

**RESEARCH ARTICLE :**

# Study on managerial efficiency of sericulturists regarding tasar silkworm rearing in Chhattisgarh

■ **Kedar Nath Yadaw**

**ARTICLE CHRONICLE :**

**Received :**

11.09.2018;

**Revised :**

04.01.2019;

**Accepted :**

10.01.2019

**SUMMARY :** The present study was conducted in 18 selected villages from the Raigarh and Korba districts of Chhattisgarh with 270 randomly selected sericulturists to assess the managerial efficiency of sericulturists regarding improved tasar silkworm rearing practices. The data were collected personally from sericulturists by using pre-tested and well structured interview schedule. The collected data were analyzed by using suitable statistical tools. As regards to overall level of managerial efficiency of sericulturists, 54.81 per cent of the sericulturists possessed high managerial efficiency. The overall managerial efficiency and managerial efficiency gap for different improved practices of sericulture production were observed to be 62.59 per cent and 37.41 per cent, respectively.

**How to cite this article :** Yadaw, Kedar Nath (2019). Study on managerial efficiency of sericulturists regarding tasar silkworm rearing in Chhattisgarh. *Agric. Update*, 14(1): 43-46; DOI : 10.15740/HAS/AU/14.1/43-46. Copyright@ 2019: Hind Agri-Horticultural Society.

**KEY WORDS :**

Sericulturists,  
Tasar silkworm  
rearing, Managerial  
efficiency

## **BACKGROUND AND OBJECTIVES**

Sericulture is an agro-based industry. It involves rearing of silkworms for the production of raw silk, which is the yarn obtained out of cocoons spun by certain species of insects. The major activities of sericulture comprises of food-plant cultivation to feed the silkworms which spin silk cocoons and reeling the cocoons for unwinding the silk filament for value added benefits such as processing and weaving. The word “sericulture” is derived from the Greek word “sericos” meaning “silk” and “culture” meaning “rearing”. Sericulture is a labour oriented, low investment, agrarian, small scale industry which suits both marginal and small

land holders because of its high returns, short gestation period and it creates opportunity for women employment. “Silk is the queen” of textiles, no other fibre is a match to natural silk (Parimala, 2009).

Managerial efficiency is the degree to which an individual acquires and adopts effectiveness factors in an enterprise to reach higher levels of performance. The managerial efficiency of sericulturists regarding improved tasar silk cultivation has a critical role in adoption of improved tasar silk cultivation. We have to increase tasar silk production to make silkworm rearing keeping profitable and economical to sericulturists. Various studies has shown that personal and socio-economic characteristics of sericulturists play an

Author for correspondence :

**Kedar Nath Yadaw**  
Krishi Vigyan Kendra,  
Dantewada (C.G.) India  
Email:yadawkn3886@  
gmail.com

important role in adoption and managerial efficiency of improved tasar silk cultivation. The information on managerial efficiency and extent of adoption of sericulturists regarding tasar silk cultivation practices by sericulturists are lacking in the context of tribal dominant Chhattisgarh state.

In this context this study focused to investigate the managerial efficiency of sericulturists regarding improved tasar silk cultivation in Chhattisgarh.

## RESOURCES AND METHODS

The present study was carried out in Raigarh and Korba districts of Chhattisgarh. The state consists of 27 districts, out of which Raigarh and Korba district were selected purposively because these districts have highest area under silk production (Anonymous, 2012a). From the each selected district, 3 blocks ( $3 \times 2 = 6$ ) were selected purposively for the study. In this way Sarangarh, Baramkela and Gharghoda blocks from Raigarh district and Korba, Kartala and Podi Uparoda blocks from Korba district were considered for this study because they had the highest area covered under tasar silk cultivation (Anonymous, 2012b).

From each selected block, 3 villages (Total  $3 \times 6 = 18$ ) were selected on the basis of maximum availability of beneficiaries in the villages. Mainly three types (*i.e.* Mulberry, Eri and Tasar) of sericulture cultivation pattern exist in the state. However, more than 85 per cent area is under tasar sericulture cultivation in the state (Anonymous, 2012a). Therefore, only those farmers who are practicing tasar sericulture cultivation were considered as respondent for this study. From each selected village, 15 sericulturists were selected randomly from the village level list of tasar cultivators. In this way a total of 270 tasar silk producing farmers were considered as respondent for the present study.

The data were collected through personal interview with help of pre-tested structured interview schedule and analyzed by using the statistics techniques were applied in the form of frequency, percentage, co-efficient of correlation and multiple regression analysis etc.

To know the overall managerial efficiency of sericulturists towards improved tasar silk cultivation, a device was developed. The response of the sericulturists regarding selected parameters of managerial efficiency of sericulturists is given above. A managerial efficiency index was worked out to assess the overall managerial

efficiency of sericulturists about improved tasar silk cultivation with the help of following eq.

$$OMEI_i = \frac{O_i}{S} \times 100$$

where,

$OMEI_i$  = Overall managerial efficiency index of  $i^{th}$  respondent

$O_i$  = Total obtained score by the  $i^{th}$  respondent

$S$  = Total obtainable score

On the basis of overall managerial efficiency index ( $OMEI_i$ ), the respondents were categorised in following manners:

Category	Score
Low (upto 33.33%)	1
Medium (33.34 to 66.66%)	2
High (above 66.66%)	3

## OBSERVATIONS AND ANALYSIS

The results obtained from the present study as well as discussions have been summarized under following heads:

### Managerial efficiency of sericulturists:

In order to measure managerial efficiency of sericulturists towards improved tasar silk cultivation, ten indicators were identified. These indicators were knowledge of improved tasar silk cultivation, skills acquired, ability in planning, ability to make rational decision, ability to co-ordinate activities, ability to mobilize resources, efficient use of resources, timely adoption, ability in rational marketing and competence in evaluation. These indicators are responsible to make an individual sericulturist as an efficient manager of tasar silk cultivation. The findings derived after analyzing the information have been presented under the following heads:

### Overall managerial efficiency of sericulturists:

The findings regarding level of managerial efficiency of respondents are presented in Table 1. The results revealed that 76.30 per cent of sericulturists had high knowledge about improved sericulture practices followed by 18.15 per cent medium and 5.55 per cent had low knowledge.

The data regarding skills acquired indicated that 74.07 per cent of sericulturists acquired high skills in sericulture

enterprise followed by 19.63 per cent medium and 6.30 per cent low.

As regards to ability in planning, 59.63 per cent of sericulturists belonged to high group in planning ability followed by 35.55 per cent medium and 4.82 per cent low.

As regards to ability to make rational decision, 70.74 per cent of sericulturists had high ability to make rational decision followed by 16.30 and 12.96 per cent respondents having medium and low ability to make rational decision, respectively.

Regarding ability to co-ordinate activities it is inferred that 58.89 per cent of sericulturists had medium ability to co-ordinate activities followed by 22.96 and 18.15 per cent of respondents having low and high ability

to co-ordinate activities, respectively.

As regards to ability to mobilize resources, 55.93 per cent of sericulturists had medium ability to mobilize resources followed by high (25.18%) and low (18.89%).

The data regarding efficient use of resources show that 64.44 per cent of sericulturists belonged to high efficient use of resources followed by low (18.52%) and medium (17.04%).

Incase of timely adoption the findings revealed that 62.59 per cent of sericulturists had high level of timely adoption followed by medium (20.37%) and low (17.04%).

Regarding ability to rational marketing the results observed that 60.37 per cent of sericulturists had low rational marketing ability followed by medium (34.07%)

**Table 1: Distribution of sericulturists according to their components of managerial efficiency (n=270)**

Sr. No.	Components	Level of managerial efficiency		
		Low (Upto 33.33%)	Medium (33.34-66.66%)	High (Above 66.66%)
1.	Knowledge of improved sericulture	15 (05.55)	49 (18.15)	206 (76.30)
2.	Skills acquired	17 (06.30)	53 (19.63)	200 (74.07)
3.	Ability in planning	13 (04.82)	96 (35.55)	161 (59.63)
4.	Ability to make rational decision	35 (12.96)	44 (16.30)	191 (70.74)
5.	Ability to co-ordinate activities	62 (22.96)	159 (58.89)	49 (18.15)
6.	Ability to mobilize resources	51 (18.89)	151 (55.93)	68 (25.18)
7.	Efficient use of resources	50 (18.52)	46 (17.04)	174 (64.44)
8.	Timely adoption	46 (17.04)	55 (20.37)	169 (62.59)
9.	Ability in rational marketing	163 (60.37)	92 (34.07)	15 (05.56)
10.	Competence in evaluation	32 (11.85)	109 (40.37)	129 (47.78)
	Overall managerial efficiency	41 (15.19)	81 (30.00)	148 (54.81)

**Table 2: Extent of overall managerial efficiency and managerial efficiency gap among the sericulturists about improved tasar silk cultivation (n=270)**

Components of managerial efficiency	Maximum of obtainable mean score	Total obtained mean score	Extent managerial efficiency (%)	Managerial efficiency Gap (%)
Knowledge of improved sericulture	10	7.64	76.40	23.60
Skills acquired	09	6.97	77.44	22.56
Ability in planning	10	7.19	71.90	28.10
Ability to make rational decision	16	10.51	65.68	34.32
Ability to co-ordinate activities	07	3.58	51.14	48.86
Ability to mobilize resources	36	19.89	55.25	44.75
Efficient use of resources	09	6.17	68.55	31.45
Timely adoption	24	15.56	64.83	35.17
Ability in rational marketing	06	2.29	38.17	61.83
Competence in evaluation	07	4.08	58.28	41.72
Overall	134	83.87	62.59	37.41

and high (5.56%).

As regards to competence in evaluation, 47.78 per cent of respondents belonged to high level of competence in evaluation followed by medium (40.37 %) and low (11.85%).

The findings pertaining to overall managerial efficiency level of sericulturist are presented in Table 2. The results revealed that 54.81 per cent of the sericulturists possessed high managerial efficiency followed by 30 per cent and 15.19 per cent of the sericulturist (Table 1) were in medium and low managerial efficiency category, respectively.

Overall managerial efficiency and gap among the respondents regarding improved practices of sericulture production are illustrated in Table 2.

Regarding overall managerial efficiency of tasar silk cultivation, the respondents had maximum managerial efficiency of skills acquired (77.44%), followed by knowledge of improved sericulture (76.40%), ability in planning (71.90%), efficient use of resources (68.55%), ability to make rational decision (65.68%), timely adoption (64.83%), competence in evaluation (58.28%), ability to mobilize resources (55.25%), ability to co-ordinate activities (51.14%) and ability in rational marketing (38.17%).

Regarding overall managerial efficiency gap in silkworm rearing, the high managerial efficiency gap was

recorded in ability in rational marketing (61.83%), followed by ability to co-ordinate activities (48.86%), ability to mobilize resources (44.75%), competence in evaluation (41.72%), timely adoption (35.17%), ability to make rational decision (34.32%), efficient use of resources (31.45%), ability in planning (28.10%), knowledge of improved sericulture (23.60%) and skills acquired (22.56%).

The overall managerial efficiency and managerial efficiency gap for different improved practices about sericulture production was observed 62.59 per cent and 37.41 per cent, respectively.

### Conclusion:

From the above finding it can be concluded that the overall managerial efficiency and managerial efficiency gap for different improved practices about sericulture production was observed to be 62.59 per cent and 37.41 per cent, respectively.

### REFERENCES

- Anonymous (2012a). *Statistics*. Directorate of Rural Industries (Sericulture Sector), Sonakhan Bhawan, Raipur (C.G.) India.
- Anonymous (2012b). *Statistics*. Office of Deputy Director Sericulture, Raigarh and Korba (C.G.) India.
- Parimala, S.A.G. (2009). Role of women in sericulture. *Kisan World* pp. 33-34.

14<sup>th</sup>  
Year  
★★★★★ of Excellence ★★★★★