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Sericulture as a Profit-Based Industry-A Review

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ABSTRACT

Sericulture is one of the most labour intensive sectors, combining activities of both agriculture (sericulture) and industry. Sericulture being an agro-based enterprise plays a predominant role in shaping the economic destiny of the rural people. It holds promise as an employment generating industry, especially in rural and semi-urban areas. Sericulture is agro-based industry, practiced in India for many centuries. The labour intensive industry remains one of the major strengths of India fascinating with its most exquisite workmanship and beauty which no other country has ever been able to replicate. Silk has always been fashionable and for the last few years, it has remained a strong component of the international fashion trends. Sericulture is multidisplinary activity consists of mulberry leaf production, silkworm rearing (cocoon production), silkworm egg production, silk reeling (yarn production), twisting, Warp and weft making, printing and dyeing, weaving, finishing, garment designing, marketing etc. In India, Sericulture is not only a tradition but also a living culture. Moreover, women participate in the activities of sericulture, thus provide ample scopes for their development through awareness, capacity building through imparting training demonstration of technologies, processes, techniques etc. and guiding for empowerment so that the society will be socioeconomically uplifted and the country as well. It is a farm based, labour intensive and commercially attractive economic activity falling under the cottage and small-scale sector. It particularly suits ruralbased farmers, entrepreneurs and artisans, as it requires small investment, but with potential for relatively higher returns. It provides income and employment to the rural people especially farmers with small landholdings and the marginalized and weaker sections of the society.

Keywords: Agro-based enterprise, Labour intensive, Employment, Women participation, Silkworm rearing.

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 and an economically rewarding enterprise consisting of several sets of activities and plays a predominant role in shaping the economic destiny of the rural people (Dewangan et al., 2011).

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Review Article

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Sericulture, is divided in two sectors namely farm and industry. The farm sector involves growing silkworm's food plants, rearing silkworm to produce cocoons and eggs. Reeling, twisting, dyeing, printing, finishing, knitting form the industry sector (Srivastav et al., 2005). Sericulture, the production of silk worms and thus ultimately of silk fibre (Ganga & Chetty, 1991), has become a promising rural activity in India because of its minimum gestation period. minimal investment. maximum employment potential and quick turnover for investment (Kasi, 2000, 2009a & 2009d). Out of 6.39 lakh villages in India, sericulture is practised in about 69,000 villages (Central Silk Board, 2002; Geetha & Indira, 2011; Lakshmanan et al., 2011).

Sericulture activity brings regular income to the community without any bias of caste, creed, gender, or religion. A remarkable feature of this activity is its egalitarianismsericulture farmers, rich and poor, earn the same income from it. As women has a crucial role in the activities of sericulture, it equally creates opportunities and make them independent socially, economically, politically, and otherwise (Goyal, 2007; Pillai & Shanta, 2011; Thomas et al., 2010). Sericulture is an extremely labor intensive industry and occupies a pivotal position from the point of providing employment and additional income to weaker sections (Best & Maier, 2007). India enjoys the availability and practice of mulberry and non-mulberry sericulture like tasar, eri, muga and oak-tasar varieties (Savithri, Sujathamma & Neeraja 2013). The tasar silk industry has acquired a big role in improving tribal socioeconomic condition besides generating substantial rural employment (Suryanarayana & Srivastava, 2005; Rao, 2007). There are 258 well-recognized tribal communities, notified as scheduled tribes in India (Sinha, 2003). There are more than 58 countries practicing sericulture in the world.

Global Silk Industry

The major silk producing countries in the world are; China, India, Uzbekistan, Brazil, Japan, Republic of Korea, Thailand, Vietnam, DPR Korea, Iran, etc. Few other countries are also engaged in the production of cocoons and raw silk in negligible quantities as shown in the figure below.

Even though silk has a small percentage of the global textile market - less than 0.2% - its production base is spread over 60 countries in the world. While the major producers are in Asia (90% of mulberry production and almost 100% of non-mulberry silk), sericulture industries have been lately established in Brazil, Bulgaria, Egypt and Madagascar as well.

S. No.	Countries	2014	2015	2016	2017	2018
1.	Bangladesh	44.5	44	44	41	41
2.	Brazil	560	600	650	600	650
3.	Bulgaria	8	8	9	10	10
4.	China	1,46,000	1,70,000	1,58,400	1,42,000	1,20,000
5.	Colombia	0.5	0.5	0.5	-	-
6.	Egypt	0.8	0.8	1.2	1.2	1.25
7.	India	28,708	28,523	30,348	31,906	35,261
8.	Indonesia	10	8	4	2.5	2.5
9.	Iran	110	120	125	120	110
10.	Japan	30	30	32	20	20
11.	North Korea	320	350	365	365	350
12.	South Korea	1.2	1	1	1	1
13.	Philippines	1.1	1.2	1.82	1.5	2
14.	Syria	0.5	0.3	0.25	0.25	0.25
15.	Thailand	692	698	712	680	680
16.	Tunisia	4	3	2	2	2
17.	Turkey	32	30	32	30	30
18.	Uzbekistan	1100	1200	1256	1200	1800
19.	Vietnam	420	450	523	520	680
20.	Madagascar	15	5	6	7	7
	TOTAL	1,78057.62	2,02072.83	1,92512.27	1,77507.55	1,59648.00

Global Silk Production (in Metric Tonnes)

Source: International Sericultural Commission

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Sharma and Kapoor Indian Silk Industry

India's silks are known for their finery and artistic designs and distinct colours. The country is known the world over for the exquisite brocade fabrics of Banaras, silks of Karnataka, tie-and –dye and Patola of Gujarat and Rajasthan, ikats from Orissa, fine Bandhej and temple silks of Kancheepuram and Tanjore, etc., are only a few of the myriad range of silk weaves, textures and patterns available in India. Mulberry is the largest practiced sericulture industry accounting for almost 76 per cent of the entire silk production. The industry provides employment to more than 7.6 million people across 51,000 villages, who operate 328,627 handlooms and 45,867 powerlooms with 8,14,616 weavers.



Sericulture was introduced in South India by Tippu Sultan during the 18th Century and since then this enterprise is practiced in Southern parts of India as a household and commercial agriculture activity (Srinivas et al., 2007). India has a glorious sericulture tradition of its own (Patil, 2009). Silk is indispensable in ceremonies and religious rituals, being a must in weddings and festivals. From this, it is very clear that it has very strong domestic market, which is a real strength of our sericulture industry. The labour intensive industry remains one of the major strengths of India fascinating with its most exquisite workmanship and beauty which no other country has ever been able to replicate. Silk has always been fashionable and for the last

few years, it has remained a strong component of the international fashion trends (Pandey, 2014) (Anonymous, 2010). Sericulture is multidisplinary activity and it plays a significance for ensuring inclusive growth (Ganie et al., 2012).

In India, due to favorable climatic conditions, mulberry is cultivated mainly in five states, viz., Karnataka, Andhra Pradesh, Tamil Nadu, West Bengal and Jammu & Kashmir. These five states collectively account for 97% of the total area under mulberry cultivation and 95% of raw silk production in the country (Anitha et al., 2013). Although sericulture is considered as a subsidiary occupation, technological innovation has made it possible to take it up on

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an intensive scale capable of generating adequate income (Sirajudeen, 2011). India contributes about 20% to the raw silk produced in the world, ranking next only to china. Majority of labour force is village based accounting for a total of about 264 million and rural women labour account for about 83 million, representing 31.5% of the rural labour force (Sarkar et al., 2017). During 2019-20, the total raw silk production in the country was 36,152 MT, which is an increase of 1.9% over the production achieved during the last year and around 93.8% of the annual targeted production for the year 2019-20. The mulberry silk production was marginally up by 0.2% during 2019-20 over the previous year (CSB, 2020).

		I I ESCIIL STATUS	s of Sericulture	-		
Particulars	2015-16	2016-17	2017-18	2018-19	2019	-20(P)
	Achmnt.	Achmnt.	Achmnt.	Achmnt.		-
					Target	Achmnt.
Mulberry	2.09	2.17	2.24	2.35	2.57	2.40
Plantation(Lakh ha.)						
Raw Silk Production:						
Mulberry (Bivoltine)	4613	5266	5874	6987	8500	6993
Mulberry (Cross	15865	16007	16192	18358	18865	18391
breed)						
Sub Total (Mulberry)	20478	21273	22066	25345	27365	25384
Vanya						-
Tasar	2819	3268	2988	2981	3515	3370
Eri	5060	5637	6661	6910	7370	7157
Muga	166	170	192	233	280	240
Sub Total(Vanya)	8045	9075	9840	10124	11165	10768
GRAND TOTAL	28523	30348	31906	35468	38530	36152
D. marrisismal	•		•	•		•

Ducant status of Contoult

P: provisional **Source:** CSB

Salient Features of Sericulture

Sericulture is not restricted to the agricultural activities of mulberry cultivation, silkworm rearing and seed production, but opens up into the post-cocoon sectors of silk reeling, twisting, weaving, dyeing, printing and garment manufacture. While, the farmers in the rural areas practice sericulture for producing cocoons, silk reeling/ spinning and weaving activities are concentrated in semiurban area, towns and cities. Reeling forms a vital link in converting the agricultural produce viz., Cocoon into an industrial product - the varn. Reeling involves a series of intricate process converting the cocoons into raw silk. The reeling sector in India is highly decentralised, employing a variety of reeling devices viz., Charka, Cottage basin, domestic basin, multi-end reeling machinerv and Automatic reeling machine.

Versatile enterprise: Mulberry, the food crop for silkworm, is a hardy and perennial crop. It can be cultivated in a wide range of soil and agro-climatic conditions both in rainfed and irrigated areas. Sericulture can also be integrated with certain other agricultural crops, livestock, vegetables and plantation in the integrated farming system for optimum use of the available resources to maximise the productivity and thereby net farm income on a sustainable basis

Eco-friendliness: Sericulture is an environment-friendly farm occupation. Since mulberry is a perennial crop, it does not require frequent opening of land, which exposes soil to natural vagaries such as wind and water erosions. Eco-friendly technologies such as bio-fertilizers, recycling of sericulture wastes into nutrient rich organic manure, biocontrol measures for pests and diseases of mulberry and silkworm, and use of safe chemicals for disinfection of rearing houses and appliances are encouraged in sericulture for preserving and promoting the natural ecosystem.

Suitable for weaker section of the society: The average holding size of agricultural land has declined from 1.01 ha in 1992 to 0.592 ha in 2013. The marginal ownership category (0.002 ha -1.000 ha) has registered an increasing trend from 52.98 per cent households in 1971-72 to 75.41 per cent households in 2013 (National Sample Survey Organization, 2013). As sericulture is highly suitable to small and marginal farmers, because of its higher income generating nature with comparatively less investment, sericulture is one of the solutions for tackling the concerns of shrinking land holding sizes of farmers. (Doubling Farmers' Income Volume 8, 2017).

Mulberry Silk Production: People and Process

The commercial production of silk is a long and complex process involving a variety of skilled people at different stages of its production. About 60 lakh people in India are engaged in various sericulture activities throughout the year. Here is an outline of the different steps involved in the production of mulberry silk and the people employed at each step.

1. **Silk rearers**: The process starts with rearing the silkworm, Bombyx mori, in a controlled environment. The female silkworm lays eggs in a box which are incubated for a few days until the eggs hatch into larvae. They are now ready to be fed mulberry leaves.

2. **Silk farmers**: Mulberry saplings are planted in nurseries and take about 6 months to grow. The leaves of the mulberry trees are then harvested to be fed to the silk larvae.

3. **Silk rearers**: The larvae are fed huge quantities of chopped mulberry leaves for about 6 weeks. During this time, they shed their skin 4 times and grow to about 4 inches long. Once it stops eating, the silkworm is now ready to spin silk. The worm is attached to a frame, where it rotates its body continuously, secreting saliva. The saliva hardens in contact with air, forming a pair of silk filaments. It also secretes a gummy fluid, sericin, which binds the filaments together for protection. Over the next 4 days, the silkworm spins about 1 km of filament, constructing a cocoon and encloses itself completely within it, growing into a pupa. From every batch of cocoons, a small portion of the male and female pupae are kept aside until they grow into moths and are mated for producing the next generation of silkworms. The remaining cocoons are sent for processing into silk.

4. **Silk reelers**: The cocoons are boiled in water, killing the pupae and softening the sericin. The silk filaments are unbound from the cocoon and carefully wound onto a reel. Filaments from several cocoons are wound together to create a single thread of raw silk. About 2500 silkworms are required to produce a pound of raw silk.

5. **Silk twisters**: The raw silk still contains the sericin gum. It is removed by washing it with soap and boiling water. The resulting silk is soft, light and lustrous, and is twisted to produce the strands of silk yarn. Different methods of twisting are used to get the various types of silk yarn: crepe, organzine, singles, etc. The yarn is dyed at this stage in baths of dye colours.

6. **Silk weavers**: In the final step, silk fabric is woven from the silk yarns using looms (handlooms and power looms). A variety of looms employ different ways of holding the warp and weft yarns in them and apply various weaving techniques to produce the diverse range of silk fabrics that we can find today.

Mulberry Silk Production: People & Process



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Involvement of Women in Sericulture

Basic feature of this farm based economic enterprise is the involvement of women as it is an occupation by and for women and their contribution in sericulture industry is to the tune of 60 %, mostly in silkworm rearing and reeling (Anitha et al., 2013; Chouhan et al., 2016).

Sericulture provides scope for the direct involvement of women in the process of production and decision making for improving their economic conditions and it enables them to gain greater recognition and status in the



Women engaged in leaf plucking

In general, women in the house, while attending to household activities, also look after silkworm rearing activities like leaf chopping, bed cleaning, feeding the silkworms, maintenance of hygiene, picking the ripe worms and placing them on family and society (Parimala, 2009; Raveesha et al., 2016).

It is stated that in China as early as 2600 B.C., Lei-su, wife of the Emperior Huang-di, is supposed to have taught the people as to how to rear the silkworms, reel silk and to make garments. Further, in the year 2640 B.C. according to the legend, the usefulness of silk was discovered by a Chinese Empress Sailen-Chi. Thus, the origin and development of Sericulture is linked to women. The sericulture industry fits into the guidelines and principles of the International Council of Women.



Women involved in Leaf chopping

mountages and so on. Their participatory role as workers is highly significant; and their rate of participation in silk cocoon production is much higher than that of male counterparts (Chowdhuri, 2011; Lakshmanan, 2012).

S.No.	Activities	Involvement Of Women (%)		
1.	Mulberry cultivation	49.55		
2.	Silkworm rearing	49.67		
3.	Silkworm seed production	20.46		
4.	Silk reeling	48.81		
5.	Silk twisting	56.34		
6.	Silk weaving	49.02		
7.	Dyeing and printing	41.00		
8.	Silk spinning	80.00		
9.	By-products utilisation	65.00		

Involvement of women in different Sericultural activities

Source: Doubling Farmers' Income – Volume 8

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G N							
S.No.	States/UTs	2	2017-18	2	2018-19	2019-20(P)	
		Target	Achievement	Target	Achievement	Target	Achievement
1.	Karnataka	11120	9322	10,750	11,592	12,000	11,143
2.	Andhra	6090	6778	7805	7481	7946	7962
	Pradesh						
3	Telengana	160	163	200	224	295	297
4.	Tamil Nadu	2000	1984	2190	2072	2300	2154
5.	Kerela	12	15	14	16	20	16
6.	Maharashtra	328	373	415	519	630	428
7.	Uttar Pradesh	300	292	340	289	365	309
8.	Madhya	230	103	160	100	165	54
	Pradesh						
9.	Chattisgarh	405	532	670	349	562	480
10.	West Bengal	2590	2577	2775	2394	2900	2464
11.	Bihar	85	63	95	85	86	3
12.	Jharkhand	2744	2220	2658	2375	2604	2697
13.	Odisha	140	116	148	131	155	118
14.	Jammu &	180	132	190	118	170	117
	Kashmir						
15.	Himachal	40	32	43	34	50	30
	Pradesh						
16.	Uttarakhand	44	35	45	36	42	41
17.	Haryana	2	0.7	2	0.7	2	0.2721
18.	Punjab	6	3	5	3	5	1
19.	Assam &	4705	4861	4980	5026	5395	3
	Bodoland						
20.	Arunachal	58	54	65	59	75	5316
	Pradesh						
21.	Manipur	560	388	435	464	600	60
22.	Meghalaya	1070	1076	1110	1187	1220	470
23.	Mizoram	100	836	105	92	130	1192
24.	Nagaland	770	615	633	620	682	104600
25.	Sikkim	17	0.001	3	0.4	1	1
26.	Tripura	85	87	125	230	130	94
	TOTAL	33,840	31,906	35,960	35,468	38,530	36,152

State-wise raw slik production during the year 2017-18 to 2019-2	State-wise ray	w silk production	during the year	2017-18 to 2019-20
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Note: (P): Provisional

Sericulture in Jammu and Kashmir

Sericulture industry in the state boasts of its glorious past. Silk has been one of the cherished heritages of Jammu & Kashmir with sericulture activity in the valley finding a mention in the ancient Sanskrit scriptures including Rajtarangni. Sericulture as a sector has been the backbone of Kashmir economy. There is great deal of evidence in ancient Sanskrit literature that the original home of silk is Kashmir. The state of Jammu and Kashmir with diverse climatic conditions viz., sub-tropical in Jammu plains, warm temperate

Source: CSB,2020

in Jammu hills and temperate in Kashmir valley makes it ideally suitable to rear bivoltine races for the production of quality bivoltine silk (Sharma & Bali, 2019).

Mirza Muhammad Haider in his Tarikhi Rashide mentions mulberry trees as among the wonders of Kashmir. The great king of Kashmir Sultan Zain-ul Abideen who is maker of industrial Kashmir gave special attention to this industry by introducing better techniques. Official reports reveal that Europe was the first continent with which Kashmir had started its silk trade. The reports show that in the year

1855, Kashmir was in a position to supply 25000 Oz of silkworm seeds to Europe. By exporting silkworm seeds to Europe, the silk industry of Kashmir gained a pivotal position on the silk route of Europe. In Kashmiri language the silk-fibre is known as 'pote' and the silkworm is the Patikeom (insects). Pote manufacturing in the Valley is an old industry (Seri-States of India 2019: A Profile).



Demand side analysis of sericulture for Jammu and Kashmir

In J&K, sericulture is an ideal enterprise for the rural development especially for the weaker sections of the society. This enterprise provides employment opportunities to all the family members of the farmers. This vocation can bring significant revenue to the households, thereby helping several poverty stricken families in the rural areas, especially the marginalized section of the population (Lal et al., 2017). The department has 173 mulberry nurseries spread over an area of 963 Acres, and 374 mulberry blocks over an area of 2215 acres across the state of Jammu and Kashmir. Annually about 20.00 lac plants are produced from these nurseries against the potential of 30,00 lac plants. The department has well established seed organization and presently about 60% local annual seed demand is met out from the sector.

Variety	2014-15	2015-16	2016-17	2017-18
Mulberry	8132	8237	8444	8104
Plantation(ha)				
Mulberry raw silk(N	(TI)			
Bivoltine	138	127	145	132
Mulberry total	138	127	145	132
(MT)				

Source: Seri-States of India 2019: A Profile

There are approximately 0.38 lakh weavers in the state who are engaged in this industry under organized and unorganized sectors. Moreover the handloom goods have great demand in the national and international markets. There are 3,741 handloom units in the state employing same number of persons producing Loies, Puttos, Tweed, Blankets, Raffals, Pashmina and Dusoti Khad. (Economic Survey, Jammu and Kashmir, 2014-15). In J&K, there are around 7 lakh mulberry trees out of which 53 per cent are available in Jammu region and 47 per cent in Kashmir region (Economic Survey, Jammu and Kashmir, 2015-16).

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S.No.	District	Mulberry raw silk production(MT)			
	JAMMU DIVI	SION			
1.	Jammu	2.8			
2.	Samba	0.3			
3.	Kathua	17.9			
4.	Udhampur	29.6			
5.	Reasi	3.6			
6.	Rajouri	29.5			
7.	Poonch	2.8			
8.	Doda	1.0			
9.	Kishtwar	1.2			
10.	Ramban	2.7			
KASHMIR DIVISION					
11.	Anantnag	8.1			
12.	Kulgam	3.4			
13.	Baramulla	8.5			
14.	Bandipura	6.1			
15.	Budgam	2.8			
16.	Kupwara	9.8			
17.	Pulwama	7.6			
18.	Shopian	2.9			
19.	Srinagar	1.8			
20.	Ganderbal	2.4			
	TOTAL	145			

District-wise raw silk production during 2016-17

Source: Seri-States of India 2019: A Profile

District wise population of showorm rearers of gamma and Rashim 2013-10.						
Ja	ummu Division	Kashmir Division				
District	No. Of silkworm rearers	District	No. of silkworm rearers			
Jammu	662	Anantnag	1800			
Samba	1371	Kulgam	650			
Kathua	4205	Baramulla	1400			
Udhampur	6300	Bandipura	700			
Reasi	1005	Budgam	500			
Rajouri	6620	Kupwara	1600			
Poonch	530	Pulwama	1400			
Doda	302	Shopian	500			
Kishtwar	407	Srinagar	280			
Ramban	880	Ganderbal	770			
TOTAL	22282	TOTAL	9600			

District wise population of silkworm rearers of Jammu and Kashmir 2015-16.

Source: Sericulture Development Department Jammu And Kashmir

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Present Status of Sericulture in the State								
	Mulberry Secto	r						
Number of Dep	artmental Nurseries	173						
Total are	a of nurseries	963 Acres						
Production capa	city of saplings/ year	30 Lac						
Present annual sapling	production in departmental	115 Lac						
nu	rseries							
Total available mulberry wealth in the state		110 Lac Trees	5					
	Commercial silkworm	rearing						
Number	of Rearers	29400						
Number of se	riculture villages	2800						
Annual cocoor	n production(MT)	1105.00						
Income ge	neration(Lac)	2226						
	Post cocoon see	etor						
Number of	rearing units	37(14 functional)					

Source: Sericulture Development Department Jammu and Kashmir

Cocoon Marketing

Jammu and Kashmir is a traditional bivoltine silk producing state and producing around 900 MT of cocoons by 27,000 farmers in 2575 villages. Sericulture Development Department (SDD) is the nodal agency responsible for the marketing of cocoons in the state. The state has established nine notified cocoon auction markets for disposal of cocoons. The cocoon markets are equipped with warehouses, hot air driers and allied facilities required for marketing and storage of cocoons by the sellers and buyers (Directorate of Sericulture Development Department, 2017-2031).

Year	Cocoon	Productivity	Avg. Price for	Raw silk	Rearers
	Production(MT)	per oz of seed	"A" grade	production	population
		(28g) (kg)	(Rs.)		(No.)
2008-09	738	32.00	192.00	82	19700
2009-10	810	35.00	300.00	90	22800
2010-11	860	35.00	410.00	107	25500
2011-12	917	37.00	350.00	116	27000
2012-13	901	37.00	397.00	112	28000
2013-14	1022	40.00	650.00	136	30000
2014-15	1032	37.00	625.00	147	30894
2015-16	944	37.00	582.00	135	30630
2016-17	973	40.00	667.00	145	30296

Cocoon and Raw silk production during last few years

(Directorate of Sericulture Development Department, 2017-2031)

The government of Jammu and Kashmir is committed to boost the sericulture industry for the benefit of cocoon growers and generate employment for the unemployed youths. In due course of the time evolving of other allied sectors like Agriculture, Horticulture, the Sericulture Sector received less attention and was pushed back in terms of development. Due to efforts of Department, around 30,000 families are involved in Silkworm rearing activity at present and the Crop production in the State is showing increasing trend. Presently only 20 to 30% of the production of

raw Silk Cocoons of the state is consumed within the State, while as rest of the Cocoon material goes outside the State through buyers from Bengal and Karnataka.

Sericulture being one of the traditional agro based cottage industries of the J&K state producing high quality Bivoltine Silk comparable to international quality helps in Improving economic conditions of the rural masses and providing employment opportunities in pre and post cocoon activities (Dar et al., 2017).

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Number of persons(Annually)				
75,000				
1,00000				
1,75000				
2,25000				
3,00000				
3,50000				

Employment in the Sericulture sector in Jammu and Kashmir

Source: Economic Survey 2015-16, Government of Jammu and Kashmir.

income generation if oni sericulture in Janniu and Kasinini	
Years	Lac. Rs.
2010-11	800
2011-12	1100
2012-13	963.00
2013-14	1193.00
2014-15	2026.00
2015-16	2226.00

Income generation from sericulture in Jammu and Kashmir

Source: Directorate of Sericulture Department, Jammu and Kashmir

CONCLUSION

The sericulture industry is unique for more than one reason. It is based on agricultural output viz., cocoons and cottage based labour intensive in nature. Identification of a market opportunity, research and development, community empowerment and learning from failure are the key factors for the success. Sericulture clearly provides remunerative 'employment' for family members and economic benefit to farming households.

In India, Sericulture is not only a tradition but also a living culture. It is a farm based, labour intensive and commercially attractive economic activity falling under the cottage and small-scale sector. It particularly suits ruralbased farmers, entrepreneurs and artisans, as it requires small investment, but with potential for relatively higher returns. It provides income and employment to the rural people especially farmers with small landholdings and the marginalized and weaker sections of the society. Sericulture occupies a place of pride in the rural economy by being only cash crop that guarantees attractive returns in a short period of time. Moreover, the women in the society particularly the rural women are actively involved in almost all the activities in their family works and in assisting the male member of family to uplift the economy. Women participate in the activities of sericulture, thus provide ample scopes for their development through awareness, capacity building through imparting training demonstration of technologies, processes, techniques etc., & guiding for empowerment so that the society will be socioeconomically uplifted and the country as well.

Sericulture has emerged as the most with important cash crop minimum investment. low gestation period, high employment potential and highly remunerative return. Suitable for every section of society, a big farmer or a landless farmer, aged person or a youth, man or a woman. This Sericulture sector is not only important for generating rural employment and preventing rural migration but also for protection and preservation of ecology, sustainable development, socio-economic change.

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