



Problems of Lac Growers in Chhatisgarh

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ABSTRACT

This study has been undertaken to identify the nature of problems faced by the Lac growers with objectives to identify the socio-economic and psychological profile along with the problems of lac growers in the district and provide suggestions for improving income through lac cultivation. The Kanker district was selected purposively due to maximum area coverage. Total 60 lac growers from four villages of two blocks were randomly selected. The study shows the awareness among farmers as they do plantation of short-cycled host plants of Semialata rather than Kusum tress. The understanding of farmers is quite high about diseases, pest control, pruning, and other farming practices. Absence of organized market, Price fluctuation, Lack of training in harvesting, handling and processing of Lac was found to be major challenge for the farmers. Climatic changes and broodlac availability was reported as other issues. Organized effort from the government line departments, KVKs and forest department for capacity building of farmers are urgent requirements.

Key Words: Lac growers, , Lac industry, Forest, NTFP, Problems

INTRODUCTION

Lac is a natural heritage of our country has been associated with tribal and poor people providing regular income in absence of other cash crops. India is the major producer of lac, accounting for more than 50 per cent of the total world production (15,200 MT) followed by Thailand (8,000 MT), Indonesia (8,000 MT), China (1,000 MT) and Vietnam (400 MT) during the year 2010. About 85 per cent of the country's production is exported to various countries. Due to its wide variety of applications in industries and in various uses the demand for lac is increasing day by day. So there is a need of promoting lac cultivation. Chhattisgarh has immense potential in terms of favourable climate, soil type, geography and natural conditions. Government is also promoting lac cultivation through new policies and schemes like SGSY and MSP.

Lac industry makes vital contribution to the economic well being of about 3 M tribal population of the country. Unfortunately over the last three decades the production of stick lac has registered a continuous decline mainly due to natural causes like unfavorable weather conditions, pest attack etc. Rao and Singh (1990) studied that about 85 per cent of the annual lac production in this country is exported. Industrially advanced countries like U.S.A., U K West Germany and USSR etc. use lac in large quantities (61.65%). During the past several years, however, there has been a gradual drop in the world demand for lac, the largest single factor, which is responsible for such decline in the demand for Indian lac is the wide and violent fluctuation in prices. The countries with advanced chemical technology like USA, UK, and West Germany have developed methods for utilizing the cheaper Thai Seed lac and started importing more lac from

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Thailand and the demand for better quality high priced Indian lac have gone down. Lac production in India has shown wide fluctuations in yield in the past, seriously affecting the export potential of the country. One of the major factors responsible for this is the heavy loss of crop due to pests. The situation can be retrieved to a large extent, if effective and economic control of the pests could be achieved. It may thus be concluded that the judicious use of this insecticide can not only result in doubling / tripling the lac yield but also in producing healthy and even pest free broodlac, without harming the lac insect (rather in improving its performance), beneficial biota, and mammals etc.

Recent studies carried out by Indian Lac Research Institute in Ranchi district of Jharkhand and several lac growing villages of other regions have revealed that income generated from lac cultivation is next only to cultivation of paddy. The income from lac cultivation is about 8 per cent of their total agricultural income. Lac cultivation requires good technical knowledge. Lack of communication may hamper the production process and supply chain later on. The other major problem of this sector in the recent past has 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 worry to enter.

Given huge prospects of lac-industry in Chhattisgarh, this study has been undertaken to identify the nature of the problems faced by the lac growers and also to suggest remedial measures for the revival of lac cultivation

MATERIALS AND METHODS

The study was conducted in Kanker district of Chattisgarh plains. Kanker district was selected purposively because the maximum area under the lac in Chhattisgarh plains comes under this district.

Narharpur and Charma block were selected for the study. Total 4 villages, two from each block were selected randomly. 15 respondents from each village who were engaged in lac production were selected randomly for the present study.

A detailed questionnaire was designed which covered all the aspects of profile with special focus on lac cultivation. Focused group discussion was another method which was used to identify key challenges faced by farmers in lac cultivation and their view on possible solutions. Detailed interview with forest officials and informal interaction were other tools which used to collect data.

RESULTS AND DISCUSSION

Profile of the respondents

Age

The data indicates that maximum numbers of respondents (76.67 %) were from the age group 37-53 yr followed by above 54 yr (18.33%) and below 36 yr (3 %). Mean age was found to be 46.75 + 7.35 yr. In conformity of the study Pal (2011) showed that on an average, the age of 39 per cent family heads was more than 50 yr and 61 per cent family heads were less than 50 yr.

Education

It was evident that most of the respondent's population was illiterate (58.3%). Only Tilkadand block had somewhat even distribution of literacy with people from different education levels. However, no one from the respondent's population has attended college. About 18.3 per cent people had attended primary schools. Similar percentage of people attended middle school as well. Only 5 per cent people had gone to high school. In contradiction of the present findings Mohammad (2012) revealed that the literacy of total family members of lac growers observed high in large (89.29%) category. He also added that the people having the education level up to primary school, middle school, higher secondary school and above higher secondary school was 44.91, 28.53, 11.29 and 3.38 per cent, respectively.

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Family Size

Maximum number of households had 6+ members i.e., 29 families as such (48.33%). However, families with 2-4 members were also close enough i.e., 20 households as such (33.33%). Male population was 95 while female population was 90 from the surveyed sixty households. The results revealed that mostly extended family concept prevails in the locale of the study. In line with the study Pal (2011) showed that lac grower's families having up to 5 members and more than 5 members were 54 and 46 per cent, respectively, with an average family size of 5.92.

Annual Income

In Tilkadand all the farmers had annual income from lac above Rs.1 lakh. If we compare it with the income from agriculture below we will come to know lac has become the primary source of income for the farmers in this region. Overall 28.33 per cent farmers had income from lac between Rs 50000-100000 annually. About fifty three per cent farmer had income from Rs100000-1, 50,000. This explains that lac is a primary source of sustainable livelihood for the farmers in this region. Likewise, 18.33 per cent farmers had income of Rs 1, 50,000 & above. Every household have 10 to15 Ber trees and from these lac host trees each of the village get around 8 to10 thousand rupees from lac cultivation. Pal et al (2009) reported similar findings.

Land Holding

Most of the farmers (93.33%) were marginal, with less than 2 ha. of cultivable land. This makes it clear that why lac cultivation is preferred over agriculture in this region. The scarcity of land and lack of irrigation facilities among these marginal farmers increases their orientation towards forest based products as they require natural rain and less effort and time. Only 1 per cent had more than 4 ha. of land. Five per cent farmers had between 2 to 4ha. of land. In line with the study Pal (2011) showed that 18.0 per cent lac growers had marginal land holding of average size 0.64 ha. Twenty five

per cent had small land holding with average size of 1.04 ha. Thirty nine per cent had medium land holding with average size 2.82 ha. Sixteen per cent had semi-medium land holding with average size 6.45 ha and 2.0 per cent had large land holding with average size 13.0ha.

Understanding of lac cultivation

The understanding level has been judged on various parameters like knowledge about the disease, crop cycle and harvesting instruments, tools and techniques involved in lac cultivation. On the basis of these knowledge levels, points have been assigned accordingly. It was found (Table 1) that majority of the famers (71.66 %) have complete understanding of lac cultivation practices followed by moderate (28.33%).

Table 1. Understanding level of a farmer with respect to lac cultivation practices N=60

| Sr. No. | Village | Complete | Moderate | Low |
|---------|-----------|----------|----------|-----|
| 1. | Chihro | 7 | 8 | 0 |
| 2. | Kapaskoti | 13 | 2 | 0 |
| 3. | Dhanesara | 11 | 4 | 0 |
| 4. | Tilkadand | 12 | 3 | 0 |
| | Frequency | 43 | 17 | 0 |
| | Per cent | 71.66 | 28.33 | 0 |

Problems related with lac cultivation

Problem of transport

It was noticed that Chihro Village had maximum transport problem as it is in the interiors of Kanker district. Lack of infrastructure problems in road transport was major reason for the higher marking in "5" and "4" categories (Table 2). Out of 60 respondents, 22 checked in the "high" category of problems in transportation and 21 checked in for "very high" category. So it was evident that this problem needs to be taken care of for consistent supply of raw material. Thirty six per cent farmers say high level of problem of transport whereas 35 per cent say it's a very high level problem while 28.3 consider it moderate.

Table 2. Categorisation of problem of transport

N = 60

| Sr. No. | Village | Transport | | | | |
|---------|-----------------|------------------|-------------|-----------------|------------|-------------------|
| | | (Very high) 5 | (High) 4 | (Moderate) 3 | (Low) 2 | (Negligible) 1 |
| 1. | Chihro | 8 | 7 | 0 | 0 | 0 |
| 2. | Kapaskoti | 2 | 5 | 8 | 0 | 0 |
| 3. | Dhanesara | 4 | 5 | 6 | 0 | 0 |
| 4. | Tilkadand | 7 | 5 | 3 | 0 | 0 |
| | Total Frequency | 21 | 22 | 17 | 0 | 0 |
| | Per cent | 35 | 36.66 | 28.33 | 0 | 0 |

Problem of Broodlac availability

The availability of Broodlac is not a severe problem, however the quality is. Poor quality Broodlac doesn't give proper yield. However Broodlac is available in government centres at the season time. Hence, data (Table 3) reveals that most of the respondents (53.33%) categorised it as a moderate problem followed by low (36.66%).

Problem of markets

The availability of market again depends on the location and accessibility of the Village. Chihro has problems because of its remote location in Bhanupratappur block of Kanker district. Tilkadand farmers had problems of accessing the market at the right time because they needed transport facility. It was evident (Table 4) that majority of the respondent categorised it as a moderate problem followed by

Table 3. Categorisation of problem of Broodlac availability on time.

N=60

| Sr. No. | Village | Broodlac Availability | | | | |
|---------|-----------------|-----------------------|-------------|-----------------|------------|-------------------|
| | | (Very high) 5 | (High) 4 | (Moderate) 3 | (Low) 2 | (Negligible) 1 |
| 1. | Chihro | 0 | 0 | 8 | 7 | 0 |
| 2. | Kapaskoti | 0 | 0 | 7 | 8 | 0 |
| 3. | Dhanesara | 0 | 0 | 8 | 7 | 0 |
| 4. | Tilkadand | 0 | 6 | 9 | 0 | 0 |
| | Total frequency | 0 | 6 | 32 | 22 | 0 |
| | Per cent | 0 | 10 | 53.33 | 36.66 | 0 |

Table 4. Categorisation of problem due to market conditions.

N= 60

| Sr. No. | Village | Markets | | | | |
|---------|-----------------|------------------|-------------|-----------------|------------|-------------------|
| | | (Very high) 5 | (High) 4 | (Moderate) 3 | (Low) 2 | (Negligible) 1 |
| 1. | Chihro | 0 | 8 | 7 | 0 | 0 |
| 2. | Kapaskoti | 5 | 6 | 4 | 0 | 0 |
| 3. | Dhanesara | 4 | 8 | 3 | 0 | 0 |
| 4. | Tilkadand | 1 | 2 | 12 | 0 | 0 |
| | Total Frequency | 10 | 24 | 26 | 0 | 0 |
| | Per cent | 16.66 | 40 | 43.33 | 0 | 0 |

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Table 5. Categorisation of problem because of climatic factors.

N=60

| Sr. No. | Village | Climate | | | | |
|---------|-----------------|------------------|-------------|-----------------|------------|-------------------|
| | | (Very high) 5 | (High) 4 | (Moderate) 3 | (Low) 2 | (Negligible) 1 |
| 1. | Chihro | 0 | 1 | 9 | 5 | 0 |
| 2. | Kapaskoti | 0 | 0 | 13 | 2 | 0 |
| 3. | Dhanesara | 0 | 0 | 12 | 3 | 0 |
| 4. | Tilkadand | 0 | 5 | 10 | 0 | 0 |
| | Total frequency | 0 | 6 | 44 | 10 | 0 |
| | Per cent | 0 | 10 | 73.33 | 16.66 | 0 |

40 per cent of the respondent who rated it as a high. Similar findings by Pal *et al* (2009) confirm the above findings.

Problem related to climatic factors

The problem of climate is persistent in every Village. It refers to global warming and unexceptional rises in temperature in summer season. Lac insect dies in excessive heat. Therefore, the farmers doesn't get proper yield. Every experienced farmer is accepting the fact that this problem due to climate has increased in recent times. It was evident (Table 5) that most of the farmers (73.33%) perceived it as a moderate factor in lac production. Everybody had production related problem in recent years due to climate change. The productivity quality-wise has decreased. Though, the government support lac cultivation by including it in MSP. However, during the quality check most of the lac rejected by the government depending on its quality. So it has

issues supporting marginal farmers because they don't have bulk production. If government rejects their lac, they had to sell it in local market for cheap prices. Similar findings by Pal *et al* (2009) confirm the above findings.

Problem of theft

Previous researchers have mentioned the problem of theft in their researches. However, now it's not so common now in the region because government has declared it under Minimum Support Price (MSP) policy, and collecting it through SHG's in designated collection centres. Hence, problem of theft has been reduced. Only few instances of theft have been observed in Chihro Village due to its separated tree location in and around the village.

CONCLUSION

Lac is a highly remunerative cultivation. A hectare of Ber plantation with Kusmi lac cultivation

Table 6. Categorisation of problem of theft of lac crop.

N = 60

| Sr. No. | Village | Theft | | | | |
|---------|-----------------|------------------|-------------|-----------------|------------|-------------------|
| | | (Very high) 5 | (High) 4 | (Moderate) 3 | (Low) 2 | (Negligible) 1 |
| 1. | Chihro | 0 | 0 | 0 | 9 | 12 |
| 2. | Kapaskoti | 0 | 0 | 0 | 4 | 8 |
| 3. | Dhanesara | 0 | 0 | 0 | 7 | 9 |
| 4. | Tilkadand | 0 | 0 | 0 | 0 | 11 |
| | Total frequency | 0 | 0 | 0 | 20 | 40 |
| | Per cent | 0 | 0 | 0 | 33.33 | 66.66 |

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can produce net return of 3-5 lakh/yr. It is like an insurance crop especially during drought year as the crop is very good during such adverse climate. Lac cultivation involves significant women participation and helps ecosystem development. A good number of lac host trees like Kusun, Palash, Ber etc. naturally occurring in forest and sub forests in Chhattisgarh are available for commercial exploitation.

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