



Narrow Lanes to Big Markets: An Overview of Traditional Printed Handloom Industry of Pilkhuwa (U.P.)

Hema Upadhayay^{1*} and Alka Goel¹

¹Department of Clothing and Textiles, College of Home Science, G.B.P.UA&T, Pantnagar - 263145,
Uttarakhand, India.

Authors' contributions

This work was carried out in collaboration between both authors. Author HU designed the study, manages the literature searches and wrote the first draft of the manuscript. Author AG analyses the study and made some corrective remarks. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/CJAST/2020/v39i130484

Editor(s):

(1) Dr. Ahmed H. A. Dabwan, Senior Lecturer, Head of Chemical and Polymer Innovation Technology Cluster,
Faculty of Chemical Engineering Technology, TATI University College, Jalan Panchor, Terengganu, Malaysia.

Reviewers:

(1) Mamatha Hegde, Ramaiah University of Applied Sciences, India.

(2) Rita Kant, Panjab University, India.

(3) Shaik Khateeja Sulthana, India.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/54097>

Original Research Article

Received 28 November 2019

Accepted 03 February 2020

Published 14 February 2020

ABSTRACT

Handloom industry is one of the important segments of the textile industry in India. There are a number of centres that are specifically engaged in the production and adornment of handloom textiles. Pilkhuwa, a small town in Ghaziabad (U.P.) situated on the NH24, 51 km from Delhi border, is also carrying its legacy of printed handloom textiles. Furnishings, specially bed sheets in beautiful designs and vibrating colours in a wide variety of fabrics and thread density are the main attraction of Pilkhuwa market. The prepared products are sold in local markets to the retailer in wholesale whereas some large manufacturers export the quality products to other parts of the country as well as abroad. The present study aims to identify the prevailing practises, current status, changing scenario and SWOT analysis of the selected cluster of Pilkhuwa (U.P.) that produces printed home furnishings. The information on handloom printing, designing and marketing was obtained through questionnaires, complemented by free interview and informal conversations with printers and local shopkeepers. The result revealed that many local communities i.e. *dhobis*,

*Corresponding author: E-mail: hema.upadhayay@outlook.com;

luhaar, weavers and their families directly and indirectly linked to this home furnishing industry for their livelihood. There is a growing opportunity for product diversification in the domestic market as well as in the export market.

Keywords: Home furnishing; Pilkhuwa; printed textiles; SWOT analysis; product diversification.

1. INTRODUCTION

Sustainable development of any economy depends not only on large scale organized industries but also equally dependent on other employment generation avenues to utilize locally available natural and human resources. Micro, Small and Medium Enterprises (MSME) is one such sector in India that has a very pivotal role to play in the development of the country. In India, MSMEs are the second largest source of employment after agriculture. They account for 40 per cent of industrial production, 95 per cent of the industrial units, 34 percent of the exports and manufacture over 6000 products [1]. It generates employment at low cost and helps the society to move on the path of prosperity & growth. As more than 65% of Indians live in villages hence little scope for establishment of large-scale industries in these areas, MSME is an important aspect with regard to development of rural areas. This sector produces a melange of industrial products such as food products, beverages, cotton textiles and wool, silk, synthetic products, jute and jute products, wood and wood products, furniture and fixtures, paper and goods produced from it [2].

Indian home furnishings manufacturers and home furnishings exporters offers a spectacular range of bedspreads, furnishing fabrics, curtains, rugs, durries, carpets, placemats, cushion covers, table covers, linen, kitchen accessories, made-ups, bed spreads, bath linen, and other home furnishings accessories to the world. Manufacturers of Home Furnishings from India, where floor coverings, kitchen linen, bath linen, cushion covers, bedspreads, curtains etc. create a rage in the international markets. Among home textiles, bed linen and bath linen contribute to two-thirds of the total market. Kitchen linen, curtains, upholstery and rugs/carpets contribute to the rest of the market [3].

The unorganized sector dominates this market. There are some centers that are specifically engaged in the production of traditional home textiles, while few other are engaged in sourcing of raw material and value addition. Pilkhuwa, a small town in Ghaziabad (U.P) situated on the

NH24, 51 km from Delhi border, also carrying its legacy of handloom printed textiles and is famous for furnishing items, especially bed sheets. Sun drying of printed bed sheets in open ground and their transportation through bullock cart is a common scene here which grabs the attention of visitors [4]. Weaving is a traditional craft to a large part of the Pilkhuwa rural sector. For people of Pilkhuwa area, it is a household industry. Pilkhuwa is famous for its handloom made khes, bed sheets, towels, durries/ lohi, tarpaulin etc. There is good demand of the items in the market [5].

Pilkhuwa constitutes the major household industry of the town characterizing the traditional skill of the local people in this specific branch of manufacturing. Majority of the smaller registered units in this area are constitutes of 10-20 persons [6]. There are many traders of this area are in the wholesale business of bed sheets, pillow covers and linen for quilts and towels, they sold the printed product in bulk to traders from different parts of the country and also the export quality to the abroad [7]. This city is also known as the handloom city for the same reason.

There is strident need to introspect these industries as they not only fetch the local needs but also serve a major source of income for rural and sub urban population, so the present study aims to study the prevailing practises, current status, changing scenario and SWOT analysis of the selected home furnishing printing cluster of Pilkhuwa (U.P).

2. METHODOLOGY

The research was purposively carried out in the Hapur districts of U.P. because of household micro-entrepreneurial activities in this area. The present paper is an attempt to study various aspects of dyeing and printing process followed by the artisans of Pilkhuwa, also to find out the Strengths, Weaknesses, Opportunities and Threats of this small scale household industry. A descriptive research design was planned for which a sample size of 60 units was selected through purposive and snow ball method. Data collected through interview schedule consisting

of both open and closed ended questions from both owners of the printing units and local shopkeepers. The observations were also recorded by taking photographs and videos of the respondents.

3. RESULTS AND DISCUSSION

3.1 Origin and Evolution of Pilkhuwa as a Handloom Printing Cluster (An Overview)

The dyeing and printing culture in this area is around 150-200 years old. The historical significance of Pilkhuwa region is due to its handloom fabric. Earlier people of *Kori* community of this area used to produce hand woven cotton fabrics in bulk. They installed many handlooms in Pilkhuwa (*Haath ki khaddi*). The woven fabrics (*kora*) were sold in local *painth* (*Haat*) where traders from nearby areas used to purchase the raw materials for the preparation of different end use products. With the passage of time in order to explore more dimensions for their developed cotton, they started dyeing and stamping of woven fabric.

Artisans from *Chhipaa* community of Rajasthan (Ruhella and Tonk) and Farrukhabad, U.P (muslim block makers *and chippas*) were migrated and settled in this region and developed their own colonies. They played major role in flourishing the culture of fabric printing in this area. There are around 600 *Chippa* families in Pilkhuwa, most of the them are residing in *Chippawada* area. Some of the present artisans of printing units claim that they are the third and fourth generation who are in this business. As the trade flourished, rural people from the nearby areas and state have moved towards this region in search of job and started working as printers in local printing units. Today more than 80% population of Pilkhuwa are settlers of other places of U.P. and other states whose fathers and forefathers migrated long ago in search of job.

They became the part of working community and established themselves as permanent residents of Pilkhuwa. Most of them settled here and set up their own small or big printing units, it is a common story of many unit owners. In the past few decades dyeing and printing work of Pilkhuwa helped it, in emerging as a major hub for home furnishing products. Process like screen making and block making and other

ancillary jobs like stitching, finishing and packaging were also associated with the printing industry and required skilled/ unskilled labour. Hence, today many communities i.e. *dhobis*, *luhaar*, weavers and their families directly and indirectly linked to this home furnishing industry for their livelihood.

Earlier local markets, called as *painth* or *haat* were the major hub or point of source for dealing, selling and purchasing of the raw materials and finished products. But soon traders started travelling from Pilkhuwa to other states to procure orders hence developed more linkages and resulted this place to emerge as a well-known wholesale market for printed handloom bed sheets. In Pilkhuwa the *Painth* or *haat* still exists in the form of Wednesday market. A weekly market in Jawahar bazaar where traders from nearby towns or cities i.e. Sardhana, Murad Nagar, Meerut and Moradabad etc. come for sale and purchase of goods. Today there are around 200 active textile printing units in Pilkhuwa with an average turnover of around 100 crore rupees and provides direct employment to 20,000 people [8]. Whereas printing units that run in the nearby villages like *Kheda*, *Sikeda*, *Autraulli* and *Partapur* are countless. Almost all the households are involved in related occupations like printing, washing, stitching, finishing or transportation. Today on an average 5-6 lakh bed sheet are printed all around the Pilkhuwa. This figure is enough to understand the strength of this cluster.

Worker's profile: Workers are hired both on a daily wage basis and piece-rate basis. The female to male ratio is 20: 80 in the printing units. The dyeing and printing units were dominated by man workforce to carry out most of the activities like hand block making, screen making, dyeing, printing and washing. Women however, are involved in home-based jobs, like finishing the raw edges of prepared articles, stitching of pillow covers and packaging of the finished products [9]. These workers do not possess any professional training and degree for printing but learnt the art of printing with years of experience.

3.2 Product Profile and Marketing

The Pilkhuwa, from the past, is a well-known wholesale market for block printed bed sheets and quilt covers. An essence of printed cotton handloom is still reflected from the products of Pilkhuwa, but with the passage of time, a change has been noted in the designs, mode and

methods of prints and also in the product range. Printed bed sheets in different range, style and pattern are still the major products of Pilkhuwa market, but owing to the recent trends some of the small shopkeepers have also started keeping the outsourced home furnishing products especially the cleaning towels, kitchen towels,

bathing towels, blankets and 3-D printed bed sheets along with the locally printed handloom bed sheets [10]. These products are sourced from the nearby area like Panipat and Meerut [11]. This may due to providing a wide range of products at reasonable/ low cost to the consumer, under one roof.

Table 1. Information regarding printing cluster of Pilkhuwa

S. No	Activities	Numbers
1.	Weaving units	100-150
2.	Dyeing and Printing related units	1. 200-300 (with basic infrastructure) 2. 600-700 (Household units)
3.	Trace development units	10-15
4.	Screen development units	50
5.	Block development units	8-10
6.	Washing units	200-300
	Jigger washing	1. 15-20
	Haudi washing units	2. 100-150
7.	Major products	Bedsheet, Diwan set, Cushion, bolsters, Towels
8.	Raw material	Cotton sheeting fabric (Plain weave fine fabric)
	Fabric	Cotton casement fabric
		Plain weave
		Weaved stripped pattern in different width (Sangam fabric)
	Colours	Rapid fast, Indigo sol, Aniline black and Pigment
	Tools & equipment used	Handblocks, Screens, Printing tables, Squeeze, Colour mixing utensils, <i>Haudies</i> (cemented tanks), Jigger, Calendering machine
9.	Major techniques for handloom adornment	Block printing, screen printing, tie and dye and spray printing

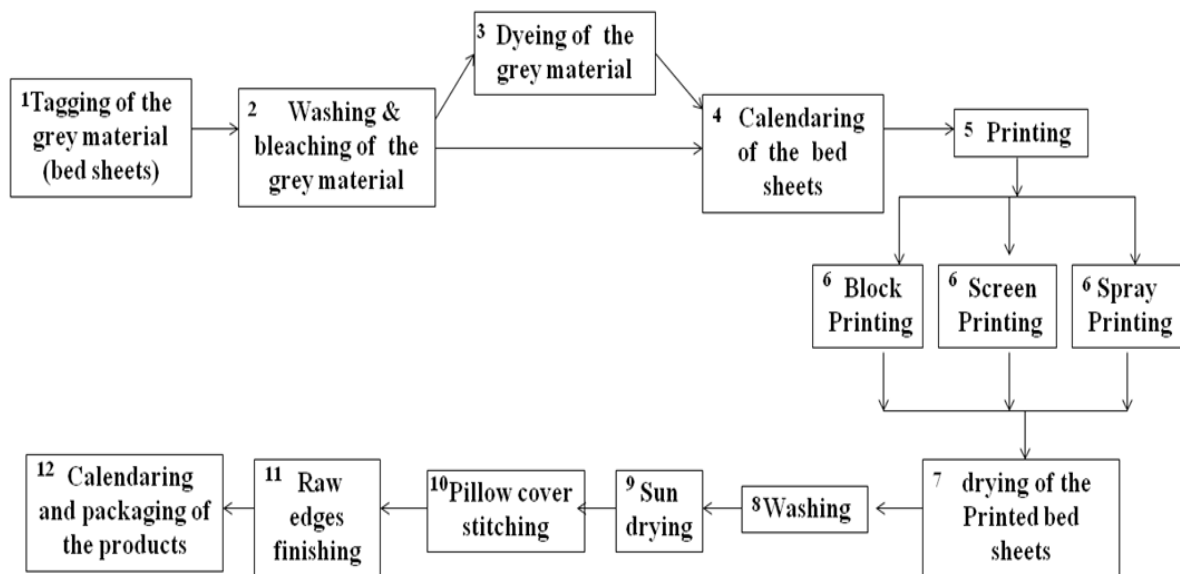


Fig. 1. Stepwise activities performed in small scale dyeing and printing units of Pilkhuwa



Fig. 2. Preprinting, printing and post printing activities in Pilkhuwa

*a & b: Scouring and bleaching in Jigger & Haudi (tank) c & d: Dyeing in Jigger & Haudi (tank) e: Calendaring
f: Block printing, g: Screen printing. h: Spray printing, i: Tie & Dye j: Colour filling with brush (putai)
k: Washing, l: Raw edges finishing (falue daalna), m: Pillow covers stitching, n: Folding, o: Calendaring (Kundi karna)*



Fig. 3. Steps in hand block making

*a: Transfer of trace design on wooden block, b: Iron chisels (Kalmein) for block carving, c: Block carving,
d: Developed outline block (rekh), e: Developed filling block (datta)*



Fig. 4. Steps in screen making

a: Development of the designs on computer, b: Preparation of photographic film (transparency), c: Preparation of screen, d: passing the emulsion coated screen through light source, e: Applying weight on the screen, f: Washing of screen, g: Coating of paint on screens, h: Rubbing of screen with kerosene dipped fabric, i: Final touching with brush, j: Developed screen

Table 2. Wages / charges of workers at different works in Pilkhuwa

S.No	Activity	Cost (Rs)				
		Pillow covers	Single bed sheet / Quilt cover	Double bed sheet	Fabric Per meter/Per piece cost	
1.	Weaving (Handloom) (Power loom)	-	20 10	25 15	10 5	
2.	Dyeing	-	5.00	10.00	3.00	
3.	Block	1 colour	0.30	2.00	4.00	-
	Printing	3-4colours	2.00	4.00	9.00	
4.	Screen	1 colour	0.20	1.00	2.00	-
	Printing	3-4colours	1.00	2.00	4.00	
5.	Calendaring	Small calendaring machine +folding	0.20	0.80-1.00	1.25	-
		Big calendaring	-	2.00	4.00	0.80-1.20 (as per the yardage of fabric)
6.	Block making (depend upon size and intricacy of designs)		100- 200 (2"x2" single block with simple design) 200-400 (5"x5" single block with simple design) 3000/- to 5,000/ including complete set of blocks with intricate designs			
7.	Screen making	1 screen 3-4 screen	700 (Prints 4 Pillow covers) 12,00-15,00	700 2,000-4,000	1200 3,000-5,000	- -
8.	Washing	Washing in Tank Washing in Jigger	-	2.00 3.00	4.00 5-6	- 0.70-1.50
9.	Washing + Dyeing (Jigger)		-	3.00	5.00	3.00
10.	Bleaching	Single bleach Double bleach	- -	2.00 4.00-5.00	4.00 5.00-6.00	1.00 3.00
11.	Spray printing		0.60	3.00	5.00	-
12.	All over black printing (screen) with black colour only		0.20	3.00	5.00	-
13.	Raw edges finishing (funde/ falue baandhana)	Single knot (funde) Double knot (Jaali)	-	0.70 2.00	1.00 3.00	-

S.No	Activity	Cost (Rs)			
		Pillow covers	Single bed sheet / Quilt cover	Double bed sheet	Fabric Per meter/Per piece cost
14.	Stitching	0.30 (stitching) -0.60 (including calendaring)	12-14 (with corners) 4-5 (without border)	-	-
15.	Manufacturing of Iron frame for screens	500	500	1000	-
16.	Trace making for design development on screen	150	500	700	-
17.	Squeeze development				
	60" length	240			
	90" length	320			

Table 3. Vernacular terminologies by local printers

Terminology	Meaning
Taanka lagana	Adjustment of the shade of printing paste by mixing of different colours to obtain desired shade in the final printing paste
Rang kaatana	Removal of excess printing paste from the screen after completion of the printing process.
Daana daalna	Spray printing on the printed bed sheet
Datta putai/ Thappa marna	Colour filling of the screen-printed area/ design with hand blocks
Falaue/Funde baandhana	Knotting of loose warp ends of the bed sheets
Kundi karna	Pressing and folding of the printed material before packaging
Khushak rehna	Improper printing due to lack of printing paste in some of the printed area.
Rang rafna	Bleeding of colours in the printed area
Haudi chadhana	Loading of bed sheets on the cemented tank (Haudi) prior to washing.

Table 4. Product profile of the units

Type	Method used	Production rate	
		No. of piece produce per day Bed sheet/pillow covers	No. of piece produce per month
Single Bed sheets and pillow covers	Screen (2workers)		
	• Single screen	800-900/11,00-12,00	16,000-18,000
	• 3-4 screens	500-600/800-1,000	10,000-12,000
	Combination with Block prints (1worker)	200-300/400-500	5,000-6,000
Double Bed sheets and pillow covers	Screen (2workers)		
	• Single screen	350-400/700-800	7500-8,000
	• 3-4 screens	150-200/350-400	4,000-5,000
	Combination with Block prints (1worker)	250-300/400-450	5,500-6,000

Each product have specific name assigned by the units in order to make it distinct from other products of the lot. There is no set pattern for naming the products, so each unit have their own style of naming their products some common naming pattern are listed below:

- **Putai:** Products on which the colour is filled over screen printed design manually through brush or block.
- **Sangam:** Products printed on striped patterned woven fabric. Some more products of this category are called as *Sangam gold*, *Sangam putai*, *Sangam gulab* e.t.c.
- **Kalamkari:** Fine printed bed sheets which gives the impression of handprint.
- **Target:** Bed sheet printed with geometrical printed designs
- **Panther:** Tie & Dyed/ marbled effect bed sheet

The Products were commonly named as per the motifs/designs printed on them like i.e. *Dandiya*, *Warli*, *Gulab*, Tiger e.t.c. whereas some products were named randomly without any logic like *Pepsi*, *Kajal*, *Modi*, *Mango*, *Dabang*, *Maharaja*, *Rainbow* e.t.c. *Chikoo*, another type of product given name on the basis of background colour. These names were used by the workers throughout the production line of Pilkhuwa. Most of the shopkeepers in the market were wholesale suppliers, who mainly sell the printed products in bulk (*gaanth*). One *gaanth* is equivalent to 100 kg of weight which consists of 80 (1+2) double bed sheets each with two pillow covers set, and 160 (1+ 1) single bed sheets with one pillow cover. Each double bed sheet has 1 kg of weight, single bed sheet having 500-600 gms of weight whereas each pillow having 125 g of weight.

3.3 Changes and Advances

The printed handloom of Pilkhuwa faced many changes in working patterns, designs and

product profile from the earlier time. The traditional hand weaving culture of this area is now almost vanished. With the advancement and competitiveness in global market and to meet the market demands in terms of production and perfection or quality the traditional handlooms (*Khaddis*) were replaced by power looms. With

the advent of power looms, weaving of canvas fabric, which is mainly used for bags and in vehicles like trucks as soft roof was also flourished in this area. Today there are around 250-300 power looms in the Pilkhuwa, most of them were installed in the households of weavers in *Ghari Mohalla* area [12].



Fig. 5. Commonly used traditional, adapted and contemporary motifs/patterns on the printed bed sheets

*a & b: Traditional geometric design, c & d: Stylized geometrical designs, e & f : Stylized floral pattern
g: Contemporary celestial motifs, h & i: Traditional animal motifs, j: Stylized bird motif,
k: Adapted daandiya pattern, l: Adapted kalamkari pattern, m: Adapted warli print, n: Contemporary cartoon motifs*



Fig. 6(a). Commonly used motifs on bed sheet

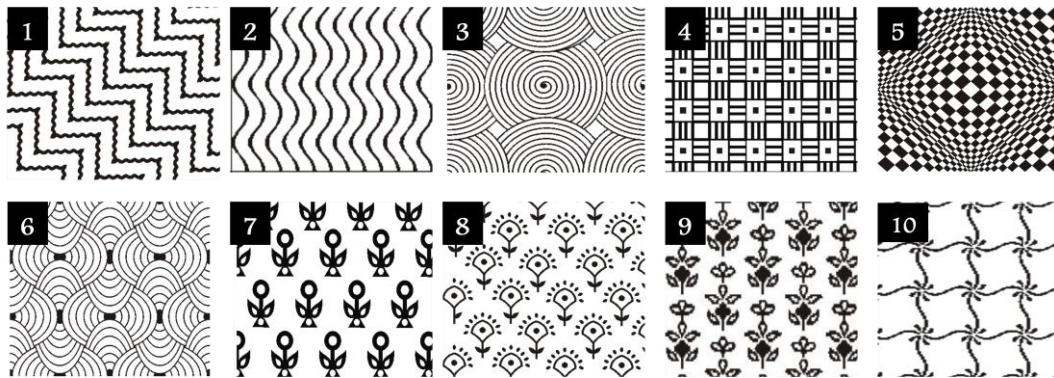


Fig. 6(b). Commonly used background patterns

1, 2 (Linear patterns), 3,4 (Geometrical pattern), 5,6 (Stylized geometrical pattern), 7, 8, 9 & 10 (Stylized buti patterns)



Fig. 6(c). Commonly used border patterns

1, 2, 3, 4, 5 & 6 (stylized border patterns), 7, 8, 9, 10, 11 & 12 (Geometrical border pattern)

There is a downfall in the traditional hand block printing work with the introduction of screen printing. In the earlier phase bed covers (*Khes*) were the only products printed with hand blocks, but with the passage of time, the horizon of printing widened in terms of colours, chemicals and mode of printing and range of products. The handmade traces for screen development have also been replaced with digital printed trace. The modernization and mechanization of textile industry has also influenced the Pilkhuwa printing cluster to some extent, which is clearly visible with the advent of calendaring, mechanized jiggers, power loom etc.

3.4 SWOT Analysis

SWOT analysis is a managing tool which facilitates the easy understanding of the possible strength, weaknesses, opportunities and threats involved in a project or in business venture. SWOT analysis helps in different ways i.e. it is a

source of information for strategic planning, builds organizations threat, helps in identifying core competencies of the firm, helps in knowing past, present and future. Hence by using past and current data, future plans can be chalked out [13]. SWOT analyses of small scale printed furnishing industry of Pilkhuwa as experienced by the researcher during the study.

Proximity to NCR and Meerut facilitates easy accessibility/ availability to raw material, chemicals and easy transportation of final products. Interdependency of these small-scale units promotes mutual benefits and sustainable development. Low cost products grab the attention of major clientele of society i.e. middle class, lower middle class and lower class.

Seasonal nature of printing work, lack of working space, waste disposal facility and lack of technological / modern machinery and

Table 5. Products, their specifications and price range

S. No	Products	Size	Wholesale price (Rs)
1.	Pillow covers		
	Pillow cover (single)	17"x 28"	40-50/-
	Pillow cover (2pc)	17"x 28"	70-100/-
	Pillow cover (dozens)	17"x 28"	330-350/-
2.	Cushion covers		
	Printed cushion covers (5pc)	16x16	125-200/-
	Velvet cushion covers (5pc)	16x16	300-450/-
	Decorative cushion covers (5pc)	16x16	250-400/-
3.	Bolsters		
	Bolster	16" X 32"	40-50/-
	Bolsters (2 pc)	16" X 32"	80-100/-
4.	Single bed sheet		
	Single bed sheet + Pillow cover	90"x50"	120-180/-
	Paired single bed sheet (2 pc without pillow cover)	90"x50"	200-300/-
5.	Double bed sheet + 2 pillow covers (Handloom)	90"x100"	250-600/-
	Double bed sheet + 2 pillow covers (Fine quality)	90"x108"	500-1000/-
6.	Diwan set		
	Diwan set (single bed sheet + 2 bolsters + 3 cushions)	90"x60"	320/-350/-
	Diwan set (single bed sheet + 2 bolsters + 5 cushions)	16" X 32"	15"x15"
			350-400/-
7.	3-D Printed bed sheets		
	Paired single bed sheet (2 pc without pillow cover)	90"x60"	180-200/-(pair)
	Double bed sheet + 2 pillow covers	90"x100"	170-225/-
8.	Quilt cover (lihaf)		
	Single bed	60"x90"	105-180/-
	Double bed	90"x100"	240-300/-
9.	Mattress covers (pair)		
		3'x6'	135/-
		3'x6'x5'	190/-
10.	Velvet Sofa covers (6pc set)		500-1500/-
11.	Towels	30"x30"	75,85,110,150,200/-
12.	Kitchen duster (per piece)	16"x24"	7-10/-
13.	Cleaning dusters (dozens)		
		20"x20"	90-100/-
		24"x24"	105/-

equipments were the major weakness of these small industries which may hamper them to flourish. Technological obsolescence may provide tough challenge by grooming technologies in the field of printing like digital printing. These small-scale industries of dyeing and printing become harmful for environment by its waste discharge. Changing demands and taste of consumer may shift their interest towards other products with novel designs and products.

There is a large scope for value addition & product range diversification through incorporation of embroidery, patchwork and other embellishment techniques. Eco-optimization and Eco-substitution in the printing process and recipes may boost road map for development of export quality products.

4. CONCLUSION

Pilkhwa signifies an industrial centre which has mainly thrived on cottage industries. It sets an example as to how significant role can the cottage industry play in the economic life of an urban centre. The demand for home furnishing is on an upswing from past few decades. Now consumers apart from traditional furnishing material, looking out for new and innovative products to deck up their homes and offices hence their choice is shifting to products with novel designs and prints. There is a growing opportunity for product diversification in domestic market as well as in the export market. It will help in ensuring better price realization of the products and in turn empowerment of the entire working community of the clusters who is directly and indirectly linked to these units for their

livelihood. Concentrated, coordinated and focused approach for integration and modernization home furnishing industry of Pilkhuwa is the need of the hour. These not only play crucial role in providing large employment opportunities at comparatively lower capital cost than large industries but also help in industrialization of rural & backward areas, which in turn, reduces regional imbalances, assuring more equitable distribution of national income and wealth.

ACKNOWLEDGEMENT

The authors are thankful to the Vastravypaar Sangh and Khadi Ashram (Pilkhuwa) for their cooperation while collecting data. Heartfelt thanks to the workers and local shopkeepers for coordinating the work according to the study and providing the valuable information.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Singh, A, Raina M. Women entrepreneurs in micro, small and medium enterprises. International Journal of Management and Social Sciences Research (IJMSSR). 2013;2(8):4-8.
2. Das PM. SWOT analysis of micro, small and medium enterprises in rural society: A study conducted in the Ganjam District of Odisha. International Journal of Scientific Research and Management. 2017;5(8): 6569-6575.
3. Ace global private limited. Report on Market Research on Home Textile Furnishings Sector in India, prepared for Italian Trade Commission, Trade Promotion Section of the Consulate General of Italy Mumbai; 2009. Available:<http://italiaindia.com/images/uploads/pdf/home-textile-furnishing.pdf>
4. Maurik MV. Block beauty. Culturnama. 2014;5(8):48-49.
5. District Industrial Profile of Hapur District. The Micro, Small & Medium Enterprises Development Institute, Government of India, New Delhi. 2016;10. Available:<http://dcmsme.gov.in/dips/2016-17/DIP%20Hapur.pdf>
6. Saxena A. Perspectives in industrial geography: A Case Study of an Industrial City of Uttarpradesh. Concept publishing company, New Delhi. 1989;193.
7. Dwivedi S. Pilkhuwa village outside Delhi send outs tons of handloom each day; 2013. Available:http://kalakarartlibrary.com/users/search_article
8. NCR Planning board, Ministry of Urban Development, Government of India. Functional Plan for Economic Development of NCR. 2016;223. Available:http://ncrpb.nic.in/pdf_files/functionalplan_economicdevelopment.pdf
9. Upadhayay H, Goel, A. Small scale dyeing and printing industry Pilkhuwa: A study. International Journal of Basic and Applied Agricultural Research. 2017;15(3):219-225.
10. Naqvi S, Sharma S. 50 days of note ban: Handloom city Pilkhuwa lies deserted, traders angry; 2016. Available:<http://www.catchnews.com/india-news/50-days-of-note-ban-handloom-city-pilkhuwa-lies-deserted-traders-angry-1482942880.html>
11. Anonymous. Pilkhuwa ki chader bani bister ki shaan; 2018. Available:<https://www.jagran.com/uttar-pradesh/hapur-city-chinese-bed-sheets-will-be-filtered-17568091.html>
12. Verma R, Panda SC, Bansal V. Dwindling handloom, sinking weavers in Western Uttar Pradesh: A Case Study of Pilkhuwa, Amroha and Muradnagar, Journal of Business Management and Information Systems. 2015;2(1):10-19.
13. Negi T, Prabhat S, Upadhayay H. SWOT analysis of selected entrepreneurial activities performed by rural women. Raj. J. Extn. Edu. 2012;20:215-220.

© 2020 Upadhayay and Goel; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/54097>