Sustainable Marketing Strategies for the Micro, Medium and Small Scale Industries of West Bengal – An Empirical Study on Bamboo Artifacts

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ABSTRACT

West Bengal has a well-defined plan for advancement of Micro, Small and Medium Scale Industry sector through the active support of West Bengal Small Industries Development Corporation and other agencies under the MSME Department. Various districts and regions of West Bengal are famous for its MSMEs.

Craftsmen/SHGs of Purulia create a myriad of utilitarian items made from bamboo. Yet, with the liberalization of market economy, bamboo artifact of West Bengal is lagging behind with the modern market system in terms of quality of product, quality of skill, access to market, marketing plan, distribution channel, packaging, etc. It is the fact that the manufacturers of this art and craft need infrastructure development, creation of industrial estates, marketing support, skill upgradation, smooth distribution channel, skill of packaging, etc. To bridge these gaps, a market survey was conducted at West Bengal to understand the demand for bamboo artifacts in the local and wider markets and also to formulate a sustainable business strategy for marketing the product and services.

The prime objectives of the study were to reveal the gaps at present context. Finally the study aims to develop a broad strategy framework for sustainable livelihood development around bamboo. Detailed interviews through a structured questionnaire were conducted with the various stakeholders in Purulia to assess their viewpoints with respect to the market potential and gaps.

Key words: Micro, Small and medium Enterprise, Bamboo Artifact; Marketing strategy; Value Chain Analysis.

INTRODUCTION

In India, small-scale industries account for about 40% of the total industrial output and are only second to the agricultural sector in providing employment. Small Industries Development Organization acts as a nodal agency in guiding the small scale industries sector through the challenges of the liberalized economic policies. India is one of the important suppliers of handicrafts to the world market. The Indian handicrafts industry is highly labor intensive cottage based industry and decentralized, being spread all over the country in rural and urban areas.

Micro, Small and medium enterprises provide economic opportunities for the poor or the low-income groups of people through employment and income generation, especially among technologically underdeveloped communities in India.

West Bengal, which is a leading State in the propagation of micro, small and medium enterprises, with around 3,50,000 units, provides employment to about 2.2 million people. The state has a well defined plan for advancement of this sector, through the active support of West Bengal Small Industries

Development Corporation and other agencies under the MSME Department, in the form of infrastructure development, creation of industrial estates and marketing and raw material support. Various districts and regions of West Bengal are famous for its micro, small and medium enterprises especially Bankura for its handloom and crafts, Purulia for its bamboo artifacts, Hooghly for its jute artifacts, Birbhum for its dokra artifacts, Dhanekhali for the handloom and textiles.

Among the 23 million people involved in the handicraft sector in India, two million people work on bamboo-based crafts. The world over, the figure is about eight million. West Bengal is a major centre of bamboo artifact production. Bamboo benefits rural communities because it lends itself to agricultural approaches and can be grown on non-agricultural land. The antiquity bamboo has remained the favorite material for its utilitarian and eco-friendly quality. The present scenario of bamboo industry offers a huge inspiration to the bamboo artifact in India and encourages its expansion and demand in abroad. With the progression of time, this established form of bamboo artifact is flourishing in the national and international market.

However, with the liberalization of market economy, bamboo artifact of West Bengal is lagging behind with the modern market system in terms of quality of product, quality of skill, access to market, marketing plan, distribution channel, packaging, and production process. It is a fact that the manufacturers of this art and craft need infrastructure development, creation of industrial estates, marketing and raw material support, skill upgrading, advanced production process, smooth distribution channel, good access to market, and skill of packaging. To assess these gaps, a market survey was conducted in West Bengal to understand the local economic circumstances and demand for particular skills and product - bamboo artifact in the local and wider markets in both product and service sectors and also to formulate a sustainable business strategy for marketing the product and services. The core idea to undertake this study was revitalization of indigenous science and technology and upgrading of the productive skills of rural people for ensuring sustainable development.

In order to overcome bottlenecks in marketing and finance and to ensure that the artisans get the proper return / price from the unique class of products which are generated from their individual skills, the study has attempted to help them out in these areas.

The prime objectives of the study were as follows:

- To scan the production status of bamboo and specialty of bamboo artifact.
- To conduct market survey for bamboo artifact and skills promoted or have scope of promotion to understand market demand, training need, existing gaps and market access of skills at present and future context.
- To gain better insight into the problems and issues, and the potential for sustaining livelihood around bamboo in an environmentally sound manner.
- To identify and propose priority areas of action and specific issues in promoting development of bamboo, taking into consideration its demand profile, whole value chain addition, various players involved in value addition, socio economic, technological, environmental and institutional dimensions.
- To develop a broad strategy framework and guidelines for sustainable livelihood development around bamboo.

METHODOLOGY

The study has been conducted using both qualitative and quantitative techniques. The prime source of information was from desk reviews of necessary documents/reports, field visits, key informant interviews, observations, focus group discussions and consultations with key stakeholders and

institutions involved in the execution and implementation of Urban Livelihood Generation Programs / Projects. In order to identify the socio economic background of the bamboo craft/workers in Purulia District of West Bengal, a baseline survey was made. For this purpose, structured questionnaires were developed for various stakeholders of West Bengal. Information was collected from bamboo artisans and also other stakeholders of the study region. Approximately 25% of the bamboo artisans were covered under the study considering both homogeneity and heterogeneity in social (caste, creed and religion) and economic aspects. For analyzing market, the study had the coverage of various players in the same value chain such as wholesalers, bulk buyers, exporters, and institutional buyers at local and state level. The study covered other service providers to understand the changing needs of the modern market, for which standard sampling techniques were used. The entire study was conducted in a transparent manner sharing information and analysis with the stakeholders. The assumptions made for the study have been clearly stated in the relevant sections of this paper.

BAMBOO ECONOMY

India possesses the world's most extensive bamboo forests, and the size of her domestic market is about Rs 6506 crores. It is estimated that about 2.5 billion people use bamboo in one form or the other at the global level. Commercial consumption of bamboo in the world is to the tune of \$10 billion (Rs 46,000 crores), which is expected to double by 2012. While the size of the bamboo economy in 2001 was \$444 million (Rs 2,043 crores), the market potential is estimated to be \$970 million (Rs 4,463 crores) with a projected annual average growth rate of 15-20%. Based on current trends, it is estimated that the bamboo industry in India could grow to \$5.6 billion (Rs 26,000 crores) by 2015, if the bamboo potential is capitalized on.

Bamboo in India generates 432 million workdays

annually. Some 25,000 bamboo based industries provide employment to about 20 million people. Of the 13.47 million tons of bamboo consumed, 11.77 million tons are used in construction, handicrafts, paper production as wood substitutes, and for domestic purposes. About 1.7 million tons of bamboo are smuggled out to neighboring countries. According to estimates, bamboo-based activities could easily generate 8.6 million additional jobs in India and thus enable 5.01 million families to cross the poverty line.

Currently there is a mismatch in demand and supply. The demand for bamboo is 26.9 million tons as against the supply of 13.47 million tons. A coordinated action plan could put this skewed equation right, especially given the wide availability of bamboo in India.

POTENTIAL OF BAMBOO

- ➤ Bamboo is a great protector of the earth's health and wealth. It is a critical element in maintaining the balance of oxygen and carbon dioxide in the atmosphere. Bamboo can tolerate diverse soil moisture regimes, can heal degraded land, stop soil erosion and help in drought-proofing. Bamboo foliage acts as a shelter for the top soil against tropical downpours and cloudbursts, while the leaf litter helps in moisture conservation by forming a soft cushion on the soil. On the ecological front, bamboo absorbs more water than many plants, thereby helping maintain soil stability. It absorbs from the air 12 metric tons of harmful carbon dioxide per hectare, and produces 35-46.2% more beneficial oxygen than most plants.
- The production process of bamboo products do not generate any pollutants to the environment unlike the process of producing plastic products. Plastic being a non-biodegradable substance, composed of toxic chemicals, pollutes earth, air and water.
- ➤ Bamboo products are also gaining a lot of popularity because they are stylish, strong (stronger

than most hard woods), durable, affordable and are very light in weight, making them easily portable.

➤ Bamboo furniture and handicrafts come with an added feature of environment friendliness. Besides, the rising price of teak has indeed made all of us to think of other alternatives to furnish our homes. Natural grass and bamboo offer good alternatives. These substitutes are also high in matters of artistic appeal, cost-effectiveness and most importantly are eco-friendly.

Owing to these reasons there is an upsurge in the demand for bamboo furniture and handicrafts.

BAMBOO PRODUCT LINES

Bamboo meets human needs in many ways depending upon its properties - from modest sewing needles to walls and roofs, in stools and cots, as food and fodder, and from ladders to mountain bridges. People made use of bamboos to make rafts, enabling them to cross water bodies. Bamboo gave humans the hollow reed (flute) for music and its bending force made it suitable for the bow. Besides being a convenient source of cellulose for paper manufacture and rayon, it supports a number of traditional cottage industries. The original potter's wheel was made out of bamboo, rope and mud. Bamboo work, therefore, can be considered as the mother of all artisan skills.

ANALYSIS OF THE EMPIRICAL STUDY

For many years bamboo related activities had been one of the traditional occupation/craft in the state of West Bengal. Bamboo artifacts are available in the districts of South 24 Parganas, Burdawan, Purulia and Midnapur. Initially, Purulia district was selected for the pilot phase considering the demography, poor infrastructure facilities and deprived economic & social class. The artisans of this craft are mainly located in forest area in Purulia district. The goal of the study was to ensure improved livelihood of the poor rural artisans through the enhancement and value addition of bamboo craft/ product. The study here attempted to scan information obtained from

bamboo artisans and also other stakeholders of the study region.

Stakeholders' Profile

The analysis of monthly income gained by bamboo workers from bamboo activity reveals that 63.33% of the bamboo workers receive less than Rs. 1000/- per month. This situation clearly indicates that a systematic and scientific intervention in the bamboo craft sector is utmost necessary. Such an integrated intervention could uplift the artisans from the poor state.

The stakeholders of the project are cottage level traditional artisans, Self Help Groups (SHGs) engaged in bamboo craft items, dry flower making groups, State Government and Self Help Group Marketing Corporation. The respective role of each of these actors is explained below.

Bamboo Shoot Processing Unit: The major activity of this group is preparation of bamboo pickles, and Chammandi powder. The tribes in this area collect bamboo shoots from forest and sell this to the group. The group buys it an average of Rs 10/kg. For selling their pickles and other related products the group mainly depends on local merchants, State Government Self Help Group Marketing Corporation, exhibitions and sometimes orders from neighboring districts. The average daily income of a unit member is Rs 60/- only.

Dry Flower Unit: The women in this unit themselves collect bamboo flower from the forest, sometimes seeking help from men and giving wage for their work. Apart from bamboo flowers they use other dry leaves. The group doesn't get any training for product diversification and skill up-gradation yet. The unit knows that dry flower has good demand in the market, but the poor rural women do not have enough idea about marketing strategies.

Bamboo Craft Producers: Majority of the artisans are women. The artisans have been trained in the production of select items with the financial assistance of various government programs. The income varies from Rs. 40 to Rs 150/- per day depending on skill and the product range.

State Government Self Help Group Marketing Corporation: This is the marketing hand. The Corporation purchases products from bamboo artisans/producer groups and markets through its outlets. The Corporation also participates in exhibition at local/state/national levels and develops trade relationships in major cities/towns across the country.

Analysis of Business Operation

There are a number of producers who make bamboo products through SHG/producers group. Among them the traditional bamboo workers are unorganized. They are producing the products in their own way and selling those items in village level. The producers belong to poor, marginalized families and most of them are women. Some of the producer groups have made contracts with State Government Self Help Group Marketing Corporation for the supply of raw material and buy back the products as well as participating in the exhibition and direct marketing.

Product range: Bamboo artifacts of Purulia have a tradition of making beautiful items of handicrafts. Among the various bamboo crafts of Purulia, bamboo mat paintings are counted as a major draw. The artisans of Purulia are dedicated to craft making and most of the crafts are made with hands. The expertise of craftsmen of Purulia is totally indigenous in their style of creating items. Some of the items that are created out of bamboo include chair, teapot, TV stand, fans, meal carriers, bamboo shades, bamboo bowls and bamboo-reed table mats. Even the bamboo fibres are crafted into exquisite piece of art by just using simple equipments. The fibrous reeds are enlaced to make mats with striking patterns that catch fancy. Several other artifacts viz., picture frames, room-dividers, and planters are made from bamboo and sometimes with the bamboo grass. Bamboo is also used as a raw material in pulp and paper, bamboo

ply and traditional industries in the region.

Availability of raw materials: The raw materials are collected mainly from local farmers, and wastelands. The bamboo collectors include people belonging to traditional communities. A bamboo cultivator's forum if formed would be helpful to ensure the sustainability of raw material. The primary processing - chemical treatment against attack of borer and fungi, and cutting to size, are done before supplying to the units.

Availability of infrastructure: Machinery and tools are the major requirements to facilitate production of quality products. Introduction of mechanization would improve both output and quality needs. At present units have some minor tools, which is not sufficient for making quality products.

Existing technology and need for skill upgradation: The technology interventions in the bamboo sector have been minimal at all levels. Even at Bamboo Corporation no significant change has happened regarding the scientific extraction, processing and product diversification of bamboos. Today, access to the latest technologies, designs and products are available and what is required is the vision to integrate the activities to the set goal. Awareness building by letting the artisans interact and discuss with the customers during exhibitions and site visits will have to be undertaken to achieve the above results. A regular center catering to such requirements will be an essential part of the cluster that can be developed in Purulia.

Scope for diversification: Bamboo is said to have more than 1500 applications including high value industrial products. Presently the cluster products are restricted mainly to crafts, which form a small part of the bamboo market. The other activities such as production of bamboo curtains, bags, dry flowers, and shoot products, have started only recently. All these activities have ample scope for development as well as diversification.

Marketing: State Government Self Help Group Marketing Corporation is the main agency involved in marketing the products of the cluster. The company has a relatively good network with a number of eco shops and trade relations with a number of retailers in different states. After the preliminary discussion with company management, they agreed to give majority of its share to bamboo producers, so that there is no

need for establish a parallel marketing system in the cluster. The company is capable of strengthening the marketing capacity of the cluster.

Value Chain Analysis

Figure 1 presents value chain analysis of making one 'Rain Maker'. It reveals that monetary worth of bamboo of Rs. 7.50 becomes Rs. 70.00 after getting converted into finished utilitarian item.

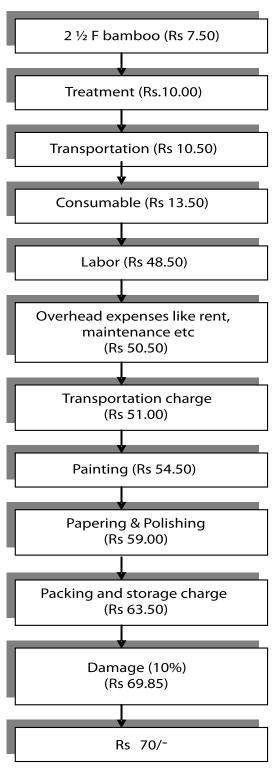


Figure 1: Value Chain Analysis of Making One 'Rain Maker'

SWOT ANALYSIS

Each business needs to evaluate its internal strengths and weaknesses (Kotler, Keller and Jha, 2007, p. 49). Here the big question is: whether the business should limit itself to those opportunities where it possesses the required strengths or whether it should consider opportunities that mean it might have to acquire or develop certain strengths (Stalk, Evans and Shulman,

1992). A major purpose of external environmental scanning is to discern new opportunities (Kotler, 1999). Further, some developments in the external environment represent threats. Therefore, business should monitor the status of internal and external marketing environment (SWOT analysis). Table 1 presents the overall evaluation of strengths, weaknesses, opportunities and threats of manufacturing of bamboo artifacts in Purulia.

Table 1: A SWOT Analysis of the Bamboo Industry in Purulia

	Production	Market	Financial
Strength	 Eco-friendly, Biodegradable and medicinal value of the raw material. Assistance from NABARD. Organized women force available under the SHGs Traditional and skilled labour 	 Market potential through product diversification innovation and new applications. Increasing demand for eco friendly bamboo products Chance for export 	Existence of Bankers and developmental financial institution in the cluster area.
Weakness	 WBSBC not operational in the district. No standard pricing for the products. Lack of institutional linkages. 	 Absence of effective market research Pricing to be standardized 	 Priority of financial institutes for bamboo sector not existing. Lack of awareness about available financial supports.
Opportunity	 Scope for technology upgradation to develop innovative products 	 With eco friendliness becoming major concern for global customers, bamboo products hold tremendous market potential. 	 Availability of finance under Cluster Development market.
Threat	 Non-Application of technology may affect sustainability. Absence of private, public partnership to promote R & D for value added products to explore new markets. Migration of artisan to tertiary sector like construction. 	 Cheaper and competing products in plastic etc Competition from China in export market. 	 Low or nil margins for artisans may effect substantially. Non provocative bankers may not support sufficient working capital for units

IDENTIFICATION OF PROBLEMS

Bamboo is truly one of the most versatile fibers and craftsmen/SHGs in Purulia are producing a myriad of utilitarian items from bamboo, which contributes a huge proportion to the country's bamboo production and export. Still, the craftsmen/SHGs are lagging behind due to some major bottlenecks. The major issues, constraints and problems faced by cluster units identified during the study were related to infrastructure, finance, production, and marke, as summarized below.

- Migration to the big cities for employment: Many poor craftsmen, who were involved in such artifacts, have already migrated to the tertiary sector like construction.
- Finance: Due to lack of funds, poor craftsmen/SHGs are not able to upgrade their business unit. The cluster actors mainly depend on local banks/cooperative societies for their working capital requirement.
- ➤ Product awareness & training: There is a lack of product awareness. Proper targeting of customers is not being made. Even craftsmen/SHGs are lacking proper training to produce versatile bamboo artifacts.
- Modern equipment: Due to paucity of modern advanced equipments, sometimes products are not being produced as expected by customers. The existing tools and machineries of the cluster are insufficient to meet large orders.
- Poor access of producers to market: Even if the customers want to go to the producers directly they cannot, since producers could not be easily located or identified or accessed.
- Lack of proper utilization of forest products: Rural people are unaware of utilizing the forest resources properly in systematic manner.
- Lack of skill: There is lack of skilled labor in the area. Laborers are suffering from market competition from other parts of the country, specially from China in export market.

- ➤ Lack of R&D: There is total absence of private, public partnership to promote R & D for value added products to explore new markets.
- Poor linkage: There is inefficient linkage of the production-consumption chain of the cluster.
- Poor storage facility: Major problem faced by the artisans is absence of raw material storage facility. During rainy season it is very difficult to keep the raw material dry and during summer there is need to keep the raw material away from direct sunlight.

DEVELOPMENT OF SUSTAINABLE MARKETING STRATEGY

In order to overcome the bottlenecks mentioned above, to upgrade the productive skills of rural artisans of Purulia for ensuring sustainable development, and to enhance the employment opportunity and livelihood security of the bamboo dependents, it is very urgent to adopt following sustainable market strategies:

- ➤ Coordinated approach covering production and marketing to assure appropriate returns to growers/producers.
- Research and Development (R&D) activities related to bamboo varieties and technologies for enhanced production.
- > Enhancement of acreage (in forest and nonforest areas) and productivity of bamboo through species change and improved agriculture practice.
- Promotion of partnership, convergence and synergy among R&D and marketing agencies in public as well as private sectors at all levels.
- ➤ Promotion of cooperatives and self-help groups to ensure support and adequate returns to farmers.
- > Generation of employment opportunities for skilled and unskilled persons, especially unemployed youth.
- Establishment of National, State and sub-State level structures to ensure adequate returns for the produce of the farmers and also to eliminate middlemen to the extent possible.

The participation of prospective entrepreneurs with high investment and possibly with foreign participation will help the bamboo craft of Purulia to occupy the international market.

The study has attempted to explore a sustainable marketing strategy for promoting and developing the bamboo artifacts. The first phase, choosing the value, represents the "homework" marketing must do before any product exists (Porter, 1985; Hiebeler, Kelly and Ketteman, 1998; Keller and Lehmann, 2003). Marketeer must segment the market, select the appropriate market target, and develop the offering's value positioning (Kotler, Keller and Jha, 2007, p. 35).

Once the business unit has chosen the value, the second phase is providing the value. Marketing must determine specific product features, prices, and distribution. The task in the third phase is communicating the value by utilizing the sales force, sales promotion, advertising, and other communication tools to announce and promote the product.

The subsequent model (Figure 2) here presents how the sustainable marketing strategy can be applied to rejuvenate the bamboo industry in West Bengal.

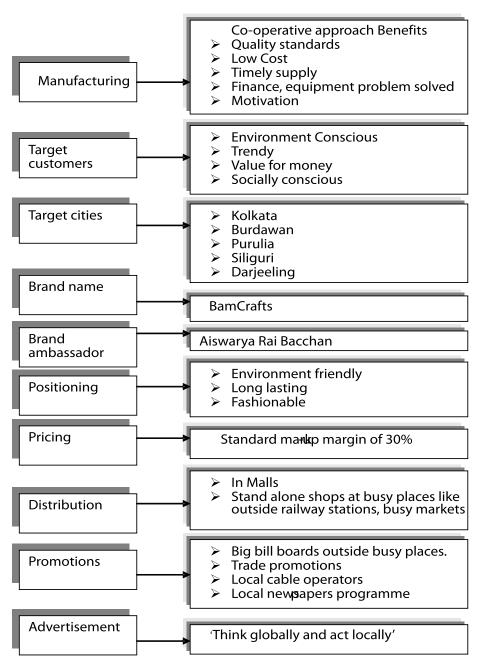


Figure 2: Sustainable Marketing Model for Promoting Bamboo Artifacts of West Bengal

Implementation Strategy

Following action plan is required to rejuvenate the bamboo artifact in Purulia.

- Detail survey before finalizing the structure of the program.
- Training on group management, cash handling, and product related topics (skill up gradation)
- Providing forward & backward market linkages to the enterprise for a growing inventory of bamboo-based products
- Upgrading skills of entrepreneurs and craftspersons and acquainting them with machineries, product design and development towards capitalization and commercialization of bamboos.
- Generating awareness and interest in the use of bamboo for housing and other constructions,
- ➤ Helping in branding, packaging and distribution.

Actions to be Taken

The West Bengal Government is undertaking a number of policies to develop a strong and vibrant bamboo industry that can produce good quality bamboo artifacts at reasonable prices to meet the growing needs of the people and to contribute to the provision of sustainable employment along with economic growth of the state. The Government will encourage the industry to increase its share in the global market.

A. Social interventions

Strengthening of Self Help Groups (SHGs): Even though the artisans are working as group basis but these groups are not formally registered as Self Help Group. For getting other departmental benefit to this group it is essential to form these groups as SHG. A total of 20-25 SHGs may be suggested to form/strengthen. Each group may have 10-15 members.

B. Technological interventions

- a) Skill Upgradation Training: Compared to products from other states and countries the artisans' level of skill at present is very poor for making products. This has to be improved and upgraded through a series of skill upgradation programs.
- b) Design Development Workshops: Design development is a very important aspect for developing new and value added products. Special care may be taken for designing new products which can be conveniently used as alternatives for some of the plastic products. New technologies and applications may be evolved and small and medium-sized enterprises (SMEs) may be promoted in bamboo diversification, quality improvement and market development for diversified bamboo products.

C. Financial interventions

The SHGs formed with artisans may be linked to State Bank of India, respective branches to meet the credit requirement of the artisans. The bank may be associated from the initial stage itself. Similarly, the Cooperative Banks are also expected to associate for credit needs of the artisans.

D. Marketing interventions

- a) Exhibitions: Exhibitions are a must for the proper marketing as well as dissemination of the possibility of making and using bamboo products. This is utmost necessary for exploring the local and domestic markets. Even State Government Self Help Group Marketing Corporation may tie up with Kishore Biyani's Future Group/Dilli haat/ECO-BAZAR to retail bamboo products from counters within the Pantaloon and Big Bazar stores.
- b) Website hosting: The federation of artisans should also have their own website for promotion and marketing of the products for which all support will be extended by State Government Self Help Group Marketing Corporation.

CONCLUSION

The traditional bamboo artifacts of West Bengal need an image make-over and they could achieve it only through visibility and publicity. The producers need to be more aware of the recent trends, fashions and quality control in functional as well as financial matters and also the business culture. They need to take more initiatives in marketing and advertising of their products. They should associate themselves with Kishore Biyani's Future Group or Dilli haat, for better visibility. The producers need to pay the craftsmen/SHGs more in order to stop them from changing profession. If needed, bulk lending may be made with players like NABARD & SIDBI in case of collaboration. Government should show more responsibility towards the bamboo industry. Institutional mechanism for delivery should be strengthened by capacity building through appropriate training of all stakeholders and linking all the schemes of Central and the State aimed at improving socio economic condition of the urban poor through a nodal body which could be the Department of Municipal Affairs and Urban Development. The role of banks in providing loans to SHGs leaves much to be desired.

The studies further revealed that the involvement of the communities other than the traditional community is necessary to remove the stigma attached to the craft. It was one of the reasons for the reluctance of the new generation in the traditional bamboo community form taking on to bamboo work. It was rightly observed that modernization and diversification of the sector with respect to the product and design, technology and marketing is much needed for the survival and growth of the sector. That paved way to the ongoing developmental activities in the sector. Moreover, to promote bamboo artifacts, crafts should be produced in a highly acceptable and fashionable way. There should not be any comparison with plastic products on cost terms. Constant product innovation is the key and for this purpose, diversified products should be thought of to suit the needs of people. And finally, environment consciousness among people should be raised so that future holds good. The theme should be: If we live healthy today we will have healthier tomorrow.

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