**Short Communication** 

# Breaking of poverty through sericulture among the tribe-A Socio-Economic study of Dharamjaigarh block of Raigarh Dist, CG, India

Dewangan S.K.<sup>1</sup>, Sahu K.R.<sup>2</sup> and Soni S.K.<sup>3</sup>

<sup>1</sup>Joint Collector, Jagdalpur, District Bastar (C.G.) – 494 001, INDIA <sup>2</sup>Department of Zoology, E. Raghvendra Rao, Govt. P.G. Science College, Bilaspur – INDIA <sup>3</sup>Department of Rural Technology and Social Development, G.G.U.Bilaspur, C.G., INDIA

Available online at: www.isca.in

(Received 2<sup>th</sup> November 2011, revised 20<sup>th</sup> January 2012, accepted 28<sup>th</sup> January 2012)

## **Abstract**

The present strategy of rural development in India mainly focuses on poverty alleviation, better livelihood opportunities, provision of basic amenities and infrastructure facilities through innovative programmes of wage and self-employment. Poverty is biggest challenge in India. Poverty is a social phenomenon in which a section of society is unable to fulfill even its basic necessities. Solution of rural poverty and unemployment can come from land and water based jobs, which even today employ six times. The farmers are encouraged to take up non-agriculture practices. In this context sericulture is a better option because it is labor intensive industry. It provides direct or indirect employment to about 7 million people in India. Sericulture requires low investment and offers high profit. It also provides regular income to farmers throughout the year unlike most other agricultural crops. Sericulture plays a vital role in the flow of income from the urban rich sections of the society to the rural poor. There are more than 58 countries practicing sericulture in the world. India is the only Country in the world to produce all the four known varieties of silk including Mulberry, Eri, Tasar and Muga. In Chhattisgarh Tropical Tasar and mulberry are reared on commercial scale. Tasar is realy named as Kosa. Sericulture is being practiced by the tribal of traditional Districts of Baster, Raigarh, Bilaspur and Surguja. The study area has about 364 acres under mulberry cultivation. Total area covered under tasar centers is about 3153.25 acres. Tasar rearing in forest are covered 4729.88 acres. The total beneficiaries are 5739 out of them 3347 are tribal in the district. In the block only 18 (18%) beneficiaries out of 100 adopted the sericulture as main occupation and rest 82 (82%) as secondary occupation. Out of 100 respondents in block 32% received employment for duration of 100-150 days and 64% for a period of 151-200 days and 3% of 201-300 days and the 1% for more than 300 days. The total monthly income obtained from all sources to the families involved in sericulture occupation is average 3840/-. The total monthly expenditure is about 2380/-. The respondent tribe of study area collects forest minor products and thus they earn income about 5950/- once in year which is a satisfactory amount for poor families. Before having sericulture occupation, the economic condition of 72% of the respondent was normal, 8% was bed and 20% was very miserable. The average annual income from the old occupation was Rs. 19350/. The change in annual income is reported app. Double which is good in amount.

**Keywords:** Poverty, sericulture, employment, income, tribal.

## Introduction

The word "Sericulture" has been derived from the word "Su" (Si) which means silk. Sericulture, the art and science of growing silkworm, food plants, rearing silkworms and production of silk is basically an agro-industry. It is divided in two sectors namely farm and industry. The farm sector involves growing silkworm's food plants, rearing silkworm to produce cocoons and producing eggs. Reeling, twisting, dyeing, printing, finishing, Knitting and felting form the industry sector<sup>1</sup>. Sericulture has provide downstream employment and income generation in rural and semi-urban areas high participation for low-income and socially under privileged groups, a larger role for women in development and huge potential for contribution to export earnings<sup>2</sup>.

There are more than 58 countries practicing sericulture in the world. India is the only Country in the world to produce all the four known varieties of silk including Mulberry, Eri, Tasar and Muga. In India Cultivation is spread Over 22 states. Covering 172000 hectares across 54000 villages operating 258000 handlooms and 29340 power looms<sup>3</sup>.

In India, sericulture is not only a tradition but also a living culture. It particularly suits rural-based farmers, entrepreneurs and artisans, as it requires low investment but, with potential for relatively higher returns. It provides income and employment to the rural poor especially farmers with small land-holdings and the marginalized and weaker sections of the society.

Vol. **1(ISC-2011)**, 371-374 (**2012**)

Poverty is biggest challenge in India. Poverty is a social phenomenon in which a section of society is unable to fulfill even its basic necessities. In India [44%] and Chhattisgarh [42.5%] of the total population lives in absolute poverty. India still has the world's largest number of poor people in a single country<sup>4</sup>.

Solution of rural poverty and unemployment can come from land and water based jobs, which even today employ six times. Indian economy reportedly suffers from high incidence of rural poverty unemployment and underemployment. The farmers are encouraged to take up non-agriculture practices which are integrated with live stock culture animal husbandry, dairy, fisheries, poultry, horticulture and sericulture to generate more income for each house hold.

In this context sericulture is a better option because it is labor intensive industry and provides direct or indirect employment to about 7 million people in India. It requires low investment and offers high profit. It also provides regular income to farmers throughout the year unlike most other agricultural crops. It plays a vital role in the flow of income from the urban rich sections of the society to the rural poor<sup>5</sup>.

Presently in Chhattisgarh three types of silk viz., 'Mulberry', 'Tasar' and 'Eri' silk are producing. Tasar culture is practiced on the forest plants in wild condition<sup>6</sup>.

In Chhattisgarh Tropical Tasar and mulberry are reared on commercial scale. Tasar is realy named as Kosa. Sericulture is being practiced by the tribal of traditional Districts of Baster, Raigarh, Bilaspur and Surguja.

Sericulture activities covered 43760 acres. The total number of Tasar center is 285(12551.93Acres), Tasar plantation under CGSP is 155 sites (10000 Acres), Tasar rearing in forest is 18827.9 Acres ), Natural Raily Cocoons Area is 500 sq.kms and mulberry gardens are 117 (2380.5Acres). The total beneficiaries are 51310 in numbers out of them 32,429 are Scheduled Tribe<sup>7</sup>.

Aims and Objectives: The Studies Will be concentrated at the Dharamjaigarh block of Raigarh district. This will include Identification of the areas where the tribal populations have been directed to adopt sericulture practices for their livelihood. Since how long this population is practicing sericulture. What percentage of male, female and children are involved in this process?

By preparing a questionnaire, data on different elements of sericulture practices and aspects of economy in terms of their economic growth will be collected as a primary data. Secondary data will be collected from the various reports, magazines and publications, from central and state agencies working on sericulture practices. Finally an evaluation on the breaking of poverty through sericulture among the tribe at study area will be assessed by using standard method of statistics and economics.

#### Material and Methods

The present investigation was carried out in Dharamjaigarh Block of Raigarh district, Chhattisgarh state, was purposely selected for the study, and based on potentiality and production of tasar/mulberry cocoons, where both types of sericulture – mulberry and tasar are being practiced. The study area has about 364 acres under mulberry cultivation though effective area is only 80-120 acres. Mulberry gardens are 18 in number. Mulberry Reeling Unit in 1 number. Tasar culture is a traditional and exclusive craft of the tribal of study area and is being practice from 13 years. Total area covered under tasar centers is about 3153.25 acres though effective area is about 2350 acre. Tasar centers are 22 in number. Tasar plantation under CGSP is situated in 57 sites and covers 3795 acres. Tasar rearings in forest are covered 4729.88 acres. The total beneficiaries are 5739 out of them 3347 are tribal in the district<sup>8</sup>.

Initially the list of sericultural villages and the names of beneficiaries were obtained from local sericultural department of Dharamjaigarh, The primary data was collected from the sampled respondents following the personal interview method using structured interview schedule standardized by Nagaraja (1989).

In the above mention block four villages were selected at random and in each village 25 beneficiaries were selected at random for collection of data. Thus 100 beneficiaries were selected from block. The farmers were post classified into main and additional based on the engagement of employment.

The information sought from the respondents involved in sericulture activities consisted of three types. The first type of information pertained to general information about the respondents.

The second type of information sought was related to occupational status, Employment days in a year, total monthly income of the family from all sources, total expenditure of the families from all sources, occupation before the sericulture, duration of sericulture work, main occupation related to sericulture, average annual income from the old occupation, crops take in a year, cocoon produced in each crop, Profit from each crop, yearly production of cocoons, average annual income.

The third type of information pertained to the Losses in Sericulture, Compensation by Government, Loan according to requirement, Attachment with Sericulture, Sericulture is favorable or not, Traditional Business is affected or not, Total labor period, Change in economic status, Change in Annual

Income through Sericulture, Displacement by Sericulture, Impact of Sericulture in Life Style and economics of silk production.

Primary and secondary data was analyzed using various statistical tools viz., mean, mode and median. The data collected include the profile of the farmers namely, age, education, social participation, economic motivation, income from sericulture, organizational participation.

## **Results and Discussion**

**Employment:** In the block only 18 (18%) beneficiaries out of 100 adopted the sericulture as main occupation and rest 82 (82%) as secondary occupation. Out of 100 families the number of working member in 18 families is only 01 and the same way in 31 families is 02, In 38 families is 03, in 10 families 04and in 03 families 05 or more then 05 members are working.

The total monthly income obtained from all sources to the families involved in sericulture occupation is average 3840/-. The respondent tribe of study area collects forest minor products and thus they earn income about 5950/- once in year which is a satisfactory amount for poor families.

Table - 1

X	F	Fx
1	18	18
2	31	62
3	38	114
4	10	40
5	3	15
N=100		Σfx=249

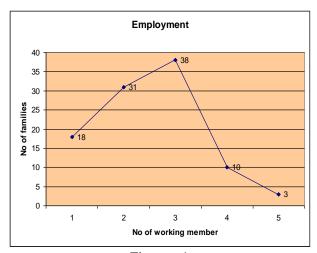


Figure - 1

Table - 2

Days	No. of Respondents
100-150	32
151-200	64
201-300	3
301-365	1

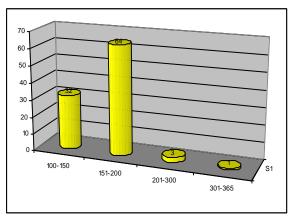


Figure -2 Average Monthly Income

Table-3

S. N.	MONTHLY INCOME	NO. OF RESPONDENT
1	000-1000	0
2	1001-2000	12
3	2001-3000	24
4	3001-4000	36
5	4001-5000	9
6	5001-6000	7
7	6001-7000	7
8	7001-8000	5
		100



Figure -3

Vol. 1(ISC-2011), 371-374 (2012)

The total monthly expenditure from all sources to the families is about 2380/-. Only respondents 14 are indebtness. Before starting sericulture occupation in the study area 58% of the total respondent were involved in agriculture and 35% in agricultural labor. Only 4% are in rearing of worm and 3% are both agriculture and sericulture. Now 148 men and 131 women are involved in the occupation under this silkworm rearing, agriculture and silkworm rearing, plantation and silkworm rearing and labor are included.

Before having sericulture occupation, the economic condition of 72% of the respondent was normal, 8% was bed and 20% was very miserable. This occupation is not new to the tribes in the study area because they are practicing sericulture since average of 13 yr. The average annual income from the old occupation was Rs. 19350/-.

From 100 respondent 15 are take one crop in year while 12 are two, 73 are three. All respondent received dfls from sericulture center and they are satisfied with dept. Primary host plant for silkworm rearing is in the priority of T.arjuna, T.tomentosa, M.alba and S.robusta with Z.zuzuba and that is about 3190 for each respondent.

All the respondent are accepted that the work of sericulture is comparatively better than other work. It is estimated that and averages of 5900 numbers of Cocoons are produced in each crop and an average of 4720 /- Rs. are gain by respondent while yearly production is an average of 18300 numbers and Average annual income about 18220/- Rs. Respondents. 99 respondent getting losses some time in this occupation and the reason are high temperature and humidity followed by diseases and pollution. Govt. did not give compensation for any loss in crop it is responded by all.

All the respondent want attach continue with sericulture because it is suited to their lifestyle. The work is simple and can be done without any cost. Sericulture can serve better for the additional income generation and lay concrete on the way for the local employment generation. All respondents have view that sericulture has not affected their traditional business, and their economic status is change and denied for any migration or displacement caused. The change in annual income is reported app. Double which is good in amount.

All the respondents attributed the following impact by Sericulture: Conservation of environment, No cutting and felling of trees, Inter state migration is checked, Local employment is generated, Served as additional income generating source, Regular savings habit has been developed, Reduction of human pressure on the forest

## **Conclusion**

In a nutshell sericulture is the source of additional income generation. Sericulture provides more than 50% employment to the respondent in a year thus stops the inter-state migration. According to the MNREGA (Mahatma Gandhi National Rural Employment Guaranty Programme) population must receive 100 days employment in a year where as sericulture provides 151-200 days employment to respondent i.e., 64%.

Majority of the respondent were practicing agriculture before adopting the sericulture but later on more than 80% respondent are doing rearing practices. Economic states from old occupation are normal for 72% respondents. The average annual income from the old occupation were estimated as Rs. 19350/-. Due to this practices respondent were earned around double income than earlier income.

Tasar culture is helpful for saving 3190 host plant by each respondent i.e., tribal were very much eco-friendly.

It is noteworthy that adopting the Sericulture by tribal they conserve the environment by non-cutting and felling of trees because sericulture is now their way of life. Interstate migration is checked because sericulture provides additional income at their door level. Regular savings habit has been developed by sericulture practices among the tribes because they earn much more than their standard of living. It is remarkable that sericulture is suited the life style of tribe because practice of sericulture is simple and can be done without any cost and skill.

The total monthly income obtained from all sources to the families involved in sericulture occupation is average 3840/-. The total monthly expenditure is about 2380/-.

### Reference

- Sericulture activities provide a perfect choice for the women Srivastav, P. K. et. al. Sericulture and Seri-Biodiversity (2005)
- Baskar H., Indian Sericulture: Exciting Path Ahead-International Sericultural Commission, India, (2005)
- Dewangan S.K., Sericulture A Tool of Eco-System Checking Through Tribal, Journal of Environmental Research and Development, vol.6 no.1, (2010)
- Directorate of Economics and Statistics District Wise Socio Economic Development Index 2001 of Chhattisgarh State (2001)
- Saratchandra B. Strides in Indian Sericultural Science and Technology- ISCC- (2005)
- Gupta Rakesh et al Tasar culture showed them the way, Indian silk, Feb (2008)
- District Statistics Book, Raigarh, (2005)
- Directorate of Gramodyog -Sericulture in Chhattisgarh-(2004)