

PROSPECTS AND PROBLEMS OF THE SOLA PITH PLANT HARVESTING AND THE SHOLA-PITH HANDICRAFT IN THE WEST BENGAL

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Abstract: West Bengal is called of the river of land and wetlands. Sola-pith handicraft is the agro-based handicraft. Sola plant is a *Hydrophytes* plant which generally grows barren in lakes, ponds, channels of paddy fields, flooded low land areas and marshy waterlogged areas. Shola plant grows mainly in the wet areas of eastern part of India i.e., West Bengal, Assam, Orissa and Deccan. Shola pith plant belongs to the family- *Fabaceae or Leguminosae* and Genus- *Aeschynomene*. Shola seeds commonly get germinating at the time of pre-monsoon when fields get moisture. Hidden seeds which remain deposited in the soil to get developing and take three months to become full grown plant. It has full blooming during the time, months of September-October. The sola pith plant is a valuable plant that handicraft makes from sola-pith which can be comparable as fine art crafts by its pretty gorgeous look and amazing skill of artisans. The importance of the shola pith handicrafts are the both cultural, heritage and economic impact in our country, now at present more than 50,000 artisans are engaged in these activities in the West Bengal. However, it is facing a lot of crucial problems to the artisans such as shortage of inputs of the sola-pith products due to decreasing wetlands, ponds and other factors. This research study paper is mainly focus on the prospects and problems of the harvesting and sola-pith products. It has a vital role in the production of sola-pith product differ from cultivation to the finished product. It is an unorganized sector and it has no power to control prices but they are exploited by the middlemen and other entrepreneurs or exporters. This traditional handicraft which is being practiced by the artisans of a particular community (Malakars) in the West Bengal. The present study paper is based on the secondary data and also this research paper highlights that the implication is looking forward to contribute knowledge for better harvesting and achievement for the sola-pith handicraft in the West Bengal.

KEYWORDS: Wetlands, Hydrophytes, Waterlogged, Harvesting, Solapith and Unorganized

Introduction: The Indian handicraft industry represents the rich Indian culture, traditions and heritage along with the modern and trendy touches. (Ghouse, Suhail M. 2012). Bengal is identical with numerous pujos and shola pith is the craft that is their archetypal decoration, known as 'herbal ivory', shola pith is a nice-looking milky-white sponge-wood craft that textures in auspiciousness of all rituals and ceremonies in the households. Craft is the repertoire of symbolic abstractions of emotions (Dhamija, 1977) and exhibit widest canvas of creativity and broadest spectrum of development (Jaitly, 1990). Crafts stands for men's endeavour to bring elegance and grace in otherwise harsh and drab human existence. Generally, the handicrafts industry is highly labour intensive, eco-friendly, low capital investment, high value addition unorganized household sector, with huge potential of employment generation and foreign exchange earnings and practiced extensively in the rural areas, (Vijaya gopalan 1993, Jain, Rahul, 2015 Jadhav, S.). India is one of the important suppliers of handicrafts to the world export market and handicrafts developed Indian

economy in general and rural economy in particular after agriculture. (Thakur, Vijay 2012, Towseef Mohi-ud-din, et. al 2014 Jain, Rahul et. Al, 2015).

The Shola pith craft is Agro-based Industry. Sola plant is a Hydrophyte plant which is a resident of swampy quagmires, flooded lowlands and troughs of paddy fields, this plant grows in three to five feet deep water and can be recognised from its leaves which float at a depth of two to six feet. It spreads a height of five to six feet with the diameter of its girth ranging between two to three inches. During the British colonial rule in India, shola had gained favour among the British as the “shola Topi” which was head-gear in the tropical weather to keep heat strokes. There are many purposes to use shola crafts such as, marriage rituals; conical topors, the sithi mukut, phulghor and rathghor for death rituals, for religious purposes; they are made in the form of sholar mala (shola pith garlands), kadam flower, Laxmi jhara etc. it is predominantly found in the form of flowers, toys, dolls, garlands, masks, ornaments, and so on (Ghosh, et.al, 2015). The people engaged as shola pith craftsmen are known as Malakar, meaning 'maker of garlands', probably because these artisans made garlands made of shola for idols and for the noble class. The Malakars belong to the Nabasakha group of artisan class (or nine branches of artisans namely Kumbhakar, Karmakar, Malakar, Kangsakar, Sankhakar, Swarnakar, Sutradhar, Chitrakar and Tantubay) and they are involved in this craft from generation to generation (Ghosh et, al 2015).

Literature Review:

Kund Ghosh (et al, 2018) who write a research paper “A Traditional Craft Practices in Transition- An Ethnographic Account on a West Bengal Village. He has explained that the Shola pith craft is a traditional ritualistic craft, recently gained importance in the global market.

A survey of shola pith workers conducted in Mandirbazar block, south 24 pargana under the initiative of the” Ministry of Micro, Small & Medium Enterprises (MSMEs), Government of India, Bengal Women Welfare Association& National Institute of Design”, has shown that some of the shola craftsmen or craftswomen earn as low as Rs.30 per day (Kumar et al, 2012).

Baijayanti Chatterjee(3 July 2018), in her article “Condition of Shola pith craft people in Rural Bengal” has explained that the problems the shola pith craft artisan’s Socio-economic condition and also has described the shola pith plant is Eco-friendly because it is biodegradable which does not cause pollution.

Das (2019) explained that Indigenous artisans involved in various crafts based on local informal knowledge has Indigenous artisans are an important factor in the equation of the Indian society and culture that actually developed the handicrafts section of the nation and the local artisans have been played a significant role in the development of rural economy in a country.

Objectives of the research:

- (1)The main objective of the shola pith craft that is sustained to harvest the sola-pith plant which is situation of it’s by understanding the difficulties that they (artisans) face.
- (2) It is highlighted that the sola-pith crafts gradually transforming into the secular or commercialized form to fulfil the modern demand.
- (3) To highlight that artisan has faced various problems related with this craft and they became the victim of exploitation of the middleman and the emerging entrepreneurs or exporters.

(4)To provide the shola pith craft, a creative aesthetic experience of the unique visual and develop values of conservation, protection the environment, resources, and heritage of the country.

Research Problems:

1. there is no proper data in the shola pith artisans of the Govt. or NGO's and others.
2. There are no proper policies to control the marketing, protection of the artisans and development of this craft.

Significance of Shola pith craft:

Shola pith is naturally easily available because it grows on marshy water logged areas. Shola pith crafts have some Cultural value of the religious and Rural Development.

1. Shola is very soft and thin in nature. It is very light by weight. It is suitable for craftsmen to use and making aesthetic things that imaginary power on it.
2. Shola is a symbol of purity and sacredness.
3. Shola is eco-friendly and it is also biodegradable feature that does not make any pollution anywhere it is used.

Methodology of the Study:

The present Study is provided by the ethnographic approach and methods, which is the energetic way for collecting, sorting and interpreting the data. The present research paper is mainly based on the Secondary Data. The secondary sources of the data include books, journals, published and unpublished research work etc.

Hypotheses of the Study:

The Shola pith craft could positively impact on the promotion of cultural, festivals and heritage and economic development of the West Bengal.

Research Question:

Which factors influence/ affect the Shola pith craft" decision to harvesting sola-pith plant and prospect policies of these handicraft products?

Research Gap: There is no direct connection between the artisans and harvesting sola-pith plant.

Sola-pith Plant: The plant of sola pith is an aquatic plant or the cork Plant and sometimes grows along with the rice paddy Cultivation fields. It is a type of perennial shrub and It is a floating stem which is spongy in nature. It grows in the marshy waterlogged areas as a wild plant. The most important and useful part of the plant from an economical point of view is the wood of the stem. It is a sub-floating hydrophyte with heavy nodulation in both stem and root resulting into high nitrogen content (Biswal *et al.*, 1987).



Harvesting: The Shola pith plant is native to the states of West Bengal, Orissa and Assam, it has a Sub-Saharan ancestry entering South Asia and Southeast extensions of the Philippines. Taking about two to three months to grow to its maturity, Shola is found to bloom most abundantly during the months of September to October. It is the flowering period which monitors the quality of the plants. For if the harvesting is carried out before this period, the quality of the harvest is seriously affected. Shola cultivation takes place under 4-5ft water during the monsoon months of June-July.

The man collects the raw material of the shola pith plants from the low land field.



SHOLA PITH MAN

Shola pith craft of West Bengal: Shola pith craft of West Bengal recognized as one of the best example of elegance, exquisite beauty and finest craftsmanship. In the West Bengal, this craft is mainly practiced in the districts of Burdwan, Birbhum, Hooghly, Howrah, Murshidabad, Nadia, South 24 parganas, Alipurduar and Coachbehar. Shola pith craft had its origin in the ritual and religious requirements of old days. There was a time when the Malakars, enjoyed a respectable position in the village society. They used to supply garlands and flowers for the village idols and for the religious and social functions of the village society. No puja or marriage could be celebrated without the shola pith craft decoration for the deities. They are few in number, but in every Hindu village there is at least one representative, who provides the shola products for the temples and marriage ritual for the village maidens. (Chakraborty, S et. al 1991).

SOME SHOLA PITH FINE ART CRAFTS:



Peacock boat



Durga



Durga



Flower



Topor



A pair of Elephant

Hervating survey of the shola pith plant in field

Table-1: Effect of planting methods on the growth and yield attributes of shola pith plat.

attributes	Growth attributes at harvest					Yield
	Branches plant	Plant height cm	Basal diameter Mm	Nodules Plant ⁻¹	Dry weight g plant ⁻¹	Marketable yield Kg ha ⁻¹
T ₁	9.40	160.11	24.55	847.40	106.60	2368.97
T ₂	13.02	201.93	30.45	1032.04	171.82	2749.14
T ₃	13.74	304.29	46.55	1445.05	215.27	3075.66
T ₄	17.80	253.60	38.44	1572.18	238.91	2064.94
T ₅	18.77	236.86	36.56	1655.13	248.04	1434.92
SEm (±)	0.33	3.77	0.697	6.57	4.57	4.89
LSD {0.05}	1.07	12.32	2.27	21.43	14.89	15.95

SOURCES DATA: A field experiment was conducted on a local variety of the crop shola in the University Farm at Cochbehar, West Bengal during July to October, 2006.

Where, T₁: direct seeding, T₂: transplanting with spacing 50 x 50 cm, T₃ : 70 x 70 cm, T₄: 90 x 90 cm and T₅: 110x 110cm.

Table 2: The cost of cultivation of the shola pith plant

Treatments	Cost of cultivation (Rs.Ha ¹)	Gross return (Rs.ha ¹)	Return cost ratio
T1: Direct seeding (30 x 30 cm)	14483.90	18951.73	1.31: 1
T2: Transplanting with spacing 50 x 50 cm	15134.90	21993.09	1.45: 1
T 3: Transplanting with spacing 70 x 70 cm	15134.90	24605.25	1.63:1
T4: Transplanting with spacing 90 x 90 cm	15134.90	16519.52	1.09:1
T5: Transplanting with spacing 110x110 cm	15134.90	11479.39	0.76:1

SOURCES DATA: A field experiment was conducted on a local variety of the crop in the University Farm at Cochbehar, West Bengal during July to October, 2006.

Economic analysis: From Table-1 yield of Shola significantly varied with various methods of planting. Highest yield (3075.66) was obtained from transplanting with spacing 70 x 70 cm being significantly different from all other treatments. The next better treatment was transplanting with spacing 50 x 50 cm (2749.14) followed by direct seeding (2368.97). Poorest yield (1434.92) was observed from the treatment with highest spacing (transplanting with spacing 110 x 110 cm). In 2004 recommended that seedling should be transplanted at a distance of 1.0-1.25 m row to row and 0.75-1.0 m plant to plant spacing.

Table-2. The cost of cultivation was concerned; T₂, T₃, T₄ and T₅ got the highest cost (Rs.15134.90 ha¹). But as yield was higher in case of T₃ i.e. transplanting with spacing 70 x 70 cm and T₂ i.e. transplanting with spacing 50 x 50 cm, the gross return and return: cost ratio were more in these treatments. T₄ and T₅ i.e. treatments with higher spacing got higher cost and at the same time lower yield. So, in T₄ and T₅ gross return as well as return: cost ratio was reduced. T₁ i.e. direct seeding with gross return (Rs.8951.73 ha¹) and return: cost ratio 1.3: 1 exhibited better performance than T₄ i.e. transplanting with spacing 90 x 90 cm and T₅ i.e. transplanting with spacing 110 x 110 cm because of the two factors occurring simultaneously low cost of cultivation and higher economic yield.

Cost of the raw materials: A bundle of dried shola stems is labelled as Jhapi which contains around 300 pieces with starting from around 200 rupees. For example, such bundles are also tagged as Tari in regional language, which is a bundle of 8-12 shola plants. Prices vary with the thin ones starting from around 24 rupees to the finer qualities starting from 70 rupees (Mandal, R.N., R. Bar, & D.N. Chattopadhyay, et al, 2014).

Table: 3 COST OF THE VARIOUS TYPES OF SHOLA PITH CRAFTS:

COST OF THE VARIOUS TYPES OF SHOLA PITH CRAFTS			
SL NO	ITEMS(SHOLA CRAFTS)	PITH SIZES & WEIGHT	COST(including GST)
1	Mayurpanki Boat, encased in glass	4.75x6.5x2.25inches,Weight 310gms	Rs. 1254.96
2	StandingLaxmi,encasedin glass	7.5x5x1.75inches,weight 225gms	Rs.1546.91
3	Shola pith Krishna,encased in glass	5.5x5x3inches, weight-360gms.	Rs.1472.84
4	Shola pith Durga	6inches,p-code-sh0013	Rs.2500
5	Single Boat	7inches	Rs. 449
6	Shola pith Durga family	18 inches	Rs. 3200
7	Shola pith Peacock boat	18 inches	Rs.2995
8	Shola pith Peacock boat	16 inches	Rs.1995
9	Shola pith Flower Streamer		Rs1427

Sources of data: Online digital.

Shola pith Haat and Market, Policies & Strategies: HAAT: The seasonal market crop up during October – December, villagers or framers bring matured shola pith stems and selling the Artisan or Traders. There are some Shola pith haat in the West Bengal, such as;

(1) Ultadanga haat. (2) Munshir haat. (3) Diamond Harbour. Every district has some important village haat where selling the shola pith stems.

MARKET: (1) VISHWA BANGLA in Kolkata. (2) BANGASREE OUTLET in Kolkata. It is found in Gift shop in Kolkata and district town or small town in the West Bengal.

Marketing Problems: 1) Market control by the .Entrepreneurs.

(2) Crisis of the financial resources.

(3) Lack of Advertising publicity of the shola pith craft.

(4) Absence of the systematic marketing network and policy.

Changed scenario with modern demands: We found that various researchers have explained that the shola pith craft came into being and continues to be in practice mainly with of its white colour, suggestive of purity and sacredness. In those days an artist (shilpi) used to create varied types of motifs by hands with simple tools. These valuable handicrafts are gradually transforming into the secular or commercialized form, with the change of time and changing value system of the modern society, new kind of demand took place. So, the craftsmen make various toys, birds, flowers and dolls. Shola pith craft have in the contemporary time found a wider application in

home decor, as artistic objects with an aesthetic dimension. Olden days, Shola decorations have re-emerged with change modifications the shola pith craft to give brightness and elegance in interior decorations and social festivals. Utility and decorative items have added a new dimension to the craft to fulfil the modern demand.

Global Market: The Shola pith occupational has expanded in the late 1990s when more and more export, the entrepreneurs have realized that the potential of this craft exquisitely products export impact on the foreign countries of the World. As a result, this craft has gained position in the global market. Shola crafts are in demand foreign for cinema decoration, interior and exterior decoration. The shola pith fine products are exported to USA, France, England, Russia, Hong Kong and Singapore through Madras.

Emergence of new dimension of the entrepreneurship: The commercialization of the shola pith craft has created on the impact in the structural and functional parts of shola pith craft and its organization. (1) **Shola pith Workshop:** The workshops produce the shola pith products as per the order by Traders or the exporters. The design of the product and its quality, the time of supplying the products were controlled by the Knowledge (Vol. 1 Issue 1 / Ghosh. K. et. al, 2016). (2) **Products made at this workshop:** There are lot of products made at this workshops or factories, such as, Shola pith Kali ball, Shola pith Gulab stick, Shola pith Lily stick, Shola pith Pana flower, shola pith Belly flower, shola pith Jui flower, shola pith Rose flower, shola pith Jasmine, shola pith Chrysanthemum, shola pith Cabbage ball, shola pith Lata ball etc. Several flowers are made like Jasmine, Rose etc. (3) **Labour:** They hire skill craftsmen from any communities or contract labourers to manufacture products. There are about 5-20 labours in each workshop. The labourer's salary or wage depends on the number of products they produce. (4) **Marketing of the finished products:** These new entrepreneurs purchase the shola pith products from the local artisans in cheap rate and sell these goods to the big shops owners or in the big fairs or run business of their own. In this way they are getting exposure to the open market where as the actual craftsmen are losing their importance. The artists themselves get very little of the profits, and are hardly able to survive in life. The exporters (company) sell the shola pith products to the international buyers and get huge profit earn.

Exploitation from Middlemen: (1) unfortunately, the middlemen play a vital role in the aggregation of finished handicraft product. These middlemen often exploit rural artisans. This is because that the rural artisans are heavily dependent on middlemen for marketing their products. (2) Craftsmen lack access to mainstream markets. They don't have access or contacts with suppliers of raw materials, as they depend on the middlemen. These artisans have limited knowledge about the marketing and export avenues and linkages. They lack access to foreign markets but they rely on local melas or exhibitions, which are limited the scope of the craftsmen. (3) Artisans are trapped in a continuous cycle of exploitation by middlemen. Due to lack of access to markets, they depend on middlemen to sell their products. However, they get very little price to sell their products, but middlemen sell these goods at very high prices and accumulate huge profits.

Discuss the analysis data:

1. In the above analysis of this research paper, we can get the valuable fine art of the shola pith which is high demand for global market.
2. From the present data of the harvesting the shola pith plant, it can be concluded that rising of nursery and transplanting in the field with a spacing 70 x 70 cm may be advocated for maximization of profit and higher return-cost ratio of 1.63:1. Approximately, Rs. 9500.00 ha¹ can be earned net from the cultivation of Shola and that's why the crop should be recommended for cultivation in wetlands in our country through which poor marginal and sub marginal farmers can be benefited.
3. From the above analysis, we can get to inform that the actually the shola pith craftsmen are losing but huge profit have earned by the middlemen, exporters or entrepreneurs.
4. Lack of sufficient facilities of the market for the artisans.
5. In the above analysis that we can found the shola pith plant is the most important agro-based cash crop and this plant is Eco-friendly for the environment.

SUSTAINABLE APPROACH:

- (1) Shola has a hydrophyte nature making it eco-friendly and this makes it even more preferable as a raw material. It is more effective to use items made of shola rather than thermocol which is artificially produced. Also, in terms of malleability, texture, and sponginess shola is much superior to thermocol.
- (2) The International Union for Conservation of Nature (IUCN) has made an alarming entry for the Shola plant in the Red List of Threatened Species and has also raised awareness of using it essentially replacing the artificially produced thermocol which is harmful for pollution in the environment.

Find out the problems of the research: From the above research paper analysis, we can get some important problems:(1) There are no proper policies of the government of West Bengal as well as Govt. of India for initiative development of the Shola pith crafts. (2) There are no adequate marketing policies to take up the development of the shola pith artisans. (3)The supply of the plant has reduced to a large extent due to the rapid decline in the number of marshy water bodies in rural areas. (4) Similarly, with the arrival of their twin in the form of thermocol (polystyrene), which is machine-made mass-produced goods and highly demanded handicraft shola products are fighting a losing battle. (5)The younger generations are migrating to the towns or take up some other job opportunity and leaving their traditional works for better employment opportunities. As a result, the crafts people now consist of women and old men majority.

Suggestion: (1) We can clearly see that the shola pith craft is being lost; immediate measures need to be taken. Firstly, we need to conserve the wetlands; secondly, we have to educate the people about the eco-friendly nature of the art-form; and protect to create a support system for the craftsmen. (2) The government should provide marketing policies to facility to the artisans. (3) The

government should give more loans facilities without mortgage. (4) Government should try to digitalize handicraft market, especially form a data base about the crafts,(5) The middlemen who do not knowledge to making the crafts but make huge profit margins just by procuring the products from the hardworking artisans and selling it to the markets. There should be some co-operative society which take direct responsibility of the purchase and keeping this craft form alive by making it suitable for the global market.(6) Awards/scholarships for young crafts persons should be introduced to encourage and give gratitude to young generation crafts persons. (7) There should be organizing marketing network of these Handicraft products.

Conclusion: The Shola pith craft products create a large foreign demand and foreign reserve. But recently the shola pith artisans face lot of problems especially in production and marketing of shola pith products. Lack of availability of sufficient raw materials, funds, insecurity in life and poverty etc. So, the Govt.of India or Govt. of West Bengal have taken proper step to develop these handicraft and initiative to help cultivation for the shola pith plants.

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