

Managing the Weavers' Crisis of Dhanekhali Handloom Industry

Sayani Das

Research Scholar, Department of Geography, Vidyasagar University, W.B., India
Member Faculty, Department of Geography, Asutosh College, Kolkata-700026, W.B., India

ABSTRACT

Dhanekhali Handloom Industry of West Bengal enjoys a prominent place in the handloom map of rural India. The place has lent its name to the cotton weaved tant sari it produces. But recently due to various reasons, it is losing its importance. This study is aimed to address these reasons by investigating the socio-economic conditions and problems of the weavers and analysing the overall nature, production method and structure of the regional weaving co-operative society. Both pre and post-field studies, including the collection of primary and secondary data from the Dhanekhali Community Development Block and different co-operative staff are carried out to unearth the root cause of the problem and to perceive the impact on the socio-economic health of the weaving community. It is found that the industry is dominated by the male workers with very low educational profile. Income is paltry and that too in an irregular way, waxing and waning with the number of product output. This poor financial condition of the weavers finds its mark on the dismal condition of the whole industry. The situation is far more aggravated by the rocketing expenditure costs, the cost of raw materials and lack of domestic market and demand.

Keywords-Dhanekhali co-operative society, handloom, tant sari, weavers, weaving techniques.

Date of Submission: 24 July 2015



Date of Accepted: 06 August 2015

I. INTRODUCTION

The handloom sector, being the largest generator of household based non-farm rural employment, occupies a distinct and unique place in Indian economy. It is carried out by the entire family, across thousands of villages and towns in the country. Along with the artistry of weaver, the Indian handloom industry demonstrates the richness and diversity of Indian culture. The sector employs 4.3 million people and is the second largest employment provider of rural India. Among the various handloom industries the name of Dhanekhali Handloom Industry of Hooghly district of West Bengal is one of most renowned one. Dhanekhali Community Development Block (also spelt Dhaniakhali) is an administrative division in Chinsurah subdivision of Hooghly district. The place has lent its name to the *tant* (handloom) sari it produces. It has gained its importance before the period of independence. It is mainly famous for its cotton weaved sari. But recently it has been losing its importance due to various reasons. Most of the weavers here are engaged with Co-Operative Weavers Society as it is their main means of livelihood. Cooperatives mainly supply the yarn and designs to the weavers, who are also part-time farmers and colourful borders. The sale of saris is good because of the well-known traditional design, especially during the Bengali New Year and the Durga Puja, when Bengali families go out on a shopping spree for saris, among other domestic items. The saris are particularly liked for their slightly thicker weave and colourful borders which housewives find very comfortable to wear while doing domestic chores. Yet, the weavers are facing the usual problems of low output, technological stagnation and subsistence level of income.

II. HISTORY OF DHANEKHALI HANDLOOM INDUSTRY

Since a long time, cotton clothes occupy a prominent place in handloom industry. Various parts of India got famous for this production. Among them "Dhanekhali" block of Hooghly district of West Bengal is one of the most important one. The perfect weaving, composite colour and exact measurement of thread used to weave a saree of this region is one of the typical characteristics which makes it different from other region. Different people give different opinion regarding the origin of this weaving industry here, but not exactly known when did it begin. It is been assumed that during the Bengali year of 1380-1385, a type of cloth called "Sushi" was used to produce in this Dhanekhali block and its surroundings. Though now-a-days majority of the weavers weave cotton saris but before and after independence some sought of silk saris was being produced and got exported to the foreign.

In India, at first the thread which was used to be produced from the spinning wheels was being used to produce the sarees. It was the Britishers who first imported the mill produced thread to weave better quality sarees. After Independence also the weavers of India used these imported thread to weave smooth better quality sarees. But the most disadvantage of buying these threads is that, the weavers have to purchase this from money-lenders in form of the process called "Dadan" which means advance payment and in return they used to get Rs 2 as wages by weaving each sari. Apart from this problem the weavers have to face the problem of high cost of raw materials, down market etc. To solve this all the weavers co-ordinate and decided to create a co-operative society through which every problem of weavers will be solved. The appropriate and composed weaving, exact measurement and a particular design named "Khejurjhuri" which makes it distinguishable from other sarees. Now-a-days highly advanced techniques for weaving have been adopted by using "Jacker".

III. OBJECTIVES

The overall objective of the study is to throw some light on weaving industry of Dhanekhali block of Hooghly district. For this reason the study is based on the existing co-operative societies where most of weavers are engaged. As such the specific objectives of the study are as follows:

- [1] To study the nature, extent, method of production and problem of weaving industry and importance in local economic condition.
- [2] To study the overall structure of the weaving co-operative society of the region.
- [3] To investigate the socio-economic condition and problem of the weavers.
- [4] The schemes taken by the government and co-operatives for the weavers to improve their conditions.
- [5] To analyse the entire situation and suggest some measures.

IV. FIELD OF STUDY

Dhanekhali (also spelt Dhanekhali) is an administrative division in Chinsurah subdivision of Hooghly district in the Indian state of West Bengal. Dhanekhali police station serves this block. Headquarters of this block is at Dhanekhali. The place has lent its name to the *tant* (handloom) sari it produces. Dhanekhali is located at 22°58'N and 88°06'E. Dhanekhali community development block has an area of 353.44 km². The study is conducted on Dhanekhali Gram Panchayet in Hooghly district of West Bengal. The region is well connected by railways and roadways from Howrah station. There are main two bus stoppages like Madan Mohan Tala Bus stop and Cinematola Bus stop which connects Dhanekhali with Chinsurah -Tarakeswar - Haripal. It also connects with National Highway No. 2 (NH -2) at Maheswarpur, 8 km towards *Chinsurah*.

V. METHODOLOGY

Methodology is the systematic analysis of the principal of methods, rules and postulates employed by a description that can be have been applied within a discipline. The pre field study includes the review of existing literature. During field study primary data has been collected from the Dhanekhali Community Development block through a well-designed questionnaire scheduled prepared before and the necessary secondary data has been collected from different the managing director and other management stuffs of the co-operatives. Besides this, the secretariat building of Kolkata, BDO office and land revenue office of Dhanekhali helped to get the secondary data. The block map of Dhanekhali was provided by the BDO land revenue office. Collected data was then tabulated and analyzed on different cartograms and quantitative techniques and followed by interpretation.

VI. RESULTS AND DISCUSSIONS

1. Weaving Techniques

1.1 Methods of weaving

Weaving is a method of fabric production in which two distinct sets of yarns or threads are interlaced at right angles to form a fabric or cloth. Cloth is usually woven on a loom, a device that holds the warp threads in place while filling threads are woven through them. A fabric band which meets this definition of cloth (warp threads with a weft thread winding between) can also be made using other methods, including tablet weaving, back-strap, or other techniques without looms. Generally Dhanekhali lent its name to the "TANT" (handloom) sari it produces. In Dhanekhali block every household has at least one loom. The material for the sari produced here is named after the place. The material for the sari is somewhat coarse and heavier than other textiles from Bengal. Generally weaving can be summarized as a repetition of these three actions-

- Shedding: Where the ends are separated by raising or lowering head frames to form clear space where the pick can pass.
- Picking: Where the weft or pick is propelled across the loom by hand, an air-jet, a rapier or a shuttle.
- Beating up: Where the weft is pushed up against the fell of the cloth by the reed.

In the Dhanekhali block the weavers generally follows two method of weaving-

Dobby Method

This method is used by the weavers of Dhanekhali since the inception of this industry and thus considered to be the most traditional method. It is a type of floor loom that controls all the warp thread using a device called "DOBBY". These method requires less capital and one has advantage of this is the ability to handle much longer sequences in the pattern. Since the weavers of Dhanekhali suffer from lack of capital, and proper incentives most of them use this method for weaving the sari. With Dobby loom all 254 possibilities are available at any time. This vastly processes ultimately found a number of cloth designs available to the weaver.

Jacquard Method

This is a modern machine which has been introduced in Dhanekhali recently. Since it is a costly machine only those who can afford it is being utilising this under the assistance of the co-operative. This machine brings much versatility to the weaving processes. This mechanism is probably one of the most important weaving inventions as it made possible the automatic production of unlimited varieties of pattern of weaving. Sarees weaved under this method also required less time as compared to the Dobby method.

1.2 Process of dyeing

Dyeing is the process of adding colours to textiles products like fibers, yarns and fabrics. Dyeing is normally done in special solutions containing dyes and particular chemical materials. The temperature and time controlling are the two key factors in dyeing. There are two classes of dye- Natural and man-made. Direct dyes, a class of dyes largely used for dyeing cotton are water soluble and can be applied directly to the fiber from an aqueous solution.

The common dyeing processes of cotton yarn with reactive dyes are as follows:-

- a) The raw yarn is wound on a spring tube to achieve a package suitable for dye penetration.
- b) These softened packages are loaded on a dyeing carriers spindle one another.
- c) The packages are pressed up to a desired height to achieve suitable density of packing.
- d) The carrier is loaded on the dyeing machine and the yarn is dyed.
- e) After dyeing, the packages are unloaded from the carrier into a trolley.
- f) Now the water is removed, leaving the desired colour in raw yarn.
- g) The packages are then dried to achieve the final product.

2. Socio-Economic Profile of Weavers

2.1 Working composition

It is found from table 1 that the percentage of male weavers in the industry is high for Dhanekhali i.e. more than 70% of workers are male and only about 27% of workers are female which indicates that in this handloom industry male workers get the most priority than female workers as this weaving industry needs hard labour which can be only offered by male workers.

Table 1
Working Composition (In Percentage)

	Male	Female
Dhanekhali	73.45	26.54

Source: Author's calculation

2.2 Educational level of weavers

The level of education among the weavers is quite low for Dhanekhali union. In Dhanekhali union, female literacy is about 10%. Nearly 59% of male weavers are primary qualified in Dhanekhali. For secondary education the condition is somehow better in Dhanekhali than Somaspur union.

2.3 Categories of worker

The categories of workers in the weaving industry can be divided into following-

Table 2
Categories of worker

	Weavers	Spinning	Dyers	Co-operative members
Dhanekhali	60	30	40	20

Source: Author's calculation

It has been found from the above table 2 that the proportion of weavers in the industry is more than co-operative members.

2.4 Span of working years

Table 3

Span of working years		
Years	No. of workers	No. of workers in percentage at Dhanekhali
1-2	5	4.42
3-10	28	24.78
11-20	62	54.87
>20	18	15.93

Source: Author's calculation

It has been noted from table 3 that maximum numbers of weavers at Dhanekhali are working for 11-20 years for Dhanekhali co-operative society which shows that weaving industry is working in stable condition in the year 2014.

2.5 Types of weavers

Two types of weavers have been identified here. Percentage of hereditary workers is comparatively much high in Dhanekhali i.e. 80% of weavers are hereditary, while 40% is of migrated weavers from Bangladesh.

2.6 Income of weavers

Table 4

Income/week (in Rs)	Percentage of weavers at Dhanekhali
201-400	37
401-1000	17.5
1001-2000	25
2001-5000	15
>5000	5.5

Source: Author's calculation

Since the weavers are working under this co-operative a fixed income level structure is found. About 37% of weavers enjoy wages between Rs201 and 400 per week under Dhanekhali union, while 17.5% enjoys between Rs401 and 1000 per week. Only about 5.5% of weavers have income above Rs 5,000 which signifies overall poor standard of living of the weaving community as well as sluggish growth of this industry.

2.7 Bonus level

Table 5

Year wise distribution of bonus to the weavers				
Bonus	Years	2008-09	2010-11	2011-12
	Dhanekhali		52,974	72,018

Source: Dhanekhali Union TantSilpiSamobayaSamity

The weavers receive bonus during the time of Durga puja. It is observed from Table 5 that from the year 2008-09 to 2011-12 there has been a gradual increase in the bonus level for Dhanekhali union. During the period of 2008-09, Dhanekhali weaving community receives above 50,000, during 2010-11 Dhanekhali union receive nearly 70,000, but the condition of Dhanekhali union's bonus level decreases during 2011-12 due to rise in the price of colour and thread.

2.8 Other sources of income

Apart from the weaving, many weavers got interested in other source of income for better wages. Under Dhanekhali union it has been found that more than 60% of people get engaged in 100 days work. Also 50% of weavers got interested to work as factory labours.

3. Dhanekhali Union TantsilpiSamobayaSamity background

The Dhanekhali Union TantsilpiSamobayaSamity is one of the developed co-operative situated in the Dhanekhali block established in the year 1944. The product of the society is highly appreciated in the market. The management of society is vested upon a board of 15 elected directors and it has been favoured by R.B.I and NABARD since 1976 and has been favoured also by IRDP programme and DINDYAL HATH KARJO PROSASTHAN YOJONA.

The major products of this co-operative are:

- [1] Tant sari with plain border, naksha border and buti.
- [2] Dhuti.
- [3] Tassor sari.

The society has total members of 785 including the weavers and dyers and 333 looms. It has its own office building, sale counter and dyeing centre. Besides local sale, the society participates in different type of exhibition organised at district level.

Table 6

INFRASTRUCTURE OF DHANEKHALI CO-OPERATIVE	1990-91	2000-01	2007-08	2008-09	2009-10	2010-11	2011-12
No. of looms	335	320	333	333	333	333	333
No. of members	685	770	782	782	785	785	785
Finance by NABARD (in Rupees)	1,500,000	3,000,000	N.A.	4,200,000	4,200,000	4,500,000	4,500,000
Production (in Number)	3,800,000	8,400,000	7,100,000	7,100,000	7,200,000	7,700,000	8,600,000
Sale (in Number)	3,400,000	7,000,000	10,100,000	10,300,000	10,300,000	11,300,000	11,600,000
Net profit (in Rupees)	100,000	200,000	400,000	300,000	300,000	400,000	300,000
Gross profit (in Rupees)	500,000	150,000	1,800,000	2,000,000	1,600,000	1,500,000	1,600,000
Wages to Silpi (in Rupees)	1,100,000	3,000,000	3,400,000	3,500,000	3,400,000	3,500,000	3,700,000

Source: Dhanekhali Union TantsilpiSamobayaSamity

3.1 Infrastructure of Dhanekhali Co-Operative

- [1] Number of members: The co-operative started its journey with about 680 members in 1990-91 including the weavers but gradually its membership number increases to near about 780 in 2011-12.
- [2] Number of looms: Under this co-operative there were 335 looms during 1990-91 and recently during the period of 2011-12 it has 333 looms.
- [3] Finance by NABARD: At first NABARD provides 7% finance during 1990-91, gradually the percentage increases and now recently in 2011-12 it provides 21% of financial support.
- [4] Wage level: Under this co-operative total wages of silpi assigned increases slowly from Rs 11,00,000 to Rs 37,00,000. While the wages of dyer is very minimum.
- [5] Production and sale: Here in this co-operative, production rate increases along with sale. Weavers earn extra wages by producing extra saris. Selling rate increases as well.
- [6] Net and gross profit: Here gross profit is always high than net profit since 1990-91 and this gap increases rapidly and in 2008-09.
- [7] Cost of design: Design cost is highly important for weaving industry. During 2008-09 it was about Rs 2,00,000 but recently there has been a rapid increase in its cost to Rs 3,00,000 during 2011-12.
- [8] Cost of packing: The finished goods need to be transported to various markets for this proper packing is required. Under this co-operative the cost was high as above Rs 60,000 in 2010 after that the rate decreases but remains high all over.
- [9] Cost of transport: It is vital for weaving industry. With the increase in price of fuel, transport cost increases. During 2008-09 it was as low as Rs 40,000 but in 2011-12 it increased to Rs 80,000.
- [10] Cost of electricity: For performing various functions of co-operative electricity is required, previously its consumption was about 38% but recently the members become conscious about its increasing price and its consumption lessens to 30%.

- [11] Present product: Previously due to its high demand production was high and products were available in co-operative to about 37% in 2010-11 but due to its gradual declination its availability reduced to 33%.
- [12] Other expenditure: Among other Infrastructural scenario of this co-operative, mentioned may be made about the cost of colour which is necessary for dyeing. Its costs increased to Rs 6,00,000 in 2011-12. While other cost includes advertisement, excess wages, stationary, bank charges and exhibition cost. Previously all these cost were high except in 2011-12 the exhibition cost decreases which is identified in table 7.

Table 7

Expenditure of Dhanekhali weaving industry			
	2008-09	2010-11	2011-12
Exhibition cost	64,606	44,414	41,380
Bank charges	9,445	13,441	10,166
Stationary cost	45,977	54,325	N.A.
Excess wages	34,157	30,827	20,168
Cost of advertisement	N.A.	23,763	21,103
Cost of colour	3,49,000	3,69,880	4,12,395

Source: Dhanekhali Union TantSilpiSamobayaSamity

3.2 Production scenario of Dhanekhali Co-Operative

- [1] Production rate during last 3 years: Analysing of production data of last 3 years of these weaving co-operatives it has been found that the trend is static more or less and recently it is declining due various problems. From the given data it has been found that production rate for Dhanekhali is 0.15 metric tonnes during 2010-11, but from 2011-12 it started declining and during 2012-13 it got down to 0.13 metric tonnes.
- [2] Raw material suppliers: Majority of raw materials are being imported from South India. From there it first arrived at Kolkata market like in Barabazar and some institutions such as N.H.D.C and Tantuja. From there, the co-operative used to buy the thread in whole sale prices and then they used to provide the raw materials to the contracted weavers. It has been found that the major quantity of thread is being supplied by the Tantuja and that is more than 80%. While the co-operative get threads from N.H.D.C which supplies 59% and the rest is from Barabazar which is 35%.
- [3] Production rate: Low productivity in the lean season is a major problem for the weaving industry. Production rate remain high during the time of Durga puja as demand of tant sari increases during this time. While for rest of the year the production rate falls compared to other periods.
- [4] Places of export: The finished products are not only being produced for meeting the state's demand but also exported to various part of India. The sarees are exported mainly to South India, Maharashtra, Gujarat and Delhi.

3.3 Schemes provided to the weavers of Dhanekhali

- [1] Schemes for weavers: From Table 8 it is found that under Dhanekhali co-operative society a number of schemes have been undertaken for the weavers. 53% of weavers have been covered under C.P.F, 8% under pension scheme, 19% under M.G.B.B.Y scheme and 20% under H.I.S.S scheme.

Table 8

Total number of benefitted weavers	Schemes for the weavers in the year 2011-2012
No. of weavers benefitted with C.P.F	609
No. of weavers under pension scheme	90
No. of weaver under M.G.B.B.Y scheme	210
No. of weaver under H.I.S.S scheme	232

Source: Dhanekhali Union TantSilpiSamobayaSamity

- [2] Health scheme for weavers: Table 9 signifies that under Dhanekhali nearly about 140 weavers have been benefitted with the spectacles scheme, 50 female weavers by maternity benefit, less than 10 weavers have been benefitted for TB/Asthma treatment and 5 for sterilization.

Table 9

Health scheme for weavers	No. of weavers
Spectacle scheme	136
Maternity benefit	55
Treatment of T.B/asthma	6
Sterilization	3

Source: Dhanekhali Union TantSilpiSamobayaSamity

- [3] Funds for weavers: Under Dhanekhali co-operative in the year 2011-12 near about Rs 5,00,000 gratuity fund have been provided to weavers and other funds includes saving fund, bonus, housing fund, medical fund, pension fund, co-operative fund .during 2008-09 there were no gratuity ,saving and bonus for the weavers which is shown in table 10.

Table 10

Funds for weavers	Facilities provided to the weavers		
	2008-09	2010-11	2011-12
Co-operation Education fund	7,500	15,000	15,000
Pension fund	28,000	30,056	31,733
Medical fund	13,013	15,800	15,866
Housing fund	12,000	15,000	15,866
Bonus	N.A.	N.A.	15,866
Saving fund	N.A.	N.A.	15,866
Gratuity fund	N.A.	N.A.	500,000

Source: Dhanekhali Union TantSilpiSamobayaSamity

4. Problems of weaving industry

- [1] Increased raw material cost: One of the major problems of weaving industry is the increasing rate of raw material cost in recent years. It has been found that the costs of raw material first increased at a high rate then decreases and then started increasing again and remain static. But it has been stated by the co-operatives that with the increasing transport cost raw material cost will again increase.
- [2] Decreasing production: In Dhanekhali co-operatives it has been found that the weavers are not getting satisfactory profit as much as they are giving their labour to weave one sari. Thus increasing labour lead to decreasing production.
- [3] Low wage level: In Dhanekhali the condition of weavers is better as they are now using modern method of weaving but since the all weavers do not have the same income it fails.
- [4] Innovation in design: One of the major problems of this industry is that in the co-operatives traditional designs are mainly prevalent. No incentives have been taken to innovatenew designs so that they can be competed with saris of other region.
- [5] Misuse of Brandname: In Dhanekhali the misuse of brandname is a major problem. Many other weavers though they are not part of society are selling their products by using the name of co-operatives. Again some machine made products from other region are often being sold to the customers in the name of this brand and if their quality is poor then in return the weavers of Dhanekhali are suffering as their demand falls.
- [6] Shifting to 100days work: Another major problem in recent days is that the industry is suffering from draining out of weavers to 100 days work as they are getting more wages from such work. While in weaving profession if they give 10-12 hours labours then only they can weave one full sari and then also they will get much less wage such as Rs 50 for 1 sari. Thus most of the upcoming generation of weaver's family are getting diverted from this profession.

5. Major findings

- [1] Low income of the weavers is a major problem here as most of the weavers still using traditional method/machine which gives low output and only those who have the ability to buy the jacquard loom have been benefitted but such percentage is very low.
- [2] High cost of raw materials.

- [3] Only those weavers who are under co-operatives are been benefitted as the co-operatives supply them necessary thread and designs and in return they have to supply the saris according to the agreement.
- [4] Weavers who are not under the co-operatives their income is uncertain as their income depends upon production, moreover they have face the problem of middlemen.
- [5] Production is high during Durga puja and low productivity in lean season.
- [6] Majority are male weavers, female are only engaged in spinning the thread. So, excessive work loads.
- [7] Demand decreasing, as modern machine made product dominates the market.
- [8] Unhygienic environment for working as most of the rooms are small and machines occupy majority portion of room leaving very little space.
- [9] Co-operative provides various incentives and facilities to the weavers who are members of it.
- [10] The Dhanekhali co-operative society is producing saris with "plain naxa border, dhuti, tassor sari with buti etc. only.
- [11] The society is highly interested to develop design with the help of CAD centre (Government of West Bengal).
- [12] Building loan, pension, provident fund, education loan have been provided by co-operatives are very small amount.
- [13] Besides local sale the society participate in exhibitions organised at district level.
- [14] Draining of upcoming weavers to other profession resulting in declination.
- [15] Dyers are also provided facilities by the co-operative.
- [16] Under co-operative, saris are exported to other states but gradually it is decreasing as upcoming generation is not interested to engage in this industry thus leading to declination.

VII. CONCLUSION AND SUGGESTIONS

With the passage of time, as revealed from the above study, Dhanekhali weavers are facing the problems of low output, technological stagnation and subsistence level of income. These problems, if not looked after, may wipe out the entire industry to oblivion, plunging several families into the wreck of financial breakdown and robbing the Bengal of one of its rich traditional weaving heritage. Thus it comes to our way to help this industry to move on. Given below are some of the suggestions for its betterment.

- [1] Controlling parallel economic activities by co-operatives society and government.
- [2] Implementing proper plan, policies for the weavers so that next generation is attracted to accept this.
- [3] Innovation of designs by CAD trained designers.
- [4] Introduction of new types of dressing material.
- [5] Involvement of more women.
- [6] Eradication of communication gap regarding marketing.
- [7] Huge production and marketing development are needed for renovation and innovation of industry.
- [8] Domestic market as well as export market should be developed.
- [9] To undertake a technology mapping of handloom/handicraft clusters and to devise technological improvements that enhances productivity, quality and reduces drudgery.
- [10] The training of weavers and innovation in the improvement of looms and designs of products needs to be undertaken to encourage the production of highly value-added products in order to improve the socio-economic conditions.
- [11] Artisans should also be encouraged to unionise/organise to improve their working conditions.
- [12] Organising fairs where buyers and sellers can directly communicate.
- [13] More infrastructure facilities should be provided by co-operatives to weavers.
- [14] Insurance scheme, medical allowances, leaves, wages, loan facilities education grant, festival allowances should be provided to weavers.
- [15] Measures should be taken to make dyers conscious about discharging the colour mix water into the nearby waterbodies. Alternative place should be chosen to reduce pollution.
- [16] To improve human resource, developed skilled manpower, technical personal.
- [17] Peaceful relation between weavers and co-operatives.
- [18] Provide more incentives to the weavers as per their demand.
- [19] Increase wage level.
- [20] Yearly increment for weavers to improve their economic condition.
- [21] Well maintenance of houses by providing house cum work-shed scheme and building quarters for weavers.

REFERENCES

- [1] S Guha, The handloom industry of Central India: 1825-1950, *Indian Economic & Social History Review*, September 1989 26: 297-318.
- [2] S. Arasaratnam, Weavers, Merchants and Company: The Handloom Industry in Southeastern India 1750-1790, *Indian Economic & Social History Review*, July 1980 17: 257-281.
- [3] K. Srinivasulu, Textile policy and handloom industry: policy, promises and performance, *Economic and Political Weekly*, Vol. 31, No. 49 (Dec. 7, 1996), pp. 3198-3206.
- [4] TirthankarRoy, Economic Reforms and Textile Industry in India, *Economic and Political Weekly*, Vol. 33, No. 32 (Aug. 8-14, 1998), pp. 2173-2182.