

**CONFLICTING TECHNOLOGICAL SYSTEMS IN
TEXTILE INDUSTRY: A STUDY OF SELECTED
HANDLOOM AND POWERLOOM INDUSTRIES IN
ODISHA**

**A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE
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DECLARATION

I hereby declare that the thesis entitled “**Conflicting Technological Systems in Textile Industry: A Study of Selected Handloom and Powerloom Industries in Odisha**” is the result of investigation carried out by me at the Department of Humanities and Social Sciences, Indian Institute of Technology Guwahati, under the supervision of Dr Sambit Mallick and Dr Liza Das. The work has not been submitted either in whole or in part to any other university / institution for a research degree.

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**“Conflicting Technological Systems in Textile Industry: A Study of Selected
Handloom and Powerloom Industries in Odisha”** for the degree of Doctor of
Philosophy at the Indian Institute of Technology Guwahati. The work was carried out
under our supervision and in strict conformity with the rules laid down for the purpose. It
is the result of his investigation and has not been submitted either in whole or in part to
any other university / institution for a research degree.

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Abstract

Indigenous knowledge systems have been produced by local people to get in touch with environment by living in a particular area across generations and helps people in decision-making about their fundamental activities. The Western knowledge systems, depicted as widespread and reliable, have marginalized and dominated indigenous knowledge systems and have an unfavorable impact on all forms of performances of indigenous knowledge system which has resulted in marginalization or in some cases loss of practices of indigenous knowledge systems. Legal, government and academic channels transmit such ethnocentric knowledge to promote capitalist and often ecologically destructive policies and practices.

The current system of erosion of indigenous knowledge system is in progress because of rapid growth of population, global markets, learning system and growth process related to rapid transformation and cultural homogenization. The intercontinental market-oriented fabric production focused on only mounting the manufacture and undervaluing the nearby custom-made handloom technologies in this manner responsible for the attrition of indigenous expertise namely handloom. Even the government-sponsored strategies and proposals do not have any realistic practicability at the proletariat level. With increasing poverty powerlooms are selected over environmentally-sound local practices such as handlooms.

With escalating paucity, the weavers for instance may also have very less time and very fewer resources to uphold the exciting character of indigenous knowledge through their local researches and innovations in that way contributing to the predicament of the handloom industry. With ready accessibility of low-priced powerloom fabric the diversified handloom cloth seems less pertinent. In short term the powerloom product seems to diminish the multiplicity of handloom product, contributing

to the loss of the local varieties of handloom product. The traditional knowledge system thus gets endangered because of disturbance faced by traditional communities. The commotion may be seen in terms of external forces such as unsuspecting imposition of Western technological system. Transversely the world while one model of modern education and mass communication spreads, it causes a menace to the indigenous knowledge system. Conventional knowledge gets scarcer because the newer age group is not concerned to know it from the older age group or older age group finds it difficult to pass it to the newer age group because of differences in their civilization supported by globalization. Development efforts that pay no attention to local situation, local knowhow and local knowledge system waste most of their precious time and capital. If we compare numerous western technologies, aboriginal technologies have proved to be efficient, reasonably priced, nearby available and culturally appropriate.

Against this backdrop the present thesis is an empirical study about the extinction of indigenous knowledge system (handloom) in western Odisha and extinction of Western knowledge system (powerloom) and indigenous knowledge system (handloom) in coastal Odisha. The indigenous knowledge system (handloom) in western Odisha is unable to flourish because of a lack of government support. The uncritical introduction of powerloom in coastal Odisha has failed to promote effective management of the existing available handloom technology at the local level thereby contributing to the predicament of the handloom technology. The introduction of powerloom has failed to achieve the desired result in coastal Odisha i.e. sustainable development because of lack of proper infrastructure like electricity, pre- and post-weaving arrangements, working capital, proper marketing facility, product diversification, etc. Only dependencies have been created by the outside world on powerloom technology that orders and demands but do not truly contribute to the development.

CHAPTER I

INTRODUCTION

1.1 Introduction

The conflicting interests between two knowledge systems, viz. indigenous and modern knowledge systems – represented by handloom and powerloom – have significant implications for the ways in which they are socially, economically, politically, culturally and institutionally embedded (McKenzie and Wajcman 1999). Indigenous/local/traditional knowledge systems have been generated by local people in contact with nature by living in a particular area across generations. Local knowledge helps people in decision-making about vital activities concerning their health, environment, safety and regulations (Grenier 1998; Hansen and VanFleet 2003). But now the practices and policies of colonization seem to have had adverse impact on all forms of practices of indigenous knowledge. The Western knowledge systems, depicted as universal and authoritative, have marginalized and subjugated indigenous or traditional knowledge systems, and are in continuous attempts to legitimate their own knowledge while de-legitimizing indigenous knowledge systems. Legal, government and academic channels transmit such ethnocentric knowledge (Western knowledge systems) to promote capitalist and often ecologically destructive policies and practices. This ethnocentric knowledge system underestimates and undervalues the indigenous or traditional knowledge systems, which has resulted in marginalization or in some cases loss of practices of indigenous knowledge systems.

1.2 Powerloom as a Western and Handloom as an Indigenous Knowledge System

Powerloom is a mechanised loom developed by Edmund Cartwright in Europe in 1784. On the one hand, since powerloom is a product of Western civilization, it is seen

as a part of Western knowledge system. Handloom, on the other hand, is the oldest cottage industry of India (Rao 1990) for which it is an indigenous knowledge system.

The current system of erosion of indigenous knowledge system is accelerating because of rapid growth of population, international markets, educational system and development processes related to rapid modernization and cultural homogenization (Grenier 1998). The international market-oriented textile production focused on only increasing the production and devaluing the locally adapted handloom technologies thereby being responsible for the erosion of indigenous technology, namely, handloom. Even the government-sponsored policies and schemes do not have practical feasibility at the grassroots level. In other words, the standard of living of the people engaged in indigenous technological systems in reality remains the same. With increasing poverty, short-term gain practices (powerloom) are selected over environmentally-sound local practices such as handloom. Further, the weavers for example may also have very less time and fewer resources to sustain the vibrant nature of indigenous knowledge through their local experiments and innovations, thereby contributing to the plight of the handloom industry. With ready availability of cheap powerloom cloth the diversified handloom cloth seems less relevant. In short term the powerloom products seem to reduce the variety of handloom products, contributing to the loss of the local varieties of handloom products. The traditional knowledge system thereby gets threatened because of disruption faced by traditional communities. The disruption may be seen in terms of external forces such as uncritical imposition of Western technological system. Neither adults nor children spend as much time in their community any more. For example, some people travel on a daily basis to the city for school, college, office, etc.

Across the world since one model of modern education and mass communication spreads, it poses a threat to the indigenous knowledge system by ignoring multiple

modernities. Traditional knowledge gets endangered because the newer generation is not interested to know it from the older generation, or the older generation finds it difficult to pass it to the newer generation because of differences in their culture owing to globalization (Kothari 2007).

The erosion of indigenous knowledge is still in evidence. In many countries official propaganda portrays indigenous cultures and methodologies as backward and obsolete and simultaneously encourages one national culture or one global culture, one language and one technology at the expense of minority cultures, languages and technologies. Often the formal schooling patterns strengthen this negative attitude. Some local people and communities lose self-reliance in their ability to help themselves and seek external solutions to their local problems. Some critics have observed that communities getting the most outwardly driven support become less competent to handle their own issues (Grenier 1998). A few development solutions based on such support are incorrect assumptions, not economically feasible or culturally acceptable, and often abandoned. Some technical solutions are introduced by people who do not belong to that particular community, and often solving the local unemployment problem becomes futile. The introduction of technical solutions such as introduction of powerloom in a rich handloom base only may be beneficial to the smaller number of people from relatively privileged groups. What matters is not technology itself, but the social or economic system in which it is embedded (Winner 1986).

Development efforts that ignore local circumstances, local technologies and local systems of knowledge waste most of their valuable time and resources. If we compare many western technologies and indigenous technologies, we find that the latter have proved to be effective, inexpensive, locally available and culturally appropriate. Only

western techno-scientific approaches are not adequate to face today's multifaceted web of social, economic, political and environmental challenges.

The introduction of powerloom technology in the rich handloom base of coastal Odisha has resulted in the destruction of the indigenous knowledge system as well the western knowledge system i.e. powerloom. The uncritical introduction of powerloom fails to promote effective management of the existing available handloom technology at the local level thereby contributing to the plight of the handloom technology (indigenous technology). The introduction of powerloom failed to achieve the desired result in coastal Odisha, namely, sustainable development. Only dependencies have been created by the outside world on powerloom technology that orders and demands (through laws and natural resource regulations) but do not truly contribute to the development. "Communities are often left to find their own means" (de Vreede 1996).

Against this backdrop the present thesis is an empirical study about the extinction of an indigenous knowledge system owing to the uncritical introduction of western knowledge system by the Government of Odisha.

1.3 Review of Literature

The disruption of the traditional community leads to the decline of the handloom. The problems of a modern society are associated with all changes which have experienced the course of industrialization. These problems are (a) the disruption of traditional communities, (b) the stress placed on the individual and the smaller family unit, and (c) the development of factories, large bureaucracies and large-scale urban living, and so on. (Watson 2003). All these factors lead to the decline of handloom as an indigenous technology.

The structures, values, norms and processes are the source of both hindrances and opportunities which people meet when living their lives. The better and more widely

these culture and processes are understood and the better the connections between specific actions or arrangements are appreciated, there is the greater opportunity for human control over work, industry and every other kind of social institution (Watson 2003). The Government of Odisha, instead of understanding the rich handloom culture of a particular place introduced an alien technology which resulted in the destruction of both indigenous as well modern technologies in Odisha.

According to Taylor (1910), scientific management involves the following approaches, viz. (a) the scientific management has to be done efficiently in order to make the workshop as efficient as possible; (b) the design of the job has to be done in such a way, so that adequate division of labour can be done in accordance to the work; (c) the separation of planning of the work from its execution; and (d) the use of incentive payment systems both to stabilize and intensify workers efforts (Watson 2003). However no specific rules are properly followed in the textile sector of Odisha.

1.3.1 Workers' Alienation:

With the growth of modern industrial capitalism we see the work ethics spreading further and wider. Modern work ethics says that work is the essential prerequisite of personal and social advancement. It is the symbol of prestige, virtue and self fulfilment (Watson 2003). But sometimes human beings cannot achieve self fulfilment in their work and feel alienated. The basic notion underlying the concept of alienation is one of separation (Schacht 1970). Workers are in various ways seen by Marx (1967) as alienated in capitalist societies. Firstly they become alienated from other people since relations of production are merely calculative, self-interested and untrusting. Secondly, they become alienated from the product, since these products will not help them in any way. Thirdly, they are alienated from their own labour, since they do not derive satisfaction from the labour because labour is forced upon them as a means of meeting

other needs. Moreover, they are in the control of other people in the work situation. This theory is applicable for the decline of powerloom in the state of Odisha. Since powerloom was introduced in Odisha with a view to fulfilling the vested interest of a small group of people, the powerloom weaver feels alienated in the work situation.

1.3.2 Intrinsic and Extrinsic Satisfaction in Work:

Some kinds of work give intrinsic satisfactions and others give extrinsic satisfaction. Work which gives intrinsic satisfaction is work that provide an enriching experience, challenges to the individual, and the individual develops and fulfils oneself at work. In such cases work has an expressive meaning. Work which gives extrinsic satisfaction says that work yields no value in itself, it becomes a means to an end and human satisfaction of fulfilment is sought outside work. Here work has an instrumental meaning. The workers are said to have an instrumental orientation to their work (Watson 2003). In the case of handloom industry, the 'work' provides intrinsic satisfaction whereas in the case of powerloom industry, the 'work' offers extrinsic satisfaction.

According to Goldthorpe (1968), there are three types of orientation to work: (a) an instrumental orientation found in the affluent manual workers, (b) a bureaucratic orientation found among white collar employees, and (c) a solidaristic orientation found among the traditional working class.

Table 1.1: Types of Orientations to Work

Orientation to Work	Primary Meaning of Work	Involvement in employing Organization	Ego-Involvement	Work and Non-Work relationship
Instrumental	Means to end. A way of earning income	Calculative	Weak. Work not a central life interest or source of self-realization	Spheres sharply dichotomized. Work relationships not carried over into non-work activities
Bureaucratic	Service to an organization in return for career progress	‘Moral’ elements: some sense of obligation	Individual’s positions and prospects are sources of social identity	Not sharply dichotomized. Work identity and organizational status carried over
Solidaristic	Economic but with this limited by group loyalties to either mates of firm	‘Moral’ when identification is with firm. ‘Alienative’ when this is more with workmates than with employer	Strong social relationships at work are rewarding	Intimately related. High participation in work-linked formal or informal associations

Source: Goldthrope (1968)

Different attitudes will prevail in different work situations. In handloom sector of Odisha, solidaristic orientation of work was found, whereas in powerloom sector instrumental orientation towards work is found.

1.3.3 Self-identity and Subjectivity at Work:

Research indicates that various factors influence the individual approaches to work. The factors are both subjective and objective. Objective factors are wage, skill, knowledge and physique. Subjective factors are motives, interests and expectations such as will make a healthy living, gaining power and job satisfaction. (Watson 2003). In handloom industry the subjective interest was fulfilled where as in powerloom industry objective needs were met with.

1.3.4 Class and Family Influences:

The career of the individual is mostly influenced by the class-family-education cluster of structural factors (Watson 2003). The persons coming from the traditional weaving community accepting powerloom technology find it difficult to survive in the powerloom business at a later stage, since in powerloom they only work as a laborer of the machine. Their control over the production diminishes.

1.3.5 Employment Relationship:

Blauner (1960) offers four principal areas of work satisfaction, viz. (a) the importance of the relative prestige of the occupation, (b) the degree of independence and control over the conditions of the work, (c) the extent to which social satisfaction is to be gained and (d) the people who work share non-work activities. In powerloom industry of Odisha the weavers lack all these aspects.

According to Parker (1983) some other factors which are necessary for the worker to get work satisfaction such as creating something new, using skill, working with full force, and working together with the people who know their job. It is also not found in case of powerloom weavers of Odisha.

Sometimes kinds of dissatisfaction are likely to occur in various circumstances. According to Parker (1983) these include doing repetitive work, making only a small part of something, doing useless tasks, feeling a sense of insecurity, being too closely supervised.

1.3.6 Technology and Work Experience:

Blauner, in his study, *Alienation and Freedom* (1964) explains that several factors influence work satisfaction in different technological settings. Every individual has different work experiences in different technological setups. In some technological setups, workers feel some sort of alienation. In the powerloom sector of Odisha, the

worker feels relatively more alienated. The kind of alienation, which the worker faces are of various types. Firstly powerlessness means lack of opportunity to control the design. Secondly, meaninglessness which means lack of opportunity to fill a sense of purpose. Thirdly, isolation which means inability to relate closely to others at work. Fourthly, self-estrangement which means lack of opportunity to achieve self-involvement or personal fulfilment at work.

1.3.7 Factors Contributing to the Plight of the Handloom Sector:

1.3.7.1 Cross National Flow of Products and Handloom Industry:

Small industry in India has been confronted with an increasingly competitive environment owing to: (i) liberalisation of the investment regime in the 1990s, favouring foreign direct investment (FDI) at the international level, particularly in socialistic and developing countries. The cumulative impact of all these developments is a remarkable transformation of the economic environment in which small industry operates, implying that the sector has no option but to 'compete or perish' (Subrahmanya 2004).

Growth of small industry in the transitional period of 1990s has come down not only in terms of units and employment but also of output. This could be an indication that increasing competition in the globalisation period does affect the growth of small industry adversely (Srinivasulu 1996; Subrahmanya 2004).

The reduction of restrictions on the movement of goods between countries and the subsequent increase in world exports would have benefited multinational corporations much more than small enterprises (Subrahmanya 2004).

Policy-makers in India in the era of globalization have considered technology development in small industry only from a single dimension, that is, through institutional technology transfer. This implies that small industry in India is perennially external-technology dependent. But technology development in small industry can be achieved

even through in-house technological innovations as well as inter-firm linkages with large firms. Technological innovations involve the situational new development and introduction of knowledge-derived tools, artifacts, and devices by which people extend and interact with their environment (Tornatzky and Fleischer 1990). In this context in Odish, instead of introducing situational appropriate technology in a rich handloom belt, the government introduced powerloom in a haphazard manner as a result of which the rich handloom belt of some portions of Odisha is affected.

The advantage with in-house technological innovation is that it can be firm-specific and continuous. Similarly, a small firm can get technological inputs and technology through a subcontracting relationship with large firms on a continuous basis. In Japan, effective sub-contracting relationships between small and medium enterprises and large firms work as an important mechanism of technology transfer (Nagaoka 1989). But in India, policy seems to have overlooked the ability of small firms to innovate (Subrahmanya 1995) and the extent of ancillarisation, though increasing in recent years, is well below the potential (Government of India 2002). Timely availability of adequate finance is another issue that crucially determines the survival and growth of small firms. Small firms are largely dependent on bank credit to meet their financing requirements, while large firms have alternative sources of finance (Reserve Bank of India 2003).

However, there are arguments that support globalisation for the development of small scale industry: The policy changes due to globalisation have also thrown open new opportunities and markets for the sector. To avail these, the focus must be turned to technology development and strengthening of financial infrastructure in order to make Indian small industries internationally competitive and fit to contribute to national income and employment (Subrahmanya 2004). A leading handloom weaver Padmashree Chatubhuj Meher of Sonepur District of Odisha has supported this argument.

Globalisation and liberalisation need not affect Indian small industry only adversely. It would have created beneficial opportunity as well. Small industry in India has found itself in an intensely competitive environment since 1991. Either small scale cottage industry in India competes in the competitive world or perishes (Subrahmanya 2004). Globalization gives an opportunity to the entire small scale industry to compete in the global market in a more sophisticated manner.

1.3.7.2 In-house Technological Innovation in Small-Scale Industry:

In developed countries small enterprises are promoted, among others, as the 'seed bed' of innovation (Subrahmanya 1995). Small enterprises have the specific advantages of flexibility, concentration and internal communications for carrying out technological innovations (Rothwell and Zegveld 1982). Technological innovations contribute to competitiveness (Tornatzky and Fleischer 1990). Even in the Indian context, a significant number of small firms do carry out technological innovations and thereby enhance their competitiveness (Subrahmanya 1995). Therefore, it is appropriate to incorporate schemes in the existing policy and institutional network to provide technological and financial assistance to in-house technological innovations at the district level and make it easily accessible to small enterprises. There is a need to create R&D fund at the state level for disbursement as margin money through the District Industries Centres (DICs) to small industry units to encourage them to undertake formal R&D and technological innovations. In addition, the Department of Science and Technology (DST) may allocate funds to universities and engineering institutions, which could provide institutional infrastructure for R&D or conduct R&D for small industry units at the regional level (Subrahmanya 1995; Nath 2001).

Sudden increase of the price of the yarn and shortage of raw material (Raj 1979; Subrahmanya 2004; Kundu 1980; Sinakandhan 1970), unauthorised growth of

powerloom (Sengupta 1981; Srinivasulu 1994), infrastructural bottlenecks (Srinivasulu 1994; Venkatasubbaian 1991; Kulkarni and Parishwad 2001; Subrahmanya 2004) contribute to the decline of the handloom industry.

According to Kulkarni and Parishwad (2001) about 40 per cent of the 2.6 lakh small industry units in Karnataka have been closed due to infrastructural bottlenecks. The infrastructural constraints confronted by small industries can be broadly classified as economic, technological, marketing and financial. Stable and reliable economic infrastructure such as power, water, transport and communications are a prerequisite for the efficient functioning of any economic activity, including small industry. Inadequate economic infrastructure is a major factor that affects the performance and competitiveness of small industry.

If small industry has to thrive steadily, infrastructural bottlenecks must be overcome to enable it to compete on its own based on inherent potential. Small enterprises in India have come up in an unplanned, uncontrolled and haphazard manner (Subrahmanya 2004).

1.3.7.3 Influence of Public Policy on Indigenous Economy:

First, the indigenous economy had been devastated with the introduction of colonial rule of the East India Company a hundred years ago. During this period, local crafts were replaced by cheaper imports of factory produced goods from Britain. This led to the gradual rout of the rural artisans in the country. As a result, there was a general impoverishment of the rural population. These people served as pools of cheap labour when the factories came up. The other reason for labour being cheap was that at the initial stages of industrialization the colonial government did not regulate work or wages. The workers were unorganized and the industrialists were able to make them work for long hours at low wages (Gadgil 1982).

High cost of production and competitiveness of the handloom industry and the lack of investment of handloom and low purchasing power of the consumer contribute to the plight of handloom sector (Paul and Mote 1967; Mridul 1977). Absence of viable market (Niranjana 2004) also contributes to the plight of the handloom sector.

Chandra's study (1999) has brought out some of the key weaknesses of the Indian textile industry in terms of competitiveness of Indian firms vis-à-vis foreign firms. He has suggested both firm-level and industry-level reorganisation of the textile sector for gaining long-term distinctive capabilities for building up competitive advantage in the international as well as in the domestic market. An important aspect of competitive advantage is to build up technological capabilities of international standard. Broadly speaking, technological capability is embodied in the human and physical capital in command of the industry. In a dynamic sense it means the ability of the industry to articulate its business problems in terms of technology and also the ability to access human, physical, financial and organisational resources to find solutions to the articulated technological problems. The benchmark data provided by Chandra reveal the vulnerability of the Indian textile industry in matters related to technology. It is to be noted that the countries referred to are Canada and China. Chandra has listed achievements of countries like Italy, Germany, Japan, the US, etc, in developing specific competence to strengthen their competitive position in the international market. Post-GATT Indian textile industry has to compete with them not only in the international market but also in the domestic market.

As a result of poor public policy, the cooperatives which are basically meant for the handloom are ineffective. Traditionally the major handloom weaving region of India is in decline. The decline of handloom cannot be attributed only to the growth of powerloom. Competition from powerloom can only partly explain the decline of

handlooms as there is a growing market for handloom. By far the more serious reason is the politicization of the cooperative societies, government and bureaucratic control (Kanaklatha 1999). The mechanized system of textile manufacturing developed in one area and transmitted to the other was modified there in specific directions in response to the pressures of the crowded product markets and the structures of industrial organizations interacting with the shortage of unskilled labour. Generally, at first, market pressures compelled the large-scale production of cheap, standardized, low quality goods, at first. Technological innovation supplied versatile equipment for manufacturing cheap and medium to fine goods. In the cotton industry, standardized products tended to stimulate standardized manufacturing machinery which, because it was simpler and therefore presented fewer mechanical and manufacturing problems than more versatile or specialized equipment, reduced operative and maintenance problems and was more amenable to innovation (David 1973).

1.3.7.4 Institutional Arrangements and Handloom Industry:

The nature of the labour process in handloom weaving largely depends on the nature of the institutional arrangement in the sector. The usury capital has a powerful presence in the sector. Known as the “mahajan”, the owner of the merchant and the usury capital controls a section of the small weavers by exercising control over both the input and output market of the handloom industry. The presence of the mahajan in the economy of small weavers has an effect on the labour process of their economy. Capitalism in handloom sector leads to deskilling of weavers (Ratan and Nag 2002). The fate of the handloom weavers is largely determined by merchants and the government officials (Dutta 1985).

The result of capitalism is reflected in a variety of bottlenecks confronted by the handloom industry. The weavers have been suffering from lack of proper organisational

support and production of handloom cloth is continuously declining because of the hike in the raw material cost; the industries is also facing the problems of lack of marketing facilities. These are the major problems of the handloom industry (Sinakandhan 1970). The nexus between the cooperatives master weaver, middle man and bureaucratic procedure contributes to the plight of the handloom sector (Srinivasulu 1996; Srinivasulu 1994). Goswami (1985) has emphasized that the decline in the market share of the handloom sector is attributed to the decline of the handloom industry.

Handlooms in India are the oldest cottage industry. Handloom weavers are gifted and are known for their excellent craftsmanship. However, with the rapid expansion of powerlooms in the decentralised sector, handloom weavers have been passing through a period of increasing distress has been emphasized by Ghosh (1991). In the case of handloom weaving, the weavers are exploited by either traders or master weavers, or others in the production and marketing chains (Niranjana 2001).

Paul and Mote (1967) has emphasized the strengthening financial viability, introduction of new technology and need for research and development in handloom sector for growth of handloom sector. A substantial part of these unauthorised looms were in fact out of the looms allotted to state government and union territories under the official conversion programme. Although the concept of decentralised sector incorporated both handlooms and small powerlooms, this unplanned, mushrooming growth of the latter created several problems for the handloom sectors. Among other things, it has affected adversely the quantity of yarn going to the handlooms and therefore the output of the handloom sector, which leads us to the second question regarding the estimation of output in the decentralised sector (Sengupta 1981).

The New Textile Policy (2000) has emphasized the need for technology upgradation for making the textile globally competitive. It examines the effectiveness of

the organised technology supply system for the textile industry under the government control and managed by the industry association. The author argues that the lack of an appropriate strategy on the part of the government and the industry has marginalised the Research and Development activities in the textile research system (Nath 2001).

1.3.8 Factors contributing the present plight of the powerloom sector

Ideology, according to Dunlop (1958), is a set of ideas and beliefs 'commonly held by the actors' involved. Hence there must be common ideology to be followed by the powerloom weavers to survive and compete in the market. Productivity improvement requires not only financial investment but also sincerity, cooperation and skill from the workers. Industrial technology requires highly skilled and professional labour force which is controlled by a range of norms and rules. In order to motivate and keep this labour force intact, there must be a kind of open educational system accompanied by social mobility and relative social equality at large. Work ethics has to be encouraged in an industrial society. The way in which people think and feel about their work will closely relate to their wider political and religious doctrines and to their general cultural orientation (Watson 1995). With the wider growth of modern industrial capitalism we see the work ethic spreading further and wider (Watson 1995). But in the powerloom sector of Odisha there is a lacking of work ethics.

1.3.8.1 Alienation in Work Situation:

Individuals are alienated from work in several ways. They become alienated from other people as relationships become merely calculative, self-interested and untrusting. They become alienated from the product of their efforts since what is produced is expropriated from them and were not, any way, conceived by the workers themselves to meet own ends and needs. They are alienated or separated from their own labor in that they do not derive the satisfaction or the delight that is possible in labour since that labour is forced upon them as a means of meeting other needs and because they put themselves under the control of other people in the work situation. People are alienated when they are not being what they possibly could be, and for people what they could be - to fulfil themselves or achieve 'self actualization' – they must create a society which, although taking a basically different from capitalism, is still one in which work, as a source of fulfilment in its own right, is central (Watson 1995).

Technological choice: In the phenomena of development, there is a difficulty in figuring out the right level of technology to fit the given circumstances: in other words there is a choice of technology and it cannot be assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries (McRobie 1979). In this case the introduction of the powerloom in the state of Odisha is not an appropriate technology in a rich handloom belt.

Case of cotton spinning: The textile industry is the second largest employment generating industry in India followed by agriculture. Until 1900, the industry was localized in villages and a few urban areas. But with the introduction of mechanized large-scale technology, this highly prosperous local industry disappeared (McRobie 1979). The industrial development of Odisha is not balanced and integrated. The

planning in the sphere of industrialization is governed by various conditions like infrastructure facilities, natural resources, financial and human potentialities and market demand.

1.3.8.2 Planning Process in the Cotton Textile Industry:

The textile enquiry (Kanungo) committee recommended the conversion of handloom to powerloom on a cooperative basis. The purpose was to raise efficiency of output in the decentralized sector. The poor powerloom weavers could produce four times as much of cloth from handloom weavers. The committee thought powerloom as technically advanced form of handlooms and considered the industry as an evolution from handlooms to powerlooms. In fact, in places like Bhiwandi and Surat the powerloom industry was a growth from handloom industry. The All India Handloom Board on its part was firmly opposed the conversion scheme and supported the recommendations of the Krave Committee because it apprehended that the handloom weavers would not survive in the competition with the powerloom. But finally the government adopted the report of Kanungo Committee and the spinning section of the mill sector was given the role of supplying the raw material to the decentralized sector. Because the technological gap between the spinning machine and the Khadi was large, traditional production method could not keep up with increase in demand (Uchikawa 1998).

In the second plan, the government introduced a scheme for the installation of powerloom in the handloom sector. But the scheme did not succeed. The powerloom enquiry committee pointed out major reasons for the failure of the powerloom scheme: (1) Insufficient financial assistance for working capital, (2) Absence of providing pre and post weaving arrangement, (3) absence of arrangements to ensure that the benefits of the loom allocation were truly distributed among all members of cooperatives (Uchikawa

1998). In spite of government regulations, the capacity of the powerlooms has increased substantially that to a sizable number of unauthorized ones (Uchikawa 1998).

Rapid growth of powerloom sector: Some economically better up handloom weavers install looms discarded by the mill sector in order to improve their efficiency. Since 1950s, the production capacity of the powerloom has been increased. The uncritical transition from handloom to powerloom did not succeed. Instead, there has been a mushrooming growth of unauthorized powerloom units (Uchikawa 1998).

The powerloom sector is of mainly two types, namely, the owner-proprietor type (weaver working on his own) and the master weaver type. In the former the weaver purchases the yarn, manufactures the fabric and sells them. He independently raises the finance to carry out his activities. In the latter the master weavers supplies the yarn to the weavers, get it woven by him and sells it in the market (Uchikawa 1998).

1.3.8.3 Disadvantages to the Powerloom Sector:

The powerloom sector either gets loan from the bank or cooperative society. More than 95 per cent working capital and most of the fixed capital is from non banking sources (Uchikawa 1998). Powerloom workers work for extremely long hours for low wages. They have little or no job securities, poor access to medical and educational facilities for themselves and for their children (Uchikawa 1998). The rapid growth of the powerloom sector has threatened employment in the handloom sector. The powerloom sector is predominant in production cost whereas the handloom sector has the advantage of producing quality products. Handlooms can use multiple warp and weft yarn, but powerlooms cannot change shuttles every four or eight picks for inserting different yarns. Handlooms have catered to the ethnic consciousness of a section of the urban elite and export markets (Uchikawa 1998).

The powerloom of Odisha is in crisis due to manifold reasons. Most of the units in the small-scale sector are either closed or in the verge of closure. The non performance of the powerloom industry in the state is attributed to various factors.

Subrahmanya (2004) emphasized the negative attitude of the banks to extend working capital is also creating hurdles in the functioning of powerloom. Further, uninterrupted power supply, shortage of raw materials, transport cost, entrepreneurial expertise and business skills, short supply of technicians and skilled workers, high absenteeism, high production cost, marketing add to the problem (Anubhai 1988). Women are less involved in powerloom whereas in the handloom sector the involvement of women is 100 per cent (Uchikawa 1998). Most of the powerloom units in the states are working only in single shift in a day due to various reasons such shortage of power supply, etc.

1.3.8.3.1 Working Capital:

Working capital is an important factor of total capital for running of the industrial unit. Components of working capital comprised share capital/ own resources, financial help from the state government, loans from the financial institutions etc. Most of the powerloom units are set up after obtaining loans from financial institutions (FIs). The state government provided the margin money assistance to the integrated powerloom development cooperative societies for procuring looms and other capital investment. However after establishment, many of these units could not obtain working capital from the FIs for running the unit, which gradually crippled their growth. The timely availability of adequate finance is another cause which determines the growth of small scale industry (Subrahmanya, 2004).

1.3.8.3.2 Power:

The shortage of power in the state has become a major hindrance in the growth of textile sector. The viability of the powerloom is contingent upon the uninterrupted power supply and should run three shifts in a day. The state is facing power shortage and there is frequent power shut down hampering the production activities of the powerloom units. The textile industry is not able to utilize the machinery to their optimum capacity thereby severely affecting the productivity of the units. Many a time production is stopped throughout the day due to power failure. When there is a frequent production break down for non- supply of power, the labor is entitled to their wages and cannot be reduced in daily basis. The power rates being charged are also a major source of sickness of the industry.

1.3.8.3.3 Raw Material:

The varieties of raw materials such as yarn, dyes and chemicals etc. come from the neighboring states. Hence the cost of procurement of raw materials is higher in Odisha as compared to other states. This additional cost leads to higher cost of the end products and becomes uncompetitive in the market.

1.3.8.3.4 Pre-loom and Post-loom Activities:

One of the major hindrances in the powerloom industry is insufficient pre-loom and post loom facilities. The sizing units situated in the states are not properly utilized due to lack of expertise.

1.3.8.3.5 Transport Cost:

Normally the raw materials are procured from other states like Andhra Pradesh, Karnataka and Coimbatore. The units therefore have to incur a high cost on account of transportation.

1.3.8.3.6 Entrepreneurial Expertise and Business Skills:

The fact that most of the powerloom units have failed to operate on a viable commercial basis proves the inadequacies in the business skills. So far no developmental efforts have been taken to strengthen the expertise level of the entrepreneurs and the perspective entrants in the field. There is a need to create training facilities for the existing and prospective entrepreneurs.

1.3.8.3.7 Supply of Technicians, Skilled Workers and High Absenteeism:

The unavailability of the technicians and the skilled workers in the state has been a major drawback for the industrial growth. Absenteeism is another hindrance in running the industry in the state.

1.3.8.3.8 High Production Cost:

The manufacturing cost for the powerloom fabrics in Odisha is comparatively higher than the other states because of the increased expenditure on transport, interest on borrowed capital, wages for the idle period to the labour, low productivity etc.

1.3.8.3.9 Marketing:

The reason for the establishment of the powerloom units in the states has mainly been the industrialization of the backward economy. Therefore, there is no adequate initiative to take care of the marketing aspects. Though the powerlooms have been encouraged to put up under different schemes the production, planning and marketing strategies have been omitted.

1.3.8.3.10 Productivity:

Most of the powerloom units in the states are working only in single shift in a day due to various reasons such shortage of power supply etc.

1.3.9 Comparison of Powerloom Industry of Odisha with the Rest of India

Powerloom grew in the southern states mainly after 1950s and they never touched Eastern and Northern India. Why do eastern and northern India lack powerloom? The explanation for this is according to Roy (1998) is eastern and northern India lack powerloom not because of high cost. Labour has always been cheap in the east. Hence labour is not one of the causes for which there is fewer number of powerloom in East. That the west had better access to the secondhand powerloom is also not the cause. The main difference between the eastern India and the western India was that, the handloom root was much weaker in the east than in the west (Roy 1998). In western India the powerloom sector is very strong because in western India, for example in Surat from 1950 onwards, there was an extensive middle class investment. This same case also happened with Bhiwandi. Other factors which are responsible for the growth of powerloom in Surat are its cloth markets, cheap electricity, the Gujarati spirit of enterprise, non interventionist government and the absence of unions. The town has an advantage since it is situated near Ahmadabad and Bombay. These two cities are major source of trade and information which enable quick response to the market. many labor from eastern India, Uttar Pradesh and Andhra Pradesh migrated to Surat to work in the powerloom sector. The labour usually gets Rs 3000 to Rs 4000 per month. However powerloom labour in western India lead a life of very hard work, but with far better chance of employment, quicker mobility and far greater chance of mobility. The migrant workers in Surat and in Western India face much difficulty, but still they prefer to live there because of regular work availability (Roy 1998). The popular powerloom sari brand came from Surat which exported much of its production. But this was nylon or rayon. In cotton powerloom do not have a long history of exporting (Roy 1998).

In Odisha along with technology, infrastructure has remained underdeveloped. The government investment in the industry is very low. The history of cooperative development and management of commons is practically nonexistent in the powerloom clusters. Doing business in the home market results in making clothes as cheap cloth as possible. It never demanded such attributes like times delivery, market search and access to information. In Odisha powerloom owners lack technical, managerial and financial skill to upgrade the industry. Therefore the extension of new technology in the powerloom is really difficult.

Two types of people are getting richer in the powerloom sector in Western India in different ways: (1) merchants who own process houses or have more working capital, (2) big producers because they can invest in the best technology. Major part of the fixed investment comes from the business man. Banks also have a visible presence in the large powerloom sector in Western India (Roy 1998). Powerloom represents the largest industry in India. The powerloom sector of India has grown extremely well in Western India since Independence (Roy 1999).

The powerloom sector of Tamil Nadu has done extremely well since 1960s but it experienced its most significant growth on 1990s onwards (Roy 1999). Modern technology in weaving came to India in the 19th century in the organizational form of the integrated mill. But today powerloom overwhelmingly dominate both the home and export market (Roy 1999). Handloom industry is labour intensive whereas the powerloom industry is capital intensive for the reason of which the powerloom of Odisha could not go much ahead.

Tamil Nadu has about a quarter of the powerloom India, and the powerloom industry of Tamil Nadu grew very rapidly after 1990s. The powerloom sector of Tamil Nadu basically makes cotton fabrics because it has a strong advantage in the main raw

material for cotton weaving. The reason behind the growth of powerloom in the state of Tamil Nadu is the state's historical involvement with textiles which has been utilized and sustained very effectively by the people of the state. There are two dimension of this development. One is handloom weaving as the main source of powerloom capital and labour and a very long term engagement with cotton spinning and textile machinery (Roy 1999) . Powerloom firms in Tamil Nadu succeed because many of them share a common history, infrastructure, information and a tendency to congregate. In spite of all these, they suffer from India's long isolation from world market (Roy 1999). The Erode cluster mainly produces coloured goods, practically every lungy and towel sold any part of India is likely to have the stamp of an Erode firm (Roy 1999).

A majority of India's small industries do not have access to reliable and efficient infrastructure. The infrastructural constraints may be broadly classified as economic, technological, marketing and financial. Economic infrastructure comprises of such as power, water, transport and communications. Technological obsolescence has been a characteristics of India's small scale industry. Due to technological obsolescence, inferior good produced by the small scale industry. Though modernization of technology has been a priority of the Government of India, but it modernizes the technology only from a single perspective. The policy makers in India have considered technology development only from a single dimension that is through institutional technology transfer. This implies that small industry in India is perennially external- technology dependant. It highlighted lack of technological dynamism in India (Subrahmanya 2004).

Technology development can be achieved in small industry through in-house technological innovation. Technological innovation includes situationally new development and introduction of knowledge derived tools, artifacts and devices by which people extend and interact with their environment (Fleischer 1990 cited in Subrahmanya

2004). Small industries in India have come up in a haphazard, uncontrolled and unplanned manner. A majority of these clusters are based on natural and traditional skills. All these clusters lack proper infrastructural facilities like power, road, water, communications, information and technical issues. Development of Industrial parks may be one of the suggestion as given by Subrahmanya (2004). Technological innovation is highly essential (Subrahmanya 2004). Lack of technological innovation destroys the powerloom industry in the state of Odisha. The initiatives should be taken by the small industry itself particularly through their associations. The importance of achieving and sustaining competitiveness in the long run' and investing self efforts and resources need to be realized by the associations. It will help the small industry in the long run.

The development of the machines has not taken place for long. The new technologies that are created by the developed countries are suitable to themselves. Because every country can develop its own technology on the basis of its human resource, natural resource, climatic environment and need. Hence a technology developed by one country may not be suitable for other country. Since instead of creating our own technology, we prefer to borrow technology. For that reason the borrowed technology is not sustainable. Productivity improvement requires not only financial investment but also sincerity, cooperation and skill from the workers. Cordial industrial relations are very much important for ensuring higher productivity and full utilization of the production capacity. For that reason the management and the supervisory staff need to built a suitable organizational climate where the workers can do their best job (Rao 1989). Management should concentrate on imparting good training on the various aspects of the work (Rao 1989).

In textiles good and bad workers are getting the same wage. The good workers are not motivated by the management. Hence the good workers are needed to be

motivated. Sometimes workers feel that their skills are not properly recognized in terms of wages. Hence wages must be substantially different between skilled and relatively less skilled worker. It is better to give higher wage to such worker to whom we give more work. Giving education, training and motivation creates a cordial relationship between the management and workers which ultimately leads to a better productivity.

The concept of decentralized sector incorporated both handlooms and small powerlooms. This unplanned mushrooming growth of the powerloom sector created several problems for the handloom sector (Eapen 1977). The participation of Women in powerloom is marginal (Jain 1983). Regarding the competitiveness, the Japanese and other competitors are more efficient than India (Mote 1967). There is not a proper coordination between technology, market and Organization. Relatively better off weavers started to replace handloom by powerlooms. (Roy 2002).

Industry specific factors which are responsible for the distress of powerloom Industry are as follows: Raw material, technology, product, regional cost factor etc. Unit specific: financial, management, stagnant demand and industrial relation (Anubhai 1988).

The textile industry depends immensely on one agricultural raw material, that is, cotton. Cotton prices tend to fluctuate depending on the size of the crop. In other countries the government has taken steps to maintain the heavy fluctuation in cotton prices by deploying price stabilization policies. However this has not happened in India (Anubhai 1988).

Technological unemployment is caused by the labour-displacing technological progress. The displaced workers are not able to find other employment avenues. Handloom is labour-intensive and employee highly flexible factors of production where as powerloom weaving is capital intensive and the factors of production that could vary

only in the long run (Nardinelli 1986). As Bythell (2008) points out, the fixed cost of powerloom is high.

The powerloom slowly replaced the handloom. There is a severe decline of the standard of livings of the handloom weavers because of the technological progress in the powerloom (Nardinelli 1986). The most powerloom workers are migrant from rural areas. The powerloom workers are predominantly illiterate.

The large scale suicide of cotton farmers in Andhra Pradesh depicts the crisis of sustainability in cotton farming. The cotton crops today require high level pesticides and irrigated water (Prasad 1999).

Bhowmik (2009) argues that in the late 1950s a few sociologists turned their attention to studying industrial labour. During the same time the issue of labour commitment was raised by American sociologists. It was believed that the growth of industrialization in developing countries was hampered by a labour force that was not used to an industrial way of life. Some writers argued that non industrialized countries, such as India, had features in their social structure that impeded commitment of labour to industry. These features include a closed system of stratification, emphasis on primordial loyalties, religious values, strong attachment to land, and so on. (Moore and Feldman (1960) mentions “commitment involves both performance and acceptance of the behaviour appropriate to an industrial way of life.” Kerr (1960) observes that a committed worker is one who stays on the job and who has severed major connections with the land. In powerloom sector of Odisha, the powerloom was introduced without teaching the weavers an industrial way of life.

1.3.10 Research Gap

Raj Kishor Meher explains the handloom industry in Odisha in terms of socioeconomic profile of the weavers through weaving process, employment and wage and the production matrix. He has taken only two places for his study: Sagarpali village of Sonepur district and Nuapatna of Cuttack district (Meher 1992). In the works of B. Sahoo and P. C. Mohapatra, not much attention is given to the problems of the handloom industry (Sahoo 1992; Mohapatra 1994). No emphasis is given to the decline of the powerloom sector in Odisha in the earlier studies. Hence in this study emphasis will be given to the study of the problems of handloom sector of Odisha and the causes of the decline of the powerloom sector in Odisha.

1.3.11 Handloom Industry in India in General and Odisha in Particular

Handloom industry in India is an ancient cottage industry with a decentralized setup that provides job to 35 million of people. The share of the handloom industry in meeting the clothing requirement of the masses is also significant. We can find handloom industry in all over India. Handloom established its reputation in the global market long before the industrial revolution (Rao 1990). India is the only country which has maximum contribution in textile to the world right from the era of Indus valley civilization till today. Today India's handloom and spinning wheel releases largest variation of designs. It continued to flourish besides the torture of the British Government (Ghosh and Ghosh 2011).

The foundation of textile development in India was laid by the fishermen community long before industrialization. In doing the handloom fabrics both the sexes have similar contribution. The raw materials for textiles are from various sources. Broadly they may be of two categories such as natural and synthetics. Synthetic textiles are of recent origin. Traditional natural textiles were produced in various countries

during various parts of the history (ibid 2000). The wonderful craft called “IKAT” which gives dyed design on fabrics. In India “Ikat” is known as Bandha in Odisha, Bandhani in Rajasthan, Pochumpali in Andhra Pradesh, Patola in Gujrat and so on. However in textile term it is commonly known as “Ikat”. Out of different types of IKAT, Bandha of Odisha stands apart. Not only in respect of its design but the process, its expression and so on can be summed up as poetry on the loom. It is also unique to find two different sets of community in two different regions of Odisha could develop this art independently keeping in tune with tradition of the land reflecting the religious sentiments like Jaganath cult as well as environmental reflections. However, this unique art has not developed universally everywhere in Odisha nor every weaver community could master it. The art is limited to Bhulia and Kostha communities of western Odisha (includes Sambalpur and other districts of western part) and Gaudiaya Patra, Asini Patra and Sarkha of eastern Odisha (Includes Cuttack and other districts of eastern part) (Gosh 2011).

1.3.11.1 Uniqueness of Handloom of Odisha:

Ikat, the heritage design in fabric is the outcome of patience, intelligence and creativity by weavers from Orissa. It is an art that brings the rich Oriya culture into expression in fabric. The design, color and forms in Ikat are exotic. With its unique dye technique (also called resist dyeing), ‘Ikat’ is one of its kind in fabric designs. Ikat is an Indonesian word that means to tie. The design is usually introduced into the fabric either during the weaving or after the weaving in most of the techniques. But the uniqueness of Ikat technique is the design is created prior to the weaving. The whole process of weaving the Ikat is time consuming. To get the desired patterns, first the threads are tied into bundles. The bundles may be coated with wax and wrapped tightly with thread to prevent unwanted dye penetration, and then the threads are dyed. Alteration of bindings and the dyeing of more than one color produce elaborate, multi colored patterns. When

all the dyeing is done, the bindings are removed and the threads are ready to be woven into the cloth. The result is an elegant piece of cloth that shimmers with colors and patterns like no other.

1.3.11.2 Types and Patterns in Ikat Weaving

According to the alignment of threads, the pattern differs. In warp Ikat, the patterns are clearly visible in the threads on the loom even before the plain colored weft that carries the dyed pattern which only appears as the weaving proceeds. The weaving proceeds much slower in this process than in the warp. Ikat as the weft threads must be carefully adjusted to maintain the clarity of the patterns. Double Ikat is where both the weft and the warp are resist dyed before stringing in the loom. Traditionally and still commonly, a back strap loom is used though any variant or modern loom may be used.

1.3.11.3 Tie and Dye Fabrics

These are fabrics in which some portions of the fabrics are dyed at intervals of randomly according to the requirement of the design. This is done in two ways. The first one is yarn stage. Here only a portion of the yarn is dyed according to the design requirements. This is achieved by tying the portion of the yarn which is not to be dyed and dyeing the yarn in full. Then the fabric woven with such yarn will give tie and dye effect. The second is the fabric stage. Here the portion of the fabric not to be dyed is tied and the whole fabric is dyed. The tied portion will not be dyed. The untied portion will be dyed. This will give dyed designs at some required places only in the fabrics. These are called tie and dye fabrics (Government of India 2010).

Textiles include organized mill sector and unorganized decentralized sector. The mill sector could be a spinning mill or composite mill. Composite mill is one where spinning, weaving and processing facilities are carried out. The unorganized decentralized sector can further be classified into two sector- handloom, powerloom

which are only involved in weaving. For that reason the unorganized sector is heavily dependent on the organized sector for their yarn requirements. It is interesting to note that the contribution of the decentralized sector to the total production was extremely noteworthy. As it is evident that. The mill sector contributed 79 per cent and the decentralized sector contributed only 21 per cent to the total cloth production, where as the contribution of the mill sector has dropped to 42 per cent and that of decentralized sector has gone up to 58 per cent during 1980-81 (Rao 1990). It shows that both handloom and powerloom have a significant contribution to the overall cloth production in India.

Table 1.2 Estimated Handloom Clusters in India by Different Studies

Year	Report	Number of Handloom
1921	Census Report	12,60,409
1932	Tariff Board Report	15,15,450
1941	Fact Finding Committee Report	17, 90, 957
1954	Tax enquiring committee Report	28,70,000
1974	Sivaraman Committee Report	35,73,364
1983	Development Commissioner of Handloom	38,20,000
2009-10	Handloom census report	23,77,000

In 2009-10, Handloom census report, it has been estimated that out of 23,77,000 weavers, 20.66 lakh in rural area and 3.11 lakh in urban area. As per the 2009 census there are 44,374 loom in Odisha (Government of Odisha 2009). It implies that Odisha contributes 1.86 per cent of the handloom to the entire nation. If we compare the data from 1983 and 2009-10, then we can observe that the decline of the handloom in India in the recent years. In all India the total number of handloom household in the year 1995 was 25.3 lakh. In the recent census (2009-10) the total number of handloom house hold is 22.7 lakh. It clearly depicts that the number of household in the handloom sector are decreasing day by day. There are 43.31 lakh handloom workers in the country, out of which 36.33 workers stay in rural areas and 6.98 workers stay in urban areas according to 2009-10 handloom census by government of India. According to the Directorate of

Textiles, Government of Odisha, the total handloom population of the state is 1,85572 (2009 census). It implies that Odisha contribute 4.28 per cent of the handloom population of the entire country.

1.3.11.4 Types of Households by Activity Status of Handloom:

In India, we find different kinds of loom in terms of its ownership, viz. (a) domestic handloom: handloom work that is undertaken primarily for non-commercial purposes such as making fabrics for domestic consumptions, and (b) commercial handloom: handloom work including weaving and allied work that is undertaken as an occupation and the product or the service is primarily made for market consumption (Handloom Census Report 2009-10). In Odisha a majority of the handlooms are working for commercial consumption.

1.3.11.5 Types of Looms in the Handloom Sector:

In India, there are different kinds of handlooms, which are explained below.

(a) Pit looms with dobby/jacquard: These are fly shuttle pit looms fitted with Dobby/Jacquard. A Dobby loom is a type of pit loom that controls warp threads using a device called a Dobby, short for "draw boy" which refers to the weaver's helpers who used to control the warp thread by pulling on draw threads. The other accessory for controlling the design element in the fabric is the 'Jacquard', which operates through a series of punch cards.

(b) Other pit looms: A pit loom is one where the weaver sits in a pit and operates the loom and the loom itself is fitted into the pit. The pedals for working the shedding motion (tana) are placed in the pit. There can be two different types of pit looms. In the first case, the shuttle that moves across the loom inserting the weft (bana) yarn is thrown manually by the weaver from one side to other, and so this loom does not have a slay (a set of strings which operates the shuttle)

attached to the frame. In the second type of pit loom, the shuttle with the weft automatically flies from one side to the other with the movement of slay. There may be certain types of improved pit looms that are raised above the ground. All these looms were recorded under the pit looms.

(c) Frame looms with dobby/jacquard: The frame loom can be fitted with either a Dobby or a Jacquard for introducing embroidery in the fabric. Thus, a frame loom with a Dobby or a Jacquard makes embroidered hand woven fabrics such as saris, other kinds of embroidered cloths, furnishings, etc.

(d) Other frame looms: An ordinary frame loom is fitted into a frame above the ground. Frame loom followed basically the same principles as ground or pit looms. The loom was originally made out of wood sticks and boards attached at right angles (producing a box-like shape), which meant that it was portable and could even be held in the weaver's lap. Today, frame looms are much larger, with strong rectangular wooden rods replacing the earlier sticks, although the frame is still in the shape of a large box or case. This can be moved, but is usually kept at one place on the ground, with the weaver seated at an elevated bench at one end. This is less expensive and a more compact alternative to a table or floor loom. The frame loom is a very versatile loom and can make many kinds of fabrics, usually medium to course, and for such looms, production is faster than a pit or loin loom.

(e) Loin loom: Loin looms are basically found in the North Eastern States (Handloom Census Report, 2009-10).

In Odisha most of the looms are of pit variety. And in some cases it is found that pit loom with dobby and jacquard. Frame loom is found in Bayan Bihar Manmunda, Boudh District and Other frame looms are also found in the Bayan Bihar Manmunda.

1.3.11.6 Sources of Raw Material in Handloom Sector:

At all India level the main source of raw material for the weaver is dyed yarn and hank yarn. Most of the raw materials are sourced from the open market. However, in case of 15 per cent to 20 per cent of weaver house hold, the master weaver is the source of dyed yarn, dyes and chemicals. These are not often available in the open market. Major source distributions of house-holds that procure hank yarn are like this. Open market procures hank yarn up to 77.8 per cent. Master Weaver procures hank yarn up to 14.1 per cent. Cooperative societies procure hank yarn up to 4.5 per cent. The National Handloom Development Corporation procures hank yarn up to 0.6 per cent.

In Odisha, the weavers working under the master weaver are getting yarn from the master weavers. The master weavers are purchasing the yarn from the open market. The independent weavers are getting yarn from the open market. Some of the cases it is also found that the weavers working under the master weavers are getting the yarn from the open market and sell the finished product to the master weaver after the final weaving are done. They sell the product to the master weaver in piece rate basis. These weavers are not working on wages. But the weavers who are taking yarn from the master weavers are working in wage rate basis. A limited number of weavers are getting yarn from the co operative societies.

At all India level out of the total hand loom 90 per cent of the loom is working and 10 per cent is idle (Research, 2009-10). Of all looms, 58 per cent are frame looms (4 per cent with dobby/jacquard, while the majority 54 per cent are other frame looms), 26 per cent are pit looms (15 per cent with dobby/jacquard and 11 per cent are other pit looms). In Odisha basically pit loom are found. Some of the pit loom is attached with dobby and jacquard. A very limited number of frame loom are found in Odisha.

There are major differences in the type of looms found in handloom households in the northeast India and other states. Frame looms (78 per cent) and loin looms (21 per cent) account for the majority in the northeast India. On the other hand, pit looms (74 per cent) dominate all other states.

Table 1.3 Important Handloom Clusters of Odisha

Category of Cluster	Name of the District	Name of the Cluster	Number of Cluster
"A"	Bargarh	Attabira, Bargarh, Bheden, Barpali, Bijepur, Padampur, Sohela, Bhatli	8
	Cuttack	Badamba, Tigiria, Nischintaikoili, Banki	4
	Subarnapur	Birmaharajpur, Sonepur, Ulunda, Binika	4
	Boudh	Boudh	1
	Jajpur	Rasulpur (Gopalpur)	1
Total	5		18
"B"	Bolangir	Patnagarh, Agalpur, Bangamunda	3
	Nayagarh	Odagaon, Nayagarh	2
	Ganjam	Rangeilunda (Berhampur)	1
	Sambalpur	Rengali	1
	Nuapada	Khariar (Sinapali)	1
	Mayurbhanj	Bangiriposhi	1
	Khurda	Bolagarh (Khurda)	1
	Kendrapara	Garadpur	1
	Balasore	Khaira	1
	Jagatsinghpur	Jagatsinghpur (Badabag)	1
	Angul	Athamalik	1
	Puri	Pipli	1
	Keonjhar	Anandapur	1
	Kalahandi	Junagarh	1
	Koraput	Kotpad	1
Total	15		18
"C"	Dhenkanal	Dhenkanal (Simnoi)	1
	Jharsuguda	Kolabira	1
	Kandhmal		
	Nawarangpur		
	Bhadrak		
	Rayagada		
	Sundergarh		
	Malkangiri		
	Gajapati		
	Deogarh		
Total	10		2
Sum Total	30		38

Note: "A" category cluster districts: more than 1000 handlooms; "B" category cluster districts: 600-1000 handlooms; "C" category cluster districts: 100-600 handlooms

Source: Department of Textiles and Handloom, Government of Odisha (2013)

1.3.12 Powerloom Industry in India

The powerloom industry in India is on the edge to meet the increased global competition in the post-2005 trade regime under World Trade Organization. The consequent effect of unleashing an imported flood of imported textiles into India and also making the export markets far more competitive are being felt from now onwards. Those units which can produce quality products can only survive in the race competition in the liberalized economy. The best alternative is to face the challenges ahead to equip the units into competitive ones having facility to produce quality products having good market and high value. The old machineries has to be replaced by new generation machines and personnel trained accordingly.

In India the powerloom sector is the dominant player in the weaving processes. It contributes more than 60 per cent of total textile production. The powerloom units are meeting the textile products required for the domestic market as well as for the export of the same. Even with the reservation of certain items for the handlooms, the powerlooms are able to replicate the handloom products, which command a major share in the export. The present day powerloom behemoths of Surat, Bhiwandi, Erode/ Coimbatore etc. were once famous for handlooms and now they are completely transformed into powerlooms without harming the interest of the existing manufacturers. The need of the hour is the integration of the handlooms and powerlooms for maximizing the benefits of the industrialization and raising the standard of living of the people.

In a few cases like in Odisha it is observed that both handloom and powerloom are integrated to produce market oriented products. But the present numbers of 1238 powerlooms (Powerloom in pen and paper) in the state of Odisha are producing low values products such as Gamcha, Saree, Dhoti, Blouse and long cloth (Government of India 2003).

The textile industry accounts for as large as twenty one per cent of the total employment generated in the economy. Around 35 million of people are directly employed in the textile manufacturing activities. There are about 1.7 million registered powerloom in India, out of which 43 per cent belongs to Moharashtra and 20 per cent belongs to Tamilnadu. Gujarat stands 3rd in the number of looms with the share of 19 per cent. Besides these states, the powerloom weaving is more in existence in the state of Andhra Padesh, Karnatk, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and in Odisha; and that taken together account for 15-20 per cent of the total powerloom units in the country (Government of Kerala 2003).

1.3.13 Powerloom Industry in Odisha:

According to a survey conducted by the Textile Committee, Government of India in 2003 it is revealed that there are a total number of 707 powerlooms units in the state of Odisha of which 469 are found to be working. The total number of functional looms in working units is estimated at 1238 looms with a power unit loom size of 2.63. The powerlooms are mostly concentrated in the district of Ganjam (343), Nayagarh (133), Khurda(75), Dhenkanal (62), Puri (56) and in other districts (38). The powerloom weavers are mainly working for the master trader or master weavers who supply yarn and other raw material relating to weaving and collect the fabrics or the finished product from the weavers. Around 61 per cent of the powerloom units are reported to have been engaged in the job work. The powerloom units employ about 2012 weavers of which 1303 are males and 709 are females (Government of India 2003).

The entire establishment of powerloom in the state of Odisha is a government sponsored scheme which was started in the year 1972 onwards. In the initial years the powerlooms were running smoothly. But after 1985 onwards the powerloom of Odisha faces severe crisis where as at the same time the powerlooms of other states were

flourishing. In Odisha, the powerloom was started in a haphazard manner, for which, it is now a failure scheme in Odisha. In Odisha both handloom and powerloom are in severe stress.

Table 1.4: Powerlooms in Odisha (1989 Census)

Sl. No.	Name of the District	Name of the Zone	Number of units enumerated		Number of Powerlooms		
			Total	Working	Working	Idle	Total
1	Balasure	Balasure	44	16	138	46	184
2	Bolangir	Sonepur	09	02	12	26	48
3	Cuttack	Athagarh	11	02	10	06	16
		Cuttack	50	23	373	304	677
4	Dhenkanal	Dhenkanal	147	53	157	194	351
5	Ganjam	Berhempur	385	291	546	168	714
6	Keonjhar	Keonjhar	01	00	00	04	04
7	Koraput	Koraput	01	00	00	08	08
8	Kalahandi	Bhawanipatna	02	01	48	106	154
9	Mayurbhanj	Baripada	02	01	40	60	100
10	Phulbani	Boudh	08	01	02	02	04
11	Puri	Khurda	49	10	162	12	174
		Nayagarh	103	47	135	158	293
12	Sambalpur	Bargarh	04	02	58	46	104
13	Sundergarh	Sundergarh	05	02	10	78	88
Total			821	451	1691	1218	2909

Source: Directorate of Textiles, Government of Odisha (1989)

Table 1.5: Powerlooms in the Cooperative Sector

Sl. No	Name of the Zone	Name of the Powerloom	No of Looms	Present status
1	Bargarh	Ramnagar Powerloom	96	Lease given to Private party but not running
2	Baripada	Baripada Powerloom Takatpur	96	Running under lease by Sri G.C. Mahanta & Sons, Baripada
3	Cuttack	Madhunagar	100	Under Liquidation
4	Cuttack (Rahama)	Shree Parvati Powerloom	150	Closed. Attached by OSFC & IPICOL
5	Cuttack (Kendrapara)	Baldevjew Powerloom	100	Closed. Attached by OSFC
6	Khurda	Barunei Powerloom	100	Closed
7	Cuttack (Jajpur)	Chatia weaving Mill	100	Plant & Machinery disposed off. Land & building attached to EPF authority
8	Berhampur	Berhampur Powerloom	100	Looms and accessories Sold.

				Land & Building attached by EPF authority
9	Athagarh	Maa Bauti Powerloom	142	Disposed of by OSFC
10	Bhabanipatna	Manikeswari Powerloom	150	Disposed of by OSFC
11	Sundergarh	Mahalaxmi Pwerloom	150	Disposed of by OSFC
		Total	1284	

Source: Directorate of Textiles, Government of Odisha / Year not mentioned)

Table 1.6: Powerloom Units in the Private Sector in Different Zones

Sl. No.	Name of the Zone	Number of Powerloom Units			No of Looms in the Units		
		Total	Functional	Non-functional	Total	Functional	Non-functional
1	Athagarh	15	11	4	74	60	14
2	Nayagarh	67	47	20	229	145	84
3	Balasore	14	4	10	174	50	124
4	Dhenkanal	120	110	10	367	344	23
5	Berhampur	148	147	1	273	271	2
6	Khurda	71	63	8	222	201	21
7	Cuttack	15	12	3	66	32	34
	Total	450	394	56	1405	1103	302

Source: Directorate of Textiles, Government of Odisha / Year not mentioned

Table 1.7: Concentration of Powerlooms in Odisha

Sl. No.	Powerloom Districts	Number of Powerlooms
1	Ganjam	343
2	Nayagarh	133
3	Khurda	75
4	Dhenkanal	62
5	Puri	56
6	Other Districts	38
	Total	707

Source: Report of the Textile Committee, Government of India, 2003

Table 1.8: Current Status of Powerlooms by Cooperative Societies in Odisha

Sl. No	Name of the Powerloom	Regd. No & Date	Date of Liquidation	Status
1	Shree Parbati Powerloom WCS Ltd., Rahama, Jagatsingpur	190CU/Tex Dt. 29.03.1988	21.09.1998	Under Liquidation
2	Baldevjew Powerloom WCS Ltd, Kendrapara	105CU/Tex Dt. 28.04.1969	18.09.1998	Under Liquidation and seized by OSFC
3	Maa Bauti Powerloom WCS Ltd., Athagarh	12AGR/Tex Dt. 12.04.1988	05.02.2005	Under Liquidation and seized by OSFC
4	Siminoi Sizing Unit, Dhenkanal	6PU Dt. 31.03.1969	02.08.1988	Under Liquidation
5	Manikeswari Powerloom WCS Ltd., Kalahandi	16 Kid 25382	31.12.2005	Under Liquidation and seized by OSFC
6	Madhunagar Powerloom WCS Ltd.,	15CU Dt. 06.08.1958	15.01.1987	Under Liquidation
			Date of cessation of production	
7	Barunei Powerloom WCS Ltd., Khurda	01/PU Dt. 26.03.1959	October 1996	Under privatization Vide order No. 1811 Dt. 05.02.2004
8	Berhampur powerloom WCS Ltd., Berhampur	J.1254 Dt. 28.03.1961	June 1995	Under privatization
9	Chhatia weaving mill, Chatia	14CU Dt. 06.08.1958	April 1996	Under privatization Vide order No. 351 Dt. 07.02.2004
10	Ramnagar Powerloom WCS Ltd., Bargarh	08/814 Dt. 01.06.1959	October 1998	Under privatization
11	Baripada powerloom WCS Ltd., takatpur, Baripada	275MD 25.07.1960	July 1998	Under privatization Under lease
12	Mahalaxmi Powerloom WCS Ltd., Kundukela, Sundergarh	2059 Dt. 25.01.1988	May 1997	Under privatization

Source: Report of the Textile Committee, Government of India, 2003

1.4 Rationale for the Topic

The present study attempts to study the handloom sector against the backdrop of the challenges posed by the powerloom. The rationale for the topic is two-fold:

- (a) Shortage of raw materials, high cost of production in the handloom sector and the absence of a viable market to cater to the needs of the handloom sector have become strident, especially in the context of the cross-national flow of products that adversely affect small scale industry.
- (b) The community of weavers in the handloom sector in western Odisha is confronted with a variety of bottlenecks: master weavers, middlemen, bureaucratic procedures, being the major factors.

1.5 Research Questions

The present study centers on the following research questions:

- (a) How does indigenous technology (handloom) receive the modern technological system (powerloom)?
- (b) How do the two technological systems mutually coexist in textile industry in Odisha?
- (c) What are the allied technology factors contributing to the decline of handloom industry in Odisha?

1.6 Objectives of the Study

The objectives of the present study are to:

- (a) Examine the socio-economic and politico-cultural system in which the modern technology (powerloom) in textile industry in Odisha is embedded;
- (b) Understand the conflicting interests between the two knowledge systems as reflected in the form of two conflicting technologies;

- (c) Examine the allied technology factors contributing to the decline of handloom industry in Odisha.

1.7 Methodology

The study was conducted in five districts of Western Odisha namely Bargarh, Bolangir, Sonepur, Boud, Nuapada and two districts of coastal Odisha namely Dhenkanal and Nayagarh. Western Odisha is given emphasis because the per centage of handloom concentration is much higher in Western Odisha in comparison to other parts of Odisha. Two districts from coastal Odisha were identified as the field of the study because in these districts, both handlooms as well as powerlooms are found.

The present study is based upon both primary and secondary data. Primary data includes in-depth personal interviews with various stakeholders of handloom and powerloom industries such as independent weavers, master weavers, middlemen and members of the cooperative societies. Moreover, interviews were conducted with the official staff of Bayan Bihar at Manmunda (Boudh district), Ganapati Balaji Spinning Mill (Sonepur district), a handloom unit of Odisha Rural Development and Marketing Society (Sonpur district), Sambalpuri Bastralaya (the largest Primary Weavers' Cooperative Society), Bargarh District, Indian Institute of Handloom Technology (Bargarh district), Weavers' Service Centre Bhubaneswar, Textile Committee Bhubaneswar, Directorate of Textiles, Bhubaneswar, Spinning Mill Federation, Bhubaneswar, Institute of Textile Technology Choudwar (Cuttack district), Powerloom servicing centre Choudwar (Cuttack district), Siminoi Powerloom Weavers' Cooperative Society (Dhenkanal district), Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar regarding the declining status of both handloom and powerloom. An in-depth interview was made with one of the leading entrepreneurs in the handloom sector in the state of Odisha, Padmashree Chaturbhuja Meher regarding the status of handloom

and powerloom in Odisha. Secondary data includes data from a variety of books, journal articles, government reports etc. The study was conducted in different handloom clusters to know the problems of handloom sector. The study was conducted in the following handloom clusters in Odisha.

Table 1.9: Respondents in Handloom Industry in Odisha

HD	HC	HV	Total NO. of respondents	No. of Independent Weavers	No. of Master weavers	No. of weavers from cooperative society	No. of Middlemen of the handloom sector	No. of Members of the cooperative society	Total No. of respondents of Districts
Bargarh	Bargarh	Barpali	37	20	05	02	06	04	98
	Sohela	Morekeli, gutupada, Tuinbandhali	11	08	02	--	--	01	
		Tandul	10	07	02	01	--	--	
		Chitakhai	12	09	01	02	--	--	
		Haldipali	13	11	01	01	--	--	
		Beherapali	15	12	01	01	01	--	
Bolangir	Agalpur	Saliavata	25	18	02	01	02	02	40
	Patnagarh	Sormuhan	15	12	01	01	00	01	
Sonepur	Sonepur	Sagarpali	10	08	01	00	00	01	65
	Binika	Meherpada	12	10	01	01	00	00	
		Rathpada	13	11	01	01	00	00	
	Birmaharajpur	Kendupali	30	22	01	02	02	03	
Boudh	Boudh	Butpali	26	21	01	01	02	01	26
Nuapada	Sinapali	Sinapali	23	18	01	00	02	02	23
Nayagarh	Nayagarh	Itamati	07	04	02	00	00	01	07
Total Number of Respondents			259	191	23	14	15	16	259

Note: HD: Handloom Districts; HC: Handloom Clusters; HV: Handloom Village

Table 1.10: Respondents in Powerloom Industry in Odisha

Powerloom Districts	Powerloom Clusters	Powerloom Villages	No. of Independent Weavers	No. of Master Weavers	No. of weavers from cooperative society	No. of middlemen	No. of members in the cooperative society	Total No. of respondents
Dhenkanal	Siminoy	Siminoy	09	05	00	00	01	15
Nayagarh	Itamati	Itamati	08	02	00	00	01	11
Total Number of Respondents			17	07	00	00	02	26

Table 1.11: Respondents from different Government Offices relating to Textile Industry in Odisha

Sl. No.	Name of the Office	Number of Respondents
1	Directorate of Textiles, Govt. of Odisha	03
2	Weavers Service Centre, Bhubaneswar, Odisha	02
3	Textile Committee, Bhubaneswar, Odisha	01
4	SPINFED, Bhubaneswar, Odisha	01
5	Powerloom Service Centre, Cuttack, Odisha	01
6	Indian Institute of Handloom Technology, Bargarh, Odisha	07
7	ORMAS, Sonapur, Odisha	02
8	Sambalpur Bastralaya, Bargarh, Odisha	04
Total		21

Addressing the first objective, sources of data collection mostly include documents related to archival materials, with a focus on the context of the imposition of Western technological system. These documents have been generated by various institutions / organisations of the Government of India. Dealing with the second objective, the study focuses on the two conflicting technological systems as seen through the practices of the weavers' community in Odisha. Then the influence of one technological system over the other was investigated through in-depth personal interviews with various stakeholders resulting in the process of deskilling and alienation. Addressing the third objective, the study dwells upon how the allied technology factors contribute to the decline of handloom industry in Odisha.

1.8 Structure of the Thesis

Chapter I	Introduction
Chapter II	History of Handloom and Powerloom Industries with specific reference to Odisha
Chapter III	Waning Handloom Industry: A Study of Selected Handloom Clusters in Odisha
Chapter IV	Declining Powerloom Industry and Allied Technology Factors: A Sociological Study of Siminoi Powerloom Cluster
Chapter V	Handloom and Powerloom Industries: A Study of Itamati Clusters in Odisha

Bibliography

The present study is divided into six chapters. The first chapter introduces various facets of the study, viz. review of literature, rationale for the topic, research questions, objectives, methodology and structure of the thesis.

Through a historical-sociological survey, the second chapter dwells upon the origin, rise, growth and decline of handloom industry in India. Further, an attempt is made to capture the uncritical transition from handloom to powerloom clusters initiated by the Government of Odisha which has dithering effects on both technological systems.

The third chapter, through detailed cases, attempts to examine the factors for the waning of the state of handloom sector Odisha. It also provides a detailed description of the profile of the respondents.

The fourth chapter examines the allied technology factors, namely, product diversification, in-house technological innovation, deskilling of labour, indigenous technology, etc. in the context of Siminoi powerloom cluster in Odisha.

The fifth chapter analyses the handloom and powerloom industries in Itamati powerloom cluster in Odisha since Itamati powerloom cluster provides a rare case of prevalence of both technological systems.

The sixth chapter provides a summary the findings of the study, limitations of the study and scope for further research in the field.

CHAPTER II

HISTORY OF HANDLOOM AND POWERLOOM INDUSTRIES WITH SPECIFIC REFERENCE TO ODISHA

2.1 History of Handloom in Odisha with specific reference to Western Odisha

The engravings on the stones of Khandagiri Cave in Odisha suggest the existence of the art of weaving even before 600 BC. Similarly, carvings in the temples of Sonepur district (Baidyanath temple) indicate the practice of weaving prior to 9th AD. Besides weaving with cotton yarn, other forms of weaving such as wild silk (tassar), wool and the fibers from the stem of the lotus were developed (Meher 1995). A study of the history of Indian textiles finds out the export of very fine quality fabrics produced in Utkal or Kalinga to Arab, Persia Egypt, Peru, Malaka, Java, Sumatra, etc (Ibid.), which indicates the flourishing of fine and artistic handloom fabrics and skilled weaving. The first trade granary was built at Jagatsinghpur (the then Hariharpur) where various kinds of fabrics were woven. There were big godowns of cloth. Subsequently, another trade granary was built at Balasore. Balasore was one of the main export centres of cotton. Cotton was collected from the western part of Garjat area and exported in huge quantities to the distant countries by naval routes (Ibid.). The British subsequently discovered the flourishing trade and industry in Odisha when they arrived at Pipili in Puri district in 1611. Thus, the handloom industry of Odisha has a chequered history during the modern age.

The excellent fabrics such as “chandrakona” and “sanno” produced at Kaunaagar in Konark and Nanigon in Puri were in demand in England. As a result, the British were attracted by the prospects to benefit from the potential unequal trade between the metropolis and the satellites. In consonance with the potential unequal trade prospects, a

shrewd diplomatic policy adopted by the East India Company adversely affected the native handloom industry of India as well as Odisha. The unwarranted interference with the Odisha art of weaving by the British government rendered the weavers of the state become unemployed, idle and lost their sullen. In 1785, the British started producing muslin in England and levied very high taxes on muslin clothes produced in India and tried to destroy the native industry (Ibid.).

The Indian fabrics produced from cotton and silk yarns were sold at a 50 to 60 per cent cheaper rate in England till 1817. The Indian producers were encouraged to export raw-materials, i.e. cotton, to England without any tax. The mill-made cloth of Manchester was marketed in India. In this way, the sale of products of Indian weavers declined and their conditions deteriorated. The native handloom industry though siphoned off its strength somehow managed to survive for another hundred years (Ibid.).

In 1928, the Royal Commission on Agriculture of England for the first time drew the attention of the Union government regarding the necessity of upliftment of cottage industry through co-operatives. But the Government of India did not take any step in this regard till 1934 when it decided to give Rs. 5 lakh to each state government per year for the improvement of handloom industry (Ibid.). The needs and impediments of handlooms industry were regularly raised in different meetings of industry. At last, Government of India appointed “fact finding committee” in 1941 on the recommendation of the Handloom Committee of 1940. The report of this committee catering to various factors of handloom industry was the first authenticated and valuable report. This committee, besides other recommendations for development of handloom industry, recommended the formation of an ‘All India Handloom Board’. As a result, the Government of India formed the ‘All India Handloom Board’ in 1945. The work of the Board was to ensure the supply of raw materials to the handloom weavers, the system of

sale of handloom clothes and arrangement of management to foster some help in this connection. This Board worked till 1947 (Ibid.).

2.2 Context of the Emergence of Powerlooms

The handloom industry could work and gain some profit during the World War II. However, India was bound by a war time treaty for safeguarding the country, and the Indian working population joined the War. This provided encouragement to the textile mills (power loom) in India for boosting their production to meet the then wartime clothing requirements. Since the cost of handloom product was higher, people preferred to purchase power loom products. The production of cloth for local consumption, which was the mode long prevalent in rural India, underwent some change with the opening up of sea trade routes and the consequent expansion of export trade in the seventeenth and eighteenth centuries (Niranjana 2001). The Marxist school of thought has argued that colonial contact destroyed pre-existing industrial systems and brought about economic retardation. Marx observed: “It was the British intruder who broke up the Indian handloom and destroyed the spinning wheel” (Ibid.).

The history of textiles informs us that with the setting up of textile mills in Britain during the Industrial Revolution, India’s position in world trade was dislocated. This decline could be dated from approximately 1821 – the year the first shipment of British textiles reached India (Das 2001: 19). Running parallel to this, of course, was the systematic use of India as a supplier of raw cotton. Britain had been on the lookout for cotton supplied from outside, drawing first on the resources of Cyprus and USA; it then turned to India “as early as 1788 (with) British manufacturer urging the East India Company to furnish them good cotton for their rising industry” (Buchanan 1966: 195). Indeed, it has been well documented that this interest played a major role in the development of rail transport in India (Satya 1997). India’s emergence as the primary

supplier of raw cotton to Britain led to a series of other changes such as the decline in hand spinning of yarn. In its place, imported mill spun yarn and cloth entered Indian markets. This not only displaced the livelihood of millions of spinners, but, over a period of time, also brought about significant changes in the organisation of the weaving community (Ibid.).

Till the first decade of the twentieth century, handloom still retained an edge in the domestic market. But this soon suffered due to the growth and consolidation of the power loom sector. Not only did the handloom sector become dependent on yarn produced by mills, but it also faced increasing competition from cloth production by power loom, which began in the period of the World War I. A competitive relation between the two sectors emerged. The problems being faced by the handloom industry came to be first emphasized in 1928 by the Royal Commission on Agriculture, “which expressed the view that the development of this village industry on co-operative lines was essential to the survival of weavers in the face of increased competition from organized industry” (Government of India 1986-87). Between 1920s and 1930s, handlooms continued to grow. This could be attributed to the nationalist movement and the demand for Swadeshi cottons as well as an increase in demand for cloth during the World War II. However, yarn prices rose phenomenally due to war conditions (especially during the World War II) pushing raw materials out of the reach of weavers. It was realized around this time that the livelihoods of handloom weavers would be adversely affected by the indiscriminate expansion of power looms.

The reasons for the decline of handloom were not internal to the handloom industry, but could have had to do with the emergence of a power loom sector from the 1920s onwards. A combination of factors contributed to the consolidation of this sector, which consisted largely of hundreds of small units set up by enterprising individuals,

each with not more than 5-10 powerlooms (usually those discarded by the composite mills). Some of these were owner-operated; others hired labour to work on the looms. In this way, they got all the benefits of a cottage industry initially, but because of their size, were exempt from labour laws. The powerloom sector thus emerged as an intermediary between the pre existing handloom and mill segments of the textile industry. Apart from other issues, such as the competition it offered to handloom products, it has also been observed that a significant number of handloom weavers switched over to work in power looms in the wake of dwindling demands.

2.3 Handloom Sector in India with specific reference to Odisha after Independence

The Government of India formed a 'Standing Handloom Industry' in 1948 under the banner of a Cottage Industry Board to solve the problem of handloom industry. In the mean time, the Union government stopped annual aid and advanced financial aid to the state government for the development of handloom. The All India Handloom Board had recommended continuing the annual aid of rupee five lakhs. But the government of India did not accept it and agreed to create a "Handloom Development Fund" of Rs. 10 lakh. This fund was kept under the supervision of a standing handloom committee. But the conditions began to change in the latter half of 1951 owing to a number of factors, international and national, such as modification of US stock piling programme, larger availability of consumer goods including power loom clothes. The demand of handloom clothes declined sharply. Unsold clothes mounted up. Many looms were rendered idle resulting in widespread unemployment among the handloom weavers. The handloom industry faced an unprecedented crisis at this stage (Meher 1995). But the government being sufficiently aware of this condition, an agenda was prepared in 1950 for the regeneration of this industry. It included setting up of an All India Handloom Board with comprehensive functions: levying an additional excise duty on mill made cloth for the

purpose of developing the khadi and other handloom industries and promoting the sale of khadi and other handloom clothes.

The All India Handloom Board was established in 1952 which later was renamed as 'Standing Handloom Committee' under the Cottage Industries Board. The Textile Commissioner became the first chairman of the Board. It gave a new momentum to the industry. Indirectly it was the work of the Board to give advice to the government about the problems of the handloom industry and directly examine schemes prepared for its development and recommend the government to give financial help for the same. Therefore, the Board was burdened with the responsibility of forming policies to strengthen and regenerate the handloom industry (Meher 1995).

In 1957, the Government of India decided to levy additional excise tax on cloth produced by the powerloom by passing an act named 'Khadi and Other Handloom Industry Act'. The taxes were collected from the clothes of other mills in addition to those exported to foreign countries. This fund was utilized for the development of khadi and handloom industry especially, for undertaking, assisting or encouraging khadi and other handloom industry. This encouraged the adoption of improved methods of manufacturing khadi and other handloom clothes. Besides that, due attention was given to the development of standard, sale and quality of handloom clothes (Meher 1995). At first, the money collected from the tax was kept in a fund known as the 'Cess Fund'. This fund was not sufficient. So from time to time, it was increased by contributing share from revenue. The cess fund was abolished in 1960 as it faced certain problems regarding the keeping of the accounts. Since then, the collection of this industry was being sent to the general revenue and the expenditure met by the consolidated fund of revenue (Jena 1980).

After independence, the handloom industry was in terrible distress. The demand of handloom clothes having fallen, the weavers were facing dreadful unemployment problems. The handloom board felt that this vital issue could be handled if it was revived in a co-operative fold through which suitable facilities be provided for the sale of its goods. The various state governments agreed to unite handloom in a cooperative fold. Hence the board determined to give financial aid to the handloom industry in cooperative fold. With the approval of the Government of India, plans and program were chalked out along with the draft of each plan for the financial assistance (Jena 1980).

2.4 Brief profile of Textiles in India in General and Odisha in Particular:

According to Nambiar (1996), India is the birth place of cotton manufactured which is recorded to have originated from the ancient period (Nambiar 1996). The industry also flourished on the export front. Herodotus writing in about 450 BC stated that cotton were the customary wear of the Indians and added that “certain wild tress bear wool instead of fruits, that the beauty and quality excel that of sheep and the Indians make clothing from these trees” (Buch 1979: 106). From these accounts it is evident that the Indian cotton textile industry is as old as Vedic age. Cotton clothes were largely exported to other countries. The super skill of the weavers has been handed over from generation to generation (Nambiar 1996).

Handloom industry is one of the oldest cottage industries in India. Handloom industry in India is an ancient cottage industry with a decentralized set-up. The industry provides job to 10 million of people. The share of the handloom industry in meeting the clothing requirement of the masses is also significant. We can find handloom industry in all over India. Handloom established its reputation in the global market long before the industrial revolution (Rao 1990). India is the only country which has maximum contribution in textile to the world right from the era of Indus valley civilization till

today. Today India's handloom and spinning wheel releases largest variation of designs. It continued to flourish besides the torture of the British Government (Ghosh and Ghosh 2011).

The foundation of textile development in India was laid by the fishermen community. In doing the handloom fabrics both the sexes have similar contribution. There is a saying in the Kaibarta community of Bengal "Durga Katen Soru Suta Mohadev bonen jaal" ("Goddess Durga spins the fine yarn while Lord Mahadev weaves the net"). Here Durga means the woman and Mahadev means Man. Perhaps this concept has born out of the Buddhist Philosophy that "I am the deity and I have the deity within me" (Ghosh and Ghosh 2000). The raw materials for textiles are from various sources. Broadly they may be of two categories such as natural and synthetics. Synthetic textiles are of recent origin. Traditional natural textiles were produced in various countries during various parts of the history (Ghosh and Ghosh 2000). Here the author tries to describe the wonderful craft called "Ikat" which gives dyed design on fabrics. In India "Ikat" is known as Bandha in Odisha, Bandhani in Rajasthan, Pochumpali in Andhra Pradesh, Patola in Gujrat and so on. However in textile term it is commonly known as "Ikat". Out of different types of Ikat, Bandha of Odisha stands apart. Not only in respect of its design but the process, its expression and so on can be summed up as poetry on the loom. It is also unique to find two different sets of community in two different regions of Odisha could develop this art independently keeping in tune with tradition of the land reflecting the religious sentiments like Jaganath cult as well as environmental reflections. However, this unique art has not developed universally everywhere in Odisha nor every weaver community could master it. The art is limited to Bhulia and Kostha Community of western Odisha (includes Sambalpur and other districts of western part) and Gaudiaya

Patra, Asini Patra and Sarkha of eastern Odisha (Includes Cuttack and other districts of eastern part) (Ghosh and Ghosh 2000).

2.4.1 Uniqueness of Handloom of Odisha

Ikot, the heritage design in fabric is the culmination of patience, intelligence and creativity by weavers from Odisha. It is the fruition of the hunt for perfection in creativity. It is an art that brings the rich Oriya culture into expression in fabric. The design, color and forms in Ikat are not only bold and forceful but also exotic. With its unique dye technique (also called resist dyeing), 'Ikat' is one of its kind in fabric designs. Ikat is an Indonesian word that means to tie. In most techniques, the design is usually introduced into the fabric either during the weaving or after the weaving. But what makes Ikat exceptional is that in this technique the design is created prior to the weaving. The whole process of weaving the Ikat is enormously time consuming. To get the desired patterns, first the threads, be it cotton, silk or wool are tied into bundles. The bundles may be coated with wax and wrapped tightly with thread to prevent unwanted dye penetration, and then the threads are dyed. Alteration of bindings and the dyeing of more than one color produce elaborate, multi colored patterns. When all the dyeing is done, the bindings are removed and the threads are ready to be woven into the cloth. The result is an elegant piece of cloth that shimmers with colors and patterns like no other.

2.4.2 History of Handloom Industry in Western Odisha:

The handloom industry of Odisha has chequered history during the modern age. A study of the history of Indian textiles reveals that very fine quality fabrics produced in Utkal or Kalinga got exported to Arab, Persia Egypt, Peru, Malaka, Java, Sumatra etc. for sale. There was a time during the 19th century when as much as 24 thousand maunds of cotton had been produced from 20 acres of land in the districts of Cuttack, Puri and

Balasore. Harishpur, Hariharpur of the Cuttack district was an old port or centre of trade in Odisha. At the time of advent of British, 3000 weavers were living in Hariharpur alone. Odisha was flourishing well in fine and artistic handloom fabrics and skilled weavers. The British reached Pipili(Puri) in 1611A.D. and discovered for themselves the flourishing trade and industry of Odisha. Their first trade granary was built at Jagatsinghpur(the then Hariharpur) which was a very big centre of handloom industry and hence various kinds of fabrics were being woven there. There were big go downs of cloth. Subsequently, another trade granary was built at Balasore.

Balasore was one of the main export centres of cotton. Cotton was being collected from the western part of Garjat area and exported in huge quantities to the distant countries by ships. The muslins and Chints of this place were so beautiful and attractive that the East India Company found it fit to present one of these to Charles-1, the then king of England. Consequently, the demand of these fabrics increased in England to a great extent and so the aforesaid company was ordered to supply more and more of these fabrics.

The shrewd diplomatic policy adopted by the East India Company in order to boost the English Textile trade affected adversely the native handloom industry of India. It was the prime objective of the company and its capitalist states (England) to destroy the basic equipment of cottage industries and weaken the economic standard of the dependent country. As a result of this, no other important occupation was left in the hands of Indian artisans except agriculture.

The Balasore port was famous then for excellent fabrics named “chandrakona”and “sanno”. The clothes were exported after being produced at Kaunaagar (Konark), Nanigon (Puri) etc. These fabrics were quite cheap, compact in texture and beautiful as well. Especially it fully captured the market of England. As a

result, the east India Company and other foreigners had set a greedy eye on this country. But others could not stand against the English men in playing diplomacy in the field of trade and commerce. They were much allured to benefit after purchasing the things here at a cheap rate and selling the same in the market of England in a higher rate.

The unwarranted interference with the Odisha Art of weaving by the British government sapped life out of it. Hence, the skilled weavers of this state become unemployed, turned idle and lost their initiative. Recalling this sad history of 18th century one cannot but feel much remorse and regret.

In 1785, the British started producing muslin at their country. On the other hand they levied very high taxes on muslin cloths produced in India and tried every means to destroy the native industry. Strange, inhuman atrocities were perpetrated against the skilled weavers and expert spinners. Weavers were caged and kept in prison. The necessary household things like the common utensils were confiscated. The thumbs of the good spinners were sliced in order to incapacitate them.

In spite of all these, the Indian fabrics produced from cotton and silk yarns were sold at a 50 per cent to 60 per cent cheaper rate in the market in England till 1817. Therefore, they levied 70 per cent to 80 per cent tax on Indian fabrics. Declaration was made prohibiting the sale of Indian clothes. By fair means or foul, the British tried to safeguard the textile industry of England. On internal trade of India, journey tax and other taxes were also levied forcibly. On the other hand, Indian producers were encouraged to export raw-materials, i.e. cotton etc. to England without any tax. The mill-made cloth of Manchester spread everywhere in India. In this way the weavers of this country became dependent on the western technological system. The profession that helped them survive was snatched from them. Besides the atrocities of the customs department in India and their counterpart in England had played an inimical role towards

the handloom industry of this place. Even then, the native industry survived for more than a hundred years despite being on the verge of extinction. In the midst, of so many ups and downs and against so much opposition and animosity it survived mainly because of its inherent vitality.

Then in 1928, Royal commission on agriculture had, for the first time, drawn the attention of Union government stating the necessity of upliftment of cottage industry through co-operatives. But government of India had not taken any step in this regard till 1934. The Government of India decided to pay Rs. 5 lakh to each state government per year for the improvement of handloom industry. So, a few state governments made tangible use of this subsidy using it as capital for the development of handloom industry.

The needs and impediments of handloom industry were regularly raised in different meeting of industry. At last, the Government of India had appointed “fact finding committee” in 1941 on the recommendation of handloom committee of 1940. The report of this committee catering to various factors of handloom industry was the first authenticated and valuable report. This committee, besides other recommendations for development of handloom industry, had recommended forming an “All India Handloom Board”. Government of India formed an “All India Handloom Board” first in 1945. The work of this Board was to see the supply of raw materials to the handloom weavers, the system of sale of handloom clothes and arrangement of management to foster some help in this connection. This Board worked up to 1947.

The handloom industry could work and gain some profit during the Second World War although it had not improved to a considerable extent. India became an arsenal being bound by a treaty for safeguarding the country. This provided encouragement to th4e textile mills in India for boosting their production. Such

production by the textile by the textile mills in India caused shortage of yarn for handlooms.

The Government of India, therefore, adopted certain measures for restraining the composite mills from large scale consumption of yarn produced by them. In addition, they devised a scheme whereby the entire surplus yarn of the composite mills and the yarn produced by the spinning mills were pooled together as the “free yarn “and distributed to various states for supplies to consumers. While these measures enabled the handloom industry to secure some quantity of yarn, it was not sufficient to meet its requirement. However due to inflationary purchasing power generated by the war time economy and the brisk foreign demand for Indian cloth, the market of textiles was a seller’s market and the handloom industry shared the conditions of boom conditions with the mills. But this condition could not last for long. Gradually it proceeded to bad ways.

2.4.3 Handloom Industry after India’s Independence:

The Government of India formed a “Standing Handloom Industry” in 1948 under the banner of ‘Cottage Industry Board’ to solve the problem of handloom industry. In the mean time, union government stopped annual aid and advanced sufficient financial aid to the state government for the development of handloom. The first All India Handloom Board had recommended continuing the annual aid of rupee five lakhs. But the government of India did not accept it and agreed to create a “Handloom Development Fund” of Rs. 10 lakh. This fund was kept under the supervision of a standing handloom committee. But condition was began to change in the latter half of the 1951 owing to a number of factors, international and national, such as modification of US’ stock piling program, larger availability of consumer goods including mill cloth and anti inflationary measures taken by the government of India. The demand of handloom cloth declined sharply. Unsold cloth mounted up. Many looms were rendered idle resulting in

widespread unemployment among the handloom weavers. The handloom industry faced an unprecedented crisis at this stage.

But the government being sufficiently aware of this condition, the following agenda was prepared in 1950 for the regeneration of this industry. Setting of an All India Handloom Board with comprehensive functions; Levy of an additional excise duty on mill made cloth for the purpose of developing the khadi and other handloom industries and promoting the sale of khadi and other handloom clothes; Appointment of a Textile Inquiry Committee to make a detailed inquiry in to the various sectors of cotton textile industry, viz, the mills, power looms, and handlooms with a view to determining the place of each in the national economy and their interrelationship; and Enforcement of certain interim measures directed towards ensuring an assured market for the products of handloom industry, e.g. restrictions of the productions of dhotis by the mill industry to 60 per cent of the average monthly packing of this Variety of cloth during the 12-month ending, prohibition of peace dyeing of dhotis and sarees by the mills. The All India Handloom Board was established in the year 1952. This board was the latter board of 'Standing Handloom Committee' under the cottage industries Board.

The All India Handloom Board was confronting a number of complicated workloads at the time of its formation. The handloom industry was in terrible distress during that time. The demand of handloom clothes having fallen down, the weavers were facing dreadful unemployment problem. The handloom board felt that this vital issue could be handled if it was revived in a co-operative fold through which suitable facilities be provided for the sale of its goods. The various state governments agreed to unite handloom in a cooperative fold. Hence the board determined to give financial aid to the handloom industry in cooperative fold. Then with the approval of the Government of

India plans and program were chalked out along with the draft of each plan for the financial assistance. This system of policy was known as general policy.

The textile Inquiry Committee had already submitted its report in 1954. In the report it had recommended the conversion of some handloom into power looms. The committee had visualized that within fifteen to twenty years all handlooms were to convert to power looms except the 50,000 throw- shuttle and fly- shuttle looms engaged in doing fine art. By this conversion it would be possible to increase the production of the cloth in the country through interim engagement basis. But the All India Handloom Board did not accept the report of the Textile Inquiry Committee apprehending the unemployment problem consequent upon this sort of conversion.

A plan was prepared for the development of handloom industry at the time of second five year plan. This plan was meant for spending 180 crore of Rs. in this regard bringing 4.5 lacs handloom to cooperative sector. Before this in 1955, the planning formed a committee named "Gramya Khudra Silpa Committee" or Village Small Scale Industries Committee. The aim of this committee was to fix yearly expenditure limit for each industry for the development of the industry in each state during the second five year plan. This committee had recommended as follows:

- (a) The production of mills and power looms should be limited to level already reached, i.e., 5000 million yards (assuming an export target of 1000 million yards) and 200 million yards respectively, and all the increased demand which the committee computed at 1700 million yards during the plan period should be met by expansion of handloom production.
- (b) The three major objectives of the development program for the handloom industry on the production side should be to (i) extend the cooperative organisation to a larger number of handlooms; (b) introduce such improvements

in the existing handlooms as would raise the level of their technical efficiency and output, and (c) bring idle looms into use. The production program for the handloom industry should aim at ensuring by 1960-61, the working of 20 lakh of handlooms for about 300 days in the year with a daily average output of 6 yards per loom.

- (c) If the performance of handlooms is found to be inadequate even after the scheme of technical improvements and assistance has been implemented, it should be considered in the light of supply and demand position of the cloth whether further measures for introduction of technically more efficient or power driven equipment in the handloom industry on decentralized basis should be taken up.

This committee had recommended to the tune of Rs. 88crore, i.e. 88 crore for handloom for cotton yarn, 5 crore for handloom of silk yarn and 3crore for handloom of woolen yarn. During the 2nd Five-Year Plan (1956-61), it was indicated to spend Rs. 59.5 crore for handloom industry. Out of this a sum of 58 crore was given to the state government to work out their schemes and the rest amount Of 1.5 crore was given to execute the schemes for the centre. During the month may 1958, some important change had been effected with regard to the policy of giving aid to the states by the centre. Up till then aid was made available to the state by the centre on the basis of the definite schemes of the states. But in the changed policy, money was given in advance to the state governments for their ways and means.

The Government of India had formed a 'Working Group of Study Team' for the handloom industry in the last part of the 1958 for valuation of different plan and programs in the second five year plan and to have experience for the ensuing third five year plan. This working group of study team submitted their report to the government in the year 1959. The All India Handloom Board accepted almost all the recommendation

of this working group barring a few for which some modification had been suggested. The Government of India had generally approved all the recommendations of this working group.

Then this working group prepared a scheme of Rs. 140.19 crore for the development of handloom industry during the third five year plan period. Out of this fund, Rs. 4 crore was kept for converting handloom to power looms. It was decided to collect Rs. 84.19 crore from the Government of India and rest Rs. 52 crore (which indicate the working capital) from the institutional financing agencies. In the draft of third five year plan there was an amount of Rs. 32 crore of Rs. as experimental foundation fund. Out of this fund, Rs. 29 crore for the schemes of states and Rs. 3 crore for the schemes of the centre were fixed and kept aside. But All India Handloom Board put a lot of pressure to increase this amount up to Rs. 43 crore. Consequently the amount was increased up to 34 crore. Out of this amount, Rs. 31 crore for the states and Rs. 3 crore for the centre were fixed.

Special mention was made for increasing production of handloom through full employment of these weavers. Also it was indicated here that the process of advancing loans to the handloom weavers would be made more easy and simple so that it would be easy and comfortable for the institutional financing agencies to advance more loans to them as against their share capital. Supply of semi-automatic looms with improved weaving accessories to the handloom weavers was emphasized. Training and facilities of pre-weaving processes, utilization of improved designs and purchase of sufficient yarn from the spinning mills as per requirements were also included in these recommendations. Besides, it was also the aim and object of these recommendations to endeavour for exporting handloom clothes to other countries.

The Government of India felt that the processes and procedures should be as simple as possible in connection with the financial assistance transacted between states and centre so that administrative work load would be lessen. Accordingly the method was simplified. All these aspects have been dealt with in detail in letter no. P.C. (p) 4/2/1961 dated, 20-10-1961 of the Planning Commission, Government of India, New Delhi.

The financial standard of the handloom weavers and the standard of this industry developed by degrees as the central government gave tangible attention for upliftment of handloom industry during the five year plan. The weavers not only earned much being capable of producing more and also improved the quality of the art of weaving and applied mind for better creation. As a result, the handloom industry of Odisha could fetch sufficient money and appreciation from other countries of the world.

2.4.4 Weavers of Odisha:

There are several classes of skilled weavers in Odisha and their introduced here in brief.

- (a) **Bhuliaa (Meher):** Bhulia caste is popularly known as the caste of weavers. This caste is also known by other names such as Bholia, Bholwa, Bhoriya, Mihir and Mehar. Formerly, a large number of Bhulias solely domiciled in the territories of Odisha. They speak the Hindi language. There are several legends suggesting the origin of Bhulia caste. According to one tradition, Bhulias immigrated to this region of the country with first Chauhan Raja of Patna. It is also believed that they are the members of some caste of northern India, who have forgotten their origin. The Koshtas tribe (landholders and cultivators) of Chhattisgarh have a sub-caste called Bhoriya. Bhulia caste also calls them Devang or Devangan, which is the name of other sub-caste of Koshtis.

(b) Kostaas: The other renowned weaver class of western Odisha is Kostaas. The surname of this class in many places is Devaangana. But the Kostaas of Sambalpur, Sonepur, Barpali, Remunda, Bheden etc. use the title 'Meher' after their names. Generally these weavers do not weave cotton yarn. They use silk, Tassar, Kantia (wastage of tassar) yarn and weave various sarees, dhoties, Kumbha napkins, shirting thaans, blouse thans, etc. out of these yarns. Unlike Meher (Bhulia), they are well skilled in decorating the fabrics with Ancha and Buta art.

(c) Deraa (Debaanga): They are originally inhabitants of Andhra Pradesh. They have been brought from Rajmundri by the king of Mahiree (Ganjam) nearly seven hundred years ago. They do dying of Vasanta colour on silk yarn or fabrics from a sort of flower collected by Kondhas from the forest in spring season. This is of sandal colour.

(d) Rangani: One of the famous weaver communities is Rangani is the southern part of Odisha. They mostly inhabit in Berhampur (Ganjam). They are the original inhabitants of Odisha. This community also lives in the areas of Nuapatna, Olasingh, Tigiria etc.

Weaving is a leaving and lovely art in Odisha. The fascinating 'bandha' or tie and dye sarees, very much in vogue now in western Odisha and famous for their weaving art and colour in and outside India, reflect the natural artistic and also the poetic senses of the weaver. They have not only achieved excellence in art and texture but also display a keen sense of colour and beauty.

Odisha is a land of exquisite handicrafts. It is renowned for its artistic handloom product. Odisha's celebrated traditional designs in textiles have been enriched by varied motifs from nature, birds, animals and temple sculpture. The embellished designs are

woven mainly by a couple of processes- the tie and dye and the extra yarn stitching. Sarees, curtains, furnishing and dress materials of tie and dye works from Odisha with intricate designs of creeper, flowers, birds, animals and temple motifs in brilliant colour and aesthetic beauty are used extensively and affectionately in the homes of aristocrat as well as common people. If in Odisha and especially in western Odisha, they grow up peerless crafts in handloom weaving, it was because the weaver himself happened to be an artist. His sensitivity to rhythm and colour, line and curve, size and shape make him/her a perfect artist and designer. What he dreams, he executes the same aptly on the fabrics. In fine, he is a Midas of art who transmutes everything into golden beauty by the alchemic touch of his excellence finger. Hence, envisages a design and a colour scheme and transforms his vision into reality by imposing distinctive harmony and beauty in the shape of fabrics.

Unlike the tie and dye works of other regions in India, the motifs and designs of western Odisha are infinite in number and every motif and design is categorized under a special caption. No design is led without giving its name. It shows the creative mind of the 'bandha' weavers of this region. This renowned craft tradition was built up and sustained against the storms of cheaper production on mills and western influence on their outlook and taste from time to time. The son watched his father at work. Gradually his hands acquired the deftness and the skills of his father and grandfather. Then his mind attuned itself to this art to develop sensitiveness, conceive and perceive new images and weave new pattern with beautiful motifs. Hence the tradition of 'bandha' art was preserved and gave birth to thousands of novel motifs and designs catering to the need, taste, and outlook of the customers of this country and abroad.

Those who have seen the Ath Phulia, Dash Phulia, Butadar, Kaptas, Bichitrap[uri, Saktapuri, Rupashree, and other saries of this kind must hanve noticed how

diverse designs like ghagara, Deuli, Lata, fish, swan, deer, elephant, lion, lotus etc. adorn the lower part of such sarees. Pictures other than this manifesting the artist poetic disposition in their choice do not claim a place in the traditional Bandha Art.

The Bandha of Ghagara is ubiquitous and similar to the Malas of Lord Jaganath and Balabhadra adorning the whole of the Anchal in suitable places in order that a particular piece of art is never left unseen. This Bandha represents black and white in equal proportion signifying the chiaroscuro of sorrow and happiness, danger and safety, blame and praise which spin the thread of life.

The artist begins his technical pursuits in the form of Deuli Bandha after such a poetic contemplation of human life. The word Deuli derives from a word in Oriya meaning the temple of God. The artist first constructs a beautiful temple dedicated to the muse of his art. It is only after worshipping his muse in this way he can accomplish his art without any fault. This is why the 'Deuli' design is presented at the beginning of the lower part of the saree.

Let us discuss the preparation of the bandha yarn. This tie and dye work is known as Kama or Bandha work in Western Odisha. Before the yarn is tied as per the design, the white yarn is straightened by the help of a wooden frame known as kamad. Prior to this, the yarn is warped according to its desired length. Then 'Ancha' work begins and the ends are set separately in some portion known as 'Ganthis'. Now these Ganthis are tied as per the designs. Suppose we are to tie a lotus flower. In tying the same, we will only tie half of lotus on Ganthis by extra yarn. The other half of the lotus will automatically come out as per the previous setting of the ends as the time of work of the lower part of the saree. But if we are to tie a creeper or swan design then we shall have to tie a complete figure on the same.

Then the whole of this tied work known as chanda. If we are to give one colour to this chanda like Ghagara, then the whole chanda will be immersed in one colour bath. If we are to give more than one color to this chhanda, then we shall have to cover some required portions of this chanda and dye in another color bath. The work of covering the portion of this chanda is known as Ghodani in western Odisha. In this way the chanda is tied and dyed again and again to have its desired color. Then this chanda will be dried under a shadow or dark place as some color fades in the light and sun. After the chanda is completely died, then the Ghodani's knots are preliminary knots will be united and straightened and made ready for weaving.

This 'bandha' process affords unlimited scope for designing. With the use of synthetic dyes, a vast range of colours in various shades and different tone effects can be introduced. A 'bandha' weaver envisions a design and a color scheme and takes days to translate his vision into a fabric of distinctive harmony and beauty. He transforms an ordinary thing into golden beauty. In traditional fabric of 'bandha' art, a lotus blossoms at the centre of all designs. It claims a central place as it has deep metaphysical and aesthetic implications. Lotus is the symbol of the 'Padmini Nayika' i.e. woman of lotus kind. Brahma is seated on the lotus. Laxmi the goddess of ideal beauty and wealth resides in lotus. So she is known as Padmalaya. The face, eyes, naval, feet, palms of lord Vishnu are compared with the lotus. Again, he is also represented as holding a lotus in his hand implying the sign of benediction. Thus, lotus is held to symbolize 'Creation. That which is the best, unintelligible and immeasurable and that which is full of light should claim a place at the centre and the lotus in the lower part of the saree or 'bandha' art legitimately does so.

'Bandha' (tie and dye) design keeps its specialty and peculiarity in many ways. First the face and back of every motif of this design is exactly the same and this is quite

impossible to be done by the machine or other improved weaving devices like Dobby, Jala, Jacquard etc. Secondly, no extra yarn is needed for this different motif of this art. Thirdly almost all traditional motifs carry poetic ideas and aesthetic beauty. Fourthly its designs are many in numbers and every design is named. Apart from the richness of the motif, the harmonious bending of colors and rainbow brilliance has made this process unique in textile world. Besides, both the ground and figure weave plain. The fabric is compact in texture, fast in color, has equal number of warp and weft and hence has comparatively stronger weaving properties. So it lasts long and hence has got hearty support of women of western Odisha.

Sarees like Padmavatee, Manihira, Muktamala, Kumbha-Saudamini, Kadambini, Baghambari, Panchabati, Rupashree etc. adorned by tie and dye are widely popular in the market in and outside Odisha. There is a programme by the central government to encourage the weavers and we firmly believe that this art Bandha of western Odisha will receive an impetus through this scheme and the Bandha weavers will recapture those creative impulses that vivified our heritage and fuse them with novel impulses which can be rewarded at home and abroad.

2.4.5 Religious Foundation of 'Bandha' Art:

The 'bandha' in Odisha is more distinguished from the Ikat of Andhra Pradesh and the Patola of Gujarat. 'Bandha' art has been influenced by two distinctive aspects of culture of Odisha, viz. the Jagannath cult and the temple art of Odisha. As a result, Bandha has transformed itself from an ordinary art of weaving into a predominantly religious inspired fabric art. An inevitable and strong influence of Jagannath cult is seen in the traditions, social customs and manners, culture and above all in the Art of Odisha. The image and cult of Jagannath are seen on the 'bandha' art of Odisha. From the very beginning we find the use of black, white, yellow and red colour on 'bandha' yarn. These

colours are natural and used as the body colour of Lord Jagannath. These natural colours were prepared from leaves, fruit, flowers, bark and lac at the residence of the Bandha weavers. The lotus Bandha of traditional saree is circular like the sound shaped eyes of lord Jagannath. The ghagara Bandha is the exact imitation of the floral pendant of the neck of shree Jagannath. This Ghagara is the basic Bandha in tie and dye art. These colours have deep meaning and intentions. White is the symbol of knowledge, purity, the present and the light. Red indicates Rajaguna, glamour, strength, Atharva, veda and sudershan. Black is the indication of death, mysterious facts, shapeless future, the place of dissolution of all religions, and also our deity lord Jagannath. Yellow expresses the idea of past, gold, beauty and Devi Subhadra. The color green points to peace, prosperity and life. Again Jagannath, Balabhadra and Subhadra are respectively the symbol of future, present and past. So these three images are not only black, white and yellow they also indicates all the Kalas (times). We see originally the use of black and white and afterward the red and yellow colors in the 'bandha' art of Odisha. Green was used with this color in later year. The singha dwara (lion gate) of the temple of Lord Jagannath and the conch, chakra (wheel), mace and lotus displayed in his hand have influenced the singha(lion), Shankha and Padma(lotus) bandhas in tie and dye work. These Sankha, chakra and padma carry different meaning and indications. Thus Jagannath Cult and accompanying religious consciousness has shaped the 'bandha' art of western Odisha. Long before the invention of scripts, the Rupavidya regarding fear, wonder, joy, curiosity and manifold beauty of nature has got its place in the solitary caves of the mountain. Man had expressed his ideas on stones before the invention of paper and Bhuriya leaves. The temples were the epics and the Mukhasals were the prefaces. Man had manifested the spontaneous feelings of his heart in direct styles on the stones of this temple. The poetic overflow of inner ideas in undistinguished manner on the sorrow and

happiness, distress and impediments, love and enemy etc. of the human life has found expression with life force in temples like Konark, Rajarani, Lingaraj etc. Those temples and pieces of stones were for the artisans' proper places to record their inner ideas felt so intensely. Today we marvel at the indelible stamp of skill and the aesthetic sense of these artists of temples.

We observe the beautiful harmony of creeper, flower, birds, beasts etc. in 'bandha' art of Odisha. The same is also engraved on the bodies of the temple. Again the Deuli 'bandha' like a temple in its shape and it is set at the beginning of the Anchal. Thus the art and temple of this 'bandha' works are advancing side by side as it were. We find wonderful similarity between natural motifs of Bandha art and those carved on the temples. Pictures of images of lotus, lion, elephant, swan, creeper, birds are found beautifully engraved in the temples. Many deities are founded seated on lotus or holding lotus in their hands. Thus, lotus has got its special place and dignity in the sculptural arts inscribed on the temples. Similarly the pictures of lion and elephant on many temples seem life-like as also the pictures of birds like swan and parrots. All these motifs of birds, beasts, creepers, flowers etc. on the temples have an immense influence on the art of 'bandha' and have contributed to its poetic beauty. These 'bandha' motifs are not only a treasure of beauty but also of deep significance. The fruits of creation and pure joy are the real substance and inner voice of this art and the 'bandha' is suffused with the nectar-like joy of human soul.

It has been observed by the connoisseurs of art that these decorating pictures of animals, birds, creepers and flowers on the temple are better as regards expression of Bhaba (ideas) and Rasa (sentiments) than the pictures painted in the so called sophisticated processes in later ages in the 'Rupachitra' of Raga Ragini of Rajastani art, in the pattas of Bangladesh, the pothi pictures of Odisha and Gujrat, the ideas and

thoughts flowered in all disguised ways. This is rare in the sophisticated and stylized paintings by the skilled artist of the Mughal age. So, skilled and dexterous art may not be best art as far as the Bhaba and Rasa are concerned. Besides, the skill and sophistication, something more is necessary. This 'something' is nothing but Bhaba and Rasa. And Bhaba and Rasa come from within. These are not outward things and cannot be expressed by skill and effort only.

If we cast our glance at a lotus glooming in a pond and lotus tied on yarn with 'bandha' art, we will find a lot of difference between the two. The lotus of 'bandha' art is not an exact reproduction of the natural lotus. It is a poetic creation, a 'lotus' in the hearts of an artist and a person who can appreciate or understand the various sentiments expressed through it – the artist's contemplation of the manifold beauties of nature overflows in sentiments. Thus the suit union of form and sentiment is accomplished and the invisible flow of Rasa (sentiment) is released in the visible things. At that moment life penetrates in to the craft of the artist and becomes animate. As a poet infuse wonderful and different meanings into a simple word of the dictionary by the magic touch of his poetic genius, so also a Bandha artist creates new meaning and ideas in a basic form of nature by his intuition, thought and speculation. This creative faculty of the artist is best exercised not in painting a similitude of nature but in pouring forth new sentiments and ideas. The creepers, flowers, birds and beast etc. tied and dyed in Bandha art are not simple objects but powerful symbols of various sentiments or Rasas creating wondrous beauty for aesthetic relish.

This Bandha art of Odisha is old enough to be deeply connected with the Jagannath cult and temple art. Hence the origin of this Bandha art may be rather in Odisha than elsewhere. A sustained and resolute research in this field needs to be undertaken for revealing its origin and history.

Handloom sector, next to agriculture, provides massive employment to the rural artisans. So far as Odisha is concerned, it has a rich tradition of producing handloom products. Even the skill and knowledge imbibed over the generation, has given the Odisha hand woven textiles an unparalleled depth, range, strength and vigour. Handloom cloth is one of the richest and resilient medium of ethnic expressions. For the weaver weaving of cloth is not just commercial venture but it represents the philosophy the way of life. Thus Odisha still retains their place of pride for unique and exquisite creations in all over the world.

The handloom industry in Odisha is the largest cottage Industry providing employment and sustenance to 4 per cent of the population of the State. Right from producing superior artistic fabrics of excellence, this Industry also produces utility fabrics for the common masses at cheaper cost. However in face of teething competition in open market, the strengthening of the Industry and its diversification is the continuous need for its survival is being provided by government assistance in different forms. To achieve this end, different schemes have been formulated and are working under the Textile Directorate of the state. The demographic picture of weaving sector is ST-1 percent (6552), SC-30 percent (123544) others –69 percent (288165) having 1.19 lakh number of looms in the state, out of which 88186 looms have been brought under the cooperative fold and developmental activities are mostly being under taken in this organized sector under the directorate of Textiles. During 8th and 9th five-year plan the following schemes were implemented by Directorate of Textiles through Zonal offices and all such assistance are being provided to the PWCS. (Department of Textiles and Handloom, Government of Odisha 2003)

Figure 2.1: Handloom Map of Odisha

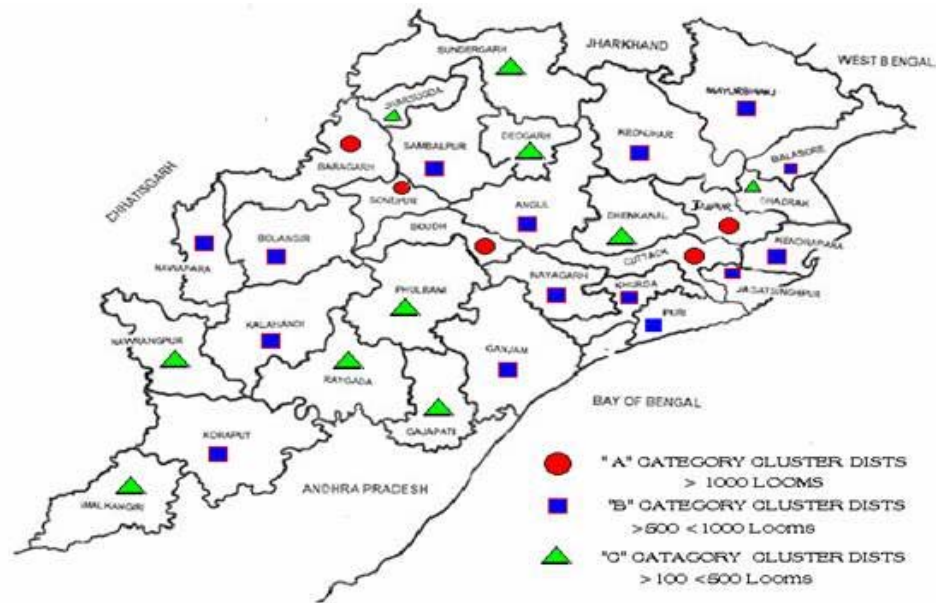


Table 2.1: Important Handloom Centres with Products

Centers	Products
Bargarh	Bed cover, dress materials, cotton tie and dye saree, silk saree, coarse cotton saree and others
Sonepur Boudh	Silk bomkai saree, tie and dye cotton saree, furnishing and silk tie and dye saree
Nuapatna	Silk khandua saree, calligraphy tassar saree and furnishing, coarse cotton saree and others
Jagatsinghpur	Fine count cotton saree
Kotpad	Vegetable dye saree and scarf, coarse cotton saree and others
Mayurbhanj Gopalpur Fakirpur Mankidia	Tassar saree and furnishing, coarse cotton saree and others
Berhampur	Silk saree, coarse cotton saree and others
Kalahandi	Habaspuri saree, coarse cotton saree and others
Bolangir	Tie and dye cotton saree and furnishings, silk tie and dye saree, coarse cotton saree and others
Nayagarh Puri Gajapati Rayagada Nawarangpur Nawapada Malkangiri Dhenkanal Kendrapa Bhadrak Sundergarh Sambalpur	Coarse cotton saree and others

Table 2.2: Important Handloom Clusters

Sl. No	Category of Cluster	Name of the District	Name of the Cluster	No. of Clusters
1	"A"	Bargarh	Attabira, Bargarh, Bheden, Barpali, Bijepur, Padampur, Sohela, Bhatli	8
2		Cuttack	Badamba, Tigiria, Nischintaikoili, Banki	4
3		Subarnapur	Birmaharajpur, Sonapur, Ulunda, Binika	4
5		Boudh	Boudh	1
4		Jajpur	Rasulpur (Gopalpur)	1
	Total	5		18
1	"B"	Bolangir	Patnagarh, Agalpur, Bangamunda	3
2		Nayagarh	Odagaon, Nayagarh	2
3		Ganjam	Rangeilunda (Berhampur)	1
4		Sambalpur	Rengali	1
5		Nuapada	Khariar (Sinapali)	1
6		Mayurbhanj	Bangiriposhi	1
7		Khurda	Bolagarh (Khurda)	1
8		Kendrapara	Garadpur	1
9		Balasore	Khaira	1
10		Jagatsinghpur	Jagatsinghpur (Badabag)	1
11		Angul	Athamalik	1
14		Puri	Pipli	1
12		Keonjhar	Anandapur	1
13		Kalahandi	Junagarh	1
15		Koraput	Kotpad	1
	Total	15		18
1	"C"	Dhenkanal	Dhenkanal (Siminoi)	1
2		Jharsuguda	Kolabira	1
3		Kandhmal		
4		Nawarangpur		
5		Bhadrak		
6		Rayagada		
7		Sundergarh		
8		Malkangiri		
10		Gajapati		
11		Deogarh		
	Total	10		2
	Grand Total	30		38

Table 2.3: Production Cycle System (For 2 pcs -11 mtrs)

Stages	Total Process	Weaving of Fine Cotton Variety	Weaving of Coarse Cotton Variety
1	Warping (Tani pura by females)	1 Day (8-10 hrs) for 2 pc i.e. 11 mts	1 Day (8-10 hrs) for 2 pc i.e. 11 mts)
2	Preparation of Tie an Dye (2 persons)	4 Days	2 Days
3	Winding (By females and children)	1 Day (Casually done by females and children)	1 Day (Casually done by females and children)
4	Sizing (by 2 male persons) (Street Sizing method)	4 - 5 hrs	4 - 5 hrs.
5	Preparation of looms	3 - 4 hrs.	2 - 3 hrs
6	Weaving	7 Days	3 Days

Cluster approach is being adopted wherein the viable societies, NGOs, other small and medium entrepreneurs will be actively associated for development of the sector. There are 72 clusters identified Odisha for the development of handloom out of which 38 are important clusters.

2.4.5.1 Tie and Dye (Ikat)

The tie and dye, in real term 'Ikat' is derived from Mangikat, a Malayalam word, means to bind, tie and wind around. The Ikat is a tie-dye process on either the warp or weft or both in warp and weft according to the designs. At the primitive age the design under tie and dye was a creative motive on the mind of the weaver basing on the natural scenario mainly the scenery, animal motifs, flowers and plants. The design is impregnated over the yarn under tie and dye process being translated in to a graph from a rough sketch paper diagram. It some times happened directly on the yarn by the weavers from their mindset but depends upon the skill of the weavers. For its intricate art of long traditional design of excellence and craftsmanship of the weaver's community on tie and dye fabrics, most popularly known as 'bandha' fabrics have a wide name and fame within the country and abroad. The tie and dye technique is mostly used in weaving Sarees, dress materials, lungi, bed cover, etc. (Meher 1995).

2.4.5.2 The Process of Weaving

The process of weaving involves a number of activities like warping, sizing, winding, dyeing, preparation of Bandha etc. Some of the important processes are discussed below.

2.4.5.3 Warping

The process for preparation of yarn from hank form to make warp is called Warping. The hank yarns are first transferred to Natai (a traditional winding device), and then it is wound around the warping frame in relation to the length of the warp. The non-weaving members of the family mostly ladies, normally perform this activity.

2.4.5.4 Preparation of 'Bandha' (Tie-Dye)

Before the yarn is tied as per the design, the white yarn is straightened by the help of a wooden frame named Kamada. Prior to this, the yarn is warped according to the desired length. The ends are set separately in portions known as Ganthis (group of threads). Now the Ganthis are tied as per the design and whole of the tied/untied yarns known as Chhanda are dipped in to the colour bath. The colour thus penetrates in to the untied portion. Subsequently the coloured portions are tied and the previously tied portions are untied to dye with a different colour, as the design requires. Such process of Tying and Dyeing is repeated till the Chhanda gets it's Bandha design. After dyeing is completed, the Chhanda are completely dried, all tied portions are untied and straightened to make it ready for weaving.

2.4.5.5 Preparation of Weft

Weft yarns are tied and dyed to facilitate a prominent boarder. In such process the hank yarns are transferred to Natai and then wounded on a device locally known as Badhi Pura as per the width of the saree to be woven. Then the boarder portion is tied and dyed as per the width of the border followed with pirn winding.

2.4.5.6 Sizing

Sizing is done to strengthen the warp yarn and make little stiffer so as to withstand the beating of the reed during the weaving process. It also gives the fabric an even weaving and sound look. Sizing is done only for cotton yarn by using the residue after rice preparation called Mud in local language by the help of a sizing brush locally termed as Kunchi. The sizing is normally done in free space nearer to the weaver cottage in the village. Preparation of loom: Preparation of loom is broadly classified in to the following categories of work.

2.4.5.7 Drafting

The process of passing the warp yarn through the heald of the loom as per the design is known as drafting. This helps to keep the warp yarn in parallel form over the width of the loom and in locating a broken yarn during the process of weaving

2.4.5.8 Denting

In this process, warp yarns are passed through the reeds and the healds. The warp threads are to be joined with the old warp threads with a local method of twisting by hands.

2.4.5.9 Setting up of Dobby

Sometimes in order to put extra warps in the boarder to weave a design an attachment called Dobby is fitted to the loom. This also helps in changing the border design easily and frequently there by also helps in increasing the productivity. Generally 4 to 12 shaft dobbies are used in the cluster area for the purpose.

2.4.5.10 Weaving

After completion of all the above processes, the weaving process gets started. The skilled weaver of the family performs this process. The looms being used in the cluster area are mainly traditional pit looms with throw / fly shuttle technique. During

weaving of a tie-dye fabric the weft yarns are usually set on the fall of the fabric after each beating. This is an essential feature.

2.4.5.11 Analysis of Production Cycle

In the cluster normally two numbers of sarees are woven in a single production cycle. The following table illustrates duration of the individual intermediary process and persons engaged for the same.

(http://www.navratnanews.com/handloom/process_of_weaving.htm)

Having discussed the origin, rise, growth and the current status of handloom and powerloom industries in Odisha, the following chapter dwells upon the state of handloom industry by taking a selected handloom clusters in Odisha. Emphasis is given in the context of handloom clusters in western Odisha because of their prevalence in large numbers.

CHAPTER III

WANING HANDLOOM INDUSTRY: A STUDY OF SELECTED HANDLOOM CLUSTERS IN ODISHA

3.1 Introduction

It is important to strengthen the indigenous technological system represented by handloom as it is culturally assimilated in Odisha. Instead of trying to understand the social structure, values and norms of the traditional handloom society, the Government of India frames policies in an isolated manner which results in the degradation of the handloom weavers. Prior to colonialism handloom was a flourishing profession among the people of India in general and Odisha in particular. Let us discuss what the indigenous technology and foreign technology are and the myriad ways in which they conflict with each other. Indigenous technology may be defined as a unified knowledge system and is a characteristic of a particular society and its culture. Indigenous technology may be called as local knowledge. This local knowledge is built up by the local people in contact with the nature through living in a particular area across generations. Local knowledge helps people in decision making about vital activities concerning their health, environment, safety and regulations (Hansen and Van Fleet 2003). But now the practices and policies of colonization have adverse effect on all forms of practices of indigenous knowledge. The western knowledge system has marginalized and subjugated indigenous or traditional knowledge systems. Western knowledge system is depicted as universal and authoritative that tries to legitimate its own knowledge while de-legitimizing indigenous knowledge system. Legal, government and academic channels transmit western knowledge system to promote capitalist and often ecologically destructive policies and practices. This ethnocentric knowledge

system underestimates and undervalues the indigenous or traditional knowledge system, which leads to marginalization or in some cases loss of practices of indigenous knowledge systems.

Prior to colonialism weavers in the handloom sector were able to satisfy their basic necessities through handloom. As a result the flourishing handloom industries of India as well as Odisha were on the wane after the advent of East India Company. The handloom industry had a better social structure, values and norms which guided their action in a proper direction to achieve desired goals, which was destroyed under the political incursion of East India Company. The internal market for handloom was damaged because frequent war dislocated the normal social structure and culture of the handloom weavers, revenue collected was not spent in India for creation of income, frequent famines and natural calamities ruined the backbone of small scale industry in which handloom was also a part, the traditional marketing outlet such as village fairs, festivals, weekly markets, pilgrimages etc. declined their importance. The export trade of textiles was crushed in 1769 when the East India Company prohibited the Indian weavers to work on their own loom. Various village institutions were undermined which were the backbone of Indian social structure. The handloom institution in Odisha is also no exception to this (Dash 1995). It resulted in the decline of indigenous knowledge system represented by handloom technology. After independence various textile policies came into existence but no fruitful results came into being. The National Textile Policy 1985 did not bring about any noticeable improvement in the handloom sector (Jain 1985). Since the handloom sector is a disorganized industry, it is difficult for the policy makers to understand the hidden social structure lies in it.

In this context, the present chapter attempts to study different challenges posed to the handloom sector in different handloom clusters in western Odisha and coastal

Odisha. In western Odisha, there are no powerlooms on account of which the condition of handloom industries in western Odisha is relatively better than coastal Odisha. In coastal Odisha, there is a prevalence of powerloom which directly copy the handloom design of coastal Odisha owing to a lack of skill in the design of badha of western Odisha. The powerloom of nearby states copy the handloom product of western Odisha thereby decreasing the demand of the handloom product of western Odisha. The prevalence of powerloom in Coastal Odisha has worsened the condition of the handlooms. Even the powerloom of coastal Odisha is not able to flourish, since it is yet to be culturally assimilated. On the one hand, people of Coastal Odisha have lost their indigenous craftsmanship because of the introduction of powerloom. The present generation of coastal Odisha is not aware of / has not been trained about the traditional craftsmanship and unable to cope with the new knowledge system. Hence in coastal Odisha both handlooms as well as powerlooms are in distress. On the other hand, the indigenous knowledge system is still alive in western Odisha but it is confronted with several challenges posed by the state-corporate nexus. This chapter dwells upon the challenges faced by the handloom sector of Odisha. The state of the powerloom sector in coastal Odisha by taking two case studies will be discussed in following chapters.

The study was conducted in five districts of western Odisha namely Bargarh, Bolangir, Sonepur, Boud, Nuapada and two districts of coastal Odisha namely Dhenkanal and Nayagarh. Western Odisha has been given emphasis because the percentage of handloom concentration is much higher in western Odisha in comparison to the other parts of Odisha. Only two districts from coastal Odisha, namely Siminoy and Itamati were identified because of prevalence of both handloom and powerlooms industries. In these two districts handloom faces a severe threat from the power loom. And at the same time, it is worth mentioning that powerloom has not been culturally

assimilated. Before introducing a different knowledge system, it is important to properly educate people regarding an alien knowledge system. Instead the Government of Odisha directly made a transition from handloom to powerloom unethically, on account of which both handloom as well as powerlooms are in severe crisis in these two districts.

The present chapter dwells upon the various challenges posed to the indigenous knowledge system (handloom). The present study is based upon both primary and secondary data. Primary data includes In-depth personal interviews that were made with the various stakeholders of handloom such as independent weavers, master weavers, middle man, and members of the cooperative societies. Besides that interviews were also made with the official staff of Directorate of Textiles Bhubaneswar, Textile Committee Bhubaneswar, and Weavers Service Centre Bhubaneswar regarding the declining status of handloom in the state. In-depth interviews were also made with one of the leading entrepreneur in the handloom sector in the state of Odisha. Secondary data includes data from variety of books, journal articles, Government Reports etc.

In Bangladesh handloom weaving is a labour intensive technology, involving different operations each of which requires a particular skill more people than the male weaver (Datta and Streefkerk 1985), which applies to the case of the weavers in Odisha. In other words, handloom sector creates employment for so many people at large. The proactiveness of one handloom makes alive sixteen related allied occupation ranging from the growing of cotton to the final handloom product woven (Niranjana 2004). In Odisha the proactiveness of one handloom makes so many related sectors active thereby creating employment opportunities for the people. Hence handloom requires serious heed from the state for its survival. However, in practice the Government of Odisha has been neglecting the handloom sector in the state thereby contributing to the plight of the handloom sector.

3.2 Brief profile of the handloom weavers and their socioeconomic status:

Table 3.1: Size of the Household

Name of the District	Total Number of weavers	Within 2 members	Within 4 members	Within 6 members	Within 8 members	More than 8 members
Bargarh	74	05	33	41	16	05
Bolangir	32	13	56	31	00	00
Sonepur	55	13	27	38	15	07
Boudh	22	00	18	54	23	05
Nuapada	18	34	33	33	00	00
Dhenkanal	00	00	00	00	00	00
Nayagarh	04	00	25	50	00	25
Total	205	10	33	40	12	05

(Source: Field survey)

Note: Responses in the table are given in percentage

Table 3.1 shows the size of the household of handloom weavers in five districts of western Odisha and two districts of coastal Odisha. In Bargarh 41 per cent of the respondents belong to 6-member family and 33 per cent of the respondents belong to the 4-members. Thus 74 per cent of the respondents family belong to the 4-6 member families in Bargarh district.

Most 6 member families are found in Bolangir, Sonepur, Boudh, Nuapada and Nayagarh district are high. Overall, 73 per cent of the respondents belong to the 4-6 member families. Most of the weavers' family is nuclear family consisting of husband, wife and their unmarried children. The head of the weaver family undertakes the weaving activity with the help of his wife and children.

Table 3.2: Educational Attainment of the Weavers

Name of the District	Number of Weavers	No education	Below Class 3 rd or 3 rd	Below Class 5 th or 5 th	Below Class 7 th or 7 th	Below 10 th or 10 th	Below +3 or +3	Higher Education
Bargarh	74	08	26	15	18	28	05	00
Bolangir	32	09	31	16	19	25	00	00
Sonepur	55	09	26	27	18	16	04	00
Boudh	22	09	45	14	05	18	09	00
Nuapada	18	11	39	28	05	17	00	00
Dhenkanal	00	00	00	00	00	00	00	00
Nayagarh	04	00	75	00	00	00	25	00
Total	205	09	31	19	22	22	04	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.2 depicts most of the respondents cannot afford to access education beyond matriculation. 96 per cent of respondents are under matriculate. Around 31 per cent of the respondents cannot afford education beyond class three. Hence, lack of education may be attributed to for the weaver's inability to cope with changing technological systems as well as various plans and policies of the government. Only 4 per cent of the respondents could afford education beyond matriculation. Thus level of education among the weavers is very low.

Table 3.3: Type of Household

Name of the District	Number of weavers	Kaccha House	Pakka House
Bargarh	74	68	32
Bolangir	32	78	22
Sonepur	55	78	22
Boudh	22	77	23
Nuapada	18	83	17
Dhenkanal	00	00	00
Nayagarh	04	75	25
Total	205	75	25

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.3 depicts that 75 per cent of respondent lives in Kaccha house whereas only 25 per cent of weavers are able to make pakka house. One the one hand, we have pakka house assisted by the government sponsored Indira Awas Yojana. And, on the other, it is observed that most of the weavers have been bereft of such government-sponsored scheme.

Table 3.4: Possession of Land by the Weavers in Odisha

Name of the District	Number of Weavers	No land	Land (Upto 1 Guntha)
Bargarh	74	93	07
Bolangir	32	100	00
Sonepur	55	89	11
Boudh	22	91	09
Nuapada	18	94	06
Dhenkanal	00	00	00
Nayagarh	04	75	25
Total	205	93	07

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.4 shows that 93 per cent of respondents have no land. Only 7 per cent of the weavers have land and that is limited to 1/25th of an acre of land only. The weavers only depend upon the weaving activity in order to survive since they do not possess land for cultivation.

Table 3.5: Income Level of the Weavers' Household

Name of the District	Number of Weavers	Below Rs 2000	Within Rs 2000 to Rs 3000	Within Rs 3000 to Rs 4000	Within Rs 4000 to Rs5000	Within Rs5000 to Rs 8000
Bargarh	74	00	47	39	14	00
Bolangir	32	56	38	00	06	00
Sonepur	55	82	07	00	11	00
Boudh	22	82	09	00	09	00
Nuapada	18	94	00	00	06	00
Dhenkanal	00	00	00	00	00	00
Nayagarh	04	00	25	50	25	00
Total	205	48	26	15	11	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.5 shows that most of the weavers' income is below Rs 2,000. Around 48 per cent of the respondents income is below Rs 2,000. If we increase the yardstick from Rs. 2,000 to Rs 3,000, then it will cover almost 74 per cent of the respondents' income. The entire weavers' families are engaged in the weaving activity and get a monthly income which is the income of the whole family.

Table 3.6: Independent Weavers and Weavers dependent upon Master Weavers

District	Number of Weavers	Dependent on Master weavers	Working on their own
Bargarh	74	81	19
Bolangir	32	78	22
Sonepur	55	82	18
Boudh	22	91	09
Nuapada	18	100	00
Dhenkanal	00	00	00
Nayagarh	04	00	100
Total	205	82	18

(Source: Field Survey)

Note: Responses in the table are given in percentage

The weavers are categorized into different types according to their working style (Source: field survey). The first one is independent weaver. In this type the weaver himself/herself buys the raw material from the market and sells the finished product in the nearby market. There are many independent weavers who work for the master weavers. These types of weavers are found more in western Odisha than in coastal Odisha. They get the raw material (tied and dyed yarn) from the master weavers and provide the finished handloom product to the master weavers. These independent weavers work on a piece rate basis. The master weaver takes the final product from them and gives their wages to the weavers on a piece rate basis. However, the independent weaver may change the master weaver according to his/her own choice. He/she is not bound to work under a single master weaver. The second category of weavers, albeit negligible in both western and coastal Odisha, works for the cooperative society. Such

weavers get raw material from the cooperative society and the cooperative society in turn takes care of the marketing aspect of the final product woven. The third category the master weaver is more artistic and aware of the demand of the market. They create the design of the fabric. They do the basic pre-loom work like tie and dye of the yarn. They give dyed yarn to the weaver and the weavers make the final product on a piece rate basis. Then the master weavers take care of the marketing aspect of the final product woven. There are few master weavers' who only take care of the pre-loom work, i.e. only designing of the fabric and tie and dye work. The nature of the master weavers' work depends on the size of their families. In other words, the master weavers whose family is large in size make everything, that is, from pre-loom activities to marketing the product. And, the master weaver whose family is small in size is engaged in pre-loom activities only. The role of the middleman is crucial in the handloom sector in both western Odisha and coastal Odisha. The middlemen come into existence where the weavers and the master weavers are not able to do the pre-and post-loom work properly. The middleman acts as a mediator between the master weaver and the weaver or independent weaver with the cloth merchant or the cloth merchant with the master weaver. Now the role of the middlemen and the master weavers is crucial in the handloom sector. It is observed that though the role of the master weaver and the middleman is exploitative in the handloom sector, the handloom sector survives because of a few master weavers in the absence of the smooth functioning of the cooperative society.

From table 3.6, depicts that total 82 per cent of the weavers depend upon the master weaver to run the weaving activity. Only 18 per cent of weavers do the weaving activity on their own.

Table 3.7: Weavers' Opinion about the Participation of Women and Children in the Weaving Process

Name of the District	Number of Weavers	Participation is 100%	Participation less than 100%
Bargarh	74	100	00
Bolangir	32	100	00
Sonepur	55	100	00
Boudh	22	100	00
Nuapada	18	100	00
Dhenkanal	00	100	00
Nayagarh	04	100	00
Total	205	100	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

From table 3.7, shows that there is full participation of women and children in the weaving activity. A weaver of Barpali remarked: 'Weaving is almost impossible without the help of my wife and children', which indicates the active participation of both women and children in weaving activity.

Table 3.8: Access of Weavers' Children to School

District	Number of Weavers	Sending their children to school	Not sending their children to school
Bargarh	74	100	00
Bolangir	32	94	06
Sonepur	55	91	09
Boudh	22	100	00
Nuapada	18	100	00
Dhenkanal	00	00	00
Nayagarh	04	75	25
Total	205	96	04

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.8 provides that 96 per cent of the respondents send their children to school. Since education is free till class X. However, they do not have much higher education. A weaver from Agalpur cluster of Bolangir district opines, 'we are sending our children to school, since education is free'. A weaver from Nuapada district says that 'we are

sending our children to school because at least, they will get a certificate of X pass or IX pass, by which it will be easier for them to tell in the market that I am educated’.

Table 3.9: Awareness about the Importance of Higher Education among Weavers in Odisha

District	Number of Weavers	Interested to provide higher education	Not interested to provide higher education
Bargarh	74	96	04
Bolangir	32	100	00
Sonepur	55	95	05
Boudh	22	100	00
Nuapada	18	100	00
Dhenkanal	00	00	00
Nayagarh	04	100	00
Total	205	97	03

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.9 depicts that 97 per cent of the respondents show deep interest in providing their children with higher education but they do not have the capacity for the same. Owing to low wage, poor socio-economic status and lack of exposure, the weavers of Odisha are not in a position to provide their children with higher education. A weaver from Butpali village of Boudh handloom cluster says, ‘My son has now just passed +3 commerce, now he wants to continue with his M. com degree. But I am not financially sound enough to provide financial assistance to my son to pursue the M. com degree’.

Table 3.10: Weavers’ Engagement with other Occupational Activities along with Weaving

District	Number of Weavers	Weaving and other occupational activities simultaneously	Only weaving activity
Bargarh	74	18	82
Bolangir	32	06	94
Sonepur	55	00	100
Boudh	22	32	68
Nuapada	18	11	89
Dhenkanal	00	00	00

Nayagarh	04	25	75
Total	205	12	88

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.10 shows that only 12 per cent of the weavers are engaged in other occupational activities besides their regular weaving activity and 88 per cent of the weavers are engaged in weaving activity only. A weaver from Barpali handloom cluster of Bargarh district opines, 'we are unable to maintain our family with this weaving activity. For that reason we have opened some other additional business with that of weaving. The additional businesses are like this the beetles shop, ration shop etc'. A weaver from Boudh district says that, 'we are bound to opt for any other additional business because we are only getting Rs 2000 or Rs 3000 from weaving activity for the reason of which we have to open some additional business along with weaving in order to smoothly maintain our family'. A weaver from Nayagarh district says, 'Now if we only weave, we will die in starvation. A weaver's monthly income is Rs 2000 or Rs 3000. And that is also not monthly assured. In this condition, if we do not open any additional business, then how we will survive? It is clear that many weavers are only involved in weaving activity without being able to do any additional job. However this trend may come to an end, if the weavers' community will not be patronized by the government.

3.3 Challenges faced by the Handloom Weavers in Odisha

Table 3.11

Different opinions of the weavers of Western Odisha regarding the handloom sector

Name of the District		Bargarh	Bolangir	Sonepur	Boudh	Nuapada	Dhenkanal	Nayagarh	Total
Total Number of weavers (IW + CS)		74	32	55	22	18	00	04	205
Ineffective cooperative system and ineffective	Y	95	84	87	90	100	00	100	91
	N	00	06	07	00	00	00	00	03

government machinery	C	05	10	06	10	00	00	00	06
Exploitation of the master weaver and the middle man	Y	24	31	31	36	56	00	100	33
	N	19	22	24	27	11	00	00	20
	C	57	47	45	37	33	00	00	47
Shortage of raw material	Y	100	100	100	100	100	00	100	100
	N	00	00	00	00	00	00	00	00
	C	00	00	00	00	00	00	00	00
Lack of working capital	Y	54	75	76	77	100	00	100	71
	N	05	00	13	09	00	00	00	06
	C	41	25	11	14	00	00	00	23
Infrastructure bottleneck	Y	88	94	82	100	100	00	100	90
	N	12	06	18	00	00	00	00	10
	C	00	00	00	00	00	00	00	00
Lack of product diversification	Y	00	00	00	00	44	00	100	06
	N	100	100	100	100	00	00	00	89
	C	00	00	00	00	56	00	00	05
Challenges faced from the power loom sector	Y	53	47	27	09	61	00	100	42
	N	45	47	64	91	33	00	00	53
	C	02	06	09	00	06	00	00	05

(Source: Field survey)

Note: Responses in the table are given in percentage

IW: Independent Weavers

CW: Weavers in Cooperative Societies

Y: Yes

N: No

C: Cannot say

Let us discuss table 3.11 in detail.

3.3.1 Nexus between the officers and the Members of the Cooperative Society

A weaver of Barpali opines, 'the government is not giving us the yarn in a low rate. For that reason we have to buy raw material from the market in a high rate'. The independent weaver buys the raw material in a higher rate and sells the finished product

in a lower rate to the middleman which contributes to the plight of the handloom weavers at large. A Master Weaver of Sohela handloom cluster of Bargarh district lucidly explains how the nexus between the government officers and the members of the cooperative society is responsible for the plight of handloom sector. He elaborates:

Suppose some handloom accessories have to be distributed among the weavers by the cooperative society. What happened in the reality? The quality of the handloom accessories given by the cooperative is very low. Hence the weaver does not use it. And the accessories get wasted in the weaver's house. But the society members showed the government that they have distributed the accessories and take the money from the government by producing the false bill.

The above elaboration suggests how the members of the cooperative societies are responsible for the plight of the handloom weavers. All types of misappropriation of fund are known to the higher officers. However why the officers and the government do not take any step in this regard is beyond the scope of the study. Many weavers of western Odisha opine that the cooperative society brings funds from the government by showing false data. According to them 'the cooperative society brings funds in the name of weavers but give it to their own relatives and friends'. In this way the cooperative society misappropriates the money. Many weavers from western Odisha express their dissatisfaction about the government facilities as who have the man power can only avail the government facilities. Otherwise, a large number of weavers are excluded from the government facilities owing to the non cooperation of the cloth merchant, leading master weavers, members of the cooperative society and the government officers.

Many respondents of Boudh district opine that the cooperative societies are only running in pen and paper which indicates that there is a discrepancy between the amount of products woven and the amount of product sold in the market. Any complaint against this would attract exclusion from government facilities in future. Owing to lack of education and awareness, the weavers at large are afraid to lodge complaint against these

illegal practices. Even if somebody raises his/her voice, his/her voice is suppressed. These independent weavers are mostly exploited in western Odisha. The independent weavers are not unable to support the basic necessities of his/her family like food, clothing and shelter. Many weavers from western Odisha have also highlighted lack of foresightedness of the government on account of which the traditional indigenous knowledge is subject to extinction. Thus the nexus of the government officers and the members of the cooperative societies is largely responsible for the plight of the weaver community in the handloom sector.

3.3.2 Ineffective cooperative System

The cooperative society should provide an alternative institutional arrangement to challenge the control exercised by the traders and the middlemen over the entire handloom production process. However, perhaps the cooperatives societies are vulnerable because they are not formed by the weavers coming together to further their common interest, but are rather created by the government authority (Mukund and Sundari 2001). The independent weavers are also dissatisfied with the functioning of the cooperative society. A weaver from Nayagarh District adds, 'Co-operatives are not functioning at all to support the weavers. The cooperatives which are running are only in pen and paper. They have nothing to do with the handloom weavers at large. Being weavers, we have not got any kind of facilities from the cooperative society'. The cooperatives societies are not able to perform well to support the weavers at large. A weaver of Barpali handloom cluster adds:

The government of Orissa has allocated huge amount of money for the weaver. But all the money has been misappropriated in different segment of implementation. For example an officer will call a weaver and tell him to put his signature on the blank paper and give Rs 200 instead of giving Rs. 500 which is being allocated for the weaver. Since the weaver does not know anything about the policy, he thought that I have not done any work (false consciousness. He is underestimating his own work) still I am getting Rs200. It's too much. In this way the officers and the members of the cooperative society are taking the

advantages of the simple and uneducated weaver. No officers and the members of cooperative society are really working hard for the upliftment of the weaver.

Earlier, when the weaver community faced the marketing problem, the government introduced the cooperative system. The government advised weavers to form a society, take loan, weave saree and sell them. The weavers' community has assured to keep the profit. However, in reality, the cost of a saree by cooperative society is more than that of the handloom saree of other businessman. Hence, many cooperative societies are closed down and many are running in pen and paper only. Even government comes to know that, the society is not making or unable to sell the saree in the market due to its high cost of production. At that time the government instructed the society if a saree costs Rs 1,000, they would need to sell it at Rs 800 and declare 20 per cent rebate. So that the customers will be attracted and cooperative societies take that 20 per cent from the government by providing bills in actual. It again gave a chance to the members of the cooperative society to be more corrupt. They showed the false bill on sale. Suppose a society has sold nothing but it showed that, it has sold sarees of Rs 1 lakh and gave rebate of Rs 20,000. And it takes that Rs 20,000 from the government by providing false bill to the government. In this way many societies take the rebate money from the government by showing false bill. Crores of money have been misappropriated by the society in this way.

Irrespective of nature of the government, each ruling party declares many packages to the weavers. However, owing to a lack of coordination, unit, education and exposure, the weavers' community is not able to utilize that fund. The officers and the members of the cooperative society take undue advantage of this situation.

Even Boyanika is the apex cooperative society, does not function well, which leads Boyanika to mix the powerloom product with the handloom product and sell it in

the market in the brand name of handloom. Everywhere nowadays brand sells not the quality of the product. But now-a-days people understand the difference between quality and brand. Hence most of the customers have left Boyanika and opted for private shops of handloom. Because in private shops, they are trying to maintain the quality of the handloom product. Even Boyanika is not able to compete with private shops by providing discount. The officers of textile committee and the directorate of textiles also agree with this point.

Despite having all infrastructure and funds, the apex cooperative society is not able to sell its products. Customers, at large, do not want to purchase mixed products. Boyanika is makes mix of powerloom product, handloom product and damaged handloom product, for which the demand of the Boyanika product has been on wane.

The cooperative society used to provide the raw material to the weaver and used to collect the saree from the weavers by paying proper wage as fixed by the government. These days even if a weaver or master weaver has the talent, he is not in possession of the primary infrastructure to do the weaving activity, which includes shortage of raw material and working capital.

When cooperative societies run well, they exploit the weavers more than the private master wavers or middlemen. Now the weaver who is a member of the cooperative society faces the following trouble like: the society make many more irregularities while giving the raw material and wage. Hence some weaver prefers to weave under private master weaver or private middleman.

A weaver from the Bolangir district adds:

If the weaver will get government patronage, then he can survive and compete in the market. The actual beneficiaries are not able to get the fund allocated for them by the government. That's why the real weaver is not getting the benefit. The fund has been misappropriated by the society members as well as government officials. If this trend will continue for a long time, then the handloom will be ruined in a very few days like the agricultural sector of

Odisha. The indigenous art will vanish in some days. Because the indigenous people are not getting fund to run their business.

The nexus between the government officers, members of the cooperative society and middlemen is responsible for the plight of the handloom weavers.

A weaver from Nuapada district adds:

The government officers get the signature of the weaver. The government officers get the false signature of the weaver. The weavers have to be given the weaving equipment in free of cost. But the officers do not give them the equipment rather they take that money meant for weaving equipment. The total loom cost is Rs20000. Money also comes for the loom. But we do not get. Everything, they shared among themselves'. The middle man also involved in this whole corruption process. The weaver also suggests openly that if Rs5 is coming for us, you (officers and the secretary and the president of the society) keep Rs 4 and give us Rs1. That is also not happening.

Since most of the weavers are illiterate and less educated they do not know how to manage the cooperative society. Taking the advantage of the situation, many master weavers produce a false production certificate that they are running 50-60 looms whereas they have only 10 looms. At the time of rebate or discount declared by the government, the master weaver with cooperation from the apex society show false sales record to the government and try to take all the benefit.

A weaver from Nayagarh District mentions, 'since the members of the cooperative societies are from the non-weaving community, for that reason they are unable to manage the cooperative society'. In other words, since the members of the cooperative societies belong to the non- weaving community they are unable to maintain the cooperative society, especially designed for handloom weavers' community.

A weaver from Nayagarh district also adds:

When there was handloom cooperative society, at that time it was running successfully. But since last 20 years the society was closed. At that time the society was giving us all the facilities ranging from raw material to wage. At that time we weaved in the supervision of the society and got the wage from the society, but the situation was quite ok. But the after the

closing of the society the situation is very worse. We are getting Rs1 profit per gamucha. Since we do not have any alternative source of income, for that reason, we are weaving.

The weavers are confronted with several problems after the closing of the cooperative society. And the closing of the cooperative society may be attributed to the misappropriation of funds in the cooperative society.

A weaver of Bolangir District adds:

The cooperative society which is considered as the life line of handloom is now in a declining stage. Many more cooperative societies are closed down. The cooperative society used to provide the raw material to the weaver and used to collect the saree from the weaver by giving proper wage as fixed by the government. At that time the weaver were not facing much problem, but after the closing of the cooperative society, the weavers are facing much difficulty. Now even if a weaver or the master weaver has the talent, he is not having the primary infrastructure to do the weaving activity, which includes shortage of raw material and shortage of working capital.

In the absence of cooperative society, weavers are not able to create better infrastructure for weaving. Now the weaver who is the member of the cooperative society faces the following trouble like: the society make many more irregularities while giving the raw material and wage. Hence some weavers prefer to weave under private master weaver or private middle man.

Table 3.12

The percentage of the weavers getting raw material as well as marketing facilities from the cooperative society, master weavers and market respectively.

Name of the District	Total Number of weavers (IW + CS)	facilities getting from the cooperative society		facilities getting from the master weaver	
		Y	N	Y	N
Bargarh	74	07	93	88	12
Bolangir	32	00	100	100	00
Sonepur	55	13	87	87	13
Boudh	22	00	100	100	00
Nuapada	18	00	100	100	00
Dhenkanal	00	00	00	00	00
Nayagarh	04	00	100	100	00

Total	205	06	94	92	08
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(Source: Field Survey)

Note: Responses in the table are given in percentage

The role of the master weavers in the process of weaving:

Here the story of a master weaver from Butpali village of Sohela handloom Cluster of Bargarh District has been narrated to understand the working style of the master weaver.

The weavers are working for the master weavers though the loom belongs to the weavers and the weavers work from home. But the weavers depend upon the master weaver for raw material and marketing of the final product in Andhra Pradesh. The raw material supplied by the weavers is already dyed and sized. The master weaver specifies the design and also does the marketing of the final product (Niranjana 2004). In Odisha, the master weavers do all pre-loom and post-loom activities. Pre-loom activities include tie and dye of the yarn whereas post-loom activities include marketing of the final product.

The master weavers do only tie and dye work. Master weavers are not involved in the weaving process. The weaving is done by the weavers. A master weaver of Barpali opines:

We do the bandha work and give it to the weaver and weaver give the finished saree to us. Agent are there to take the saree from us and sell them in market. Even some master weaver, whose family member are more, have direct access with the market. Some master weaver depend upon the middle man. Some middle man even buy the Bandha from the master weaver and give them to the independent weaver and collect material directly from them. Every master weaver have different group of weaver. However the independent weaver have the choice of changing the master weaver.

The role of master weavers in the handloom sector in Barpali is very dynamic. The role of the master weavers varies from place to place. Some master weavers give tie and dye yarn to the weaver and get the finished handloom product from the weaver. And then, they give that product to the middleman for selling of the product. There are few instances where the master weavers play the role of master weaver, middleman and

marketing agency. In Barpali, a few master weavers have their own production houses in which they employ individual weavers for weaving work.

Table 3.6 suggests that 82 per cent of the weavers are dependent upon the master weavers for doing the weaving activity. Without master weaver, it is very difficult for them to carry out the weaving activity. From table 3.12 it is observed that 92 per cent of weavers are getting facilities from the master weavers. And only 6 per cent weavers are getting facilities from the cooperative society. A few weavers who are independent weavers sometimes depend upon the master weaver to continue the weaving activity. A weaver of Barpali laments, 'we know that the master weaver is exploiting us. Knowing this thing, we are bound to work under the master weaver because there is no other institutional arrangement under which we can carry out work smoothly'. Weavers in general know that the role of the master weavers is exploitative, but they do not want to disclose it because their handloom business is running with the help of master weavers and middlemen. Without their help the entire handloom industry is nowhere. Table 3.11 says that 33 per cent weavers tell that there is exploitation by the master weaver. Around 20 per cent of the weavers say there is no exploitation by the master weavers and 47 per cent of weavers are not aware of what exploitation is. Perhaps they do not want to disclose the fact. They have the fear that it may hamper their weaving activity. However, in Nuapada more than 50 per cent of the weavers feel exploited by the master weavers and in Nayagarh district it appears that all weavers are exploited by the master weavers.

3.3.4 Shortage of raw material:

Table 3.11 depicts there is a shortage of raw material in the handloom sector. A weaver from Bargarh handloom cluster says 'Now we are facing acute problem regarding getting of the raw material. The cost of the yarn, color, dyes are so skyrocketing that, it's very difficult to manage the handloom business. Hence we are facing many problems in

procuring the raw material from the market'. He also adds that 'When there were different spinning mills in Odisha, we did not face much difficulty in procuring the raw material. But, after the closing of the different spinning mills, the yarns are coming from other states. Hence their costs were also very high because when yarn coming from the other states, the transportation cost is also included in that. Hence the price of the yarn becomes high'. The sky rocketing price and at times the artificial scarcity of yarn made by the big businessmen in the market compels the weaver to depend upon the master weaver and middlemen for their survival. A handloom weaver from Nayagarh District adds 'now yarns are coming from Karnataka and other states. And the quality of their yarn was also quite good. But the cost of the yarn is also very high. When we (the handloom weavers) go to shop for purchasing yarn, they sell us the yarn in a high price. But when the middle man or the master weaver purchases the yarn from the market, they purchase it in a low price. There may be different setting between the master weaver and the middle man with the yarn merchant. This situation compels us to depend upon the master weaver and middle man'.

3.3.5 Lack of Working Capital:

Table 3.11 shows that 71 per cent of the weavers tells opines there is a lack of working capital in the handloom sector, on account of which they have to depend upon the master weavers and middlemen in order to run the handloom business. A weaver from Nuapada District adds, 'In our area the cooperative society is totally not in function. Weaver also does not have the money to run the handloom business. Hence he has to depend upon the master weaver or the middle man for getting the working capital'. In Nayagarh district, 'hundred percent of weavers says that there is lack of working capital. Even the banks are also not interested to provide loan to the handloom sector. Because they know that the handloom is not a profitable business. Hence we are working on the mercy of the

middle man and the master weaver, since they are providing us the working capital and necessary infrastructure for weaving'. A lack of working capital compels the weavers to be perennially dependent upon the master weavers and middlemen. Table 3.11 suggest that in Bolangir, Sonapur, Boudh, Nuapada and Nayagarh district the problem of working capital is acute than in Bargarh. However in Bargarh such problem persists a lot. This low response in the Bargarh District may be attributed to the unwillingness of the weavers to respond.

3.3.6 Infrastructure bottleneck:

Table 3.11 indicates that 90 per cent of weavers face infrastructure problem in weaving their handloom products. Only 10 per cent of the respondents have minimum infrastructure for weaving. A master weaver of Bargarh handloom cluster opines, 'the waver is not having the adequate infrastructure, raw material and other things for making the design and we fill the weaver is not capable enough to make new designs at that time we create designs and give to the weavers to weave. At the time of difficulty we help them or guide them'. Owing to inadequate infrastructure, the weavers are not able to weave proper design. A weaver of Sohela handloom cluster of Bargarh District opines, 'we have very small muddy house. For that reason in the rainy season, we find it difficult to weave. In summer we design the warp beam in our nearby field. But now no field is there. Everywhere construction work is going on. So we find it very difficult to design the warp beam. Another problem that we are facing is in the rainy season we find it difficult to design the warp beam. Also we find it very difficult to store our woven product in our home due to lack of space in our home for the reason of which we sell our product without doing any bargaining with the business man in a very low price'.

3.3.7 Lack of product diversification:

Table 3.11 suggests that in western Odisha there is no problem of product diversification whereas in Nayagarh District in coastal Odisha no product diversification resulting in the similar kind of product getting flooded in the market. Since the similar kind of product gets flooded in the market it decreases the value of that product. Hence the weavers are compelled to sell their products at a cheaper price. Another problem the handloom weaver of Nayagarh district in coastal Odisha faces is that the powerloom of Nayagarh district apes the entire handloom product and sells it in a very cheaper price. Hence in Nayagarh district the handlooms are decreasing day by day. A weaver from Nayagarh district adds:

Previously we are weaving saree in the handloom of Itamati. If you have a loom, you can weave as you like. So many people come like you to our village. But nothing had happened to us till now. Here we are not weaving any saree. We are only weaving Gamucha. Those who have installed power loom here, only running dress material having symbol of Ashok chakra (Ashok Chakra flower). But the problem is that, the same kind of product got flooded in the market.

In Nayagarh district in coastal Odisha there is a lack of product diversification in the handloom sector leading to the plight of the handloom weavers.

3.3.8 Challenges faced from the powerloom sector:

Table 3.11 depicts that 53 per cent of the respondents in Bargarh district in western Odisha are confronted with serious challenges from the powerloom sector. A weaver from Barpali handloom cluster adds:

Due to low cost saree produced by the powerlooms, people prefer to use powerloom product. But no such powerloom is available in western Odisha rather such products come from other states. If the same product people get in a lower price obviously they use powerloom product. The powerloom of Andhra Pradesh and Tamilnadu coping the handloom product of Sambalpuri even the marwaris coping the sambalpuri design.

The handloom products have lost their importance in western Odisha owing to the prevalence of powerloom products. Since the prices of the powerloom product are low as compared to the handloom product people prefer to buy powerloom products thereby leading to a decline in the demand for the handloom products. A weaver from Nuapada district adds:

If you see the standard of living of the weaver has been increased i.e. because of controlled rice per kg Rs. 2.00. The wage of the weaver is very low. The scheme of the government is not able to reach to the people. The problem of the marketing is very high. Even the apex society Boyanika and Sambalpuri Bastralaya have failed to attract the customer. Competition from powerloom sector is also increasing. If the handloom production can be used as a luxurious product, then it can be marketed to the upper classes. The government level marketing of handloom product is also very low. Even exhibition of the handloom production is not attracting the people. Regarding the future of the handloom sector, the weavers are pessimistic. Even many weavers have left their ancestral job and jumped to other sector.

Owing to stiff competition from the powerloom, the handloom sector in Odisha faces severe crisis. A weaver from Bolangir District adds :

Obviously the powerloom product are creating problem for us. If power loom would have created different product then it would have been better for the power loom as well as handloom. Instead of creating, innovating and designing new product, it directly copies the handloom design which is creating a lot of confusion among the buyer regarding handloom and powerloom product. When a buyer goes to a shop for buying a handloom product, the shop keeper shows him two product of same design. One is of powerloom product and the other one is of handloom product. The rate of the two products supposes Rs 700 and Rs 2000 respectively. Obviously the buyer will buy the product of Rs 700.00. He will neglect the handloom product. But when she uses the product, the product will be destroyed very soon than handloom product. Like this every buyer faces confusion in the handloom and power loom product. But the power loom even cannot sell their product like this. The people are not so foolish. Now the upper class people can differentiate between these products and buy the real handloom product. The lower cost power loom sarees are taken by the people of lower class. The saree which we weave in 8 days, power loom weave the similar kind of saree 3 piece per day. Obviously powerloom cannot maintain the quality. But now a day's who care for quality. That's why the handloom is facing a lot of problem in marketing the handloom product.

Most of the powerlooms directly copy the handloom product and sell it them in the brand name of handloom which creates a lot of confusion among the customer at the time of purchasing the handloom products. The shopkeeper also helps the powerloom businessmen by selling their product in the brand name of handloom to the people at a cheaper price. However, a large number of weavers of Sonepur district are optimistic about the handloom sector. Table 3.11 provides that 64 per cent of weavers are very optimistic about the handloom sector in spite of the competition faced from the powerloom sector. A leading weaver of Sonepur district adds:

He is very optimistic about the future of the handloom. He is of the view that powerloom has its own way of weaving different products and handloom has its own way of weaving different products. The things which are being woven by the powerloom cannot be woven by the handloom and vice-versa. Hence no one should enter the boundary of the others. Instead of doing that power loom wants to capture the market of handloom product. It copied the handloom product directly, which is a problem for us. The handloom reservation act is there but who is obeying that. The government is also not taking any steps to eradicate this problem. Obviously the Orissa powerloom cannot copy our product because they do not have that sophisticated technology to copy our product. Mostly the sarees are copied by the powerloom of southern and western states. In the 1980s the powerloom sold the handloom design saree in Rs 50/Rs60. But the actual cost of these saree in handloom was Rs 400 and Rs 500. That's why we faced a severe crisis in selling our product. The design was almost same but there is a difference in quality and texture of that product which was not appreciated by the educated mass. Hence the major customer of powerloom products are labor class or working class, and the handloom product only used by the educated mass. The printed materials come from Gujarat, Maharastra, Madhya Pradesh and southern states. But gradually the powerloom product has lost its importance in the market. Here the power loom product refers to the copied handloom product. The educated mass came to know the difference between the handloom and powerloom product. The problem with the powerloom product is that it gets damaged very quickly and does not last for a long period of time. Now the powerloom products are being used by the lower class people. Still we are trying to make handloom product for all the categories of people. We are trying to develop the handloom. Now we have changed the old design and trying to create new designs. Even we have introduced new techniques and technologies in the handloom sector. In the past we weaved saree in 15 count, 20 count yarn. But now we are using 80 count, 100 count, 120 counts of yarn. Previously only Brahmपुरi saree was prevailing in the market, we tried to

create sonpuri Pata and silk saree. In the past the silk saree was not used by the common man. Only the king, jamidar or people of higher social status have the access to the silk saree. But now we have made silk saree, which can even accessible by common man. Those who are the initiator of these great revolution in handloom are really working hard to make this sector more prosperous. In the past we sell our product to the business man. Later we decided to open our own shop in Bhubaneswar and we did that. From our own research centre at Bhubaneswar, we tried to understand the choice of the customer and accordingly we design different fabric. After the opening of our shop Bhubaneswar, now we are able to understand the choice of the customer. In our own shop, we keep the handloom design saree of all over India. But basically we keep our own production.

Many weavers in western Odisha are optimistic about the handloom sector and they want to improve the handloom sector to face the stiff challenges from the powerloom sector. But in coastal Odisha (Nayagarh district), the handloom weavers do not show optimism equally about the future of the handloom sector. All handloom weavers of Nayagarh district opine that there is a stiff competition from the powerloom sector in the district itself. A handloom weaver of Nayagarh district adds:

Everybody in our family does the weaving activity. The looms which were previously operating in our home are now on the decline and about to close. The main cause is lack of money and stiff competition from the power loom sector.

Owing unequal competition from the powerloom, the handloom is on decline and about to close in Nayagarh district. Another weaver of Itamati of Nayagarh District adds that *'In Itamati, there were 5000 hand looms. But now it is only 300/400'. This has happened due to stiff competition from the power loom sector'*. The indigenous knowledge system is under threat in coastal Odisha as well as in western Odisha. But in Coastal Odisha, it is in the highest danger as compared to western Odisha. If due care will not be taken by the Government of Odisha the indigenous technology i.e. handloom will disappear soon. In Odisha the situation of the textile industry is not healthy. The penetration of, the powerloom has disturbed the handloom industry immensely. And at the same time the powerloom was not sustainable in Odisha because a lack of adequate infrastructure for

the powerloom, and more importantly, a lack of cultural assimilation. Further, the state of the powerloom industries will be discussed in the following chapters.

Table 3.13

Handloom Weavers’ opinions about wages, socioeconomic status and the future in the handloom sector

Name of District	Total Number of weavers	Low wage to the weaver		Future is uncertain in the handloom sector		Low socio economic status	
		Y	N	Y	N	Y	N
Bargarh	74	100	00	32	68	100	00
Bolangir	32	100	00	22	78	100	00
Sonepur	55	100	00	18	82	100	00
Boudh	22	100	00	55	45	100	00
Nuapada	18	100	00	50	50	100	00
Dhenkanal	00	00	00	00	00	100	00
Nayagarh	04	100	00	100	00	100	00
Total	205	100	00	32	68	100	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.13 suggests that the handloom weavers get a very low wage and this maintain a very poor socioeconomic status. However, in spite of low wage and low socioeconomic status, 68 per cent of weavers are optimistic about the future of the handloom sector. A weaver from Barpali handloom cluster says ‘Both male and female members work in the handloom. Handloom is the only source of their livelihood. No other source is available. Monthly remuneration is Rs 2500.00’. The whole weaver family is involved in the handloom activity and the whole family gets a monthly income of Rs 2000 to Rs 2500 which is very less for running their family smoothly in the present market, on account of which many handloom weavers are leaving the handloom sector and are engaged in other sectors to earn a better remuneration. A weaver from Barpali handloom cluster adds:

The cooperative societies are not at all functioning well. There is low wage in the handloom sector. The entire family is involved in the weaving activity and earns a amount of Rs 3000.00 per month. At the same time there is no other option left for us. Even if the options

are available, we are not adequately skilled enough to do that work. It is very difficult to manage the family with in Rs 3000/Rs 4000 per month. The individual income of the weaver per day is Rs 20/ Rs 25/Rs 30. The trade union is there but it is also not functioning. No weavers of the handloom want to make an uncritical transfer from handloom sector to power loom. Those who have made the shift now repenting. Because in the power loom their freedom is restricted. They only work as a daily wage earner. Their creativity is neglected. Hence they feel alienated in the work situation. For that reason many weavers who have left their traditional occupation and migrated to other states to work in the powerloom sector again coming to their home and trying to start the handloom weaving again. But the problem they faces are the following. Unavailability of raw material. Unavailability of adequate working capital. Lack of cooperation from the members of the cooperative societies as well as the government officers. Hence he finds it to difficult to survive in the handloom sector. The weaver tells that the government has taken a step that giving death injections to the real talents. In Odia the phrase is like this “talent maran niti sarkarra”. Lack of proper coordination among the weaving community itself is also aggravating the situation. The government is giving many packages to the weavers but no package is reaching to the weaver.

Owing to low wages, the weavers face tremendous troubles to survive in the handloom sector. The government does not take any drastic step to protect the indigenous culture of the state i.e. the handloom technology. If this trend would continue, then handloom will be totally disappear from the state itself. A government officer from the textile department adds:

Some of the handloom clusters in Odisha is closed now. In Balasore there is no handloom cluster at all. In Balasore earlier 200 handloom clusters were found, but now no handloom clusters are found there. Handloom is reducing in Balasore. In Bhadrak all the handloom clusters have been closed. In mankidia (Balasore) earlier 200 handloom clusters were there. But now no one is there. Apart from the western Odisha, handloom sector in all other part of Odisha is reduced. Take the example of Nuapatna, tigeria in Cuttack district. It was a big handloom cluster. But now the number of weaver is reducing day by day. The major problems the handloom sector in Odisha are like this. Staying at home and earn Rs 300/Rs400 per day rather than going out side is a very good option for the weaver. But they are even not able to earn Rs 100.00 per day where as all the member of the weavers family is involved in it. If the entire members of the weaver’s family are involved and earn a amount of Rs100.00 per day, then why they will stay in that sector. If government will make arrangement for them, they will happily stay at home and earn Rs 200/Rs300 per day. In home getting Rs 15,000 is much better than going outside and get a income of Rs 50,000. But if it is difficult to earn Rs 15,000 in home also then it is much better to go outside and

earn Rs 50,000. Hence many weavers are leaving the handloom sector and due to low wage the handloom sector is deteriorating day by day.

Table 3.14

Medical Facilities from the Government

Name of the District	Number of Weavers	Not satisfied with medical facilities	Satisfied with medical facilities
Bargarh	74	100	00
Bolangir	32	100	00
Sonepur	55	100	00
Boudh	22	100	00
Nuapada	18	100	00
Dhenkanal	00	100	00
Nayagarh	04	100	00
Total	205	100	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.14 indicates that none of the weavers are satisfied with the medical facilities given by the government to the weaver's community. The medicine that are provided to the weavers through the government facilities are of inferior quality. A weaver from Bolangir district adds 'we have been provided a card of ICICI bank to avail medical facilities from the government Hospital. But the doctors are not ready to accept the card. If some doctors are accepting the card, they are providing inferior quality of medicine. We are fed up with the card and also, we are fed up with the kind of medicine provided by the hospital'. The Government of Odisha in the name of providing free medicine to the weavers does not provide quality medicines, which has dithering effects on the confidence of the weaver at large.

Table 3.15**Transmission of Knowledge across Generations**

District	Number of Weavers	Handloom as their job by their children	Handloom as not their job by children
Bargarh	74	100	00
Bolangir	32	88	12
Sonepur	55	93	07
Boudh	22	55	45
Nuapada	18	100	00
Dhenkanal	00	00	00
Nayagarh	04	00	100
Total	205	89	11

(Source: Field Survey)

Note: Responses in the table are given in percentage

However in spite of so many difficulties in the handloom sector, a large number of weavers hope that their succeeding generations would take up handloom as their profession. On the one hand, people from western Odisha have opined that their children would take up handloom as their profession since there is no other gainful employment opportunity elsewhere. On the other hand, in coastal Odisha, not all weavers hope that their children would take up handloom as their profession.

Table 3.16**Weavers' opinions about the dominance of powerloom over handloom**

District	Number of Weavers	Powerloom will dominate handloom sector	Powerloom cannot dominate handloom sector
Bargarh	74	05	95
Bolangir	32	22	78
Sonepur	55	16	84
Boudh	22	41	59
Nuapada	18	28	72
Dhenkanal	00	00	00
Nayagarh	04	100	00
Total	205	19	81

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.16 depicts that that 81 per cent of weavers have opine that powerloom cannot dominate the handloom sector, provided the handloom get absolute government patronage. Otherwise the powerloom sector will dominate the handloom sector. A weaver from Bargarh district mentions:

No doubt the product of the powerloom is cheaper. Handloom product is sold at a high price. But handloom is in the blood of the weaver. Even if people buy the power loom product, we cannot stop weaving the traditional handloom product. Day will come when there will again be a demand for this traditional handloom product. Till that time we have to keep patience. And if we get the attention of the government, then only we can flourish better. But it will again be a wrong decision for us to seek the help of the government. Because no government irrespective of the party has taken any drastic steps in order to improve the conditions of the weavers. Hence we have to make our own destiny.” Said by Akash Meher. He also said that Padmashree Chatur Bhuja meher and Padmashree Krutartha Acharya has taken many initiatives to strengthen the conditions of the weaver. These two persons are private entrepreneurs in the handloom sector of western Odisha. If the government plans and programs will really reach to the grass root level, then people of this sector will be interested in weaving. He also said that handloom sector can never be replaced by the powerloom sector. He also emphasized the specialty of the handloom product, that the tie and dye product can never be made in a powerloom. People are using the power loom product since it is cheaper. According to him the powerloom product is only a dress material produced in a mechanized way in order to fulfill the necessity of clothing. But it does not reflect any creativity. The handloom sector of Barpali does not get any threat from the powerloom sector, rather it does not get any government support.

The handloom sector of western Odisha does not face much from the powerloom sector; rather, they are not getting proper government patronage to survive in the market. However in coastal Odisha, according to the respondents the handloom weavers are confronted with severe threats from the powerloom sector.

Table 3.17: Sustainability of the Handloom Industry in Odisha

District	Number of Weavers	Handloom is sustainable	Handloom is not sustainable
Bargarh	74	100	00
Bolangir	32	94	06
Sonepur	55	89	11
Boudh	22	59	41

Nuapada	18	89	11
Dhenkanal	00	00	00
Nayagarh	04	00	100
Total	205	89	11

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.17 shows that 89 per cent of the respondents are optimistic regarding the bright future of the indigenous technology. However, in coastal Odisha none of the weavers are optimistic about the sustainability of indigenous knowledge system, i.e. handloom. In Bargarh district, there is near absolute optimism exhibited by the respondents. A weaver from Bargarh district adds, 'Handloom will surely survive but it needs immediate attention of the government in terms of funding'. From the above responses it can be inferred that the handloom sector will surely survive in the market. A leading weaver of Sonepur District adds:

Odisha is very rich in making handloom and handicraft products. In a nutshell we can say that Agriculture, handloom and handicraft are the backbone of the Odisha's economy. But due to improper marketing mechanism, and poor initiative by the Government the beauty of these product remain unknown to the whole world. So he emphasizes the advertisement and marketing of handloom products in a lucid way, so that the world will know about the artistic beauty and specialty of Orissa handloom. Regarding the history of handloom he told that, handloom has a long history. Handloom weaving is there since time immemorial. Handloom reflects the artistic creativity of the weaver. In the past the weaver weave the handloom saree out of curiosity. Hence at that time he could able to design very beautiful handloom products. All the handloom products in the past depicted the heart and soul of the weaver that includes his happiness, sufferings, joy etc. When you see a handloom product suddenly it gives you a new perspective to look at the whole world. Because the weaver at that time never weaved it for commercial purposes rather he created such beautiful creation out of his passion. But since last fifty years, the consumerism culture has developed so much and the general taste of the public is so diversified that it is very difficult to attract the people by that traditional unique designs. In the era of globalization the multinational companies capture the market by having a control over print as well as electronic media. Through regular advertisement and publicity they trap the general mind set of the public. They advertise their product through famous actress and actors. People without thinking critically takes the advertisement for granted and consume their products. But they do not understand the problem they will face in the long run. Whatever the circumstances may be

the general demand for the handloom and other handicraft product has been declined. It is the truth. Here we cannot blame anybody rather we have to run with the time. Hence we are trying to create new designs and innovate new techniques to innovate sophisticated handloom products. In this critical juncture of time, if we work whole heartedly for the handloom sector, then definitely we will win.

Despite many difficulties, if the weavers at large will be determined to protect the indigenous culture and technology, definitely they will be able to do so. A leading weaver of Sonapur district says,

One idea comes to my mind that Aiswariya Rai is a actress and she uses the car which costs Rs 1 crore, then why cannot she wear a saree of Rs 1 lakh at least or 5 lakh. The thing is that if we provide her quality product, definitely she will buy it. Such things suddenly come to our mind and we created the best design saree which costs range between Rs1 lakh to Rs 6 lakh or more than that. These celebrities are buying our product even international celebrities buy our product that is because we have created such quality product. If the total weaving community whole heartedly works on this handloom sector, I am sure that the future of the handloom product of western Odisha is bright. The major thing is that creating a quality product needs lot of hard work and patience, which the present generation is lacking. If you want to make a quality handloom fabric, you have to sit for hours consistently and patiently, and then only a quality product can be made. But now the present generation weaver adopted a short cut method for weaving. They do not try for excellence rather they want only to survive by doing handloom activity. If we really work hard in the handloom and try to make new innovation and create new designs, definitely we will get customers from national as well as international market. The saree woven in our district are sold in the international market at Rs 10 lakh or more than that. To reach in this stage I have struggled a lot. I have sold the saree by moving door to door in Bombay. Basically people from Maharashtra and Gujrat spent a lot of money on this type of product, since the per capita income of the Orissa is very low; the costly design sarees can not be sold in the Orissa Market. Every year we are creating new designs. In the past the length of the handloom saree was less. For that reason at that time the size, texture, colour were also different. Previously the colour was black, white, red and yellow. After that new colours were discovered like green, blue, yellow, violate etc. we are every year changing the design, pattern and texture of the handloom saree since last 50 years. It has also a market demand.

If the weaving community, at large, works whole heartedly for the revival of this indigenous culture and technology, definitely they can do so. However from the field

survey a large segment of the respondents is optimistic regarding the future of the handloom sector.

Now let us discuss the state of the handloom sector from the master weavers' perspective.

Table 3.18

Master Weavers' opinions on the state of the handloom industry in Odisha

Name of district	Number of Master Weavers	Shortage of Raw material		Lack of Government Support		Marketing problem		Challenges from the Powerloom		Regarding the sustainability of the Handloom	
		Y	N	Y	N	Y	N	Y	N	Y	N
Bargarh	12	100	00	100	00	00	100	33	67	83	17
Bolangir	03	100	00	100	00	00	100	67	33	33	67
Sonepur	04	100	00	100	00	00	100	25	75	100	00
Boudh	01	100	00	100	00	00	100	100	00	100	00
Nuapada	01	100	00	100	00	00	100	100	00	00	100
Dhenkanal	00	00	00	00	00	00	00	00	00	00	00
Nayagarh	02	100	00	100	00	00	100	100	00	00	100
Total	23	100	00	100	00	00	100	48	52	70	30

(Source: Field Survey)

Note: Responses in the table are given in percentage

As previously mentioned, the master weaver plays a dominant role in the handloom sector in the absence of malfunctioning of the cooperative society. Owing to master weavers, the weavers are able to maintain their day to day affair in the handloom sector.

Now let us discuss the present plight of the handloom sector from the master weavers' perspective:

Table 3.18 suggests that there is a shortage of raw material in the handloom sector. A master weaver of Bargarh district adds that 'since all the spinning mills in Odisha are now closed, we are facing many difficulties in procuring the raw material. The raw material basically the yarn which is available in the market is imported from other state for the reason of which their cost of production is also high'. Owing to shortage of raw

material, the weavers as well as master weavers face enormous difficulty in the handloom sector.

3.3.8 Lack of government support:

Table 3.18 indicates that owing to lack of government support the master weavers as well as the independent weavers face difficulty in running the handloom business. A master weaver adds:

Now a day's nobody wants to do hard work in the handloom sector. Hence the number of weaver is getting down day by day and they are switching over to other occupations like selling of vegetables, opening beetle shop, opening cyber café which needs a very low concentration. Even they are not doing well in that sector. This he term as the self exploitative nature of the handloom weaver. Now many people in the age of 20 to 25 do not want to work and they want to work in that sector in which they have to do a very less work and a high salary is assured. That is the problem with the handloom sector. That people are now a day's do not want to work. The powerloom sector, government officials are taking advantages of this situation. In the last twenty years the weaver population has been decreased tremendously. Because nobody want to sit and work for a long period of time. Those who are working hard, you will see they are in a better condition. Those who do not work hard and maximum of their time is wasted in gossiping and thinking about others, these people are facing problem.

The government officers, instead of guiding the weavers' community in a proper direction, take undue advantage of the weaknesses of the weavers community. A master weaver from Bolangir district adds:

We give them advance money+yarn+tie and dye yarn+we also support weaver's family at the time of need. The problem we get some time is that, the weaver tells first give me Rs3000.00 in advance, then I will weave otherwise not. Sometimes we face much difficulty in handling the weaver because we have very low working capital. We are also not getting anything from the government. So many meetings have been organized by the Assistant director of textiles office but nothing has been done till now. The officers are taking huge bribe.

Owing to lack of government support, the master weavers face difficulty in handling the weavers' community at large.

3.3.9 Marketing problem:

Table 3.18 depicts that there is no marketing problem of the final handloom product woven. Either the master weavers sell the product in the market or the master weavers depend upon the middlemen for selling of the final product woven in the handloom sector. Whatever the case may be, there is no problem in selling of the final handloom product woven.

3.4 Challenges from the powerloom sector:

Table 3.18 shows that all master weavers from Boudh, Nuapada and Nayagarh district have opine that their handloom products are facing challenges from the powerloom sector. Around 67 per cent of the master weavers from Bolangir district opine they are not able to compete with the powerloom products. Only master weavers from Bargarh and Sonepur are a little optimistic about the handloom sector. In Bargarh district 67 per cent of the master weavers and in Sonepur 75 per cent of the master weavers opine they do not face any trouble from the powerloom sector. However, if we see the overall response, then it may be concluded that 48 per cent of the master weavers face trouble from the powerloom sector and 52 per cent of the master weavers do not. A master weaver from Bargarh district adds:

He told that, now power loom product can over take handloom product, because the tie and dye work is very critical. If we get government patronization, then only we can develop, otherwise it is very difficult for us to develop.

Owing to lack of government patronage, the handloom industry faces difficulty to survive in the market. Otherwise there is no such threat from the powerloom sector in western Odisha. Nevertheless, there is tremendous threat from the power loom sector in coastal Odisha.

Table 3.18 provides that that, 70 per cent of master weavers express their optimism about the sustainability of the handloom industry. However, the opinion of the master weavers

from Nayagarh district in coastal Odisha is on the contrary. A master weaver from Bargarh district adds, 'handloom is sustainable. Since we are designing the technology and we have the control over the whole production process for that reason we can say that the handloom technology is sustainable'. A master weaver from Nayagarh handloom cluster says, the handloom technology is unsustainable because if we trace back to the history, we will find that the handloom industry is more developed in western Odisha than coastal Odisha'. Hence the master weavers of western Odisha are more optimistic regarding the handloom sector than coastal Odisha.

Table 3.19
Level of Income of the Master Weavers

District	Number of the Master Weavers	Within Rs8000 to Rs10000	Within Rs10000 to Rs 20000	Above Rs20000
Bargarh	12	67	33	00
Bolangir	03	67	33	00
Sonepur	04	25	75	00
Boudh	01	100	00	00
Nuapada	01	100	00	00
Dhenkanal	00	00	00	00
Nayagarh	02	100	00	00
Total	23	65	35	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.19 depicts that a large number of master weavers earn Rs 8,000 to Rs 10,000. Only 35 per cent of master weavers earn Rs 10,000 to Rs 20,000. And there is no such master weaver whose income is more than Rs 20,000. However, in the district of Sonepur a large number of weavers i.e. 75 per cent of the master weavers' income level is between Rs10,000 and Rs 20,000.

Table 3.20
Involvement of Women and Children of Master Weavers in the weaving process

District	Number of Master Weavers	Participation is 100%	Participation is less than 100%
Bargarh	12	100	00
Bolangir	03	100	00
Sonepur	04	100	00
Boudh	01	100	00
Nuapada	01	100	00
Dhenkanal	00	00	00
Nayagarh	02	100	00
Total	23	100	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.20 shows that the role of women and children in the handloom sector is highly appreciable from the master weavers' perspective.

Table 3.21
Master Weavers' involvement in the Weaving Process.

District	Number of Master Weavers	Not dependent upon the middle man for selling of the final product	Dependent upon the middleman for selling of the final product
Bargarh	12	33	67
Bolangir	03	00	100
Sonepur	04	50	50
Boudh	01	100	00
Nuapada	01	00	100
Dhenkanal	00	00	00
Nayagarh	02	100	00
Total	23	39	61

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.21 depicts that 61 per cent of the weavers depend upon the middlemen for selling the final handloom product woven. In Nayagarh district in coastal Odisha, all master weavers sell the product themselves. However, in western Odisha the prevalence of middlemen is much greater than that of coastal Odisha. Many entrepreneurs from coastal Odisha and outside the state of Odisha are settled down in western Odisha and

earn a lucrative amount of profit from the handloom sector. Hence, the master weavers as well as the weavers are not able to get the actual profit. A master weaver from Bargarh handloom cluster explains how he/she is exploited by the middlemen.

Narahari Meher is a good master weaver. He is weaving since last 30 years. According to him the business man is getting all the profit. Because we only produce to get our livelihood. The middle man take the product in low price and sell them in Bomaby, Delhi and in other cities in a very high price. Hence the major profit is appropriated by the middle man only. Only we are getting the wage. Even he pointed out that there is a competition between weaver and master weaver in terms of selling their product , because they do not have enough capital to store their product for a long period of time, because they need money to eat, whose advantage is taken by the middle man and the trader. The major problem that is faced by the master weaver and the independent weaver is shortage of working capital. Those who are capable of doing things, they do not have the capital. Capital is in the hands of big merchant and middle man and traders. Raw material (500)+ wage (1500)= 2500. Hence the cost of production of one Bandha saree is Rs 2500.00. After investing Rs 2500.00, the master weaver sells the saree in Rs 3000.00. Middleman take the saree in Rs 3,000 from the master weaver and sells in Other market starting from Rs4000 to Rs10,000. Hence you just imagine who is taking all the profit. Basically the middle man is form non weaving community. Basically they are from costal Odisha and other neighboring states and Marwari people. The traders takes this saree to Delhi and take the Rastrapati Award. The design is made by the master weaver himself. Even a scientist cannot understand the design. The other people get the loan in the name of us. Now the weaver family is decreasing. The real worker is not getting any benefit. Really the design are very critical. He showed the researcher, in what kind of environment the Bandha work is being done. The environment is very clean. The weaver is a gifted person and is endowed with a high talent. What a tremendous engineer he is? The Mehers are basicall neat and clean people with a very handsome and beautiful look. They are artistic by nature. They love nature very much. They are physical appearance is better than the other Odia people. The problem we face is other people get the benefit in the name of us. The middleman those who are from our community and have little exposure about the world, take the product from us and show it to the Rastrapati and take the Rastrapati award and take all the advantage of the government. Some trader gets the help of me and takes the award. They know the work; they have idea about the work but they do not work. Only they sell the original work of ours and get all the benefit and became internationally acclaimed person. Actual worker is not getting anything.

The middlemen take the advantages of the helplessness of the weavers' community. And in the absence of a proper marketing agency, the middlemen exploit the weavers' community. Another weaver from Bolangir district adds:

Now the cooperative societies are running in pen and paper. If some societies are running they exploit the weaver more than the private master waver of middleman. Now the weaver who is the member of the cooperative society faces the following trouble like: the society make many more irregularities while giving the raw material and wage. Hence some weaver prefer to weave under private master weaver or private middle man. According to him, if the weaver will get government patronage, then he can survive and compete in the market. The actual beneficiaries are not able to get the fund allocated for them by the government. That's why the real weaver is not getting the benefit. The fund has been misappropriated by the society members as well as government officials. If this trend will continue for a long time, then the handloom will be ruined in a very few days like the agricultural sector of Odisha. The indigenous art will vanish in some days. Because the indigenous people are not getting fund to run their business. Some weavers who are desirous to weave are exploited by the middle man in the name of marketing of the final product woven and allocation of funds to the weaving community in the absence of proper government agencies.

In the absence of proper government agencies to look after the problem of the handloom weavers, the middlemen exploit the weavers. A master weaver of Bolangir district explains how the nexus between the middleman and the government officers:

The government officers get the signature of the weaver. The government officers get the false signature of the weaver. The weavers have to be given the weaving equipment in free of cost. But the officers do not give them the equipment rather they take that money meant for weaving equipment. The total loom cost is Rs20000. Money also comes for the loom. But we do not get. The middle man also involved in this whole corruption process. For example the weaver also tells that if Rs5 is coming for us, you (officers and the secretary and the president of the society) keep Rs 4 and give us Rs1. That is also not happening. Now all the weaver community got disappointed and is not interested to enter any officers to that village. Because whoever comes, comes for their own profit. The weaver also knows that so many surveys do not have any impact upon the weaver. The weaver community tells the officers, why are you coming so many times to get the signature from us. You do one thing; you keep 75% of money with you and please distribute 25% among us. Still that is also not happening. Even they come with nothing even not with a Panpudia (eparike gotie panpudia tae bi nahin, tahele ame kahinki dastakhat dabu). The Assistant Director of Textiles is in Patnagarh said a weaver of Agalpur (Saliabhata). Who will go to office to lodge a complaint? The office is 100km away. The credit card and the health insurance card are also not functioning.

The alliance between the middlemen and the government officers is responsible for the plight of the weaving community at large. A master weaver from Nuapada district adds:

The demand of handloom production is very low in today's context. The wages of the handloom weavers is very low. That's why the selling of handloom production is also low. The government officials and the field officers do not have direct links with the weavers. The middle man is closing the mouth of the officers by giving large amount of bribe. Officers are expanding the problem by taking 20% of the bribe from the whole corruption process. Officers come and check the performance of the society. He / She get saree, get bribe. Hence he gives report that there is proper wages given to the weavers, there is proper raw materials given to the weavers. But in reality the weavers get nothing. Officers are not coming in to the root. The honest officers and politicians are not able to get the cooperation of the public.

. Here a master weaver from Bargarh district explains the production cycle of the Sambalpuri Bandha saree and how the middle man is earns maximum profit from the whole production process:

*Master Weaver (Bring the raw material from the market) -----Master Weaver (makes the raw material eligible for weaving) -----Master Weaver (give the eligible raw material for weaving to the independent weaver with design)-----
-----Independent weaver (turn the eligible raw material into finished good)-----
-----Master Weaver (again the independent weaver supply the finished good to the master weaver)-----Middle man (take the finished good from the master weaver)-----
-----Middle man (Middle man sell the finished good in market through its agent). Here in the entire production process maximum profit is appropriated by the middle man, then master weaver and the weaver only get the wage.*

The middlemen appropriate the maximum profit from the whole production process. Since the master weavers initiate the business and perform much mental as well as physical labour, he/she should get a large share of the profit. At the same time he/she also has to pay a reasonable wage to the weavers. In reality, neither the master weavers nor the weavers get the profit; they only get their minimum wages. The major part of the profit is taken by the middleman. When cooperative society was functional, they did not

face much trouble. But after the collapses of the cooperative society, they started facing this kind of trouble.

Table 3.22
The case of the middle man

Income Level of the Middleman

District	Number of middle man	Within Rs10000 to Rs200000	Rs20000 to Rs40000	Rs 40,000 to Rs 1,00000	Rs 1,00000 and above
Bargarh	07	100	00	00	00
Bolangir	02	100	00	00	00
Sonepur	02	100	00	00	00
Boudh	02	100	00	00	00
Nuapada	02	100	00	00	00
Dhenkanal	00	00	00	00	00
Nayagarh	00	00	00	00	00
Total	15	100	00	00	00

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.22 shows that the income range of the middlemen falls between Rs 10,000 to Rs 20,000 which is more than that of the weavers' and master weavers'. The middlemen have the highest income among all stakeholders in the handloom sector whereas the middlemen do a relatively very less amount of work.

Table 3.23
Opinions of the Members of the Cooperative Society

District	Number of Members of the cooperative society	View regarding the malfunctioning of the cooperative society		View regarding the power loom will take over handloom product		View regarding the sustainability of the handloom sector	
		Y	N	Y	N	Y	N
Bargarh	05	100	00	00	100	100	00
Bolangir	03	100	00	33	67	67	33
Sonepur	04	100	00	00	100	100	00
Boudh	01	100	00	00	100	100	00
Nuapada	02	100	00	50	50	50	50
Dhenkanal	00	00	00	00	00	00	00

Nayagarh	01	100	00	100	00	00	100
Total	16	100	00	19	81	81	19

(Source: Field Survey)

Note: Responses in the table are given in percentage

Much explanatory responses are not found from the members of the cooperative society in the handloom sector. Table 3.23 suggests that the cooperative societies are running in pen and paper only. Almost 81 per cent of the members of the cooperative society in western Odisha are optimistic about the future of handloom sector. However, the members of the cooperative society of coastal Odisha are not equally optimistic about the future of the handloom sector.

Table 3.24
Opinions of the Government Officials

Total Number of Officials	Regarding malfunctioning of the government bodies		Powerloom will take over handloom product		Regarding the sustainability of the handloom sector	
	Y	N	Y	N	Y	N
21	100	00	48	52	71	29

(Source: Field Survey)

Note: Responses in the table are given in percentage

Table 3.24 depicts that the government bodies which are meant for handloom sector are not functioning well. An officer from the textile department adds:

The problem of deterioration of both handloom and powerloom in Odisha because: the government is not interested in Textile sector. Other state patronizing textile sector. If in Odisha somebody raises voice against that, then the government thinks yes we have to do something. But after that there is no follow up action to that policy. In other states the kind of infrastructure that is given to the weaver is not given to our weaver. Since last 10 years we are trying to formulate one textile policy for the state of Odisha. The policy was initiated by the Director of Textile, Government of Odisha. The officers seated, number of meeting have been arranged. But finally it is not formulated. It is in pen and paper now. Neither the government has taken any initiative not any body is taking any step to improve the handloom sector. After some day it will go to dustbin. Since last 10 years we are trying to formulate a policy but nothing has been done till now. West Bengal, Andhra Pradesh, Tamilnadu, every where you will find Textile Policy. The state where the textile policy is not there, how can

you think of the development? For the development of any other sector, you need to plan. Plan is very much necessary. According to the plan, the financial allocation will be done by the government. If there is no plan, then how do they allocate the money? If you go to state government and ask them to some information on powerloom, you will get very few information. Only you will get information on handloom. 14 spinning mills were here. Earlier it was more than 14 spinning mills and at the same time ginning and spinning mill are there. There were gining and spinning mill in Kalahandi, Nuaptna and Bolangir. No help have been given to them by the government of Odisha. Only they are doing by their own interest and getting assistance from the government of India. In Andhra Pradesh so many policies are made for these industries.

The Government of Odisha does not take radical steps for the improvement of the textile sector in the state. Around 52 per cent of the government officials opine that powerloom product cannot override the handloom products and 71 per cent of the officials are optimistic regarding the sustainability of the handloom sector.

An old lady from the weaver community in Saliavata village of Agalpur handloom cluster of Bolangir district elaborates:

Now all the weaver community got disappointed and is not interested to enter any officers to that village. Because whoever comes, comes for their own profit. The weaver also knows that so many surveys do not have any impact upon the weaver. The weaver community tells the officers, why are you coming so many times to get the signature from us. You do one thing: you keep 75% of money with you and please distribute 25% among us. Still that is also not happening. Even they come with nothing even not with a Panpudia (eparike gotie panpudia tae bi nahin, tahele ame kahinki dastakhat dabu). Who will go to office to lodge a complaint? The office is 100km away. The credit card and the health insurance card are also not functioning.

The weavers' community, at large, is disappointed with the callous attitude and behavior pattern of the administration. The old lady adds further:

So many surveys have been conducted in our village. One survey was for manga (loom). One survey was for jacquard machine. One survey for giving us finance. Like this so many. But till now we have not got anything. Now we have decided that we will not enter any government officer into our village.

This clearly depicts how the weavers' community at large does not get the attention of the government and how the government has an indifferent attitude towards the weavers' community.

A government officer of the textile department adds:

Some handloom clusters of Odisha are closed now. In the some districts of Odisha, the handloom has been totally disappeared. Apart from western Odisha, in other parts of Odisha the handloom weaving has been reduced tremendously. Now days in Western Odisha, the handloom is also going to decrease. The major causes of this decreasing handloom may be attributed to very low wage in the handloom sector.

According to her /him due to low wage, the handloom industry is declining. He opine 'the deterioration of the handloom and powerloom of Odisha is mainly the Government of Odisha is not interested in the Textile sector. If somebody raises voice regarding the textile sector, then government thinks that yes now the government has to do something for the handloom sector. But after that no follow up action was taken up by the government'. The officer adds that 'the textile committee is trying to formulate one textile policy for the state of Odisha. The policy was initiated by the Directorate of Textiles, Government of Odisha. So many meetings have been arranged in this regard. But finally it was not formulated. How can you think of the development of the textile industry in a state, where there is no specific textile policy for the state?' She/he adds told that the scarcity of the raw material and the negligence of the government have made the situation of the handloom weavers worse.

Ineffective marketing system has led to the decline of the handloom products in the state. Even the apex cooperative society, Boyanika and Sambalpuri Bastralaya, have failed to take care of the marketing aspect of the handloom products. In this regard, a master weaver of Butapali village of Sohela handloom cluster of Bargarh district says:

Because of shortage of raw material and other administrative inconvenience the cost of handloom products becomes high. Hence people are not interested to buy the handloom

product thereby decreasing the market for the handloom product. Now the production of the handloom is only for the high class people of the society since it is not affordable by the common man. Now also the production of the handloom clothes has been lowered in Western Odisha because of lack of support from the government like supplying of raw material and marketing and availability of the raw material in a cheaper rate. Hence many handloom weavers have left handloom and migrated to other states or places in search of employment. The apex cooperative societies are also failed to market the handloom product due to heavy corruption in the apex cooperative societies.

3.5 Conclusion

The handloom industry in Odisha is rich in its artistic design, texture and color. Handloom is an indigenous technology and culture which is still alive in Odisha and provides employment to a large section of the population. The weavers and master weavers of western Odisha are working hard in the handloom sector for their survival. Handloom, the indigenous technology, is struggling to survive Odisha in the absence of the proper functioning of the cooperative societies and government bodies. The Government of Odisha has been ignoring its indigenous people, technology and culture which is totally destructive for the state itself. Even the government has not formulated any proper policy for the revival of the handloom sector. The Government of Odisha has been neglecting the handloom sector which is the second best employment generating industry after agriculture. According to all the stakeholders of the western Odisha, the role of powerloom products in the handloom sector is negligible. However powerloom have somehow affected the handloom industry of coastal Odisha. In western Odisha the powerloom to a large extent, has not affected the handloom sector significantly. In western Odisha, the handloom sector is in distress because it does not receive proper attention of the Government of Odisha. The nexus between the middlemen and the government officers is responsible for the plight of the handloom industry as explained by the different stakeholders of the handloom sector. However, many weavers are still

optimistic about the handloom sector and opine that if the sector will get serious attention of the government, then the handloom sector will certainly flourish. The rich handloom belt is under threat owing to the introduction of the powerloom in coastal Odisha. The powerloom industry also was not able to survive in coastal Odisha because of a lack of cultural assimilation. Without creating proper infrastructure for the powerloom sector, the government introduced powerloom in coastal on account of which the powerloom is a failed scheme in Odisha.



CHAPTER IV

DECLINING POWERLOOM INDUSTRY AND ALLIED TECHNOLOGY FACTORS: A SOCIOLOGICAL STUDY OF SIMINOI POWERLOOM CLUSTER IN ODISHA

4.1 Introduction

Debates on science and technology (S&T) in independent India have largely taken place around changes in S&T policy, the role of the State in distinguishable phases ranging from the strong promotion of S&T, pursuit of self-reliance and the dominant role of the state sector under the Nehruvian State to the ongoing phase of State withdrawal, attenuated emphases on self-reliance and indigenous research, and heightened influence of foreign governments and multinational corporations on public policy including in S&T. This analysis has considerable validity in organized industry and is the main current of scientific research in institutions and universities. However, there has been continuity rather than change in the broad area of livelihoods and habitat of rural and petty producers such as agricultural labour, artisans and other off-farm workers and the self-employed in manufacturing, construction or related sectors, and perhaps including the peasantry as well. Since independence, there has been an almost complete neglect of, indeed perhaps blindness to, these sectors and to the generation and application of S&T appropriate to the development needs of this section of the populace. This huge and persistent systemic chasm in the S&T ecosystem in India has, along with other structural biases and institutional failings, contributed to the now chronic deprivation of these sections, steep decline in the economic weight of their occupations and activities, their disconnect from the development mainstream, and a loss of hope in the future. And, the powerloom sector in Odisha is no exception to such distress.

The purpose of the present chapter is not to reflect upon the demarcation problem (demarcation between two conflicting knowledge systems), but to find out the impediments contributing to the plight of powerloom sector in textile industry in Odisha. In this context it is important to dwell upon a plethora of concepts and ideas which contribute to the debate on powerloom industry, both globally and on a specific locale.

Prior to India's Independence, Gandhi (1938) promoted small-scale and cottage industries as a gainful economic activity. The rationale for Gandhi was simple – such industries required little investment, provided individual with gainful employment opportunities and was seen as a means of ensuring self-sufficiency and the survival of the country's traditional craft and artistry. More importantly, Gandhi's vision of self-reliance was a part of a larger struggle for independence from the imperialist yoke. Gandhi's advocacy of small-scale and cottage industries is constitutive of one of alternative and/or multiple modernities.

Niranjana and Vinayan (2004) argue that India's passage into modernity has centred significantly on the textile industry. The textile sector is one of the largest employers in the country and within this sector handloom weaving enjoys a preeminent status. The persistence of handloom weaving right into the present either owing to its organisational responses to changing markets, technological or product innovation, or other kinds of adaptation of labour, capital and skills – calls for its in-depth exploration. Today's globalised macroeconomic processes have also affected the non-formal sector and a contemporary understanding of the nature of the handloom industry and its responses are hence very important.

The coexistence of two knowledge systems – represented by handloom and powerloom – involves a variety of perspectives straddled within progress discourse, poverty discourse and market discourse, constitutive of the socialist project, welfare

project and liberalization project respectively. In this context, Mamidipudi, Syamsundari and Bijker (2012: 41) propose an alternative view of handloom weaving as a socio-technology: understanding handloom as an ensemble of knowledge, skills, technology and social relations explains the continued sustainability of handloom, and also offers clues for socio-technical innovation and an alleviation of vulnerabilities.

The conflicting interests between two knowledge systems, viz. indigenous and modern knowledge systems – represented by handloom and powerloom respectively – have significant implications for the ways in which they are socially, economically, politically, culturally and institutionally embedded (McKenzie and Wajcman 1999). Indigenous/local/traditional knowledge is generated by local people in contact with nature by living in a particular area across generations. Local knowledge helps people in decision making about vital activities concerning their health, environment, safety and regulations (Hansen and VanFleet 2003: 3). But now the practices and policies of colonization seem to have adverse impact on all forms of practices of indigenous knowledge. The western knowledge systems, depicted as universal and authoritative, have marginalized and subjugated indigenous or traditional knowledge systems, and are in continuous attempt to legitimate its own knowledge while de-legitimizing indigenous knowledge systems. Legal, government and academic channels transmit such ethnocentric knowledge (Western knowledge system) to promote capitalist and often ecologically destructive policies and practices. This ethnocentric knowledge system underestimates and undervalues the indigenous or traditional knowledge systems, which has resulted in marginalization or in some cases loss of practices of indigenous knowledge systems.

The uncritical transition from handloom to powerloom clusters is regarding as involving the question of ‘deskilling of labour’: the process by which skilled labour

within an industry or economy is eliminated by the introduction of technologies operated by semi-skilled or unskilled workers. Braverman (1974) argues that capitalist forms of production reduce the cost of labour by breaking down complex work processes into smaller, simpler and unskilled tasks. This continuous fragmentation process replaces the skilled craft worker by unskilled labour requiring little training, so that jobs in the secondary sector of the labour market are substituted for jobs in the primary sector. In consequence, wages and employment conditions are pushed down to the lower level typical of the secondary sector: unemployment and insecure employment become widespread and people in deskilled jobs become alienated from work.

In the development discourse, there is a difficulty in figuring out the appropriate level of technology to fit the given circumstances: in other words there is a choice of technology and it cannot be unproblematically assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries (McRobie 1979). The state, instead of giving priority to the existing indigenous knowledge and improving upon that, is engaged in emulating modern technology. However, it is beyond the scope of the present study to critically engage in the nature of the state. Since technology is alien, it is important to understand how a specific technology is culturally assimilated by its practitioners, stakeholders, and so on, for example, absorbing minorities into the ways of the majority requiring them to adopt the majority's language, customs and values. Industrial technology requires a highly skilled and professional labour force controlled by normative orientation, value systems, institutional mandates and ideological moorings: the problem of order. In order to motivate and keep this labour force intact, there must be a progressive educational system accompanied by social mobility and social equality at large. Work ethics has to be encouraged in an industrial society (Watson 1995).

The industrial development of Odisha is not balanced and integrated (Meher 1992) and hence work ethics in the powerloom sector in Odisha requires redesigning: a set of ideas and beliefs 'commonly held by the actors' involved (Dunlop 1958). There must be progressive ideological moorings to be followed by the powerloom weavers to survive and compete in the market. Productivity improvement requires not only financial investment but also unity, sincerity, cooperation and skill from the workers: a rule-governed shared culture is based on relevance, acceptability and elegance, as Weber suggested in *Economy and Society* (1978). The maintenance of cordial industrial relations is important for ensuring higher productivity and full utilization of the production capacity. The management and supervisory staff need to build a suitable organizational ambience where the workers can do their best job (Rao 1989). Perhaps in these matters, the Japanese and other competitors are more efficient than their counterparts in India (Mote 1967). Since there is a lack of product diversification in textile products, there is a less competitive environment in the state for which the powerloom is not able to flourish. The textile industry depends heavily on an agricultural raw material, that is, cotton. The prices of cotton tend to fluctuate depending on the size of the crop as well as market volatility. In some other countries, the respective governments have taken up steps to maintain the heavy fluctuation in cotton prices by deploying price stabilization policies, which has not happened in India (Anubhai 1988). Since the price of cotton is high and Odisha is also not a chief producer of cotton, it ultimately leads to the shortage of raw material in the sector, thereby responsible for the plight of textile industry, both handlooms as well as powerlooms. As Bythell (2008) points out, the fixed cost of powerloom is high: in the powerloom sector of Odisha there is high investment and low return. Such a situation calls for in-house technological innovations: the situational new development and introduction of knowledge-derived

tools, artifacts and devices by which people extend and interact with their environment, which is firm-specific and continuous (Tornatzky and Fleischer 1990). The major dimension of technological development arises from the social system in which the technology operates. The individual private firms largely operate on the basis of their own individual interest rather than social welfare (Murty 2002).

The state of Odisha has a poor industrial set up. A majority of its population depends upon agriculture for their survival. The handloom sector of the state is the second employment generating sector in the state. The people dependent on handloom weaving have acquired skill and knowledge from their ancestors: it has been easy for them to cope with the handloom. In 1972, there was a transition from handloom clusters to powerloom clusters initiated by the Government of Odisha, albeit uncritically, in the districts of Ganjam, Nayagarh, Khurda, Puri, Dhenkanal and other districts. Such an uncritical transition from handloom to powerloom clusters has resulted in the distress of powerloom in the above mentioned powerloom clusters.

It is against this backdrop that the present chapter sheds light on the factors contributing to the distress of powerloom industry in Odisha. It is important to examine the factors for the growth of powerloom industry in the western and southern part of India on one hand, and decline of powerloom industry in eastern India on the other. The factors for the growth and/or decline of powerloom industry in different regions in India are interrelated, and any attempt to study these in isolation would be misleading.

Table 4.1 provides a brief profile of powerlooms in Odisha. Table 4.2 offers the number of powerloom units in the private sector in different zones in Odisha. The two tables provide a comprehensive understanding of the state of powerlooms in Odisha.

Table 4.1: Profile of Powerlooms in Odisha

Sl. No	Name of the District/ Zone	No of Powerlooms in Private Sector			No of looms installed			Name of Powerloom in Cooperative Sector	Number of Looms installed		
		Total	Functional	Non-Functional	Total	Functional	Non-Functional		Total	Functional	Non-Functional
1	Athagarh	15	11	4	74	60	14	Maa Bauti	142	-	142
2	Berhampur	148	147	1	273	271	2	Berhampur Powerloom	100	-	100
3	Cuttack							Madhunagar	100		100
		15	12	3	66	32	34	Sri Parvati	150		150
								Baldevjew	100		100
								Chhatia Weaver Mill	100		100
4	Khurda	71	63	8	222	201	21	Barunei	100		100
5	Bargarh							Ramnagar PL	96	96	-
6	Baripada							Baripada PL , Takatpur	96	96	-
7	Sundergarh							Mahalaxmi	150		150
8	Nayagarh	67	47	20	229	145	84				
9	Balasore	14	4	10	174	50	124				
10	Dhenkanal (Siminoi)	120	110	10	367	344	23				

Source: Directorate of Textiles, Government of Odisha (2005)

Table 4.2: Number of Powerloom Units in the Private Sector in Different Zones

Sl. No	Name of the Zone	Number of Powerloom Units			No of Looms in the Unit		
		Total	Functional	Non-functional	Total	Functional	Non-functional
1	Athagarh	15	11	4	74	60	14
2	Nayagarh	67	47	20	229	145	84
3	Balasore	14	4	10	174	50	124
4	Dhenkanal (Siminoi)	120	110	10	367	344	23
5	Berhampur	148	147	1	273	271	2
6	Khurda	71	63	8	222	201	21
7	Cuttack	15	12	3	66	32	34
	Total	450	394	56	1405	1103	302

Source: Directorate of Textiles, Government of Odisha (2005)

4.2 Powerloom Clusters in India

In India the powerloom sector is the dominant player in the weaving processes. It contributes more than 60 percent of total textile production. The present day powerloom behemoths of Surat, Bhiwandi, Erode, Coimbatore etc. were once famous for handlooms and now they are completely transformed into powerlooms. The need of the hour is the

integration of the handlooms and powerlooms for maximizing the benefits of industrialisation and raising the standard of living of the people. But the problem in Odisha is that the powerloom is in a distress condition as compared to the rest of the India. In few cases like in Odisha it is observed that both handloom and powerloom are integrated to produce market oriented products. Currently, 1,238 powerlooms in Odisha are producing low-value products such as Gamucha, Saree, Dhoti, Blouse and long cloth (Textile Committee Report, Government of India 2003).

The textile industry accounts for as large as 21 percent of the total employment generated in the economy. Around 35 million of people are directly employed in the textile manufacturing activities. There are about 1.7 million registered powerloom in India, out of which 43 percent belongs to Maharashtra and 20 percent belongs to Tamil Nadu. Gujarat stands third in the number of looms with the share of 19 percent. Besides these states, the powerloom weaving is more in existence in the state of Andhra Pradesh, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and Odisha; and that taken together account for 15-20 percent of the total powerloom units in the country (Textile Committee Report, Government of India 2003).

4.3 Powerloom Industry in Odisha

According to a survey conducted by the Textile Committee, Government of India in the year 2003 it is revealed that there are a total number of 707 powerloom units in the state of Odisha of which 469 units are found to be working. The powerloom weavers mainly work for the master trader or master weavers who supply yarn and other raw material relating to weaving and collect the fabrics or the finished product from the weavers. The powerloom units only employ about 2012 weavers of which 1303 are males and 709 are females (Textile Committee Report, Government of India 2003).

The entire establishment of powerloom in Odisha is a government-sponsored scheme initiated in 1972. In the initial years the powerlooms were running smoothly. However, since 1985 onwards the powerloom of Odisha has been facing severe crisis whereas at the same time the powerlooms of southern and western Indian states were flourishing. The causes of the decline of the powerlooms and closing of the powerloom cooperative societies are manifold. This chapter attempts to find out the major causes of the decline of the powerloom in the state of Odisha from different perspective.

4.4 Case of Siminoi Powerloom Cluster

In-depth personal interviews were conducted with various stakeholders of Siminoi powerloom cluster in the state of Odisha. The respective official staff of the Directorate of Textiles, Textile Committee, Weavers Service Centre Bhubaneswar and Powerloom Service Centre Choudwar, Cuttack, Government of Odisha were consulted about the declining status of powerlooms. Data were collected from the secondary sources that include reports of the Textile Committee regarding the present status of powerloom, and a variety of reports of the Directorate of Textiles, Government of Odisha on the present status of the powerloom in the state of Odisha. There is a paucity of literature on the distress of powerloom in Odisha. Hence the study is entirely based on the data collected from the respondents of the specific powerloom cluster and data collected from the officers of the different offices relating to textiles and some preliminary secondary data on powerloom from the Directorate of Textiles and Textile Committee Office, Bhubaneswar.

4.4.1 Poor Marketing

The reason for the establishment of the powerloom units in the states has mainly been the industrialization of the backward economy. Therefore, there is no adequate initiative to take care of the marketing aspects. Though the powerlooms have been installed under

different schemes of the government, the production, planning and marketing strategies have seldom been made (Government of Kerala 2003). In Odisha the demand for the powerloom product is low. Why is the demand for the product of the powerloom of Odisha low whereas the powerloom of other states like Gujarat, Tamil Nadu are flourishing? The most and important reason is a lack of product diversification (Textile Committee Report 2003). In Siminoi the powerloom weavers basically weave Lal Gamcha. If all weavers make Lal Gamcha, then that particular product gets flooded in the market there by decrease the demand for that particular product. A weaver opines: '*In Siminoi we only produce Lal gamucha*'. The powerlooms of Odisha are simple, plain powerlooms which only weave cotton material which have a less market demand. From plain gray cotton to sophisticated synthetic textiles woven in Surat. Surat concentrates entirely on synthetic cloth, mostly nylon and partly polyester varieties which are in much demand. Surat powerloom produce textiles that are considerably cheaper (Goswami 1990). Hence market demand for their product is high. Since the powerloom of Odisha only produces cotton fabrics, hence its demand is very low in the market. The powerlooms of Odisha are not sophisticated powerlooms for which their production does not look attractive. In Western India Powerloom have wide range of weaving facilities, from high speed jet looms used in some units in Surat to simple non-automatic looms (Goswami 1990). There is also unavailability of pre and post loom facilities in Odisha like warping, sizing, calendaring etc. Since all these facilities are not available, the product from the powerloom of Odisha looks like raw product not finished product. But in Maharashtra and Gujarat, the availability of calendaring machine makes the product look attractive for the reason of which their product have a much more market demand whereas the product of Odisha powerloom has a less market demand due to the absence of proper infrastructure.

4.4.2 Lack of Product Diversification

Product diversification refers to a marketing strategy to increase sales volume from new products and new markets, and can be expanding into a new segment of an industry that that business is already in, or investing in a promising business outside the scope of the existing business. Owing to a lack of product diversification and production of similar product makes the powerloom industry of Odisha uncompetitive in the state as well as national market. Another thing is that the weavers of Odisha are only weaving cotton materials which have a less market demand. In this regard the Surat powerlooms are much ahead. The popular powerloom sari brand came from Surat which exported much of its production. But this was nylon or rayon. In cotton, powerloom do not have a long history of exporting (Roy 1998). Since the Siminoi powerloom cluster only produces cotton Lal Gamucha without any product diversification, its market demand is low. A group of weavers of Siminoi powerloom cluster opined that '*We have more production of only Lal gamucha. If the production would have been diversified, then demand for each product will be available in the market. Since similar production is going on, hence there is a lack of demand*'. The flooded similar kind of production leads to distress sell.

Since only one product is produced from a specific powerloom cluster, it's easier for the middle man to bargain as much as possible thereby devaluing the powerloom weavers and their talent. If we look at it from another perspective, we can conclude that, only job work is done in these powerlooms. The powerloom weavers are only producing the product, which have been ordered by the capitalist. The powerloom weavers also do not have sufficient financial flexibility to do something of their own. It depicts the capitalist structure of the powerloom sector of Odisha. According to a weaver,

There is no proper coordination among the weaver. Every weaver is not selling his/her product to the Mahajana [feudal moneylender] at a fixed rate; rather they sell it in a different rate. For example if one weaver sells his product at Rs 45 per piece to the

Mahajana, another weaver sell his product in Rs 41. And another weaver sells it in Rs 40 per piece. Here in this case the Mahajan bargain with the weaver and get the material in the lowest possible price. Ultimately the weaver is the loser. We have more production, for that reason, less demand. We are selling the product in a half hazard manner. Since handloom is producing less number of products, that's why, there is a demand for the handloom product. The new generation people do not know the abcd.... Of handloom weaving and also do not want to be involved in the powerloom activity.

Owing to a lack of product diversification, one particular product gets flooded in the market which gives the middle man a chance to bargain thereby lowering the wage rate and devaluing the work of the weaver. The powerloom of other states are trying to ape the Odisha handloom design as well as powerloom design which again worsens the condition of the handloom as well as the powerloom sector of the state. In this regard, according to a group of weavers, '*Powerloom of other states are copying our product in a more sophisticated way. That means they are doing our product by using sophisticated raw material (yarn, dye) and technology*'. From this response it can be inferred that, the powerloom of South and Western India are copying the design of the powerloom as well as handloom product of the state of Odisha in a more sophisticated way and sells their product at a cheaper price thereby leading to the crisis in the powerloom sector in the state of Odisha. Owing to the absence of the cooperative society, the weavers are facing difficulty in storing as well as selling of their product, which again gives the chance to the middleman to exploit them.

4.4.3 Absence of the Cooperative Society

Another problem is that now the powerlooms of Odisha are not under the cooperative fold rather they are now individual units. There is a tremendous absence of either bank or cooperative credit in the powerloom sector (Goswami 1990). The powerloom units are individual units; there are no specific organizations to look after the specific problems of powerloom like raw material, electricity, and proper market research in Odisha (Textile

Committee Report, Government of India 2003). Small industries in India have come up in a half hazard, uncontrolled and unplanned manner. A majority of these clusters are based on natural and traditional skills. All these clusters lack proper infrastructural facilities like power, road, water, communications, information and technical issues (Subrahmanya 2004). After the closing of the powerloom cooperative societies and Odisha Textile Mills, the entire powerloom now becomes individual units and working in an unorganized manner. Hence it's very difficult for the individual family to run the powerloom without community as well as government support. The Shortage of raw material, a lack of working capital, shortage of power supply and a lack of proper market aggravate the situation more. Hence many powerloom weavers are quitting their job and jumping over to other occupation. According to a powerloom weaver, *'Now the independent weaver becomes helpless since he has to do everything, from buying raw material to marketing of the finished product'*.

In Odisha specifically in Siminoi (Dhenkanal) the owner entrepreneurship type of powerloom prevails more. In the owner entrepreneur type all the operations are carried out by one person who takes the entire risk. The master weaver types dominate in Western India, whereas in Surat, there is a little bit of exception (Goswami 1990). In Odisha the individual owner of the powerloom feels helpless in doing all the work, since there is no specific organization to help the individual weaver. After the closing of the cooperative society the market demand for the powerloom product in the state is in a worst condition.

Owing to the absence of a specific organization to look after the specific problems of the powerloom clusters, the powerloom of Odisha face severe crisis. The initiatives should be taken by the small industry itself particularly through their associations. The importance of achieving and sustaining competitiveness in the long

run' and investing self efforts and resources need to be realized by the associations. It will help the small industry in the long run (Subrahmanya, 2004). Because of the absence of these associations like cooperative society, the small industry i.e. powerloom is in a severe crisis. Various causes for the closing of the Siminoi powerloom clusters have been lucidly explained by a group of weavers.

In the past we had cooperative society, and we were benefitted out of that society a much. When the first, cooperative society came, only 50/60 mills were there. Society at that time giving the raw material to the weaver and collect the finished good from the weaver by giving appropriate wage for the appropriate product. But some clever weaver thought that, if we open our own production as well as marketing, then how much profit we will get. Likewise all the weaver run away from the society and society collapse. Another thing for which the weaver ran away from the society because the society gradually becomes irregular in giving raw material and wage to the weaver in proper time. And at the same time, some rich people wanted to open their own powerloom production unit. Now the production has been increased. But at the same time other necessary things decreased like market research, proper planning, and coordination among the weaver. Everyone is doing things according to his/ her own will. Nobody is there to control the production process. Now the production is more, but we are unable to sell the product in a proper way, for the reason of which the whole benefit is appropriated by the middle man. When there was cooperative society we have never faced this kind of marketing and raw material trouble, which is a major problem now. Now more unplanned production, no product diversification, improper selling mechanism has worsened the condition of the powerloom sector in Odisha. If we produce the finished good according to the requirement of the market and according to the taste of the people, then people will definitely buy our product. Instead of doing that, if we only produce Lal gamcha, Lal gamcha and Lal gamcha, then who will buy it. Again its cost is Rs 70, which is again more than the Powerloom Lal Gamcha of Erode. That's why our product has no market value. Hence where the raw material is available, the production unit should be made there. Since we do not have the raw material for that reason, our production unit is not running properly. We are investing more in the transportation since we have to bring raw material form Nuapatna. Odisha is now days a consumer market, no production is going on here. Since we are doing labour, for that reason we are surviving.

Upon the closing of the cooperative society, the powerloom weavers are confronted with severe difficulties. They are facing difficulties from buying raw materials to selling of the finished products. There is no specific organization to look after their business. Some

weavers gave their response in favor of the cooperative society. According to them, cooperative society is an imperative for the smooth functioning of the powerloom industry.

If cooperative society would have been formed, then we will be benefited. Why should we go outside? Since the machines are available in our home, we can weave and run our family. Actually those who have stored the yarn, they are getting all the profit. Because they create artificial scarcity in the market, thereby increasing the price of the yarn as per their mood. By giving bribe to the government officials they do all these things.

The large-scale interstate migration can be controlled if the state's industrial development will be emphasized. In Odisha along with technology, infrastructure has remained underdeveloped. The government investment in the industry is very low. The history of cooperative development and management of commons is practically nonexistent in the powerloom clusters. Doing business in the home market means making as cheap cloth as possible. It never demanded such attributes like timely delivery, market search and access to information (Roy 1998). For all these reasons the powerloom could not be able to flourish in the state of Odisha.

4.4.4 Role of the Middlemen

According to a group of weavers of Siminoi Powerloom Cluster,

We the weaver by doing hard labour, we earn 50 paise per meter, but the whole seller will get Rs 1.00 per meter. Basically the traders are the Marwari and Bengali people. Actually the business is run by the Marwari people. We are getting no profit, we are living only hand to mouth. The Mahajan will tell us, will you provide your product by this price? The price is decided by the Mahajan, since the weaver has no choice he has to agree with the rate fixed by the Mahajan. Hence he faces all the trouble. Another thing is that the powerloom weavers do not have proper infrastructure to store their own material.

Since there is no specific organization to look after the problems of the powerloom clusters, the middle men are taking advantage of the situation. They help the powerloom weavers in terms of credit facility and selling of their product and for doing this, they

appropriate a huge profit margin. Hence the actual profit is not reaching to the weavers. This ultimately led to the development of capitalism in the powerloom sector. According to Braverman (1974), work within capitalist organization was exploitative and alienating. For Braverman the search of capitalist interest over time ultimately leads to deskilling and routinisation of the worker. Braverman argues that the capitalist owners and managers are intentionally driven to deskill the labour force to lower production cost and ensure greater productivity. Deskilled labour is cheap and easy to control. In turn, work is intellectually and emotionally unfulfilling. This theory is appropriate in the case of the powerloom cluster of Odisha. The middlemen play the role of capitalist and tries to deskill the labour force to lower the production cost thereby they can have a control over the entire labour force and they can exploit the labour force in future.

In Siminoi powerloom cluster, the weavers have not been bestowed with adequate economic and political endowments, on account of which the design/s of several products become the main casualty. The shortage of raw material, inadequate funding and the absence of the cooperative society compel the weavers of the powerloom cluster to make cloth designs according to the choices of cloth merchants. Cloth merchants extend raw material, funding as well as proper marketing facilities for only *Lal Gamucha* to the weavers through the middlemen. The weavers very often have to resort to borrowing informal loans from cloth merchants for the smooth functioning of their family through middlemen. The absence of government patronage, lack of educational facilities and awareness among the weavers encourage the cloth merchants to deskill most of the weavers by imposing their choices upon the powerloom weavers, which has resulted in the deskilling of a large of workforce engaged in weaving in Siminoi powerloom cluster. Cloth merchants' imposition on the weavers to make a particular type of product time and again and unwillingness to create a market for the

development of other products alienates weavers from their work. Such alienation or estrangement has led to deskilling of weavers in Siminoi powerloom cluster.

4.4.5 Low Wage to the Weavers

There was a transition from handloom cluster to powerloom cluster in Siminoi initiated by the Government of Odisha in 1972. Earlier, it produced saree and other dress materials in the handloom. Powerloom was introduced in Siminoi in order to increase the productivity of the villagers. But at that time nobody could anticipate that introduction of powerloom in the village without proper infrastructure would again make the situation worst. Now the weavers of Siminoi are facing a severe crisis. Now they are in the stage of ambivalence. They do not know actually what to do in the present situation. Without critical thinking the government introduced the powerloom in a handloom village. But powerloom is not an indigenous technology rather it's a foreign technology. How far can a village maintain a foreign technology? After the forced disappearance of the traditional technology (handloom) the powerloom arrived. In the phenomena of development, there is a difficulty in assessing or estimating the right level of technology to fit the given circumstances: in other words there is a choice of technology and it cannot be assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries (McRobie 1979). The government introduced the technology of affluent society in a poor state. For that reason the powerloom technology remains unsustainable. Now the villagers of Siminoi are in a great confusion. Now they are in such a situation that they have already forgotten the indigenous technology (handloom) and at the same time unable to maintain the powerloom machinery. After the breakdown of the traditional social structure (handloom and the management of handloom), a new social structure emerge (powerloom). With the

introduction of mechanized large-scale technology, this highly prosperous local industry disappeared (McRobie 1979).

One of the most important challenges is that the weavers after leaving their ancestral occupation and after accepting this new technology are unable to get two full meals per day. And for that reason many weavers are now a day's quitting this job and searching for other occupation. Even many weavers do not find other job suitable for them. Because there are also so many factors for which the weaver cannot switch over from one job to another job. For example distance from home, self respect, duration of work, nature of work, social life etc. For that reason many weavers of Siminoi are now thinking to revive the traditional handloom sector, which again is a difficult task. A weaver of Siminoi powerloom cluster of Dhenkanal district opined that *'When a daily labour gets Rs 200/Rs 250 per day, and his monthly income is Rs 7000 approximately. In the powerloom sector, one will invest loom, raw material and marketing and get Rs 6000 per month. Now the looms have been decreased from 40 to 30'*. It is clear that the powerloom owner as well as the weavers is unable to maintain their livelihood by this powerloom business. A daily labourer earns Rs 200/Rs 500 per day without any investment whereas a powerloom weaver is paid Rs 5000 to Rs 6000 per month after investing a lakhs of rupees. Powerloom workers work for extremely long hours for low wages. They have little or no job security, poor access to medical and educational facilities for themselves and for their children.

A weaver of Siminoi expresses: *'Monthly in two powerloom machines we used to get Rs 5000.00 to Rs 6000.00. After the maintenance charge and labour payment, the owner gets Rs 5000.00 to Rs 6000.00'*. Now we get one argument that the powerloom weavers are not getting proper wage. There are many causes for which the powerloom weavers are unable to get proper wage. As a weaver mentions,

I am a powerloom weaver; I am getting Rs 150 per day. People are unable to get their livelihood from handloom sector, for that reason they changed to powerloom sector. But again we are facing the same situation. For the reason of which now we have made this powerloom business a part time business. If we do it on a fulltime basis, we cannot even able to run our family. Hence we have also other side business. Simultaneously we also act as a daily wage labour.

Regarding the wage the weaver said, even after changing from handloom to powerloom the situation is again become worst. Some powerloom weaver has also told that we are not even able to earn the profit that we usually got in the handloom sector in the past. Powerloom weavers are not able to get proper wage, on account of which they do not want to continue with powerloom sector.

4.4.6 Infrastructure Bottleneck

Infrastructural bottleneck is one of the major causes for the plight of the powerloom sector. A master weaver opined that *'In Andhra Pradesh, Tamil Nadu and Gujarat, they have a separate production house for powerloom and they have raw material, government support for the reason of which they are running their own business. They have 80 looms in a production house with one printing machine'*. But this common facility centre is not available in Odisha. The weaver also told that *'If the government gives us Rs. 20, 000 loan, we have to do so many formalities. Our days are wasted in doing the formalities'*. Here we can say that due to lack of finance the weaver is unable to make proper arrangement for the weaving.

The unavailability of common facility centre in the powerloom sector in Odisha is responsible for the unorganized production of materials in the powerloom sector. In western India the powerloom sector is very strong because of in western India for example in Surat from 1950 onwards, there was an extensive middle class investment. This same case also happened with Bhiwandi. The town has an advantage since it is

situated near Ahmadabad and Bombay. These two cities are major source of trade and information which enable quick response to the market (Roy 1998). In contrast, in Odisha this kind of facility is not available. A lack of pre-loom and post-loom facilities is also one of the major hindrances for which sophisticated products cannot be woven. It can be said due to infrastructural bottleneck, they are unable to produce sophisticated products.

4.4.7 A lack of major renovation in the powerloom sector

In Western India the powerloom is increasing day by day, because the weavers are getting a huge government patronage and have entrepreneurship quality. And they get raw material easily from their own state. In Odisha, raw material is not available. The cause is cotton is not produced in the state. The state of Odisha also does not get sufficient government patronage for cotton cultivation. According to a weaver,

In western and southern India raw material and government patronage are available. In Odisha only the labour work is being done. Here labour work refers to the weaving work. Because yarn, dye comes from southern and western India. In Odisha only weaving is done. The major profit is appropriated by the merchants of southern and western India from where the yarn is coming like Tamil Nadu, Karnataka, and Maharashtra. While selling raw material they keep high profit margin.

Upon the closing of the handlooms in Siminoi, and an uncritical conversion of handloom to powerloom has made the situation worse. When Siminoi was a handloom belt, it was sustainable. Its sustainability comes because of the available infrastructure for handloom, that includes availability of raw material, sufficient pre and post loom facilities, product diversification etc. Another aspect was that since it was a homemade or indigenous technology, its sustainability was assured. The new technologies that are created by the developed countries are suitable to themselves. Every country can develop its own technology on the basis of its human resource, natural resource, climatic environment

and need. Hence a technology developed by one country may not be suitable for other country. Since instead of strengthening our own technology, we prefer to borrow technology, for that reason the foreign technology is not sustainable (Rao 1989). In Odisha, powerloom is a foreign technology. It becomes difficult to maintain a foreign technology, since weavers of Siminoi do not have adequate expertise on the powerloom technology.

4.4.8 Role of the State

The fact that most of the powerloom units have failed to operate on a viable commercial basis proves the inadequacies in the business skills. So far no developmental efforts have been taken to strengthen the expertise level of the entrepreneurs and the prospective entrants in the field. There is a need to create training facilities for the existing and prospective entrepreneurs in the powerloom sector (Textile Committee Report, Government of India 2003). In Odisha powerloom owners lack technical, managerial and financial skill to upgrade the industry. Therefore the extension of new technology in the powerloom is really difficult. Technology development can be achieved in small industry through in-house technological innovation. Technological innovation includes situationally new development and introduction of knowledge derived tools, artifacts and devices by which people extend and interact with their environment (Fleischer 1990 cited in Subrahmanya 2004). But no such training is imparted by the Government of Odisha for development of in-house technological innovation. In Odisha the entrepreneurship quality is not encouraged. According to a government officer of the textiles department of Odisha,

Actually the entrepreneurship quality is not encouraged by the Government of Odisha. Basically the major infrastructure for entrepreneurship is not available in Odisha. A person of Odisha basically wants to depend upon government job or private job because of the absence of entrepreneurship training. No risk taking behaviour also aggravates the

situation. Lack of education may one of the causes for the deterioration of this powerloom sector Odisha.

Entrepreneurship with social welfare schemes is not encouraged by the state. Owing to a lack of education among the unskilled and skilled powerloom weaver, they are actually unable to understand government plan and policies. The government officers are taking advantage of the situation. An officer adds:

The Government of Odisha is not interested in the handloom as well in the powerloom sector. As well as the government officers and leaders have an indifferent attitude to the whole textile sector. Even banks are not interested to give loan, those who are interested to do handloom as well as powerloom business because banks also know that the handloom as well as powerlooms are a failure scheme in the state of Odisha.

If some industry has to flourish in the state, government support is highly essential. How much a private person can invest in an industry if it will not be patronized by the state? In this regard a weaver said that *'how much a private person can invest in an industry, if it will not be patronized by the government seriously. We are only making Gamucha here because of lack of proper infrastructure. Due to lack of proper training to the powerloom weaver, the powerloom is coping the handloom product and sells it in market in the brand name of handloom'*.

The Government of Odisha has not been paying any heed to handloom as well as powerloom industries, neglecting the textile sector. Technological innovation is highly essential. A lack of technological innovation destroys the powerloom industry in the state of Odisha (Subrahmanya 2004). A weaver of Siminoi Powerloom cluster explained how the government is not encouraging the enterprising quality among the weavers:

In Surat , one owner has 500/1000 powerloom and he runs it successfully. If we have 10 loom, then we think that we have enough. Whatever the government patronage were there, now is getting stopped. The government is not encouraging enterprising skill among its people. Total investment in the powerloom sector is Rs15000 (machine) + Rs15000 (yarn and other raw material). Investment is Rs 30,000. But no profit. only satisfaction is that we

work in our own place and earn some money. If we would have cooperative society, then it would have been better.

4.4.9 A Lack of Planned Installation of Powerloom

Relatively better off weavers started to replace handlooms by powerlooms (Roy 2002).

According to the owner of a powerloom unit,

Those people, who have money, install a powerloom. Who will deny them? The government of Odisha is unable to give us work. Our product is getting sold at foreign country like Indonesia and other country and gets maximum appreciation there. Our talent is getting appreciation outside the country but our government is not recognizing our talent. Then how can the powerloom flourish?

In this context, it is important to understand the nature of the integration of stable systems of social interaction, that is, of social structure, thus focuses on the integration of the motivation of actors with the normative cultural standards which integrate the action system, in our context interpersonally. These standards are patterns of value-orientation, and as such are a particularly crucial part of the cultural tradition of the social system (Parsons 1951). There is no rule and regulation in the installation of powerloom. The people who have money can install a powerloom. Now the government of Odisha is unable to create work for the people. One of the weavers expresses that in the past the handloom product of the state of Odisha had a higher demand in the international market, which is on the wane now. In Odisha, all spinning mills were closed due to a lack of government intervention, on account of which there is a shift in occupations. According to a group of weavers of Siminoi Powerloom cluster,

The yarn rate is increasing. Previously the spinning mill was in Odisha, hence we could able to get the yarn easily. The spinning mills which are available are now privatized. And the privatized spinning mill is doing yarn for their requirement not for us. Now for the yarn, we have to depend upon other state.

Owing to the closing of the spinning mills, the weavers are facing difficulty in the procurement of the yarn.

4.5 Discussion

The deterioration of the industrial culture of Odisha may be attributed to a lack of proper education, business skills and more dependence on alien technology. In the development discourse, there is a difficulty in figuring out the appropriate level of technology to fit the given conditions. In other words, there is a preference of technology and it cannot be assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries (McRobie, 1979). The government, instead of giving priority to the existing indigenous knowledge and improving upon that, is trying only borrowing technology. Since technology is foreign, it is very difficult to maintain that technology. Industrial technology requires highly skilled and professional labour force which is controlled by a range of norms and rules. In order to motivate and keep this labour force intact, there must be a kind of open educational system accompanied by social mobility and relative social equality at large.

Without creating a proper infrastructure for the installation of powerloom, the government introduced the powerloom in the state in a half hazard manner, for the reason of which the powerloom sector in the state is a failure scheme. Since the powerloom was installed in the state in a half hazard manner, it ultimately leads to irregularities in giving finance to the powerloom sector. Further the closing of the powerloom cooperative society due to heavy corruption has also lowered the condition of the powerloom sector in the state. This, according to Dunlop (1958), is a set of ideas and beliefs 'commonly held by the actors' involved. Hence there must be common ideology to be followed by the powerloom weavers to survive and compete in the market. Productivity improvement requires not only financial investment but also sincerity, cooperation and skill from the workers. Cordial industrial relations are very much important for ensuring higher productivity and full utilization of the production

capacity. For that reason the management and the supervisory staff need to built a suitable organizational climate where the workers can do their best job (Rao 1989). The powerloom sector of the state still lacks all these qualities, which needs to be strengthened. Provision of education, training and motivation creates a cordial relationship between the management and workers which ultimately leads to a better productivity (Rao 1989). Management should concentrate on imparting good training on the various aspects of the work. Perhaps in these matters, the Japanese and other competitors are more efficient than India (Mote 1967). Since there is a lack of product diversification in the state, there is a less competitive environment in the state for which the powerloom is not able flourish. Cotton prices tend to fluctuate depending on the size of the crop. In other counties the government has taken steps to maintain the heavy fluctuation in cotton prices by deploying price stabilization policies. However, this has not happened in India (Anubhai 1988). Since the price of cotton is high and Odisha is not a chief producer of cotton, it ultimately leads to the shortage of raw material in the sector, thereby responsible for the plight of the textile industry, both handlooms as well as powerlooms.

Having discussed a case of Siminoi powerloom cluster in Dhenkanal district in Odisha, the following chapter strengthens the argument of the study by focusing on another powerloom cluster (Itamati powerloom cluster) in Nayagarh district in Odisha.

CHAPTER V

HANDLOOM AND POWERLOOM INDUSTRIES: A SOCIOLOGICAL STUDY OF ITAMATI POWERLOOM CLUSTER IN ODISHA

Having discussed the state of similar powerloom cluster in Dhenkanal District, it is important to strengthen the argument by dwelling upon another case drawn from Itamati powerloom cluster in Nayagarh District. Itamati powerloom cluster in Nayagarh District in Coastal Odisha too is confronted with a variety of challenges owing to the uncritical transition from handloom to powerloom in textile industry. The weavers of Itamati powerloom cluster express their lived experiences about their engagement with powerloom sector in Itamati. It is important to note that unlike Siminoy powerloom cluster, there is prevalence of both handloom and powerloom clusters in Itamati.

5.1 Lack of Product diversification and Unorganized growth of powerloom

At the outset there is a lack of diversification so far as the products are concerned. Hence, customers seldom find interest to procure/ purchase the similar kind of products. The powerloom industry has been engaged in the production of coarse material. The demand for coarse material in general is less.

According to a weaver of Itamati powerloom cluster of Nayagarh District

“Instead of weaving sweet and good product, the powerloom was engaged in weaving the entire coarse product which do not have the market value. The best and suitable things should be made in powerloom. In spite of weaving fine thing, the powerloom started to weave the low quality cloth even the cloth which the handloom weaver do not want to weave. The powerloom started to weave coarse cloth, Lal Gamucha and star Gamucha. Hence the powerloom of Itamati only concentrated on these things like gamucha, and coarse cloth. Then you imagine, if this type of low quality product will be weaved by the powerloom, will it run?”

The powerloom cluster in Itamati directly apes the design of the handloom product instead of making some innovation in designing the products. It is important to note that the powerloom of Odisha cannot copy the sophisticated handloom products. because of its unavailability of sophisticated technology. Hence it only weaves the handloom designs which now-a-days are not woven by the handloom weavers, for example coarse products like gamucha, shirtings, bedsheets, etc. As such, the market demand for the Odisha powerloom products is low. According to a weaver of Itamati powerloom cluster,

“In Bombay the powerloom sector is flourishing because of their very good infrastructure facility. They have powerloom Park. Inside the powerloom park there is everything available. For example the yarn bank is there, the entire raw material are available there, finance facility (Bank) available there, each and every machine which are needed for the weaving in powerloom also available there. For example sizing machine, printing machine, calendaring machine etc. and last not the least marketing facility is also available there. Over all there is infrastructural facility is much better than us”.

The powerloom cluster in Itamati has not been organized properly, on account of which it is unable to flourish and makes low quality products which have no market demand. According to a weaver of Itamati of Nayagarh District

“Since there is no product diversification, one type of products gets flooded in the market there is decline in the sale of Lal gamucha”.

From the response it can be inferred that there is a need to diversify products in Itamati powerloom cluster. It is possible of the powerloom industry in Odhisa as a whole would grow in an organized manner.

5.2 Lack of running/working capital

Working Capital is an important factor for running any industrial unit. Components of working capital comprise of share capital and/ or own resources, financial support from

the state government, loans of financial institutions, etc. Most of the powerloom units were set up after obtaining loans from financial institutions. The state government assisted the integrated powerloom development cooperative societies for procuring looms and other capital investment. However after establishment, many of these units could not obtain working capital from the financial institutions for running the unit, which gradually crippled their growth Government of Kerala in 2003. The timely availability of adequate finance is one of the factors which determine the growth of small scale industry (Subrahmanya 2004). A lack of entrepreneurial attitude of the banks to extend working capital support also creates hurdles in the functioning of the powerloom clusters in Itamati. According to a weaver of Itamati powerloom cluster,

“We were first at Itamati handloom. We were getting much more profit from the handloom sector. We are quite happy and comfortable when we were in the cooperative fold. In 1982, we enter into the powerloom. In 1985 we run the powerloom. At that time I was having only 2 loom. No running capital was there. At first when OSFC (Odisha State Finance Corporation) wanted to give us finance, at that time he told us, that, please bring a report on electricity availability and please bring a assurance letter from the bank that it will provide you working capital, then only we will provide you loan for the installation of powerloom. When OSFC told us to give block capital in loan, we bring assurance letter from the electricity office, we bring assurance letter from the bank and give them even we give them the proof of our land. The bank was ready to provide us the working capital; the electricity office was ready to provide us electricity in time. We give this entire thing to the OSFC and OSFC provided us the loan. We installed two powerloom. But the OSFC gave us the entire loan in a phase wise manner. The bank has told us if we start the loom within six month, then it will give us running capital, but because of the late financing of the OSFC, we could not able to run the loom in proper time. We started it after 2 years. When after two years we went to bank for the working capital, the bank told us that it is too late. Hence we cannot provide you the loan means the working capital. Hence again we face problem in running capital”.

Owing to financial irregularities by the Odisha State Financial Corporation, the powerloom industry faces difficulty in running in running its units.

Even after procuring the loan from the Odisha State Financial Corporation, the Powerloom weavers are not able to run the powerloom units because of working capital. The financial support, albeit negligible, has been provided in a structured way. In this regard, a group of weavers remarked:

“In 1982, for installation of one loom, minimum Rs20000 is required. For two loom, the bank has to give us only Rs40, 000. Instead of giving Rs 40,000, the bank gave us Rs10, 000. Hence again we face trouble to run the loom in Rs10, 000. First we have to prepare the warp beam, and then only we can make production. For the preparing of full warp beam for two looms Rs 10, 000 is required, then for the weft, new yarn is required. Since the bank has only given Rs 10, 000 for that reason we made half warp beam and started our work. When the production came out, at that time, we have to sell that product also, since the cooperative society was not functioning well, we have to sell our product by ourselves. When we go for sell, at that time the loom remain closed for 5/10/15 days. At the time of closing the loom, there was no income. Hence we again consume the money from the principal capital. Whatever profit we should have got, we got nothing. Likewise, everything comes to an end. But what the money was given was not properly used. The person who will built a house, if you give them full money, then only he can design the house in his/her own way. But if you give them the money in a phase wise manner, then what will happen? The OSFC give a very minimum amount and people do it of their own”.

Similarly, according to a weaver of Itamati powerloom cluster,

“Whatever in difficulty we are at least able to run our family. But when there is no selling of the product, the powerloom remains closed. And people eat from the principal amount. Likewise, there was heavy loss in powerloom. In the year 1982, I got a tremendous loss in powerloom for the reason of which, I had to sell my land. I have sold 3 land. Actually the problem is we do not know how to invest the capital in a proper way”.

Owing to lack of education among the weavers and government support, the powerloom sector is confronted with enormous difficulties in Odisha. The powerloom sector neither gets loan from the bank nor from the cooperative society. More than 95per cent working capital and most of the fixed capital are procured from non bank sources, on account of which the cloth merchants continue to exploit the powerloom weavers.

5.3 Infrastructure bottlenecks

Roy (1999) argues that powerloom firms in Tamil Nadu succeed because many of them share a common history, infrastructure, information and a tendency to congregate. In spite of all these, they suffer from India's long isolation from world market. However, the powerloom industry in Tamil Nadu possesses a better infrastructure. A majority of the India's small scale industry do not have access to reliable and efficient infrastructure. The infrastructure constraints may be broadly classified into economic, technological, marketing and financial. Economic infrastructure comprises of such as power, water, transport and communications. Technological obsolescence has been a characteristics of India's small scale industry. Owing to technological obsolescence, inferior goods produced by the small scale industry. Though the development of technology has been a priority of the Government of India, it develops the technology from an ethnocentric perspective. The policy makers in India have considered technology development without looking at the institutional ways in which the fruits of technology reach the target groups. This implies that small scale industry in India is perennially external technology dependent. It highlighted a lack of technological dynamism in India (Subrahmanya, 2004). In Odisha also we find lack of technological dynamism and poor infrastructure contributing to the plight of the powerloom industry in the state. According to a weaver of Itamati powerloom cluster,

“In Mumbai, the powerloom sector is flourishing because of their very good infrastructural facility. They have powerloom Park. Inside the powerloom park there is everything available. For example the yarn bank is there, the entire raw material are available there, finance facility (Bank) available there, each and every machine which are needed for the weaving in powerloom also available there. For example sizing machine, printing machine, calendaring machine etc. and last not the least marketing facility is also available there. Over all there is infrastructural facility is much better than us”.

Owing to adequate infrastructure facilities, the powerloom industry in Mumbai shows signs of progress. The quality of raw material, financial support and marketing strategies makes it successful. However, the powerloom industry in Odisha has **been** of such facilities. According to a weaver,

“We are doing our entire product in cotton and selling it in a lesser price where other powerloom are mixing polyester with cotton and selling it in the brand name of cotton. For that reason also we are facing many problems”.

In Mumbai, the powerloom mix polyester with cotton and sell it in the brand name of cotton material in Odisha market at a cheap price. But the powerloom industry in Odisha make only cotton fabrics, its price of which is comparatively high. Hence, people prefer to buy the products of the Mumbai powerloom industry and thus the demand of the powerloom product in Odisha is on decline. Owing to lack of infrastructure, the weavers of the powerloom are not able to make the products like the powerloom industry in Mumbai. Further, the weavers are not producing the fabrics which are supposed to be produced by the powerloom. As a weaver elaborates:

“Another thing is, if we make polyester product, then we would have got much profit. In Bombay they are doing that. Instead of doing that, we do the product in cotton. It again adds to the problem that we are weaving the cotton which is to be woven in the handloom. Here we are doing nothing rather we are copying the handloom product, and doing the entire handloom product. We are not doing anything which is supposed to be woven by the powerloom”.

The powerloom industry in Odisha is not engaged in making any innovative product, rather, they directly copy the handloom product on account of which both handloom and powerloom industries are in distress. This issue has already been discussed in the previous two chapters. According to a weaver,

“The powerloom is likely to get more profit in weaving polyester products than handloom products. Because polyester is made from chemical but cotton is made from

cotton tree. Hence the price of cotton is high than of polyester. Cotton is often exported to the foreign countries on account of which, there is always a shortage of cotton in India and it leads to a hike in the price of cotton. The Government of India supplied the cotton to China”.

Further, when powerloom weavers weave, they use cotton warp and polyester weft so that the cost of production will be less. But, when handloom weavers weave, they use both cotton warp and cotton weft, and it ultimately increases the cost of production. Here the weaver explains how the powerloom of Odisha is lagging behind the powerloom of other states. Due to proper infrastructure and technical expertise, they unable to produce fine design cloth, for which their product has a less market demand. According to a weaver,

“In addition, powerloom products have a fine design since they have adequate equipments to weave. For example, they have sizing machine, calendaring machine, etc. Suppose they weave a product, after that they calendar that product. After calendaring the look of the products get changed. But in the case of handloom products, there is no calendaring machine.”

According to him because of lack of proper infrastructure i.e. absence of pre and post loom facilities is responsible for making fine design cloth for that reason; there is a lack of market demand for the Odisha powerloom product. One of the major hindrances in the powerloom industry is inadequate pre-loom and post loom facilities. The sizing units situated in the states are not properly utilized due to a lack of expertise (Government of Kerala, 2003). According to a weaver,

“Here in Odisha we had also sizing unit in Jagatpur, Jatni and Odagna. But now all are closed. Because of the following reason. They took order from the weaver or the weaver gave order that we need a warp beam of Lal gamucha. After finishing the warp beam, they gave that to you. You take the product from him of Rs50,000 and gave him only Rs20,000. And you tell them that I will pay you the rest of Rs30,000 after some days without specifying the time period. In this way everybody did that. Hence the unit always runs in a loss. Hence the entire unit got closed. Because where from the sizing unit get

the running capital. But in surat, the owner of the sizing unit, have only invested the block capital. The running capital comes automatically. Because in Surat, they have professionalism and commitment to the work. But we do not have that. They are doing the powerloom business very professionally”.

From the above responses it can be inferred that due to lack of professionalism in the powerloom sector, the powerloom sector of Odisha has not able to maintain proper infrastructure. Heavy power shortage is also responsible for the present plight of the powerloom industry in the state. According to a weaver

“Now another problem arises. The problem is if the power supply (electricity) will be available for continuously for 8/10 hours, then the weaver could have weaved continuously without any botheration. But now continuous power cut again aggravate the situation to a worst condition. Here in this case the weaver is paid for 8hours but he only works for 4 hours. Another 4 hours is power cut. Hence for that reason also we are going to close the powerloom. For doing 8 hours of work, the weaver has to wait for 14//15/16/17/18 hours. There is no limit to his waiting. One day the situation becomes so worse that I have thought of leaving this powerloom job. Because what happened, you worked for ½ an hour, then there is power cut and it goes on the full day. Hence we could not even able to weave for 2/3 hours properly. Then you can see the kind of situation, which we are facing. Once a weaver distracted from the work, then it’s gone case. Suppose a weaver is weaving in the four wall of a room. If the current is gone, then the weaver comes out side. After coming to outside, when he got all the sun light and free air, he will never be interested to go back to that boring room. But he continuously works in that boring room for ¾ hours continuously then it’s ok. But that’s not happen because of power cut. Another thing is that there is too much of hot in the room itself. The temperature is very high inside the room. Even you attach a fan then only it’s a problem”.

Here the weaver lucidly explained how the frequent and regular power cut is responsible for the distraction of weaver from its work. Hence from the above responses it can be inferred that the borrowed technology is not sustainable. The loan money is not properly utilized. Further there is conflicting interest among the weavers.

According to a powerloom weaver, in spite of all the difficulties, still there is a profit in the powerloom sector. But the problem is since the loan money is not properly

utilized and there is a conflicting interest among the weavers, the powerloom is unable to flourish in the state of Odisha. According to a weaver

“But still there is a profit in the powerloom. Only we have to invest the money properly and we have to do everything in a planned and organized manner. And another thing is that we have to diversify the product. Everybody should not weave the same product, rather everybody should weave different product keeping in view the market demand. And powerloom should not copy the product which is being woven by the handloom. Then only both handloom and powerloom sector will flourish in Odisha. Who will listen to you? No body. In the past there was a Konark Chakra dress material was weaved by the handloom weaver. But I for the first time tried to weave the Konark chakra dress material in the powerloom by fitting the handloom jacquard machine into it. I got the success. I was able to weave the Konark Chakra dress material in the powerloom for the first time in Itamati by fitting the handloom jacquard to it. Then many people come to see the technology. After learning the technology, they also started fitting the jacquard machine in their powerloom and weave the same design Konark Chakra saree without diversifying their product. We have also that license that, we can fit jacquard in the powerloom. At that moment the product which was made in handloom, I started it to weave in Powerloom by fitting handloom jacquard. Since handloom jacquard was fitted to the powerloom, powerlooms speed became slow. For that reason instead of weaving 4/5 meters cloths in an hour, it weaved only 2 meters. Because if we speed more the loom, the jacquard will not tolerate. For maintaining for quality design, we had to slow the running speed of loom. For that reason, 2 meter cloths weaved in an hour. For 10 meters of clothes we need 5 hours. For those 5 hours we have to employ a crafts man. Because we cannot weave of our own, since we have to manage other things relating to bringing of raw material to maintenance of the machine and so on so forth. We gave Rs100.00 to the crafts man. Two looms we have deployed. 3 pieces (30 meter cloths) of cloth, he gave and took Rs300.00. After giving him Rs 300, we get a profit of Rs 600 from 3 piece of cloth. Hence we get a very good profit. Because in Odisha if we get Rs600.00 per day, then at least we can manage our family smoothly. Like this I gave the material to the market in a continuous basis. People watched it. And they developed a kind of jealousy towards me. Instead of doing some new business or diversifying the product, they just copied my model. Likewise all most all the members of our village copied the same model and design also. Previously, only 2 looms were giving that particular Konark Chakra design but now 46 looms are doing the same product. Hence a particular product got flooded in the market. Hence the price for the particular product comes down (the product has high demand in Puri, Bargarh and Barpali)”.

Here the weaver explains how lack of professionalism, lack of education among the people regarding business skill and business ethics is responsible for the plight of the powerloom sector in the state. The Mahajana and the middle men are taking the advantages of this situation. The mahajan and the middle men are taking the advantages of the non coordination among the weavers and appropriate all the profit. A weaver has lucidly explained how the middle men and the Mahajans are taking advantages of the situation. According to him,

“Since the production was high, I went with the entire production to sell to the Mahajan. At that moment for one thana [one thana is equal to 20 metres approximately] of cloth the rate is Rs 800.00. Suppose I have taken 50 than. Then the rate of 50 than is $50 \times 800 = 40,000$. Hence we should have got Rs 40,000 by selling 50 than of saree. If I am unable to sell that product in that particular day, then I will waste some more days only to sell the product and my loom will remain closed for some day which will ultimately hamper our earning. Since the production is high, hence the Sahukar make bargaining with me and told me I cannot take these product in Rs800.00 per than. Hence in order to sell my product, I have to cut down the price up to Rs50 per than. Hence I sold the product in Rs750.00, there by getting the profit of Rs150.00 per piece instead of getting profit Rs200.00 per piece. (The cost of production of preparing one piece of saree is Rs600.00). When another weaver went to the Mahajan for selling of his good, the Mahajan told him that, I have lots of similar kind of product which are with you. Hence the weaver is compelled to sell his product by cutting down the price of Rs25.00 there by getting a profit of Rs125.00. gradually we are now getting a profit margin of Rs60 Or Rs70 or Rs80 per piece of cloth. You just imagine the situation”.

Here the weaver explained how the nonexistence of a powerful trade union and the absence of coordination or absence of class consciousness among the weavers is responsible for the plight of the powerloom sector in the state. Due to the absence of proper business skill and business ethics the weavers are not interested in product diversification and only busy in coping others product. It clearly depicts the lack of innovation in the Itamati powerloom cluster. A weaver has lucidly explained this phenomenon. According to him

“Lack of product diversification: if somebody does a design, everyone is interested to copy that product hence do not interested in the diversification of product for the reason of which one type of product got flooded in the market thereby decreasing the selling of our product and there is a less market demand for all these. I forecasted this problem much earlier. I advised the entire weaver, that you got the formulae from me, that how a handloom jacquard, you can fit in the powerloom. That formula is money. But please do not copy my design. Please change the design pattern by applying the same formula. But nobody listened to me. If there is different design available in our village, then definitely each and every product would have its market demand. If one party will come to our village, he will find 46 designs are available in 46 looms. That will also attract many more customers. Since everybody do the same thing, now the situation is very worse. Now some weaver understanding the situation, trying to change the design, but what will happen now. All ready the profit has been decreased. For that reason no I am going to close my powerloom unit”.

Here the weaver explained how the absence of poor business skill and business ethics and poor industrial relation is responsible for the plight of the powerloom sector in the state of Odisha in general and Itamati powerloom cluster in particular.

5.4 Lack of profit in the powerloom sector

According to a weaver,

“If you start up an industry by investing Rs1.00. obviously you want a profit of Rs3.00. otherwise why you will do a business. In Bombay powerloom they have very high quality of powerloom machine. The cost of their powerloom is Rs56 lakh/Rs60 lakh/Rs80 lakh. Whereas our machine’s cost is Rs20, 000/Rs30, 000/Rs40, 000. Then you please tell how we can develop material like them. In Bombay, they produce different kind of product in a different way. And the quality of yarn i.e. available in Bombay, even you will not be able to see them here. In Bombay there is no cotton license is provided, only polyester license is provided. But now there is no licensing system. Now cotton license is not given to any factory in Bombay. In Kalyana area of Bombay, we visited 20/25 factory, we have seen the entire factory, and we have seen the quality of yarn that they are using. Even we do not able to see that quality of yarn here. Even we do not find that kind of infrastructure here. Suppose in Bombay, you have installed one powerloom. then you do not have to worry about anything. The people will give you the warp beam and other weaving accessories to you. And they will also instruct you the design, and they will tell you, we need some thousand meter of dress material. You will just weave that product in the powerloom. Suppose today something got done, then you will deposit them and get the money. That means without any investment you run your business smoothly. Only you

have to make an initial investment i.e. installation of powerloom. That's all. Then automatically everything will be done. Everything is done there by using computer. They have everything with them like printing machine, sizing machine, calendaring machine”.

Here the weaver explains how in Bombay the business is so organized thereby leading to maximum profit whereas in Odisha such unorganized powerloom sector is responsible for less profit in the sector.

5.5 Lack of professionalism in the sector

According to a weaver,

“The professionalism is discussed below. You take the warp beam and other accessories necessary for the weaving. And give us the finished product after processing. And you get the wage for the processing work. Likewise, they will also give order to the sizing unit, that you make sizing of this much of product, and we will provide you the processing charge. But we do not have that facility. A powerloom weaver has to do each and every thing of its own”.

According to the above response, it can be inferred that the kind of professionalism, you will find in Bombay, you will never find that kind of professionalism in Odisha. Owing to lack of quality education, people lack entrepreneurial skills. They always want to depend upon either government or private sector. Nobody wants to start up a new thing. According to a weaver,

“We have one person from Cuttack, who was appointed as the Director of Textile in Bombay. 10/15 years back. A meeting was held in BBSR. We also participated in that meeting. He told that in Surat or Bombay, license has been given for the installation of powerloom of 5,000 or 8,000, but in reality, 20,000 and 25,000 looms were operating. In Ahmadabad, the situations also like this. But in Odisha the situation is completely different. In Odisha we have given license to run 9,000 powerlooms, but in reality there are only 500 powerlooms are operating in the entire state. He also told us how we will develop in the near future. He also assured us to give us fresh loan. Again he advised us to start up the work by employing new powerloom. Then we questioned them, if you will provide us the loan, then who will give the margin money? Since we the weaver are incapable of giving the margin money, for that reason they did not sanction our loan. Hence for that reason nobody was interested to take that loan because of giving the margin money. It was a sponsored drama of the government. For that reason, the

position of powerloom as well as the status of powerloom in the state of Odisha is very bad. Even the case of handloom in Odisha is also not satisfactory”.

From the above responses, it can be inferred that, due to lack of quality education, people are instead of improving themselves, always depends upon the government or private sector. The state is full of natural resource and human resource. But due to lack of risk taking behavior, the state is far lagging behind. At the sometime the government of Odisha is not taking any steps to boost the confidence of the people. But the state has a better natural as well as human resource. That means the present generation do not want to weave rather they want to do other thing. Owing to low wage, people are not interested to work in this sector. According to a weaver,

“In powerloom suppose we will get a profit of Rs3.00 per gamucha. A weaver can weave 8 gamucha per day. Hence the master weaver get a profit of $Rs3 \times 8 = Rs24$ from one loom by giving of Rs120 per day to the weaver. Here in this case the weaver has to work from 8am to 5/6 pm. Hence the weaver is also telling that if I go for any manual work, then I should have earned Rs of 200 per day and the working duration is 9am to 1 pm. Hence now a day’s all the weaver prefers to do the manual work instead of weaving. Now another thing has also happened. That is the government has declared 1 kg rice per 2 rupees to the BPL card holder. Since many weavers are BPL card holder, they are enjoying the benefit of 1 kg rice per 2 rupees. And these people prefer to do manual work than weaving, since manual work is more profitable than weaving. But they do not understand that manual work will not be available throughout the year according to a weaver who is still sticking to his own work. Now in the Itamati, the handloom is going to be closed. If you come here after some year, you will not find a single handloom here. Powerlooms are also getting closed gradually. Many powerloom owner has sold their powerloom. Some people are even buying this powerloom. Those people who have lost interest in the powerloom as well as those people who got loss in the powerloom, now they are leaving the powerloom. In powerloom in Itamati, only plain saree can be weaved. Sambalpuri Bandha saree cannot be weaved in this powerloom. If we even weave Bandha saree, then we have to deploy one person per one loom. And we have to pay a huge amount of wage and another thing is that, if we weave Bandha saree, then it is very difficult for us to weave that saree in the powerloom. Because our powerlooms are not technologically efficient to weave the Bandha saree. But now the Sambalpuri clothes have great market demand. The weaver who is weaving, if he weave at a time in two looms, then it is very difficult for him to weave in two loom. if he weave in two loom, then only he will get Rs120.00. but he does not feel comfortable in weaving in 2 looms at

a time. But if he weaves in one loom, we only provide him Rs60, in which he is not satisfied. For that reason, in spite of his dissatisfaction in weaving in two loom, he is compelled to weave in two looms”.

From the above response, it can be inferred that the powerloom weavers prefer to do manual work, since manual work is better paid than the powerloom weaving. For that reason, now there is a shortage of labor in the powerloom sector which is again contributing to the plight of the powerloom sector. In the other states the situation of powerloom is quite better. You can take the example of Bombay.

A powerloom weaver of Odisha has worked for sometimes in Bombay Powerloom and performed very well, but when he came to Odisha he found it difficult to perform better in the powerloom sector of Odisha. Here he tries to explain, why the Powerloom of Western India performs better than that of the powerloom Of Odisha. According to him,

“In Bombay much polyester work is done and also there is a huge market for the polyester product. Many rich people stay in Bombay. If you install 4 powerlooms in Bombay and at the same time you are giving the labor charges for 8 hours, then you need not go anywhere. Warp beam will automatically come to you with other additional accessories. You will only weave and get the wage. But this facility is not available here. Here in Odisha you have to do everything from A.... to Z..... . Suppose they will provide you gray warp beam, you weave gray product, they will take gray product. Then you give that gray product to the bleaching section. After bleaching, you take that product to the dying section. In the dying section, different colors are made. Suppose you need 5000 meter yellow, 5000 meter black and 5000 meter red cloth. They will do that. And after that you give that product to the printing section. Printing section will do the final print on this. Then your work is over and you take your entire product from the printing section by paying the required amount. In the printing section, they will print the design in your cloth by using the computer. There the entire thing is done department wise. Hence you will find a strict division of labor there. But we do not have that facility. Why the Odisha Textile mills got closed, that is because of these things. Here we have so many problems. The problem of shortage of raw material, the problem of power shortage, the problem of lack of government patronage, the problem of product diversification, the problem of market of particular product, the problem of using obsolete technology, the problem of lack of coordination among the weavers, the

problem of not functioning of the cooperative society, the problem of lack of professionalism in the sector and so on and so forth. People from Itamati, they are doing powerloom business in Bombay and getting a very good profit”.

From the above response it can be inferred that, in Bombay the powerloom is systematic and organized. There is proper business ethics and business skills for which they are able to perform better than the powerloom of Odisha. But the powerloom of Odisha is lacking all these, for the reason of which unable to flourish in the national market. We do not have proper marketing facility. The weavers have to do everything from bringing raw material to finished good. According to a weaver of Itamati,

“Another problem is that, here we do not have the market. In Bombay, you will find people all over the India. Hence there is a huge market in Bombay. But here there is no market. In the year 1972 the government sponsored powerloom is not at all functioning well. In our Itamati, in the year 1979 license was given and the finance was given in the year 1982 and the actual work started in the year 1985. Still it is not running properly. In Baripada also the situation of powerloom also not good. In Dhenkanal simnoy the situation is even worst. in Simnoy they only weave the Lal gamucha. Hence the situation is not at all good in simnoy. If there will be complete division of labor and unit among the weaver, then something can be done. But thinking about unit, integrity and division of labor is a day dream in Itamati.”

According to him, due to lack of market the Odisha powerloom is not able flourish properly. The loan money meant for the powerloom sector is not properly utilized. According to a weaver,

“In all over Odisha the situation of powerloom is a worst condition. Even the government has failed to revive this sector. Why are you doing this research? Nothing is going to happen with this. And also the attitude of the people is also very bad. If they get a loan, first they utilize it buying the luxurious product instead of strengthening the business for which the money is meant for.”

Here the weaver is trying to explain that the government of the state is responsible for the present plight of the powerloom sector in the state. According to another weaver,

“In machipada, Nayagada, the same situation persists. In simnoy of Dhenkanal and Machipada of Nayagarh, there is no such Jacquard in that area. That technology will also never go to their mind. If you do not have that crafts man mind, then you can not fit handloom Jacquard to the plain powerloom. I gave teaching in Itamati, they learn the technology, but if they would have changed in design, then it would have been better for them. In machipada and Sunakhala, people only weave Gamucha. Nobody is doing saree. If somebody is weaving, he is weaving the plain saree, which has no market. But there is profit in powerloom, but no one is interested to do it in an organized way. The selling capacity of Itamati is very less, but when there is much production, then what will happen? You will tell. Nobody can do anything to improve the condition of powerloom in Itamati of Nayagarh. Even the government of India has failed to do any kind of improvement to the powerloom sector. Even Odisha Textile Mill could not able to survive. Our government is very weak to deal with this kind of problem. In Bombay the government is very strong enough to do this entire thing. Bank even not interested to believe the common man, then how it will help the common man. Even the common man gets a loan, and then he should have properly utilized that money. What happened if a common man gets a loan, his first priority is to buy a bike or any other thing, hence he could not able to utilize that money properly. If he gets a loan, at first, he thought of eating mutton instead of fish. But he does not think, how to develop with that money. If some big people get a loan, their first priority is to buy a car. Nobody is thinking, how the total institution will develop. Nobody is thinking that, if I will buy a bike in the loan money, then how much money will be blocked. Suppose, somebody want to go to Nayagarh, then let's go by an auto rickshaw. Why should we buy a bike to go to Nayagarh from Itamati? When everybody buys a bike, then what happened, the entire loan money is wasted in that buying bike, car and other cosmetic product. If some money comes through the government plan and program, the first priority is how to eat that money. Everybody knows that I am Baikuntha nayak. Is it necessary to wear a watch to get myself identified or is it necessary to ride a bike, in order to get myself identified? Now a day's everyone feels like an identity crisis. Hence in order to fulfill that identity crisis, everyone is doing different kind of mistake. Our people are unable to utilize the money in a proper way. So much money is wasted in doing all the drama bazi. For that reason also the bank is not interested to give us loan. Hence we cannot blame the government and the bank. Both government as well as the banks is equally responsible for the decreasing status of powerloom. but if the bank officers identified the potential candidate, then help him, then something could have been done”.

Here the weaver is trying to explain the careless attitude of the people which is again contributing to the plight of the powerloom sector in the state.

5.6 Financial Irregularities in the Powerloom Sector

The OSFC (Odisha State Financial Corporation) has not given the loan at a time, it gave a loan in a phased wise manner and at the same time it only gave the powerloom weaver the block capital not the working capital. And the entire government sponsored powerloom started in Odisha in a huge corruption. According to a weaver of powerloom sector of Itamati,

“The officers of Odisha State Financial Corporation came to our village. The OSFC gave us Rs 2, 80, 000. The managing Director came to our village, and told us that, we have given you this much of money. Your money is increasing, then when you are going to return the loan. Everybody shows that the powerloom is running in a great loss. I have told to them that, sir you have given me Rs 2, 80,000. Per month the interest is Rs2800.00. if I will pay you per month Rs2800 for interest and another Rs700 for the principal capital, will it be ok? They told me yes it’s ok. I told them; yes I am ready to pay the loan, but what about the running capital? You please pay me the running capital. You have financed me in the scheme of single window scheme. In which you have mentioned that you will provide us Block capital+ Running Capital. Now you pay me that running capital. You have not given the running capital, since last 10/12 years. They again told me that if we provide you the running capital, will you be able to repay the entire loan along with the interest and the running capital? I told them, since you have not given us the running capital; there is no question of taking interest from us. You have only given us the block capital, then how will start the business. I have also given them a example. The example is like this. Suppose you give me a shoe of Rs 10,000. But you keep one shoe that is of Rs5000 and provide me the of Rs 5,000. Then what will I do with the second one. That is the case happened with me. The OSFC half financed and did not finance the other thing. For that reason, we have sold out the looms. Because only block capital, no running capital, then what will we do? For that reason we sold the entire powerloom in the rate of fish and vegetables. If somebody has preserved the powerloom, then provide us the running capital. Everybody is telling that there is no profit, but I told that there is so much of profit. I also calculated everything. They wrote everything in pen and paper but nothing happened. For that reason, the entire weaver scolded me; they told me why you did these entire thing. I told them, why you always show loss to the OSFC officials. If you always show loss, then what will happen? Will they help you? What you think is totally incorrect, that if you show them the loss, they will finance you? You have to show them the profit, then they will provide you loan. If you always show them the loss, then no one is going to help you”.

From the above response, it can be inferred that, due lack of proper education, the weavers do not know what to do at what time. They always show loss to the government officers. The officers instead of educating the weavers are taking advantages of the situation. In Odisha the government officers are always taking the advantages of people's ignorance. Owing to lack of proper exposure and education, the people are always afraid of government officers. Hence they always feel dependent on the government officers. The government officers instead of educating people about the real fact, always want to be worshipped by the ignorant people. Hence this type of culture in Odisha has completely destroyed the work culture and work ethics of the state, for the reason of which the textile sector in general and the powerloom sector in particular are in severe distress. The concept of powerloom in Odisha also not practically materialized.

The Odisha State Financial Corporation (OSFC) has brought a party from Delhi to build a powerloom complex in Odisha. The party told that he will take away all the powerloom of Itamati. The party told the weavers of Itamati, that the weavers do not have to invest anything. It would take land in Nayagarh, then it would install 50 powerlooms in that land, and the weavers will only be given the design and raw material. Their only work would be to weave and nothing else. The company would take the responsibility of marketing. The weavers would only get the wages. And also the weavers would receive a part of the profit. The weavers will get a total infrastructure for powerloom, similar to that of Bombay, which includes bank, post office etc. But after that the OSFC has gone and has never come. For that reason, the weavers are wasted most of their time in doing such unnecessary thing. The bank has also known that in Odisha the powerloom scheme is a failure scheme. According to a weaver,

“All his sons are doing mobile business/ computer business. Nobody is interested to do the powerloom business. Because in the past there was profit in the powerloom, but now there is no profit in the sector.”

There is a lot of profit. But proper money is not coming as well as the money which is coming; there is not proper utilization of the same. When there were 28 looms running, 44 people were working in a loom. According to a weaver,

“At that time there was a huge market. For that reason, it could run smoothly. If 2 looms provide 10 piece of product a day, then the price of 10 piece of product $700 \times 10 = \text{Rs}7000.00$. since I was having 28 looms, hence I got 140 piece of product. Hence the cost of 140 pieces is $140 \times 700 = 98,000$. Suppose for any reason the powerloom could not run. Hence you take $98,000/2 = 49,000$. Hence my daily selling was between Rs 49,000 to Rs 60,000. At that moment selling was also very high. But now the whole month income is Rs3000/ Rs 3500. Heavy power shortage again aggravates the situation. At that moment means in the past, the officers took so many false signatures from us and misappropriate cores of rupees. At that time the powerloom was installed in so much of corruption. The staff of Odisha State Financial Corporation and the agent has done a huge corruption at that time. For that reason, not a single person has got a good machine”.

It shows the inefficiency of the administration of the state government for which the concept of powerloom is not practically materialized in the state. A new problem has come up. According to a group of weavers after making a shift from handloom to powerloom the weavers find the same difficulty which was there in handloom sector. The weaver made a shift from handloom to powerloom but in the powerloom they also find the same problem which was there in the handloom. Here a story of a powerloom weaver's family is narrated. How he faced the problem when he shifted from handloom to powerloom.

He has installed 7 handlooms. But the business was able to sustain because of the competition from the powerloom. Hence He is not also able to give satisfactory wages to the weavers. The products are also not being able to sell in the market because of its high price due to high cost of production. At first He have installed 7 handlooms. He weaves in his own loom and also at the same time he deploys the weaver to weave. After that the

labor weaver increased their wage rate. After that also the weaver increased their wage rate. For that reason, the production comes down. For that reason, for selling there is lack of productivity. Per piece product the crafts man weaver get Rs170. But still it is now up to the level. Since it was not up to the level, that's why I closed the handloom sector. Previously He was weaving the gamucha, after that he modified the design in the handloom sector. That means he tried to modify the design in the handloom sector. So many people came to see the handloom design in his house. Having seen the design, they tried to put it in their powerloom. Likewise the powerloom sector of his area are completely coping the handloom product. Suppose some people are coming to his house. Can he deny them? But if they in the name of coming to his house, copy his product, then what can be done. When powerloom started coping these products, then he tied up his hand and leg because there is no other option left for us. Now we do not have any other business. For that he recently started powerloom business. If he would not have deployed powerloom, then he would have till now will be in Surat as a daily labor. He destroyed his previous house and constructed a new house for the installation of the powerloom. Total he invested 1 lakh. 50 thousand for the electricity and 50 thousand for the other accessories. For bringing yarn, he does not have money now. For that reason, now he has borrowed another 1 lakh to buy yarn. Since last two years the powerloom is running. In these two years with the maintenance of his family he was able to repay the loan amount of rupees of 70,000. The most surprising thing is that the amount of profit that he was getting in the handloom sector is also equal to that of the profit that he is getting in this powerloom sector. He is not getting any extra profit in this powerloom sector. One and foremost problem, there is no marketing facility and at the same time there is no demand for his powerloom product in the market. And another problem is that the powerloom needs heavy maintenance. And another problem is that the powerloom

needs heavy power. Lack of power shortage also one of another problem. The investment, that he has done for the handloom is more in the powerloom. But the profit is very less in the powerloom than the handloom sector. But the investment in the powerloom sector is much more than the handloom sector.

Now he is doing chaka thana and Bandha thana. And at the same time so many ideas are in his mind but he could not able to materialize the idea due to shortage of man and money power. Because he is the only person in his family, who is involved in this powerloom business. His sons and daughters are not interested to work in this sector in the near future. It is very difficult to manage a business with a one person. He is the single person. He also narrated the problem faced on that particular day to the researcher. The problem was like this. On that day he went to repair some part of the powerloom to 60 k.m. and after coming he was fully tried; hence it is very difficult for him to manage the business. Whatever it is very difficult to manage the whole business. Now the Bandha people came and alone one person, it is very difficult to manage the whole business. Whatever income he is getting, within that only he can manage his family only. The income is hand to mouth in the powerloom sector.

In the year he was having the hand loom. But when the powerloom copied the entire product of handloom sector, he has to in the compulsion install the powerloom in order to compete in the market. His powerloom is also old powerloom. Those people who are not interested in the powerloom, they sold out their powerloom. Hence he brought the powerloom from them. In sunakhala there is 25/30 looms and even in Khurdha, there is also lot of powerloom. But everybody is weaving the gamucha. Hence that product is not sold in the market properly. In khordha there is one powerloom factory. The powerloom factory is also not functioning in khurdha. Since there is no

profit in the powerloom sector, many people want to leave this sector and selling out their powerloom. In khurdah people are weaving gamucha and Lungi etc. even they are weaving dhoti. He is also doing the Konark Chakra product for the college going girls in the powerloom. Previously he was weaving it in the handloom. Now he is doing it in the powerloom. Since he gave the wage to the weaver a Rupees of 50, then why should not we weave it in the powerloom. May be in the powerloom we had to give a less amount of wages. But the cost of production is again same. Because powerloom requires high maintenance as well as heavy power. For that he even has to invest a lot. Hence in the handloom he has to pay more labour charge but less maintenance cost. In the powerloom, he has to pay less labour charge but more maintenance cost, since the technology is borrowed not indigenious. Hence it is very difficult to maintain a borrowed technology since there is technical expertise available to maintain the powerloom.

Previously the weavers were weaving in the handloom. But what happened some people those who are economically strong, they installed powerloom and copied our product and sell it in the market in a lesser price. Even they lessened the price up to 100 rupees per than. In the handloom sector the weavers used to get Rs 50 profit in one than. Instead of getting Rs50 the weavers have to give Rs100 from their hand when this powerloom product comes into the market. Hence for that reason, all the weavers closed their handloom. After that what they will do? They do not have any source of livelihood. Whatever the condition may be, they have to survive in the market. Hence they got loan from the mahajan and installed powerloom. Because it is very difficult to go outside state and work as a daily labor. Instead of going outside state and work as a daily labor, they thought it is better to stay in their own home state and get whatever income come from the powerloom sector. But they installed these powerlooms by getting loan from the private Mahajan. No bank has given loan to them to install the powerloom. Whatever

they are running these powerloom business in a great difficulty. The main causes of the closing of the powerloom are that the yarn rate is very high, and then there is no proper marketing facility. Uncritical transfer from handloom to powerloom makes the both handloom and powerloom unsustainable.

Previously they were having handloom in this area. After that they changed to powerloom. When they shift to powerloom, at that time they had to sell one than cloth in less than Rs 100 than the previous price. Because so much productions of similar type got flooded in the market. Hence whatever profit they were getting like Rs50/60/70/80, that even they could not able to get. They were giving their product in Bargarh, Barpali area. But now those people are not interested to take their product. Because the same Chakra quality product is flooded in the market. Hence the clothe merchants of Bargarh are not interested to take their product. For that reason they have to cut down the price of their product. They have to cut down the price of the product up to Rs40/ Rs50. They were selling one than of cloth in Rs750. One weaver went and gave to the Sahukar One than of cloth by cutting down the price by Rs30. Then the rate becomes Rs720. Hence they got a profit of Rs120. Then when a weaver goes to the Sahukar for selling his product, the Sahukar tells that I am having lots of this type of product, hence I cannot take it. The weaver thought that if today I am not selling the product, then I have to move around the market for the selling of my product. In the meantime my loom will not run, then the income of my 1/2/3/4/5 days will be lost. Thinking in this light, the weaver is compelled to sell his product to the Sahukar by cutting down the price of Rs30/Rs40 again. Similarly the same methodology was adopted by many weavers. Now they are getting a profit margin of Rs30 per than. Previously they were getting Rs200 profit per than. If sufficient power supply will be available, then they can weave 6 piece of product in day time as well as 6 piece of product in the night time. But the power supply is not

available sufficiently. Regular power supply is a major problem now a day. Hence they are able to weave maximum 6 piece of cloth in a day thereby getting of Rs5000/Rs6000 per month.

It can be concluded that due to the absence of a strong trade union, the powerloom is unable to flourish in Odisha.

5.7 Can the Sambalpuri handloom saree be woven in the powerloom?

The powerloom weavers can weave sambalpuri handloom product. But they can weave Bandha shirting product not the saree product. If they weave saree in the powerloom then the powerloom will lose its balance and will give a adulterated look to the saree. Actually they have not tried that, because in order to weave a Bandha saree, there are other technology should be fitted into the powerloom. And their powerlooms are not technologically sophisticated to weave the Sambalpuri, Bandha saree. Bandha saree is a critical one. It can only be better weave in the handloom slowly, slowly to maintain its original quality.

The powerloom of other states are copying this sambalpuri saree and also weaving this saree. Because they have that sophisticated technology like printing, sizing, calendaring machine and etc. It can be concluded that Odisha powerloom is not technologically sufficient to weave better product.

5.7.1 The Case of a Powerloom owner and his family:

Surendra Behera is a powerloom owner as well as weaver. In his entire family he is only involved in the powerloom activity. His wife is doing the activities relating to the roiling of yarn, or other things which are related to the preliminary things for the weaving. His son is metric pass and his daughter is studying in class 10th. They are not interested in weaving as well as they will not weave in the near future. He is also not interested that his sons and daughters do this entire thing. Because in this sector there is no profit at all. How much he will weave. Because it is very difficult to manage the family with such income. He explained why there is no market demand for the powerloom product. His response is like this

“The only reason for the decreasing selling of our product is everyone is doing the same thing, same product and same design. No product diversification. Everybody is doing this chakra product. If you visit any powerloom in our district, you will find only this chakra than. If they bring a little change in the design, then it would have been much better”.

He also explained that, how due to lack of proper product diversification, there is a less market demand in the powerloom sector.

Their monthly income is Rs5000 to Rs6000. If somebody has only one loom, then he will get Rs100 per day if he weaves himself in the loom. If he weaves day and night, then he will get Rs200 per day. That means if one person weaves day and night in one loom, then he will get Rs6000 per month. If he only weaves in the day time, then he will get Rs100 per day provided the electricity is available the whole of the day.

Here he explains that if electricity is provided continuously, then a person can be able to earn Rs3000 per month properly. Otherwise it is also very difficult for the weaver to earn Rs3000 per month.

He also explained:

“In one day in one loom we can get 10 meter of cloth (1 than). That means we will get 20 meters of cloth (2 than) from 2 looms. Provided the electricity is available properly. If electricity will not be available then nothing can be done. Hence everything depends upon the electricity. Now a days we are getting 10 meters of cloth from 2 looms. In ten meters of cloth we are getting a profit of Rs30 after giving the labor charge Rs100 to the weaver. I have six looms hence I am getting a daily profit of Rs90 provided if I employ weaver to weave. If I do not employ weavers, then my profit would have something more”.

Here the weaver is explaining how due to shortage of power supply, the production is getting down and down. Since it is a borrowed technology, they have to depend upon everything – from maintenance to electricity.

In handloom to weave 10 meters of cloth the weaver has to devote 7/8 hours. And he gets an amount of Rs170 per 1 than. The difference between the handloom and the powerloom is that, in the handloom he gets Rs170 per day by weaving 1 than in 7/8 hours by giving his hard labor but in the powerloom he gets Rs200 per day by weaving 1 than in a comparatively less time by giving his less labor and more mind. Hence in the powerloom he gets an extra amount of Rs30 by giving a very less labor.

In handloom the production was less, hence selling was right. That means products are not flooded in the market, thereby there was always a demand for the product, but in case of powerloom, the production is more but accordingly the selling is less, because the similar kind of products are got flooded in the market.

He also adds that

In Barkali, Baghela everywhere we find the powerloom. They only weave Gamucha and Lungi in that powerloom. In sunakhala some people weave saree. You will also find powerloom in machipada of Nayagarh district. Many powerlooms are there. But these are old powerloom, which the weavers got in loan. After the installation of powerloom, people started weaving in the powerloom. When the powerloom run in a full

swing, at that time the Government of Odisha stopped giving the working capital to the weaver. But the officers from the Odisha State Financial Corporation reached the village to collect the loan (Block capital) given to the people at the time of installation of the powerloom. When the officers come for the collection of the loan, at that time the people shows them the loss. They showed that their powerloom is not making profit rather it is running in loss. So the officers did not come for the collection of loan, since all the powerlooms weaver showed the loss.

When the powerlooms weaver started copying the handloom product, at that time the Government officers again and again came to our village for the checking and told the weavers that the products that you are making are reserved for the handloom. Hence we should not weave these products meant for only handloom sector. The weavers replied that we cannot innovate any new design. Hence we will weave only these products. That is the reply of the weavers to the government officers.

The weavers reply was like this, those who are in the Government may be the Political leaders or officers, and they are misappropriating cores of Rupees. The Government even could not able to bend their hair. Only those who are in the lower section of the society the Government is trying to administer them. Hence we did not listen to any body. Now we are copying the handloom product and running our business.

The government is again coming to our village to collect the loan. But the weavers are refusing to repay the loan. The Government is telling give at least 50% of the loan. The weavers are telling that we will not give a single paisa. The situation is like this. Nobody listens to anybody. Previously those who are unable to return the loan, the government has taken away the loom from them. After this incidence (taking away the loom), we went to the Odisha high court. Now the case is under consideration. Hence

now the government officers are neither coming to collect the loan nor to take away the powerloom from us.

But now no new powerloom is coming to our village. These are all old powerlooms. Now a day nobody is interested to install new powerloom. If you buy a new powerloom, then it will cost around Rs70, 000. Why we will install new powerloom since there is no profit in this sector.

For that reason now those who are interested to install powerloom, they are buying 2nd or 3rd hand powerloom in a very low cost i.e. Rs10, 000/Rs15, 000/Rs20, 000. If it need any maintenance, then we will spend another Rs5, 000/Rs10, 000 for its maintenance, then it will be OK for running.

Previously the powerloom was totally a government sponsored scheme, but after the closing of the powerloom cooperative societies, the powerlooms are decreasing day by day. Now the old powerlooms are running.

It clearly depicts that due to the absence of proper business skills and business ethics, borrowed technology, the powerloom sector of Odisha is not able to flourish. Proper importance is not given to in house technology up gradation. Lack of proper business skills and business ethics leads to lack of product diversification. Borrowed technology leads to absence of technical expertise, there by leading to the plight of the powerloom sector of the state.

Since the similar kind of production is more in the powerloom sector, no product diversification, for that reason, there is any market demand for the product. For that reason nobody is interested to install new powerloom.

5.7.2 The case of handloom sector in Itamati:

In Itamati, the handloom is about to close. A lady weaver narrated, why the handloom is declining in Itamati. The narration is like this

“Everybody in our family does the weaving activity. The looms which were previously operating in our home are now on the decline and about to close. The main cause is lack of money. Lack of raw material, lack of labor. But the handloom product has a great market demand. But if you sell the same product, then that is not going to be sold in the market. Market wants design and color combination. The price of the raw material is increasing day by day. And the wage of the weaver or the labor (the person who is employed by the master weaver to weave in the loom) is also increasing day by day. For that reason, after buying raw material in a high rate and after giving a high wage to the labor, we are not able to get a good amount of profit. The profit that we are getting may be called our wages or less than our wages. We will buy the yarn in a high rate and we will sell the final product in a low rate because of the high competition in the market from powerloom product. We are doing only star gamucha here. Now the labor charge is very high. This star gamucha is sold in Bargarh, Sambalpur, Puri, Bhubaneswar, and Cuttack. My father got into paralysis by selling the gamuchas. In surat also there is training is given to the weaver. In other sector there is a system of interview and training and after training, there is a scheme of employment opportunity and then salary. But in our sector, there is no such facility is provided to us. If no facility would be given to this sector, then how this industry will survive. The cooperative society is also not functioning. When there was handloom cooperative society, at that time it was running successfully. But since last 20 years the society was closed. At that time the society was giving us all the facilities ranging from raw material to wage. At that time we weaved in the supervision of the society and got the wage from the society, but the situation was quite ok. But the after the closing of the society the situation is very worse. We are getting Rs1 profit per gamucha. Since we do not have any alternative source of income, for that reason, we are weaving. We are interested to install powerloom, but where from we will get the money. The people who have money are installing powerloom. We should have got Rs1/2/3 profit per gamucha. But that is taken by the weaver. The benefit of this sector is in this sector, the old, child, young everybody can work.”

She has lucidly explained that why the handloom in Itamati is going to be closed.

Another handloom weaver of Itamati adds:

“Since last one year, the handloom units of my hose were closed, because of the shortage of handloom weaver (Labor). Since the weavers are not getting proper wages, then why should they come? I have given employment to 3 handloom weavers. Now I am running only two handloom unit. The other handloom units are totally closed. Because of low wages people are not interested to weave. We are not getting any government support.”

From the above response, it can be inferred that the handloom of Itamati is going to be vanished within some couple of years. Serious attention of the government is necessary for the survival of the handloom sector. A old weaver whose age is above 80, has narrated the decline of the whole textile sector in Itamati from his own experience. The narration is like this

“The farmer should do the farming, the oil man should oil, and the weaver should weave. Then only you will find number one product. Then only the people of other country will come to us to get our product. Or else our product definitely would have an international market. Even if you hike the price of your product, people will definitely come to your product. Because in today’s world, quality product has always a market demand. That will also reduce unemployment in our country. The weaver is also telling simultaneously that he is not against the present education system. But at the same time he has given importance to the basic education and the fundamental occupation and caste based occupation of the people. His argument is like this, you get education as much as you want, you may be a graduate, post graduate, PhD, or more than that, but you should have to learn working. You should not confine yourself in the four walls of class room, air conditioned research lab, pen, paper, printer, computers only. You have to come out of that. What we are doing, instead doing basic education, and instead of doing grass root work, we are only doing superficial work, which make us in trouble. If I would have knowledge about my basic ancestral work, then I would have survived, definitely if I would not get a government as well as private job. One country was saying that, in that country people used to do sugarcane. Even they are in service, which does not matter. But when all the people entered into the government job, they do not interest to cultivate sugarcane. As a result of which, the other countries also do not provide them anything. For that reason, now what is happening, the government of that particular country has told its citizen, whatever you do, service or anything else, but it is very compulsory to you to do sugarcane in your land. Now India’s situation is getting worst than forever, that is because we have given up our ancestral job and we are now not self sufficient rather no we are dependent upon the government as well as private sector. If we forget our ancestral job, then it’s very difficult to manage. What are we doing, that

we are importing all our necessary needs from the other country. We are investing lakhs of Rupees to get the technology of the other country. If we would have spent that much of rupees in improving our own indigenous technology, then we would have reached much more than other people. Are we getting any profit, by deploying the technology of the other country? Obviously no. You see, in Itamati, the government introduced the powerloom which is a foreign technology ignoring the indigenous technology (handloom). And you see the result. Now neither handloom nor powerloom are performing better in Itamati.”

From the above responses, it can be inferred that, government instead of giving importance to the existing knowledge system and improving upon that, unnecessarily deploy foreign technology. As a result of which neither indigenous technology nor foreign technology are able to survive. A master weaver from Itamati has lucidly explained some other causes other than powerloom which are responsible for the plight of the handloom sector in Itamati:

“We are weaving all these handloom material by deploying labor weaver. The master weaver is saying that, he is a master weaver but he is not weaving himself rather he has deployed some individual to weave. The work of the master weaver or the owner of the handloom units as follows:

- 1. Searching the individual weaver for the deployment in the handloom unit to weave, so that the entire handloom unit can be run smoothly.*
- 2. Preparation of the warm beam for the final weaving. (It is a preliminary work, which has to be done before the final weaving process.)*
- 3. Arranging raw materials that include bringing raw materials from the market and from other sources.*
- 4. If something gets short, then he brings all that and deposit that in the handloom unit, so that the handloom unit can run smoothly.*
- 5. The main thing is that he has lots of previous knowledge about the handloom industry, that’s why it is very easier for him to run this business. But the whole problem is lies somewhere else. The problem is not with his expertise. The problem is shortage of raw material and the shortage of labor handloom for the weaving.*

Previously he was having lots of loom. But gradually the looms are decreasing day by day. But till now he has not installed any powerloom. He has only handloom units. He even showed to the researcher that the number of handloom unit, he was having previously, but now the handloom unit is decreasing very rapidly. According to him, in

Itamati, there were 5000 hand looms. But now it is only 300/400. According to him the causes of decreasing handloom unit in the village Itamati (Nayagarh District) are manifold.

- a. Due to lack of labor power.*
- b. Shortage of wage.*
- c. Shortage of raw material.*
- d. Now the labor handloom weavers are coming to weave 10/ 15 days per month, which is another problem for the continuance of the handloom weaving.”*

He also adds that

“We are also weaving Sambalpuri Bandha Gamucha. All the looms of ours of one size. I am only running the dress material of girls in my looms. He even showed the researcher that it’s a Bandha Gamcha. We are buying the Bandha material from Nuapatna and Maniabandha. He also showed a blouse piece made up of Sambalpu Bandha. We are bringing all the Bandha material from Maniabandha and do the final weaving process here. It signifies that the required raw materials are not available with them for the reason of which they have to import all the raw material from Nuapatna and Mania Bandha and do the final weaving in the Itamati itself.”

From the above responses, it can be inferred that other than powerloom, there are also some additional causes which are responsible for the decline of the handloom industry. The causes are due to lack of labor power, shortage of wage and shortage of raw material.

How the powerloom are replicating the handloom design which is ultimately the cause of the deterioration of the handloom sector in Itamati is lucidly explained by a handloom weaver. The explanation is like this

“For example, we the handloom weaver fast designed a dress material for the girl people but now powerloom suddenly copied that product. Hence now the handloom of Itamati is in a very distress stage. Basically the mechanized industry copies all the design from the handmade product. Whatever support is given by the Government through the cooperative society is not reaching to the grass root weaver or the real weaver. In other words, we can say that the package of the government or the patronage of the government is not reaching to the actual beneficiaries. The government is also giving the weaver some technical apparatus, which is no use to them. Because the

government is not giving the apparatus in a research basis. Rather it gives the apparatus only to popularize its name and fame. Hence we now the weavers are completely disappointed with the government scheme and programme and the torture we face from this powerloom sector. Hence now we have totally lost our interest to innovate any new design or new thing. Hence now innovation is totally stopped in the handloom sector in Itamati. Why should we innovate new design, because when we innovate new design and it has some market value, suddenly the powerloom weaver copied that product and sell that product in a comparatively cheaper price than that of handloom sector. For that reason we the handloom weavers are day by day losing our interest to innovate new thing, because when we innovate some new thing it gets copied by the powerloom. Even the powerloom weaver does not feel it necessary to at least give us the recognition for the designing of such beautiful product. Hence we are losing our interest to do new type of innovation in the handloom design. If the government would have reserved some item especially for the handloom weaver, then we the handloom weaver definitely be benefited out of that. Instead of promoting the handloom sector, the government is buying the powerloom product and selling it in the brand name of handloom. Since it is done by the apex cooperative society Boyanika, hence no one is able to know what is going on in the government department. If some item has to be reserved for the handloom, then only we will be benefited up to certain extent. But no such action is taken by the government till now. There may be law in this regard in the government but no such follow up action is made by the government till now. If the government will say that the Sambalpuri Bandha gamucha will only be weaved by the hand loom, then definitely we will be benefitted by that. The policy of the government is not properly implemented and as well as the policy and law of the government is not properly obeyed. There is a license system of the government to install powerloom in our area. But no one is obeying that license system. Hence in this area now a day no permission is required to install a powerloom in our area. Unauthorized growth of powerloom again made the handloom sector of Itamati worst.”

The weaver has explained adequately that how a new innovation in the handloom sector is being copied by the powerloom. the powerloom owners are instead of designing new product directly copies the handloom product and sells it in the market in a comparatively cheaper price which is a major problem for the handloom sector. A master weaver of Itamati is describing the problem of labour shortage in Itamati handloom sector. He is narrating the entire story like this

*“Here I am giving the detailed chart of my monthly income. You see the weaver will weave this much here. He will only weave two piece of material per day. Since he is a physically challenged person, hence he is doing this thing. Otherwise he would have opted for other sector. This is the perception people having in this sector. The perception is like this. Those who cannot do anything, they only rely on the handloom sector. This weaver is weaving two piece of product per day. He is getting Rs35 per piece gamucha. Hence he is getting Rs70 in two piece per day. Someday even he weaves maximum three piece of gamacha thereby getting a wage of $Rs35*3 = Rs105$.but basically he weaves two piece per day. Sometimes even one, when he is in severe illness. We are getting profit of Rs10/ Rs15 profit per piece gamucha after our primary investment that includes raw material + wage to the weaver. Hence we are getting $Rs15*2 = Rs30$ per day per loom. Or we may get maximum Rs40 per day per loom. We will get Rs30 per loom provided the weaver will come regularly. Otherwise even some days are there, where we did not earn anything because on that day the weaver did not come. Another thing is that there is no guarantee that the weaver will come regularly to weave. The weaver is coming 15 days per month or sometimes he even comes 4 days a month. Basically when he gets outside work by which he can earn Rs250 per day, he prefers to go there. But when there is no work, he prefers to come to the handloom. Since in the handloom, he only gets Rs70 per day, for that reason he prefers to work out side, but whenever he do not get any work, at that time he prefers to work in the handloom. Because it is better to do something than nothing. Hence the handloom sector is coming in the ‘something’ category. Sometimes even we cannot force the weaver to come to our loom to do the weaving activity.”*

From the above response, it can be inferred that due to low wage in the handloom sector people prefer to do other work which is highly paid thereby ignoring the handloom sector. For the reason of which the handloom sector is decreasing day by day. Now the original weaver has switched over to other manual work to get a better earning. A weaver also adds that

“Those who are day laborer, they go out from home for work on 7am. And came back on 1pm and get a wage of Rs170 or Rs200 or Rs250 per day. When they do over time work, they get Rs of extra Rs 200. Then why should they stay in this sector and earn an Rs70 only by doing whole day work. We were having a cooperative society in our village. But now a day the cooperative society got closed because of huge corruption. Now everybody is weaving individually. Hence now the handloom work is totally of individual. Hence almost all the handloom units are getting closed day by day in Itamati. Because it is very difficult for a person to run this handloom business in today’s market, where he will face lots of competition and hindrances from other sector. Further the

cooperative society which was very helpful to the handloom weaver is now not functioning.”

From the above explanation, it can be inferred that due to proper wage in the handloom sector, the weavers switched over to other manual work thereby contributing to the plight of the handloom sector in Itamati of Nayagarh District.

5.8 Conclusion

From above all the responses and discussions, we can come to the conclusion that, due to lack of proper education, lack of business ethics and business skills, and much more dependent on borrowed technology has deteriorated the industrial culture of the state. In the phenomena of development, there is a difficulty in figuring out the right level of technology to fit the given circumstances: in other words there is a choice of technology and it cannot be assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries (McRobie, 1979). The government instead of giving priority to the existing indigenous knowledge and improving upon that is trying only borrowing technology. Since technology is borrowed, it is very difficult to maintain that technology. For the reason of which in Itamati both handloom and powerloom are in distress. Industrial technology requires highly skilled and professional labour force which is controlled by a range of norms and rules. In order to motivate and keep this labour force intact, there must be a kind of open educational system accompanied by social mobility and relative social equality at large. Work ethics has to be encouraged in an Industrial society (Watson, 1995). But in the powerloom sector in Odisha there is an absence of work ethics, which needs to be encouraged. The industrial development of Odisha is not balanced and integrated (Meher, 1992).

Without creating a proper infrastructure for the installation of powerloom, the government introduced the powerloom in the state in a haphazard manner, for the reason of which the powerloom sector in the state is a failure scheme. The half hazard installation of powerloom has also destroyed the indigenous technology (handloom) in Itamati. Since the powerloom was installed in the state in a half hazard manner, it ultimately leads to irregularities in giving finance to the powerloom sector. Further the closing of the powerloom cooperative society due to heavy corruption has also lower the condition of the powerloom sector in the state. An ideology which holds the system together. This according to Dunlop is a set of ideas and beliefs 'commonly held by the actors' involved. Hence there must be common ideology to be followed by the powerloom weavers to survive and compete in the market. Productivity improvement requires not only financial investment but also sincerely, cooperation and skill from the workers. Cordial industrial relations are very much important for ensuring higher productivity and full utilization of the production capacity. For that reason the management and the supervisory staff need to build a suitable organizational climate where the workers can do their best job (Rao, 1989). The powerloom sector of the state is lacking all these qualities, which needs to be strengthened. Giving education, training and motivation creates a cordial relationship between the management and workers which ultimately leads to a better productivity (ibid). Management should concentrate on imparting good training on the various aspects of the work (ibid).

There is a lack of competitiveness in the powerloom sector in Odisha. Perhaps in these matters, the Japanese and other competitors are more efficient than those in India (Mote, 1967). Since there is lack of product diversification in the state, there is a less competitive environment in the state for which the powerloom is not able flourish. The

textile industry dependent on one agricultural raw material- cotton. Cotton prices tend to fluctuate depending on the size of the crop. In other countries the government has taken steps to maintain the heavy fluctuation in cotton prices by deploying price stabilization policies. However this has not happened in India (Anubhai, 1988). Since the cotton price is high, and Odisha is also not a chief producer of cotton, hence it ultimately leads to the shortage of raw material in the sector, thereby responsible for the plight of the textile industry both handlooms as well as powerloom.

As Bythell pointed out, the fixed cost of powerloom is high. In the powerloom sector of Odisha there is high investment and low return. Hence it also contributes to the plight of the powerloom sector in the state.

The major dimension of technological development arises from the social system in which the technology operates. The individual private firms only operate on the basis of their own individual interest rather than on social benefit (Murty, 2002). For the reason of which since the owner of the Odisha powerloom sector run their business keeping in view only their individual interest, for that reason, it has a very smaller social benefits.

However it may be concluded that the irresponsible attitude of the Government of Odisha has resulted in the destruction of the whole textile sector that includes both handloom and powerloom in Itamati of Nayagarh district in Odisha.

CHAPTER VI

CONCLUSION

This chapter provides a summary of the findings of the study, limitations of the study and then goes on to explore the possibility of further research in the field.

6.1 Summary of the Findings of the Study:

The handloom industry of India as well as Odisha had been devastated after the advent of East India Company (Dash 1995). It resulted in the devastation of an indigenous knowledge system as well as indigenous technology. After independence various textile policies came into existence but no fruitful results came into being (Jain 1985). Since the handloom sector is a disorganized industry, it is very difficult for the policy makers to understand the hidden social structure lies in it and make policies. The present chapter explores different challenges posed to the handloom sector (indigenous knowledge system) in different handloom clusters in western Odisha and coastal Odisha. In western Odisha, from the field study and secondary data, it was observed that there are no powerlooms. The condition of handloom in western Odisha is relatively better than in coastal Odisha when there is the prevalence of powerloom.

- (a) Weavers' opinion on problems of handloom sector: 91 per cent of pointed out that there is an ineffective cooperative system. 33 per cent weavers said that they were being exploited by the master weavers. 47 per cent of weavers said that they cannot say anything about the master weaver. In fact in the absence of cooperative societies the master weavers are running the handloom business. Hence many weavers do not want to speak against the master weavers although they are exploited by the master weavers. All weavers said that there is shortage of raw material and 71 per cent of weavers said there is shortage of working

capital. The rest of the weavers get working capital from the master weavers. Around 90 per cent weavers suggest that there is infrastructure bottleneck in the handloom sector whereas 89 per cent of weavers highlight the presence of diversified products in the handloom sector in Odisha. 11 per cent who gave their opinion that there is no product diversification or less product diversification belongs to coastal Odisha. In coastal Odisha the handloom is in a vulnerable stage because of the prevalence of powerloom. 42 per cent weavers opined that there is challenge from the powerloom sector. However a large section of weaver i.e. 53 per cent of weavers opined that powerloom is never a challenge for them. However in coastal Odisha 100 per cent weavers opined that there is a challenge from the powerloom sector. 100 per cent of weavers told that they are getting a very low wage. The whole family's monthly income ranges between Rs. 2000 and Rs. 4000. Still they do not want to leave the handloom sector because of their strong traditional root of handloom as opined by the weaver. 68 per cent of weavers told that the future is not uncertain in the handloom sector. However in Bolangir and Sonepur districts 78 and 82 per cent of weavers respectively said that the future is not uncertain in the handloom sector. 100 per cent weavers opined that there is low socioeconomic status in the handloom sector. 100 per cent weavers told that they are not getting proper medical facilities from the government. In Bargarh, Sonepur and Bolagir District (western Odisha) 100, 88 and 93 per cent of weavers respectively opined that their children would take up handloom as their job in the future. In coastal Odisha (Nayagarh district) 100 per cent weavers opined that their children would not opt for handloom in future. However, 89 per cent of weavers opined that their children would take up handloom as their occupation in future. 81 per cent of weavers opined that

powerloom can not dominate handloom. Basically weavers from Bargarh, Bolangir, Sonepur, Boudh and Nuapada strongly opined that powerloom can not dominate handloom. Weavers from Bargarh, Bolangir and Sonepur strongly opined that handloom (traditional knowledge system) is sustainable. However 89 per cent of weavers opined that handloom is sustainable.

- (b) Master Weavers' opinion on the problems of handloom sector: 100 per cent of master weavers told that there is shortage of raw material in the handloom sector. 100 per cent master weavers told that there is lack of government support in the handloom sector. 100 per cent of master weavers told that there is no marketing problem. 52 per cent of master weavers hold the view that there is no challenge from the powerloom sector. In sonepur 75 per cent of master weavers agreed to this fact that there is no challenge from the powerloom sector. Master weavers from Bargarh and Sonepur strongly hold the view that the handloom is sustainable. However 70 per cent of master weavers agreed to this fact. According to the master weavers the percentage of involvement of Women and children in weaving activity is 100 per cent.
- (c) Responses of the members of the cooperative society: 100 per cent respondents hold the view that there is malfunctioning of the cooperative society. 81 per cent of respondents opined that powerloom cannot overtake handloom product in Odisha. 81 per cent of the members of the cooperative society hold the view that handloom is sustainable.
- (d) Responses of the government officials: 100 per cent of the respondents hold the view that there is malfunctioning of the government bodies relating to the handloom sector in the state. 52 per cent of Government officials opined that

powerloom cannot take over handloom product. 71 per cent of Government officials hold the view that handloom is sustainable.

From the above analysis and discussion, it is found that Odisha handloom is very rich in its artistic design, texture and color. Handloom is an indigenous technology and culture which is still alive in Odisha and providing employment to a large section of the population. The weavers and master weavers of western Odisha work hard in the handloom sector for getting their livelihood. Handloom, the indigenous technology, is struggling to survive in the Odisha in the absence of the proper functioning of the cooperative societies and government bodies. The power over indigenous technological systems by the state in reality has been translated into power over indigenous people. It has not formulated a proper policy for the revival of the handloom sector. It neglects the handloom sector which is the second next employment generating industry after agriculture. According to all the stake holders of the western Odisha the role of powerloom products in the handloom sector is negligible. However powerloom have somehow affected the handloom industry of coastal Odisha. But in western Odisha it has not affected the handloom sector significantly. In western Odisha, the handloom sector is in distress because it is not getting the proper attention of the government of Odisha. The nexus between the middlemen and the government officers is also responsible for the plight of the handloom industry as explained by the different stakeholders of the handloom sector.

Most of the weavers nevertheless are still optimistic about the handloom sector and suggest adequate attention of the government for its survival. The government, instead of uncritically converting the rich handloom sector into powerloom sector, should strengthen the indigenous handloom sector. The introduction of powerloom has disturbed the handloom culture in coastal Odisha and meanwhile powerloom also could

not survive in coastal Odisha since it is yet to be socially, economically and culturally embedded. Without creating proper infrastructure for the powerloom sector, the government introduced powerloom in coastal Odisha which reason the powerloom is a failure scheme in the state of Odisha. However from the field study it is found that, handloom is still surviving in western Odisha and it needs immediate attention of the government for its growth and survival. Otherwise the rich indigenous technology i.e. handloom will soon vanish from the state within some decades.

Siminoi is a powerloom cluster in Dhenkanal District in the state of Odisha. In-depth personal interviews were conducted with various stakeholders of Siminoi powerloom cluster in the state of Odisha regarding the declining status of the powerloom.

Why is the demand for the product of the powerloom of Odisha low whereas the powerloom of other states like Gujarat, Tamil Nadu are flourishing? The most and important reason is a lack of product diversification (Textile Committee Report 2003). In Siminoi the powerloom weavers basically weave Lal Gamcha. If all weavers make Lal Gamcha, then that particular product gets flooded in the market there by decrease its demand. The flooded similar kind of production leads to distress sell. After the closing of the cooperative society of the powerloom sector due to huge corruption, the market demand for the powerloom product in the state is in a worst condition. Owing to the absence of a specific organization to look after the specific problems of the powerloom clusters, it face severe crisis. Since there is no specific organization to look after the problems of the powerloom clusters, the middle men are taking advantage of the situation. They help the powerloom weavers in terms of credit facility and selling of their product and for doing this and appropriate a huge profit margin. One of the most

important challenges is that the weavers after leaving their ancestral occupation and after accepting this new technology are unable to get two full plate meals per day.

The unavailability of common facility centre in the powerloom sector in Odisha is responsible for the unorganized production of materials in the powerloom sector. A lack of pre-loom and post-loom facilities adds to the problem. When Siminoi was a handloom belt, it was sustainable. Its sustainability comes because of the available infrastructure for handloom. The new technologies that are created by the developed countries are suitable to themselves. Powerloom is the technology of the developed state. Hence it becomes difficult to maintain a foreign technology due to adequate technical expertise and proper infrastructure.

Entrepreneurship with social welfare schemes is not encouraged by the state. Owing to a lack of education among the unskilled and skilled powerloom weaver, they are actually unable to understand government plan and policies. The government officers are taking advantage of the situation. Relatively better off weavers started to replace handlooms by powerlooms (Roy 2002). Further there is no rule and regulation in the installation of powerloom. A large section of weavers who have converted their handloom to powerloom find it difficult to maintain the powerloom because of the aforesaid difficulties thereby contributing to the decline of the powerloom industry in Siminoi.

Owing to a lack of proper education, business ethics and business skills, and dependence on foreign technology has deteriorated the industrial culture of the state. In the phenomena of development, there is a difficulty in figuring out the right level of technology to fit the given circumstances: in other words there is a choice of technology and it cannot be assumed that the level of technology used by the affluent societies is the only possible level, let alone that it is necessarily the best for the poor countries

(McRobie, 1979). The government, instead of giving priority to the existing indigenous knowledge systems and improving upon that, is only engaged in aping foreign technological systems. Since technology is largely foreign, it is very difficult to maintain that technology. Industrial technology requires a highly skilled and professional labour force which is controlled by a range of norms and rules. In order to motivate and keep this labour force intact, there must be a kind of open educational system accompanied by social mobility and relative social equality at large.

Without creating a proper infrastructure for the installation of powerloom, the government introduced the powerloom in coastal Odisha in a haphazard manner, and hence the powerloom sector in the state is a failure scheme. Since the powerloom was installed in the state in a haphazard manner, it ultimately leads to irregularities in giving finance to the powerloom sector. Further the closing of the powerloom cooperative society due to heavy corruption has also lowered the condition of the powerloom sector in the state. Ideology according to Dunlop (1958) is a set of ideas and beliefs 'commonly held by the actors' involved. Hence there must be common ideology to be followed by the powerloom weavers to survive and compete in the market. Productivity improvement requires not only financial investment but also sincerity, cooperation and skill from the workers. Cordial industrial relations are very important for ensuring higher productivity and full utilization of the production capacity. For that reason the management and the supervisory staff need to build a suitable organizational climate where the workers can do their best job (Rao 1989). The powerloom sector of the state still lacks all these qualities which need to be strengthened. Provision of education, training and motivation creates a cordial relationship between the management and workers which ultimately leads to a better productivity (Rao 1989). Management should concentrate on imparting sufficient training on the various aspects of the work. Perhaps in these matters, the Japanese and

other competitors are more efficient than their Indian counterparts (Mote 1967). Since there is a lack of product diversification in the state, there is a weaker competitive environment in the state for which the powerloom is not able to flourish. Since the cotton price is high, and Odisha is also not a chief producer of cotton, it ultimately leads to the shortage of raw material in the sector, thereby being responsible for the plight of the textile industry, both handlooms as well as powerlooms.

The Government of Odisha did not introduce the powerloom in an organised manner in the Itamati handloom village of Nayagarh district in Odisha without taking into consideration of the local needs as a result of which the rich indigenous technology (handloom) is going disappear in Itamati. Simultaneously the powerloom is also on the decline since it is a knowledge system alien to that particular place.

Itamati is a small village located in the Nayagarh District of Odisha. Itamati once famous for producing rich handloom product is now unable to produce neither rich handloom products nor rich powerloom products. The handloom units that were available in Itamati in the past were more than 5000 and now it is down to only 300 to 400.

- (e) Various causes of the decline of the handloom: Infrastructural bottleneck is one of the problems of handloom industry in Itamati. The handloom industry is facing problems in terms of procurement of yarn. According to Mukund and Sundari (2001) ineffective cooperative system also adds to the problem. The introduction of powerloom to universalize modern science and technology (Niranjana, 2001) also adds to the problem. Powerloom proliferation in the name of technological upgradation posed a real threat to the very survival of the handloom weaver (Niranjana, 2001). Violation of the Handloom Reservation Act by the powerloom sector is also a problem for the handloom.

Lack of fixed capital, working capital, shortage of weavers in the handloom sector, closing of the weavers' cooperative societies are responsible for the destruction of the indigenous knowledge system. Lack of fixed as well as working capital is attributed to lack of selling of the handloom product in the market. The lack of selling of the handloom product is attributed to cheap powerloom cloths available in the market thereby decreasing the demand for the handloom product in Itamati. Shortage of weavers is attributed to opportunity for work is available through different government schemes thereby distancing the traditional weavers from their main occupation i.e. weaving and responsible for the unemployment of the weaver in the long run. Because government cannot provide full employment to anybody through any scheme. Hence weavers in spite of strengthening their own indigenous work i.e. handloom runs after different short-term government schemes which are available only for some months or years. This tendency of the people like running after the Government or Private Organization for short-term gain is responsible for the plight of the indigenous knowledge system. Since the introduction of the Cooperative society is government sponsored (Mukund and Sundari 2001) without taking into consideration of the local inhabitant, its feasibility also comes into question.

The powerloom sector of Itamati faces severe crises in terms lack of product diversification, lack of running and working capital, infrastructural bottlenecks, exploitation by the mahajan and middleman, lack of marketing facilities and irregularities in giving finance by the Government.

- (f) Powerloom and cultural assimilation: In Odisha the powerloom was introduced in 1972 in the name of technology upgradation in the rich handloom belt. The introduction of powerloom attracted the handloom weaver to weave in the powerloom. Uncritically many weavers converted their handloom unit to

powerloom unit without considering the difficulties they would face in future. In the initial period the powerloom sector was running smoothly with the help of powerloom cooperative societies. The whole problem started from the year 1987 onwards. The powerloom cooperative societies began to close because all the stake holders of powerloom sector could not get proper benefit. It was a government sponsored scheme. The Government sponsored pre loom and post loom facilities which were provided initially were also closed down because of huge corruption.

Those weavers who had uncritically accepted this scheme are now repenting. Now neither are they able to run the handloom nor run the powerloom. They are unable to run handloom because they have forgotten the skill of handloom by accepting the powerloom. And they are unable to run powerloom because the weaver is not self sufficient enough to run the powerloom as its own as in the case of handloom and dependant on external help. When any of the external help stops flowing to the weaver for so many factors, then he feels helpless and lost hope in the alien knowledge system. This has happened in case of Itamati village too.

In the handloom the weaver has to invest more labour but less maintenance cost. Here investment of labour implies the designing and redesigning of the existing technology with existing locally available resources. Since handloom is a local technology, existing local resources are enough to maintain this technology. In the powerloom, he has to invest less labour but incurs more maintenance cost. More maintenance cost is necessary for the powerloom because it cannot be redesigned by existing available local resources; hence the weaver has to depend upon the external help for maintenance of powerloom. This dependency of the weavers upon external factors for maintaining the powerloom increases the maintenance cost of the powerloom. Since

weavers own the labour, they can invest it according to their own wish in the production process in the handloom and in making in the handloom sustainable. Since powerloom is capital intensive, it is not sustainable in Itamati (field survey). According to the weavers of Itamati, there are difficulties in powerloom than in handloom, such as lack of opportunity to make diversified product, repetition of the same designs, lack of opportunity to innovate and use skill, high maintenance cost, dependence upon external factors for funding raw materials, technical expertise and electricity.

In handloom the production was less, hence selling was right. Therefore products are not flooded in the market, thereby there always maintains a demand for the product, whereas in case of powerloom, the production is more but accordingly the sale is less, because the similar kinds of products get flooded in the market.

Scraped and discarded looms were brought to Itamati by the loom supplier and were made capable of use in the powerloom industry. All rejected looms were running at Itamati and are unable to produce diversified products and merely ape the products designed by the handloom by fitting handloom jacquard machine in the powerloom of Itamati. These powerloom products are sold in the market at a cheaper price in the brand name of handloom.

The Government of Odisha without developing the rich handloom belt of Itamati uncritically converted the handloom belt into a powerloom belt by introducing low quality powerloom. Since the introduction of powerloom in a rich handloom belt was completely government-sponsored without taking into consideration of the local opinion, it has not succeeded in Itamati yet. The uncritical transition leads to the decline of both handloom as well as powerloom industries in Odisha.

6.2 Limitations of the Study:

The present study critically engages with the conflicting technological systems in textile industry in Odisha. Nevertheless, the present study is limited in its scope and ambit:

- (a) The findings of the study may not be applicable to other regions because of certain regional specificities.
- (b) The findings of the study may not be applicable in the context of other industrial products.
- (c) The findings of the study may not help us formulate policies at a national level.

6.3 Scope of Further Research:

Though the present study is limited in its scope and ambit, it has been able to foreground the problematic of conflicting technological systems in textile industry in Odisha. The scope of further research in the field is wide in the sense that more handloom and powerloom clusters may be studied from cross-regional and cross-national perspectives. This would help us understand and intervene in the making of the national textile policy.

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