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## REGIONAL PLANNING (A CASE STUDY OF GUJRANWALA)

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KEYWORDS	ABSTRACT
Regional, Pakistan, planned, development, residents, quality of life	Gujranwala, a vibrant city in Pakistan, with a high population and rapid urbanization, Gujranwala faces various challenges that necessitate comprehensive planning and management. This article aims to shed light on the regional planning initiatives undertaken in Gujranwala, highlighting the key strategies, achievements, and future prospects. The basic aim of the study is to evaluate the prospects of the Regional Plan for District Gujranwala. And to put forth an integrated land use plan and regional plan that takes into account the demands of the local populace concerning housing, health, education, religion, parks, recreation, sports, industry, commerce, trade services, agriculture, and other land uses. The research design employed a mixed-methods approach, combining qualitative and quantitative techniques. The study utilized surveys, interviews, observation, and secondary data analysis to gather comprehensive information about regional planning in Gujranwala. The study on Gujranwala's regional planning reveals several key findings. Gujranwala, initially a rapidly growing industrial city, faced challenges due to its unprecedented expansion. In conclusion, the research underscores the need for a holistic and adaptive approach to regional planning in Gujranwala, considering the city's dynamic growth, economic significance, and environmental concerns. The findings provide valuable insights for policymakers, urban planners, and local authorities to formulate and implement effective strategies for the sustainable development of Gujranwala.

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## INTRODUCTION

A regional plan is a road map for future growth. It is a thorough policy document that offers precise guidance for long-term development operations in a field that includes all sectors and aspects of life in an integrated way. The regional plan establishes growth and development policies. The regional plan's ideas and data are integrated to act as a guide for local decisions about the public and private use of land and natural resources, as well as the provision of amenities for the general public to improve the quality of life for residents (Bihandig, 2019)(Hidayat & Salahudin, 2021).

Several local governments have been established in the district following the promulgation of the 2019 New Punjab Local Government Act, including the Metropolitan Corporation, Gujranwala, Tehsil headquarters Municipal Committees, Non-Tehsil headquarters Municipal Committee, Town Committees, and District Councils. The PLGA 2019 gives the relevant local governments permission to create land use plans for the areas within their notified borders, but it does not provide them permission to create a district-wide plan for Gujranwala. As a result, the HUD & PHE Department

gave the GDA permission to create the district of Gujranwala's regional plan (Javed & Riaz, 2020)(Javed & Farhan, 2020)(Rafique et al., 2020).

Since its creation, the Gujranwala district has experienced significant growth. However, this growth is unplanned. The regions' rural-to-urban migration, population growth, mushrooming, poverty, and lax administrative control have resulted in several urban challenges (Drakakis-Smith, 2012)(Nyairo et al., 2021)(Soltani, 2022). In recognition of the importance of the district of Gujranwala and the vision of the Prime Minister of Pakistan, the Government of Punjab aspires to regional planning of all districts so that civil facilities may be provided to locals in a planned manner and based on accurate need assessments. To meet the needs of the district's expanding population over the next 50 years, all municipal facilities may be recognized and provided with the plan's formation (Yuen & Choi, 2012)(Ahmed et al., 2021)(S. A. M. Ali & Mufti, 2022).

Considering such scenarios, this research aims to highlight the basic needs of people living in Gujranwala district and propose a regional plan that may provide all basic facilities after encountering the residents. The suggested plans will assist the district administration and encourage people to live tranquil lives in ecologically friendly surroundings while following their personal and collective development aspirations.

Regional planning research with case studies in Gujranwala has significant benefits in understanding in-depth regional characteristics, identifying problems and opportunities, and designing effective planning strategies. By focusing on aspects such as economic growth, improving infrastructure, environmental management, and improving people's quality of life, this research has the potential to make a positive contribution to sustainable development. In addition, involving active community participation in the planning process can increase the acceptance of development plans, while research results can become the basis for forming better public policies at the regional level. Successful implementation of the recommendations from this research plays a key role in achieving the development and welfare goals of the community in Gujranwala.

## **METHOD**

The research design employed a mixed-methods approach, combining qualitative and quantitative techniques. The study utilized surveys, interviews, observation, and secondary data analysis to gather comprehensive information about regional planning in Gujranwala. A purposive sampling strategy was adopted to select participants for interviews and surveys. Key stakeholders, including government officials, urban planners, residents, and local businesses, were identified and invited to participate in the study. A sample size of 200 participants was deemed sufficient to gather representative data. The semi-structured interviews allowed for in-depth exploration of critical issues related to regional planning. Secondary data was sourced from relevant government reports, urban planning documents, and academic research papers. This provided a contextual framework to analyze and validate the primary data collected. Quantitative data collected through surveys was analyzed using statistical software, allowing for systematic interpretation of the responses. The responses to open-ended questions were scrutinized to identify recurring themes and patterns, complementing the quantitative analysis. Qualitative data gathered from interviews and observations underwent thematic analysis to extract meaningful insights.

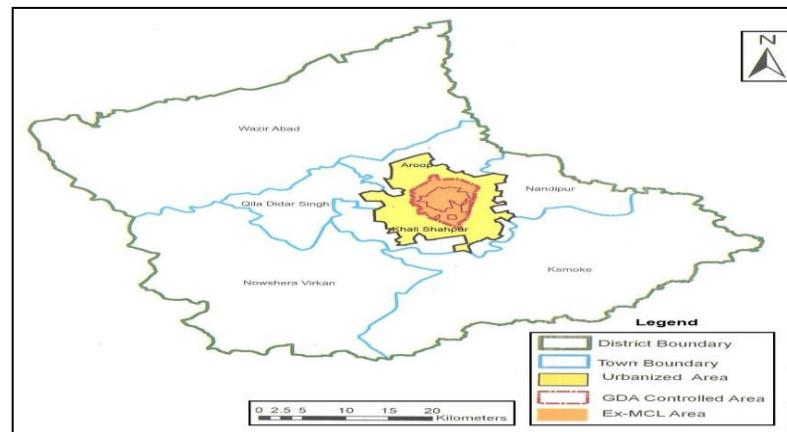
## RESULT AND DISCUSSION

Gujranwala city, being a district and divisional headquarters, is one of the most rapidly growing industrial cities, which grew fast, it expanded beyond expectations. However, Gujranwala City was the best industrial trading hub and a progressing commercial center. It is one of the core centers for economic and social activities within Pakistan (Minallah, 2016). The Housing and Physical Planning Department, Government of the Punjab, had previously created outline development plans for most metropolitan centers, but those plans have since expired.

In addition to that defunct city district government, Gujranwala notified Peri-urban structure plans of these areas in 2011, but the same was valid for five years. These plans are currently considered valid due to the Punjab Land Use Rules, 2009 saving provisions. These plans are now outdated. The proposals embodied in the plans could not be enforced due to laxity in approval and enforcement. However, these plans were created to guide and control the city's development for a defined period. Through partial implementation, this objective cannot be achieved efficiently which resulted in the improvement of the road network and separation of land uses (Z. Ali, 2020). The primary aim of the study is to evaluate the prospects of the Regional Plan for District Gujranwala. And to put forth an integrated land use plan and regional plan that considers the demands of the local populace concerning housing, health, education, religion, parks, recreation, sports, industry, commerce, trade services, agriculture, and other land uses. To study existing infrastructural services such as water supply, drainage system, sewerage within the area, and improvements of the proposed schemes.

With a population of 4,708,000 in 2014, Gujranwala is one of the most crowded cities in the area of Punjab, despite having only 120,807 residents in 1951 (Minallah, 2016). According to statistical analysis, the union council's population had already grown to a level comparable to that of Gujranwala's metropolitan area beyond the Ex-MCL (Metropolitan Corporation Limits) boundary. The population growth and metropolitan area development had a detrimental effect on the already few resources. The younger generation made a concerted effort to meet its health, education, work, and leisure demands through the policymakers. However, despite its many benefits, this approach can also lead to a population explosion due to inadequate family planning programs. Gujranwala's growth rate reached 5.01% between 1951 and 1961 and rose to 7.59% between 1972 and 1981. Gujranwala's population has grown nine times over the past 47 years at an average growth rate of 3.79%. With a population of 141,5711 in 2007 estimations, Gujranwala City, comprised of seven municipalities, was rated fifth among Pakistan's major cities in 1998 with 1,132,509 residents. The city's population increased by 3.79% between 1981 and 1998, and the entire Ex-MCL region was 914 square miles Km. The discovery of a new urban area, an area of around 2381 square meters, outside the Ex-MCL boundary km (Minallah, 2016).

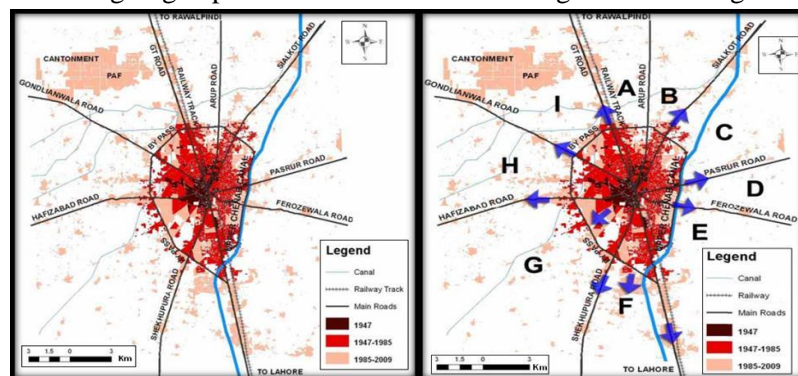
The database was created to show the spatial patterns of urban growth and the interplay between the socioeconomic and physiographic factors influencing urban expansion. Chronological summaries of urban and socioeconomic development provide insight into the expectations for the future. The study was completed with the help of the MS Excel program, logical calculations, and projections. Urban growth maps created using Geographic Information System (GIS) and ArcGIS software were acquired from secondary data sources (Abousaeidi et al., 2016).



**Picture 1 Urbanized MCL Area of Gujranwala**

Source: Punjab government district profile

There is a clear pattern to the government's current policies and guidelines for upcoming planning and policy making. Urbanization and the influx of people from population increase significantly impacted the ongoing depletion of resources and changes in land usage.



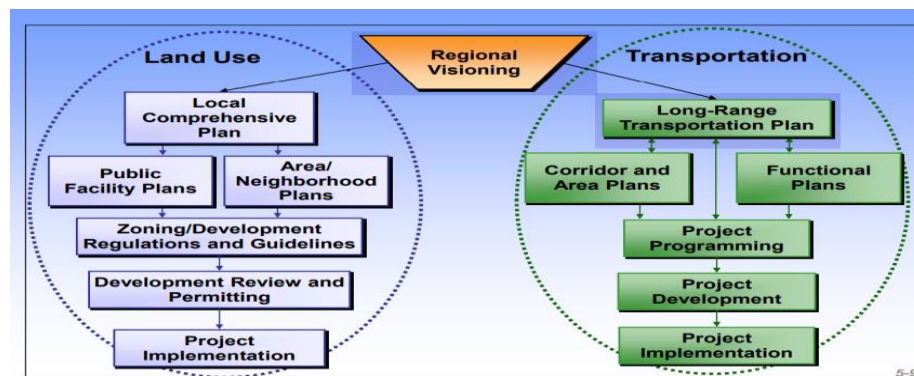
**Picture 2 & 3 The Spatial Growth of Gujranwala Increased migratory tendency towards this area has coincided with natural population growth.**

Source: UNICON, 2009

Centers for Urban and Regional Policy Research were founded to track development and disparities. Despite the efforts of numerous government and non-government organizations, it was found that the difference between districts grew with time. Examining the socioeconomic growth of a region requires knowing the extent of development and the availability of public infrastructure (A. U. Khan et al., 2014).

### **Regional planning at the district level**

The main goal of planning for cities and regions is to promote the entire community's needs. That objective, however, is no longer as clear-cut as it once might have been given the increasingly diverse social and multicultural makeup of our contemporary urban societies, as people from such widely dissimilar social and cultural backgrounds may have goals that are incompatible with one another. Contrary to the viewpoint that predominated for the bulk of the 20th century, particularly within the context of the rational planning paradigm, regional planning is no longer seen as a politically neutral activity. This is one reason why a significantly higher level of conduct than what is required under the planning law must be adopted by planners and other professionals and officials in municipal government to win the trust of the community they serve.



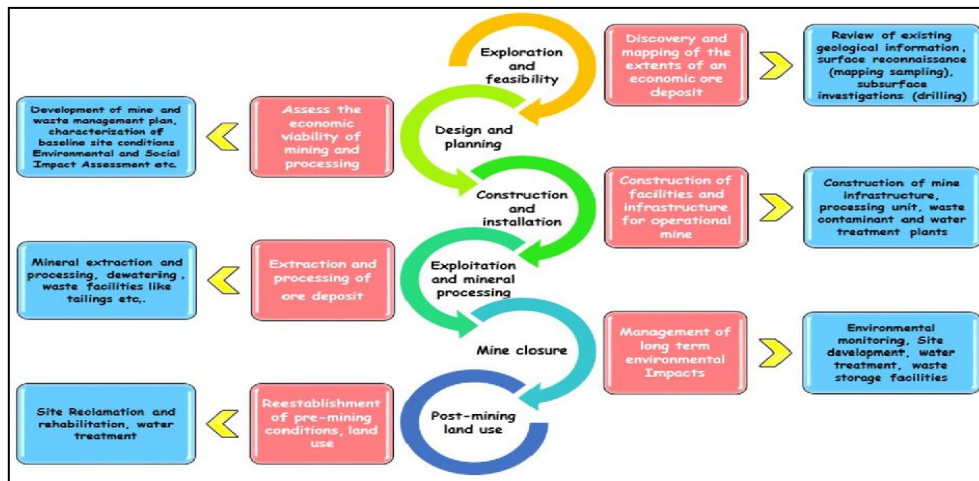
Picture 4 Regional Visioning Plan proposed by Rockingham Planning Commission  
Source: Scientific diagram

### Regional Planning at the district level through the Environmental Planning Process

The environmental balance in urban-rural areas has been upset by a variety of commercial and industrial activities, a rise in population, and a failure to consider the best use of natural resources. As a result, environmental planning for the intelligent use of land resources and preventing environmental disasters are among the issues managers focus on these days. Planners and executives take this matter seriously on a global scale. However, less attention has been given to it on a smaller scale, particularly in rural areas, where environmental resources are concerned. Furthermore, rural areas are crucial since a significant portion of their livelihood depends on utilizing environmental resources. However, planning is essential to avoiding the harm done to these locations and ensuring suitable development by harnessing each region's potential because the natural environment has a limited biological capacity for human use. The pre-established goals will likely be accomplished because the planning is based on objective facts and natural potential. Thus, three steps of the planning process were used to implement environmental planning at the district level. These steps included appreciating the situation, assessing it, and incorporating Gujranwala district's social, economic, and ecological developments. Plans that are established solely utilizing scientific and specialized approaches without considering values and actual human needs are neither supported nor implemented in practice.

### Regional Sustainable Development Assessment

The concepts of "regional development," "sustainable," and evaluation practice are complicated and divisive. Each demonstrates quick trends, changes, and chances for better regional development and governance. One of the outcomes of the culture of targets, performance, and assessment is the development of uniform systems for evaluating the effectiveness of policy efforts. This approach has been employed to assess regional sustainable development, frequently with dismal results. This addresses some prerequisites for evaluating regional sustainable development and presents data from studies demonstrating the demand for innovative institutional and procedural practices. The evidence for innovation shows that evaluation approaches and methods must be tailored to the unique environmental, social, and economic conditions. The degree of sociopolitical influence over the selection of practices and policies is another factor to be examined when analyzing the evaluation of regional sustainable development.



Picture 5 Evaluating the pattern of a sustainable region

Source: Regional Visioning Initiatives: Process and Implementation by Pamela Hahn Barth

### Capacity Development Regarding Regional development

To accomplish all of the goals above, it will also be necessary to develop resources and increase the ability of connected organizations, beginning with those involved in regional development on the government level. So, the Capacity Development Regarding Regional Development." The organizations most responsible for formulating the major body of plans for regional development are central and local governments in the respective country. Yet, many developing nations lack well-established procedures for planning and implementing regional development. Mainly, there are numerous instances where responsibility is not uniformly distributed among pertinent departments since the regional development concept is poorly defined. Building post-planning implementation capability for regional development plans is essential, along with planning ability. Some potential instruments (means) for achieving this include creating guides for regional development, gathering statistical data, applying routine updating systems, and developing GIS and topographic mapping.

These problems should not just be addressed from the standpoint of regional development; steps should also be taken to address issues specific to particular sectors. Effective Approaches for Regional Development: these concerns should not just be tackled from a regional development viewpoint; responses to specific sector-specific problems should also be taken. The Guideline for "Government Decentralization" must consequently be followed. It will be required to consider the division of labor, competition, and cooperation within the region and between linked regional areas to advance regional development further. Let's say, for instance, that two nearby regional districts with identical development plans pursue the same industry and successfully construct a sizable industrial complex. Strengthening the capacity of the resources engaged is essential for increasing the capacity of regional development systems. In the past, institutions connected to the government valued their human resources. The area's citizens and businesses are also involved in regional development. Thus, building up human resources in each of these sectors is essential.

Due to a lack of funding, many regional government organizations have limited human resources available for regional development. It is essential to increase both the government's human resource capacity and the involvement of local citizens and enterprises in regional development. Strengthening the caliber of human resources is another factor. Regional development topics are



getting more complex in recent years, involving a variety of needs and factors, so it will be necessary to improve the technology employed by and hone the abilities of those handling these difficulties.

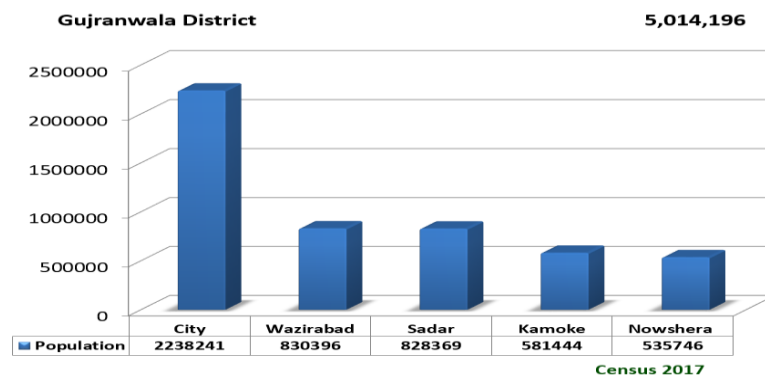
### Analysis of regional prospects in Gujranwala

#### Physical

Gujranwala is a city located in the north-eastern region of the Punjab province in Pakistan. It is the seventh-largest city in Pakistan and the country's third-largest industrial center after Karachi and Faisalabad (Naz & Zaidi, 2013).

#### District Statistics (population)

According to the 2017 Census of Pakistan, the population of Gujranwala is approximately 2.7 million people.

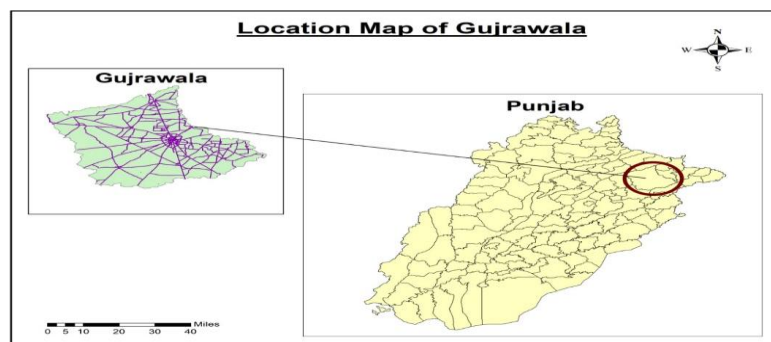


Picture 1 population of the district

Source: Census 2017

#### Location

Gujranwala is a city and capital of Gujranwala Division located in Punjab, Pakistan. It is also known as the "City of Wrestlers" and is quite famous for its food. The city is Pakistan's 5th most populous metropolitan area, as well as the 5th most populous city proper. Founded in the 18th century, Gujranwala is a relatively modern town compared to the many nearby millennia-old cities of northern Punjab (Mughal, 2014)(Rana & Bhatti, 2018). Gujranwala is now Pakistan's third largest industrial center after Karachi and Faisalabad and contributes 5% of Pakistan's national GDP. The city is part of a network of large urban centers in north-east Punjab province, forming one of Pakistan's most highly industrialized regions. Along with the nearby cities of Sialkot and Gujrat, Gujranwala forms part of the so-called "Golden Triangle" of industrial cities with export-oriented economies (Shahid, 2022)(Javed & Qureshi, 2019).



Picture 2 location map of district Gujranwala

Source: by researcher 2023

## Topography

Gujranwala is located in the Rachna Doab's center, a region stretching from the Ravi River in the south to the Chenab River in the north. Gujranwala is a historic area of northern Punjab that is a part of the Majha. Punjabi plains served as the foundation for the city, and the area around it is an endless plain devoid of topographical variety (I. Khan & Syed, 2021)(Nadeem et al., 2023).

Gujranwala, which lies 226 meters (744 feet) above sea level, borders Ghakhar Mandi and several other cities and towns. The province capital, Lahore, is located around 80 kilometers (50 miles) to the south. Gujrat and Sialkot are to its north. Azad Kashmir and Sialkot connect Gujranwala to Bhimber, while Gujrat connects it to Jammu. Faisalabad is located about 99 miles (160 km) to the southwest. Hafizabad and Pindi Bhattian, which lie west of it, link Gujranwala to Jhang, Chiniot, and Sargodha (Naz & Zaidi, 2013)(Tahir & Khaliq, 2018).

## Climatic Conditions

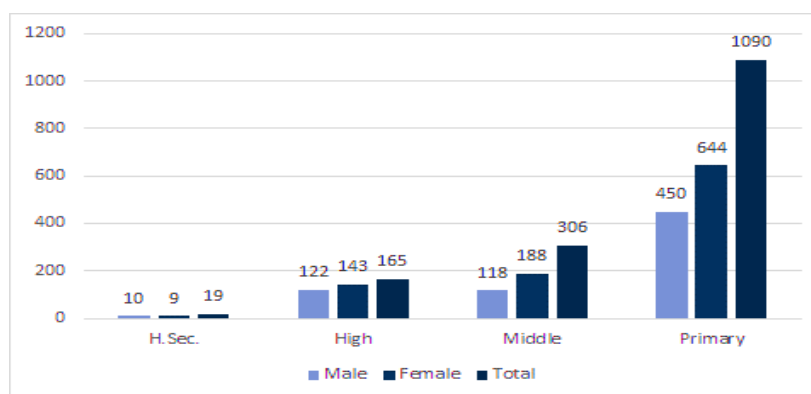
Gujranwala experiences seasonal fluctuations and a hot, semi-arid environment. The summertime temperature ranges from 36° to 42°C (97° to 108°F) from June to September. November through February are often the coldest months, with average lows of 7°C (45°F). When the monsoon enters the Punjab, the wettest months are usually July and August. The average rainfall during the other months is approximately 25 millimeters (0.98 in).

## Social Conditions of Case Study Area

### Education

Gujranwala's literacy rate was 79%. Gujranwala has the Army Aviation School, which was moved from Dhamial to Gujranwala in 1987. For better and higher education, many universities are established in Gujranwala, the universities include the University of Sargodha, University of Central Punjab, GIFT University, and University of Punjab.

### Schools



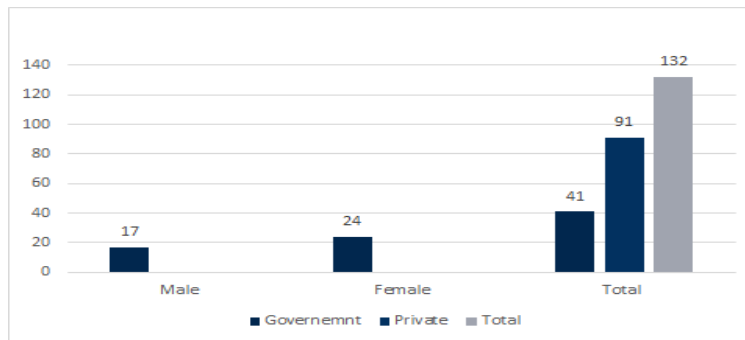
Picture 3 Schools in Gujranwala

Source: District Report, Government of Punjab

### Colleges

Like other cities of Pakistan, education in Gujranwala also comprises Primary, secondary, and graduate-level education. Scholarships are also offered for the best academic results.



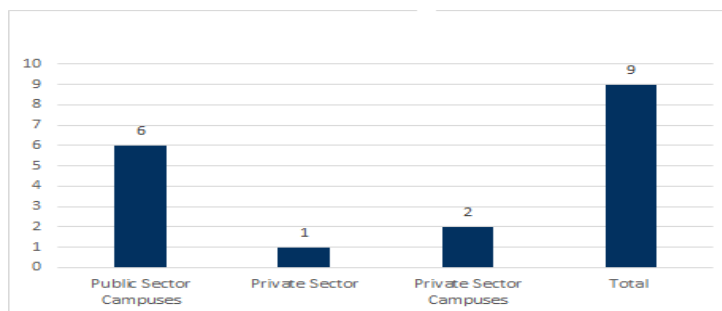


Picture 4 Colleges in Gujranwala

Source: District Report, Government of Punjab

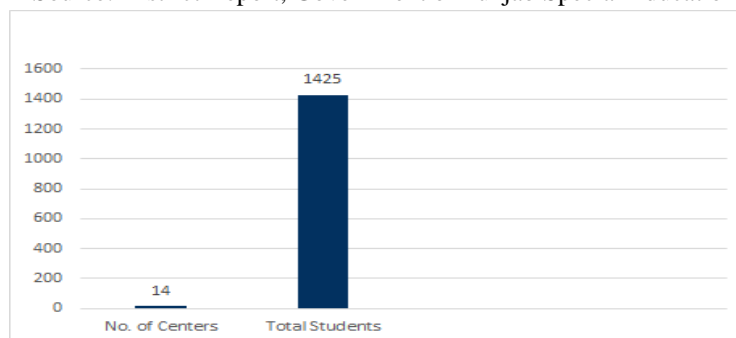
### Universities

Gujranwala has numerous educational institutions, including universities, colleges, and schools. The University of the Punjab has a campus in Gujranwala, and several other universities and colleges are offering a range of courses and degrees. Gujranwala City's adult literacy rate in 2008 was 73%, which rose to 87% in the 15–24 age group throughout Gujranwala District, including rural areas. The city is also home to the Gujranwala Theological Seminary, established in Sialkot in 1877 and moved to Gujranwala in 1912. The Army Aviation School of the Pakistan Air Force was moved to Gujranwala in 1987 from Dhamial.



Picture 5 Universities in Gujranwala

Source: District Report, Government of Punjab Special Education Center



Picture 6 Special Education Center in Gujranwala

Source: District Report, Government of Punjab

### Recreation

#### Nishan-e-Manzil

Nishan-e-Manzil Gujranwala is a famous landmark and a well-known point of interest in this city which is visited by several people on a daily basis. This beautiful place is situated in Gujranwala Cantonment.

### **Liaquat Park**

Liaquat Park (Company Bagh) is a park located in Gujranwala which is famous for having a tree that is probably hundreds of years old. It stands in the middle of a large field in the park.

### **Sheranwala Bagh**

The Sheranwala Bagh Baradari is a garden pavilion reportedly built by Mahan Singh, the father of the famous Maharaja Ranjit Singh. It is a classic baradari, which means '12 doors' about the three open bays on each side of the structure.

### **Gulshan Iqbal Park**

Gulshan Iqbal Park is the only park for Gujranwala people who want to enjoy outdoor activities with their families. Children enjoy swings, train rides, and other fun-filled activities in the playing area. Situated in the suburban locality of Shaheen Abad G.T. Road, the park has a big ground for jogging and picnics.

### **Jinnah Park**

Jinnah Park in Kangniwala is a beautiful, lush green park which makes it a good picnic spot for family outings.

### **Haveli of Maharaja Ranjit Singh (Sher-e-Punjab)**

Maharaja Ranjit Singh was the first Indian in a millennium to turn the tide of invasion back into the homelands of the traditional conquerors of India, the Pashtuns (Afghans), and thus, he became known as the Lion of Punjab. At their height, his domains extended from the Khyber Pass in the northwest to the Sutlej River in the east and from the Kashmir region at the northern limit of the Indian subcontinent southward to the Thar (Great Indian) Desert. After decades of unwillingness to protect the Sikh heritage, the Gujranwala district administration has planned the restoration and preservation of Maha Singh's tomb, located in the premises of Sheranwala Bagh. However, it is now a crumbling structure with encroachments.

### **Gurdwara Rori Sahib**

Gurdwara Rori Sahib, (Front View) Eimanabad Gujranwala Pakistan. This Gurdwara was built during the era of Maharaja Ranjit Singh (November 1780 - June 1839). Gurdwara Rori Sahib is the sacred shrine that marks the site where, according to tradition, Guru Nanak, after the town's destruction had stayed with Bhai Lalo. Here the Guru had to sit and lie on a hard bed of pebbles (small stones) as alluded to in Bhai Gurdas Varan.

### **Transportation**

Gujranwala is well-connected by road and rail to other major cities in Pakistan, including Lahore, Islamabad, and Karachi. The city also has an international airport, the Gujranwala International Airport, which is currently under development.

### **Gujranwala railway station**

Gujranwala railway station serves as a stop along Pakistan's 1,687 kilometers (1,048 mi)-long Main Line-1 railway that connects the city to the port city of Karachi to Peshawar. The entire Main Line-1 railway track between Karachi and Peshawar is to be overhauled for \$3.65 billion for the project's first phase, with completion by 2021. Upgrading the railway line will permit train travel at speeds of 160 kilometers per hour, versus the average 60 to 105 km per hour speed currently possible on existing track.

### **Air**

Gujranwala has no airport of its own. The city is instead served by airports in nearby cities, including the Allama Iqbal International Airport in Lahore which offers non-stop flights to Europe,

Canada, Central Asia, East Asia, and Southeast Asia. Gujranwala is also serviced by the nearby Sialkot International Airport - Pakistan's first privately owned commercial airport. Built in 2007, the airport offers non-stop service to the Middle East, as well as domestic locations.

Public transportation Gujranwala has a small-scale centrally managed public transportation system known as a city `tour.

### **Gujranwala Flyover**

Gujranwala is situated along the historic Grand Trunk Road that connects Peshawar to Islamabad and Lahore. The Grand Trunk Road also provides access to the Afghan border via the Khyber Pass, with onward connections to Kabul and Central Asia via the Salang Pass. The Karakoram Highway provides access between Islamabad and western China, and an alternate route to Central Asia via Kashgar, China.

Gujranwala is connected to Lahore by Sialkot-Lahore Motorway. The motorway passes east of the Grand Trunk Road and terminates near the Sialkot International Airport. Plans for the motorway's extension farther north to Kharian near Gujrat City were announced in late 2017.

### **Economic Conditions of Case Study Area**

Gujranwala is home to a wide variety of industries. Gujranwala is Pakistan's third most significant center of industrial production after Karachi and Faisalabad. Gujranwala, along with the nearby industrial cities of Sialkot and Gujrat City, form what is sometimes referred to as the Golden Triangle of their relative prosperity and export-oriented industrial base. The city's industries employ up to 500,000 people, while the city's GDP makes up 5% of Pakistan's overall economy.

As of 2002, the city's environs were home to some big industries, 25,000 cottage units, and an estimated 6,500 small and medium-sized businesses that manufacture various items. With more than 200 producers in the city, Gujranwala serves as the hub for manufacturing and exporting sanitary equipment and goods in Pakistan. The city is home to around 60 auto part manufacturers.

With 150 small and medium-sized businesses in Gujranwala connected to the electric fan industry, the city is well known as a hub for producing electric fans. The city is Pakistan's third largest center for iron and steel manufacturing - reflecting Gujranwala's historic association with metalworking since the migration of the Lohar clan of blacksmiths to the city during the colonial era. The city has been a center of hosiery manufacturing since the migration of refugees primarily from Ludhiana in 1947.

Textiles, apparel, yarn, and other textile goods are also produced in Gujranwala. Other manufacturing based in the city includes rice, plastic, cutlery, coolers and heaters, agricultural tools and equipment, carpets, glass goods, surgical equipment, leather products, machinery for military uses, domestic appliances, motorcycles, and food products. The rural regions surrounding Gujranwala are heavily engaged in wheat production and yielding more wheat per acre than the national average. Gujranwala District is also the most productive region for rice growing in Punjab.

In 2010, Gujranwala was ranked 6 out of Pakistan's top 13 cities in order of ease of doing business by the World Bank and was ranked the second-best in Pakistan for construction permits. Pakistan's electric shortages of the 2010s severely stymied the city's growth. Industrial units in the city suffered an average of 2872 hours per year in Gujranwala in 2012. By the end of 2017, the electricity supply had drastically improved with augmented electric generation due to new power stations coming online. Improved supplies of electricity contributed to the important Places.

## Markets

Gujranwala district is one of the major industrially developed districts of the country. It possesses the requisite social/physical infrastructure and industrial base for the manufacture of specialized electrical/electronic products and industrial machinery to meet the overall requirements of the country such as distribution/power transformers, electricity/gas/water meters, circuit breakers, electric appliances, wires/cables, calculators, computers, machine tools, etc.

### The following industries are identified for investment in district Gujranwala:

Auto Parts, Aluminum Conductors, Animal/Poultry Feed, Boilers, Copper Wire, Calculators, Cast Iron Pipe, Circuit Breaker, Cattle/Sheep/Goat Fattening Farm, Capacitors/Resistors/Transistors, Dairy Farm, Distribution/Power Transformer, Electric Motors/Turbines, Electricity/Gas/Water Meters, Fructose from Rice, Leather Garments, Machine Tools.

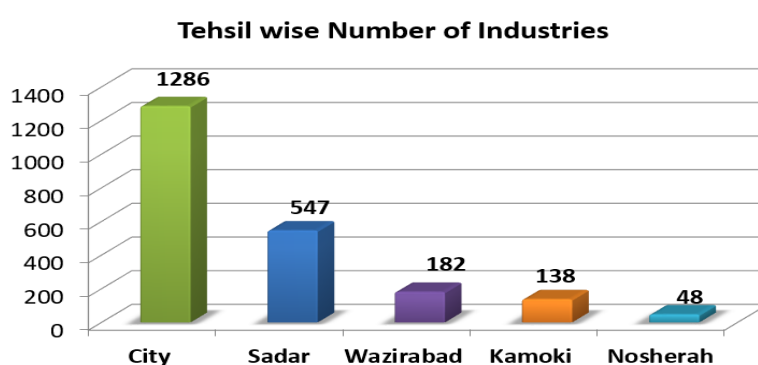
## Industries

Gujranwala is now Pakistan's third largest industrial center after Karachi and Faisalabad and contributes 5% to Pakistan's GDP. The city is part of a network of large urban centers in northeast Punjab that forms one of Pakistan's most highly industrialized regions.

**Table 1 Industrial units of Gujranwala**

Major Industrial Units	1,494
Minor Industrial Units	707
Total	2,201

Source: District Report, Government of Punjab



**Picture 22 industries in Gujranwala**

Source: District Report, Government of Punjab

## Agriculture

After independence, Gujranwala was developed and is now Pakistan's leading city. It is now an agricultural marketing center (grains, melons, sugarcane) and a commercial and industrial center, manufacturing ceramics, iron safes, copper, brass, and aluminum utensils.

**Table 2 Agriculture division in Gujranwala**

Total Area	906,352
Cultivated Area	778,210
Uncultivated Area	128,142
Forest	2,084
Cultivable wasteland	49,162
Not available for cultivation	76,896

Source: District Report, Government of Punjab



**Picture 23 Agriculture in Gujranwala**

Source: District Report, Government of Punjab

### Forest

An area of 1977 acres is under forest in the district. There is also a linear plantation of 1759 km alongside the roads/canals. The popular trees grown in the area are Kau, Phalai, Kikar, and Shisham.

### Sports

Gujranwala has the multipurpose Jinnah Stadium, which has a capacity of 20,000 spectators. It has hosted matches of the 1987 and 1996 Cricket World Cup.

### Institutional Setting in Case Study Area

#### Development Authority

Gujranwala and its environs were amalgamated into a district in 1951. The Gujranwala Development Authority was established in 1989 to oversee economic and infrastructure development in the city. The city is currently administered by the City District Government Gujranwala (CDGG) and Gujranwala Metropolitan Corporation, while development is generally under the office of the Gujranwala Development Authority. In 2007, the city was re-classified as a city district with 7 constituent municipalities: Aroop, Kamonke, Khiali Shahpur, Nandipur, Nowshera Virkan, Qila Didar Singh, and Wazirabad Towns.

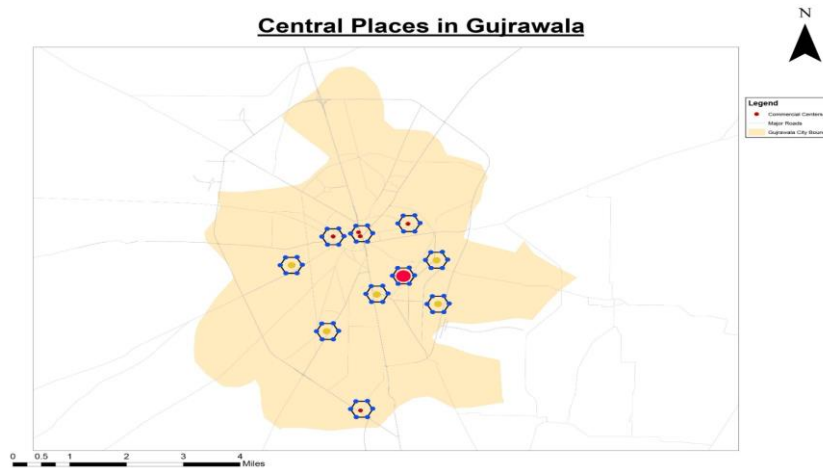
In December 2019, Gujranwala Municipal Corporation was upgraded into a Metropolitan Corporation under Punjab Local Government Act 2019.

1. Local Government System.
2. Municipal Corporation Gujranwala.
3. District Council Gujranwala.
4. Municipal Corporation Kamoke.
5. Municipal Committee Nowshera Virkan.
6. Municipal Committee Qila Didar Singh.
7. Administrative division

**Table 3 Administrative division of Gujranwala**

Area	2,433 Sq. KM
Population	4.18 (million people as per census 2017)
Population Density	1,718 per sq. km
Revenue Tehsils	04
National Assembly Constituencies:	05
Provincial Assembly Constituencies	12
Rural Local Governments	01
Villages / Revenue Estates	840
Police Stations	24
Police Posts	09

Source: District Report, Government of Punjab



Picture 24 Central places in Gujranwala (growth perspective)

## CONCLUSION

Gujranwala City is a rapidly growing industrial city in Pakistan, with a population of 4,708,000 in 2014. The city has experienced significant population growth and metropolitan area development, leading to a strain on resources. The defunct city district government and outdated development plans have hindered the city's growth and development. The city's urban growth and socioeconomic development have been influenced by various factors, leading to disparities between districts. The environmental balance in urban-rural areas has been disrupted by commercial and industrial activities, population growth, and inadequate use of natural resources. The city's regional planning at the district level aims to address the community's needs and promote sustainable development. However, challenges related to evaluating regional sustainable development and capacity development for regional development persist.

Gujranwala is a city located in the Punjab province of Pakistan, known for its industrial and commercial significance. The city's topography, climatic conditions, and social conditions, including education, recreation, and transportation, play a crucial role in shaping its development. The city is well-connected by road and rail to other major cities in Pakistan and has a significant industrial base, contributing 5% to Pakistan's GDP. The institutional setting in Gujranwala includes the City District Government Gujranwala, Gujranwala Development Authority, and the newly upgraded Gujranwala Metropolitan Corporation. The administrative division of Gujranwala consists of revenue tehsils, national and provincial assembly constituencies, rural local governments, villages, police stations, and police posts. Overall, Gujranwala faces challenges related to urban growth, environmental planning, sustainable development, and capacity development. The city's industrial and economic significance, coupled with its rich cultural and historical heritage, make it a significant urban center in Pakistan.

## REFERENCES

- Abousaeidi, M., Fauzi, R., & Muhamad, R. (2016). Geographic Information System (GIS) modeling approach to determine the fastest delivery routes. *Saudi Journal of Biological Sciences*, 23(5), 555–564.
- Ahmed, S., Huifang, W., Akhtar, S., Imran, S., Hassan, G., & Wang, C. (2021). An analysis of urban sprawl in Pakistan: consequences, challenges, and the way forward. *International Journal of Agricultural Extension*, 8(3), 257–278.
- Ali, S. A. M., & Mufti, M. (2022). *Political Parties and Decentralization in Pakistan*. Publius: The



- Journal of Federalism, 52(2), 201–224.
- Ali, Z. (2020). *City Planning And Urban Design Guide*. Pakistan Institute of Development Economics.
- Bihanding, H. (2019). *Perencanaan pembangunan partisipatif desa*. Deepublish.
- Drakakis-Smith, D. (2012). *Urbanisation, housing and the development process*. Routledge.
- Hidayat, R. J. P., & Salahudin, S. (2021). *Perencanaan Pembangunan Infrastruktur Yang Berkelanjutan Sebuah Kajian Pustaka Terstruktur (Systematic Literature Review)*. Kybernan: Jurnal Studi Kepemerintahan, 4(2), 110–128.
- Javed, N., & Farhan, K. (2020). Access to Urban Services for Political and Social Inclusion in Pakistan. *Governance for Urban Services: Access, Participation, Accountability, and Transparency*, 237–254.
- Javed, N., & Qureshi, N. N. (2019). City profile: Faisalabad, Pakistan. *Environment and Urbanization ASIA*, 10(2), 233–254.
- Javed, N., & Riaz, S. (2020). Issues in urban planning and policy: The case study of Lahore, Pakistan. *New Urban Agenda in Asia-Pacific: Governance for Sustainable and Inclusive Cities*, 117–162.
- Khan, A. U., Saboor, A., Hussain, A., Sadiq, S., & Mohsin, A. Q. (2014). Investigating multidimensional poverty across the regions in the Sindh province of Pakistan. *Social Indicators Research*, 119, 515–532.
- Khan, I., & Syed, K. H. (2021). *Social Stratification in a Punjab Village in New Millennium*.
- Minallah, M. N. (2016). Urban growth and socio-economic development in Gujranwala, Pakistan: a geographical analysis. *Pakistan Journal of Science*, 68(2).
- Mughal, M. A. Z. (2014). *Time, space and social change in rural Pakistan: An Ethnographic study of Jhokwala Village, Lodhran District*. Durham University.
- Nadeem, A. A., Zha, Y., Mehmood, K., Awais, M., Afzal, M. M., Hussain, H., Shaheen, A., & Aslam, B. (2023). Quantification of temporal variations in groundwater level using satellite imagery technique: A case study of Rachna Doab, Pakistan. *International Journal of Environmental Science and Technology*, 20(3), 2565–2580.
- Naz, N., & Zaidi, S. U. H. (2013). Historical perspective of urban development of Gujranwala. *J Res Arch Plan*, 14(1), 21–38.
- Nyairo, R., Onkangi, R., & Ojwala, M. (2021). Contextualizing Resilience Amidst Rapid Urbanization in Kenya Through Rural-Urban Linkages. *Climate Vulnerability and Resilience in the Global South: Human Adaptations for Sustainable Futures*, 55–73.
- Rafique, Z., Rosilawati, Y., & Habib, S. (2020). Development of local governance and decentralization to empower citizens in Pakistan: A historical analysis. *Revista UNISCI*, 53.
- Rana, I. A., & Bhatti, S. S. (2018). Lahore, Pakistan—Urbanization challenges and opportunities. *Cities*, 72, 348–355.
- Shahid, K. A. (2022). *Is the Physical Infrastructure in Pakistan Enough to Attract Foreign Direct Investment*.
- Soltani, K. (2022). Urban development and redevelopment in developing countries and the middle east. In *Redeveloping Tehran: A Study of Piecemeal Versus Comprehensive Redevelopment of Run-Down Areas* (pp. 23–40). Springer.
- Tahir, M., & Khaliq, T. (2018). 2 Land Use in Pakistan. *Developing Sustainable Agriculture in Pakistan*, 33.
- Yuen, B., & Choi, S. (2012). *Making spatial change in Pakistan cities growth enhancing*.



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