CLUSTER PROFILE POWER LOOMS FAISALABAD





Turn Potential into Profit

Small & Medium Enterprise Development Authority
Ministry of Industries, Production & Special Initiatives
Government of Pakistan
http://www.smeda.org.pk

8th Floor, LDA Plaza, Egerton Road **Lahore**

Tel: +92-42-111-111-456 Fax: +92-42-6304926-27

TABLE OF CONTENTS

1	INTR	ODUCTION – FAISALABAD	.3
2	DESC	CRIPTION OF CLUSTER	.3
	2.1 Po	WER LOOM CLUSTER, FAISALABAD	3
		STORY AND BACKGROUND OF CLUSTER	
	2.3 Co	DRE CLUSTER ACTORS	5
		THER CLUSTER ACTORS	
	2.4.1	Raw Material Suppliers	
	2.4.2	Machinery Suppliers	
	2.4.3	Chemical and Dyes Suppliers	
	2.4.4	Other Actor	
	2.5 GE	OGRAPHICAL LOCATION	6
3	ANAI	LYSIS OF BUSINESS OPERATIONS	.6
	3.1 PR	ODUCTION PROCESS & WORK FLOW	6
	3.1.1	Sizing	6
	3.1.2	Starching	7
	3.1.3	Weaving	
	3.1.4	Dyeing	
	3.2 TE	CHNOLOGY STATUS	7
	3.3 Qu	JALITY CONTROL	7
	3.4 M	ARKET ANALYSIS	7
	3.5 Fin	NANCING	8
	3.6 Hu	JMAN RESOURCE	8
4	INST	ITUTIONAL SETUP	.8
	4.1 EN	TREPRENEURS ASSOCIATIONS	8
	4.1.1	Council of Loom Owners, Faisalabad	8
	4.1.2	Faisalabad Chamber of Commerce & Industry (FCCI)	9
	4.2 Go	OVERNMENT/SEMI GOVERNMENT SUPPORT INSTITUTIONS	9
	4.2.1	Textile Commissioner's Organization (TCO)	9
	4.2.2	Small and Medium Enterprise Development Authority (SMEDA)	9
	4.2.3	Punjab Small Industries Cooperation (PSIC)	
	4.2.4	Trade Development Authority of Pakistan (TDAP)	
	4.3 En	UCATIONAL INSTITUTIONS	9
	4.4 PR	IVATE BDS Providers	0

5	SWOT ANALYSIS		
5.	1	STRENGTHS	10
		Weaknesses	
		Opportunities	
5.4	4	Threats	11
6	١٨١	/ESTMENT OPPORTUNITIES IN CLUSTER	1 1



1 Introduction – Faisalabad

Historically known as "Sandal Bar", Faisalabad district came into existence in 1904 with the new name "Lyallpur". The name Lyallpur was given with a view to pay tribute to Sir James Lyall, Lt. Governor of Punjab, for his services rendered in colonization of the lower Chenab valley. Under a historical announcement by then President of Pakistan Muhammad Zia-ul-Haq, Lyalpur named after Late Shah Faisal Bin Abdul Aziz King of KSA on 1st September, 1977. Faisalabad was made the divisional head quarters on 1st July, 1982 comprising districts of Faisalabad, Jhang, and Toba Tek Singh. The divisional status of Faisalabad was further descended after the promulgation of Punjab local government ordinance 2001 in which district government of Faisalabad was established along with six tehsils administrations namely Faisalabad city, Faisalabad Saddar, Chak Jhumra, Jaranwalla, Samundry and Tandlianwala.

Faisalabad district is located in central Punjab between River Ravi and River Chenab at an elevation of 605 feet above sea level. The total Area of district is of 5856 Sq km. The district has extreme hot and cold climate. Before colonization there was hardly any population in the entire area. Faisalabad city which had a population of 9,171 in 1901 jumped 179,000 in 1951 had further jumped to 2,009,000 during 1998 census. According to the existing trend, the estimated population of Faisalabad city would be around 5,000,000 in 2010.

A tiny town founded only to act as a market for agriculture produce has now grown into a metropolitan city which enjoys third position in the country, as far as population and industrial growth is concerned. Besides being a big market for agricultural produce, it is highly industrialized city having large industrial base predominantly textile. It is also called "Manchester of Pakistan" on account of its status as regards Textile industry. Industrial role of Faisalabad has been more than just significant in last few decades. Only textile industry of Faisalabad constitutes more than 70% of total textile exports of Pakistan which have a share of 68% in total Pakistan exports. This makes Faisalabad's share of total Pakistan exports of more than 45%.

Before independence, there were only five industrial units in Faisalabad City. Now, there are dozens of textile mills with other subsidiary units. Roughly, there are 512 large industrial units out of which 328 are Textile units, 92 engineering units and 92 of chemicals and food processing units. Other industries include hosiery, carpet and rugs, nawar and lace, printing and publishing and pharmaceutical products etc. There are also some 12,000 house-hold industries, which include some 250,000 power loom factories.

2 Description of Cluster

2.1 Power Loom Cluster, Faisalabad

Faisalabad district has made rapid strides in the field of industry after independence. It is now called the "Manchester of Asia" for its extensive development of textile industry. This development has been made possible by the continued efforts of pioneering entrepreneurs as well as workers over a period of four decades.

Weaving sector is one of the most important textile sub-sectors. The exports of woven fabrics and other woven made ups comprise a major portion of textile exports from Pakistan. Export of fabrics increased from 1,575 million sq meters worth US \$ 1.10 billion in 1999-2000 to 2005 million sq meters worth US \$ 1.35 billion in 2002-2003, thus



showing an increase of 23% in terms of value. Other than direct fabric exports, Pakistan has also emerged as a leading exporter of woven made-ups with a value of more than \$950 million per year.

Faisalabad contributes 80% of the country's exports and 80% of the national sales of the locally produced cotton fabric (grey and processed / printed cloth). The location quotient of investment, employment and number of textile industrial units were also highly significant for Faisalabad's textile sector, confirming presence of a substantial cluster. At the core of the cluster was the large weaving industry, dominated by **15,000 power looms units**, mostly small enterprises (with 20 or less looms installed and a few firms having as much as 50 to 240 looms), and 32 independent weaving factories. While the cluster accommodated nearly 83% of all the country's small to medium scale textile production businesses. The weaving cluster is supported down-stream by 210 fabric processing units, 700 cloth exporters and nearly 300 national wholesalers of fabric. On the up-stream there were 210 sizing units and nearly 800 merchants of the largest yarn market in Asia.

The clustered firms were also benefiting from better and more reliable local suppliers, lower prices of inputs and availability of the labor skilled in textile weaving. Though salaries were comparatively higher due to the demand and the city factor, the weavers usually contracted work to the labor when orders were received. The labor tend to work more efficiently when they have a work contract as wasting time would also be non-profiting for them. For the small weavers, Faisalabad's location also had advantages in terms of availability of the public goods, knowledge spillovers, opportunities for collaboration for making final products, availability of the infrastructure and proximity to the buyers. The small-scale clustered participants also faced much more intense competition, forcing them to continuously improve to survive.

2.2 History and Background of Cluster

Seeds of Faisalabad's textile cluster were sown at the turn of 20th century with construction of the Lower Chenab canal to cultivate barren lands of the region. This resulted into many fold increase in the production and export of cotton from the region. Industrial production of yarn and fabric started in the region in 1930s with the establishment of the first textile mill in 1934. The Sheikhs clan from Chiniot (a town near Faisalabad), renowned for their commercial acumen, started to establish yarn trading businesses in Faisalabad which eventually grew to become the largest yarn market in Asia.

Growth of the textile industry in the region got a significant boost in 1950s when the government of the time declared the region an industrial zone and provided tax holiday for new factories to be established there. In the following three decades small-scale power loom sector flourished in Faisalabad. It was aided by the government policies that declared, initially, units up to 4 looms and then increased to 40, looms as cottage industry and hence exempt of taxes and stringent labor regulations. These policies also brought an end to the era of the integrated composite textile mills, as these could not compete with the low cost fabrics produced by the small power loom operators.

To support the large number of weaving units, yarn sizing and fabric processing establishments also sprang up. Alongside production and processing of fabric, specialist machinery supply and service establishments, suppliers of textile industry related chemicals and products also mushroomed in the region. A large number of national traders and exporters of fabrics and textile products, who had established in Faisalabad over the years, sold cotton fabric and textile products to other regions.



2.3 Core Cluster Actors

The entrepreneurs involved in fabric weaving on Power Looms are the core cluster actors. The industrial statistics of core cluster actors are as follows:

Table: Power Looms Cluster, Faisalabad¹

Number of Units	 Total Units Approximately 21,874 Large Size Independent Units: 32 Small and Medium Size Units²: 21,842 (Registered Units 6,842 and Non Registered Units 15,000)
Number of Looms Installed	Total Number of Looms Installed: 300,000 - Auto Looms: 50,000 – 60,000 - Power Looms: 250,000
Installed Capacity	Installed Capacity of Cluster is Around 10 Million Meters Grey Fabric Daily
Capacity Utilized	Approximately 8 Million Meters Grey Fabric Daily
Employment Generation	Approximately 400,000 (Directly and Indirectly)

2.4 Other Cluster Actors

2.4.1 Raw Material Suppliers

A fairly large numbers of raw material suppliers are present in Yarn Market commonly known as "Soottar Mandi" in the Faisalabad city. These suppliers provide yarn on net cash and on credit as well of 10 to 30days.

2.4.2 Machinery Suppliers

Numerous textiles related machinery supplier are found on Railway Road market, Mansoorabad and Samundri road. Most of the machines are imported and are second hand machines from China.

2.4.3 Chemical and Dyes Suppliers

To support the large number of weaving units, suppliers of chemicals and products mushroomed in the Faisalabad region. Around **200** whole Sellers of Textile Chemicals & Dyes are operating in Faisalabad.

2.4.4 Other Actor

Besides these suppliers and core actors there are a number of other processing manufacturers who are supporting the main stream fabric weaving cluster. These actors are playing a vital role in growth and market expansion for main stream actors. The details of theses actors' arte as follows:

² Note: Many small-scale enterprises do not register with government departments for tax purposes. Same number is stated by the Council of Power Loom Owners Faisalabad and the Textile Commissioner's Office Faisalabad



-

¹ Source: Council of Power Loom Owners Faisalabad, Textile Commissioner's Office Faisalabad and Directorate of Industrial Establishment Punjab 2005-06

- Fabric Processing Units 210
- Sizing Units 210
- Fabric/Cloth Exporters 700
- National Wholesalers of Fabric 300
- And nearly 800 merchants of the largest yarn market in Asia

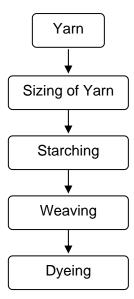
2.5 Geographical Location

Geographically the Power Looms Cluster is not concentrated at one place in Faisalabad. Majority of units found in following areas.

- Ghulam Muhammadabad
- Mansoorabad
- Faizabad
- Chak Jhumra
- Palkorian
- Saddhar
- Samanabad
- Dhudiwala

3 Analysis of Business Operations

3.1 Production Process & Work Flow



3.1.1 Sizing

Sizing of the yarn is essential to reduce breakage of the yarn and thus production stops on the weaving machine. With sizing the strength - abrasion resistance - of the yarn will improve and the hairiness of yarn will decrease. Different types of water soluble polymers called textile sizing agents/chemicals such as modified starch, polyvinyl alcohol (PVA), carboxymethyl cellulose (CMC), acrylates are used to protect the yarn.



3.1.2 Starching

In this process a preparation of substance called starch is used to stiffen yarn and to make water proofing and other finishing.

3.1.3 Weaving

Weaving is the textile process in which two distinct sets of yarns or threads, called the warp and the filling, are interlaced with each other to form a fabric or cloth.

3.1.4 Dyeing

Dyeing is the process of changing the color of the yarn or cloth by treatment with a dye. Dyes are applied to material by direct application, or by immersing the yarn or cloth in the liquid dye or solution of the dye.

3.2 Technology Status

The weaving of synthetic fabric is done mostly on low technology power looms, with the inherent weakness of producing low quality fabric. Currently SOD power looms 72" are installed. Additionally these machines have limited capability to handle complex fabric constructions. The competitors such as Turkey, Indonesia and Korea have invested heavily in the latest water jet weaving technology which has helped them capture and sustain the market share in the global exports.

The global trade in artificial and synthetic fabrics is more than that of the cotton and blended fabrics. The competitors like Korea and Indonesia have developed this sector, realizing the important role of synthetics in the years to come. The drawback of this sector is lack of modern technology. In order to compete internationally, modern water jet weaving machines, with the capability to manufacture diverse qualities of fabrics are needed

3.3 Quality Control

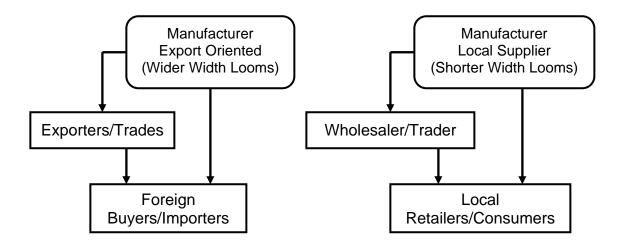
The low quality yarn and the use of poor weaving technology (Power Looms) are the main causes of all the fabric defects. While factors such as weaknesses in back process and working conditions in the weaving facilities are of secondary importance in fabric quality. Similarly there are no proper standards and identification systems for the evaluation of fabric

3.4 Market Analysis

The larger weavers have been exporting almost all of the fabric they produced. The cluster of smaller weavers in Faisalabad, on the other hand, consistently exported around 50% of the cloth they produced and the rest has been sold to the domestic customers. Simultaneous presence in the dynamic segments of domestic market alongside with exports apparently helped the cluster of small scale weavers adapt more quickly to the changing and ever demanding markets.

An important feature of the learning relationship between the new exporters and their foreign buyers was the small-scale nature of contracts and a "customization of fit" between the producer and the feedback-giving intermediary that suited small scale weavers better than the bigger ones with modern faster machines that could weave larger production runs only.





3.5 Financing

No special financing scheme for power loom sector has been introduced by any of the financial institution in Faisalabad. There are two types of systems on which Auto Looms industry is operating. The units, which are comparatively structured and have a high number of looms, have good financial strength. These units procure their raw material with their own investment, go for their own production and earn good margins on the sale of fabric in the local market or by exporting it in the form of fabric or made-ups. Due to lack of finances the small units operate on "conversion" basis. These units don't have the financial strength to procure raw material for themselves. The customers provide the main raw material that is yarn and these manufacturing units just take the conversion charges for converting yarn into fabric. In this case, the profit margins are limited. On the other hand these small units get yarn on credit for 10 to 30days hence they procure and sell the product and payback the yarn supplier.

3.6 Human Resource

The power loom sector is the labor intensive sector where the machine operators get on the job training through the **Ustaad-Shagird** system. Middle level management is non-existent in this segment; the entrepreneur himself is the manager. The machine operators in this segment do not obtain any formal training. The other sector comprises of shuttle-less weaving machines. This capital intensive process segment also does not rely on the formal institutions for the provision of manpower. Some of these units have supervisors trained at vocational institutes and the floor managers are textile professionals. Recent developments in the weaving technology require the operators and managers to be familiar with electronic gadgets attached to high speed machines including CAM (Computer Aided Manufacturing). Skill enhancement would require increased usage of computer based systems to monitor and manage productivity and quality.

4 Institutional Setup

4.1 Entrepreneurs Associations

4.1.1 Council of Loom Owners, Faisalabad

Council of Power Loom owners, Faisalabad is group that is representative of power loom industry of the cluster. Its membership consists of 1020 members, which includes



all small and medium units of the industry. Most of the large level manufacturers are not part of this group.

4.1.2 Faisalabad Chamber of Commerce & Industry (FCCI)

Faisalabad Chamber of Commerce & Industry (FCCI) has advocated the collective opinion, concern and aspiration of the private sector. It is the main representation, which has a great say in the policy matters with the Government. FCCI serves as bridge between the private sector and the Government.

4.2 Government/Semi Government Support Institutions

Following Government/Semi Government institutes can play a vital role for the uplift of power loom cluster of Faisalabad.

4.2.1 Textile Commissioner's Organization (TCO)

The Textile Commissioner's Organization, with the status of an attached department under the Ministry of Industries, and headed by a Textile Commissioner was therefore, created in November 1973. TCO objectives is to Develop & revitalize the Textile Industry in Faisalabad to establish solid export base by creating/maintaining Textile database & serving as bridge between Industry & Government. TCO takes up the problem of Textile sector to Govt. for their solution.

4.2.2 Small and Medium Enterprise Development Authority (SMEDA)

The Small and Medium Enterprises Development Authority (SMEDA) was established in 1998 under the Ministry of Industries and Production in order to foster the development of SME in the economy and was expected to take a key role in this process. Its functions include, inter-alia, the facilitation on policy making and the provision of overall planning, programming, research and evaluation of matters related to SME in Pakistan; monitoring and evaluation; encouraging and facilitating development of SME and to protect their interests. SMEDA has its Regional Business Coordinator in Faisalabad.

4.2.3 Punjab Small Industries Cooperation (PSIC)

PSIC is also working for the facilitation of small industries in Punjab. They offer soft loans to small entrepreneurs at subsidized rates. Their main focus is on small units.

4.2.4 Trade Development Authority of Pakistan (TDAP)

Is the primary agency of the Government of Pakistan engaged in promotion and boosting of country's exports. Since its inception in 1963, it continues to facilitate the exporters in overcoming difficulties faced by them, TDAP helps exporters to participate in exhibitions abroad and sends delegations to export markets with a view to explore new markets and develop the traditional markets. TDAP also initiate projects in various export sectors to train necessary manpower that can manage the export trade and industry.

4.3 Educational Institutions

Only Technical Education and Vocational Training Authority (TEVTA) is the major institute offering courses relevant to the local industry need of Faisalabad. TEVTA is managing nearly 400 different technical, commercial and vocational training institutes through out the province. In Faisalabad, the two important institutes of TEVTA include



Government College of Technology (GCT) and Govt. Apprenticeship Training Center (GATC).

The objectives of this organization include the provision of the up-to-date training facilities to the technical staff and the trainers to improve the efficiency of the available human resources. Currently the TEVTA is striving to upgrade the courses and the training programs according to the feedback from Faisalabad power loom industry.

4.4 Private BDS Providers

No significant private business development service providers are operating in the region with specific reference to power looms engineering industry.

5 SWOT ANALYSIS

5.1 Strengths

- Raw material is easily available and the variation in the yarn prices is limited.
- Installation of the modern looms is necessary to upgrade the product quality, reduce production cost, strengthen the competitiveness and stabilize the operations so as to be more profitable.
- Through technology up-gradation of this sector, the quality of fabric will improve and it will allow for production of wider width fabric for made-ups in the export markets

5.2 Weaknesses

- Long distance from the seaport.
- Failure of the cotton corps due to diseases may create raw material availability problem.
- Unskilled manpower.
- Non Availability of financial support for small units that are operating on "conversion" basis. These units don't have the financial strength to procure raw material for themselves.
- Due to the capital intensive nature of the high tech machines in the manufacturing of woven fabric, the focus of the local textile entrepreneurs has, in the past, remained on the power looms; the quality has been ignored all along. Because of the poor quality, its fabrics fetched unit prices well below the average international unit price.
- Lack of R&D support.

5.3 Opportunities

• Establishing Industrial Clusters

The textiles sector comprises a significant number of small and medium enterprises (SMEs). The formation of clusters would be beneficial for such SMEs because this can provide cost-effective solutions to deliver targeted technical assistance for upgrading technology, management and marketing. Experience in many countries has shown that industrial clustering leads to greater efficiency and flexibility not attainable by individual firms operating in isolation. For the



textiles sector, industrial clusters may be established at Faisalabad, Lahore, and Karachi.

Establishing Co-operatives for Power/Auto Looms Sector

The power/auto looms sector is fragmented with an average unit size of 7-8 looms per unit. The small size makes it difficult for the operators to upgrade their processes and technologies and to take advantage of the supporting services provided by the public sector. It is, therefore, proposed that the informal sector should be supported through the formation of co-operatives i.e. common manufacturing facilities with multiple ownership. Such co-operatives may be provided easier access to credit and technical and marketing support services.

5.4 Threats

- Power Shortage and high electricity rates
- High wage rates
- Tough competition in foreign market.
- Withdrawal of R&D support for Textile Sector by the government.
- Current spindles utilization for manmade fibers is very low compared with its competitors. Major reason for this is the protected manmade fibers industry. Import duties on manmade fibers make the raw material expensive for the spinning industry thereby making it non-competitive in yarn export market

6 Investment Opportunities in Cluster

Keeping in view the strong presence of Textile Industry in the area, there is an ample opportunity of investment in the cluster. Some potential projects for investment are as follows:

- Woven Fabric Printing Facilities
- High Tech Fabric Processing and Finishing
- Dyeing and Bleaching (Yarn and Fabric)
- Buying Houses (Export Market)
- Trading and Franchise Retailing

