

MASTER PLAN FAISALABAD 2021-2041



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FAISALABAD DEVELOPMENT AUTHORITY
GOVERNMENT OF PUNJAB



ECONOMIC DEVELOPMENT PLAN

FAISALABAD MASTER PLAN (2021-2041)
INCLUDING STRATEGIC PLAN FOR FIVE YEAR

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ABBREVIATIONS

ADP	Annual Development Program
AIIC	Allama Iqbal Industrial city
CPEC	China Pakistan Economic corridor
FBR	Federal Board of Revenue
FBR	Federal Board of Revenue
FCCI	Faisalabad Chamber of Commerce and Industry
FDA	Faisalabad Development Authority
FESCO	Faisalabad Electric Supply Company
FGCC	Faisalabad Garment City Company
FIEDMC	Faisalabad Industrial Estate Development and Management Company
FMP	Faisalabad Master Plan
FUTS	Faisalabad Urban Transport System
GDP	Gross Domestic Product
GIS	Geographic Information System
GOP	Government of Punjab
ISALs	Internal Saving and Lending Schemes
LDA	Lahore Development Authority
MC	Municipal Corporation
MC	Municipal Committee
O&M	Operation and Maintenance
OCL	Osmani & Company Private Ltd.
PBIT	Punjab Board of Investment and Trade
PFC	Provincial Finance Commission
PIEDMC	Punjab Industrial Estates Development and Management Company
PSIC	Punjab Small Industries Corporation
PSS	Punjab Spatial Strategy
SMEDA	Small and Medium Enterprise Development Authority
TMA	Tehsil Municipal Administration
UC	Union Council
UN	United Nations

CONVERSION TABLE

1 meter	= 3.28 feet
1 square kilometer	= 247.1 acres
1 hectare	= 2.47 acres
1 acre	= 43560 square feet

1. ECONOMIC DEVELOPMENT PLAN

1.1 CURRENT SITUATION

Faisalabad is the third largest city of Pakistan in terms of population after Karachi and Lahore. It is located in the Punjab province having resident population of more than 3.2 million. The Faisalabad district includes the following six sub-divisions (tehsils), viz., Chak Jhumra, Sammundri, Jaranwala, Tandlianwala, Faisalabad City and Faisalabad Saddar, out of these Faisalabad City and Faisalabad Saddar tehsils are the most densely populated. Most of the area of both these tehsils falls under the administration of Faisalabad Development Authority FDA. As per the census 2017, population of FDA controlled area is 4.7 million including 3.24 million urban and 1.46 million rural residents. The boundaries of Faisalabad district are surrounded by the districts of Chiniot, Sheikupura, Sargodha, Jhang, Gojra, Sahiwal, Sammundri, Nankana Sahib, Tandlianwala and Okara. The relative advantage in production and agglomeration of textile industries and allied economic activities are rightly linked to the popularity of Faisalabad and to be known as the 'Manchester of Pakistan'.

Close proximity to River Chenab and River Ravi makes the land of Faisalabad more fertile and cultivable for agricultural activities. In addition to that, the city is well connected with other cities through railways, airways, highways and motorways due to it be the principal industrial hubs in the country. These factor advantages led to attract greater investments in diversified economic activities as well as immigration of labor force in this city. To keep the attraction sustainable, it requires effective planning and viable policies to harness new opportunities using the contemporary advance techniques and tools. Any slackness in the required infrastructure and human resource and in size of appropriate investment may cause higher operational costs and hindrance in sustenance of economic development.

In the wake of urbanization and other economic prospects, like China Pakistan Economic Corridor (CPEC), this Master Plan aims to guide Faisalabad District Government to facilitate economic and regional development for the next 20 years. In this pursuit, current economic situation and analysis of development prospects are of critical importance. Hence, the Economic development plan is aligned with the strategic objectives of Punjab Spatial Strategy (2017-2047) which focuses on enhancing the quality of life for all segments of society and develop regions based on their competitive advantage. All the statistics and information used in the analysis is taken from the most relevant, reliable and latest available data from

- Household Integrated Economic Survey,
- Pakistan Social and Living Standard Measurement Survey,
- Labor Force Survey,
- Provincial budget documents,
- Various issues of Punjab Development Statistics,
- Yearbooks of Federal Board of Revenue (FBR),
- Economic Survey of Pakistan,
- Population statistics,
- World Health Organization and United Nations etc.

Based on these critical and noteworthy findings, urban development plan is devised that lead towards the integrated economic development plan.

1.1.1 Population

The city of Faisalabad has been a center of attraction for domestic investors and for the labor force hailing from neighboring districts partly due to its improved industrialized base and agglomeration of economic activities and regional connectivity. Table1 below shows that though Faisalabad city population has been increasing briskly during the last seven decades, from around 0.2 million in 1951 to 3.2 million in 2017 its rate of growth depicted a declining

trend over time, it has fallen from over 8% per annum to around 2.49% per annum during the same period. Additionally, the estimated population for the area administered by FDA was 4.7 million in 2017 that depicted a growth of 2.3%, whereas the population growth of the overall district was 2.0%. The fact that Faisalabad city reflects a more densely populated area with an average of over 19,000 persons living in one km² indicates the potential of urban development in the Faisalabad Saddar tehsils. Hence, among the six tehsils of Faisalabad district including Faisalabad city, Faisalabad Saddar, Summandri, Jaranwala, Chak Jhumra, and Tandlian Wala tehsils, Faisalabad Saddar tehsil is critically important for future urban planning and development.

Table 1-1: Population and Housing Characteristics of People 2017

Year	Population		Population Growth	
	FDA	Faisalabad City	FDA	Faisalabad City
1951	583,503	209,787	-	-
1961	892,232	456,728	4.3%	8.1%
1972	1,503,210	877,357	4.9%	6.1%
1981	1,847,585	1,181,562	2.3%	3.4%
1998	3,064,456	2,140,346	3.0%	3.6%
2017	4,704,252	3,238,841	2.3%	2.49%

Source: PBS – Census statistics

It is also worth noting that population growth of Faisalabad district during the inter census period 1998-2017 has been lower than the overall Punjab province. It is due to the presence of higher population growth in other districts of Punjab including Lahore, Rawalpindi, Rahim Yar Khan, Multan, and Gujranwala. Given their higher population growth compare to Faisalabad district and the FDA area is reflective of the fact that these districts are the epicenter of the migration from other districts before Faisalabad.

1.1.2 Household Size

The average persons per household (HH) in Faisalabad city is 6.32 whereas in FDA area, it is marginally higher at 6.39 person. Historically, the average HH size has been decreasing and pointing towards relative improvement in housing density over time. The average urban household size has declined from 7.33 to 6.31 persons. It has resulted in expected rapid growth in housing sector due to the increase formation of more smaller and/or nuclear household. Table 2 highlights the facts about household size and other housing characteristics.

Table 1-2: Population and Housing Characteristics of the Year 2017

	Area under FDA	Faisalabad City
Population (in numbers)	4,704,252	3,238,841
Population growth	2.28%	2.20%
Area (in km ²)	1,354	168
Population density (persons per km ²)	3,474	19,279
Housing units	736,744	512,284
Household size	6.39	6.32
Owned housing units	79.8%	75.6%

Rented housing units	15.9%	20.4%
Rent-free housing units	4.3%	4.0%

Source: PBS – Census 2017

1.1.3 Population Distribution

Higher population growth in the FDA area as compared to the overall districts indicates migration from other areas into the Faisalabad city and Faisalabad Saddar tehsils. Aside from this, the Faisalabad district has over 55% of its population below 25 years of age. These facts point towards the existing growth potential due to the presence of young human resource as well as the increasing need for employment opportunities.

1.1.4 Housing

The demand for housing increases with the rise in population. Currently there are over 1.2 million housing units in Faisalabad district, 0.74 million in FDA area and 0.51 million in Faisalabad city. According to census 2017, 56% of the urban households in Faisalabad district are living in the housing units of one or two rooms. Around 60% of these urban housing units were constructed more than 10 years ago. Nearly 20% of households are living in rental accommodation in more densely populated Faisalabad city. This percentage is 16% in FDA area, as shown in Table 2, and 13% in Faisalabad district. Most likely, the high population density and high rate of rental accommodations are by-products of multi-story housing units and expensive property prices. It specifies the need of low-cost housing units in the FDA area. New low-cost housing societies are warranted that may partly replace existing housing units at urban localities but with some better planned facilities. The existing urban societies are not appropriately planned due to insufficient and higher per unit cost of required public services, health hazards, and environmental degradation.

1.1.5 Healthcare Facilities

The healthcare facilities in the Faisalabad district and its sub-areas are analyzed in terms of number of hospitals and availability of beds. Table 3 indicates the situation of healthcare facilities in FDA area and Faisalabad city. There are twenty-five (25) public and private hospitals in Faisalabad district, (21) in FDA area and nineteen (19) in Faisalabad city. Furthermore there are approximately 300 dispensaries, specialized centers and clinics available in Faisalabad district. Out of which 146 are in located in FDA area and 64 in Faisalabad city. These centers and clinics include specialized centers/other units like T.B. Clinics, Rural Health Centers, Basic Health Units, Sub-Health Centers, and Maternity & Child Health Centers, etc. Only minor improvements were observed in 2015 in setting up of some new dispensaries and an increasing the number of hospital beds. The number of beds in these healthcare facilities are concentrated in Faisalabad city. Out of the 4425 beds in Faisalabad district, 3,556 are in Faisalabad city. The city contains 41% of the population and over 75% of healthcare facilities in terms of hospitals and beds.

Table 1-3: Situation of Healthcare Facilities

	FDA	Faisalabad City
Healthcare facilities (no. of units)		
Hospitals	21	19
Dispensaries	79	49
Specialized centers	67	15
Number of Beds		
Hospitals	3585	3,532
Dispensaries	0	0
Specialized centers	168	24

Total	3753	3556
No. of beds per healthcare facility		
Hospitals	171	186
Specialized centers	2.5	1.6
Beds per 10,000 persons	8	11
Required no. of beds as per (SDG's maximum threshold of 18 beds per 10000 people)		
Total beds required	8,468	5,830
Deficit	4,883	2,298

Source: Consultant's estimates based on Census 2017, Development Statistics of Punjab-2017

Under SDG-3, Good Health and Well-being is considered as healthcare indicator which defines for access / availability of hospital beds per 10,000 persons. Its earmarked threshold is 18 beds per 10,000 population of the area. However, in Faisalabad city there are 11 beds per 10,000 persons currently available and in FDA area its availability is 8 beds and in Faisalabad district, it is below 6 beds. These facts highlight two important conclusions, firstly, it points towards lack of healthcare facilities in Faisalabad district and secondly, healthcare facilities seems over burdened due to its utilization by the residents of adjoining localities and districts.

1.1.6 Education

The literacy rate among Faisalabad urban residents is higher at 79% than that of its rural residents which stands at 61%. As a whole 70% of the district population is literate. Similarly literacy rate amongst population of FDA area stands at 73% and it is 79% amongst Faisalabad city residents. Literacy rate is higher in Male as compared to females. This disparity is lower in Faisalabad city, where 81% of males and 76% of females are literate. Literate population is taking formal education in both urban and rural areas. Moreover, the literacy rate in Faisalabad district has registered an increase from 52% to 70% during the census periods 1998 and 2017. In male population literacy has increased from 61% to 75% and in females from 42% to 65%. The census 2017 also show higher literacy rate amongst females than males in the age bracket from 10 to 29 years. It reflects potential for increasing number of labor force equipped with skilled manpower and educated labor force. The increase in literacy ratio also increases the employment demand in general, specifically for female groups. Table 4 gives the details about educational facilities in the FDA area and Faisalabad city.

Table 1-4: Situation of Education Facilities for the Year 2017

Statistics	FDA	Faisalabad City
Literacy rate	73	79
Statistics for Primary, Middle, and Secondary Schools		
Number of government schools	1,678	996
Enrolment in government schools	423,557	302,630
Pupil-teacher ratio in government schools	39	43
Estimated total enrolment in schools (government & private)	880,593	632,463
Proportion of government schools' enrolment	48%	48%
Estimated percentage of school going age children currently enrolled	80%	84%
Out of school (Unenrolled) going age children	218,799	124,460
Required Schools (for 100% enrolment of school going age children)	751	383
Required teachers (for the 100% enrolment)	5,491	3,292

Arts and Science Higher Secondary Schools, Intermediate and Degree Colleges (public and Punjab, Federal Govt., PAF and Private Organizations)		
Number of the Higher Secondary Schools & Colleges	115	86
Enrolment in the Higher Secondary Schools & Colleges	60,495	48,297
Teaching staff in the Higher Secondary Schools & Colleges	1877	1399
Pupil-teacher ratio in the Higher Secondary Schools & Colleges	32	35
Total enrolment in all professional and other institutions (higher secondary schools, colleges, & university)	145,306	117,260
Proportion of professional colleges and universities enrolment	58.40%	58.80%
Proportion of boys and girls, between age of 17 and 22, enrolled in all professional and other institutions (higher secondary schools, colleges, & university)	25.20%	29.00%

Source: Consultant's estimates based on Census 2017, Development Statistics of Punjab-2017

1.1.7 School Education

There are about 1000 government primary, middle, and secondary school buildings that exist in Faisalabad city out of the total 2271 schools in overall district. In the FDA area number of schools is estimated to be 1678. Altogether an estimated 0.69 million students are enrolled in these government schools in Faisalabad district, 0.42 million in FDA area, and 0.30 million in Faisalabad city. Population census 2017 however reports that total school enrolments in Faisalabad district is much higher than these numbers, which is largely attributed to the enrollments in private schools. As per estimations, 1.43 million students are enrolled in public and private schools in Faisalabad district, 0.88 million in FDA area and 0.63 million in Faisalabad city. On average, 48% of the students are studying and enrolled in government schools located in Faisalabad district. As far as gender classification is concerned, majority of female (56%) are studying and enrolled in government schools and remaining 44% in private sector schools in Faisalabad city. On the contrary, 40% of the male students are enrolled in government school whereas 60% are acquiring their education in private sector schools of Faisalabad city. Despite this enrolment in public and private schools, over 0.4 million children of school going age (5 to 14 years) are still out of schools. Categorizing them by areas, out of school children in Faisalabad district estimated to be 22% in FDA area and 20% in Faisalabad city. Overall, 16% of the school going age children (5 to 14 years) are still out of schools..

The satisfactory maximum pupil to qualified teacher ratio is 40:1 as per SDG-4. This ratio falls in the required range except for the boys' government schools especially in FDA area and Faisalabad city. In order to reach to the 100% enrollment rate till Metric, it requires up-gradation of existing schools or establishment of new schools and recruitments of hundreds of teachers in overall Faisalabad district.

1.1.8 Colleges and Universities Education

The college and university education start from intermediate onwards. It is classified as (i) professional and university education and (ii) arts and science education. As per the given statistics there are 180 private and public higher secondary school and intermediate and degree colleges in Faisalabad district, out of which 105 are of girls. Keeping the urban / rural educational attainment of intermediate and above, the FDA area has 115 higher secondary schools and colleges and Faisalabad city has 86.

Altogether the enrollment in these higher secondary school and colleges is about 90,000 boys with 51,000 girls. The number of teachers are 2,936, which makes the pupil-teacher ratio falling in the required range. In FDA area more than 60,000 students and in Faisalabad city over 48,000 students are estimated to be enrolled in the higher secondary school and colleges.

Estimated number of total enrollments including both the professional and other arts and science enrollment is 0.21 million in Faisalabad district, 0.15 million in FDA area, and 0.12 million in Faisalabad city. Number of students over and above the students of higher secondary schools and colleges are enrolled in professional colleges, institutes and universities. Altogether 57.9% of students in Faisalabad district, 58.4% in FDA area, and 58.8% in Faisalabad city are enrolled in the professional colleges, institutes and universities. Enrollment in the professional and other colleges, universities and institutes as percentage of the population between 17 and 22 years is 22.4% in Faisalabad district, 25.2% in FDA area, and 29.0% in Faisalabad city. Overall, females are more inclined towards intermediate and higher education. The estimates reveal that 25.3% of the females between ages of 17 and 22 and 19.7% of males between the same ages are enrolled in intermediate and higher education. In FDA area this proportion is 28.6% for females and 22% for males and in Faisalabad city 33.1% for females and 25.2% for males. These situation highlights that males are more content in acquiring basic education (up to college levels) but greater proportion of females inclined towards higher education.

1.1.9 Vocational Education

Very low proportion of people from Faisalabad have acquired diploma or other certifications, which reflects lack of technical trainings or vocational education and their weaker applicability in the industry.

The education situation highlights that males are more inclined towards basic education but females towards higher education. It may have significant impact on employment demand and growth prospects of the district.

1.2 INFRASTRUCTURE

Faisalabad had long been a center of attraction for the business community primarily due to concentration of the textile and associated high value added industries coupled with its significantly improved and greater regional connectivity through provincial highways and road network. However, conditions of internal roads and other associated road infrastructure are more or less same in Faisalabad district as well as in other districts of Faisalabad division. Despite the fact that the area of Faisalabad district is about 33% of the entire Faisalabad division, its road network comprises of around 38% of the roads in Faisalabad division. It indicates that higher mobility and greater connectivity are the most vital aspects of business activities to flourish.

The traffic volume on roads of Faisalabad district is significantly higher that have caused huge traffic congestion as compared to other districts of this division. Motor cars, jeeps, motorcycles and scooters, along with Station Wagons on roads have caused rapid increase in motorized traffic and resulting congestion. In particular, rapid increase in traffic congestion is due to almost two fold increase in motorcycles and scooters on roads from 0.61 million in 2013 to 1.11 million in 2017 in a short span of four years. As a whole number of vehicles on road in district Faisalabad are nearly 1.3 million. More than 40% of these vehicles are on roads of Faisalabad city only, whereas on roads of FDA area these vehicles account for 60%. This highlights the provision of much improved and rapid transport infrastructure in Faisalabad especially inside FDA boundaries. Currently, the Faisalabad Urban Transport System Service (FUTS) are the main bus operators providing bus service to the public, whereas some public-private bus services are also operating here alongside FUTS like Brothers Metro. This suggests the need of proper urban transport infrastructure, in turn demands further development of roads and public transport infrastructure.

1.2.1 Public Utility Services

The major sources of drinking water in Faisalabad district are tap water, electric and hand pumps. Interestingly, larger share of households in Faisalabad district have source of drinking water inside the house as compared to FDA area and Faisalabad city. Nearly 28% of

households have to go outside to fetch drinking water in Faisalabad district, whereas this percentage is 34% in Faisalabad city. It signifies the water supply need inside the houses and the water reservoir for residents of FDA area. Statistics about public utility services for FDA area and Faisalabad city are shown in Table 5.

Situation of sewerage is poor in the overall Faisalabad district. Around 44% of the housing units are connected to sewerage in Faisalabad district, 58% in FDA area and 78% in Faisalabad city. Besides, almost 24% of the housing units are connected with open drains in Faisalabad district. It is 19% in FDA area and 12% in Faisalabad city as well.

Table 1-5: Situation of Public Utility Service in the year 2017

	FDA area	Faisalabad City
Sources of Drinking Water		
Inside	69.8%	66.0%
Tap	14.1%	14.6%
Electric / hand pump	50.4%	45.1%
Others	5.3%	6.3%
Outside	30.2%	34.0%
Tap	4.7%	3.8%
Electric / hand pump	8.8%	8.4%
Others	16.7%	21.8%
Toilet facilities		
Connected with sewerage	57.6%	77.8%
Connected with septic tank	4.3%	2.1%
Connected with open drain	18.9%	12.0%
Pit with slab	13.8%	6.9%
Other	0.7%	0.5%
None	4.8%	0.8%
Cooking fuel		
Wood	31.1%	13.5%
Gas	65.3%	82.6%
Other	3.6%	3.9%
Source of lighting		
Electricity	98.2%	99.0%
Others	1.8%	1.0%

Source: Consultant's estimates based on Census 2017, PBS

Most of the households (over 83%) have access to gas service in Faisalabad city whereas 65% of households in FDA area and 54% in overall Faisalabad district use gas as the cooking fuel. Wood is the other major cooking fuel in the district. It indicates significant demand for new gas connections in the FDA area.

Access to electricity for lighting is available to about 99% of the households in Faisalabad city and 98% of the households in entire Faisalabad district have electricity connection.

The overall analysis suggests the need to improve sewerage system, water supply, and gas supply in the district. New localities must be established in consideration of these utilities to improve the overall living condition of the Faisalabad district.

1.2.2 Water Supply

EXISTING WATER SOURCES

In Faisalabad district both ground water and surface water are available but hardly sufficient for the residents. However, ground water is comparatively saline than surface water. The surface water sources of Faisalabad district are linked with river Chenab from Chiniot Canal, Jhang Branch Canal, and Rakh Branch Canal.

WATER DEMAND

Considering 40 gallon per capita per day as being existing water demand, its consumption estimates turns out to be 315 MGD for Faisalabad district, 188 MGD for FDA area, and 130 MGD for the Faisalabad city. Contrary, the level of current water supply by Faisalabad Water and Sanitation Agency (WASA) to the residents of FDA area stands at 88.5 Million Gallons per Day (MGD). It shows large water supply deficit and under-consumption of water exists in Faisalabad district.

EXISTING WATER SUPPLY

Water and Sanitation Agency (WASA) Faisalabad is solely responsible for water supply in the area falling under its jurisdiction. From the existing sources of surface water WASA supplies 56 Million Gallons Per Day (MGD) water from Chiniot Well-Field Area located near Chenab River through 29 tube wells, 20 MGD from Jhang Branch Canal through 25 tube wells installed at Jhang branch Well-Field area, and 8 MGD through 8 tube wells installed at Rakh Branch Canal which passes through the city. Around 4.5 MGD water is also provided through the surface water treatment at "Jhal Khanuana Water Works" and "Millat Town Water Works". Hence, altogether WASA supplies 88.5 MGD water from all available sources. It requires other water sources or new reservoir in bridging the gap in existing water supply and demand to the FDA area, which demands more than double of the existing supply.

1.2.3 Sewerage and Drainage

Faisalabad has a sewerage and drainage system with a capacity to treat 20 MGD wastewater and almost over 78% of the households are connected with the disposal stations. However, the actual sewerage water generated by Faisalabad is approximately 280 MGD. It suggests significantly higher slackness in sewerage water treatment capacity exists in WASA's system

1.2.4 Solid Waste Management

Faisalabad Solid Waste Management Company was established by the City District government Faisalabad and was given the task of collection of solid waste and its dumping into allocated and requisite locations.

1.2.5 Electricity

Faisalabad Electric Supply Company (FESCO) is responsible to supply electricity to the entire Faisalabad district to operate under the license from NEPRA (National Electric Power Regulatory Authority).

1.3 ECONOMIC ENGINES OF THE CITY

1.3.1 Agriculture

Pakistan is still predominantly an agriculture-based economy given the sizable labour force associated with this sector. Similar trend one may also observe in Punjab where 40% of its labor force earns their livelihood from agriculture sector. Contrary, due to greater urbanization in Faisalabad, a lesser proportion of labour force is engaged with agriculture sector. The estimated shares of labour force affiliated with agriculture sector are: Faisalabad district (28%), FDA area (19%) and Faisalabad city area (4.5%) only.

Agricultural activities in Punjab are vital for the whole country. Punjab province geographical area comprise 26% of the national geographical area whereas, its cultivated area under various crops accounts for 57% of the total national cultivated area. Similar pattern is observed in Faisalabad district and in FDA area that respectively consists 0.7% and 0.2% of the national area contrary to its 2.2% and 0.4% share in national cultivated area. This reflects a little but relatively higher contribution in the agricultural activities as compared to its area.

Unfortunately, agriculture sector contribution in national value added is much less as compared to other sectors including industries and services. It can be demonstrated by comparing sectoral shares of labor force with its estimated gross domestic product (or gross regional product (GRP), National statistics shows that 39% of the agriculture labor force contributes only 19% in national GDP. Nearly alike pattern is observed in Punjab and Faisalabad as well. In Punjab, 40% of labor force engaged in agriculture contributes 20% in GRP, in Faisalabad district agriculture contributes 13% in its GRP, and in FDA area agriculture contributes 8% in its GRP and in Faisalabad city merely 1.8% of the city's GRP. A large majority of agriculture labour force sector are either illiterate or have lower education levels, matric or below. This is perhaps the most critical reason for lower agriculture productivity.

The cropping pattern of major crops at national, provincial and district Faisalabad level is more or less similar. The major crops include wheat, rice, cotton, and sugarcane. Development statistics of Punjab shows that 70% of the area sown both at national and in Punjab is attributed to these four crops including 67% in Faisalabad district. Punjab having cotton, and 64% of sugarcane. In Faisalabad district where 3.8% of country's population lives, contributes 3.7% in country's wheat production, 0.8% in rice, 0.6% in cotton, and over 8% in sugarcane output. Interestingly, Faisalabad's agriculture production is tilted towards sugarcane followed by wheat. It does not produce more cotton despite the greater concentration of large textile industry. Apparent reason behind this pattern perhaps is the lower yield per hectare of cotton, and rice in Faisalabad. The other crops sown in Faisalabad include linseed, canola, and guava.

1.3.2 Industries

The contribution of industrial sector in the national, provincial and local GDP / GRP and in provision of employment is considerably large. Its estimated sectoral share in the national and provincial GDP / GRP has been hovering between 21% - 22% for the last several years. Moreover, share of labour force engaged with industries relative to its contribution in national, provincial and area specific GDP / GRP including FDA and Faisalabad city area is also worked out and that vary by area.

The contribution of industries in provincial GRP of Punjab is estimated to be at 22% as compare to its share of 25% in labour force. Moreover Industrial contribution in district and FDA area GRP is 28% each, and in Faisalabad city its share is 29%. Contrary share of associated industrial labor force is about 35% in Faisalabad district, 38% in FDA area, and 43% in Faisalabad city. The critical point to note is generation of lower industrial value added relative to labour force engaged in FDA area and Faisalabad city as compared to overall Punjab. As 25% of labor force contribute 22% in the provincial GRP and 43% of labor force contributes 29% in GRP of Faisalabad. This suggests that the industrial sector of Punjab is producing higher value-added product as compared to Faisalabad. The lower industrial share of GRP in Faisalabad city may signify either the lower productivity per employee or the use of comparatively old and outdated plant and machinery due to lower investment in BMR in Faisalabad.

The city of Faisalabad falls under the Regional Economic Hub in the system of cities and growth infrastructure strategy designed for Punjab where major concentration of industrial units of textile and clothing, chemicals, transport and basic manufacturing are located. The statistics related to number of factories located in Faisalabad division clearly show a pre-dominance of Faisalabad district among all the six districts of this division. As per development

statistics over 82% of the total factories of Faisalabad division are located in Faisalabad district, accommodating over 86% of the employees of the entire Faisalabad division. It shows that higher concentration of factories and workers led to increased employment opportunities. Consequently, the average employment per factory located in Faisalabad district is significantly higher than that observed in other districts.

The city industrial growth commences with the establishment of numerous small scale cottage units by the local entrepreneurs and that within a short span of time graduated to many established SME's and further to large scale units. This fast pace industrial development in SME's primarily attributable to local entrepreneurial acumen that had utilised the power loom boom for setting up of several units in small spaces all over the city. Presence of large yarn market as a source of raw material for finished textile goods and its forward linkages to domestic and international markets helped accelerated the production and sales volume further. This fast pace industrial growth in Faisalabad city poses many challenges including unplanned spread of SME's in all over the city including centre city residential areas causing congestion, environmental hazards besides adding inefficiencies. Below maps provide the location of industrial spread in the Faisalabad city.

Industrial landscape of Punjab clearly establishes the importance of Faisalabad given its predominant role in industrial sector activities. The available statistics suggests that a total of 46,357 (75%) active industrial units are located in the four major concentrations of Punjab with the highest number of industries 12985 (28%) are situated in Faisalabad, followed by 27.3% in Golden Triangle, 14.6% in Lahore and 4.3% in Multan.

Industrial clustering of Faisalabad show a dominating role of small and medium scale industries in provision of employment to the city residents. The available statistics shows that from a total of 12985 industrial units in Faisalabad, 12,492 (96.2%) consists of small scale units having employment size of 1-50 workers, followed by 372 (15.1%) medium scale units with an employment level between 51 to 250 and about 121 (0.9%) large scale industrial units having employment levels of 251+ workers. These industries are occupying nearly 267,314 workers with highest 137,018 (51.3%) workers are absorbed in small scale units followed by 90,027 (33.7%) highly skilled and professional workforce are attached with the large scale industrial units and 40269(15.1%) workers are dependent to the medium size industries for their livelihood Altogether small and medium size units (SME) is the mainstay of city industries.

Table 1-6: Ranking by Industry and Employment Concentration in Faisalabad

Rank	Sectors	Firms in No.	%	Sectors	Employees in No.	%
1	Textiles	7,353	56.6%	Textiles	167,214	62.5%
2	Other Manufacturing	1,189	9.2%	Wearing Apparel	35,358	13.2%
3	Food Products	942	7.3%	Food Products	18,728	7.0%
4	Printing and Reproduction	582	4.5%	Other Non Metallic Mineral	7,097	2.7%
5	Wearing Apparel	555	4.3%	Printing and Reproduction	6,602	2.5%
6	Machinery and Equipment N.E.C	414	3.2%	Chemicals and Chemical Products	5,445	2.0%
7	Other Non Metallic Mineral Products	385	3.0%	Machinery and Equipment N.E.C	4,545	1.7%
8	Rubber and Plastic Products	315	2.4%	Rubber and Plastic Products	4,298	1.6%

9	Paper and Paper Products	268	2.1%	Paper and Paper Products	4,158	1.6%
10	Furniture	246	1.9%	Other Manufacturing	3,346	1.3%
11	Fabricated Metal Products	188	1.4%	Beverages	2,287	0.9%
12	Chemical and Chemical Products	186	1.4%	Furniture	1,805	0.7%
13	Motor Vehicle, Trailers etc	79	0.6%	Fabricated Metal Products	1,547	0.6%
14	Wood and Wood Products	69	0.5%	Basic Pharmaceuticals	1,074	0.4%
15	Basic Metals	64	0.5%	Coke and Refined Petroleum	809	0.3%
16	Miscellaneous	150	1.2%	Miscellaneous	3,028	1.1%
Total		12,985	100.0%	Total	267,341	100.0%
		(28% of Punjab)				(24.2% of Punjab)

Source: The Urban Unit, Punjab

However, the pattern of industrial concentration and its share in city employment clearly reflect predominance of textile sector given its 60% share in total industrial units of Faisalabad (see Table 6) followed by 9.2 % units of other manufacturing and 7.3% units of food sector. Other sectors in order of importance include: printing and reproduction, machinery and equipment N.E.C, non metallic mineral products, rubber and plastic products and so on.

The importance of textile in Faisalabad is also evident given its high share in the total employment of Faisalabad. Textile sector absorbed 202,572 (75.7%) workers in the total industrial workforce of Faisalabad. The role of all 15 industrial sectors in employment is given in the Table 6. In the context of textile sector this workforce is productively employed in various textile sector units and facilities as given in table 7.

Table 1-7: Number of Textile Units by Classification

Type of textile industrial units	Quantity
Spinning & Composite Mills	73
Power Looms (Standard & Auto)	>300,000
Shuttle-less Looms / Air Jet Looms	>9000
Sizing Units	>100
Textile Processing, Printing & Finishing Units	>250
Hosiery & Knitwear Units	>1500

Source: The Urban Unit, Punjab

Table 8 provides statistics on sectoral share of employment. According to the table 39% of the city labor force is attached to the manufacturing sector followed by 27% workers are engaged with the wholesale and retail trade services for earning their livelihoods. These two sectors combined contributes two third in the city employment The share of other important sectors in the city employment generation are construction (5,9%), transport (5.6%), other services (4,6%), education (4.3%), agriculture (1.4%) healthcare (1.3%) and so on.

High value-added textile product from Faisalabad is exported to many countries including USA, U.K and other European and Middle Eastern countries. Estimated \$ 5.5 billion annual earnings are being derived from textile exports which is about 45% of the country exports. Key textile groups of Faisalabad include Nishat, Sitara, Interloop, Crescent, and many others. Apart from textiles various other important industries are also located here and playing an important role in provision of employment to the local population. These industries include chemicals, food, foundry, and agro processing and pharmaceuticals sector.

Following table provide the city economic structure and the role of various sectors in generation of city employment.

Table 1-8: Sectoral Share in Employment-Faisalabad

Sr. no.	Sectors	Percent
1	Manufacturing	39.10%
2	Wholesale & Retail	26.90%
3	Construction	5.90%
4	Transport	5.60%
5	Other Services	4.60%
6	Education	4.30%
7	Accommodation	3.00%
8	Activities of Home	2.50%
9	Agriculture	1.40%
10	Healthcare	1.30%
11	Public Administration	1.00%
12	Financial and Insurance	1.00%
13	Water Supply and Sewerage	0.90%
14	Professional	0.60%
15	Real Estate	0.50%
16	Administrative	0.50%
17	Electricity, Gas	0.30%
18	Information and Communication	0.30%
19	Arts, Entertainment	0.20%

Source: The Urban Unit

1.3.3 Services

Services sector comprises wholesale and retail trade sector, banking and insurance, communication and transportation sector including air, sea and road transport, education and health services etc. Services sector contributes much higher and enhance livability globally and particularly in urban economies. Faisalabad current economic structure is suitable and supportive to enhance share of services sector particularly by investing in IT and communication and other allied services. Given the large domestic market of high value added textile and clothing, use of IT and its connectivity will provide large market access. Further potential of IT and IT enabled services including software exports and E-Commerce has a greater scope and need to be explored by promoting private sector through facilitation and incentives.

It is Important to point out that the contribution of services sector in the national GDP appears to be the highest at 60% with its workforce share of 37% in the national labour force. This

pattern is even more overwhelming in urbanized areas. In Punjab 35% of the services labor force contributes 58% in its GRP, whereas respective labour force and GRP shares for FDA area are 44% and 64%, and in Faisalabad city these shares are 53% and 70%. Despite hosting large textile industry, major share of employed labor force are in services sector in Punjab.

This pattern is partly evident from the distribution of labor force by occupation in Faisalabad city. A thin 22% of the labor force work in industries either as plant and machine operators, or as assemblers and/or as technicians and associate professionals and majority of them are males.

In 2017-18, the total GRP of Punjab is 18.4 trillion which becomes 53% of the country's GDP, that roughly equals to its provincial population share. Given that 60% of the national labour force are working in Punjab, producing 53% of the national GDP, it's per employee total productivity seems to be somewhat lower. To examine relative performance sectoral / total productivity shares are also worked out for Faisalabad district, FDA area, and Faisalabad city alongside Punjab and the country. The comparative figures show that Faisalabad city producing higher per capita GRP of Rs. 176,837 in comparison to Punjab per capita GRP of Rs 166,886. Moreover Faisalabad district and FDA area per capita contribution in their GRP is relatively less than the average per capita provincial GRP. Similarly, Faisalabad city is performing better while comparing its per capita GRP with somewhat lower national per capita GDP figures. Moreover Faisalabad city comprises of 1.56% of country's population and 1.37% of country's labor force but produces 1.65% of the Pakistan's output. As a whole this situation reveals lower per capita GRP in Faisalabad district and FDA area and higher in Faisalabad city in comparison to national and Punjab province per capita GDP / GRP.

Figure 1 depicts the commercial areas in Faisalabad city and FDA controlled area. It suggests that the commercial areas are spread across Faisalabad city and the expansion can be observed along with the major roads going out of Faisalabad into FDA controlled area. The expansion is likely to evolve in the similar direction and likely to concentrate in the entire FDA controlled area later

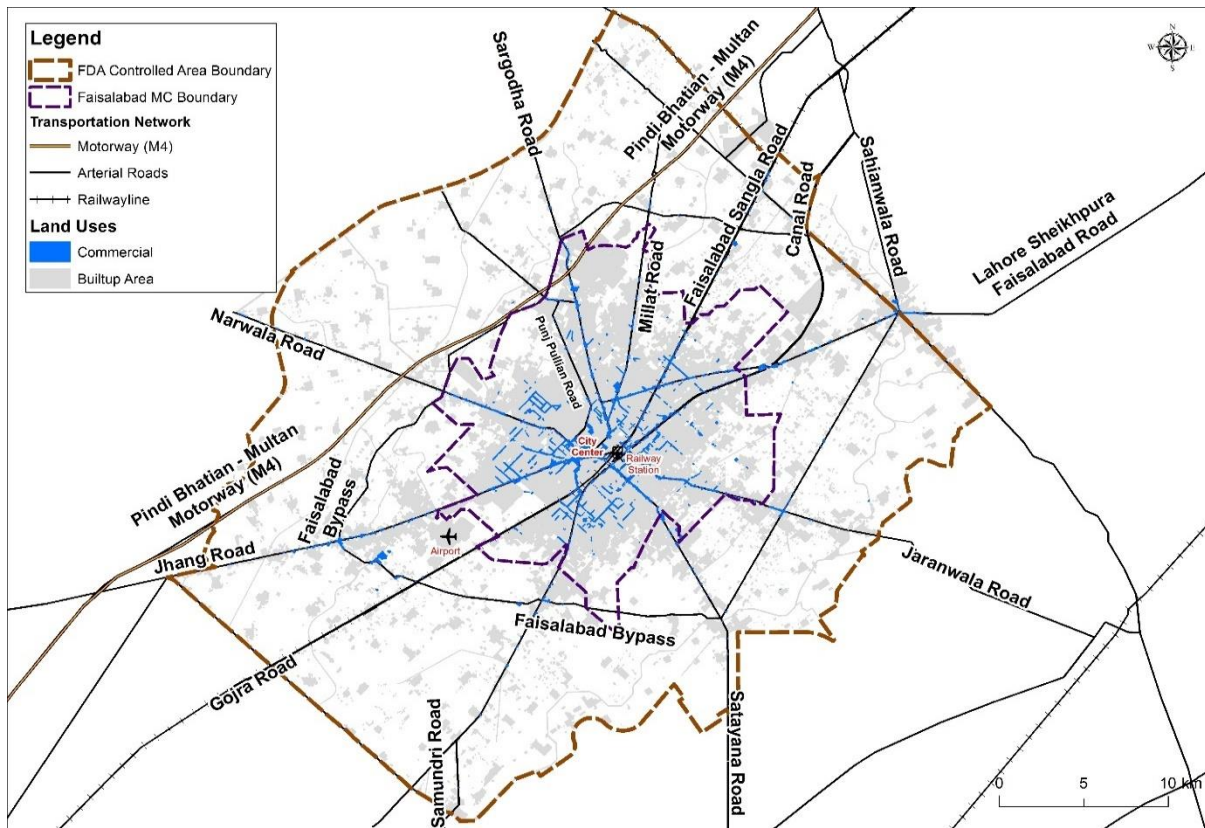


Figure 1-1: Commercial Areas in Faisalabad

1.3.4 Labour Force Participation by Occupation, Education and Gender in Faisalabad

The employment conditions in Faisalabad are reviewed given its overall labor force participation rate (10 years and above) which stand at 41%. This somewhat lower labour force participation is due to lower female labour force (17%) participation in comparison to their male counterparts whose share is about 65%. It is worth noting that despite attainment of higher and even to some extent professional qualification by women at large, their participation rate in economic activities finds significantly lower. It is more pronounced in urban areas with their 9% participation and somewhat higher at 26% amongst rural area females. Contrarily the female unemployment rate is significantly higher in the urban areas (11.2%) as compared to rural areas (2.8%) As a whole unemployment rate had been 4.3% in 2014-15.

Apart from rural urban labour force disparity as enunciated above, the overall labor force participation in FDA area is estimated at 40% whereas it is 37% in the Faisalabad city. The unemployment rates in these areas are higher as compared to overall Faisalabad district due to the higher female unemployment rate and lack of employment opportunities to urban females.

The pattern of employment in Faisalabad city as depicted by employees occupation category indicate that most of the male labor force have occupied jobs as service and sales workers, craftsmanship and related trades, besides plant and machine operators, and elementary occupations. Contrary, female labor force finds more attraction in crafts and related trades, professional jobs, and elementary occupations. Moreover Faisalabad district level figures by occupation distribution show some deviation due to the larger absorption of its workers engaged with skilled agricultural, forestry, and fishery work. It is due to the higher proportion of rural population in Faisalabad district as compared to the city.

Quantification of population and labour force participation (10 years and above) by their levels of education is worked out by gender. It shows that composition of male and female population are respectively about 51% and 49 % in all the three areas of Faisalabad including Faisalabad district, FDA area, and Faisalabad city. Amongst males, labour force participation somewhat varies by location as it is 78% in Faisalabad district, 82% in FDA area, and highest at 87% in Faisalabad city. The overall distribution of labor force and population by educational attainment is almost similar in all respective areas. However there exist differences in population and labor force by their levels of education and gender. It is clear that labour force participation increases with the levels of educational attainment amongst both males and females as reflected by the higher share of more qualified i.e; either attained intermediate / graduation degree and/or having master degree. It is more pronounced amongst female residents in more urbanized area of Faisalabad city. In FDA area, 2.7% of the females having attained master's degree or above their labor force share is 3.5% (see Table 9). In Faisalabad city, the respective percentage shares are 3.3% in population and 6.3% in labor force.

Table 1-9: Distribution of Occupation by Gender in FDA Area

Occupation	Male	Female	Total
Service & sales workers	18.50%	1.30%	19.90%
Craft and related trade workers	13.20%	4.00%	17.20%
Skilled agricultural, forestry, and fishery workers	10.00%	6.40%	16.40%
Plant and machine operators, and assemblers	15.40%	0.60%	15.90%
Elementary occupations	9.60%	3.30%	12.90%
Technicians and associate professionals	5.30%	0.10%	5.40%
Managers	4.90%	0.10%	5.00%
Professionals	2.80%	2.20%	5.00%
Clerical support workers	2.20%	0.10%	2.30%
Total	81.90%	18.10%	100.00%

Source: Consultant's estimates based on LFS 2014-15

This analysis directs us to adopt three-pronged strategy for employment and labor force. First increase focus is required to enhance female labour force participation in urbanized Faisalabad i.e FDA area and Faisalabad city. Second it demands higher investment to generate more employment opportunities with simultaneous curbing of high prevailing unemployment rate in urbanized areas. These opportunities are more likely to exist in the manufacturing and services sectors. And third, targeted efforts are needed to develop labour force in professional technical, managerial and highly skilled categories and more training opportunities are warranted to accelerate the pace of economic development in Faisalabad city and district.

1.3.5 Growth Potential

The Punjab Business Plan 2047 developed by Urban Unit aims at developing economic prosperity for the large population of Punjab. This plan identifies existing and potential economic growth sectors and clusters to achieve high growth and derive synergies for the economic development of the province and various urban / rural areas including Faisalabad. As per the business plan Faisalabad falls in the 17-economic regions of Punjab. It has identified priority industrial growth sectors and clusters for Faisalabad in which it has comparative advantage and competitive edge. These focus sectors are textile and clothing, chemicals, transport, basic manufacturing and maize. It prioritizes clusters for Faisalabad and include i) agro and food processing, 2) textile and clothing, 3) mixed / hybrid, 4) light engineering, 5) high-tech (technologies), 6) auto and parts, 7) chemicals and minerals, 8) logistics and cargo, 9) financial and support services. Moreover further diversification in the industry and services using both conventional sectors and hi-technology sectors based on competitiveness for urban cities and Faisalabad are recommended to move towards high and

fast pace economic development. It is possible in the forthcoming industrial estates with improved infrastructure facilities at these sites will also provide competitive edge to the Faisalabad businessman and entrepreneur along with other potential investors. At present, share of industrial sector in the provincial GDP is 17.5% and the target is to take this up to 23% of the GDP by 2030. This will be achieved through reduction in the share of agriculture sector.

To achieve high growth provincial target business plan also lists existing and future top 10 export sectors. At present textile and clothing are the two top export sectors and the major part of this export come from Faisalabad. Government future business plan also lists high value added clothing and textile products on the top followed by in order of priority manufacturing of electronic components, processed food, IT and consumer electronics, textile, transport equipment, chemicals, non electronic equipment, leather products and fresh food.

Besides, Faisalabad as the third largest and one of the most densely populated city of Pakistan, well connected with the national highway and motorway with rest of the region and country, having international airport and railway network has significant potential for tourism. It has many historical and recreational tourist sites. These include historical Clock Tower, Qaisery Gate, Lyallpur Museum, Gumti Fountain. Moreover Jinnah Garden, Hockey Stadium and Gatwala Wildlife Park also attracted many visitors and tourists. These tourist sites need to be properly maintained and wherever required facilitation services to be provided to generate public attraction. An appropriate fee and charges may be imposed on visitors to maintain these places. Few of these sites may be handover to private sector on contract basis.

The scope of development and the use of Information and Communication Technology (ICT) along with soft and hardware development in promoting business and their by earnings is enormous. Faisalabad possesses adequate number of working professionals and IT trained human resource and they require appropriate window for further growth. According to report the city has about 160-IT companies with over 5000 employees. There are more than 2,000 freelancers as well these companies and freelancers are generating about \$ 200 million. Given the huge global market of about \$ 550 billion the share of Pakistan is very low. To enhance the share of Pakistan in the global market, Technology parks, co-sharing and virtual infrastructure is required in this sector in bringing efficiency and reducing cost of doing business. Moreover, adequate number of quality IT professionals and qualified trained individuals are needed in this field with IT education and training from high learning institutes and training centers and Universities.

1.4 GOVERNANCE

The major authorities in governance hierarchy are provincial and local governments. The provincial government of The Punjab finances major development projects through Faisalabad Development Authority (FDA), whereas WASA Faisalabad is responsible for the provision of water supply at local levels, maintain sanitation and drainage systems, and local government look after local and municipal roads and streets. The revenue assignment and capacity of local councils is apparently not very significant, and accordingly the provision of financing and revenues stands at quite lower levels.

The most important point is the involvement of multiple governments, authorities, agencies, departments in the urban management of Faisalabad. The government of Punjab, Department of Communication and Works, Housing Urban Development and Public Health Engineering Department, Provincial Highway Punjab, Environment Protection Department, Punjab Housing and Town Planning Agency, The Urban Unit Punjab, Forests Department of Punjab Parks, and Horticulture Agency Faisalabad are involved at provincial level. City District Government Faisalabad, Traffic Police, Rescue 1122, and Town Municipal Administration (TMAs) are working at district and local government level and Faisalabad Development Authority (FDA) taking part in the development of Faisalabad city and its surrounding areas falling under its control.

Another important aspect is the governance of FDA which is working under the Punjab Development of Cities Act, 1976 has several members including Chief Minister as its Chairman, and Mayor, and other members from provincial government departments and technical experts etc. The authority has power to 'initiate and maintain a continuous process of comprehensive development planning for the area with the objective of preparing a development plan'. Mayor as representative of local government is the member of the FDA has a limited authority in the presence of Chief Minister as Chairman and other members who are also from provincial government. This confines the role of local government in the planning and development of the Faisalabad city. Punjab Local Government Act 2013 restructured the local government and its functions contrary to the earlier Local Government Act 2001. Besides this, there are separate District Education and Health Authorities having their Chief Executive Officers appointed by the provincial government. This multiplicity of institutions / authorities / working bodies makes the system for public service provisions more complex and looming. This warrants reforms in the overall governance structure, more likely, under one unified command of Mayor of Local Government. Also high powered Steering Committee is proposed where representative of multiple agencies and authorities at all levels of governments are members to resolve issues and matters pertaining to local government development, operation and maintenance of services; through its resolution by critical decision making and effective coordination. Steering Committee also proposed to be chaired by elected Mayor of the local government.

1.4.1 Provincial and Local Finances

The allocated budget for Local Government & Community Development Department (LG&CD) in Faisalabad is very low and barely reaches to Rs.1, 002 million including allocations for Annual Development Programme (ADP). The provincial budgetary allocations and transfer receipts to the local government department of Punjab was Rs.368 billion in the year 2017-18 and that was later revised down to Rs.349.5 billion. The budgetary figure stood at Rs.444.9 billion in 2018-19 which had also revised downward to Rs. 434.7 billion, also in 2019-20 the budgetary transfer figure was at Rs.442.4 billion. These transfer figures to LG&CD department as reported in relevant year's White Paper of Punjab are not detailed and clear as only part of it to be transferred to Local Governments of Punjab under the PFC Award. This is essentially for meeting local tiers recurring expenditure requirements. Beside health and education agencies budget financing. If transfers to local governments are based using population criteria then Faisalabad district would get around Rs.25 billion in 2017-18 and Rs.32 billion in 2018-19 and 2019-20 whereas it has received only about Rs. 2.6 billion (see table 21) to all the 9 local councils in Faisalabad including FMC that has received Rs.1.07 billion in the year 2017-18. The total number of union councils in urban areas of Faisalabad District are 157, whereas in rural areas the corresponding figure stands at 189. It is thus clear that various layers of local councils receive limited funds from the PFC award. The current magnitude of provincial transfer receipts barely meet local council's current expenditure and a limited amount left for development. However these provincial transfer to local councils need to be enhanced to adequately finance both recurring and development functions.

1.4.2 Levels of Local Finances and Tax Collection

Local councils in Punjab so as in all other provinces derive their fiscal powers and authority according to their local government acts. These fiscal powers including both revenue and expenditure functions vary by type of urban and rural local councils. As per Local government Act 2013 Faisalabad city enjoys the status of Municipal Corporation besides Faisalabad district has four TMA Corporations including Layalpur town, Iqbal Town, Chak Jhumra town and Tandianwala Town. It is clear that local councils in general have limited fiscal powers and occupy less buoyant sources of revenues. Property tax is the major local tax besides other minor taxes. Property tax is highly under exploited partly in the presence of various concessions and exemptions and partly due to lack of fiscal efforts confines its revenue base

to its true potential. This phenomenon limits the local finances from its own source revenue basis and resulting lower overall local tax collection in Faisalabad.

The main source of income for Faisalabad Municipal Corporation (FMC) is the provincial transfer receipts in account of Provincial Finance Commission (PFC) Award for meeting their expenditure requirements. FMC has received Rs. 1.07 billion from PFC transfer receipts that include non-development grants of Rs 834 million and development grants of Rs. 232 million. All other local councils due to smaller in size have received much lesser amount in account of PFC transfers.

1.4.3 Existing Problems with Taxation, User Charge Structure and Related Improvement

In accordance with the Local Government Act 2013, the powers of Local government have been limited with fewer expenditure assignments. Their development largely hinges upon provincial financial allocations in account of Annual Development Plan (ADP) and transfer receipts from Provincial Finance Commission (PFC).

FBR yearbook publishes collection of federal tax revenues from income and corporate tax (direct tax), general sales tax (GST), import duties and federal excise duties for various taxation zones including Faisalabad Division. This reflects the potential of Fiscal and economic base of various taxation zones in the country. The magnitude of net federal tax collection from its taxes in Faisalabad division hovering around Rs. 22 to Rs 44 billion during the periods 2013—2018 (see Table 10). The major tax collected pertains to the direct tax, followed by sales tax on imports and domestic goods. The direct taxes and sales tax on imports have consistent upward trend, while sales tax on domestic goods have been somewhat volatile. The numbers of income and sales tax filers from Faisalabad according to FBR are 198,113 and 14,650 respectively.

Table 1-10: Tax Collection by FBR from Faisalabad Division

Taxes		2013-14	2014-15	2015-16	2016-17	2017-18
Sales Tax	Gross	6,696.3	7,725.2	8,320.1	11,811.5	7,370.0
	Refund	3,684.9	5,530.9	6,886.7	1,949.2	5,605.0
	Net	3,011.4	2,194.3	1,433.4	9,862.3	1,765.0
Direct taxes	Gross	15,837.5	18,767.8	20,622.5	21,170.0	27,153.0
	Refund	202.0	325.4	535.8	257.0	398.5
	Net	15,635.5	18,442.5	20,086.7	20,913.0	26,754.5
Federal Excise Duties	Gross	265.1	392.2	375.2	150.6	147.6
	Refund	-	-	92.9	-	-
	Net	265.1	392.2	282.3	150.6	147.6
Sales Tax on Imports	Total	3,433.0	4,091.0	11,002.0	13,011.0	15,104.0
Total Tax collection by FBR (Net)		22,345.0	22,345.0	25,120.0	32,804.4	43,936.9

Source: FBR Yearbook 2017-18

The Provincial sales tax collected by Punjab Revenue Authority (PRA) between the period from 2012-13 to 2017-18 stood between Rs.90 and Rs.130 billion. According to per capita provincial tax, the size of overall sales tax on services from Faisalabad roughly comes to around Rs.12 billion to Rs.17 billion. Hence, tax collection had been roughly between Rs.34 billion in 2013-14 to around Rs.61 billion in 2017-18. The estimated GRP of Faisalabad division in 2017-18 is 1,761 billion. Roughly estimated Tax-to-GDP ratio of Faisalabad is around 3.4%, which is significantly lower than the comparative national figure of Tax-to-GDP.

1.4.4 Annual Development Program (ADP)

The provincial ADP allocations to Faisalabad and other districts in Punjab are financed primarily by the provincial government given their available resources that may vary over time. In case of Faisalabad ADP allocations, they had not been very consistent in terms of budget size and sectoral priorities. The provincial ADP budgetary figures for Faisalabad was Rs.20.2 billion in 2017-18 that had dropped to merely Rs.7.3 billion in 2018-19, followed by Rs.8.8 billion in 2019-20. In the fiscal years 2017-18 and 2018-19 under special initiatives textile industry have been provided relatively higher priority in the ADP allocations. Besides this, priorities have also been emphasized for other important sectors including urban development, roads, water and sanitation followed by health and education sectors in the years 2017-18, 2018-19, and 2019-20. Despite this, the size of development allocations to Faisalabad have been extremely volatile reflecting lack of consistency and prioritization in short to medium run period. Total sector-wise allocations under development program and the relative share are given in the Table 11.

Table 1-11: Allocation under Development Plan to Faisalabad

Sector	Provision for 2019-20		Provision for 2018-19		Provision for 2017-18	
	Total	%	Total	%	Total	%
Urban Development	3,547	40.1%	808	11.1%	1,538	7.6%
Industries, Commerce & Investment	1,500	17.0%	4,000	54.9%	10	0.0%
Roads	913	10.3%	456	6.3%	3,025	15.0%
Specialized Health Care & Medical Education	837	9.5%	211	2.9%	488	2.4%
Agriculture	575	6.5%	256	3.5%	765	3.8%
Water Supply & Sanitation	449	5.1%	175	2.4%	1,255	6.2%
Sports & Youth Affairs	217	2.4%	87	1.2%	409	2.0%
Higher Education	206	2.3%	273	3.7%	514	2.5%
Primary & Secondary Healthcare	190	2.2%	435	6.0%	1,022	5.1%
Public Buildings	174	2.0%	83	1.1%	268	1.3%
LG&CD	97	1.1%	49	0.7%	198	1.0%
Energy	40	0.5%	40	0.5%	105	0.5%
Social Welfare	39	0.4%	126	1.7%	166	0.8%
Population Welfare	35	0.4%	23	0.3%	-	0.0%
Emergency Service (1122)	15	0.2%	-	0.0%	-	0.0%
Irrigation	5	0.1%	-	0.0%	-	0.0%
Forestry	3	0.0%	10	0.1%	14	0.1%
Governance & Information Technology	1	0.0%	1	0.0%	-	0.0%
School Education	-	0.0%	258	3.5%	1,108	5.5%
Livestock & Dairy Development	-	0.0%	0	0.0%	5	0.0%
Special program / initiatives	-	0.0%	-	0.0%	9,150	45.3%
Special education	-	0.0%	-	0.0%	51	0.3%
Wildlife	-	0.0%	-	0.0%	42	0.2%
Population planning	-	0.0%	-	0.0%	40	0.2%
Fisheries	-	0.0%	-	0.0%	32	0.2%

Total	8,842	100.0 %	7,291	100.0%	20,204	100.0 %
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Source: Multiple Provincial Budgets of Punjab

1.5 ANALYSIS

1.5.1 Strengths, Weaknesses, Opportunities and Threats for Urban Development

Where does Faisalabad (FDA area) stand? We can identify strengths, weaknesses, opportunities, and threats in the physical, social and economic characteristics, infrastructure, and governance in the wake of upcoming developments, like CPEC. From this section onwards, Faisalabad represents FDA area, unless specified for district or city.

Covering 60% of the population in the second largest district in Punjab by population FDA area certainly has a significant potential of large labor force and consumer market. Younger and comparatively literate population and labor force capable of producing high value-added goods and services. Female literacy is also an indicative factor of future higher literacy in the region. Over 80% of its labor force is absorbed in the industrial and services sectors thus reflects its comparative advantage in comparison to several other districts of Punjab where nearly 60% of their labor force is engaged with industrial and services sectors. Concentration of industrial and services sector has its benefits eminent from its lower per unit cost of production, ability and high potential to avail benefit from new development, and bright prospects for new investments. In fact, its physical, social, and economic characteristics are the strengths of Faisalabad, but the quantity and quality of its infrastructure, governance, and some other characteristics seem clear hindrance and come up as threats. These aspects are discussed below.

In Faisalabad an estimated 0.22 million children between the age of 5 and 14 are out of the schools at present. This fact points towards an important challenge in meeting Goal-4 of the Sustainable Development Goal (SDG), which state 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Its first target is; 'by 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.' It requires 100% enrolment of the school going age children. Moreover besides school education, the higher education including college, university education and professional education, females are enrolled more than males. This results in 14% of the males and 15% of females in Faisalabad having intermediate and higher education.

Despite slightly higher female enrollments in higher education their labour force participation appears low reflecting by their significantly lesser share at 18% compare to 82% males in this category. Another weakness of urbanized Faisalabad (FDA Area) is their lower overall labor force participation at 30% as opposed to 35% in overall Punjab. It is due to the higher labor force participation among rural area residents as compared to urban. Moreover larger proportion of labor force are engaged with the industrial and service sector in FDA area in comparison to national and Provincial figures but their average productivity per employee in FDA area is found significantly lower suggesting relatively lesser value addition in Faisalabad. This may attribute to the fact that somewhat inefficient production processes may be exercised or lack of use of modern technology in production.

The healthcare infrastructure and utilities services are also appeared somewhat lacking in Faisalabad. Healthcare infrastructure services further pressurized due to its extensive use by residents of adjoining districts / localities where the quality of services are either poor, low or non prevalent. SDG-3 also emphasis: 'Ensuring healthy lives and promote well-being for all at all ages' requires access to healthcare facilities. One of the healthcare indicators is number of beds per 10,000 residents and eighteen (18) beds per 10,000 is the threshold defined by World Health Organization (WHO). Faisalabad at present is at a level of less than half of the required facility. Similarly, significant lack of water supply inside housing units, gas connections, and

limited access to sewerage facilities clearly reflects area away from being a better service infrastructure region.

One of the most attractive opportunities for Faisalabad is likely development under CPEC and the SEZs. It has potential to raise the quality of life of residents and offer an estimated 300,000 new jobs in next 5 to 10 years. The details of which are further discussed in the next section.

Some of the more likely threats and risks that may cause hindrance and unwarranted delays in Faisalabd development include: First, the presence of multiple institutions, authorities and working bodies with overlapping and unclear functional jurisdictions at all three tiers of governments (Federal, Provincial and Local). This may cause major hindrance and more likely delay the implementation of any development plan for Faisalabad unabling it to fully reap the benefits from most important projects like CPEC and SEZs. The presence of this phenomenon makes the system more complex and provision of public services and associated development cumbersome. Appropriate redresser of these weaknesses require one centralized control ideally under one umbrella leadership (say; Elected Mayor of Municipal Corporation) being head/ Chair of the Steering Committee where representation from all tiers of government institutions and agencies are present in those development and other project aspects where policy level decision with consent can be sorted out to expedite the decision.. Second issue that can cause implementation delays is the lack of timely financing arrangements. As the development budget of Faisalabad has reflected volatility in its quantum and priorities as well. There require a transparent and quick process of project approval and time bound and roll over financing arrangements has to be prescribed. Third critical risk is the adequate availability of product markets in which Faisalabad had comparative advantage and products may be consumed / exported out quickly. If the products that are developed and manufactured do not find adequate markets, it will discourage investors. For new markets for products, international and national exhibition will be useful to promote products and motivate / guide investors.

1.5.2 China Pakistan Economic Corridor

As mentioned earlier Faisalabad district has vast and larger regional connectivity through roads, being well connected to Lahore and Islamabad by the M-3 motorway, whereas the M-4 motorway links Faisalabad to Multan and from there onwards to Sukkur and Karachi, through the Karachi-Lahore motorway. Since major part of the M-4 motorway is already operational in connecting many important cities. Via M-4 motorway Faisalabad is linked with Multan, through Gojra, Shorkot, and Khanewal. There is no doubt that M-4 motorway project is extremely beneficial and of vital importance for the economic development of Faisalabad in future. It provides closer links among various industries and prolific businesses in Faisalabad to connect with the China-Pakistan Economic Corridor (CPEC) routes. Two special economic zones in Faisalabad are of vital importance in this regard. The first, M-3 industrial city of Faisalabad approved in year 2016 is expected to be the major beneficiary from CPEC. Another special economic zone, the Allama Iqbal Special Economic Zone (SEZ), is also expanded under CPEC besides the M-3 industrial city. The area of M-3 industrial city is over 4,300 acres having 607 developed plot of varying sizes ranging 1 to 12 acres. These plots are completely soldout and about 115 units are already under production and nearly 160 more are at construction stage. The extent of colonization of plots in M-3 industrial city is about 45% to 50%. Moreover Value Addition City sloped apread over an area of 225 acres having 128 completely devloped and soldout plots with 3/4th of its plots already colonised. The Allama Iqbal SEZ approximately covers 4,001.06 acres of land. The feasibility report of the Allama Iqbal Industrial City in Faisalabad, adjacent to the existing industrial city of Faisalabad is under the planning and development stages. Out of these two SEZs the core area used for industrial and commercial activities is expected to be over 5,000 acres.

Under the Special Economic Zone Act 2012, these SEZs provide several benefits to the investors and business including the fiscal incentives containing one-time exemption from custom duties and taxes on import of plant and machinery and tax exemptions on income for five to ten years. These benefits will encourage investors to reap out benefits and the job-

seekers to gain the employment opportunity. It will also result in higher national income which is expected to boost the government revenues from indirect taxes, even in the period of tax holidays.

Major focus industries in the SEZs include Textiles, Engineering, Construction, Automobile, Pharmaceutical, Packaging, FMCG (Fast-moving-consumer-goods), Food processing, Chemicals, Warehouse, and Transportation. Besides it will also give boost to the support services, like Banking, Insurance, Telecommunication, Training and development, Logistics, Education, Public services etc. The potential development of diversified industrial and services sector activities under CPEC will lead to generate significant backward and forward linkages in the form of increase raw material use / absorption and output consumption in domestic and surrounding localities including exported out to other areas and countries. Continued economic activities and creation of new employment generation that may benefits regions and improve quality of life of the resident population through income generation.

Given the existing FDA area and Faisalabad city land utilization statistics and the sectoral share of employment, it is expected that the SEZs will significantly increase the employment opportunities in the industrial and services sectors. Roughly, from 180,000 to 300,000 new jobs can be expected from this development in next 10 years. These SEZs will certainly attract the population of closer districts of Faisalabad. However, this opportunity will turn into reality only when proper planning is undertaken. It requires education, professional training and skill development, rational gender-neutral policies to develop and implement.

Given SWOT for economic development in the context of existing situation and the expected development through SEZs, following sections provide analyses for Education, Healthcare, Housing, Water supply and sanitation, Industry and occupational mix, Professional trainings and research.

1.5.3 Faisalabad's Outlook

POPULATION

Current population (year 2021) is expected to be past 5 million. Keeping the growth rates of urban and rural population, the population of Faisalabad will be around 8.2 million. The share of urban population will be around 70% (see Table 12). This population would require more housing, utility services, healthcare, education and employment. The outlook of these factors is provided below.

Table 1-12: Prospects of Social and Economic Characteristics & Infrastructure for 2021-2041

	2021	2025	2030	2035	2041
Expected population					
FDA area	5,052,773	5,697,393	6,429,384	7,259,040	8,198,321
Rural	1,558,142	1,742,571	1,953,750	2,193,983	2,466,188
Urban	3,494,631	3,954,822	4,475,634	5,065,057	5,732,133
Faisalabad City	3,478,669	3,923,902	4,431,218	5,007,699	5,661,682
Rural	27,529	19,255	13,468	9,420	6,589
Urban	3,451,139	3,904,647	4,417,750	4,998,279	5,655,094

Source: Consultant's estimates

HOUSING

There are nearly 0.8 million housing units in Faisalabad, at present. The demand for new housing units is expected to increase by 24,000 to 36,000 units annually in the next twenty years. Altogether, 0.6 million new housing units are required in the next twenty years. Federal government's plan for provision of low-cost housing to the poorer segments of the society may

likely to meet only part of the housing needs. Federal government targeted national housing programme is to build 5 million low-cost housing units by 2023 which at present seems highly unlikely. However its successful implementation if it follows population criteria, Faisalabad will get over 0.11 million new housing units to be constructed and that can serve nearly 17% of the housing demand / units in next twenty (20) years (see Table 13).

Table 1-13: Expected Demand for Housing

Total new housing units required				
	2021-25	2025-30	2030-35	2035-41
FDA area	117,689	135,402	155,831	179,405
Rural	33,966	38,919	44,607	51,144
Urban	83,724	96,483	111,224	128,261
Faisalabad City	82,571	95,130	109,636	126,396
Rural	-	-	-	-
Urban	82,571	95,130	109,636	126,396

Source: Consultant's estimates

UTILITY SERVICES

The standardized services provision of all utilities in the existing and in all new housing units, including its access to all commercial and industrial concerns is warranted in Faisalabad to make it a progressive and developed region. Due to the significant lack of water supply sources and major reliance on inside electric and hand pumps in the present housing stock requires raising the water supply by more than double its existing supply. It requires new sources, reservoir, and new connections as shown in Table 14. It is expected that nearly 50,000 new water supply connections inside housing units in existing as well as in new housing units in the area would be required. In case of average two households (units) per dwelling unit, the requirement of new connections will become half. This can be further adjusted by average dwelling storeys. After 2030, the existing backlog of inside connections provision of water supply will be met. Table 14 provides details about annual demand for utility services in next twenty years.

Table 1-14: Annual Demand for Public Utility Services for 2021-2041

	FDA Area	Faisalabad City
Annual Water Supply Connections (inside house)		
For 2021 – 2030	49,448	36,692
For 2030 – 2041	33,524	23,603
Annual Sewerage connections		
For 2021 – 2030	55,762	28,938
For 2030 – 2041	33,524	23,603
Annual Gas connections		
For 2021 – 2030	53,006	27,436
For 2030 – 2041	33,524	23,603
Annual Electricity connections		
For 2021 – 2030	26,763	18,327
For 2030 – 2041	33,524	23,603
For 2030 – 2041	33,524	23,603

Source: Consultant's estimates

The existing situations of sewerage connections are even worse in Faisalabad. There will be a requirement of about 56,000 new connections annually for first ten years and over 33,000

afterwards. Like the water supply, the backlog connection requirement will be finished in first ten years. They can also be adjusted as per the dwelling storeys.

Significant number of residents of Faisalabad largely relies on wood and other types of fuel for cooking purposes, aside from natural gas. Therefore, it would require provision of around 53,000 new gas connections annually up to first 10 years to bridge the gas connectivity gap to the existing household using other than gas as fuel as well as connection to new housing units built in this period. After 10 years, there will be a requirement of 33,000 new gas connections per annum.

Unlike water supply, sewerage, and gas, majority of households in Faisalabad have access to electricity. However, there will be requirement of electricity connections in new housing units. It is projected that over 26,000 new electricity connections will be required annually during the period 2021 – 2030 and over 33,000 annually for the remaining planning period.

EDUCATION

The net enrolment rate of schools (primary, middle, and matric) in Faisalabad is estimated to be 80%, including public and private sector schools' enrolment. Remaining students belongs to the age between 5 and 14 years are estimated about 0.24 million in the year 2021. If government schools enrolled all these students, then government schools as percentage of total would be over 58%. If this enrolment rate continues, government schools will be required to enroll around 17,500 to over 25,000 students every year for the next 20 years. The enrolment will increase over time with the rise in population. It requires development / improvement in related infrastructure, in terms of upgrading the existing schools and additional new schools construction, and onboarding human resource in terms of teaching staff.

Table 1-15: Expected Demand for Education Infrastructure

	2021-25	2025-30	2030-35	2035-41
Required schools (capacity of new and existing schools to 500 students)				
FDA area	37	134	226	256
Faisalabad City	37	134	152	172
Required teachers				
FDA area	4,062	5,826	2,831	5,444
Faisalabad City	2,800	3,503	1,897	3,695
Expected net enrolment rate	90%	100%	100%	100%
Pupil-teacher ratio	40:1	40:1	40:1	40:1
Annual Employment Demand				
FDA area	49,827	53,893	58,352	63,254
Faisalabad City	34,100	37,041	40,269	43,822

Source: Consultant's estimates

HEALTHCARE

Demand for healthcare facilities in Faisalabad is much higher than that of its current access representing in terms of number of beds available per 10,000 inhabitants, as per WHO standards in the wake of SDG's. It shows that, currently, Faisalabad stands at merely 41% of its required healthcare infrastructure. This requirement will increase further by more than 60% in the next twenty years, reaching to over 14,500 hospital beds in the Faisalabad area.

Table 1-16: Expected Demand for Healthcare Infrastructure

	2021-25	2025-30	2030-35	2035-41
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Required hospitals (with 200 beds per hospital)				
FDA area	22	15	7	8
Faisalabad City	10	10	5	6
Number of required hospital beds (Existing hospital's capacity to 200 bed per hospital)				
FDA area	4,961	3,027	1,493	1,691
Faisalabad City	2,354	2,090	1,038	1,177
Expected beds / 10,000 persons	15	18	18	18

Source: Consultant's estimates

INDUSTRY, OCCUPATION, AND EMPLOYMENT

As highlighted earlier, Textile, Engineering, Construction, Automobile, Pharmaceutical, Packaging, FMCG (Fast-moving-consumer-goods), Food processing, Chemicals, Warehouse, Transportation, Banking, Insurance, Telecommunication, Training and development, Logistics, Education, Public services are the major industries that are expected to play critical role in the development of Faisalabad. In the wake of this development there are expectations of changing distribution of occupation in the area. To reap the true benefit from CPEC and SEZs Faisalabad will require more Professionals, Managers, and Technicians, compared to Craft and related trader workers, Plant and machine operators, and assemblers, and Elementary occupations. Increase industrialization is expected to enlarge the labor force share in industry and services from existing 82% to around 90% by 2030. Increasing employment opportunities combined with higher literacy rate will more likely to increase labor force participation rate in Faisalabad. If it increases by 2% in females and 1% in males in every five years in urban areas and about its half in rural areas, the overall labor force participation in Faisalabad will increase from an existing 41% to 45% in the next 20 years. With this participation rate, the expected demand for employment is anticipated to be between 50,000 and 63,000 and above annually in the next twenty years.

PER CAPITA INCOME

In the last twenty years Pakistan has been facing almost 8% of inflation and 4.4% of GDP growth. Due to CPEC, the economic growth may add up to 2% while the inflation may be subdued. Hence with additional 2% GDP growth from year 2025 and 5% of inflation, the per capita income (at current price) of the country is expected to increase from Rs.0.89 million to Rs.0.92 million in the year 2041. In terms of dollar it will be close to \$4,900.

The current per capita income of Faisalabad is lower than the country's income but due to the industrialization the sectoral share, labor force, and productivity in Faisalabad is expected to change more rapidly, which may add up to 1% more in the economic growth of the region. With this assumption, the per capita income will increase form Rs.0.17 million in 2021 to Rs.0.96 million in 2041 or above \$5,000.

Table 1-17: Expected Economic Output (GDP)

	2021	2025	2030	2035	2041
GRP-Current prices (in billion Rs.)	878	1,373	2,459	4,403	7,886
Per capita GRP (Rs.)	173,710	240,976	382,422	606,590	961,859
Per capita GRP (\$)	1,121	1,479	2,232	3,368	5,079

Source: Consultant's estimates

TAX COLLECTION

The current tax-to-GRP ratio estimated to be about 3.2% which is significantly lower than the national ratio. Due to direct tax exemptions to the industries in SEZ's, it is expected to remain at same levels for next 5 years but subsequently its share is expected to increase by 1% after every five years. If the tax collection performance of taxation authority improves due to better and improve tax administration, it may likely to collect more taxes from businesses and allied industries, then tax-to-GRP ratio is likely to accelerate and the expected tax collection may likely to reach from a present Rs.28 billion to about Rs.490 billion by the year 2041.

Table 1-18: Revenue Generation from FDA Area

	2021	2025	2030	2035	2041
Total tax collection (Rs. in billion)	28.03	43.85	103.11	228.69	488.40
Tax to GRP	3.2%	3.2%	4.2%	5.2%	6.2%

Source: Consultant's estimates

1.6 URBAN DEVELOPMENT STRATEGY

1.6.1 Objectives of Economic Development

The basic objective of the Faisalabad Master Plan is to provide a framework for a viable and sustainable socio-economic strategy and infrastructure development format of the Faisalabad (FDA area). It aims to provide a framework for socio-economic and infrastructure development of the area to bring inclusive development aiming towards enhanced quality of life. It also intends to utilize the existing and upcoming potential to harvest the maximum benefit from regional and local economic development in terms of employment opportunities, increasing per capita income, and tax revenues for the government. The goal is to make the Faisalabad a prosperous and welfare region.

1.6.2 Proposals

The proposals cover housing, school education, higher education, professional trainings, healthcare, industry, employment, labor force participation, public utility services, tax collection and revenue generation.

1. Develop the special economic zones (SEZs) for the provision of housing, education, healthcare, public services, and other economic infrastructure. Their details are added below in the development of overall Faisalabad.
2. Construct new low-cost housing units for ten thousand (10,000) households annually for next five years and for five thousand (5,000) households every year afterwards. Give preference to those who don't own residential property and belong to the lowest quartile of income.
3. Launch phase-wise housing scheme for residential and commercial purposes. Make it better planned by giving pre-specified structures of housing units with permission of up to three stories' in residential construction. Allocate a separate space for commercial and residential high-rise buildings. The area should preferably be in the close outskirts of the city or the SEZs to utilize resources efficiently and at minimum cost of public service provision.
4. Gradual increase in school enrolments and capacity enhancement / upgradation of existing schools to an average of 500 students. The primary schools may be upgraded to middle or matric standard as per their building capacity and structure. If majority of existing school buildings are smaller in size to accommodate more students, they may be operated in twin shifts (morning and afternoon). Make plan for new construction of government school buildings in the new housing colonies with the capacity of at least 500 student enrollments. This will require 37 additional schools by 2025, 134 more by 2030, 226 by 2035, and 256 additional schools by 2041. Altogether over 650 new schools are required to achieve 100% school enrollments by 2030. Similarly, more than 18,000 new teachers

- need to be recruited to meet the additional enrolments / literacy requirements and maintaining student / teacher ratio. The teachers need to be recruited periodically over a span of 20 years.
5. For healthcare infrastructure, existing hospitals capacity to be enhanced to 200 beds on average. To achieve the SDGs target of 18 beds per 10,000 persons, Faisalabad requires 44 new hospitals in twenty years, out of which 30 are required in next 10 years with the capacity of 200 beds per hospital. Combining up-gradation of existing hospitals to 200 capacities with plan provision of new hospital beds, the total requirement reaches to over 7,500 beds by 2030 to reach the SDG target.
 6. A significantly large number of new labor force entrants will emerge in future. To adequately address this requires three-pronged strategy, increase female labor force participation; explore investment and employment opportunities, impart professional and technical qualification and trainings.
 - a. For increasing labor force participation two steps are warranted, reduce females working time to six hours per day and make the provision of day care facilities in all the industrial and commercial location / areas mandatory.
 - b. Make it mandatory for all families to enroll their children. Additional incentive needs to be offer to parents / guardian on mandatory enrollment of his / her school going children. The incentives to parents / guardian may include additional social security benefit or healthcare benefits etc. Keep a complete computerized database of these enrolments.
 - c. Make it mandatory for all females and males who acquire intermediate and graduate degree from arts and science discipline to take at least six-month professional training from the recognized institutes. Large colleges / universities may offer this training at their institutions with the consultation of the industry experts.
 - d. Make it mandatory for all the professional institutions to establish working forums for new ideas and entrepreneurship. Encourage graduates to present their ideas and help to commercialize them. Increase the IT proficiency in all the professional degree students.
 7. Regularize all the small, medium, and large businesses in Faisalabad. Carryout census enumeration of all the businesses by type etc., and its regular up-dating of records.
 8. Provide all utilities to entire housing and commercial units. Rather than encouraging use of gas, residents and businesses should be encouraged to electrify vehicles, cooking etc. Encourage them to off-grid electricity generation. Give incentives to businesses and residential units, which go off-grid.
 9. Establish Faisalabad dry port with modern technology and computerized record-keeping to provide efficient supply chain solutions to businesses.
 10. Develop large area for warehouses and cold storages with modern technology and computerized record keeping. Provide the facilities of these warehouses to all the businesses on rental basis.
 11. Facilitate the banking and insurance services to encourage consumer financing and financing of other projects.
 12. Make logistics an efficient industry. Provide parking spaces with large and modern workshop facilities. Keep record of all the logistic activities in Faisalabad.
 13. Impose development cess and maintenance charges at local level on all residential, business, and commercial units. Set user charges for warehouse services, cold storages and parking lots. Charge and penalize businesses that do not keep proper record and undertake lesser number of banking transactions. To incentivize the responsible businesses, charge higher rents of warehouses and cold storages.
 14. Establish Faisalabad Expo Centre at location situated within close vicinity of the main city.
 15. Develop auto parts market
 16. Develop separate space for slaughterhouse
 17. Establish professional and vocational training and research institutes for each major sector like textile, agriculture, IT, electronics, and telecommunication. Engage experts from existing professional institutes and universities.
 18. Establish separate computer, laptop, and accessories market. Encourage the domestically produced and low-price equipment and accessories.

19. Develop a computerized data and research center for record keeping of all social, economic, and physical characteristic and infrastructure in Faisalabad. Make the best use of technology in the form of data collection, formation, and statistics. Professional institutes or universities can help in this regard.

1.7 IMPLEMENTATION PLAN

The proposals cannot be effectively implemented without a well-coordinated and smoothly functioning responsible authority, which has the capacity and authority to undertake every piece of the proposal. The implementation plan is given with the existing institutional, legal and regulatory framework, financing plan, and monitoring and evaluation.

1.7.1 Institutional and Legal Framework

It is more likely that this plan faces several impediments in its implementation due to the involvement of multiple governments, authorities, agencies, bodies in functional assignments and overlapping governance jurisdictions as highlighted earlier. Therefore, a separate 'Faisalabad Development Unit (FDU)' is proposed to implement the Faisalabad Master Plan.

Ideally the whole area of Master plan should fall under the Faisalabad Municipal Corporation (FMC) having board with representatives from FMC, other rural and urban local councils falling in the study area, FDA, District Education and Health authorities, Planning and Development Department of Punjab, the Urban Unit Punjab, Faisalabad Chamber of Commerce and Industry (FCCI). In the current institutional and legal framework, it can technically fall under FDA. Its office will be established in the FDA. It will have a board with the representatives from FDA, FMC, other rural and urban local councils falling in the study area, District Education and Health authorities, Planning and Development Department of Punjab, the Urban Unit Punjab, Faisalabad Chamber of Commerce and Industry (FCCI). The mayor of FMC will serve as the Chairperson of the FDU. The unit comprises of its own organizational structure in which dedicated staff will be transferred / hired from FMC, other urban and rural councils, and FDA. It is more likely that adequate human resource capable to undertake the mandated tasks would not be available. This gap can be bridge by organising on the job training programmes for this workforce through hiring of services of capable professional and academic training institutes and universities. Additionally if capable manpower is not available, they may be hired from the market offering them market based salaries. The unit will comprise of five major departments including planning, finance, procurement, IT, human resource and coordination, and law department. Planning department will be responsible to prepare operational level plans for all the projects and proposals. Finance department will take care and assesses all the financing needs through the preferred modes. Procurement department will procure all the goods and services required to implement the projects and plan for the PPP projects. Human resource and coordination department will mandate facilitation in the hiring, development of project tasks and description and records of all departments and staff. It will also coordinate with all the departments for smooth functioning of their mandated tasks. IT department will help set up data and research center and assist in the related work in different proposals. It will ensure the maximum efficiency in all the processes and developments through the best use of information technology.

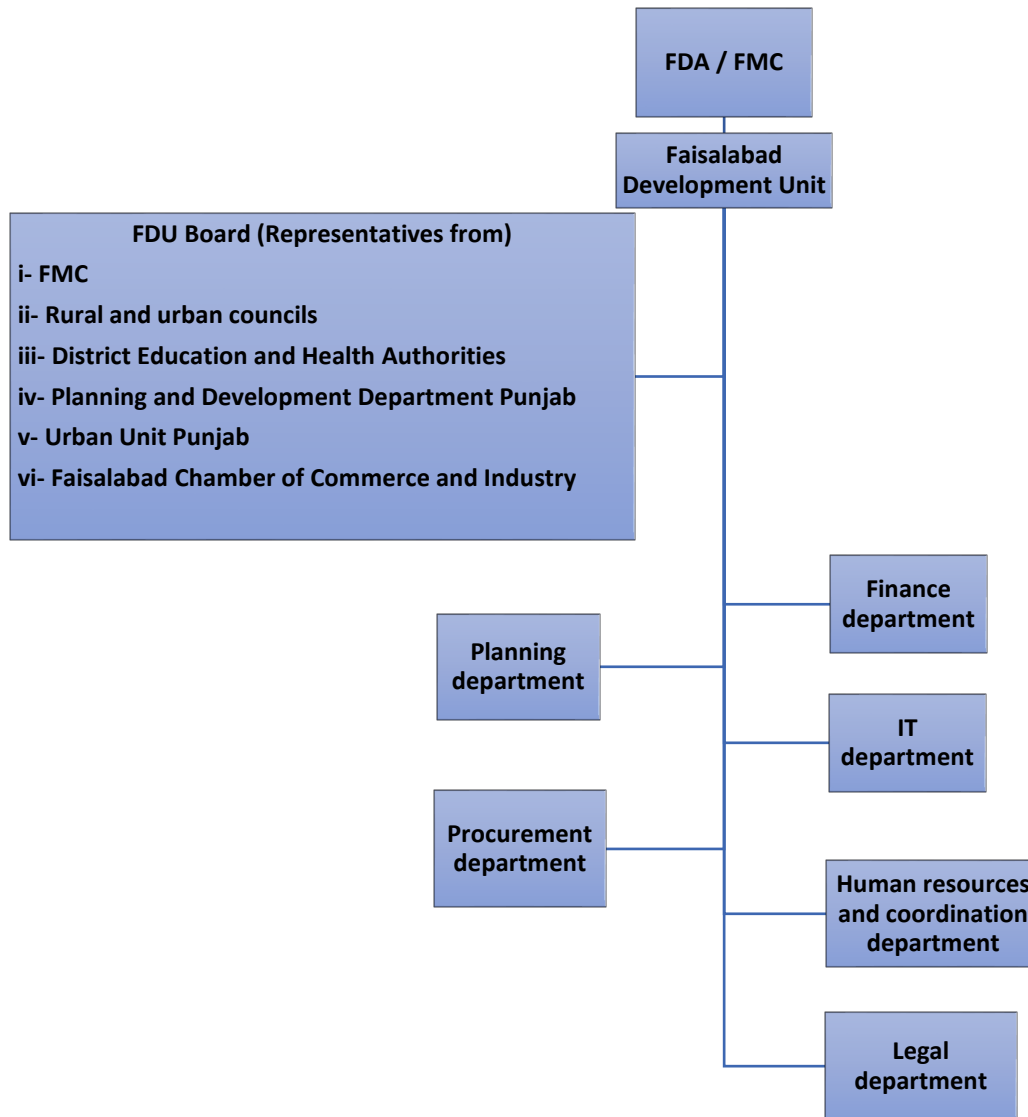


Figure 1-2: Proposed Institutional Framework for Faisalabad Master Plan

Law department will take care of all the legal and regulatory issues. This is very necessary as the study area fall under the jurisdiction of several urban and rural local councils. The development and functioning of SEZs is undertaken under the SEZ act, which specifies the role of local development authorities, provincial government, and federal government. Significant assistance from this department will be required to carry out the development process in line with the act, existing local government structure, the other existing laws and regulations. It will set up a policy for user charges, development cess, and tariff rates for different services and infrastructure. It will draft a legal document for the reduced working hours of female workers, day-care centers in the industries, incentives for the parents and guardian for enrolment of school-going age children, and professional and IT trainings to the enrolled students at intermediate and higher level.

In the medium to long run with rising level of development in FMC jurisdiction its further extension in area limits more likely to be warranted to cover whole study area where single authority may look after area development work. Given the efficiency principal in terms of lower cost of service delivery, functional assignments of school and district education and health

authorities should be devolved / transfer to local government. The FDA should be a part of larger local government mandated to serve as development arm of FMC.

Different financing options, discussed below, may be used to implement the plan, but it should be channeled through local government. The local government should own and be responsible for the development of Faisalabad with the funding resources of higher levels of governments, donor support program and public private partnership mechanism. Subject to development and approval of appropriate laws for debt acquisition policy by higher tiers of Governments (primarily Federal Government) local government should possess right to issue long term bonds and acquire loans up to specified limits from banks and multilateral / bilateral donor agencies.

1.7.2 Financing Plan

The possible sources of financing may include funding from federal and provincial government sources, public private partnership, local own sources from taxes and non taxes / user charges and donor funding for development and improvements. For the projects not related to provision of basic / necessary service like housing services, professional trainings, and data center, higher tariff rates / user charges can be charged and consequently financing options, like public-private partnership and loans from commercial banking channels etc. may feasibly be utilised. On the other hand, projects of basic / necessary services like health, education, etc., higher tariff rates to cover the whole capital expenditures do not seem viable due to increase cost of these public services to the masses, as such there is a need to exploit other financing options like projects inclusion in Faisalabad Annual Development Plan (ADP), financing from own source revenues etc. Following are few indicative sources of financing that may be considered important in financing capital as well as operations and maintenance costs of the proposed projects.

1.7.3 Sources of Financing for Proposed Projects

PROVINCIAL GOVERNMENT FUNDING (ADP)

The capital cost requirement of the education, health infrastructure and development of economic zones may be placed at high priority in provincial Annual Development Programme (ADP) schemes for Faisalabad as provision of basic social and other important economic services to resident population as the prime responsibility of the government given its high associated benefits.

DONOR FUNDING (DF)

Donor agencies (World Bank, Asian Development Bank, DFID etc.) funding may also be an option to be exercised for plan projects of social and economic infrastructure. It however requires approval of federal and provincial governments under the present rules of business. As such, FDA can seek donor funding for its plan projects in the form of loans or grant financing. Provision of funding in social and economic infrastructure development projects is also an area of donor interest and loans at lower interest rates as well as grants provision may usually be offered by donors for these projects and also projects related to water supply, sewerage, and drainage system and other social sectors. These sectors are also critical in achieving Sustainable Development Goals.

LOAN (LN)

FDA may approach domestic financial institutions for acquisition of loans for meeting capital cost requirements of projects subject to devising of acquisition of loan rules which are currently lacking. Sovereign guarantees of higher level governments (Federal and Provincial) should be

required to enter into long-term loan agreement with the commercial bank for project financing of economic and allied infrastructure development. These projects more likely to fetch high financial returns and can ideally be repaid through imposition of levy and/or user charge / tolls and taxes.

LONG-TERM BONDS (LTB)

Project financing through long term municipal bonds have been exercised in many countries for financing local development. This option is used for economic infrastructure projects which usually bring high financial returns. FDA and/or FMC may be able to exercise this option subject to approval of higher tier government. Similarly, if these bonds are guaranteed by the Government of Punjab, then authority can get several investors to finance these projects even at lower rate of return. This source can be used to cover plan / projects costs either entirely or major part of the planned development. The maturity period of these long term bonds are usually about 20-years and more.

PUBLIC-PRIVATE PARTNERSHIP (PPP)

Public-Private Partnership (PPP) may also be executed for financing projects development and its subsequent maintenance. It is one of the most feasible options successfully exercised in project financing in many countries, in particular at places where public sector like to involve private sector in various projects due to either financial / technological constraints or lack of its efficient management after development. It is more appropriately used in case of plans and/or projects having higher economic/ social returns like, roads, bus terminals, schools, colleges, and vocational and commercial institutes besides some really big infrastructure projects like development of airports etc. many arrangements under PPP are available and success fully practiced at many places including Pakistan. These options under the PPP arrangements usually between the government and private sector are as follows.

- Build – Operate – Transfer (BOT) ...
- Build – Own – Operate (BOO) ...
- Build – Own – Operate – Transfer (BOOT) ...
- Design – Build. ...
- Design – Build – Finance. ...
- Design – Build – Finance – Operate (DBFO) ...
- Design – Construct – Maintain – Finance (DCMF) ...
- O & M (Operation & Maintenance)

However it requires comprehensive policy and rules under the PPP arrangements for clarity of all issues and avoidance of any confusion under the agreement between the parties. Under PPP projects both parties choose the financing arrangements according to their interest and suitability for example in some cases FDA can cover part of the capital cost (may provide land for the project) and private sector can further invest in its construction and subsequent maintenance and other arrangements under their mutual agreement. List of prioritized projects and its feasible financing options are given in the end in section 5, Table 1.

OWN SOURCE REVENUES (OSR)

According to Punjab Development of Cities Act 1976 authorities can impose fees and other charges for service provision to cover operating expenses, including taxes and interest for provision of service maintenance, repayment of loans, and for financing further extension of schemes and for future major expansion in such schemes and financing. Therefore, FDA and/or FMC may raise financing for the proposed project by imposing a appropriate tariff / user

charges. However, while setting rates of tariff / user charges / tax rate for project financing ability and willingness to pay by households/businesses must be considered.

1.8 MONITORING AND EVALUATION

The systems of 'Monitoring' and 'Evaluation' are often considered an effective tools to oversee and review the implementation of projects, policies, and investment in any sector. Its effective design and implementation provide answers regarding extent of achievement of objectives of projects and policies, whereas the objectives of monitoring and evaluation are to make a standardized format for analyzing the performance of any relevant sector, concern project, or planned policy. Unfortunately, In Pakistan and in almost all provinces the major proportion of the allocated development budget observed to be spent in the last couple of months of each fiscal year and thus misappropriated, due to the absence and slackness of any effective monitoring and evaluation system, the efficiency of utilization of these funds are subject to severe criticism.

As a parent authority and key financing source of local government and FDA recurring and development budget, it is the responsibility of the provincial government to monitor the performance of Faisalabad local government and development projects including the master plan. Moreover, monitoring option through third party validation may be exercised for the implementation of the master plan that may adequately review and report the physical structure of the projects, their quality and quantity. It will make the Faisalabad local government responsible for the implementation of the Master Plan. Further, the monitoring and evaluation should strictly consider the efficiency aspect, i.e. output as well as input of all concerned. If the best performing sector or department is well rewarded, it will obviously be a source of encouragement to further improve their performance and efforts. To begin with it is recommended that on projects beyond say certain ball park Rs 50 million and above at-least 1% to 2% of the project cost should by mandatory earmarked for monitoring and evaluation of projects for effective utilization of public funds.

1.9 PRIORITIZED PLAN AND PREFERRED MODES OF FINANCING THE PROPOSAL

1.9.1 Prioritized Plan

The prioritized plan concisely sets the timeline and priority for the proposed projects in detail. List of these economic development projects is shown in Table 19. The possible modes and preferred source(s) of financing are also mentioned with the detailed list of projects in the Appendix in Table 20.

Table 1-19: List of Economic Development Projects

Sr. No.	Project	Timeline Ranking			Priority Ranking			Estimated Cost Rs. in million
		Short Term	Long Term	Both	High	Medium	Low	
1	Development of Allama Iqbal Industrial City (AIIC)		✓			✓		5,000
2	Extension of Punjab Small Industries Corporation Industrial Estate		✓			✓		500
3	Establishment of Khurrianwala Industrial Estate		✓			✓		500

4	Regularization of Four Industrial clusters in city area into Industrial Estates	✓			✓			5
5	Establishment of Apparel and Garments Stitching Zone, Narwala and Jhang Road	✓			✓			5
6	Expansion of Faisalabad Dry Port		✓			✓		20
7	Development of Warehouses and Cold Storages	✓			✓			20
8	Establishment of Auto Spare Parts Markets	✓			✓			50
9	Establishment of Slaughter House		✓			✓		50
10	Establishment of Tecno park		✓			✓		2,700
Total								8,850

APPENDICE

Computations for sub-areas of the district

The study area comprises of the area falling under the jurisdiction of FDA. It becomes the combined area of two out of the six tehsils in the Faisalabad district, including Faisalabad City tehsil and Faisalabad Saddar tehsil. Most of the data, for the social, economic, and other characteristics and infrastructure, is available at district level. We find the population data at tehsil level and by urban / rural distinction and the data for healthcare infrastructure. When searched for the relevant indicator that can serve as basis for disintegration of data at sub-areas, urban / rural share and population are found to be the better proxies. Hence all the computation of statistics for FDA and Faisalabad City is carried out based on their population and the share of urban population. The Gross Regional Product is computed based on the income share of HIES-2015-16, population, and share of urban population. The sectoral shares of GRP are based on the per employee productivity in each sector and the number of employees in the sector. These estimates reflect the true picture and have been cross checked through their logical association with other relevant indicators.

Table 1-20: Detailed List of Prioritized Projects

Sr. No.	PROJECT	TIMELINE RANKING			PRIORITY RANKING		Mode of Financing
		Short Term	Long Term	Both	High	Medium	
1	Development of SEZs with housing and provision of public utility services		✓			✓	ADP, PPP
2	Construction of low-cost housing units			✓	✓		Loan, PPP
3	Launch of phase-wise housing scheme for residential and commercial purposes.		✓			✓	PPP
4-i	Upgradation of existing school capacity to a level of 500 students	✓			✓		ADP
4-ii	Construction of new government schools and hiring of additional teachers		✓			✓	ADP
5-i	Upgradation of existing hospitals to the capacity of 200 beds	✓			✓		ADP
5-ii	Construction of new hospitals with 200 beds capacity		✓			✓	ADP
6-a	Reduction in female labour force working time to a six hours daily and mandatory provision of	✓				✓	PPP

	day care facilities at work place or nearby						
6-b	Additional social security or healthcare benefits etc. to the parents / guardian of enrolled school-going age children	✓				✓	ADP, DF
6-c	Six-months professional trainings to all enrolled intermediate or graduation student of arts and science disciplines to increase their productive absorption in local economy			✓		✓	PPP
6-d	Establish working forums in professional institutions for entrepreneurship and increase IT proficiency among all professional degree students			✓	✓		PPP
7	Regularization of all small, medium, and large businesses within Faisalabad and carryout annual industry census	✓			✓		ADP
8	Provision of public utilities in all housing, industrial and commercial units			✓		✓	OSR, LTB
9	Establish Faisalabad Dry Port with high-tech and modern infrastructure provision and computerized record keeping		✓			✓	OSR, PPP, LTB
10	Develop large areas for warehouses and cold storages equipped with modern facilities, and computerized record keeping		✓			✓	OSR, PPP
11	Provision of parking spaces with large and modern workshop facilities.		✓			✓	OSR, PPP
12	Implementation of development cess and maintenance charges at local level on all the residential, industrial and commercial units. Set user charges for warehouse services, cold storages, parking lots.		✓			✓	OSR

13	Establish Faisalabad Expo Centre		✓			✓	PPP, LTB
14	Development of auto parts market		✓			✓	PPP, LTB
15	Development of slaughterhouse		✓			✓	ADP, LTB
16	Establish professional and vocational training and research institutes for each major sector like textile, agriculture, IT, electronics, and telecommunication	✓			✓		PPP
17	Establish separate computer, laptop, and accessories market		✓			✓	PPP, LTB
18	Develop a data and research center for record keeping of all social, economic, and physical characteristic and infrastructure in Faisalabad with the best use of technology		✓		✓		OSR, LTB