditions here thereby benefiting the farmers, he said. According to a recent survey, Odisha has shown the lowest negative growth rate in the country implying to its good potential. Nabarangpur district is the biggest producer identified, but this is also the one that has shown the largest negative growth rate in the state, implying to certain negative developments there. The Forest Department can very much help in promotional activities on lac, and should particularly consider withdrawing present restrictions on the same which are creating unnecessary hurdles in the transit of a sensitive, live & perishable item like brood lac, even killing the lac insects therein and thereby spoiling its viability, he emphacised. He



Dr. A.K.Jaiswal affected IINRG's initiativ

cited two striking examples of how the Odisha restriction badly & unduly affected IINRG's initiative to supply brood lac for promotional activity in Odisha and outside.

Dr.Jaiswal mentioned that against a global demand of about 40,000 tons of lac, India produces about 30,000 tons. Hence, we need to utilize out potential to further increase the production so as to take advantage of the market situation².

(Full paper of Dr. Jaiswal's keynote address is available in annexure-1)

3.2 Thematic Session I: Cultivation of Lac and Marketing of Crude Lac

01. Presentation- Mr. Prafulla Kumar Panda, Regional Manager, TRIFED, Bhubaneswar

He shared that 69 Minor Forest Produces (MFPs) had been given to the Gram Panchayat for collection and trade but lac was not included in this list. The restrictions in transit of brood lac are discouraging the farmers of Odisha. Lac is a profit making trade. It should be declared as a free trade item. In case of transporting lac out of the district, the transit permit should be relaxed or overruled, he demanded.



Mr.Panda's observations were centered around the fact that TRIFED is now trying to promote lac cultivation in the tribal areas and by the tribals, whereas the present regime is creating problem for the successful implementation of this promotional scheme. Presently the scheme operates in few districts like Sundargarh and Kalahandi though other deserving areas may be taken up in the future plan, he said. Farmers' SHGs are involved in this scheme. Each member is given 10 Kg of brood lac and some other support. About 2300 beneficiaries are involved in the process.

📥 Mr. P.K.Panda

02. Presentation- Mr. Amar Kumar Gouda, RCDC

Mr. Gouda shared the in his talk that Maharaja of Jeypore patronized the lac artisans and as such so many artisan hamlets are still found in Nabarangpur. However, the artisans and cultivators of lac in Nabarangpur area are facing problems in the business. Getting the raw material is becoming difficult & costlier for the artisans. There are potential areas for lac cultivation in the district and in some of these areas people are also cultivating lac, but restrictions of the Forest Department during transit is creating a big problem for them, he said.

² However, some cultivators reported of a kind of unexplained deterioration in the quality of lac even before harvesting. Scientists usually tend to explain parasitic attack or climate change if the quality & quantity of production suffer despite proper care & investment, but this case did not seem to match with the respective indicators and hence Dr.Jaiswal said he would investigate the matter. It may be informed here that the lac production has suffered badly in other states like Jharkhand despite required care (more details available at http://www.downtoearth.org.in/node/2250).

03. Mr. Suresh Rout(RCDC), Bhawaniptana

He shared that lac is being widely cultivated on *kusum* trees in 15 villages of Nangalbeda in the Ghantamal panchayat at the Orissa- Chhattisgarh border, and from lac cultivation, the cultivators are earning nearly 25,000 rupees annually.

04. Mr. Nilamani Mohanta from Khandadhar(Sundargarh) gave a picture of lac trade in Kuliposh-Khandadhar area of Bonai sub-division, Sundargarh district. He shared that the climate of Khandadhar is very much suitable for lac cultivation, and also there are plenty of host trees(kusum). For lac cultivation, NABARD and TRIFED are helping the farmers, and the farmers are able to earn about 40000 to 50000 rupees annually from the trade. However, although *kusum* trees are situated on agricultural lands, the lac produced from it has not been given the status of an agricultural produce in Odisha. Further, there is no proper storage facility for lac, particularly for brood lac which is why the brood is to be procured from other states . There is a potential of establishing a lac-processing industry at Bonai, but it is yet to be utilized; he remarked.

05. Ms. Madhuri Patra, an artisan of Nabarangpur shared in the House that due to frequent low pressures followed by sudden downpours the lac crop is getting damaged. Moreover, the number of *kusum* trees has now come down. The reduced production of lac in the locality is creating trouble for the artisans, she said.

06. Mr. Ranjan Kumar Kar, a scientist from OUAT working with Krishi Vigyan Kendra, Debhog, Balasore made a significant presentation in which he introduced a different strain of lac insect (*Kerria sarada-* trivoltine) that has been identified in Odisha. The remarkable nature of this strain is that it thrives on a species (*Samania saman* or *Albizzia saman*, locally known as badachakunda, khirisa, or nidrabati) other than conventional lac host trees like kusumi and palas. It can give three crops per annum, and can be cultivated on road sides since *A. saman* is often seen on roadsides. He emphasized on the fact that lac is a potential disaster proof crop/ enterprise, and can serve as a good source of alternative livelihood for the poor. So it should be promoted, he justified.



Mr. Ranjan Kumar Kar

He estimated that the per hectare employment generation(per 100 hosts) from lac cultivation in a year would be 269, 776, and 529 person-days respectively for palas(772 numbers), ber(494 numbers), and kusum(278 numbers) trees. The net profits(in Rs.) from different species can be as under, as per his presentation:

Host tree	Palas	Ber	Kusum
Investment(Rs.)/100 trees	13162	34087	135338
Return(Rs.)	24980	62800	456000
Net return(Rs.)	11818	28713	320662
Net income per tree(Rs.)	118.2	287.1	3206.7

Mr.Kar also presented some statistics as to how optimum utilization of the host trees is lacking, and what is the position of Odisha in the country's production scenario on lac(more details in annexure-2).

07. Mr.A.P.Das, AGM, NABARD, Bhubaneswar:

Mr. Das recalled his experiences in Jharkhand where lac cultivators received kissan credit cards(KCC). He said NABARD has a scheme of per tree scale of finance, which can benefit the lac cultivators. He further said that the State Credit Seminar should include policy recommendations on lac, and lac-based handicrafts should be promoted.



Mr. A.P.Das ____

3.3 Thematic Session II: Commercial Processing and Artisanship in Lac



Panelists of the second day session. From left: Mr. Bikash Rath, Mr.P.K.Mishra, Mr.Kesudas, Mr.Sukanta Behera, Dr. A.K.Jaiswal, and Mr.Devendar Kumar

01: Presentation- Mr. P. K. Mishra, Handicrafts Promotion Officer, Office of the Development Commissioner of Handicrafts (Government of India), Bhubaneswar

Mr.Mishra said that there are several schemes(like, Rajiv Gandhi Swasthya Seva Yojna and Janashri Vima Yojna) for the artisans which they can take advantage of. He further said that the government has been promoting traditional arts & crafts within its limitation, and his office can help the lac artisans with identity cards and artisan's credit cards. He advised the artisans to adopt designs/practices that can ensure the marketability of their product, and said that his office has already been helping the lac artisans of Balasore and Nabarangpur.

02: Presentation- Mr. Devendar Kumar, PRADAN, Ranchi(Jharkhand)

PRADAN, a national-level NGO has been working for promoting the lac sector, particularly the lac cultivation in Jharkhand and some other states. It has been working through its field research and field-level interventions to ensure the promotion. Given the good market potential of lac at national and

international level, PRADAN wants to stop the reducing trend in lac production and feels that the nongovernment sector can contribute a lot for this purpose. The concept paper, reflected in Mr. Kumar's presentation, has been reproduced in annexure-3. The following table has been reproduced from the presentation itself because of its important statistics:

Scenario of lac sub-sector: Pan India			
No of farmers	4-5 lakhs households		
Total average production per year	20,000 MT		
Value of Trade (shellac)	Rs. 250 crore		
Major Production states	Chhattisgarh, Jharkhand, MP, WB, Orissa (36%, 33%, 19%, 5%)		
No of production districts	around 55		
No of big markets	around 35		
No of small markets	around 250		
No of big processors	around 25		
No of small processors	around 80		
No of major exporters	11 (5 leading)		
No of minor exporters	10		
No of haat paikars ³	1250		
No of block paikars	150		

(Courtesy: PRADAN, Ranchi)

03. Mr. Kesudas, Founder, Baleswari Kala Kendra, Baleswar

Mr. Kesudas, who has done commendable job in popularizing and promoting the traditional lac craft, told the participants that the lac trade has high prospects like the Pipili *chandua*, Sambalpuri handloom, and traditional stone works. If the artisans and cultivators are more organized, then the trade can give better livelihood opportunity to many families, he said. He suggested that the foundation of a state level association should be laid in the workshop. A number of artisans and cultivators supported this idea.

04. Mr.Sukanta Behera, Nilagiri, Baleswar:

Mr. Behera is an entrepreneur in the lac sector who has been trying to promote women's SHG in lacquer work in the Kishore Chandrapur area(Nilagiri sub-division). He has been in touch with scientists at IINRG

³ Paikar means wholesaler

⁹ Report of the State-level Workshop on Promotion of Lac-based Livelihood | RCDC

and KVK, Baleswar as well as with TRIFED and ITDA for both cultivation and processing activities. He has introduced in his area some processing activities already successfully practiced in other states, and is ready to start an industrial processing unit of lac. He discussed the issues in the trade of lac, and recommended for a liberal regime for promotion of this trade.

05. Dr. A.K.Jaiswal:

When Dr. Jaiswal was requested to share something on IINRG's activities & achievements to support the artisans, he said that some R&D activities had been pursued at his Institute to improve the quality of lac and its by-products. He advised the artisans that since lac is soluble not in water but in alcohol, hence it would be easier for them to prepare an alcoholic solution of lac so as to apply for decorative purpose, followed by drying. This will save them from the laborious melting work.

When some artisans expressed apprehension that purchasing/using alcohol might attract legal action, Bikash Rath clarified that they can even use the surgical spirit available in medicine stores.

3.4 Special Session: Networking among the Stakeholders of Lac

The session was coordinated by Mr. Bikash Rath, Senior Programme Manger, RCDC. As a part of the objectives of this workshop, he facilitated the formation of a state-level association of lac-dependent people so that they can cooperate with each other, cultivators can supply raw material to the artisans and artisans can supply lac-based handicrafts to the cultivator families, and together they can gain a better power to demand for their rights. As such, the participants agreed to form the **All Odisha Lac-culturists' Association** with the following functionaries:

- 1. Mr. Kesudas, Baleswar- President
- 2. Ms. Pravati Patra, Nabarangpur- Vice President
- 3. Mr. Nilamani Mahanta, Kuliposh (Sundargarh) Secretary
- 4. Mr. Sukanta Behera, Nilagiri (Baleswar) Treasurer

4. Recommendations drawn from the presentations & discussions

Based on the discussions in the two-day programme, following recommendations were finalized and submitted to the Forest Department, Odisha through the **All Odisha Lac Culturists' Association**:

- 1. No transit permit is to be required for lac with living lac insects (Brood lac) provided that a government agency relating to forestry or agriculture or products thereof, or VSS/Palli sabha/GP certifies the same to be for cultivation purpose.
- 2. Further, no permit is to be required for carrying/transporting within the state, upto one quintal of stick lac or scrap lac and upto 50 kg of other processed form of lac, provided that the

transportation is on behalf of an SHG/cooperative or other such groups recognized by the government.

3. The exemption in permit is also to be applicable for inter-state transportations of lac upto 12 quintals.

5. Valedictory

At the end, Mr. Bikash Rath summed up the deliberations made during the two-day workshop. He highlighted certain major issues discussed in the workshop, and thanked all the participants for making this event so successful.

Compiled by Hemant Bag, Programme Officer & Bikash Rath, Sr. Programme Manager, RCDC. Photography by Sabyasachi Rath, RCDC.



An artisans' group from Nabarangpur



Glass plates decorated with lac



Traditional lac-coated puppets



Lac-coated basketry and other items



Mr. Nilamani Mahanta



Ms. Madhuri Patra



Some participants



An artisan showing a traditional item



Some participants



Mature lac ready for harvest on a kusum tree



Dr. Ranjan Kumar Kar with productions of stick lac(photo courtesy: Dr. Ranjan K.Kar)

Annexure - 1

Keynote address by Dr. A.K. Jaiswal, Principal Scientist & Head, Transfer of Technology Division, IINRG, Ranchi (ICAR, New Delhi)

Ladies and Gentlemen

It gives me a great pleasure to address this November gathering of technocrats, entrepreneurs, academicians, administrators, development workers, policy makers, well wishers of lac and forest dwellers who are here to deliberate upon the strategies to promote lac based livelihood. The changed climate in terms scanty and untimely rain created uncertainty in agriculture production particularly paddy under rainfed condition. Since last 25 years when I joined Indian Lac Research Institute, I have seen many ups and down in lac trade. But, I assure you that in view of certain merits this commodity will never perish instead come out with a bang, Once upon a time Odisha was also a major producer of lac in view of vast forest cover, plenty of host trees available, suitable climate and life style of these forest dwellers matches with the cultivation operation. Frankly speaking, we are unable to document success story for lac production in the states. Recently, I met a member of planning commission at my Institute. After a briefing he got fascinated about the potentialities of this commodity and also told me that while surveying several areas in the country for formulating developmental policy none of the district collectors informed about this commodity. Strange is the case, that despite availability of large resources in terms of host trees in this state, these are utilized to only limited extent for lac production. I met and wrote to several functionaries from Orissa state at my Institute for creating livelihood through lac production, processing and utilization but unfortunately it never materialized. Serious attempts has been made by TRIFED to revive lac in Sundargarh and adjoining districts through its project named 'National Action Plan' and success has been witnessed where farmers have adopted scientific lac production on kusum and Indian plum trees. Similarly in Baleshwar district also, a NGO namely Kishore Chandrapur Lac Industrial Co-operative Society, Nilgiri, Balasore in collaboration with ITDA, has attempted to introduce and revive lac production. We have been successful to introduce kusmi lac in Kotagarha block of Kandhmal district around six years back. From merely 40 kg broodlac, the farmers were able to multiply and produce around 14 guintals of scraped lac within one and half year and able to generate around Rs. 1.12 lakh. Several families involved in contract farming of lac, where the service provider made available all inputs and technology but output was shared in ratio of half-half. The same model may be replicated in other parts of the state. Only we have prepared several resource persons and service providers for this sector. Free movement of lac in the state as in other states like Chhattisgarh, Jharkhand, West Bengal etc., establishment of broodlac farm

by government support, awareness drive even amongst the policy makers and developmental agencies, promotion of lac production under project mode are several key actions required in the state. The involvement of people in lac production will not only ensure livelihood of these forest dwellers but help in minimizing subversive activities by forest dwellers and environmental protection. Today, price of lac is very high and the *kusmi* lac is being sold at around Rs. 240 per kg. A normal size ku*sum* tree has potential to produce around 75-80 kg broodlac in a year. The strength of lac production lies in the facts that it does not required water for irrigation on trees, no fertilizer, very little manpower, little time and non-perishable property of lac. But the production activities need to be executed timely. With this platform, I would like to convey that production of lac is not simply a collection, but it is produced only when lac insects are released and other intervention by the people. Hence, it is although coming out of the forest areas but by the intervention of forest dwellers.

Though the state contributes only 2.2% of the country total lac production but its importance in terms of better preservation of lac insect, in view of suitable climate could not be ruled out. State may identify a few areas where summer temperature does not exceed beyond 42°C and there is intermittent rain during Summer season. Such areas may be marked for establishment of broodlac farm to produce the same on large scale and fill up the gap between demand and supply. This will help to initiate lac production in other potential areas of the state. The data showed that Nabrangpur district contributes highest in the state's total lac production (36%) followed by Mayurbhanj (19%) Baleshwar (13%) and Koraput (11%), The contribution of Keonjhar, Sundargarh and other minor lac producing districts is around 21% together.

During last four years the Odisha state registered a lowest negative growth rate (-3.1%) in comparison to other lac producing state namely Jharkhand (-6.6%), Chhattisgarh (-16.5%), Madhya Pradesh (-10.1%), West Bengal (-14.4%). Maharashtra (-24,0%) and country as a whole (-12,2% per annum). These figures indicate better performance of the state during last four years and suitable climate for this venture.

District-wise lac production data indicated that Mayurbhanj and Baleshwar are the two districts registering a positive growth of 1.9% and 6.2% respectively. There is sharp decline in Nabrangpur (-9.7%) and Koraput (-2.1%), The Keonjhar, Sundergarh and other areas together also registered a negative growth of -5.7% per annum.

The significance of lac has many facets. Its production has direct bearing on tribal economy and livelihood support. It is also the means of survival of about 150 odd processing units which provide employment to economically weaker sections of the society. Above all, we have social commitments

for which we should work together for promotion of renewable environment-friendly natural material like lac. As we know the agriculture and forest are under the jurisdiction of state, this sector need substantial investment in view of unexploited available resources, environmentally safe, easy technology and reduced earnings from agriculture sector under rainfed condition due to uncertain rain and changed climate pattern. We would like to emphasize here that this commodity has assured market whether it is raw or processed lac or value added products. Since the lac is nonperishable, it can be stored even for years without much deterioration in its quality. The semi processed lac known as seed lac can be stored for a longer period. The state is well known for its handicraft in various sectors, have ample scope to utilize its production in such sectors. Under the present scenario, the country needs large quantity of raw lac to feed its more than 150 processing and value addition units. There is a big gap between demand and supply. Poor lac crop in Indonesia and Thailand added fuel to fire. There is substantial enhancement in price of raw lac. The lac manufacturer has already committed for export, but is facing difficulty to fulfill the promise. The supply situation would improve but will take time. Hence there is need to enhance lac production. Besides, there is need for free movement of this commodity within and outside state. This will help in easy and ensured marketing of produce and subsequently the issue of lac processing is taken up along with value addition. On behalf of IINRG, I assure you all kinds of technical help required for this mission. The state government may invest in this sector for livelihood for lac production, processing and value addition as in other adjoining state of Chhattisgarh, Jharkhand, Maharashtra, etc. through forest department or *Zila Panchayat* or ITDA or other suitable agency.

I hope, during the two days of this conference, we would be able to come out with strategies which will help in livelihood security through lac production, processing and utilization.

(Courtesy: Dr.A.K.Jaiswal, IINRG, Ranchi)

Annexure - 2

State-wise production of sticklac in India (2007-08)

Name of state	Total production (ton)	Share in national production (%)
Andhra Pradesh	30	0.15
Assam	85	0.41
Bihar	10	0.05
Chhattisgarh	7160	36.69
Gujarat	55	0.27
Jharkhand	6385	30.94
Madhya Pradesh	3755	18.19
Maharastra	1070	5.18
Meghalaya	15	0.07
Orissa	435	2.11
Uttar Pradesh	500	2.42
West Bengal	1140	5.52
TOTAL	20640	100.00

Major lac producing areas of Odisha

District	Regions
Balasore	Haldipada, Jaleswar, Nilagiri
Keonjhar	Telkoi
Koraput	Ramgiri
Kalahandi	Lanjigarh, Th. Rampur
Mayurbhanj	Jashipur, Kaptipada, Karanjia, Padampokhari, Sarat,Thakurmunda, Udla,
Nabarangpur	Chandahandi, Raighar, Umerkot
Nuapada	Sarabong, Nangalbod, Darlimunda, Siallati (Udyanbandh), Bharuamunda
Sundergarh	Khandadhar, Kutra, Rajgangpur

(Courtesy: Sri Ranjan Kumar Kar, KVK, Debhog)

Annexure - 3

Role of NGOs for Development of Lac Production

1. Introduction:

Lac has been a traditional source of livelihood for thousands of tribal families living in the forest fringes of Jharkhand, Chhattisgarh, Madhya Pradesh and Orissa. These families primarily depend on agriculture for their livelihood, which is insufficient to provide them with food security and round-the-year income. Poor families living in forests and forest fringe villages have historically suffered from challenges like unfertile or barren land, low asset base, lack of irrigation facilities, small landholding, poor linkages with the market and their own low risk-bearing capacity, forcing them to migrate in search of work. Lac cultivation with host resources readily available within the periphery of their habitat does provide appreciable incomes to certain segment of families in central and eastern region.

However, with recent failure in Rangini crop consecutively for 34 years now, these families have lost significant livelihoods. Civil Societies in the past have contributed significantly in developing value chain of sub-sectors where poor people participate the most. The recent example from Jharkhand is the case of Tasar, Poultry and rainfed vegetable cultivation. It is argued that in order to fix the problem in the Lac value chain especially at the production end of the chain, active involvement of NGOs need to be ensured along with state, market, banking and research partners.

2. Current status and analysis of scenario:

- Demand conditions global and national seem stable in spite of financial crisis. Thus, any further in increase in supply is not going to severely affect the price of crude lac.
- Indian lac is superior in quality and has greatest share in quantity in the international market. Thus, we have a command in the market.
- Poorer communities represent 95% of current volume of production. Therefore, any investment in lac production enhancement will target the 'aam admi' and would contribute to poverty alleviation.
- Only around 7-10% of the host is currently utilized. This means that India has immense potential to shore up crude lac supply.
- The reservation price for farmers is much below the current lowest price. This means that farmers are going to continue lac cultivation in spite of price fluctuations.

3. Major constraints in enhancing production:

- Large production risks beyond human control
- Lack of service delivery mechanism around Lac production services (brood, credit, technology extension, agro-chem inputs/equipments, institutional support etc)
- Very few government subsidy programs for Lac cultivation infrastructure development.

• Frequent price fluctuations.

Risk Suscepti- billy to peet a and decase 3 Price		Most attractive
• Prilos & & & & & & & & & & & & & & & & & & &	2 4 1 3 5 9 Least attractive	 (10) (7) (8) (6)
1	Re.2000/year	Rs.7000+/ye Market attractiveness • Profitability/cesh income

Prioritization of potential Lac segments based on attractiveness and risk

4. Strategies for NGOs in enhancing production:

- Invest in action researches pertaining to production assuring and productivity enhancing technologies. Developing knowledge partnership amongst producer, lac experts, research institution and promoting agencies to improve lac productivity and contain risks. For example the NABARD-RIF lac project.
- Diversifying production risks by growing different strains of lac on different hosts in different seasons with focus on Kusmi lac cultivation (See the above figure for preferring Kusmi strain). Strategic shift to Kusmi on Ber/Kusum and bringing new lac host plants like Semialata under plantation through government programs like NREGA, SGSY etc
- Introduce and improve Production services like credit, brood, extension, insurance can bring more host under cultivation. NGOs can select lac production clusters in its operating area and create relevant service linkages.
- Setting up farmers' cooperatives to leverage economies of scale to maximize producers' selling power and provide production services.
- > Intervene in brood market structuring to ensure brood supply and quality.
- Working towards developing insurance product and insurance service delivery for risks unmanaged by technology/mgmt.

(Courtesy: Mr. Binju Abraham, PRADAN, Ranchi)