



Cocoon Crafting- An Ideal Enterprise for Upliftment of Rural Women

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ABSTRACT: Cocoon crafting is an art of designing of some handicraft products like flowers, bouquets, garlands, greeting cards and other artistically designed fancy items. The raw material for cocoon crafting is generally silk cocoons. The defective cocoons or cut cocoons which are rejected as waste in grainages and reeling sector can be utilized in making crafts. Cocoon crafting can be taken as a commercial activity particularly by women folk of low socio-economic status and in turn bargain good economic return, simply utilizing cut/pierced cocoon waste with their creative skill. The fancy by-products made from these waste cocoons are in demand nowadays and considerably fetch a bigger price. It bears low investment and no specific technicality and provides greater returns. The rural women folk can take it as a sideline activity and can make crafts in their leisure. It is considered as an ideal industry for the upliftment of rural women. The development/designing of cocoon handicrafts will attract attention of huge number of local masses, thereby boosting up their revenue returns and value addition in sericulture through handicraft market.

Keywords: cut cocoons, bouquets, handicrafts, flowers, rural women.

INTRODUCTION

Cocoon crafting refers to art and skill of producing decorative or artistic items by employing silk cocoons as a raw material. It involves designing of handicraft products like flowers, bouquets, garlands, greeting cards and other artistically designed fancy items (Chakravorty *et al.*, 2010; Kaul and Pandey 2014). The raw material for cocoon crafting is generally silk cocoons. The silk cocoons are harvested after raising silkworms over mulberry leaf in sericulture. The silk cocoons are reeled to obtain raw silk and converted into silk fabrics and silk goods which are exploited commercially over a large scale. During the reeling of silk cocoon, different defective cocoons do not adhere to the quality silk production and lot of cut cocoons are generated in seed production centers. Therefore the defective cocoons or cut cocoons which are rejected as waste can be utilized in making crafts. The craft artist bears the distinctive 'hand of the maker' and where the craftsman maintains direct control over hand, tool and machine operations used in the production process. The cocoon crafting does not involve any highly skilled but medium-specific technical skills can significantly transform raw materials into finished products (Kallimani *et al.*, 2016). The conversion of waste cocoons into beautiful products employs very

affordable materials as mentioned in figure 1. Cocoon crafted flowers can be used as ornamentals and for decoration purpose to enhance aesthetic value (Kaul and Pandey 2014).

Women in India have been generally figured as "home-makers", but in most cases they also work for a livelihood to support their families (Rao, 2012). Half of the agriculture labour in India involves women (Majumder and Shah 2017). The income generated by the rural women in the family is generally utilized more profitably for the social and economic development for the family (Gupta and Gupta 1987). The continuous increase in prices has also pushed women to income generating activities within or outside the household to maintain an economically sound family (Elder *et al.*, 2020). It is found that India is the home to 12.7 crore working women and 90% of them are working in the unorganized sector (Goswami and Bhattacharya 2013). It is also found that women are engaged in various fields, the participation of women is mostly found in marginal and casual employment due to inadequacy of skills, illiteracy, restricted mobility and lack of individual status (Chari, 1983). Women are also mostly engaged in the unorganized sector (Mehta and Sethi 1977). They are overwhelmingly concentrated in agro-based/household based activities (where they often serve as unpaid family labour) such as dairying,

fisheries, small animal husbandry, handlooms, handicrafts and sericulture. Again, in many countries, even in India, women are often paid two-third or even half of the wages earned by men for the same task (FAO, 1995). Sericulture is an agro based rural industry includes cultivation of mulberry, silkworm rearing and post cocoon activities. During the process of silk reeling many by products are generated which are disposed as waste and pollute the environment. Majority of the farmers belongs to economically weaker sections and unaware the full potential of by products (Buhroo *et al.*, 2018). The silk cocoons are mainly used for silk production and remaining left over pupae is rarely utilized for animal feed, oil extraction, fertilizer (Barcelos *et al.*, 2021). The cut cocoons and defective cocoons generated from grainage industry and cocoon market can be used for making crafts (Kallimani *et al.*, 2016; Qadir *et al.*, 2023). Handicrafts are handmade products prepared from raw indigenous material using traditional artistic tools or even some simple machinery in its designing/innovation (West *et al.*, 2017). Sericulture has been fully recognized as an important rural industry in India and elsewhere and is practiced as a house hold industry. It is a labour intensive export oriented cottage industry, generating high employment and income per unit area of land. One hectare of mulberry land can generate employment to 13 people per year (Sarkar *et al.*, 2017).

Women have played a significant role in this industry. Nearly 60% work of this industry is done by women only (Sekhar and Kumar 1988; Kumar, 1986). In recent years, the role of women received increasing importance. The specific operations she performs as well as the magnitude of her production contribution have started being perceived and acknowledged more recently. The year 1994 had been declared as the 'Year of Women in Sericulture'. Through this special campaign, "women in sericulture" was brought on to the center stage of sericulture development. Later on, the developmental schemes conceived by Central Silk Board, India advocates greater thrust on women empowerment, promotion, awareness generation and support services (Rabha *et al.*, 2022). The concept of gender budgeting introduced by the Government of India during Tenth Plan also led the Central Silk Board of the country to assess the adequateness of the allocation of resources for women and ensure that the gender commitment coupled with budgetary commitments are translated into achievements. The Eleventh Five Year Plan made a separate "women development component" mainly to address the social security concern of women associated with the silk industry (Roy, 2015). Handicraft products are catchy, cost effective objects of gift and decorative value. Crafted items made from cocoons maintains luster for years with visual appeal. The eye catching art of cocoon craft is one of the very interesting utility of by-products which will give scope to develop human skills in addition to generate self employment and revenue (Kallimani *et al.*, 2016). Mostly rural men move to urban area in search of employment, leaving the entire burden of maintaining the household on women. If the

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rural households are to be made economically viable self sustaining units, the employment and income generation by rural women may be accepted as an index of the social development and the progress of the country (Chattopadhyay *et al.*, 2008). The art of making crafts from silk cocoons is less technical requires low investment and can generate hefty amount to women artist who takes it as a subsidiary work at her home (Kaul and Pandey 2014). This review throws light on the significance of cocoon art in upliftment of rural women in India.

Articles designed from cocoon crafts:

1. Crafting of flower from silk cocoon. The dyed silk cocoon is cut in the shape of 3-4 petals and arranged in a flower shape. The petals are fixed with glue. The flowers are dried and small hole is made in its centre and soft fancy wire is inserted which acts as a stalk. Similarly sepals for a flower are made which look like leaves of flower. This art requires no technicality and a worker can make hundreds of flowers a day and can generate a good amount from it (Olick, 2013; Kaul and Pandey 2014).

2. Crafting of flower bunch "bouquet" from silk cocoon. Twenty-fifty cocoon flowers are arranged in a flower bouquet according to the planned size and design. Bouquet is wrapped in a transparent PVC sheet or craft paper to present it as a bouquet (Kaul and Pandey 2014; Kallimani *et al.*, 2016).

3. Preparation of flower garland from silk cocoons. Different types of garlands are prepared from silk cocoons. The cocoon garlands are durable and can be preserved for many years. The cocoons are cut in flower shape and arranged in sequence by selecting different colors and designs of flowers to make a beautiful pattern. It employs zig-zag scissor, colored beads, thread for holding flowers, needle etc. About 500 cocoons are required to prepare a bunched garland with bouncy look and six garlands can be prepared from 1 kg of cut cocoons. Cocoon garlands are graceful and elegant to wear (Reddy, 2008; Kaul and Pandey 2016).

4. Preparation of greeting cards. Cocoons are cut into small pieces of various designs so that these are shaped as flowers, trees, and other scenic objects including small huts, animals, birds etc. These shapes are fixed on a piece of a craft/drawing paper and water colour/sketch pens are used wherever necessary to design and paint the card. These cards look awe-some with full emotional expression as being hand crafted from the natural material (Reddy 2008; Kallimani *et al.*, 2016).

5. Preparation of other fancy items. Small gift/decoration items like key chain, ear rings, colorful birds or any other items of aesthetic value which will exhibit the creative skill of craftsmanship, can be prepared and designed by utilizing cocoon by-products and waste deformed/ rejected cocoons (Reddy, 2008; Kaul and Pandey 2014). The cocoons are cut into small pieces of various designs, and these pieces are assembled together to form a particular shape and fixed on craft, velvet or drawing paper. After giving it a finishing artistic touch, fancy product thus prepared can

be glass framed and presented as gift (Kallimani *et al.*, 2016).

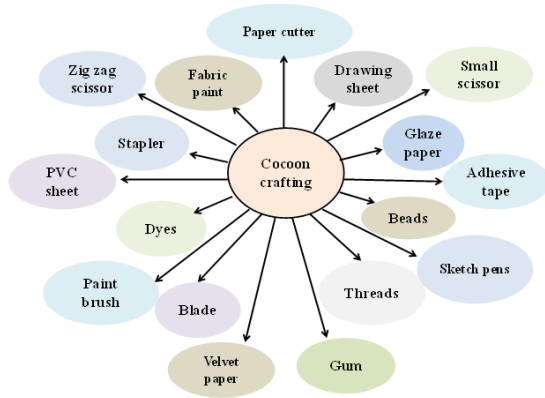


Fig. 1. Materials required for cocoon crafting (Kaul and Pandey 2014).

The majority of rural women are not permitted to work outdoors because of deep rooted social taboos. They are being deprived of opportunities to contribute to the economic growth in rural areas. Sericulture activities have been always a fascinating choice for the women because women can do all the activities along with her daily household chores at her home (Satsangi, 2014). However, the contribution of women in the sector is invisible due to various constraints (Yadav and Jadhav 2017). The Constraints in adoption of sericulture enterprise by rural women is summarized as follows:

1. Lack of training on sericulture
2. Lack of experience in managing sericulture based enterprise
3. Absence of agencies to support

4. socio-personal problems were lack of support from other community members
5. difficulties in production process and non-availability of raw material
6. costly raw material
7. inadequate loan facility
8. fluctuations in costs of produce
9. fluctuations in demand of the product
10. Poor knowledge of market and competition.

Since, there are some constraints faced by rural women in adoption of other sericulture activities viz., cocoon crop production, mulberry cultivation or silk weaving. Cocoon crafting is very favorable enterprise for rural women who face challenges in other sericulture activities. The advantages of adoption of cocoon crafting enterprise are summarized as follows:

1. It requires low investment and defective or cut cocoons can be purchased on a very low price.
2. It does not require any specific skill to craft different decorative products viz., flowers, bouquets, garlands.
3. Other materials required for cocoon crafting are very affordable and easy available
4. It is eco-friendly and cost- effective enterprise for rural women.
5. It requires less time and women can do it in leisure time.
6. It does not require any large space; women can pick this enterprise at home.
7. It brings more economy.
8. The cocoon crafted products lasts for many years and are in demand nowadays.
9. The eco-friendly products are welcomed by consumers worldwide.
10. It utilizes waste cocoons and generates economy from waste.

Table 1: Economics of developing cocoon crafts (Kaul and Pandey 2014).

Economic of cocoon crafts	Single flower bouquet	Flower bunch bouquet	Single flower garland	Flower bunch garland	Greeting card
No. of articles prepared / kg of cut cocoon	1000-1500	30-45	30-38	3-6	50 cocoons only
No. of cocoons required/article	2-3	95-100	85-100	500-600	2-3
Cocoon cost (Rs)	0.50	15	15	80	0.50
Labour cost (Rs)	5.00	20	15	60	3.0
Production cost (Rs)	10.50	95	45	155	6.5
Production scale cost (Rs)	20.0	200	75	350	12.0
Net profit (Rs)	9.50	105	30	195	5.5

CONCLUSIONS

Cocoon crafting is a self employment generates a good amount when this art is prompted skillfully in a creative manner. The waste cocoons in grainages or reeling sector can be utilized skillfully to craft value added products for decoration and aesthetic purpose. It requires careful and attentive people to pursue this art. The cocoon crafting is a revenue generating enterprise which could be easily took by rural women folk to earn more as an aid to their livelihood. The conduct of awareness programmes and trainings can persuade rural

women to take up cocoon crafting as a side activity. This will ultimately help in the upliftment of rural women and value addition to sericulture industry.

REFERENCES

- Barcelos, S. M. B. D., Salvador, R., Barros, M. V., de Francisco, A. C., & Guedes, G. (2021). Circularity of Brazilian silk: Promoting a circular bioeconomy in the production of silk cocoons. *Journal of Environmental Management*, 296, 113373.
- Buhroo, Z. I., Bhat, M. A., Malik, M. A., Kamili, A. S., Ganai, N. A., & Khan, I. L. (2018). Trends in

- development and utilization of sericulture resources for diversification and value addition. *International Journal of Entomological Research*, 6(1), 27-47.
- Chakravorty, R., Dutta, P., & Ghose, J. (2010). Sericulture and traditional craft of silk weaving in Assam. *Indian Journal of Traditional Knowledge*, 9(2), 378-385.
- Chari, T. V. R. (1983). Vistas employment for needy women and disabled. *Soc. Welfare*, 38(11), 14-16.
- Chattopadhyay, S. K., Sarkar, K., Chattopadhyay, R., Baur, G. & Trivedi, S. (2008). A Study On Socio-Economic, Health And Hygiene Status Of Women Engaged In Sericulture Industry In Sujapur of Malda District, West Bengal. *Social Environmental and Biological Association*, 5(1), 77-81.
- Elder, G. H., Robertson, E. B., & Ardel, M. (2020). Families under economic pressure. In *Families in troubled times* (pp. 79-103). Routledge.
- FAO (1995). Women, Agriculture and Rural Development: A Synthesis Report of the Near East Region. Sustainable Development Department (SD), Food and Agriculture Organization of the United Nations (FAO).
- Goswami, C. & Bhattacharya, M. (2013). Contribution of Sericulture to women's Income in Assam, A case study in Goalpara District of Assam, India. *International Journal of Science, Research and Publication*, 3(3), 1-6.
- Gupta, R. & Gupta, B. K. (1987). Role of women in economic development. *Yojana*, 31(18), 28-32.
- Kallimani, C. S., Chandrashekar, P., Naika, R., & Bharathi, V. P. (2016). Integrating Sericulture Byproducts for Sustainability. *Indian Horticulture Journal*, 6, 67-70.
- Kaul, S., & Pandey, R. K. (2014). Art of Silk Cocoon Crafting-A Boon for Value Addition. *Asian Journal of Pharmaceutical Science and Technology*, 4(4), 168-172.
- Kumar, P. R. (1986). A study on the credibility and Utilization pattern of Sericulture Information Sources among farmers of Chiikkaballapur Taluk, M.Sc. (Agri) Thesis, University of Agril. Senescences, Bangalore.
- Majumder, J., & Shah, P. (2017). Mapping the role of women in Indian Agriculture. *Annals of Anthropological Practice*, 41(2), 46-54.
- Mehta, S. & Sethi, N. (1997). Targetting women for developing. *Social Welfare*, 43(10), 14-16.
- Olick, L. (2013). *Witchy Crafts: 60 Enchanted Projects for the Creative Witch*. Llewellyn Worldwide.
- Qadir, J., Islam, T., Sudan, N., & Aryan, S. (2023). Grass Root innovations for Better Performance of Sericulture Industry. *Biological Forum – An International Journal*, 15(4), 996-999.
- Rabha, P., Saikia, M., & Ghosh, K. (2022). Chapter-2 Empowering Women through Sericulture. *Advanced Trends in Agricultural Extension*, 37.
- Rao, N. (2012). Male 'providers' and female 'housewives': A gendered co-performance in rural north India. *Development and Change*, 43(5), 1025-1048.
- Reddy, R. M. (2008). Value addition span of silkworm cocoon-time for utility optimization. *International Journal of Industrial Entomology*, 17(1), 109-113.
- Roy, C. (2015). Inclusive Development in Sericulture through Female empowerment, a case study in Malda district, W.B. *Munich Personal RePEc archive*, MRPA paper no. 64275.
- Sarkar, K., Majumdar, M., & Ghosh, A. (2017). Critical analysis on role of women in sericulture industry. *International Journal of Social Sciences*, 6(3), 211-222.
- Satsangi, A. (2014). Employment Generation and Role of Women in Sericulture. *Shrinkhala*, 1(1), 36-38.
- Sekhar, P. & Kumar, R. (1988). Role of rural women in Indian Sericulture. *Proceeding of the international congress on tropical sericulture practices*, February 18-23, Published by Central Silk Board, pp. 95-98.
- West, A., Istook, C., Porterfield, A., & Ghosh, T. (2017). A Service Learning Collaborative to Build a Sustainable Enterprise for Underprivileged Women (SEuW). *Journal of Textile Design Research and Practice*, 5(1), 3-16.
- Yadav, U., & Jadhav, N. (2017). Empowerment of rural women through sericulture. *Environment Conservation Journal*, 18(1&2), 207-209.