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Research Article

PARTICIPATION LEVEL OF FARM WOMEN IN SERICULTURE

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Abstract: The present study was conducted in Siddlagahatta and Chintamani taluks of Chikkaballapur district and Bangarpet and Srinivasapur taluks of Kolar district during 2017-18 in Karnatakalt is reported from the study that majority (95.83%) farm women were attending weeding operation in sericulture followed by(91.66%) were attending intercultural operations 100 percent of farm women were participating in harvesting of cocoon. This study was undertaken to know the extent of farm women participation in Sericulture and identify problems faced in sericulture.

Keywords: *Sericulture, Farm women*

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Introduction

Sericulture is considered as a boon to many farmers in the drought prone areas in southern part of Karnataka like Kolar and Chikkaballapur districts. Rearing of silkworm is an art and science, popularly known as sericulture and agro based cottage industries provide employment, to million in China, India, Korea and Vietnam. Sericulture in Karnataka (South India) has been practiced mainly in southern part of the State for many decades. Global silk production in India is 0.31 lakh metric tons after china with 1.42 lakh metric tons. Whereas Karnataka has got highest area and production in India. Being rural based labour-intensive industry sericulture is ideally suited for improving the social and economic standards of the poor. Sericulture serves as an important tool for rural reconstruction, benefiting the weaker sections of the society. Sericulture provides not only periodical return within short period of time but also assures own family employment opportunities around the year. A number of new technologies have been developed by the scientists of research institutes which are boon for the development of the Sericulture industry. Unless all these innovations reach the field, the development would not take place. By realizing the need of extension activities to create awareness on the new innovations to the farmers, extension activities are being conducted regularly by the sericulture extension personnel. Karnataka Kolar and Chikkaballapur stands first in area and production in sericulture. The farmers are treated sericulture as main source of income for their lively wood. It is a boon to small and marginal farmers.

Objectives of the study

To study adoption level of improved practices among sericulture farmers in Kolar and Chikkaballapur districts.

To study the profile and relationship between adoption level of improved practices of Sericulturists and their socio-economic characteristics

Material and methods

The present study was conducted in Siddlagahatta and Chintamani taluks of Chikkaballapur district and Bangarpet and Srinivasapur taluks of Kolar district during 2017-18 in Karnataka. These taluks were purposefully selected for the study based on highest area under mulberry.

A list of all the mulberry growing villages in each taluk was prepared in consultation with the respective sericulture extension officers of the state department of sericulture. From this list 3 villages from each taluk were selected based on the largest area under mulberry cultivation. Further 10 sericulture farmers from each village were randomly selected as respondents for the study. Thus, a total sample for the study was 120 respondents from both the Districts. The characteristics of sericulture farmers selected for the study were (independent variables) *viz*., age, education land holding, income, mass media participation, social participation, extension participation, level of aspiration and risk orientation were measured by using appropriate scales and scoring procedures. A pre-structured interview schedule was prepared and used for collection of the data. The statistical tools used in the study were percentages, mean, standard deviation, Correlation and multiple regression analysis. The results are summarized as below.

Results and Discussion

Extent of farm women participation in mulberry production

It is seen from the [Table-1] that majority (95.83%) farm women were attending weeding operation in sericulture followed by (91.66%) were attending intercultural operations, 83.33 percent in planting, harvesting (75%), application of FYM (66.66%) and application of NPK fertilizers (50%).Whereas, farm women never participate in some sericulture operations like time of planting (88.33%),Collection of planting materials (86.66%), land preparation (81.66%), Pest and disease management (81.66%), Pruning of mulberry (62,50%) and Irrigation (58%).

Extent of farm women participation in Silkworm production

It seen from the [Table-2] that 100 percent of farm women were participating in harvesting of cocoons (100%) followed by disinfection of rearing house, rearing materials and bed cleaning (96.66%), feeding of late age silkworm (95.83%), sorting and grading (75%) and moulting (50%) were participating in silk worm rearing activities.

Table-1 *Extent of farm women Participation in mulberry production practices, (n=120)*

SNo	Mulberry Cultivation practices (Production)	Regular		Occasional		Never	
		No.	%	No.	%	No.	%
1	Land preparation	4	3.33	18	15	98	81.66
2	Collection of planting materials	-	-	16	13.33	104	86.66
3	Time of planting	2	1.66	12	10	106	88.33
4	planting	100	83.33	10	8.33	10	8.33
5	Spacing in mulberry garden	2	1.66	5	4.16	113	10.83
6	Pruning of mulberry	20	16.66	25	20,83	75	62.5
7	Application of FYM	80	66.66	25	20.83	15	12.5
8	Application of NPK fertilizers	60	50	20	16.66	40	33.33
9	Pest and disease management	2	1.66	20	16.66	98	81.66
10	Intercultural operations	110	91.66	5	4.16	5	4.16
11	Weeding	115	95.83	2	4.16	3	2.5
12	Transportation of mulberry	30	25	50	41.66	40	33.33
13	Irrigation	20	16.66	30	25	70	58.33
14	harvesting	90	75	20	16.66	10	8.33

Table-2 *Extent of farm women Participation in Silk worm rearing and marketing practices, (n=120)*

SNo	Silkworm rearing Practices	Regular		Occasional		Never	
		No.	%	No.	%	No.	%
1	Disinfection of rearing house	116	96.66	4	3.33	-	
2	Disinfection of rearing materials	116	96.66	4	3.33	-	
3	Collection of silkworm breeds	-		2	1.66	118	98,33
4	Chawki rearing	2	1.66	8	6.66	110	91.66
5	Leaf chapping	46	38.33	10	8,33	64	53.33
6	Feeding of chawki worms	9	7.5	10	8.33	101	84.16
7	Lattage silkworm rearing	112	93.33	8	6.66	-	-
8	Feeding of lattage silkworm	115	95.83	5	4.16	-	-
9	Leaf preservation	60	50	20	16.66	40	33.33
10	Pest and disease management	10	8.33	20	16.66	90	75
11	Bed cleaning	116	96.66	4	3.33	-	-
12	Moulting	60	50	20	16.66	40	33.33
13	Harvesting	120	100	-	-	-	-
14	Sorting and grading	90	75	20	16.66	10	8.33
15	transporting	4	3.33	6	5	110	91.66

Table-3 *Problems faced by sericulture farmers in Mulberry production, (n=120)*

SNo	Problems	Yes	%	No.	%
1	Lack of knowledge about selection of plant material	15	12.5	105	87.5
2	Lack of knowledge about improved varieties	5	4.16	115	95.8
3	Lack of knowledge about soil type	16	13.33	104	86.66
4	Lack of knowledge about time of planting	14	11.66	106	88.33
5	Lack of knowledge about method of pruning	15	12.5	105	87.5
6	Lack of knowledge about method of planting	15	12.5	105	87.5
7	Lack of knowledge on time of application of FYM	10	8.33	110	91.66
8	Lack of knowledge on correct dose of NPK	115	95.8	5	4.16
9	Shortage of irrigation water	110	91.66	10	8.33
10	Lack of knowledge on disease control in Mulberry	105	87.5	15	12.5
11	Lack of knowledge on Pest control in Mulberry	114	95	16	13.33
12	Scarcity of laoures	114	95	6	5
13	Electricity problem	120	100	0	0

Table-4 *Problems faced by sericulture farmers in Silkworm rearing and marketing practices, (n=120)*

SNo	Problems	Yes	%	No.	%
1	Lack of knowledge about size of rearing house	15	12.5	105	87.5
2	Lack of knowledge about direction of rearing house	12	10	108	90
3	Lack of knowledge about disinfection of rearing house	13	10.83	107	89.16
4	Lack of knowledge about methods of disinfection	14	11.66	106	88.33
5	Lack of knowledge about silkworm cross breeds	18	15	102	85
6	Lack of knowledge about chawki rearing methods	11	9.16	109	90.83
7	Lack of knowledge about latage rearing methods	10	8.33	110	91.66
8	Lack of knowledge about feeding of chawki silkworms	4	3.33	116	96.66
9	Lack of knowledge about feeding of lateage silkworms	12	10	108	90
10	Lack of knowledge about disease control in silkworm rearing	70	58.33	50	41.66
11	Lack of knowledge about uji control	65	54.16	55	45.83
12	Lack of knowledge about uniform silkworm maturity hormone	81	67.5	39	32.5
13	Lack of knowledge about the deflossing and sorting of cocoons	104	86.66	16	13.33
14	Lack of knowledge on market prices	90	75	30	25
15	High transportation cost	110	91.66	10	8.33
16	Low price for cocoons	80	66.66	40	33.33

The correlation coefficient (r) indicated that the variables namely education, mass media participation, Extension participation, Risk orientation and level of aspiration were significantly related to adoption of improved cultivation practices among sericulture farmers. Multiple regression analysis indicated that all the nine independent variables fitted together in the regression model contributed to 61. 30 percent of the variation in the adoption of improved cultivation practices of the sericulture farmers.

Problems faced by the farmers in tree type mulberry cultivation

An appraisal of [Table-3] reveals problems faced by of sericulture farmers in mulberry production were electricity problem (100.00%), lack of knowledge on correct dose of NPK(95.80%), scarcity of laboures and lack of knowledge on pest control in mulberry, (95.00%)shortage of irrigation water ((91.66%), lack of knowledge on diseases in mulberry (87.50%) were the major problems. Further, it can be inferred from [Table-4] that high fluctuation of cocoon prices (95.83%) high transportation cost(91.66%), lack of knowledge on the deflossing and sorting of cocoons(86.66%), lack of information on market prices and low price for the cocoons and lack of knowledge on uji fly (54.16%) were the major problems as perceived by the farmers in silkworm rearing practices.

Conclusion

It is found that, farm women are participating to great extent in almost all sericulture operations, so there is need to educate farm women on control of pests and diseases, calculation of NPK fertilizers and use of improved farm implements. There is need to furnish daily market prices to sericulture farmers through using modern information communication technologies (ICTs). Massive training programmes to be organized in sericulture to educate on improved cultivation practices and wider spacing to farm women. By use of wider spacing in sericulture shortage of water for irrigation can be overcome

Application of research: Study helps to find out specific area where sericulture farmers required training to improve their knowledge level in order to increase production, productivity in sericulture.

Research Category: Sericulture

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University: University of Agricultural Sciences, Bangalore, 560 065, Karnataka
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Author statement: All authors read, reviewed, agreed and approved the final manuscript. Note-All authors agreed that- Written informed consent was obtained from all participants prior to publish / enrolment

Study area / Sample Collection: 6 villages in Srinivasapur Taluk of Kolar district and 6 villages in Sidlagatta Taluk of Chikkaballpur

Cultivar / Variety / Breed name: Mulberry

Conflict of Interest: None declared

Ethical approval: This article does not contain any studies with human participants or animals performed by any of the authors.
Ethical Committee Approval Number: Nil

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