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A diagnostic report on cluster development programme of Shantipur handloom cluster, Nadia, West Bengal
Part I – Evolution of the cluster and cluster analysis

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Integrated Handloom Cluster Development Scheme (IHCDS) is being implemented by the Development Commissioner for Handloom, Ministry of Textile, GOI since the year 2005-06 with a broad objective to develop traditional Indian handloom clusters in an inclusive and holistic manner. One of the important objectives of this scheme is to build the clusters' capacity to meet the challenges of the market and make them globally competitive. Presently, IHCDS is operational in 20 selected clusters spread across 12 states. Identification of potential markets and promotion of market driven designs are some of the essential approaches for the development of any handloom cluster and till now modest attention has been paid towards market developmental activities like market assessment, study of market trends and export potential for its products. The three-part series of papers reports on the cluster development programme of Shantipur handloom cluster to formulate a sustainable business plan as well as marketing plan to assist this historic cluster to compete in the ever challenging textile business. Part I describes the evolution/historical back ground of the cluster, its geographical location, existing cluster structure and infrastructure analysis to facilitate formulation of a sustainable business-cum-marketing plan to be reported in subsequent parts for the development of the cluster.

Keywords: Handloom cluster development, Traditional handloom, Master weaver
IPC Int. Cl.[8]: D01, D06C, D06F

The handloom textiles constitute a timeless facet of the rich cultural heritage of India. As an economic activity, handloom sector occupies a place next only to agriculture in providing livelihood to the people. About 65.51 lakh persons are directly or indirectly engaged in weaving and associated activities in the handloom sector[1,2]. The element of art and craft present in Indian handlooms makes it a potential sector for the upper segments of the market, both domestic as well as global[1]. As estimated, about 84% of total handlooms in the world are in India[3]. However, the sector is beset with manifold problems such as obsolete technologies, unorganized production systems, low productivity, inadequate working capital, conventional product range, weak marketing link, overall stagnation of production and sales and above all, competition from powerlooms and mill sector. In spite of all these constraints, handloom forms a precious part of the generational legacy and exemplifies the richness and diversity of our country and the artistry of the weavers. Tradition of weaving by hand is a part of the country's cultural ethos. Handloom is unparalleled in its flexibility and versatility, permitting experimentation and encouraging innovation. Innovative weavers with their skillful blending of myths, faiths, symbols and imagery provide the fabric an appealing dynamism. The strength of handloom lies in introducing innovative design, which cannot be replicated by powerloom sector[1]. As a result, in spite of the threat offered by the powerloom sector, this sector accounts for 13% of the total cloth produced in the country (excluding cloths made of wool, silk, and hand spun yarn) and also contributes substantially to the export earnings even in this era of global competitiveness[2]. Handloom sector in India is highly decentralized and dispersed and handloom weavers can be found in over 400 clusters in the country. In view of the high employment in the sector and cost disadvantages faced by handlooms compared to the mill and powerloom sectors and due to the manual nature of production, the Government of India had been following a policy of protection of the handloom sector since long. This policy consists of subsidy for

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production of yarn supply, marketing rebate on sales, and exemption from excise duty on hank yarn which has recently been discontinued[4].

The Government has come up with a new scheme, namely Integrated Handloom Cluster Development Scheme (IHCDS). As per this scheme, weavers who are organized as clusters would get the assistance directly from the Union Government. On the basis of the recommendations of the Standing Committee on Labour, the scheme is proposed to be implemented in 20 Pilot Project Sites or handloom clusters. The Committee also recommended that all the handloom clusters in the country should be covered by the scheme within a definite period of time[1]. The scheme aims to focus on formation of weavers group as a visible entity, develop the handlooms weavers' groups to become self sustainable, inclusive approach to cover weavers both within and outside the co-operative fold, skill up-gradation of handlooms weavers/workers to produce diversified products with improved quality to meet the market requirements, provide suitable workplace to weavers to enable them to produce quality products with improved productivity, etc. Under the scheme, clusters of about 300–500 looms each will be taken up for development in a time frame of 3 yrs. It is proposed to take up about 625 clusters during the 11th Five Year Plan. The new Integrated Handlooms Development Scheme has been approved by the Government on November 26, 2007.

The handloom industry in West Bengal mostly produces traditional items like *sarees*, *dhotis*, *gamcha*, towels, *lungies* and of late, there has been a tendency to switch over to the production of furnishing and high quality items like stoles, scarf for exclusive export market. So far as the *sarees* and *dhotis* are concerned, they include both fine and coarse varieties grey, dyed or bleached. As this industry spreads throughout the state, the item wise production pattern varies from district to district. In North Bengal districts of West Dinajpur and Malda, coarser varieties of coloured *sarees* are mostly produced. But in Nadia and Hooghly, *sarees* like *Tangails* and *Dhaniakhalis* are mainly produced, where the fabric is fine and costs high. In Bankura, Purulia and Midnapore, the main products are bed sheets, bed covers, window screens, etc. besides ordinary *sarees*. In Midnapore, mosquito curtain cloth is also produced. In the district of South 24 Parganas, surgical cloth is mainly produced. In spite of several products, West Bengal is especially famous for its *sarees* made from fine quality cotton or silk yarn. *Shantipuri* (Fig.11), *Jamdani*, *Baluchari*, *Tangail* and *Murshidabad silk*, each having some specialty of its own, have become a brand name in the market which cannot be replicated by powerloom. In West Bengal, there are 3,50,994 handlooms providing direct and indirect employment to about 6,66,514 persons. So, handlooms in West Bengal have important contribution towards economy of the state[3].

Methodology

Besides the surveys, information was also collected through secondary sources from the areas/localities concerned. The survey was primarily of two types, viz. intensive (involving detailed studies of the cluster to formulate a sustainable Business Plan as well as Marketing Plan to assist the cluster to compete in the increasingly challenging textile business by meeting various cluster actors individually in mass while staying there for more than a week and extensive by doing in-depth work/survey within several villages/ localities/ *Gram Panchayets* under the entire cluster. Data were collected by interviews, observations and active participation. On reaching a locality, rapport was made with one or two persons, preferably the chief, and contact was then established with other people of the locality. Generally, two types of interviews were taken, firstly of individuals (selected at random but chosen from the entire value chain) and secondly of groups, in which more than one individual / member of different societies, consortia, NGOs, etc. were approached (Tables 3&4). In order to get the total picture of the entire value chain of the cluster, the following agendas / areas have been covered; meeting with the individual weavers/master weavers/yarn merchants/designers/ *mahajans* to understand the problems in running the business; to understand the financial modalities, i.e. how the different cluster actors get finance from bank or merchants or other sources; modus operandi of the yarn merchants, prices of various types of yarns consumed, their sources, counts (Table 2), etc.; kind of products manufactured in the cluster and the possibility of product diversification (Figs.11&12); markets of existing / traditional products and diversified products, and possibility of exports; *Mahajans* and their business model; methods of yarn dyeing and preparatory, different dyes and chemicals used, and problems faced therein; level of technology employed in chemical processing, designing, weaving

including preparatory processes and finishing; level of appropriate technology that can be deployed in every step of fabric manufacturing; and different Government policies and support measures, and awareness of the same among the different cluster actors. Nadia district occupies a very important place in the field of handloom industry. The traditional production of *Jamdani saree* of Nabadwip, *Shantipuri* (Fig.11) of Shantipur and *Tangail* varieties of Phulia, a township very near to Shantipur has been popular in the domestic market[5]. Shantipur had been a seat of Sanskrit learning and literature, The weavers of Shantipur have made themselves famous by their professional aptitude in making *Tant saree*[6].

Shantipur handloom cluster

Presently, Shantipur (located at 23.25^0 N 88.43^0 E) is a city and a municipality in Nadia district of West Bengal. This small town, located in the Ranaghat sub-division of the district and about 18 km away from Krishnagar (Fig. 1). Shantipur cluster includes municipal areas of Shantipur and the *Gram Panchayet* area of Phulia except one *Gram Panchayet*. This cluster falls under one (Nadia) of the 20 pilot project sites under IHCDS of our country[6,7]. Shantipur is about 90 km away from Kolkata and is well connected by road and rail. After partition of India, many skilled weavers of Dhaka came and settled in West Bengal around Shantipur and Ambika Kalna of Bardhaman district, both traditionally renowned centres for hand-woven fabrics. With government encouragement and support, the talented weavers soon revived their ancestral occupation and the art of exquisite weaving once again flourished. Today, finely woven feather-touch textiles and *sarees* in exotic designs and colours are being produced in the vast weaving belt of Shantipur, Phulia, Samudragarh, Dhatrigram and Ambika Kalna, each centre producing superb fabrics in its own unique weaving style. Shantipur is known for superfine *dhotis* and *jacquards sarees* (Fig.11). The produce is marketed through co-operatives (Table 3) and various undertakings.

So far as the information are available, the weaving started at Shantipur in long back perhaps in 1409 and the weavers used to manufacture *sarees* during 1683–1694 when king Rudra Roy was ruling Nadia[8]. During the Mughal Regime, the production process was made systematic to some extent and the products achieved due recognition. *Sarees* were exported to Arab, Greece, Turkey, Iran, and Afghanistan that time. Thereafter, the said industry came into the control of East India Company till the Governor General came into existence. Superfine hand spun cotton yarns of 250^s – 300^s Ne were used for the manufacturing of quality *sarees* by expert weavers. Later barrel Dobby was introduced by Sri Darga Das Kastha during 1920–1925 and the throw shuttles were converted to fly shuttles. Sri Debendranath Mukherjee introduced Jacquard machine, which widened the scope of designing from simple to intricate and also variety. In view of political reasons prior to independence, many weaver families belonging to *Vaishnava* religion migrated from East Pakistan (presently Bangladesh) and settled at the places nearby *Nabadweep* (Nadia district), which they considered as holy place. So, Shantipur and its surrounding areas were rich in expert traditional handloom weavers. Gradually, *Shantipuri saree* (Fig.11) became the brand name of the product of Shantipur. It is popular for the fine and uniform texture. The *sarees* are famous for the

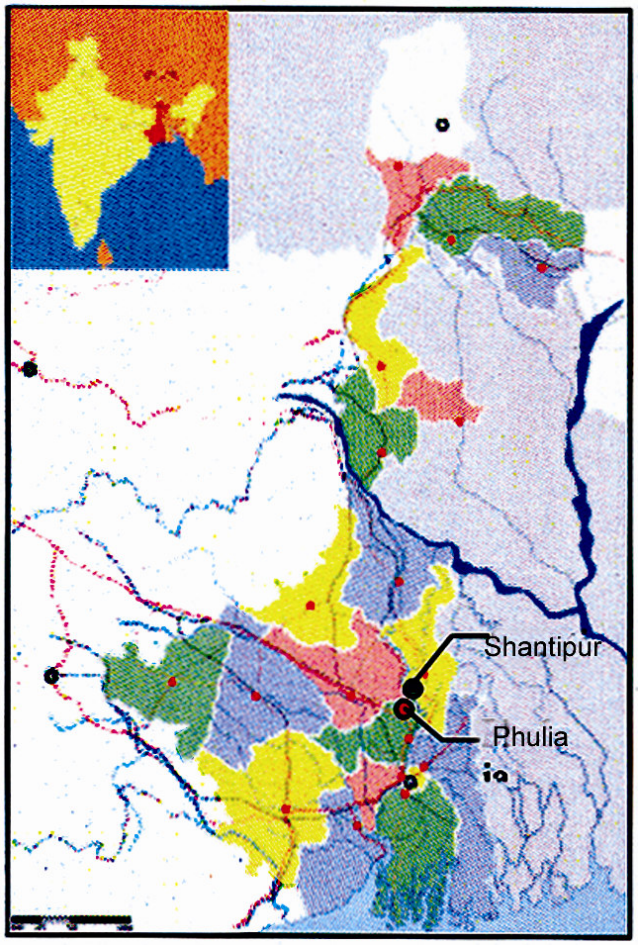

Fig.1–Location map of the study area

designs used with extra warp in the border and cotton ground base. *Muga*, twisted cotton, *zari*, viscose (art silk), and polyester are used for the extra warp. Depending upon the designs, colour, pattern, *Shantipuri sarees* (Fig.11) are named as *Nilambari*, *Gangajamuna*, *Benkipar*, *Bhomra*, *Rajmahal*, *Chandmalla*, *Anshpar*, *Brindabani Mour Par*, *Do-rookha*.

Structure of the cluster

The core actors of the cluster are the weavers and master weavers. The evolution of the weavers into the master weavers tells about the organic relation that these core cluster actors enjoy amongst themselves. This further shows how the growth of the cluster has provided opportunities to a weaver to develop into a master weaver. Previously this category of weavers were engaged in weaving only, but today they undertake the overall responsibility of supplying the raw material to the weavers, provide the designs and pay wages to the grass root level weavers; and then supply the *sarees* to the *Mahajans*. *Mahajans* provide design and colour information and a better price realisation for the *saree*, but on the other hand make the transactions on credit. A part of the production of master weavers is also sold in the local *Haat* (Figs.5&6) of Shantipur. The modal unit size of the master weavers is 4 looms. There are few master weavers having 10-60 looms under one shed. The master weavers apart from the weaving earning of one loom earn profit margins from the products weaved on other looms engaged by weavers under him. There are approximately 70,000 working looms and 2, 10,000 persons involved directly/indirectly in the weaving and preparatory activities in the entire Shantipur cluster including Phulia sector. The women basically perform the preparatory works like separation of hanks, sizing and bobbin/pirn winding. There are around 111 different weaving communities namely the *Pramanik*, *Kastha*, *Dalal*, *Khan,* etc. Majority of the weavers belong to *Tantuvay* community. All the weavers have good weaving skills for weaving *saree* on Jacquard looms.

Dyeing is basically carried out in more than 90 commercial dye houses or dyeing units which, based on the quantity of yarn dyed, are categorized into large, medium and small units (Figs.2,3&7). About 60% of the total yarn sales are in the form of coloured yarn (Fig. 4), and the remaining about 40% is in the grey form. The yarn traders employ the large and medium scale for dyeing where as the small-scale unit does the job work for the master weavers. The designers in the cluster make designing work using their own creativity and imagination. They neither have a formal education nor a proper mechanism to update their knowledge skills. For lack of proper exposure and orthodox nature, the skills of the majority of the designers are tradition based. Their main role in the cluster is to do costing for the master weaver, and supply them the punched cards for the Jacquard.

Other cluster actors

The main raw material required for the cluster is cotton yarns, *zari* and art silk yarns. Cotton yarns are obtained from the traders/suppliers of Kolkata. Other type of yarns are polyester filament, silk (mulberry, Chinese, Bangalore), and fine woolen yarn. There are more than 100 yarn traders at Shantipur (urban area) supplying various yarn types, dye staffs and other chemicals (Table 2). There are more than 100 loom manufacturers and loom accessories suppliers. Mostly fly shuttle pit looms of width 130– 40 cm are being used in the cluster with 100-150 hooks Jacquard; 99% of the looms have Jacquard attachment. Few looms of the SHG's were noted to be without Jacquard. These suppliers source the Jacquard m/c from Kolkata. There are more than 700 registered traders with the *Taant Vastra Vyabsayee Samiti* and they are the key persons carrying out the marketing activities. These traders initially supply the design and colour combination to the master weavers, and the master weaver arranges the production. The local traders in turn supply these *sarees* and other fabrics to the traders of Kolkata. From Kolkata these products are distributed to different corners of the state and to other national markets. Various support institutions and their roles for the development of the cluster are mentioned (Table 1). Most of the cluster actors are totally unaware of the various welfare schemes/measures of the State and Central Government[1,2]. Only the weavers under the Co-operative Societies are availing these facilities, that too in very small percentages due to lack of proper awareness and lack of willingness of paper works to avail them, and partially due to administrative delay (Table 3).

Fig.2 Largest dye house of Shantipur sector

Fig.3 Effluents discharged

Fig.4 Dyed yarn is transported

Fig.5 Local *Haat* in Shantipur

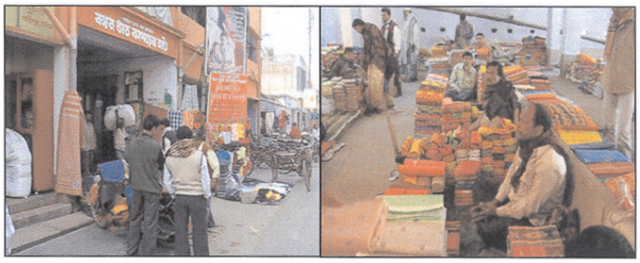

Fig.6 Ghosh market in Shantipur locality

Fig.7 Dye house of Phulia sector

Fig.8 Modern equipments in the dye house of Phulia

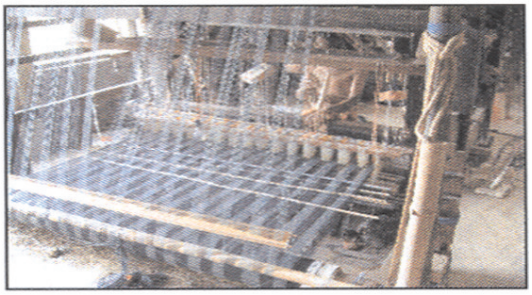

Fig.9 Exportable fabric is being woven

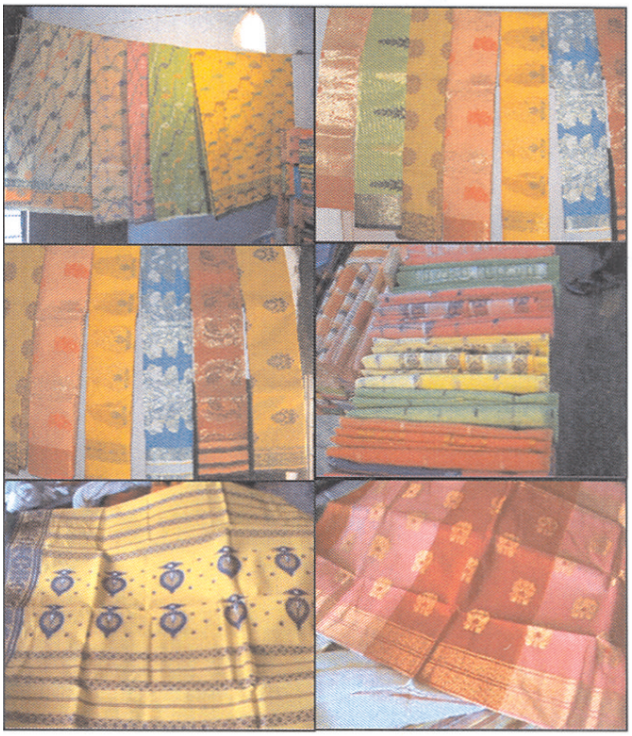

Fig.11 Traditional *Shantipuri* /Jacquard *sarees*

Fig.10 Finishing-cum-calendaring room

Fig.12 Diversified exportable fabrics

Table 1 — Various support institutions and their roles

Support institutions	Roles
Directorate of Textile & Handloom (Handloom Development Offices)	Implementation and monitoring of various Government schemes.
Weavers' Service Centre (WSC), Kolkata	R&D support and implementation of central schemes and training programme.
National Handloom Development Corporation (NHDC)	To supply basic raw materials like yarns and dye stuffs at the Mill Gate Prices to the organized sector of the Handloom Industry, and organize training cum workshops on technical and managerial issues.
Indian Jute Industries Research Association (IJIRA)	To provide testing facilities of physical, chemical and limited eco parameters.
Regional Training cum Demonstration Centre (RTDC)	To impart training to the local weavers on loom motion, parts, dyeing and advanced weaves.
CAD/CAM Centre, Shantipur	To offer training courses on computer aided designing on nominal fees.
National Institute of Fashion Technology (NIFT), Kolkata	To provide training cum R&D support in the field of fashion and designing.
Apparel Training & Design Centre (ATDC), Kolkata	To conduct training programme on apparel design and manufacture.
Textile Engineering Colleges of WB; Government College of Engineering & Textile Technology (GCETT), Serampore, GCETT, Berhampore, Silpa-Sadana, (Visva-Bharati University)	To participate in various small projects and knowledge dissemination programmes.
Financial Institutions (one credit co-operative bank and three nationalized banks; SBI, Allahabad Bank and UBI)	To offer different products under the existing schemes like Prime Minister Rojgar Yojana, Swarna Jayanti Swarojgar Yojana, term loan, etc. to the handloom industry.
Tant Vastra Vyabsayee Samiti	Promotion of CAD/CAM centre, advocacy issue, charity activities, imparting training to the weavers.
Local *Haat* (one having 700 stalls with good infrastructure another with a capacity of 200 stalls) (Fig.5 &6).	To support the sales activities of the local weavers, master weavers and small traders.
Textiles Committee, Shantipur	Export promotion and quality appraisal, testing, market research, Total Quality Management, cluster development.
National Productivity Council	To conduct project study on various issues relating to cluster development.
NGOs (two actively working)	To play proactive role in social security systems, health care, capacity building of local artisans in marketing.

Table 2 — Rates of cotton yarns as procured by the *mahajans* from local yarn merchants (January, 2009)

Yarn count(Ne)	Rate per bundle of 4.5 Kg [Rs.]
80^s Amravati (DHPR)	900
84^s Amravati (DHPR)	920
100^s Thiruvalluvar (DHCR)	1300
$2/100^s$ Nagamal (DHCR)	1280
$2/80^s$ Sugavaneswara (DHPR)	950
$2/60^s$ Manasha Lakshmi	670

DHPR: Double Hank Plain Reel; DHCR: Double Hank Cross Reel

Table 3 — Active co-operative societies in the cluster (out of 52 registered societies of WB)

Name of society	Address
Pareshnathpur Bandhab Co-op. Weavers Society Ltd	PO – Fulia Colony, PS – Shantipur, Nadia – 741402.
Jibandeep Tantubay Samabay Samity	–Do–
Fulia Progotisil Tantubay Samabay Samity Ltd	–Do–
Nutan Fulia Tantubai Samabai Samity, Samabay Sadan [Society No. 1]	–Do–
Tangail Tantujibi Unnayan Samabay Samity Ltd, Samabay Sadan [Socity No. 2]	–Do–
Fulia Tangail Shari Bayan Silpa samabay Samity Ltd, Samabay Sadan [Society No. 3]	–Do–
Shantipur Kutirpara Co-op. Weavers' Society Ltd	Kutirpara, PO + PS – Shantipur, Nadia.

Infrastructure and value chain analysis of the cluster

This handloom cluster has good infrastructural facilities as regards water, road, electricity, banking facilities, and good connectivity by road and train. The cluster possesses some inherent strength in terms of rich resources of traditional skills and overall better economic condition of the weavers than those of many other handloom clusters. However, the cluster has some inherent weaknesses too. The entire process chain is disintegrated (Figs.13&14) that means too much material handling resulting in higher cost of production and lower profit margin of the produce.

Table 4 — Consortium already formed in the cluster

Name of Consortium	Address
Shantipur Handloom Weavers' Consortium (Manufacturer, Retailer & Wholesaler of Handloom Products)	KK Tala Street (TP Pramanik Lane), Sutragarh, Shantipur, Nadia 741 404.
Fulia Kritwiwas Handloom Weavers' Consortium	No 2, Nutan Fulia (Mathpara), PO Fulia Mathpara, Nadia
Shantipur Designers' Consortium (registration filed, yet to function)	—

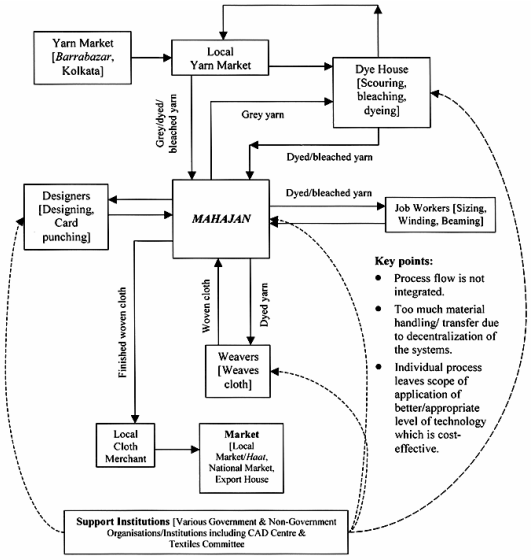

Fig.13–Existing value chain/process flow (controlled by *mahajans*/master weavers)

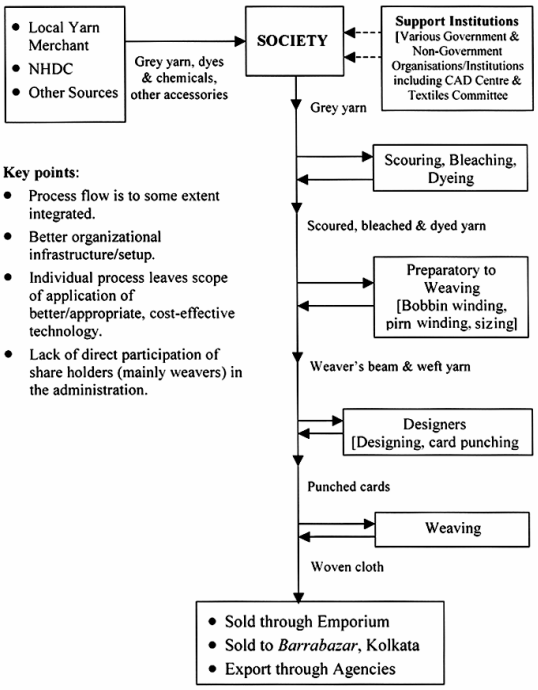

Fig.14–Existing value chain/process flow (controlled by co-operative societies)

Table 5 — Information about the cluster

No of active looms in the cluster	70,000 (approx).
No of people engaged (directly or indirectly)	2,10,000 (approx).
Status of the weavers	Under *Mahajan* in majority of the cases, a few under society (Table 3) or consortium (Table 4).
Source of capital of the cluster actors	Own (in majority of the cases).
Main product	*Sarees* (Fig. 11).
Other major products	*Dhotis*, dress materials, exportable fabrics like stoles, scarfs, etc. (Fig. 12).
Major yarn types used	100^s, $2/100^s$, 84^s, 80^s, $2/80^s$, $2/60^s$ Ne cotton yarn.
Other types of yarn used	Viscose (Art silk), polyester and *zari* for boarder. Silk, wool, fancy yarns (Lycra/*elastic*, crepe yarn, etc.) for exportable items.
Type of dyes used	Direct, Vat, Azoic, Procion (Reactive) for domestic items Vat, Acid, Procion, Vegetable for export items
Average cost of dyeing (for all dyes)	Rs 140/- per bundle of 4.5 kg yarn
Average profit in dyeing per bundle	Rs 5/-
Average production / weaver / week (6 days)	5 *sarees*
Average wages paid to the weaver per *saree*	Rs 65–110/- (depending upon designs)
Average monthly wages of the weaver	Rs 2000–3000/- (depending on nature of job)

Over the years, the cluster has acquired poor image due to poor product quality as compared to nearby clusters /sectors. This is due to lack of willingness to adopt appropriate level of technology/modern methods /design experimentation/product diversification, lack of product and process innovation, value addition step except weaving (Fig.9), and finishing process except ironing/calendaring /mending /stitching (Fig.10). The local master weavers have demand for centralized dyeing units equipped with modern high speed and cost effective machineries (Figs.7&8) with effluent treatment plant, and yarn bank, information kiosk, and better market facility especially centralized export house/outlet, etc. In spite of all the odds, there is growing opportunity for market diversification, product diversifications (Fig.12) in exports and local markets, and scope for productivity and quality improvement in entire process chain by adopting

appropriate level of technology/contemporary methods in every step of production cycle thereby ensuring better price realisation of the produce, and in turn empowerment of the entire handloom weavers' community of the cluster.

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References

1 Anonymous, Development Schemes for Handloom Sector, 9th Report, Standing Committee on Labour, 14th Lok Sabha, (Ministry of Textiles, Government of India), 2005–06.

2 Anonymous, Annual Report, (Ministry of Textiles, Government of India), 2007–2008.

3 URL: http://www.texmin.gov.in accessed on 15–01–2009.

4 URL: http://edi-handlooms.org accessed on 15–01–2009.

5 URL: http://nadia.nic.in/District_Profile/ accessed on 16-01–2009.

6 URL: http://en.wikipedia.org/wiki/Shantipur accessed on 16-01–2009.

7 URL: http://indianhandloomcluster-dchl.net accessed on 16–01–2009.

8 URL: http://indianhandloomcluster-dchl.net/Nadia/ accessed on 16–01–2009.