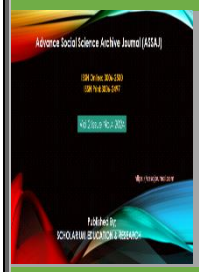

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REAL ESTATE SECTOR WITH ENVIRONMENTAL SNAGS & INFORMAL ECONOMY. INSIGHTS FROM QUETTA, BALOCHISTAN. A QUALITATIVE STUDY

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ABSTRACT
The real estate sector in Quetta, Pakistan, faces numerous challenges that hinder its growth and sustainability. The study examines the current trends and challenges in the real estate sector of Quetta, Pakistan, focusing on environmental issues, pollution, no registration, rising taxes, and government policies. The study examines the level of informality in the economic activities of the real estate sector. The study employs a qualitative approach, utilizing interviews with key stakeholders to provide a comprehensive NVivo overview. The research concluded that the real estate sector is primarily informal. The findings reveal significant concerns regarding environmental issues, pollution, and resource waste due to the real estate sector.

Keywords: Real Estate Sector. Environment. Ecology. Informal Economy. Quetta. Balochistan. NVivo.

Introduction

Pakistan is facing housing issues for the lower income groups, increasing urbanization in the last few decades, and critical issues of ecology (Jahangir, 2018). Pakistan's major cities require homes, hotels, schools, hospitals, and areas for commercial activities for many migrants to urban areas from remote rural areas. Besides urbanization, the population of the metropolitan regions is increasing rapidly. Pakistan has the fifth largest population in the world. The current population of Pakistan is 252.4 million, which is 3.08% of the world population, with an annual growth rate of 1.52%. The urban population of Pakistan is 34% in 2024, which was 30% in 2010 and 29% in 2000, which indicates an increase in urbanization in the last 15 years (Worldometer, 2024). The need for houses in Pakistan increased by 75% from 1980; there are differences in houses required in all four provinces of Pakistan, with person per room decreasing from 3.2 to

2.6. The average person per room in Pakistan is 7, whereas in Balochistan, it increases from 7.6 to 7.8 (Hasan & Arif, 2018).

The rapid increase of urbanization and construction in the major cities of Pakistan damages the ecology with the informal settlement of lands. Urban flooding, illegal encroachment, land reclamation, decreasing orchards and agriculture fields, and horizontal expansion of the cities are vital causes of damage to the ecological systems (Farhan, 2013). Heatwaves, floods, weather changes, snowline, global warming, and increased carbon cycle disturb the environment. Most of Pakistan's major cities' construction is unplanned (Hasan & Arif, 2018). Air pollution, water pollution, sanitation problems, solid waste management issues, fast deforestation, reliance on pesticides, water-table reduction, inorganic foods, use of fertilizers, and climate change are due to development in the real estate sector and urbanization (Aslam, 2018). On the other hand, development in today's world is related to economic corridors, building industrial cities, roads with networks, and infrastructure development (Sugiyarto, 2017).

According to the ADB (2024) report on Pakistan, the real state sector of Pakistan is associated chiefly with informal settlement. Land grabbing and land encroachment are comprehensive practices in almost every area of Pakistan. Illegale enhancement, informal sector activities, and avoiding building codes cause lousy living conditions, disrupt urban life, and damage city development. The unplanned housing, lack of green buildings, and traffic are because of the informal settlement of the real estate sector (ADB, 2024). There is a strong connection between ecological disorder and informal activities in real estate, especially in Balochistan Province and Quetta.

The real estate sector in Quetta, the capital city of Balochistan province in Pakistan, presents an exceptional and multidimensional landscape categorized by its strategic geographical location, socioeconomic undercurrents, and regulatory challenges. As an emergent urban centre, Quetta has witnessed significant growth and development in its real estate market over the past few decades (Kakar & Kakar, 2011). The city is the capital of Balochistan Province, the largest province by area of Pakistan. The growth in the real estate sector has been driven by factors such as urbanization, population influx, and the city's pivotal role as a trade and transit hub. The town connects the Afghanistan and Iran border to Pakistan with the rest of the country (BBOIT, 2024).

The main reason for Quetta's urbanization is the province's capital city, which has better health and education facilities than the other cities of Balochistan. However,

the real estate market in Quetta has its complexities and challenges. The interplay of regulatory frameworks, socioeconomic disparities, political instability, and informal real estate practices has shaped the market's development in both positive and negative ways (SMEDA, 2021). The political instability profoundly impacted real estate investments, often deterring potential investors and slowing market growth. Additionally, the rise of taxes and changes in property-related fiscal policies have influenced real estate dynamics, affecting developers and buyers. Increased property taxes and transaction fees have sometimes resulted in reduced investment activity. Understanding these dynamics is crucial for stakeholders, including policymakers, investors, urban planners, and local communities, to navigate the opportunities and risks of real estate investments in Quetta.

Few studies highlighted the informal economic activities and real estate sector in Quetta. Shahzad, Ahmed, & Fatima (2023) compared Quetta city's formal and informal financial sectors. The real estate sector was considered an informal economic sector for Quetta City. Tariq, Shahzad, and Ahmed (2024) highlighted the micro-credit for the small enterprises of Balochistan. Another study about the settlement of the Pakistan land market was conducted, and the study concluded that there was a settlement of land on a cash basis (Settle, 2018). Anjum, Bazai, and Naeem (2022) highlighted that Balochistan province has all the natural resources but does not have clean air and clean water. No study was found in the literature about the real estate sector's association with ecological disorder and the informal economy. The sustainable development and growth of the real estate sector are significant obstacles in Quetta. The Quetta real estate industry is a volatile and unpredictable market environment, as the Quetta market is a hub of trade and transit. The irregular spread of the city while not following the building code and tax laws, as well as unplanned development in the town, which causes severe ecological disorder and activities, are mostly related to the informal economy.

Objectives of the study

The objectives of the study are

- To analyze the real estate market in Quetta
- To identify the key trends and challenges of the real estate market in Quetta
- To Identify the level of informality in the real estate sector of Quetta
- To identify the environmental disorder in Quetta due to the real estate sector

Significance of the study:

The study holds the significance of the real estate sector in its comprehensive investigation of the real estate sector in Quetta, Balochistan. The study highlights

critical challenges and trends in the real estate sector and investigates the sector's growth and sustainability. The study adds to the existing literature poll on the real estate sector and ecology in Quetta City and Balochistan. The study examines the impact of the real estate sector on ecological disorder and the informal economy.

Literature review

Many micro-enterprises, small firms, and multi-size builders are engaged in Pakistan's construction business, housing scheme development, and real estate sectors. These Mirco enterprises work as subgroups and subsidiaries of major investors and land grabbers who hold illegal money. Javed and Nawaz (2023) categorized the real estate sector into formal and informal classifications. Self-built homes in planned schemes, developers and builders-constructed homes, cooperative housing, community houses, welfare houses, and government housing schemes are part of formal real estate. Whereas unauthorized construction on state lands, organized invasion on state lands, unapproved sub-division on state lands, Nascent land grabbing under the patronage of an influential person, and encroachment over empty lands are grouped into informal real estate. Political decisions restrict the formal land supply and increase informal practices in the real estate sector. The weak legal framework leads to uncertainty in the sale purchase of the real estate sector. Financial agencies hesitate to lend money due to the slow transfer and settlement of real estate, and the stakeholders find informal ways to transfer land (Rana, 2021).

According to Ellis and Roberts (2016), Pakistan's urbanization rate is around 3% and will grow with this peace in the coming years; urbanization is 37% in Pakistan. Pakistan faces an 11 million shortage of houses in 2021; Pakistan must build 350,000 homes per year, whereas the supply is only 150,000 (Federal Government, 2021). The quality of the houses and buildings significantly impacts the real estate sector; many homes have been destroyed and demolished due to natural disasters, urban flooding, rural flooding, and infrastructure development (Hasan & Arif 2018). The average cost of house building and construction has increased by 200%; it was 3.7 million in 2012, which increased to 6.6 million in 2018 (Khalil & Nadeem, 2019). The informal settlement of the Katchi Abadi is observed in every city of Pakistan, which causes weak building structure, low service facilities, unsafe living, sanitation problems, lack of social engineering and architects, and overcrowding (Siddique, 2019).

Investment in the land market makes it easy to hide the black money earned by prominent corrupt people compared to the formal financial system, stock markets, and industry development (Tirmizi, 2020). The property dealers are mostly unregistered in

Pakistan and are tax avoiders and large contributors to the country's hidden economy (Rana, 2021). Malik and Wahid (2014) identified that speculation in land markets, failed rules and regulations, no assistance, immediate need, lengthy procedures, and expensive lands are the key contributors to the growth of the informal real estate sector.

Kakar and Kakar (2011) highlighted that the refugee arrival, urbanization, lack of investment opportunities, availability of formal credits, and low inflow of foreign remittances are the prime issues of the real estate sector of Quetta city. Javed and Nawaz (2023) worked on housing in Pakistan and highlighted that housing in Pakistan followed the West for the last two decades. Human migration from urban to rural areas of Pakistan is due to industrialization and better facilities for life. After 9/11, Afghan migrants traveled to KPK and Balochistan for refuge. The land record issues are complex and cause delays in the real estate sector. The complex transfer systems, ownership rights, tenancy rights, leasing rights, public and state land disputes, and non-digital land records allow corruption and informal settlement in the real estate sector.

After the 18th constitutional amendment (2010), housing and town planning became provincial subjects, but DHA and Cantonment authorities are still working on previous federal rules. The recent development of Multan DHA is around 38 square kilometers, which is bigger than the 100 district cities of Pakistan. Urbanization causes serious water scarcity issues in Pakistan's urban areas (Hameed et al., 2021). Pakistan is one of the countries with the lowest share of rental housing. Another critical issue with the housing and real estate sector is the administration of the lands with multiple agencies. Like Cantonments land is According to the Cantonment Act 1922, tehsil municipal authorities are looking at some areas, revenues administrations control a few lands, development authorities also involved in the land management, and some private builders like Bahria are involved in the lands. In the same city, the authorities differ regarding green builts and parks, water and sanitation, road buildings, water management, waste management, health, and education (Haroon et al., 2019; Aziz et al., 2020).

According to the Balochistan Immoveable Property Ordinance (1965), no person is allowed to hold any property without lawful authority. No one can unlawfully occupy, hold, construct, encroach, crop, or land or property—ownership documents forfeiture. According to the economic report (2008), Quetta is above 180th worldwide in ease of property registration. Compared to the other developed cities of Pakistan,

Quetta is low in all ten indicators; Quetta takes 93 days to register a property compared to Karachi. The registration cost and stamp duty, registration fee, and transfer charges are high. Contract enforcement is the weakest in Pakistan and Balochistan; Quetta city property and real estate sector faces agreement delays and contract issues.

The property accounts are naturally informal, and the property system's valuation process is ineffective. The poor legislation and hidden profit of property transactions are part of the real estate sector, and the informal real estate sector mostly plays property deals. Real estate agents, property developers, and builders are the agents controlling the property sector of significant cities in Pakistan; the rural areas are also under the influence of these market agents. The agricultural land is being reduced and replaced by housing societies near big villages, tahsils, and district towns. Agriculture lands were typically purchased at lower prices and re-sold at higher prices, with some development occurring without payment of due taxes (Mustafa, 2019).

According to the Pakistan Social and Living Standards Measurement (PSLM, 2020), Balochistan's homeownership in urban areas is 83% self-owned, 7 % rented, and 6 % empty. In the Balochistan urban area, self-owned homes comprise 69%, 23 % are rented, and 4 % are empty, compared to rural areas where self-owned homes comprise 88%. In rural areas, houses are rented just 3 %, and 8 % are empty. The figure of PSLM indicated that the number of rented homes in rural areas is far less than in urban areas, and the high percentage of empty homes indicates that Balochistan follows the same trend of urbanization as the rest of the country and world.

Lu et al. (2024) highlighted the population share of Quetta city. Quetta has a share of 0.40 % of the population of Pakistan and 7.4% of the population of Balochistan Province. At the same time, 1.2% of the population is in urban cities of Pakistan, and 27% of the urban population of Balochistan. According to the ADB report (2024), local government councils have been tasked by Balochistan's LGA with overseeing "land use control, zoning, master planning, classification, declassification, or reclassification of commercial or residential areas, markets, housing, urban or rural infrastructure, environment and construction, maintenance, or development thereof." Though any local council "may, within the area of its jurisdiction, with prior approval of Government, frame programs for Town Improvement and constitute a Town Improvement Committee for the purpose," town planning is a mandatory responsibility of urban councils.

Balochistan's leading organization regulating urban expansion is the Department of Urban Planning and Development. Balochistan has started a program to create a databank to help expedite public investment planning, better align it with urgent development needs, and identify priority development sectors to implement its framework for constructing a province spatial strategy. The certification and approval of construction projects, professional standards compliance, material testing requirements, and urban space management in streets, roads, and buildings are all covered by the Balochistan Town Planning and Building Rules 2021. Particularly concerning seismic safety precautions, street width specifications, emergency access, and building height restrictions, these regulations follow the Pakistan Building Code 2007 (World Bank, 2022).

Noncompliance with these diverse urban planning standards is pervasive. The proliferation of unregistered construction and poor road, trash, sanitation, and lighting management underscore Balochistan's urban planning and governance shortcomings. One of the main obstacles to controlling urban development in Balochistan is the unwillingness to enforce town planning regulations and the severe limits on local government capabilities. Pakistan experienced one of the worst floods in its history in 2022. The floods, brought on by the most intense and concentrated monsoon rains ever recorded, clearly demonstrated the rise in climate and disaster risks and the associated economic and social consequences to the nation. There were over 33 million impacted. There were over 1,730 fatalities. Approximately 2 million homes were damaged or destroyed, and 8 million people were forced to relocate. Road segments were washed away, dams and water supply systems were killed, and 22,000 schools suffered damage. They had to close temporarily, and many people's livelihoods were upended by the near-total loss of cattle and kharif (summer crops). The predicted losses and economic damage from the 2022 floods was $30 billion, three times the $10 billion.

The Quetta Development Authority oversees the construction of residential complexes and commercial districts, and the Metropolitan Corporation Quetta, which manages municipal services, are the city's two primary urban authorities. The Quetta Cantonment Board supervises the cantonment area's local government services. Furthermore, the city is home to more than 20 private housing complexes. Quetta has a severe water shortage, and its primary infrastructure and utility networks—such as those for energy supply, sewage disposal, and public transportation—have limited reach and capabilities. The 1985 master plan was hardly carried out. As of this writing in 2022, the 1985 master plan has not yet been updated, despite efforts to do so having begun in 2020 (Javed & Hobson, 2022).

Eighty percent of the entire cost of all previous significant flood events in the nation's history was incurred during the 2022 floods. Together, the floods in 2010 and 2022 claimed about 3,700 lives. Around 1,200 people were murdered in Karachi alone during Pakistan's most incredible heat wave in 2015, which reached 49°C. Droughts, whose effects take time to manifest, also caused Sindh to worsen in 2014 and reduced average GDP growth from 6.0 percent to 2.6 percent between 2000 and 2002. Meanwhile, 2022 UN research found that, in the worst-case climatic scenario, Pakistan will experience the most considerable estimated GDP loss from climate change among South and Southwest Asian nations, at 9.1% each year. According to a 2022 World Bank assessment, Pakistan's GDP might be lowered by at least 18–20% per year by 2050 due to the combined hazards of catastrophic climate events, environmental degradation, and air pollution.

Some regions of Pakistan are also vulnerable to other natural hazards, such as cyclones along the Sindh coast, seawater intrusion basin-scale changes in sediment dynamics in the lower Indus River basin, GLOFs in the northern region, and earthquakes in the Quetta area. This significant exposure to natural hazards has put the nation at persistently high catastrophe risk levels, placing it in the top 10 countries for climate risks and impacts, in addition to having a consistently high social vulnerability score due to poverty ranked 10th out of 193 nations most susceptible to climate-related disasters in 2022 and eighth among those most impacted by extreme weather occurrences from 2000 to 2019 (UNESCAP, 2022).

Urbanization and climate change have a complex and profound relationship. With 75% of worldwide emissions coming from cities, they are the most significant source of carbon emissions. 108 They are the primary drivers of land use change and have the highest pollution levels, which may exacerbate temperature increases and inversions. However, due to their high population density and high concentration of infrastructure, amenities, and services, cities may be most affected by climate-related disasters. Infectious and communicable diseases, many of which are made worse by climate change, are also effectively spread by cities due to the growing densification and overcrowding in urban populations (Government of Pakistan Report, 2022).

Cities also cause specific climate-related effects and urban-specific phenomena. One illustration is the urban heat island (UHI) effect, which results from heat trapped in concrete urban infrastructure and surfaces. The UHI has grown dangerously harmful in recent years, deteriorates the quality of urban soil and air, and poses health hazards to urban populations. Another example is soil sealing, which occurs when dense concrete is layered over urban areas, reducing the earth's natural ability to drain. Cities are crucial in mitigating and adapting to climate change because of the complex above and interconnected relationships. They must include climate change in every facet of

urban planning and management to make the shift to low-carbon and climate-resilient development (ESCAP, 2022).

One of the leading causes of urban flooding is the growing imperviousness of urban surfaces brought on by the loss of green cover and the soil sealing that occurs with extensive infrastructure development and construction projects in cities. Lahore is an excellent illustration. It became more vulnerable to flooding after losing more green cover in just 7 years (2010–2017) than in the preceding 20 years. Inadequate waste disposal systems, outdated and overworked drainage systems, a lack of rainwater storage and management systems, institutional capacity limitations, poor urban governance, and growth that disregards terrain and landscape all contribute to urban flooding.

According to the climate risk country profile of Pakistan (2021), air, water, and land pollution are just a few of the environmental issues that Pakistani cities must deal with. Particulate matter and nitrous oxide levels in significant cities are more remarkable than permitted by the National Environmental Quality Standards, indicating severe air pollution. The most important sources of air pollution are emissions from industry and transportation. Urban soil, water, and air pollution are caused mainly by improper waste management. In Pakistan, environmental deterioration has substantial social and financial repercussions. The average life expectancy in Pakistan is shortened by 4.3 years owing to air pollution alone, while death and years lived with disability result in an extra annual loss of 6.5 percent of GDP. Quetta, the provincial capital of Balochistan, is in comparatively better shape despite the country's less developed cities.

Traditional single-story courtyard homes predominate in Quetta's residential areas, which resemble an amalgam of rural communities. The downtown districts are crowded and overcrowded. The city has little room to grow because it is surrounded by mountains, mainly to the north and northwest. The maximum permitted building height since the 1935 earthquake caused extensive damage is 9.14 meters. The city is now updating its building standards to address the growing space shortage and the federal government's demand for more vertical development (Iqbal, 2023). Although Quetta is directly threatened by climate change, international organizations do not provide much assistance, and there is no cooperation with neighboring provinces to share information. Additionally, there is still little private investment and no PPP projects. One encouraging development is the recent improvement in public safety, which has long been a worry (ADB, 2020).

These elements include pervasive corruption, as Ahmad and Baloch (2018) point out, informal payments and corruption compromise the market's integrity, and ineffective industry unions that cannot adequately represent industry interests (Khan

et al. 2019). Khan and Raza (2022) highlight the negative consequences of inconsistent policies, bureaucratic inefficiencies, ineffective governmental policies, regulatory challenges, ongoing political and economic instability, and the fluctuating demand brought on by the departure of Afghan refugees and rising property taxes. Furthermore, political and economic uncertainty undermines investor trust and inhibits market expansion, as highlighted by Bukhari and Ali (2023). These issues have led to a fall in market activity, a distortion of property values, a decline in investor trust, and widening socioeconomic disparities. These interconnected issues call for all-encompassing plans and changes to promote Quetta's open, steady, and just real estate market. A considerable amount of real estate transactions in Quetta occur through unofficial channels, which lack the necessary paperwork and legal supervision, per a study by Qureshi and Iqbal (2021). This approach risks investors and property buyers and undermines the official real estate market. In Quetta's real estate market, money obtained illegally is frequently used in real estate deals.

Research Methodology

The study needs to get the intuition and understanding of the respondents, and it employs an inductive approach and exploratory design. Exploratory design reveals the hidden ideas and insights of the proposition (Creswell & Cresswell, 2017). The study adopted the qualitative research design, as the theory formulation typically related to qualitative research (Yin, 2009; Sekaran & Bougie, 2016). The literature review helped me understand the topic and build the storyline for the research. Understanding the topic is the foundation of the theme's development. The study adopted an inductive approach for theme development, which allowed the researchers to construct themes from the qualitative data. The deductive approach is based on literature and theories to make themes and then check the quality of data support for those themes (Kraiwanit, Limna, & Siripipatthanakul, 2023). Qualitative data for the study was collected through semi-structured interviews using purposive sampling (Pike, Puchert, and Chinyamurindi, 2018; Zikmund et al., 2013).

Twenty-five interviews were conducted with property dealers, real estate builders and developers, officials of environmental agencies, urban development officials, local government officials, and investors. Twenty-five interviews were the saturation point for the qualitative studies, whereas twenty-five interviews were the saturation point in this study (Galvin, 2015; Hennink & Kaiser, 2022). The interviews were transcribed verbatim, the transcription was coded, and themes were generated.

Nvivo soft was used for the study analysis. The software provides the opportunity for a detailed analysis of the proposition of the study (Alhojailan, 2012).

Data Analysis & Results

Qualitative interviews were conducted with 25 interviewees related to the real estate sector. All the respondents were educated, but no one was illiterate. The interviewed persons had mentionable experience in the related field. The data was coded for analysis, and the codes were abstracted from the data. Different words, phrases, sentences, and paragraphs were used to condense the meanings of the codes (Limna, 2023). The data highlighted 12 themes for the study; 5 themes are related to the ecology of the real estate sector, whereas seven themes are related to the informal economic activities in the real estate sector.

Word Count

Figure 1. Word count

The word count allows the researcher to count the most repetitive words in qualitative data. Twenty-five most repeated words are shown in Figure 1. These words help in the analysis and trend of the qualitative data.

Word Tree

Word tree is another technique used for data analysis; Nvivo software provides the option to make a word tree. Word trees represent the most frequent words used in the qualitative data. Word trees also highlight the hierarchical order of words used in the data. In the present study, words sector were used the most, and estate, real, government, business, and policies, respectively. Figure 2 presents the 25 words used in the data, represented in an order of tree. Word trees were used to identify the study's pattern and present the facts more clearly.

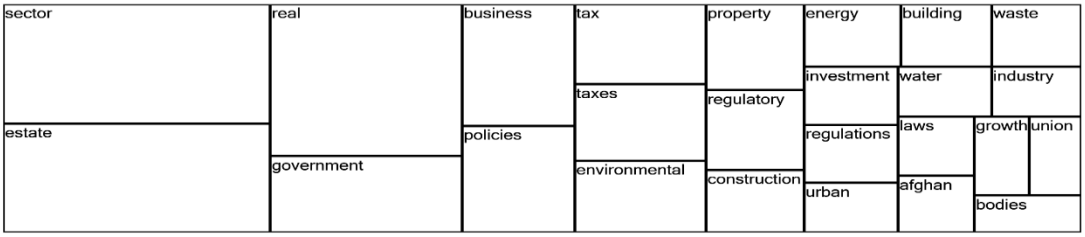

Figure 2: Word Tree

Cluster Analysis:

Cluster analysis facilitates insight and deeper analysis; cluster analysis categorizes the observation sets of the ungrouped data. The systematic arrangement of the themes generates analytical logic. Figure 3 represents the logical arrangement of the data into clusters and sub-clusters. Tax, policies, and sectors are placed in one sub-cluster, whereas investment, regulatory bodies, and growth are placed in a separate sub-cluster.

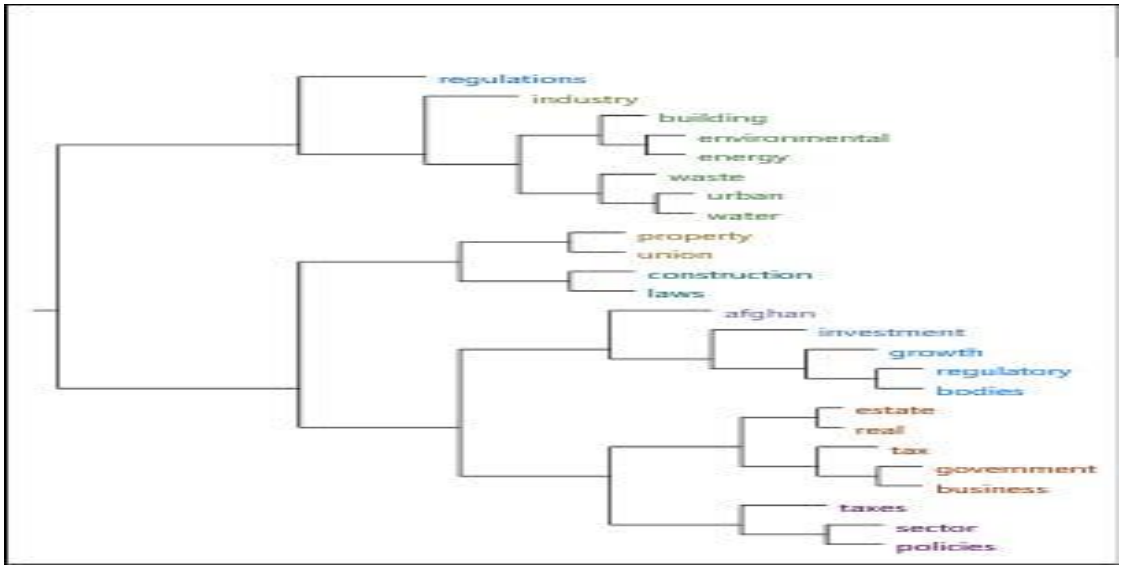

Figure 3: Cluster Analysis

Sunburst's analysis of Nvivo explains the codes used in the Nvivo; there were 12 codes used. The sunburst is like a pie graph showing the categories of the data set or categories.

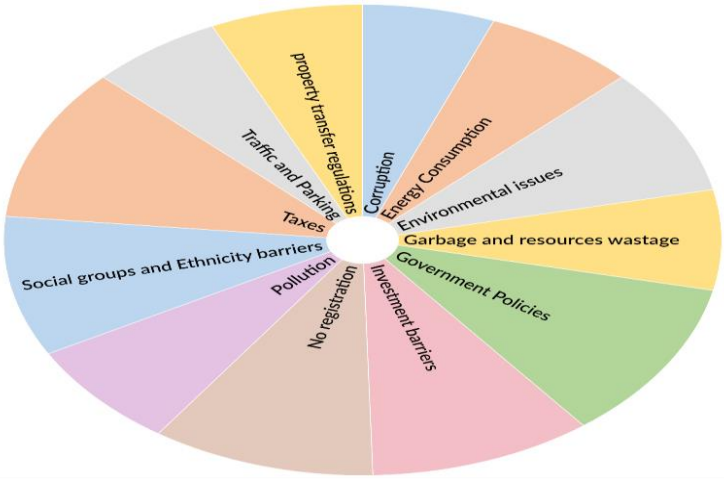

Figure 4. Sunburst Analysis

Table 1 Themes Extracted From Qualitative Data.

Code	Theme	Explanation
Taxes	Informal Economy	Informal real estate units do not pay taxes and dislike tax payments. (Shahzad, Ahmed, Fatima, 2023)
No registration		Registration is one of the characteristics of formal economic units, whereas no registration is part of informal units. (Shahzad, Ahmed, Fatima, 2023)
Government Policies		Government policies are needed to cope with the informality in the real estate sector. (Tariq, Shahzad, Ahmed, 2024)
Property transfer regulation		Government policies and procedures are complex, and policies are weakly implemented. (Tariq, Shahzad, Ahmed, 2024)
Energy consumption	Resource Wastage	Real estate construction consumes energy more than any other sector. (Shekhorkina et al. 2020)
Traffic and parking		Unplanned construction is a significant cause of traffic and parking issues, which waste resources and time. (Kasi, Mahar, & Khan, 2018)
Garbage and resource wastage		Ineffective and improper construction is a significant cause of garbage and waste of scarce resources. (Mirabella et al., 2018)
Pollution	Ecological issues	The real estate sector causes pollution by using energy consumption. (Wang et al., 2018).
Environmental issues		The real estate sector causes severe environmental issues in Quetta City. (Geiger et al., 2013).
Corruption	Social & Economic Impacts	The weak implementation of government policies increases corruption in society. (Balochistan Land Report, 2022)

Social groups and ethnicity barriers		Social groups and the tribal system of Quetta impact the real estate issues in Quetta city. (Anjum, Bazai, & Naeem, 2022)
Investment barriers		High inflation, government policies, and corruption reduced investment in the real estate sector of Quetta. (Javed & Hobson, 2022).

Matrix coding is also used for the analysis, and the matrix is formulated using codes and a builders/developer group of respondents. Developers are more concerned with taxes and government policies and least concerned about corruption, parking, and traffic issues. Government officers justify government policies, taxes, and energy consumption, whereas they are least concerned with the corruption and transfer of property regulations. Investors are more concerned with government policies, taxes, and registration issues and least about parking, pollution, and environmental issues. Property dealers are less concerned about environmental issues and corruption but focus more on taxes, regulations, and registration.

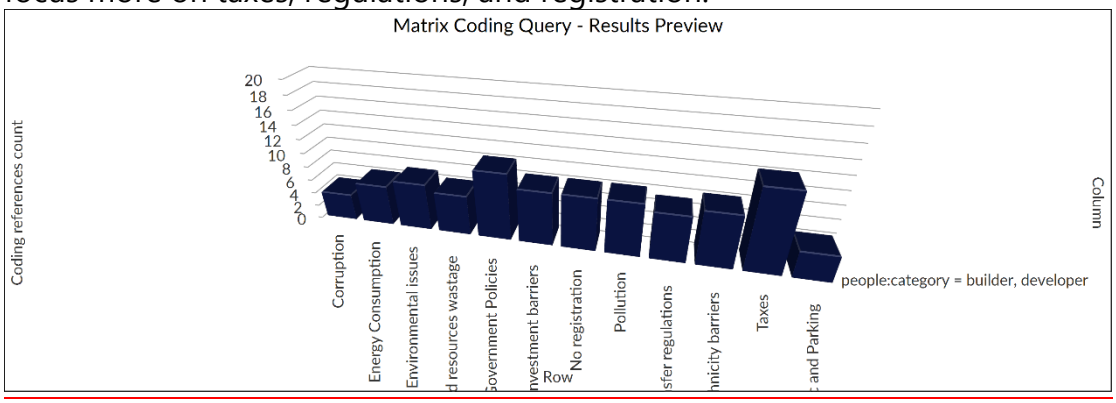

Figure 5. Matrix Coded

Discussion

The results of the data highlighted that the government imposes direct and indirect taxes, which are the primary source of revenue for the government and play an essential role in developing a country. The rapid and continuous increase in taxes on real estate in the sector shapes market behavior and influences investment decisions. The constant rise in taxes is discouraged by industry professionals; analyzing the opinions, 92% of interviewees stated that the high margin of taxes imposes a significant burden on the real estate sector, and the increasing taxes directly affect their businesses' growth and sustainability. Taxes have increased dramatically, noting a jump up to 300% tax, significantly impacting our business's profitability and operational costs. The sector taxpayers are unaware of the benefits against the taxes they pay.

Real estate transactions and ownership typically involve several types of taxes, such as property tax, FBR tax, BRA tax, transfer tax, holding tax, purchase tax and sales tax, and speed money. Taxes are necessary to pay and essential because they are collected for the country's development and are beneficial for improving the country's condition. If imposing high taxes is contributing to the country's better condition, then they should apply taxes, but if it is not, then the government should go for other solutions; imposing high taxes is not the only solution for the country's development and growth. It reflects a common sentiment in the real estate sector that taxes should be aligned with economic growth and stability.

Participant also criticizes the government and their policies, particularly tax policies, as detrimental to sector growth. Government policies fluctuate according to their self-interests; they do not have better plans, keeping the aim for the betterment of our country. However, taxes are essential to the country and the real estate sector, impacting investment decisions and market stability. The government should promote digitization in the tax collection system for the sector's long-term growth and ensure transparency and accountability. Digitalizing the tax system can benefit the real estate sector by improving efficiency, easing tax paying, creating transparency, and setting the sector free from corruption. It will be a significant step to eliminate corruption as officials demand extra unofficial taxes, which we are not willing to pay but have to pay. Digitalization can help us pay taxes, verify documents, and other curricular activities at our fingertips, saving us time. The government should create a user-friendly and flexible tax environment that enhances the overall experience of professionals in paying taxes and encourages them to pay taxes. The government policies and weak implementation of the rules and regulations are the principal cause of the informal activities in the sector. The participants urged the government to play a pivotal role in the real estate sector for regulating the real estate sector. Most participants stated that government and regulatory bodies are not working correctly as expected. Government regulations are useless and act as blindfolded over illegal wrongdoings in departments. The sector professionals criticize the government for the proper enforcement of laws and regulations in the sector and for the wrong policy decisions, burdening them with the tax policy specifically, which is the main challenge and barrier nowadays.

Another theme generated is the complex property transfer issue, as the data highlighted that the officials demand bribes to expedite the property transfers, overlooking missing documentation or even manipulating land records. Many real estate schemes operate illegally due to a lack of proper regulation and law enforcement, which leads to informality in business. The data suggested that there should be an appropriate system of checks and balances on official government

activities to ensure transparency, address wrongdoings, hire honest people who may work for the country's development, and stand against eliminating corruption. These situations are significant hurdles to the formalization of the real estate sector.

The majority of the businesses in the real estate sector are not registered with any government body, and there are few unions and groups for representatives in business society. The majority stated that unions are working correctly in terms of internal matters, such as providing support in case of disputes and issues held between two ventures or agents or any third party, and unions resolve the problem in the best way they can, but unofficially. Few unions exist in the market, divided into different levels, such as national, regional, local, and city area divisions. These unions are hurdles for registering real estate businesses to the government.

Social groups and ethnic barriers are themes generated from the data primarily focused on the division of city real estate on an ethnic basis. The ethnic communities are bounded strongly and want to live in one common area, like the Hazara-populated areas of Marriabad and Hazara town. Similarly, the northern and western areas of the city are Pashtoon dominant areas, and the city's southern side is Baloch majority area. The ethenic division for real estate is also divided into tribes and sub-tribes. The same tribe residents are interested in combined streets, schemes, towns, and small areas. The trend has some benefits and disadvantages for the real estate sector. Afghan refugees' residences and their return to their native areas have been the topic of interest for the real estate sector in Quetta for the last few years. However, the return of Afghan refugees is vital in the context of regional stability and economic impact. On the return of the Afghan refugees, the real estate sector experienced a negative impact on the industry, created market uncertainty, and increased informal settlement of lands and cash transfers. The purchase of land informally at low prices has been observed mainly in the surroundings of the city areas, especially the bypass and Nawa Killi. The population of Afghan refugees comprises wealthy investors in the real estate market; they own informally high-worth assets in Quetta city, while the Quetta locals do not have that much investment and wealth compared to Afghan refugees.

The study covered another essential aspect of the environmental issues created by the real estate sector. The study's results focused on enhancing buildings' environmental performance and energy efficiency. The real estate industry contributes significantly to environmental problems, responsible for 35% of greenhouse gas emissions and 45% of world energy usage (Geiger et al., 2013). The extraction of raw materials, manufacturing building materials, construction process, building operations, and final demolition are all phases of the industry's environmental impact. Buildings' high energy use and carbon footprint are significant environmental concerns. Up to 50% of global carbon dioxide emissions are caused by the construction sector, with

greenhouse gas emissions produced at various phases of a building's life cycle (Shekhorkina et al., 2020).

Furthermore, a significant amount of non-renewable resources are consumed by the industry; the building sector alone uses about 24% of the world's raw materials (Wang et al., 2018). Unplanned construction, housing schemes, sanitation, and drainage systems are significant issues in the city (Mirabella et al., 2018). Quetta is a jungle of concrete without planned construction, and the center of the town is almost unable to live in it as traffic and parking issues are increasing daily.

Waste management is one of the prime issues in the city, and construction waste is a large part of the waste in Quetta. The construction waste is further divided into many subgroups, with no proper planning for the construction waste and no specific law regulation—builders invested in building large residential and commercial plazas in small areas, streets, and narrow old Muhalas. The highly dense population in these Muhalas has severe issues with water and sanitation, parking, pollution, noise pollution, and waste management. The residential areas are without green buildings, parks, and grounds. The builders and investors utilize the land for residential plots rather than offer for the gardens and grounds. The city has been facing urban flooding for the last few years, lack of rainfall, less greenery, no trees, and no open land for the water table.

Conclusion & Recommendations:

Enhancing transparency, improving the registration process, and reforming tax and regulatory frameworks to foster a more stable and prosperous real estate market. The real estate sector in Quetta is fraught with challenges that impede its development. Management of the impact of Afghan refugee departures, reducing corruption, and implementing building code policies are essential steps toward creating a more robust and dynamic market.

The digitalization of land records and electronic ownership transfers of the lands can reduce the issues related to the real estate sector in Quetta City. Improvements in the sector depend on enforcing the law and regulations. Planned construction is highly recommended for sector development, ease of citizens, low waste, and a better environment. Once the real estate sector is regulated, the issues of noise and air pollution will be reduced accordingly, which will also encourage urbanization in Balochistan.

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