

## Declining Powerloom Industry and Allied Technology Factors: A Sociological Study of Siminoi Powerloom Cluster in Odisha

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### **Abstract**

*Powerloom is a dominant player in weaving in India. The need of the hour is to integrate both handloom and powerloom for better production. Nevertheless, there was an uncritical transition from handloom clusters to powerloom clusters initiated by the Government of Odisha in 1972, it is having a deteriorating effect on both handloom and powerloom. The present paper attempts to examine the factors contributing to the plight of powerloom clusters in Odisha. In-depth personal interviews were conducted with various stakeholders of Siminoi powerloom clusters of Dhenkanal district in Odisha. A lack of unplanned installation of powerlooms, government patronage, competitiveness, product diversification, marketing, infrastructure bottleneck etc. are responsible for the plight of powerloom sector at Siminoi cluster.*

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## 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 dominant role of the state sector under the Nehruvian State to the ongoing phase of state withdrawal, attenuated emphasis on self-reliance and indigenous research, heightened influence of foreign governments and multinational corporations on public policy including in S&T. This analysis has undoubted validity in organized industry and 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 with the mainstream development and a loss of hope in the future. And, powerloom sector in Odisha is no exception to such distress. The purpose of the present study 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.

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Prior to independence, Gandhi (1938) promoted small-scale and cottage industries as a gainful economic activity. The rationale for Gandhi was simple – it 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 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 the 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 enjoyed a pre-eminent status. The persistence of handloom weaving right into the present either due to its organizational responses to changing markets, technological or product innovation, or other kind of adaptation of labour, capital and skills – calls for its in-depth exploration. Today's globalized macroeconomic processes have also affected the non-formal sector and a contemporary understanding of the nature of the handloom industry and its responses are 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 – 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 has been

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generated by the 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 Van Fleet, 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<sup>1</sup> (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 involves 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. In this regard, 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 becomes widespread; and people in the 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 assumed that the level of technology used by the affluent societies is the only possible level, let alone

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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.<sup>2</sup> Since technology is alien, it is important to understand how a specific technology is culturally assimilated by its practitioners, stakeholders, and so on: absorbing minorities into the ways of the majority requiring them to adopt the majority's language, customs and values. Industrial technology requires high-skilled and professional labour force controlled by normative orientation, value systems, institutional mandates and ideological moorings: the problem of order.<sup>3</sup> 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: rule-governed shared culture is based on relevance, acceptability and elegance (Weber, 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 workers can do their job best (Rao, 1989). 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 textiles, there is a less competitive environment in the state due to which the powerloom is not able to flourish. The textile industry depends heavily on an agricultural raw material (cotton). The price of cotton tends to fluctuate depending on the size of the crop as well as market volatility. In other countries, the respective governments have taken steps to arrest the heavy fluctuation in cotton prices by deploying price stabilization policies, which has not happened in India

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(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 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 only operate on the basis of their own individual interest rather than social welfare (Murty, 2002).

The state of Odisha has a poor industrial setup. A majority of its population depends upon agriculture for their survival. The handloom sector is the second next 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 others. Such an uncritical transition from handloom to powerloom clusters has made the situation even worse, and has resulted in the distress of powerloom in the above mentioned powerloom clusters.

It is against this backdrop that the study 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 of India are interrelated, and any attempt to study them in isolation would be misleading.

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**Table 1***Profile of Powerlooms in Odisha*

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

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



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Table 1 provides a brief profile of powerlooms in Odisha. Table 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 2**

*Number of Powerloom Units in the Private Sector in Different Zones*

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

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

### Powerloom Clusters in India

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 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 the industrialization and raising the standard of living of the people. But the problem is that, in Odisha, the powerloom is in a distress condition compared to the rest of India. In a few cases like Odisha, it is observed that both handloom and powerloom are

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integrated to produce market-oriented products. But the present number of 1,238 powerlooms in the state of Odisha are producing low value products such as gamcha, saree, dhoti, blouse and loin cloth (Textile Committee Report, Government of India, 2003).

The GOI Textile Committee Report (2003) showed that the textile industry accounts for as large as 21 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 belong to Maharashtra and 20 per cent belong to Tamil Nadu. Gujarat stands third in the number of looms with a share of 19 per cent. Besides these states, the powerloom weaving is more in existence in the states of Andhra Pradesh, Karnataka, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and Odisha; and that taken together accounts for 15–20 per cent of the total powerloom units in the country (ibid.).

### Powerloom Industry in Odisha

According to a survey conducted by the Textile Committee, Government of India in the year 2003, 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 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. The powerloom units only employ about 2,012 weavers of which 1,303 are males and 709 are females (ibid.).

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 powerlooms of Odisha have 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. The following section tries to find out the major causes of decline of the powerloom in the state of Odisha from different perspectives.

### Case of Siminoi Powerloom Cluster

In-depth personal interviews were conducted with various stakeholders of Siminoi<sup>4</sup> powerloom cluster in the state of Odisha. The official staffs 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 report of the Textile Committee regarding the present status of powerloom and data were also collected from 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 little literature found 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.

### 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 putting up of powerlooms has been encouraged through different schemes, the production, planning and marketing strategies have been omitted (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, but the powerloom of other states like Gujarat, Tamil Nadu are flourishing? The most and important reason is lack of product diversification (Textile Committee Report, 2003). In Siminoi, the powerloom weavers basically weave Lal Gamcha.<sup>5</sup> If all weavers make Lal Gamcha, then that particular product gets flooded in the market thereby decreasing the demand for that particular product. The powerlooms of Odisha are simple, plain powerlooms which only weave cotton material that has low demand in the market.

### ***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 powerlooms produce textiles that are considerably cheaper (Goswami, 1990). Hence market demand for their product is high. The powerlooms of Odisha produce only cotton fabric, whose demand is very low in the market. The powerlooms of Odisha are not sophisticated due to which their production does not look attractive. In Western India powerlooms 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<sup>6</sup> etc. Since all these facilities are not available, the products from powerloom of Odisha look like raw and not finished products. But in Maharashtra and Gujarat, the availability of calendaring machine makes the product look attractive due to which their product has a high market demand whereas the product of Odisha powerloom has a low market demand due to the absence of proper infrastructure.

### ***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 where business is already in, or investing in a promising business outside the scope of the existing business.<sup>7</sup> Lack of product diversification and production of similar products make the powerloom industry of Odisha uncompetitive in the state as well as in markets outside the state. Another thing is that the weavers of Odisha are only weaving cotton materials which have a little 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 Gamcha without any product diversification, its market demand is low. A group of weavers of

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Siminoi powerloom cluster opined that '*We have mere production of only Lal Gamcha. If the production would have been diversified, then demand for each product will be felt in the market. As the same product is going on, there is a small demand*'. The market flooding of similar kind of products 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 a product, which has been ordered by the big merchants or middlemen. 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 weavers. Every weaver is not selling his/her product to the Mahajana (feudal moneylender) at a fixed rate; rather they sell at different rates. For example, if one weaver sells his product at Rs 45 per piece to the Mahajana, another weaver will sell his product at Rs 41. And another weaver will sell it in Rs 40 per piece. Here in this case the Mahajan bargains with the weaver and gets the material in the lowest possible price. Ultimately the weaver is the loser. We have more production, and hence, less demand. We are selling the product in a haphazard manner. Since handloom is producing less number of products, there is poor demand for the handloom products. 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 powerlooms of Southern and Western India are copying the designs of the powerloom as

well as handloom products of the state of Odisha in a more sophisticated way and they sell their products 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 their products, which again gives a chance to the middleman to exploit them.

### ***Absence of the Cooperative Society***

Another problem is that the powerlooms of Odisha are not under the cooperative fold rather these are now individual units. There is an absence of either bank or cooperative credit facility in the powerloom sector (Goswami, 1990). The powerloom units are individual units; there are no specific organizations that look after the specific problems of powerloom like raw material, electricity or proper market research in Odisha (Textile Committee Report, Government of India, 2003). 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 (Subrahmanya, 2004). After the closing of the powerloom cooperative societies and Odisha Textile Mills, powerlooms have now become individual units and are working in an informal manner. Hence it is difficult for the individual family to run powerlooms without community as well as government support. The shortage of raw material, lack of working capital, shortage of power supply and lack of proper market aggravates the situation. Hence many powerloom weavers are quitting their jobs and shifting to other occupations: 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).

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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 severe crisis. Various causes for the closing of Siminoi powerloom clusters have been lucidly explained by a group of weavers.

In the past we had a cooperative society, and we were benefitted out of that society a lot. When the first cooperative society came up, only 50/60 mills were there. At that time the society gave the raw material to the weavers and collected the finished goods from the weaver by giving appropriate wage for the appropriate products. But some clever weavers thought that, if they own their production as well as marketing, then their profit will be more. Likewise all the weavers ran away from the society and society collapsed. Another thing for which the weavers ran away from the society was that the society gradually became irregular in giving raw material and wages to the weavers in proper time. And at the same time, some rich people wanted to open their own powerloom production units. Now the production has been increased. But at the same time other necessary things decreased like market research, proper planning, and coordination among the weavers. 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 a cooperative society, we have never faced this kind of marketing and raw material trouble, which is a major problem now. Now unplanned production, no product diversification, improper selling mechanism have worsened the condition of the powerloom sector in Odisha. If we produce the finished goods 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

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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 from 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.

After the closing of the cooperative society, the powerloom weavers are confronted with several 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 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 also 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 powerlooms could not flourish in the state of Odisha.

### ***Role of the Middlemen***

According to a group of weavers of Siminoi Powerloom Cluster,

We the weavers, by doing hard labour, earn 50 paisa per meter but the whole seller gets Rs 1.00 per meter. Basically the traders are the Marwari and Bengali people. The business is run by the Marwari people. We are getting no profit, we are living from hand to mouth. The Mahajan will tell us, to sell the product at such



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a 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 middlemen 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 routinization 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 clusters of Odisha. The middlemen play the role of capitalist and try to deskill the labour force to lower the production cost. Thus 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 Gamcha* 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. 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

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weavers, which has resulted in the deskilling of a large section 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.

### *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 make the situation worst. Now the weavers of Siminoi are facing a more severe crisis. They are in the stage of ambivalence. They do not know 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 is a foreign technology. How far a village can 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 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 introduced the technology of affluent society in a poor society. 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 has emerged (based on powerloom). With the introduction of mechanized large-scale technology, a highly prosperous local industry could disappear (McRobie, 1979).

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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 square meals per day. And for that reason many weavers are now quitting this occupation and searching for other occupations. Many weavers do not even find other jobs suitable for them. There are many other factors due to which the weavers cannot switch from one occupation to another occupation, such as distance from home, self-respect, duration of work, nature of work, social life etc. Due to these reasons many weavers of Siminoi are now thinking of reviving the traditional handloom sector, which again is a difficult task. A weaver of Siminoi powerloom cluster of Dhenkanal district opined that '*today, when a daily labour gets Rs 200/Rs 250 per day, and his monthly income is Rs 7,000 approximately, in the powerloom sector, after investing in loom, raw material and marketing the weaver will get Rs 6,000 per month. Now the looms have been decreased from 40 to 30*'. It is clear that the powerloom owners as well as weavers are unable to maintain their livelihood through powerloom business. A daily labourer earns Rs 200/Rs 500 per day without any investment whereas a powerloom weaver is paid Rs 5,000 to Rs 6,000 per month after investing a lakh 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 5,000 to Rs 6,000. After the maintenance charge and labour payment, the owner gets Rs 5,000 to Rs 6,000*'. Now our argument is 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 further; 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. Therefore we have now made this powerloom business a part time business. If we do it on a fulltime basis, we will not even be able to run our families. Hence we have other side businesses. Simultaneously we also act as daily wage labourers.

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Regarding the wages, the weaver said, after changing from handloom to powerloom the situation has become worse. Some powerloom weavers also told that they were not even able to earn the amount of profit that they usually earned 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 in the powerloom sector.

### **Infrastructure Bottleneck**

Infrastructural bottleneck is one of the major causes for this 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 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 a loan of Rs 20,000 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 in Western India for example, in Surat from 1950 onwards, there was an extensive middle class investment. The same case also happened with Bhiwandi. The town has an advantage since it is situated near Ahmedabad 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 that due to infrastructural bottleneck, they are unable to produce sophisticated products.

### **A Lack of Major Renovation in the Powerloom Sector**

In Western India powerlooms are increasing day by day, because the weavers are getting huge government patronage and have entrepreneurship quality.

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They also get raw material easily from their own state. In Odisha, raw material is not available because 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. Yarn and dye come 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 a high profit margin.

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 came because of the available infrastructure for handloom, that includes availability of raw material, sufficient pre – and post-loom facilities, product diversification etc. Another thing 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, because weavers of Siminoi do not have adequate expertise on the powerloom technology.

### ***Role of the State***

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

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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 be one of the causes for the deterioration of the powerloom sector in Odisha.

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

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

If any industry has to flourish in the state, government support is highly essential. How much a private person can invest in an industry if it is not patronized by the state? In this regard a weaver said that, '*how much a private*

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*person can invest in an industry, if it will not be patronized by the government seriously. We are only making Gamcha here because of lack of proper infrastructure. Due to lack of proper training to the powerloom weaver, the powerlooms are copying the handloom products and selling it in the market in the brand name of handloom'.*

The Government of Odisha has not been paying any attention to handloom as well as powerloom industries, thereby neglecting the textile sector. Technological innovation is very essential. A lack of technological innovation has destroyed 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 500/1,000 powerlooms and he runs them successfully. If we have 10 looms, then we think that we have enough. Whatever the government patronage was there, is being stopped now. The government is not encouraging enterprising skill among its people. Total investment in the powerloom sector is Rs 15,000 (machine) + Rs 15,000 (yarn and other raw material). Investment is of Rs 30,000 but there is no profit. The only satisfaction is that we work in our own place and earn some money. If we were working through a cooperative society, then it would have been better.

### ***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 focus 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

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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 high demand in the international market, which is now waning. 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 were able to get the yarn easily. The spinning mills which are available are now privatized. And the privatized spinning mill makes yarn for their own requirement and not for us. We have to depend upon other states for the yarn now.'* Owing to the closing of the spinning mills, the weavers are facing difficulty in the procurement of the yarn also.

### Discussion

Lack of proper education, lack of business ethics and business skills and greater dependency on foreign technology have hindered the industrial culture of the state. In the phenomenon 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 one, 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 relying only on borrowed technology. Since industrial technology is of foreign origin, 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

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haphazard manner, for the reason of which the powerloom sector in the state is a failure. 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. An ideology which holds the system together. 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 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 quality training on 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 to flourish. 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 powerlooms.

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### ! NOTES

1. Sumner (1906) coined the term, 'ethnocentrism' to describe prejudicial attitudes between in-groups and out-groups by which *our* attitudes, customs and behaviour are unquestionably and uncritically treated as superior to *their* social arrangements.
2. For a better and critical understanding of the nature of the state, refer to Alavi and Shanin (1982: 1).
3. Two aspects of (imperative) problem of order may ... be distinguished, order in the symbolic systems which make communication possible, and order in the mutuality of motivational orientation to the normative aspect of expectations, the 'Hobbesian' problem of order (Mills, 1959: 25).
4. Siminoi is a powerloom cluster in Dhenkanal District in the state of Odisha.
5. Gamcha is a thin, coarse, traditional cotton towel found in India and Bangladesh that is used to dry the body after bathing or wiping sweat. Gamcha is the local term for a sweat towel. Lal means red. Lal Gamcha means red towel.
6. Calendering is a finishing process used on cloth where fabric is folded in half and passed under rollers at high temperatures and pressure.
7. Product diversification is only one of the four aspects of growth strategies: the other three aspects include market penetration, product development and market development (Ansoff, 1957). Further, diversification may be of three types, viz., concentric, horizontal and conglomerate or lateral.

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