Regional Industrial Development Plan for Faisalabad

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Introduction

Faisalabad, previously known as Lyallpur, is an industrial city located in the Punjab province of Pakistan. The city has a rich history of industrialization dating back to the colonial period when it was developed as an agricultural center. The city saw a significant growth in industry in the 20th century, especially in the textiles and clothing sectors and acknowledged as “Manchester of Pakistan”. Other important industries in Faisalabad include chemicals, pharmaceuticals, and non-electrical machinery manufacturers. In recent years, the city has also seen the development of software technology and IT services. The city is now considered as one of the major industrial centers in Pakistan, contributing significantly to the country's economy.

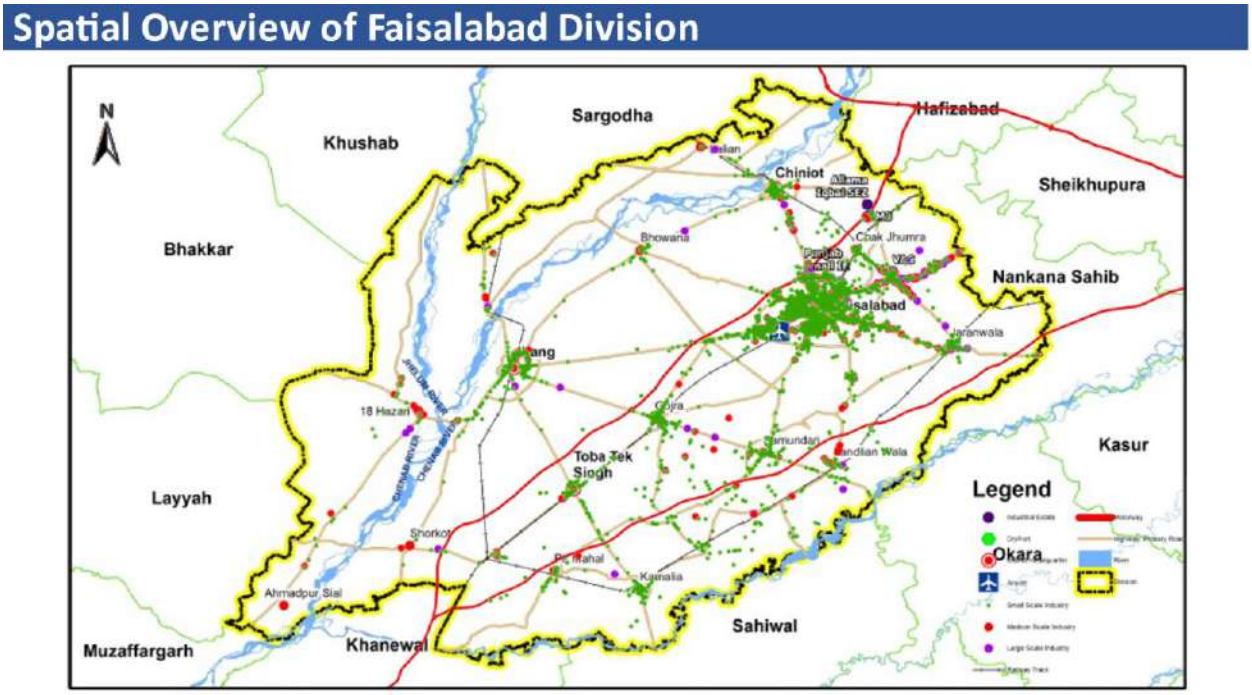
In the early 20th century, Faisalabad was one of the largest exporters of cotton in the world. The city's textile industry was further developed after the creation of Pakistan in 1947, with the establishment of new mills and factories. The city became a major center for the production of cotton, silk, and synthetic textiles.

In the 1950s and 1960s, Faisalabad saw the development of other important industries, including sugar refining, fertilizers, chemicals, and electrical goods. The city's industrial sector continued to grow throughout the 1970s and 1980s, with the establishment of new factories and the expansion of existing industries.

In the 1990s and early 2000s, Faisalabad saw the growth of the IT sector, with the development of software technology and IT services. The city has now become one of the major industrial centers in Pakistan, contributing significantly to the country's economy.

Over the years, the city's industries have provided employment opportunities for many people, both directly and indirectly. The city's industrial sector has experienced an average annual growth rate of around 7% over the past decade and continues to be an important contributor to Pakistan's overall economic growth.

Map 1 Spatial Overview of Faisalabad



Source: Census of Manufacturing Industries 2015-16

With an area of 17,917 sq. km and the population of 14 million, the division is surrounded by Multan, Lahore and Sargodha division and connected to the rest of country through a network of railway lines, airport, motorways (M3 and M4), national and provincial highways.

Each dot on the above map represents an industrial establishment and in total the Faisalabad division is house for 14,886 industrial units, 135 large, 410 medium and 13,941 small manufacturing units. The sectors are define as per Pakistan Standard Industrial Classification and sectoral analysis shows that 59% of the firms are textile and wearing apparel sector. This shows the strength of the region and the dominance of Faisalabad in Division. Other sectors are other manufacturing (Not elsewhere classified), food products, machinery and equipment and printing and reproduction of recorded media.

Spatial analysis shows that 90% of the industrial units are in Faisalabad district followed by the Toba Tek Singh, Jhang and Chinot. These industrial units accommodate the direct employment of 293,501. These numbers of employment and industrial units is 31% of

Manufacturing Firms and 26% of Manufacturing Employment of Punjab is in this Division. The following two tables show district and sector-wise breakdowns of industrial units.

Table 1 District wise number of units

District	Small	Medium	Large	Total	Employment
Faisalabad	12492	372	121	**12985**	267341
Chiniot	250	7	5	**262**	5198
T.T. Singh	720	9	3	**732**	9187
Jhang	479	22	6	**507**	11775
Total	**13941**	**410**	**135**	**14486**	**293501**

Source: Census of Manufacturing Industries 2015-16

Table 2 Sector Wise details of Industrial units

Sectors	Firms	Percent
Textiles & Wearing Apparel	8,549	59%
Other Manufacturing	1,381	10%
Food Products	1,184	8%
Printing And Reproduction of Recorded Media	582	4%
Other Non-Metallic Mineral Products	551	4%
Machinery And Equipment N.E.C	431	3%
Others	1807	12%

Source: Census of Manufacturing Industries 2015-16

With respect to industrial count this division can be categorized as one of the most industrialized divisions of Punjab. This also shows the favorable environment for entrepreneurship, availability of quality labor and raw material and support from the institutions and government policies with the room for development, improvement, and innovation.

Stakeholders

Federal Government

The federal government may not have much of a direct role in the running of the city. However, it influences the local economy through its fiscal and monetary policies. FBR and SECP, both federal entities, have a strong presence in the city owing to their high revenue generation capacity. Faisalabad-based trade bodies are often engaged in advocacy efforts with the federal government for tax issues and lowering the cost of business.

Punjab Government

The provincial government holds many reins in supervising various agencies and departments of the city. It holds the biggest leverage in the form of provincial transfers of funds for both development and non-development purposes. Local government agencies have a weak revenue base; hence their sustenance remains dependent on the provincial kitty. It is a separate matter that Faisalabad is among the largest tax generators in Pakistan, but fiscal transfer mechanism remains at the discretion of provincial government.

Municipal Corporation Faisalabad (MCF)

The role of city municipality is expanded in the new local government act. However, in absence of the elected officeholders, Divisional Commissioner is also additionally heading MCF as its Administrator. The municipality is meant to provide municipal services with an additional function of ‘Economic and Value Chain Development’ also entrusted to it. At present, MCF is playing a limited role in running city affairs, which is expected to increase post-local elections.

Faisalabad Development Authority (FDA)

It is a vital government entity responsible for the land management in the city. It also undertakes master planning of Faisalabad. It has civic agencies, such as WASA and TEPA, operating as its subsidiaries. WASA provides services pertaining to water, sewerage, and drainage. TEPA is working in traffic management and transport planning.

District Administration

Administratively, Faisalabad city is one of the six tehsils, which collectively makes up Faisalabad District. Deputy Commissioner (DC) is the administrative head of this district. The DC office is responsible for the revenue collection and implementation of government regulatory directives. It is overseeing the provision of services and maintenance of public order.

Faisalabad Chamber of Commerce & Industry (FCCI)

FCCI is the premier representative body of businesses in Pakistan. Its membership comprises of 6,404 companies segregated into 1,279 corporate members and 5,125 associate members. It has been the leading voice for safeguarding the interest of the business community by reaching out to higher echelons of the government. It has been instrumental in the execution of various business facilitation and infrastructure initiatives in the city.

Other Trade Bodies

Faisalabad also boasts of various other trade bodies serving different niches of the local and national business community. It includes Faisalabad Chamber of Small Traders & Industry (FCSTI), Pakistan Textiles Exporters Association (PTEA), All Pakistan Cotton Power Looms Association (APCPLA) and All Pakistan Textile Processing Mills Association (APTPMA). Many of these organizations may play a pivotal role in the functioning of the growth coalition. Their contribution to the local economic development cannot be underestimated.

Faisalabad Industrial Estate Development & Management Company (FIEDMC)

FIEDMC has played a pivotal role in developing major industrial estates in the vicinity of Faisalabad. As a joint venture between the government of Punjab and private investors, it has developed two major zones in Faisalabad. Currently it is engaged in the development of a third

zone dedicated to industrial projects related to CPEC. It has already attracted foreign investors in its M3-Industrial City, the largest industrial estate in the country.

Punjab Small Industrial Estate

Punjab Small industrial Estate cooperation is a government owned body with its mandate to establish small industrial estates to provide dedicated and specialized infrastructure for industrial development. Since its formation in Punjab PSIC has established more than 20 industrial estates across Punjab. Small Industrial Estate established its 1st industrial estate in Faisalabad in 1970s and it is 100% colonized. This industrial estate played a pivotal role in the early days of industrialization in Faisalabad and provided a dedicated space along with the ancillary infrastructure. The PSIC industrial estate is also supported by Cluster Development Center and Business incubation center. These two common facilities are closed due to budgetary and administrative issues.

Existing Industrial Infrastructure

The existing industrial infrastructure of Faisalabad consist of one small industrial estate (1021 plots), M3 industrial zone (4,315 acre and 492 plots), Allama Iqbal industrial zone (3,000 acre and 200 plots), and Value Addition City (225 acres and 285 plots). Considering the number of industrial units and type of industry (labor intensive and export oriented), the given infrastructure is inadequate and that's the reason that almost 96% of the firms are outside the planed area and resulted in urban livability and compliance issues.

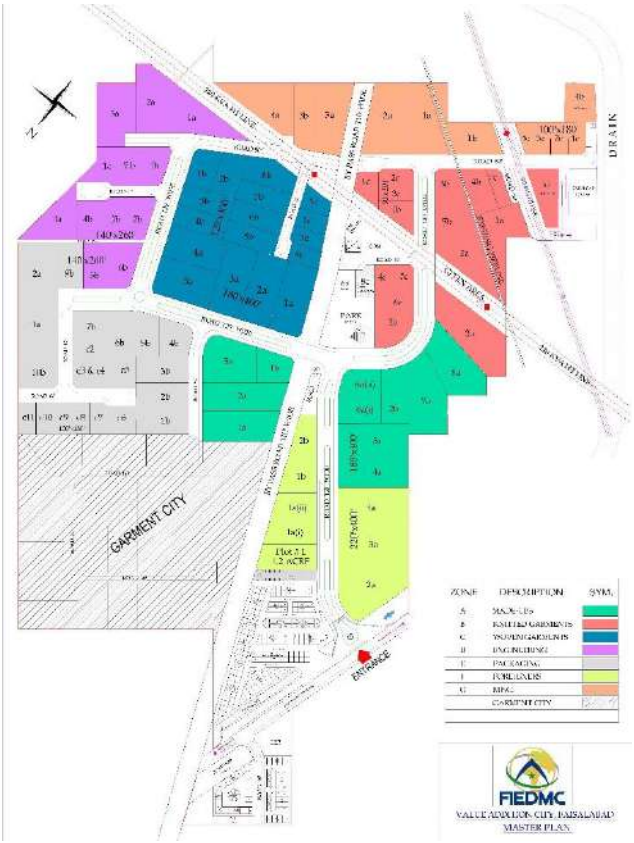
Punjab Small Industrial Estate - I

Located on the main Faisalabad bypass road, this is one of the oldest industrial estate of PSIC, currently this is 100% colonized and needs extension and upgradation. The field visits revealed that the administration of the estate is under staffed and civil infrastructure needs revamping along with the operationalization of cluster development center and business development center.

Value Addition City

Value Addition City is located at Khurrianwala road on the area of 225 acres with the colonization rate of more than 60%. This facility provides state of the art infrastructure and amenities for the industrial units.

Map 2Layout Plan of VAC



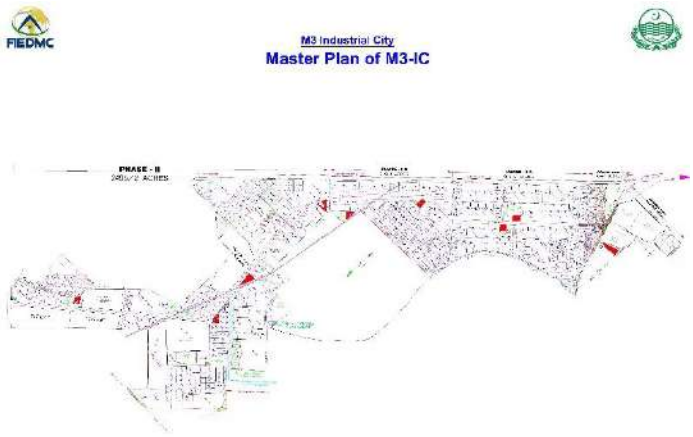
Source: FIEDMC

M3 industrial Zone

Located along the Chine Pakistan Economic Corridor is another state-of-the-art facility developed by the Faisalabad Industrial Estate Development and Management Company over the area of more than 4,000 Acre to accommodate 492 industrial units. This facility has given the status of Special Economic of Zone that provides tax break for more than 10 years for the newly established units to attract local and foreign investment. So far, the colonization rate is around 40% and expedite the colonization rate the FIEDMC is executing two projects in the Industrial estate that includes 132kv Grid Station No. 2 Of 80MW Capacity And 132kv Grid Station No. 3 Of

80MW Capacity in Allama Iqbal Industrial City and Water Supply Works for Industrial Plots/Units Along Main Arterial Road, Chiniot Sahianwala Road and Roads at Both the Banks of Sem Nala in Allama Iqbal Industrial City. The successful execution of these projects will result in significant increase in colonization rate to support the relocation of firm from residential areas to a dedicated planed facility with state-of-the-art infrastructure.

Map 3 M3 Industrial City



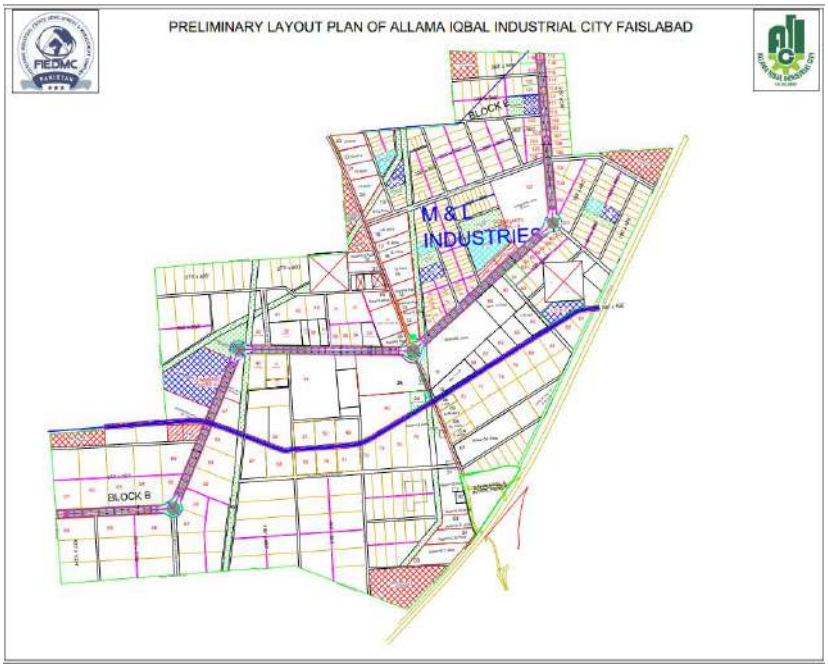
Source: FIEDMC

Allama Iqbal Industrial City

Another industrial zone with the status of Special Economic Zone is in a process of development by the FIEDMC. This newly established zone consists of more than 3,000 acre and situated along the China Pakistan Economic Corridor. These newly developed zones with the status of Special Economic Zones are designed considering the international standards to attract foreign direct investment.

The state-of-the-art industrial zones are in a process of development and construction, but these facilities are not enough to cater to the needs of industrial cities like Faisalabad. The Faisalabad needs mixed model development and strict zoning laws to relocate the firms from residential areas to the dedicated zones.

Map 4 Proposed Layout Plan of Allama Iqbal industrial City.

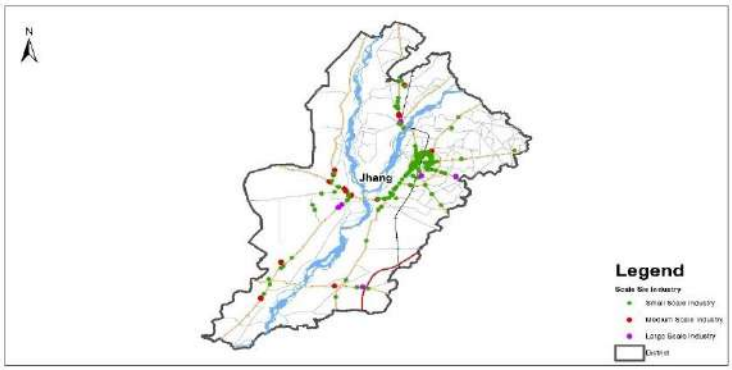


District wise Analysis (Jhang-Toba Tek Singh – Chinot)

Jhang

Below a map and table shows the sectoral and spatial existence of the firms. Spatially major units are in tehsil jhang and 90% of the units are small. The spillover of Faisalabad textile sector can be seen clearly as 56% of units are from the textile sector. This district does not have any dedicated infrastructure, all the industrial units are in unplanned, residential, or agricultural areas. The establishment of Small Industrial Estate Jhang is in the planning phase.

Map 5 Industrial spread in Jhang



Source: Census of Manufacturing Industries 2015-16

Table 3 Manufacturing Sectors in Jhang

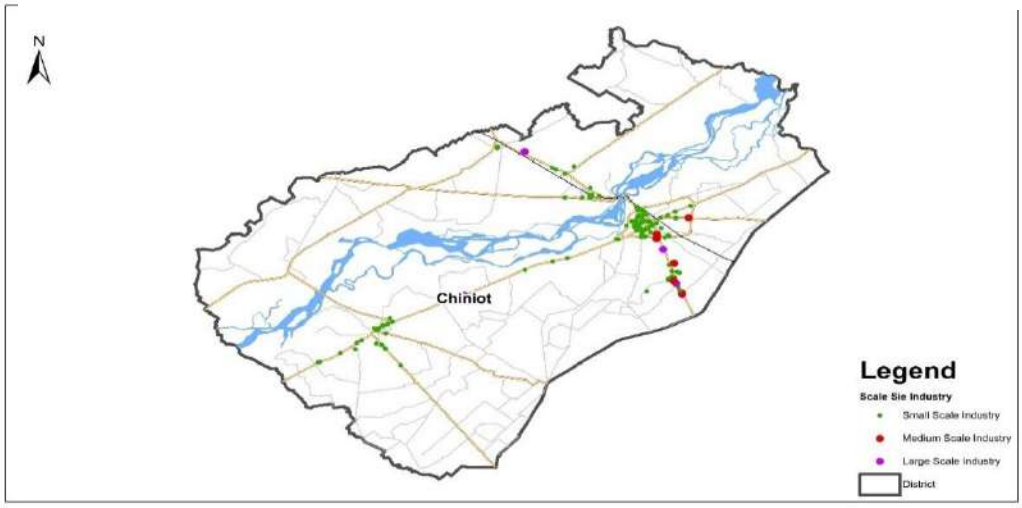
Sector	Large	Medium	Small	Total
Textiles	1	7	272	280
Food Products	5	6	94	105
Non-Metallic Mineral Products		9	30	39
Furniture			36	36
Fabricated Metal Products,			25	25
Others			22	28
Grand Total	6	22	479	507

Source: Census of Manufacturing Industries 2015-16

Chiniot

Below a map and table shows the sectoral and spatial existence of the firms. Spatially major units are in tehsil Chiniot and 95% of the units are small. 60% of the firms are in manufacturing furniture or wooden crafts or artifacts with high demand in local and international markets. The growth of furniture industry is natural, and craftsman are working with traditional production methods. This district does not have any dedicated infrastructure, all the industrial units are in unplanned, residential, or agricultural areas. The district needs state of the art craft village, small industrial estate and institutions to support the cottage and micro industry.

Map 6 Industrial Spread in Chiniot



Source: Census of Manufacturing Industries 2015-16

Table 4 Manufacturing sectors in Chiniot

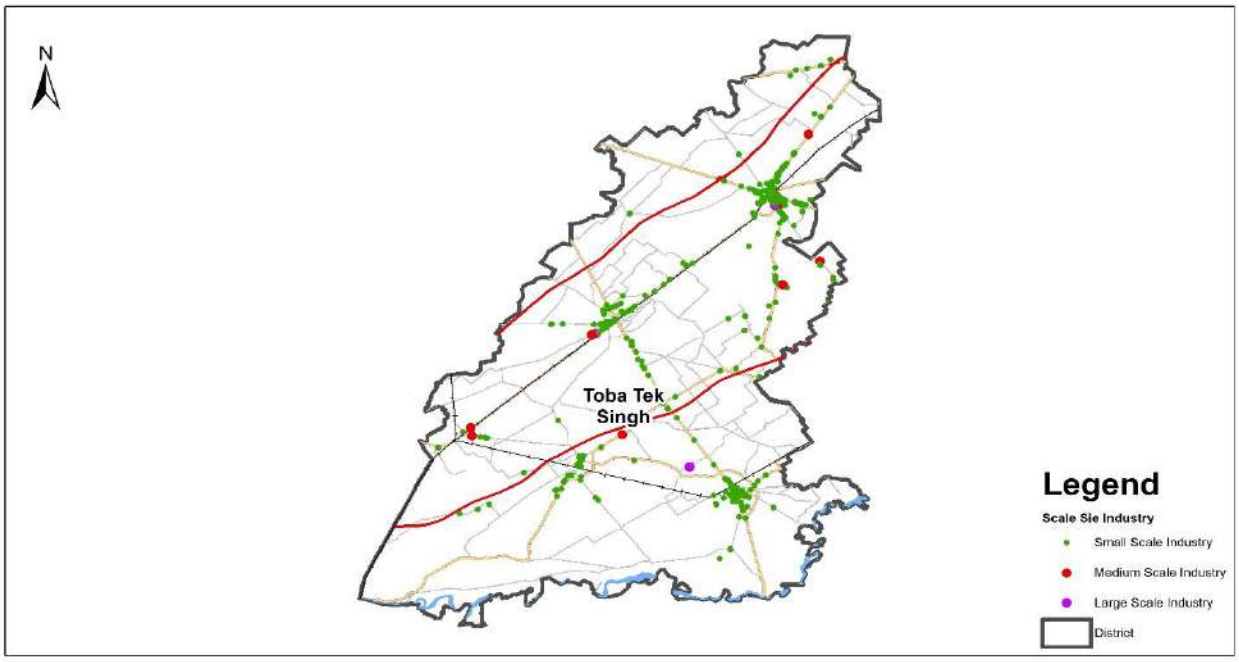
Sector	Large	Medium	Small	Total
Other Manufacturing			104	104
Furniture			52	52
Textiles	2	5	35	42
Food Products	3	1	24	28
Non-Metallic Mineral Products			25	25
Other		1	10	11
Total	5	7	250	262

Source: Census of Manufacturing Industries 2015-16

Toba Tek Singh

With 732 firms, Toba Tek Singh is the 2nd most industrialized district in the division. The industrial spread is even as compared to other two districts and the district headquarters lies in the middle of M3 and M4 motorways. The spillover of Faisalabad textile sector can be seen here and cluster of *"Khadar"* in tehsils Kamalia is very famous. The establishment of a small industrial estate and Handicraft Development Center in Kamalia is in the execution phase. Similar type of projects are also required in other tehsils.

Map 7 Industrial spread in Toba Tek Singh



Source: Census of Manufacturing Industries 2015-16

Table 5 Manufacturing sectors in Toba Tek Singh

Sector	Large	Medium	Small	Total
Textiles	2	2	312	316
Food Products	1	3	105	109
Non-Metallic Products		3	99	102
Other Manufacturing			80	80
Furniture			69	69
Others		1	55	56
Grand Total	3	9	720	732

Source: Census of Manufacturing Industries 2015-16

Wooden Crafts and Furniture Cluster in Chiniot

The handicraft sector is a representative of a country's value, tradition and culture and highlight skill within of nationals. These clusters in any country are also contributing economically. There are several reasons why these items are purchased such as artistic, creative, cutlery, traditional, social symbol and significant. An interesting fact about this industry is this skill is transferred between generations and contributes to national heritage. Furthermore, this sector requires a little investment and provides a high ratio of value addition. Also, it is a source of employment for many craftsmen in semi urban or rural localities. It has the potential to generate new jobs and attract foreign revenue through exports. These industries are usually labor intensive. It is a cottage industry. Also, there are several advantages or benefits for attracting investment in this sector such as with a very negligible amount of capital is required for a startup, one can manage his/her own work/ business and flexibility of working hours. Moreover, it has the potential to improve the living standard of its labor or working class and have spillover effects in other segments of the economy such as increased utilization of local raw material. Progress of this sector also suggests that income does elevate in rural or tribal areas which results in lower level of migration from rural to urban areas. This upgradation leads to improvement of social equilibrium, national identity preservation and ethnic heritage.

With the development of technology this sector is suffering in international markets as the demand for innovative products is increasing. It is the responsibility of the government to give attention to this sector and provide privilege to this segment. Through globalization this sector has the potential to provide opportunities and challenges to this sector. However, through better governance, strategies, sufficient and accessible finance, competitive environment, better trade policies and suitable infrastructure will upgrade this sector of economy.

Wooden craft in Chiniot

The handicrafts sector in Pakistan has historical roots that date back to Indus Valley Civilization. Several regions of Pakistan (such as Multan for pottery, Silalwali for wooden crafts and Chiniot for wooden furniture) have gained international significance in this sector. And Chiniot is one of those regions that are renowned for wooden handicrafts with geometric patterns and oriental designs and heavy furniture.

Economic Significance:

Economically this sector has immense significance. This cluster has 500 micro-units with almost 2500 workers and craftsmen. These products are usually used for decorative purposes or heavy furniture manufactured on customized order from high end consumers. The target buyer of this cluster is mostly from the high-income class.

Furthermore, it supplies its goods to other cities, provinces, and countries. Mainly the products from this sector are exported to Australia, Belgium, France, Germany, Holland, Italy, Saudi Arabia, Spain, Sweden, Turkey, USA, and United Kingdom. Whereas, the main competitors are China, Indonesia, India, Korea, Malaysia, the Philippines, and Turkey.

Constraints

Chiniot handicrafts have demand constraints in the international markets. This lower demand is due to unbranded products with little or no information, and importers hesitate in buying these products. Hence, it leads to lower offered prices than competitors. Simultaneously, the manufacturer is discouraged due to lower demand in the market.

Additionally, artisans do not meet certification and quality standards which affects the overall export of this segment. However, it is generally sold on the international market when vendors themselves visit international exhibitions and attract targeted customers. The strategy used for exporting these items is to transport them along with other regular trading items other than handicrafts. Also, the inefficiency of the system is not encouraging the growth of exports here. Another process followed to gain order in this sector is through exhibitions. Interior designers and relevant buyers visit these exhibitions; observe the capability of the manufacturer; and place orders. Therefore, exhibitions can increase the potential of this segment. But due to non-involvement in such activities sellers miss out on potential orders.

Furthermore, a larger component of the market share can be captured through online selling. But due to lower international demand producers in this sector are ready to invest in this dimension.

The strength of this region is its skilled labor that is found in abundance.

Also, inefficient tools and machinery are used for production. Thus, leading to a compromise on the quality of the final product. Therefore, by incorporating better quality tools and production

methodologies, the quality of the final product can be improved by decreasing the cost of production.

Several countries such as India, Indonesia, and Malaysia have developed the handicrafts sector into an industry. However, this market in Pakistan is still in the developing stages and has not attained the status of the industry. And, this is due to several laggings such as lack of education, technological backwardness, unstable prices of raw materials, and lower demand in international markets. Therefore, the upgradation of this sector is necessary for the overall improvement of this region.

Proposed intervention for Chiniot Cluster.

Craft shops

Due to non-proper working conditions this sector is not exploiting its potential and it becomes necessary to improve working conditions. Subsequently, these shops will be particularly designed to provide craftsmen with a common facility to operate their production activities. And these shops will have standardized architecture and will ensure sustainability in the production process.

Seminar Rooms

Lack of coordination between different stakeholders and production stages leads to inefficiencies. And, these seminar rooms will serve as a common facility and can be used for multiple purposes such as training and other business events and meetings.

Exhibition Halls

Non-representation of products to potential buyers is the main reason for lower sales. The hall will be used to conduct local, national and international level exhibitions and will provide an opportunity to strengthen this sector.

Art Gallery

A common display center that exhibits all sorts of products and depicts the skill of artisan will develop recognition to this sector. Through this platform product differentiation and specialization will be depicted.

Design Center

Upgradation and development of design is an essential demand for sustained growth in this sector. And this center will operate to design new products. By doing this, more customers will be attracted, and higher profits can be attained.

Common Studios

Another constraint faced by this sector in international markets is non-standardized production and packaging facilities. Hence, these centers will have the responsibility to work on packaging, marketing, and branding of products according to international standards. And will assure standardization in all these dimensions.

Wood Bank

Preservation of seasoned wood is a constraint for manufacturing of several products other than their respective seasons. Therefore, this wood bank will preserve wood and will provide opportunities to utilize it other than its production seasons. Hence, production all around the year will be assured.

Tools Bank

Due to the non-availability of certain tools, particular products and designs cannot be produced. Therefore, this tool bank will have a job to assure availability of modern equipment that is compatible with international markets so that final goods do not face discrimination.

E-Commerce trainings

The major constraint faced by this sector is non-familiarity with e-commerce that leads to a lag in sales. This center will provide training to conduct business activities on online forums and prepare labor force for this purpose.

Table 6 Proposed Interventions for Chiniot Cluster Development.

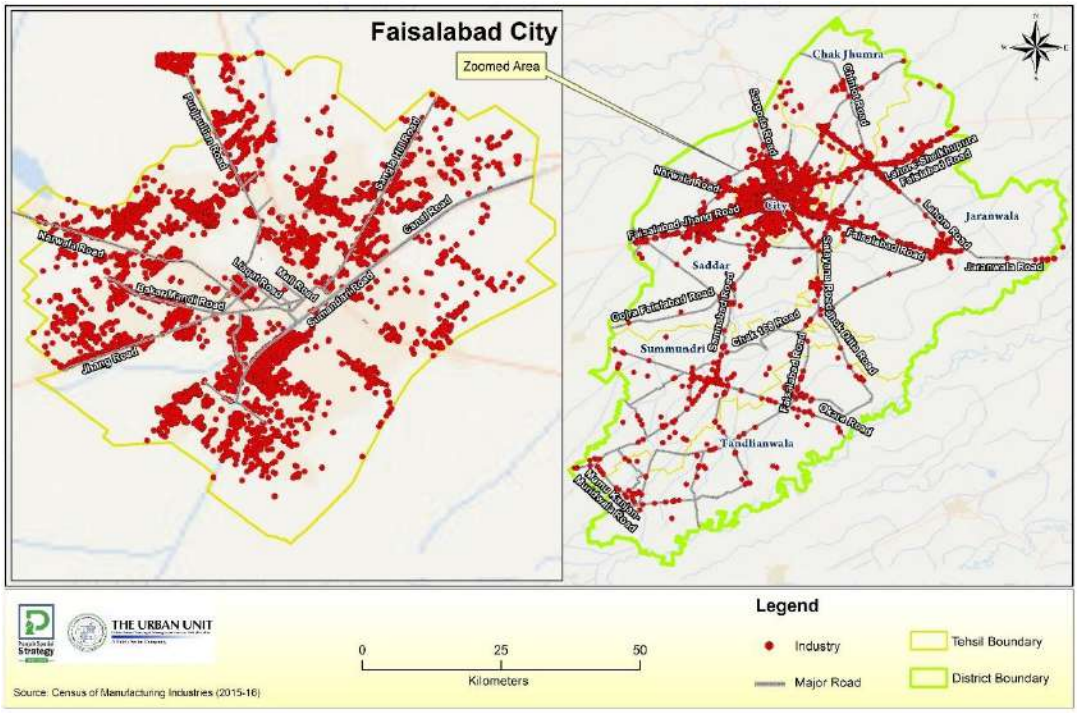
Module	Description	Cost	Short Term	Medium Term	Long Term
		Rs. Mn	0-3 years	3-5 years	5-10 years
Craft Shops	Shops of craftsmen	25	X		
Seminar Room	Seminar rooms for trainings and community meetings	5		X	
Exhibition Hall	Exhibition hall for yearly exhibitions	20			X
Art Gallery	Gallery for artists to display their work	10	X		
Design Center	Innovation	25	X		
Common Studios	Packaging, Marketing, branding	20		X	
Wood Bank	Storage for seasoned wood	30			X
Tools Bank	Modern tools facility	10		X	
E-Commerce trainings	Business and marketing trainings	10	X		
Total		**155**			

Faisalabad (Center of Industrial Activity)

The concentration of industries in one location can lead to economies of scale, increased competitiveness, and improved efficiency. It also often leads to the development of supporting infrastructure, such as transportation and communication systems, as well as a skilled labor force. However, industrial agglomeration can also have negative impacts, such as increased pollution, traffic congestion, and strain on resources. Starting from the cottage stage, Faisalabad-based

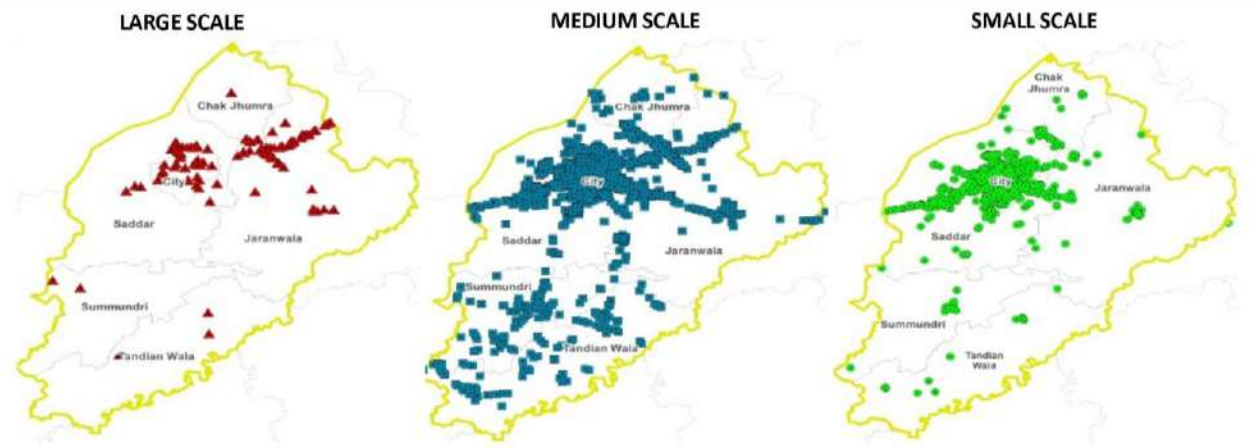
entrepreneurs have quickly graduated to SME and later large scale just based on their sheer robust entrepreneurship. SMEs are still the industrial mainstay of the city. Local entrepreneurs initiated the power loom wave by setting up looms in sheds and small spaces throughout the city. The yarn market in the city center played a pivotal role in sourcing raw material for the fledgling industry of yesteryears and continuing with the service today. City industrialists have embarked upon the value addition of cotton in yarn and cloth to sell the finished products in both domestic and overseas market.

Map 8 Industrial Concentration in Faisalabad



This entrepreneurial heritage is utterly private sector-driven and remains an asset of Faisalabad. With sheer circumvention of any given zoning regulation or master plan, the city underwent unorganized economic development. It has resulted in the emergence of unauthorized mixed zoning throughout the city. Faisalabad does have a lot of small and medium industries located in and around residential areas of the inner-city areas. It did create its own challenges, which will be discussed in a later chapter. Mapping of the industrial units will highlight the mixed zoning element.

Map 9 Scale wise industry in Faisalabad



	Small		Medium		Large	
No. of Industries	12,492	(96.2%)	372	(2.9%)	121	(0.9%)
No of Employees	137,018	(51.3%)	40,269	(5.1%)	90,027	(33.7%)

Source: Census of Manufacturing Industries 2015-16

Locational pointers reflect both legacy and business reality. SMEs concentration in the city areas denotes the legacy of past unplanned industrialization in Faisalabad. Whereas the location of many of the large-scale enterprises indicates the lack of space within city limits, hence industrialists have to move out to establish large units. They are the relationships between firms in a supply chain, or between firms producing complementary products. These linkages can lead to positive spillover effects, where the growth and success of one firm or industry can benefit others through increased demand, knowledge transfer, and specialization.

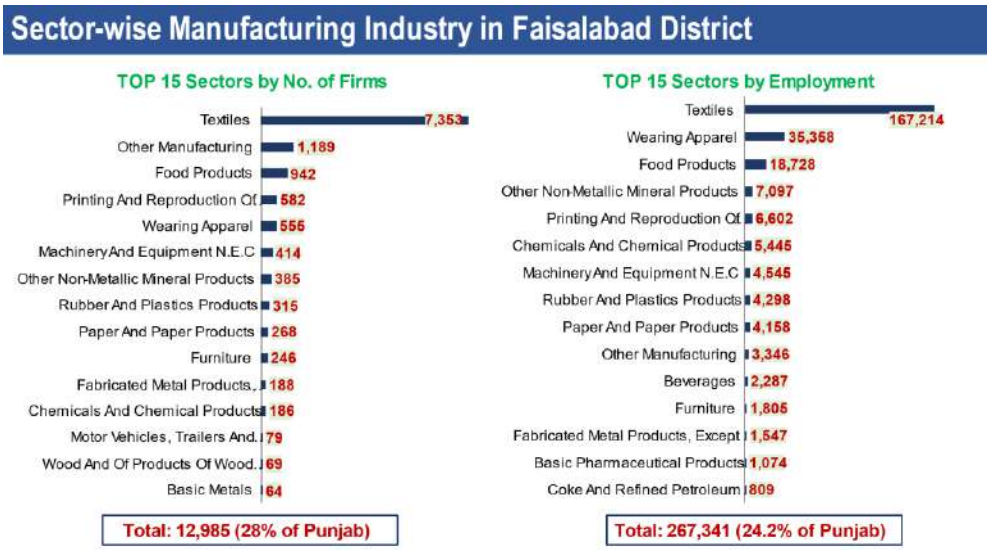
There are several types of industrial linkages, including forward linkages, where the output of one industry is used as inputs for another industry, and backward linkages, where the inputs for one industry are provided by another industry. Upstream linkages refer to the suppliers of raw materials, while downstream linkages refer to the firms that use the output of an industry as inputs for their own production processes. Industrial linkages play a crucial role in promoting economic growth and development, as they create networks of firms and industries that can share resources, knowledge, and expertise.

The textile sector has a complex network of industrial linkages, as it is a multi-stage and multi-faceted industry. The following are some of the key industrial linkages of the textile sector:

1. Raw material suppliers: The textile sector relies on the upstream linkages with suppliers of raw materials such as cotton, wool, silk, and synthetic fibers.
2. Spinning and weaving: The spinning and weaving of raw materials into yarn and fabric is an important stage in the textile industry and creates forward linkages with other sectors.
3. Dyeing and printing: The dyeing and printing of fabric requires specialized inputs and creates backward linkages with chemical and colorant suppliers.
4. Garment production: The final stage of the textile industry is the production of finished garments, which creates forward linkages with retailers and downstream linkages with customers.
5. Machinery and equipment: The textile sector also have linkages with the manufacturers of machinery and equipment used in spinning, weaving, dyeing, printing, and garment production.
6. Services: The textile sector also has linkages with a range of service industries, including transportation, financing, and consulting.

These industrial linkages create a complex network of interconnections and interdependencies that drive the growth and competitiveness of the textile sector.

Figure 1 Sector wise firms and employment in Faisalabad

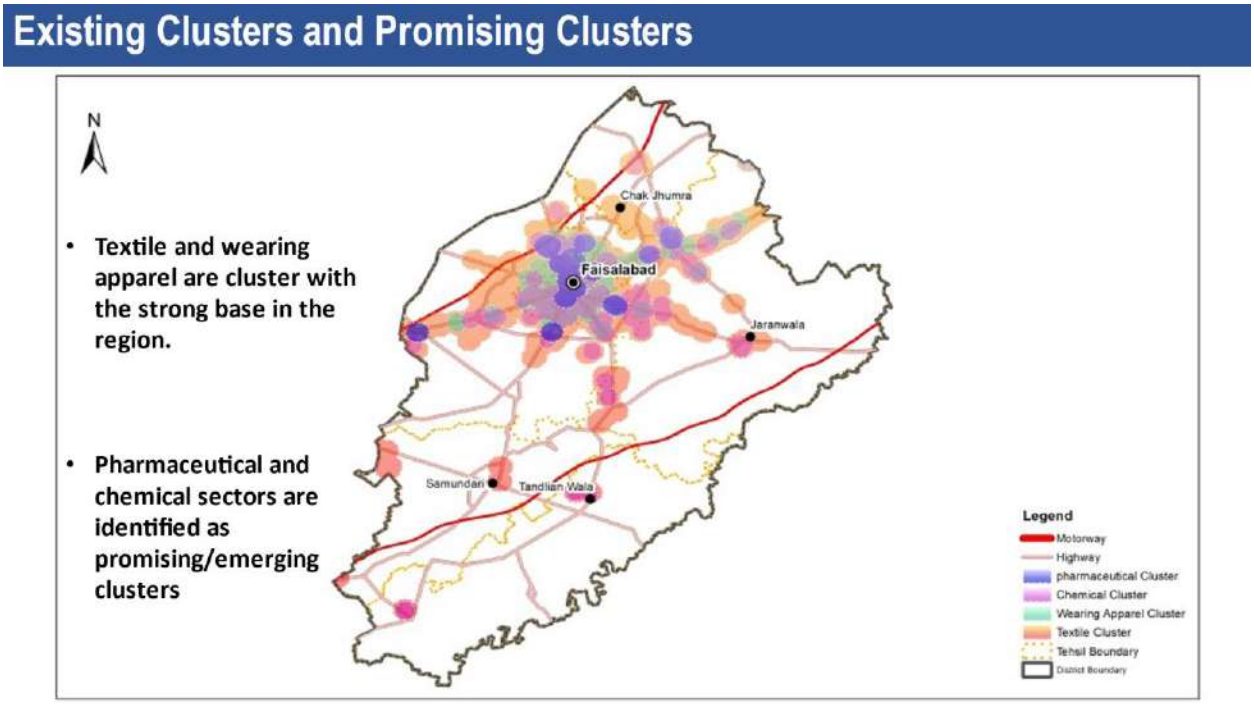


Source: Census of Manufacturing Industries 2015-16

Despite a vibrant entrepreneurial heritage and large pool of university graduates, the city doesn't have technology parks, incubators, accelerators or a startup eco system. The University based two business incubator centers do not have much to show. The city has expanded concentrically from the city center along with its primary roads. Conventional businesses are not much concerned about the façade. There are individual expressions of state-of-the-art office buildings, but they remain restricted to individual business groups and smaller in scale. Faisalabad needs to have a higher number of mixed use constructions with a focus of provision of high quality and affordable retail and office space.

The city also needs to build high standard sports and entertainment facilities to attract businesses from other locations. It will go in line with the addition of space for high-end offices. It becomes all that vital for soliciting Chinese investment in the industrial estates, north of the city.

Map 10 Existing Clusters and Promising Sectors



Source: Census of Manufacturing Industries 2015-16

Promising clusters refer to geographic concentrations of related industries that are competitive, innovative, and growing. These clusters can take the form of cities, regions, or even countries, and are characterized by a high concentration of firms, institutions, and other organizations within a specific industry. Some of the key features of promising clusters include:

1. Strong inter-firm linkages: Promising clusters are characterized by strong linkages and collaborations between firms, which can drive innovation, improve competitiveness, and increase productivity.

2. Access to skilled labor and resources: Promising clusters benefit from a high concentration of skilled labor and resources, which can reduce the cost of doing business and improve the quality of products and services.

3. Favorable business environment: Promising clusters typically have a favorable business environment, with supportive policies, favorable regulations, and access to funding and other resources.

4. Cluster-specific assets: Promising clusters often have specific assets, such as specialized research institutions, supportive suppliers, and access to markets that are not available in other locations.

Promising clusters can play a critical role in economic development, as they can drive innovation, create jobs, and stimulate economic growth. By encouraging the growth and development of promising clusters, policymakers and businesses can create a more favorable environment for economic development and competitiveness.

Zones and Corridors

The geo tagged data of industrial units in Faisalabad depicts that the industrial development in the past 100 years is natural, random, without zoning regulation and without proper planning. The establishment of industrial units in a congested area can create a range of challenges and conflicts. Some of the key impacts include:

1. Traffic congestion: The concentration of industrial activities in a congested area can exacerbate existing traffic problems, leading to increased congestion, air pollution, and safety hazards.
2. Environmental degradation: Heavy industrial activities can generate significant amounts of waste and pollution, which can harm the environment and public health.
3. Conflict with residents: The presence of heavy industries in a congested area can lead to conflicts with local residents over issues such as noise, vibration, and air pollution.
4. Infrastructure strain: Existing infrastructure in a congested area may not be adequate to support the needs of an industrial zone, leading to increased strain on roads, water and electricity supplies, and other essential services.
5. Land use conflicts: The development of an industrial zone in a congested area can lead to conflicts with other land users, such as residential and commercial areas, over the use of land and other resources.

To minimize the negative impacts of industrial zones in congested areas, it is important to carefully plan and regulate their development, taking into account the needs and concerns of local residents, as well as the needs of industry. This can involve measures such as establishing buffer zones, implementing strict environmental regulations, and providing adequate compensation to affected residents. Additionally, investment in infrastructure and other services may be needed to support the development of an industrial zone in a congested area.

Based on locational data, this study divided the city into 5 corridors and 3 zones. This study also proposed the relocation model and relocation spots outside the residential areas for development of dedicated facilities for the SMEs and large industrial units. Refer to the below map for details of corridors and zones and refer to the table below to see the population, area, industrial units, and industrial units' density of each corridor and zone.

Map 11 Proposed Zones and Corridors

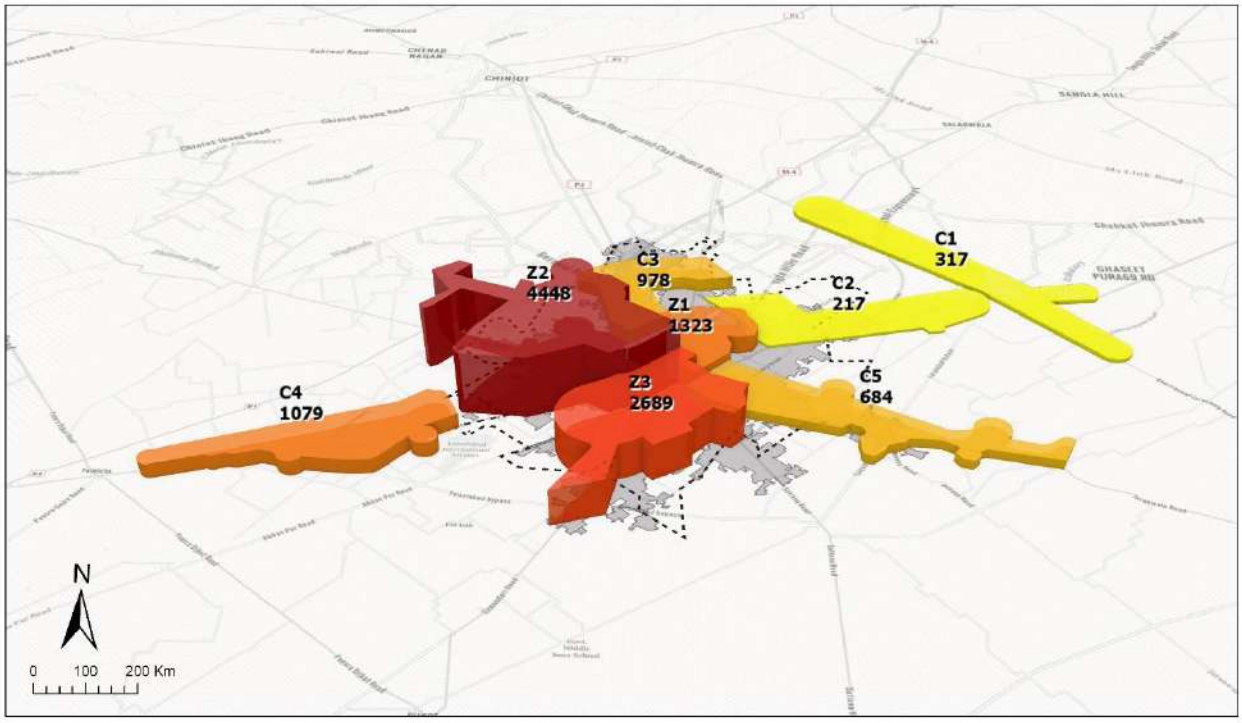


Table 7 Details of zones and corridors

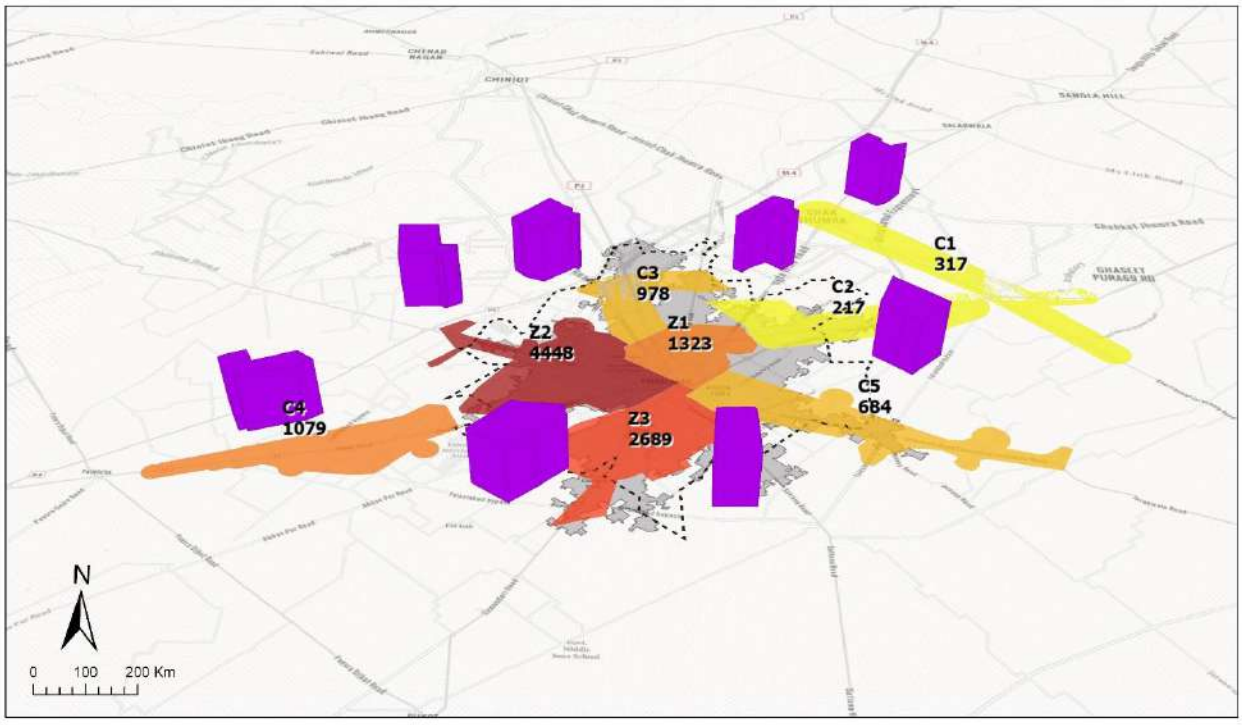
Zones and Corridor	Population	Firms	Area Sq2	Firms per Sq. Km of Area	Propose Industry Relocation Area Km Sq2
C1	170,278	317	55	6	3
C2	169,878	217	44	5	4
C3	221,001	978	26	38	5
C4	73,620	1,079	36	30	6
C5	664,771	684	44	15	4
Z1	1,122,589	1,321	24	54	6
Z2	1,308,383	4,448	57	77	6
Z3	1,184,158	2,688	45	60	6
Total	4,914,678	11,732	331		40

As per the information given in table 6, the zone 2 (Motor market, university area, clock tower, Ghulam Muhammad a bad, Raza Abad and Amin Pur Bangla interchange - M4) which start from the heart of city and stretches towards lies in the heart of the city is one of the most industrialized area with the industrial density of 77 firms per square kilometer and providing direct employment to approximately 40,000 labor force. Spinning and weaving are the major industries of the area followed by the other textiles, Rubber products and wearing apparels.

Similarly, corridors 3 and 4 are most populated in terms of industrial density and number of units, respectively. Corridor 3 mainly covers the area of Faisalabad Sargodha Road and Punjab small industrial estate is also located along this corridor. This is one of the largest small industrial estates of Punjab with 1050 plots and 100% colonization rate. While corridor 4 includes Faisalabad Jhang Road.

Below Map 9 shows the identified empty pockets for relocation of the firms from the residential areas. The relocation needs a well-planned strategy along with financial and infrastructure support. The total area identified is 40 sq. km (9,900 Acre) which will be sufficient for the development of large and small industrial estate projects.

Map 12 Zones and Corridors with proposed location.



Proposed Relocation Models

Industrial development in the city was started over a 100 year ago and this was one of the core strength/forces behind the development and expansion of the city. The relocation of the firms needs a proper plan, financial, institutional, and infrastructural support along with innovative and out of the box ideas. The following are the options that can be explored or modified for successful relocation of the firm.

Industrial Estate Model

PSIC or FIEDMC can develop dedicated facilities close to urban areas or at identified locations. With the development of each facility collaborative efforts of banks, chamber of

commerce, associations and PSIC/FIEDMC can help to relocate the firms. With the development of each facility, strict zoning/land use regulations shall be imposed.

Site Development Zone

Local government and Faisalabad Development Authority can develop industrial site development zones along with site development zone structure plans. These newly developed site development zones shall be operated and managed by the Board of Management. With the development of each facility, strict zoning/land use regulations shall be imposed.

Plug and Play Facilities

The Public Private Partnership Authority can develop plug and play model facilities for stitching, power loom and bedsheets sector firms. These facilities can be provided on rent or lease model to SMEs of weaving, spinning and which comprise of almost 5,500 firms with the development of each facility, strict zoning/land use regulations shall be imposed.

Table 8 Stakeholders Matrix for Relocation Model

	Land Identification	Land Acquisition	Infrastructure Development	Operation and Maintenance
Industrial Estate Model	Chamber and Associations FIEDMC PSIC	FIEDMC PSIC	FIEDMC PSIC	FIEDMC PSIC
Industrial Site Development Zone	Chamber and Associations Local Government Faisalabad Development Authority	Not Applicable	Local Government Faisalabad Development Authority	Autonomous Board of Management
Plug and Play Model	Chamber and Associations Private Developer Public Private Partnership Authority	Public private partnership Authority	Private Developer	Autonomous Board of Management

Corridor Wise Details

Corridor 1

The major areas include Chak Jhumrah Khuriwala road. Textile, food products and rubber and plastic products are major sectors. The total area of the corridor is 55 sq. km with an estimated population of 170,278 and 317 active operational firms providing direct employment to approximately 41,000 labors. A pocket of approximately 3 sq. km (741 acre) has been identified that can be used for the dedicated industrial estate.

Map 13 Corridor 1

Corridor 2

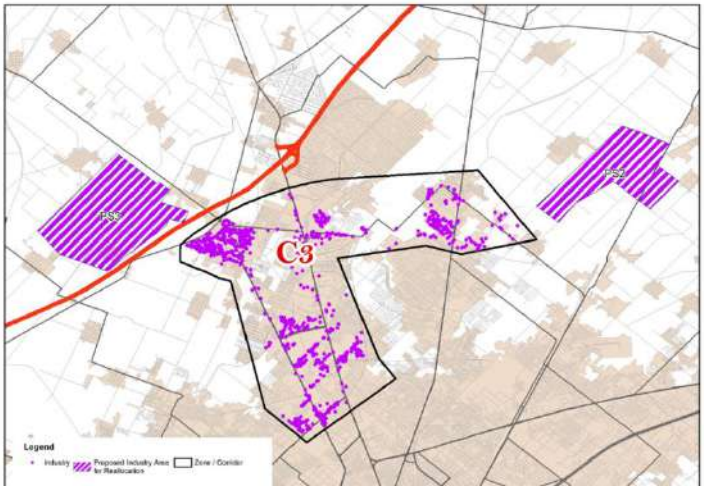
The major areas include Faisalabad Sheikhupura Road. Textile, paper manufacturing and other nonmetallic products are major sectors. The total area of the corridor is 44 sq. km with an estimated population of 169,878 and 217 active operational firms providing direct employment to approximately 7,520 laborers. A pocket of approximately 4 sq. km (1,00 acre) has been identified that can be used for the dedicated industrial estate.

Map 14 Corridor 2

Corridor 3

The major areas include Faisalabad Sargodha Road. Textile, apparel and paper manufacturing are major sectors. The total area of the corridor is 26 sq. km with an estimated population of 221,001 and 978 active operational firms providing direct employment to approximately 36,000 labors. A pocket of approximately 5 sq. km (1235 acre) has been identified that can be used for the dedicated industrial estate.

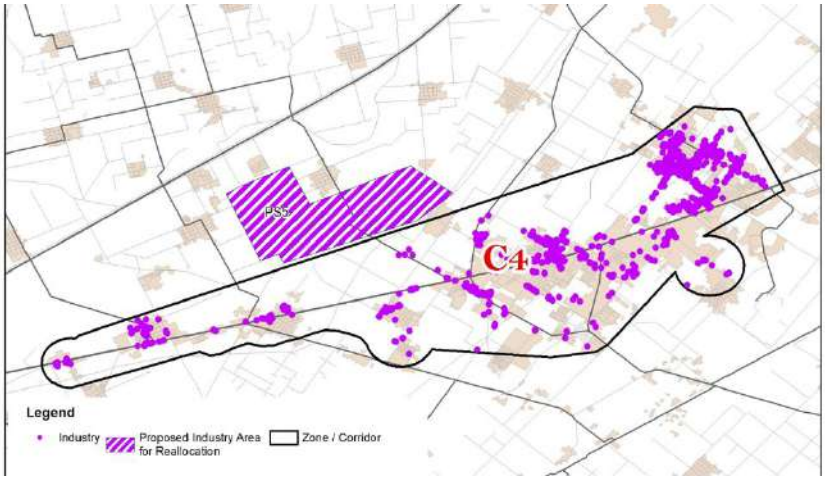
Map 15 Corridor 3



Corridor 4

The major areas include Faisalabad Jhang Road. Textile and manufacturing of semi-trailers are major sectors. The total area of the corridor is 36 sq. km with an estimated population of 73,620 and 1,079 active operational firms providing direct employment to approximately 16,000 laborers. A pocket of approximately 6 sq. km (1400 acre) has been identified that can be used for the dedicated industrial estate.

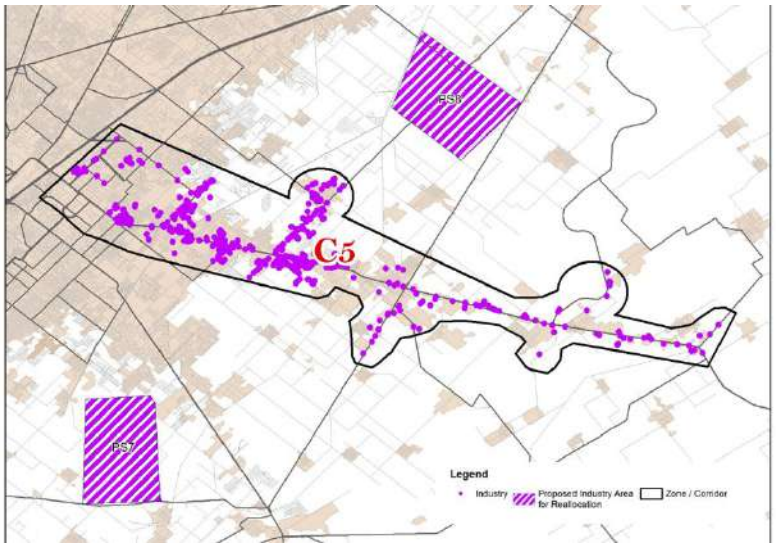
Map 16 Corridor 4



Corridor 5

The major areas include Chak Jhumrah Khuriawala Road. Textile, food products, manufacturing of rubber and plastic products are major sectors. The total area of the corridor is 44 sq. km with an estimated population of 664,771 and 684 active operational firms providing direct employment to approximately 16,000 laborers. A pocket of approximately 4 sq. km (1,000 acre) has been identified that can be used for the dedicated industrial estate.

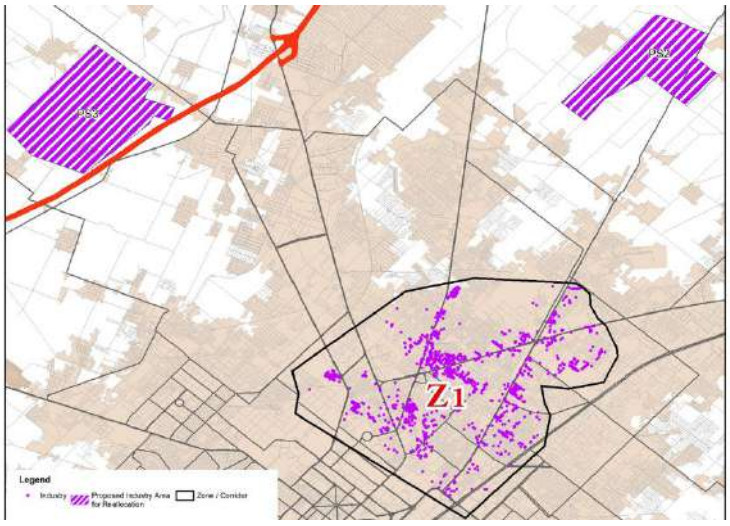
Map 17 Corridor 5



Zone 1

The major areas include Ghaziabad, Millat Chowk, Gulstan Colony and the start of Lahore Sheikhupura Road. Textile, rubber, and plastic products are major sectors. The total area of the zone is 24 sq. km with an estimated population of 1,122,589 and 1,321 active operational firms providing direct employment to approximately 32,000 laborers. A pocket of approximately 6 sq. km (1,400 acre) has been identified that can be used for the dedicated industrial estate.

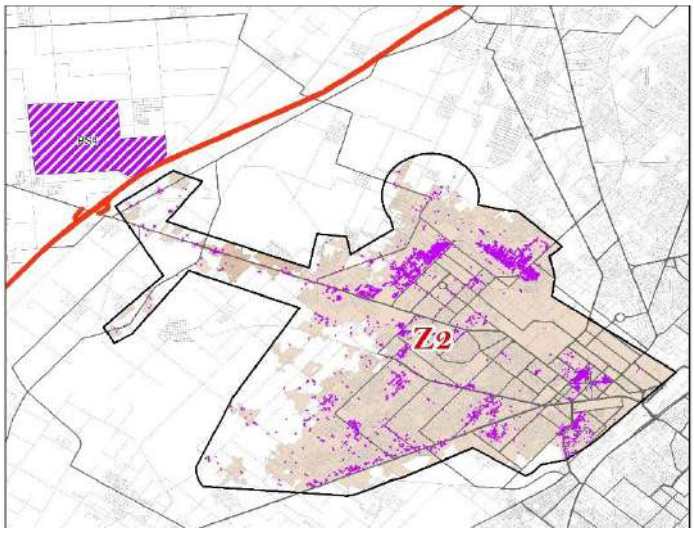
Map 18 Zone 1



Zone 2

The major areas include Motor Market, University Area, Clock Tower, and Ghulam Muhammad Abad. Textile and apparel are major sectors. The total area of the zone is 57 sq. km with an estimated population of 1,308,383 and 4,448 active operational firms providing direct employment to approximately 39,000 laborers. A pocket of approximately 6 sq. km (1,400 acre) has been identified that can be used for the dedicated industrial estate.

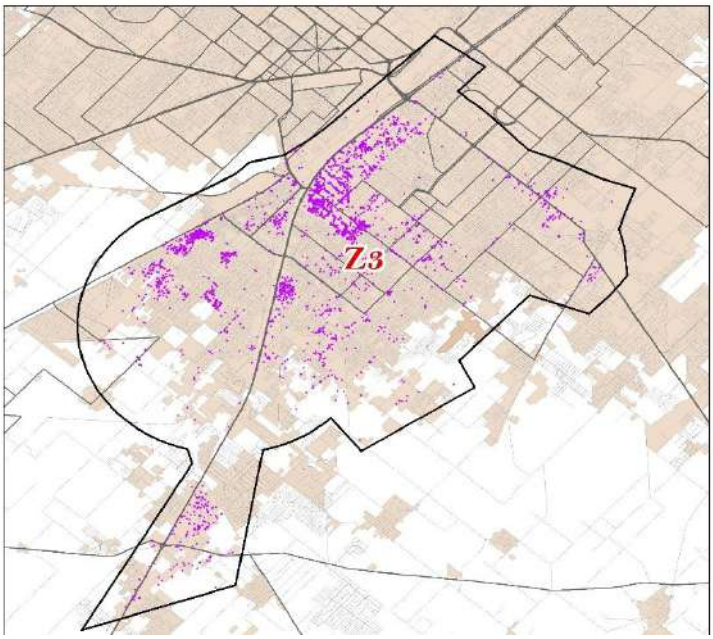
Map 19 Zone 2



Zone 3

The major areas include the people's colony, Satyana Road, Yousaf Town and Sarfraz Colony. Textile, manufacturing of machinery and equipment and apparel are major sectors. The total area of the zone is 45 sq. km with an estimated population of 1,184,158 and 2,688 active operational firms providing direct employment to approximately 34,000 laborers. A pocket of approximately 6 sq. km (1,400 acre) has been identified that can be used for the dedicated industrial estate.

Map 20 Zone 3

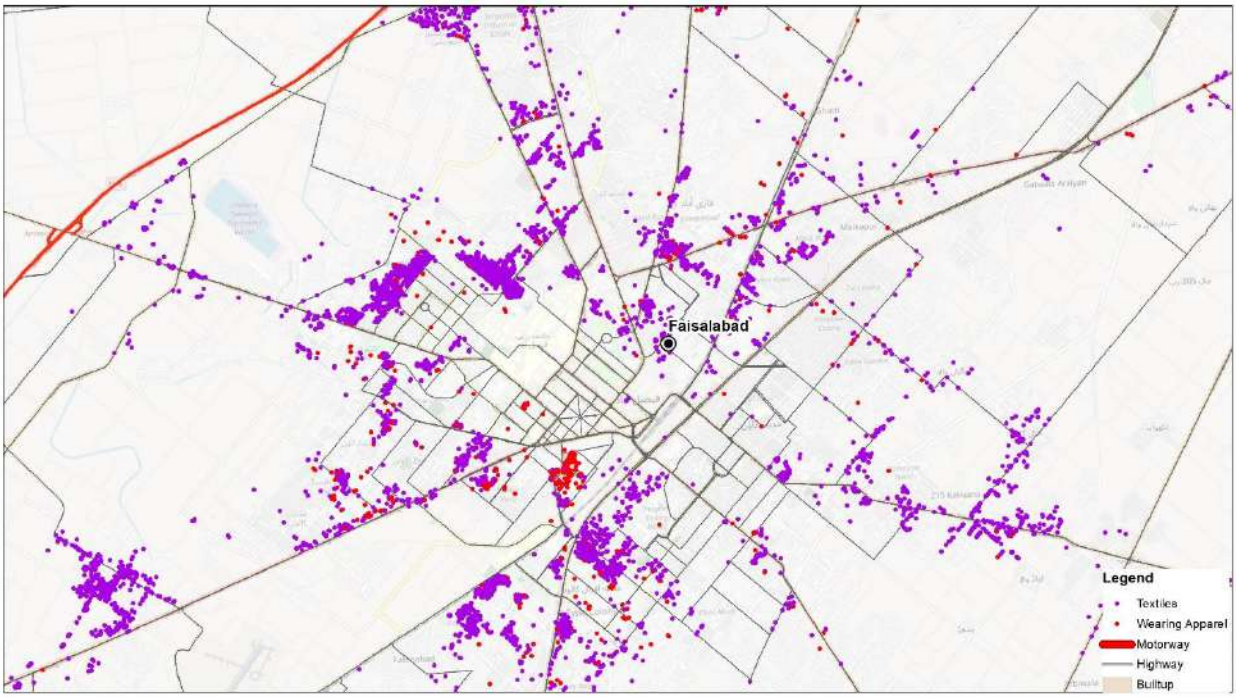


Textile and Apparel Value Chains

With 8,549 firms of textile and apparel sectors, Faisalabad contributes to the 30% to 40% of Pakistan's textile Exports. The agglomeration of the textile sector is providing a competitive market to international buyers and brands. Textile production involves the transformation of fibers into yarn, then into fabric, and finally into clothing and other textiles. These products are sold to both domestic and international markets, creating a complex network of global trade.

The textile industry is essential for the global economy, as textiles and clothing account for USD 905 billion in worldwide exports. Countries specializing in textile production often have low labor costs and a large pool of skilled workers, which makes them attractive to international buyers looking for cost-effective production. Additionally, the sector has a significant impact on employment, particularly in developing countries where it is a major source of employment and income. However, the textile industry also faces numerous challenges, including environmental sustainability, labor rights, and competition from low-cost producers. Industry must continue to adapt to changing market conditions and consumer preferences, while also addressing these challenges to maintain its place in the global value chain.

Map 21 Textile and Apparel Industry in Faisalabad City

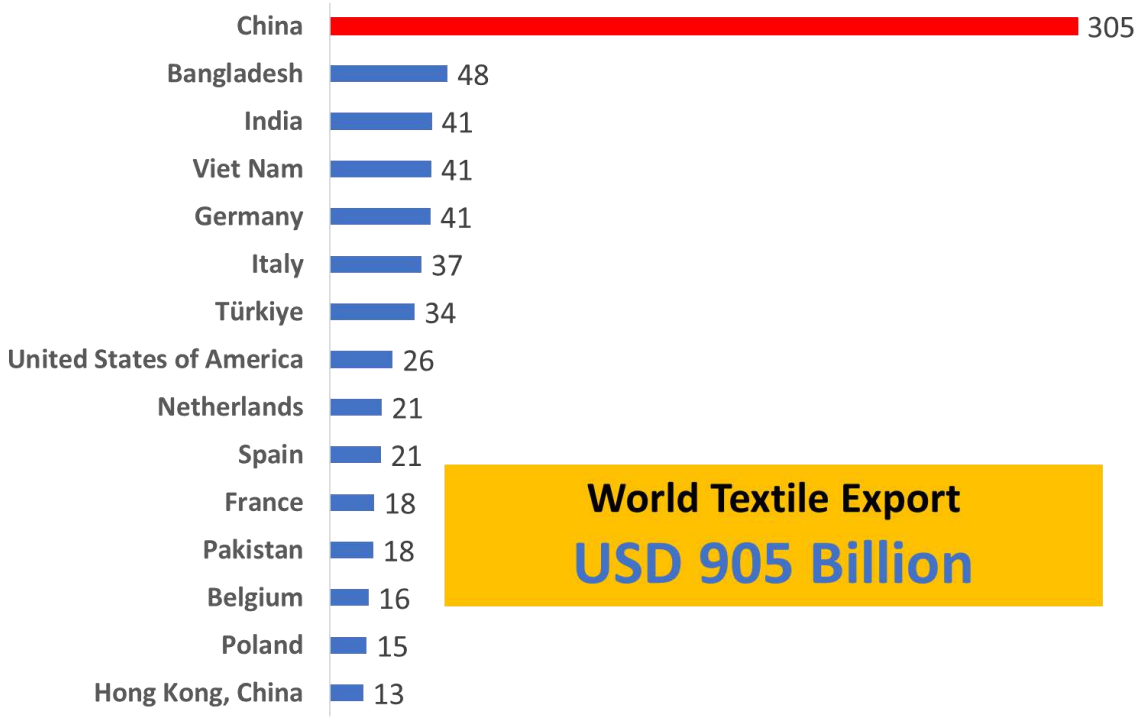


As shown in the above map the textile industry is highly concentrated in the urban residential area of the city bringing in the challenges of compliance and livability.

Export Market

The textile industry is one of the oldest and most established industries in the world, dating back to the ancient civilizations of Egypt, Greece, and China. In the modern era, the textile industry has transformed into a global market, with textiles being produced, traded, and consumed all over the world. The textile world export market involves the trade of various textile products, such as fabrics, yarns, and clothing items, between different countries. The textile world export market is highly competitive, dynamic, and diverse, with numerous countries and companies vying for a share of this lucrative market. Figure below shows the world export players, the market is led by China, followed by the Bangladesh, India, Vietnam and Germany.

Figure 2 Textile and Apparel Exporters



One of the major players in the textile world export market is China. China is the largest exporter of textiles in the world, with an estimated share of around 40% of the global market. The Chinese textile industry is known for its low production costs, vast production capacity, and diverse product range. Chinese textile manufacturers produce a wide range of products, including cotton, silk, wool, and synthetic fibers. The Chinese textile industry is also known for its ability to quickly adapt to changing market conditions and consumer preferences, allowing it to maintain its dominance in the global market.

India is another major player in the textile world export market. India is the second-largest exporter of textiles in the world, with an estimated share of around 5%. The Indian textile industry is known for its traditional textiles, such as cotton and silk, as well as its modern textile products, such as technical textiles and home textiles. The Indian textile industry is also known for its skilled labor force, which allows it to produce high-quality products at competitive prices.

Bangladesh is another country that has emerged as a major player in the textile world export market. Bangladesh is the third-largest exporter of textiles in the world, with an estimated share of around 4%. The Bangladeshi textile industry is known for its low production costs, which are among the lowest in the world. The Bangladeshi textile industry specializes in producing ready-made garments, such as shirts, pants, and jackets, which are exported to various countries around the world.

Vietnam is also a significant player in the textile world export market. Vietnam is the fourth-largest exporter of textiles in the world, with an estimated share of around 3%. The Vietnamese textile industry is known for its high-quality products, such as cotton and silk fabrics, and its ability to produce a wide range of products, from clothing to home textiles. The Vietnamese textile industry is also known for its competitive prices, which have helped it to capture a share of the global market.

Turkey is another country that has a significant presence in the textile world export market. Turkey is the fifth-largest exporter of textiles in the world, with an estimated share of around 3%. The Turkish textile industry is known for its high-quality cotton products, such as towels and bed linens, as well as its ability to produce technical textiles, such as fire-resistant fabrics. The Turkish textile industry is also known for its robust design capabilities, which have helped it to create unique and innovative products that are in high demand in the global market.

The demand for textile products in international markets is influenced by various factors, such as fashion trends, production costs, and quality standards. The textile industry is subject to various trade agreements, tariffs, and regulations, which can affect the competitiveness of different countries and companies. For example, the textile industry is highly regulated in the European Union, which has strict environmental and social standards that must be met by textile manufacturers. The United States also has strict regulations on textile imports, which can affect the competitiveness of different countries in the global market.

The product lines where Pakistan is dominating are low value added, low tech, labor intensive and low in profit margins. Despite the long history in this sector, Pakistan was not able to graduate or diversify in the product lines or in the value chains. Pakistani producer are still dependent on the western corporations for Research, development, designing, innovation,

branding, marketing and sales, Majority of Pakistani firms are laying on the bottom of the smile curve as shown below.

Figure 3 Smile Curve

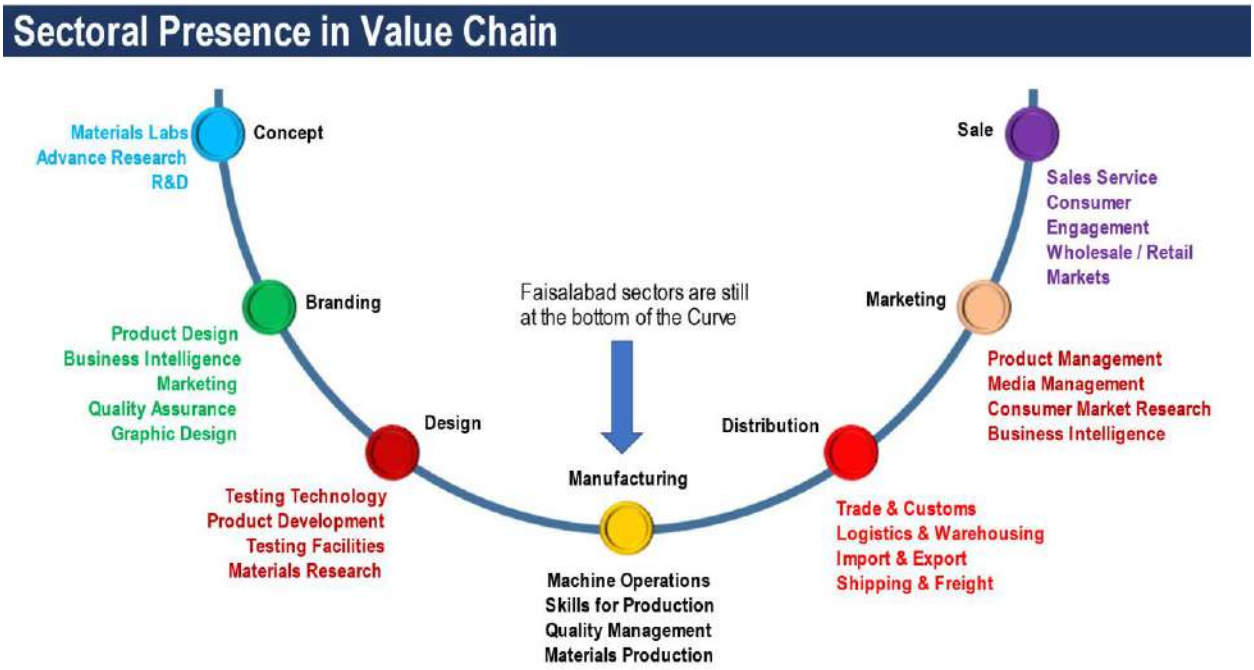
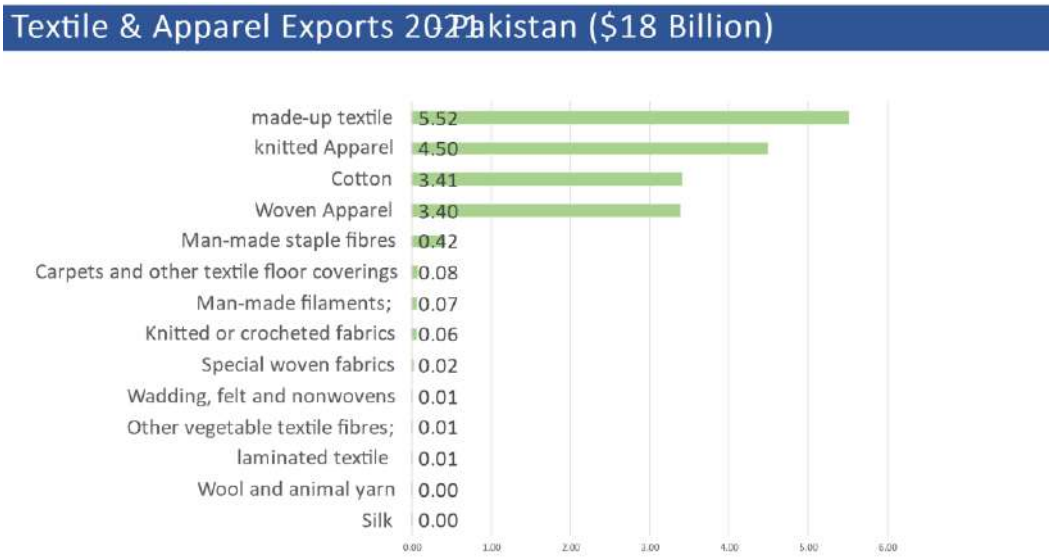


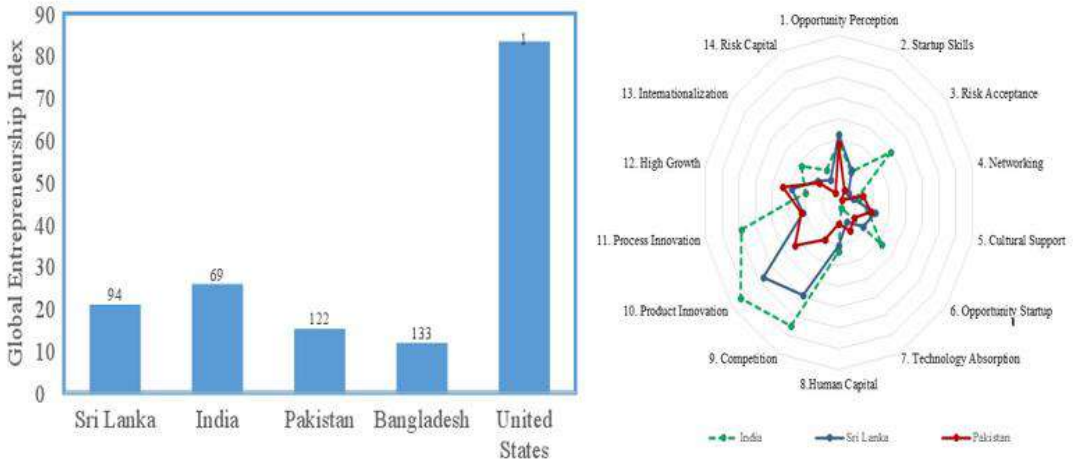
Figure 4 Textile and Apparel Exports of Pakistan



Growth Opportunities and Impediments

Capacity constraints of firms can further restrict their ability to access finance to make appropriate investments. The Global Entrepreneurship Index (GEI) encapsulates the confluence of factors contributing to an economy's entrepreneurship ecosystem under the broad categories of infrastructure, resources, and attitudes. A 2017 study conducted on the GEI ranks Pakistan 122 out of 137. countries under consideration with an overall score (15.2), significantly lower than regional counterparts Iran (rank: 85, GEI: 22.1), India (rank: 69, GEI: 25.8), China (rank: 48, GEI: 36.3), and Sri Lanka (rank: 89, GEI: 20.9). These differences are illustrated in Figure 13, with the addition of the United States for comparison.

Figure 5 Global Entrepreneurship Index



Source: Global Entrepreneurship and Development Institute (Work Bank Report: Pakistan at 100)

Following are the entrepreneurial constraints faced by firms in Pakistan as per the World Bank Study. These constraints halt the process of growth, development, process innovation, product innovation and productivity growth.

Most firms have minimal knowledge of available financing instruments. Less than half the firms claimed to agree that they knew which loans were best suited to their business purpose, forming a significant roadblock to credit expansion. In some cases, firms were prepared to disclose their full information but did not have the capacity to comply with the bank's documentation requirements. Such capacity restrictions implied an artificially lower actual demand for

investment. Encouraging firms to use independent financial auditors, perhaps provided by the bank as a service, might increase investment, raising the demand for external financing.

Cumbersome documentation and processing add to firms' difficulties in obtaining loans. Several studies document the distortions in lending markets, such as those that arise due to preferences to certain firms that are politically connected. Among the main problems firms report in loan approval, the two major and recurring themes involved the allegedly excessive documentation required for the process and the high mark-up charged by banks. Most firm owners expressed a desire for such a process to be streamlined with the use of technology, or for the process be supplemented with electronic documentation, such that redundancies might be eliminated.

Businesses that are still run as small family firms lack modern practices. Only a few firms' owners claimed to have participated in any form of entrepreneurship education. A lack of human capital may be a deterrent to entrepreneurial aspirations, and with the overall lack of investment demand.

Dynamism in terms of launching new products is lacking. Only about half of all firms claimed to have launched a new product variety in the past 2 years, and similarly only slightly more than half claim to be familiar with the potential growth trajectory of the fan industry in the coming 6 to 12 months. Larger firms released product varieties more frequently.

Many of the transactions in the SME sector involve informal, expensive trade credit (where the goods were bought and paid for at a later stage), which substituted the need for formal credit. In addition, a considerable number of micro and small enterprises rely on informal lending, both within and outside of the entrepreneur's network. Informal financing usually takes place due to obstacles in participating in the formal lending market and hence is not included in official measures, masking the true demand for credit. The survey finds that, while for most firms, owners make financial decisions directly, with a few relying on the existence of a board or a CEO/CFO, the major source of financing for every firm in the survey was identified as 'self', with only nine firms also considering the banks as an additional source of finance. All firms except one identified both banks and cash as the main medium of transaction for their products.

It was natural that large firms faced almost no difficulties with the high interest rates; it was the smaller firms that primarily raised this issue repeatedly since it resulted in a reduction in their profit margins. Larger firms had access to foreign markets, thus their sales were almost orthogonal to the market-interest rates. Furthermore, export-oriented firms had access to the State Bank's export finance scheme (EFS), whereby short-term financing facilities were provided to exporters through banks for exports of all manufacturing goods, especially value-added products. Smaller firms not only faced the direct cost of higher interest rates, but also suffered a fall in sales when aggregate demand contracted in the face of rising interest rates.

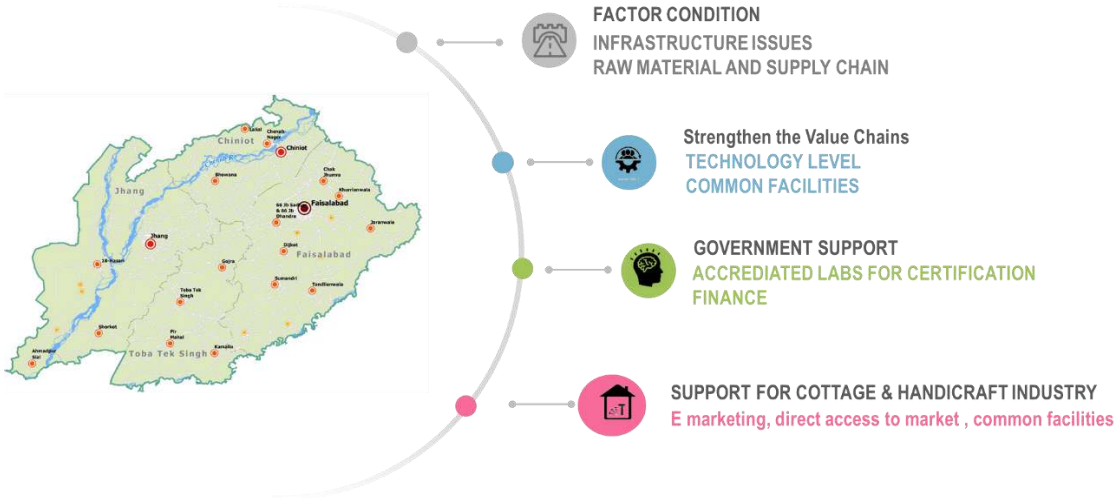
Despite these mentioned shortcomings, there is reason to be optimistic. Firms' owners agreed that they are willing to innovate in the current operational business, identifying their need to expand sales and to engage in more R&D to release better products. Firms identified the quality of products as a major factor in their export sales, commenting on how this was a new trend due to the emergence of power houses such as India and China. What remains concerning is that almost all firms consider self-finance to be the primary source to this end, with only 21 claiming that banks would be a main source of finance for innovation.

Way Forward for Moving Up the Value Chain

Understanding the regional advantage and providing an enabling environment is the key for transformation, diversification, and graduation in global market and on the smile curve of the value chain. The program and polices should be targeted to a specific sector and objective to increase the share in exporting economy.

The study aims to provide a list of projects and interventions to resolve the regional issues of industrial development and competitiveness. As shown in the figure below the four types of areas are identified for the strategic interventions.

Figure 6 Areas of Intervention



The proposed programs and project at the end of the study are targeted to address the issues in the above-mentioned areas.

Perennial Issues and Recommendations

Below table shows the list of issues that are long standing and require a small policy intervention from the relevant stakeholders. These issues do not require any detailed project or program.

Table 9 Perennial Issues

Issue	Recommendation	Responsible
Electricity	Fixed electricity tariff @7.5 cents/KWh and uninterrupted supply	NEPRA
Gas	Consistent RLNG and system gas tariffs	OGRA
Water	Water tariff to be uniform all over the country	WASA

Alternate Energy	Encourage solar integration and extend LTFF for captive alternate energy	NEPRA / SBP / MOC&T
Raw Materials	Liberal imports regime for raw materials (cotton & MMF), export parity support price, enhance cotton yields & PCCC with private sector	MOC&T / Agri Depts
DTRE, Bonds, EOU & Other Export Schemes	Extend to indirect exporter, online processing, enhancement of utilization period, easy certification and resolve procedural issues	FBR / MOC&T
Taxation & Refunds	Simplification of taxation system. Release the outstanding tax refunds (PKR 220 Bn) through cash & promissory notes. Policy for refunds. Rationalization of the 1.25% turnover tax	FBR / MOF
Duty Drawbacks	Continue on value addition as per regional countries & 2% for nontraditional markets (DLTL & DDT)	MOF / FBR
Temporary Importation Schemes	Digitization, ease of approvals, easy regulation, and calculations	FBR / MOC&T
Skills & Training	Subsidy for apprenticeships, dedicated textile trainings, EDF utilization, and funding through government schemes	TEVTA / NAVTTC
Labor Support	ESSI and EOBI rebates, labor law reforms and women hostels near clusters	ESSI / EOBI / Labor Depts

Bank Financing	Mandatory credit disbursements by banks, higher limits (15%), enhance LTFF and expand to building construction, and allow financing of leased machinery	MOC&T / SBP
Technology	Technology Upgradation Fund and markup support	MOC&T / MOST
Trade Policy Rationalization	Improve R&D, encourage backward linkages, rationalization of trade policies and one-window	MOC&T / MOST
Marketing	Warehousing & display centers in PPPs and performance management of trade missions. Easy visa regimes for exporters. Bring buying houses. Liberal utilization of 10% of export proceeds. Incentive for export to side markets.	MOC&T / MOFA / SBP
Market Access	Better trade agreements with China, Canada, and Japan.	MOC&T
Enabling Infrastructure	Plug & play industrial parks (EPZs & SEZs), develop industrial corridors, common facilities, and revival of closed industry	BOI / MOC / Provinces / EPZA

Proposed Projects

Projects of PKR 37.1 billion (Estimated) are proposed below for the regional industrial development of Faisalabad.

Table 10 Proposed Projects

Sr. No.	Project Name	Category	Total Cost in PKR Million
1	132kv Grid Station No. 2 Of 80MW Capacity And 132kv Grid Station No. 3 Of 80MW Capacity in Allama Iqbal Industrial City - FIEDMC	Short Term	1,535
2	Water Supply Works for Industrial Plots/Units Along Main Arterial Road, Chiniot Sahianwala Road and Roads at Both the Banks of Sem Nala in Allama Iqbal Industrial City, Faisalabad-FIEDMC	Short Term	500
3	Establishment of Handicraft Development Centre (HDC) at Kamalia District T.T. Singh	Short Term	88
4	PSIC - 1 Jhang (Self Finance)	Short Term	
5	PSIC -1 Kamalia (Self Finance)	Short Term	
1	Infrastructure upgradation of PSIC Faisalabad	Short Term	100
3	Operationalization of CDC center PSIC Faisalabad	Short Term	400
4	Operationalization of incubation center PSIC Faisalabad	Short Term	400
5	Establishment of PSIC Toba Tek Singh (M4 Interchange)	Short Term	1,000
8	Establishment of design house for apparel sector	Short Term	500
11	PC-II for the establishment of a compliance center for textile and apparel exports	Short Term	100
12	Technology localization center for textile sector	Short Term	5,000
13	Energy efficiency and conservation compliance center for used imported machinery	Short Term	500
15	Provision of Shops to craftsmen in Chiniot	Short term	25
18	Establishment Display Center in Chiniot	Short term	10
19	Establishment of Innovation Center in Chiniot	Short term	25
23	Business and marketing training center in Chiniot	Short term	10
2	Establishment of PSIC –II Faisalabad	Medium Term	2,000

6	Relocation support program for SMEs	Medium Term	1,000
7	Relocation support program for large units	Medium Term	10,000
14	Establishment Of Small Industrial Estate Chiniot	Medium Term	1,000
16	Establishment of Seminar rooms for trainings and community meetings in Chiniot	Medium term	5
20	Establishemnt of Product Development Center in Chiniot	Medium term	20
22	Modern tools facility in Chiniot	Medium term	10
9	Establishment of vertical garments park (PPPA Authority)	Long Term	5,000
10	Establishment of combined effluent treatment plants along the identified corridors and zones	Long Term	10,000
17	Establihsment of Exhibition Hall for yearly exhibitions in Chiniot	Long Term	20
21	Storage for seasoned woodin Chiniot	Long Term	30
	Total		37155