

Impact of Cluster Promotion Programme on Socio-economic Status of Sericulturist

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ABSTRACT

Cluster Promotion Programme (CPP) was enforced by Central Sericulture Board unitedly with Directorate of Sericulture, Maharashtra throughout the years 2007-10. The present paper analyzes the impact of CPP on socio-economic standing of sericulturist's in Osmanabad district. In all hundred and fifty sericulturists were selected by "probability proportionate sampling size technique" from eight talukas and twenty five villages. Information was collected by personal interviews with sericulturists. The findings disclosed that almost one fourth of the sericulturists (24.00 percent) managed to extend sericulture financial gain from 25.01 to 50.00 per cent, whereas, 19.33 per cent sericulturists detected 50.01 percent to 75.00 percent increase in financial gain from sericulture. Majority of the sericulturists (37.33 %) enlarged their annual financial gain from 25.01 to 50.00 per cent. The 64.00 per cent of sericulturists reportable amendment in social life within the range of 25.01 to 50.00 per cent owing to CPP. The results of the current study have a very important policy implication for the promotion of sericulture development in Maharashtra in general and Osmanabad district in particular.

Key words : Cluster promotion programme, Impact, Sericulturist, Socio-economic status.

Mulberry sericulture is taken into account to be one of the financial gain and employment potential occupation within the rural areas in our country. China leads the globe with silk production of 104000 MT or 81.95 per cent of the manufacture. India ranks second in respect of world raw silk production. It's position, jointly of solely 2 major silk producers within the world, and from its employment potential, that sericulture and silk derive their importance within the Indian textile map. Under Catalytic Development Project (CDP) implemented by Central Silk Board (CSB) Ministry of Textiles, Govt. of India, sericulture production cluster were identified and Cluster Promotion Programme (CPP) were implemented by CSB in collaboration with Directorate of sericulture, M.S in Osmanabad district during the year 2007-10. Success of any new technology depends on its acceptance / adoption by sericulturists and the user acceptance is much dependent on carefully drawn and implemented extension programme (P. Rama Mohanarao and Kambale, C.K. 2009). The present investigation was conducted in Osmanabad district of Maharashtra State where both Kharif and Rabi crops are taken. The district is having a hundred and one villages under mulberry plantation with an area of 274 ha (685 acres) and having a Cocoon production of 76380.2 kgs (76.38 MT) with an annual turnover of Rs. 57, 48,928/- (Anonymous, 2010). Considering the above mentioned facts, the study was undertaken to assess the impact of CPP on socio-economic standing of sericulturist's in Osmanabad district.

south and lies between north latitudes 17°37' and 18°42' and east longitude 75°16' and 76°47'. The district has a geographical area of 7512 sq. km. It has 8 talukas. The climate of the district is characterized by a hot summer and general dryness throughout the year except during the south-west monsoon season, i.e., June to September. The mean minimum temperature is 8.5°C and means maximum temperature is 42.5°C. The normal annual rainfall over the district varies from 600 mm to about 850 mm.

Sampling plan and data collection

Three 3 stages sampling technique was adopted for this investigation. Cluster wise mulberry planted eight talukas particularly Kallam, Washi, Bhoom, Paranda, Osmanabad, Tuljapur, Omerga and Lohara were hand-picked wherever Cluster Promotion Programme was enforced throughout 2007-08 that was thought of as base year. On the basis of this, list of mulberry growing villages were prepared, arranged in descending order of area and in all 25 villages were selected on proportionate basis. The percentages of area under mulberry plantation in each block was calculated and converted into proportion for selection of 150 respondents. The respondents those have taken the advantage of CPP between 2007-2010 were selected from the selected villages. The list of sericulturist under CPP was drawn. Thus, in all 150 respondents were selected for study from the list by adopting "proportionate probability sampling to the size technique. The data with help of pre-structured interview schedule were collected by personal interviews of sericulturists.

Assessment of socio-economic impact

The dictionary meaning of the term impact could be robust impression or effect. Operationally, the impact was defined as the changes occurred at the respondent sericulturist due to CPP on sericulture.

METHODOLOGY

Area descriptions

The present investigation was undertaken in Osmanabad district. It is situated in the southern part of the state abutting Andhra Pradesh in

These effects were measured in terms of the per cent changes that occurred within the numerous parameters of the impact on the idea of the bottom year (2007-08) throughout that CPP were enforced in Osmanabad district. For this study, eight impact parameters were known. The procedure followed for the measure of one parameter of impact assessment is given below. The socio-economic impact of alternative parameters in terms of change in number of batches per year, income from sericulture, annual income, total land holding, change in type of sericulture unit, saving and social life was discovered by adopting constant procedure.

Change in area under mulberry

The percentage change in area under mulberry was computed by using following formula.

$$CAM = \frac{AMs - AMb}{AMb} \times 100$$

Where,

- CAM – Change in Area under mulberry
- AMs - Area under mulberry in a study year
- AMb - Area under mulberry in a base year

RESULTS AND DISCUSSION

Distribution of respondents in step with impact parameters viz. Socio- economic impact

Change in area under mulberry plantation

Change in area under mulberry refers to additional area cultivated by the sericulturist after taking the advantage of CPP on sericulture. The percentage change in area under mulberry was presented in Table 1.

From the information presented in Table 1, it's ascertained that, there's no amendment of area under mulberry plantation of 44.00 per cent of the sericulturist as they have already planted mulberry before the implementation of the cluster promotion programme however they need not increase the area during the study period. The findings are partially in line with observation made by Kasi Reddy et. al (2008). Increase in area from 25.01 to 50 per cent was recorded with 23.34 per cent of sericulturist followed by 15.33 percent having 75.01 per cent and above increase in area under mulberry. Whereas 9.33 per cent sericulturist have up to 25 per cent increased area followed by only 8.00 per cent of sericulturist have more than 50.01 to 75.00 per cent increase in area under

Table 1
Change in area under mulberry plantation

Sr. No.	Change in area under mulberry plantation	Respondents (n=150)	
		Number	Percentage
1	No change	66	44.00
2	Increase up to 25%	14	9.33
3	Increase from 25.01% to 50%	35	23.34
4	Increase from 50.01% to 75%	12	8.00
5	Increase from 75.01% and above	23	15.33
Total		150	100.00

mulberry by sericulturist under cluster promotion programme. Hiriyanna et. al (2008) also reported that the area under mulberry has improved significantly.

Change in number of rearing cycle per year

Change in number of rearing batches taken annually refers to the batches taken before and after the implementation of CPP on sericulture. The percentage change in number of batches taken annually is depicted in Table 2.

From the data presented in Table 2, it is observed that, 28.67 per cent of the sericulturist was taking same number of rearing cycles per year as they were taking earlier before the implementation of CPP as it was recorded as no change in number of batches by the sericulturist. Increase in number of batches was increased from 25.01 per cent to 50.00 per cent was observed with 28.00 per cent of the sericulturist while 22.00 per cent of the sericulturist had noticed more than 75.01 per cent increase in number of batches. Increase in number of batches from 50.01 to 75 per cent was recorded with 14.00 per cent of sericulturist followed by 7.33 per cent taking more than 25 per cent number of batches for cocoon production under cluster promotion programme. The findings are partially in line with the

Table 2
Change in number of rearing cycles per year

Sr. No.	Change in number of batches	Respondents (n=150)	
		Number	Percentage
1	No change	43	28.67
2	Increase up to 25%	11	7.33
3	Increase from 25.01% to 50%	42	28.00
4	Increase from 50.01% to 75%	21	14.00
5	Increase from 75.01% and above	33	22.00
Total		150	100.00

observations made by (Kasi Reddy et. al; Pal et. al (2008) and Hiriyanna et. al (2008) reported that sericulture offer regular own family employment throughout the year which helps to increase number of batches.

Change in sericulture income

Income from sericulture refers to the amount received after selling the cocoons. The change in income from sericulture was measured on the basis of difference between the income received from per hectare cocoon production during study year and base year. The data regarding the change in sericulture income is presented in Table 3

It is disclosed from the info conferred in Table 3 that, majority of the sericulturists (26.00 per cent) reportable unchanged sericulture financial gain as they were obtaining same quantity of financial gain before and when the implementation of cluster promotion programme. Nearly one fourth of the sericulturist (24.00 per cent) managed to increase sericulture

Table 3
Change in sericulture income

Sr. No.	Change in sericulture income	Respondents (n=150)	
		Number	Percentage
1.	No change	39	26.00
2.	Increase up to 25%	19	12.67
3.	Increase from 25.01% to 50%	36	24.00
4.	Increase from 50.01% to 75%	29	19.33
5.	Increase from 75.01% and above	27	18.00
Total		150	100.00

income from 25.01 to 50 per cent. Whereas, 50.01 per cent to 75 per cent, 75.01 per cent and above and up to 25 percent increase in sericulture was observed by 19.33 percent, 18.00 percent and 12.67 per cent sericulturist respectively. The findings are in confirmation with the findings created by Gururaj, et. al (2007) and Kasi Reddy, et. al (2008).

Change in annual income

Gross income refers to the amount received after selling the produced plant product of economic importance. The change in annual income was measured on the basis of difference between the income received from per hectare total production during study year and base year. The data regarding the annual income of the sericulturist is presented in Table 4.

It is revealed from the data presented in Table 4 that, majority of the sericulturist (37.33%) inflated their annual financial gain from 25.01 to 50 per cent. Nearly one fourth of the respondents (24.67%) managed to increase their annual income from 50.01 to 75 per cent. About 22 per cent of sericulturist recorded no change in annual income. Whereas up to 25 per cent,

Table 4
Change in annual income

Sr. No.	Change in Annual income	Respondents (n=150)	
		Number	Percentage
1.	No change	33	22.00
2.	Increase up to 25%	15	10.00
3.	Increase from 25.01% to 50%	56	37.33
4.	Increase from 50.01% to 75%	37	24.67
5.	Increase from 75.01% to 100.	07	4.67
6.	Increase more than 100.01%	02	1.33
Total		150	100.00

75.01 to 100 per cent and more than 100 per cent increase in annual income was observed by 10.00 percent, 4.67 per cent and 1.33 per cent sericulturists respectively. The findings are in confirmation with the findings made by Chauhan (2002) stated that sericulture activity has been adopted as subsidiary occupation which contributed about 7.29 per cent to household income. Likewise Akre et.al (2004) reported sericulture generates regular income to

marginal and needy farmers and has the highest input-output ratio.

Change in total land holding

The change in total land holding was measured on the basis of difference between the land holding possessed during study year and base year. The data is presented in Table 5.

It is observed that, the increase up to more than 25 per cent of land holding is recorded with 42.66 per cent of the respondents. Whereas 30 per cent of the respondents shows no change in total land holding followed by 14.00 per cent showing increase from 25.01 to 50.00 per cent of land holding. However, quite

Table 5
Change in total land holding

Sr. No.	Change in Total land holding	Respondents (n=150)	
		Number	Percentage
1.	No change	45	30.00
2.	Increase up to 25%	64	42.66
3.	Increase from 25.01% to 50%	21	14.00
4.	Increase from 50.01% to 75%	12	8.00
5.	Increase from 75.01% and above	08	5.34
Total		150	100.00

a few numbers of respondents increased their land holding in the range of 50.01 to 75 per cent (8.00%) and 75.01 per cent and above (5.34%).

Change in type of sericulture unit

Change in type of sericulture unit refers to the unit which the sericulturist have during study year and base year. The distribution of respondents' sericulturist on the basis of change in type of sericulture unit is presented in Table 6.

It is disclosed that, majority of the sericulturist (42.67 per cent) managed to alter sericulture unit from 75.01 and above. About 33.33 per cent reported unchanged sericulture unit as they were using same cocoon production unit before and after the implementation of cluster promotion programme.

Table 6
Change in type of sericulture unit

Sr. No.	Change in Type of sericulture Unit	Respondents (n=150)	
		Number	Percentage
1.	No change	50	33.33
2.	Increase up to 25%	02	1.33
3.	Increase from 25.01% to 50%	32	21.34
4.	Increase from 50.01% to 75%	02	1.33
5.	Increase from 75.01% and above	64	42.67
Total		150	100.00

Nearly 21.34 percent of the sericulturist managed to increase sericulture unit from 25.01 to 50 per cent. Whereas, 50.01per cent to 75 per cent, and up to 25 per cent increase in sericulture unit was observed by 1.33 per cent of sericulturist respectively. This is in

conformity with the findings made by Hiriyanna et. al (2008).

Change in savings

Savings refers to the amount saved by the sericulturist in terms of cash and kinds. The change in savings was measured on the basis of difference between the savings during study year and base year. The distribution of respondent's sericulturist on the basis of change in savings in the form of cash and kinds is presented in Table 7.

The change in savings of more than 39.33 percent sericulturist increased in the range of 25.01 to 50.00 per cent. About 30 per cent of the respondents show no change in saving as they are getting the same income before and after the implementation of cluster promotion programme on sericulture. However the

Table 7
Change in savings

Sr. No.	Change in Saving	Respondents (n=150)	
		Number	Percentage
1.	No change	45	30.00
2.	Increase up to 25%	26	17.33
3.	Increase from 25.01% to 50%	59	39.33
4	Increase from 50.01% to 75%	20	13.34
5	Increase from 75.01% and above	0	0.00
Total		150	100.00

respondents increased their savings in the range up to 25 per cent and from 50.01 to 75 per cent are 17.33 and 13.34 per cent respectively, where no respondents with increase in income from 75.01 per cent and above were recorded. This is in conformity with the findings of Krishnamoorthy (2008), who reported that there is increase in saving under sericulture due to impact of IVCP.

Change in social life

Change in social life refers to respondents having different position in various social organizations. The change in social life was measured

on the basis of position held by the sericulturist during study year and base year. The distribution of the respondent's sericulturist on the basis of change in social life is presented in the Table 8

The change in social life of about 64 per cent sericulturist increased in the range of 25.01 to 50 per cent. About 26.67 per cent of the respondents reported change in their social life increase in the range of 75.01 per cent and above. While a very small number i.e. 8 percent from range between 50.01 to 75 per cent and 1.33 per cent where from 25 per cent and above range has increased their social life due to the implementation of cluster promotion programme on sericulture.

Table 8
Change in social life

Sr. No.	Change in Social life	Respondents (n=150)	
		Number	Percentage
1.	No change	00	00.00
2.	Increase up to 25%	02	1.33
3.	Increase from 25.01% to 50%	96	64.00
4	Increase from 50.01% to 75%	12	8.00
5	Increase from 75.01% and above	40	26.67
Total		150	100.00

CONCLUSIONS

The findings clearly indicated that, cluster promotion programme have created significant impact on all the socio-economic aspects of sericulturist's. The study findings are in conformity with the findings of Dayakar Yadav (2004) who reported that development of sericulture can be hastened up with the adoption of cluster concept. The results of the current study have a crucial policy implication for the promotion of sericulture development in geographic area generally and Osmanabad district especially.

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