

A Comprehensive Analysis of Pakistan's Housing Market





Preamble

Pakistan is a country of over 241 million people with a huge potential for housing needs. Pakistan has the lowest mortgage to GDP in the region, standing at a mere 0.32%. This is a part of the broader housing challenge the country is confronting, marked by a significant shortage of housing units, a deficit that escalates each year.

While estimates and numerical figures outline the deficit in housing units and the concurrent demand, they frequently lack the authenticity derived from primary sources. The sluggish growth of the housing market influenced by various factors, emphasizes the need for comprehensive measures for improvement. These measures may include policy reforms, expanded financing options, and innovative products designed to widen the base of housing finance customers.

As a conscientious market organization, PMRC not only provides refinancing services to primary mortgage players but also actively participates in capacity building and product innovation. Our continuous collaboration with stakeholders aims to enhance the mortgage customer base within the housing finance industry.

Hence, we considered it essential to reassess the demand for housing and formulate strategies to

expedite the pace of housing finance in Pakistan.

To gain a thorough understanding of the current market landscape, PMRC initiated a comprehensive housing market study. The insights anticipated from this study will not only guide our strategic decision-making but also play a pivotal role in shaping our products and services to seamlessly align with the evolving needs of our customers. This initiative represents an opportunity for us to proactively stay ahead of industry trends, foster innovation, and solidify our position in an ever-evolving sector that demands both agility and adaptability.

Having successfully conducted this exhaustive survey, it brings me great delight to share the outcomes of the Low-Income Housing Market study in Pakistan, meticulously prepared with our research partner, Akademos.

I express my gratitude to both the teams of Akademos and PMRC for their unwavering effort and dedication in completing this exceptionally comprehensive and timely survey report.

Mudassir H. Khan
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Abstract of Findings

Indicator	Definition	Results
Housing Needs & Housing Demand		
Housing Needs in Pakistan a. Current Housing Needs b. Future Housing Needs	Total housing supply needed to ensure that at minimum, there is one housing unit available for each household. Thus, housing needs are equivalent to the total number of households at a given time. a. Based on current population and number of households b. Based on population growth and new household formation annually	Current Housing Need = 38,340,566 Units Annual Future Housing Need = 1,063,219 Units
Housing Demand in Pakistan a. Current Housing Demand b. Future Housing Demand	Housing demand is expressed in the form of households actively seeking housing in the market a. Proportion of consumers who have indicated that are currently seeking housing in the market (primary survey) b. Proportion of consumers who have indicated that are interested in seeking housing in the market in the near future, or next one year (primary survey)	Current Housing Demand (Urban) = 2,520,279 Units Future Housing Demand (Urban) = 3,507,459 Units
Housing Supply		
Housing Supply (14 Districts) a. Vertical Units b. Horizontal Units	Total supply of residential units estimated using GIS based methods a. Units within residential buildings with 3 or more stories b. Units within residential buildings with 2 or less stories	Current Housing Supply = 12,439,471 Units Vertical Housing Supply = 2,374,314 Units Horizontal Housing Supply = 10,065,157 Units *based on 14 districts
Future Housing Supply (13 Districts)	Estimated annual increase in housing stock, using the net housing supply growth rate. This growth rate is calculated in each district in the sample by comparing growth in housing stock as per Census 2017 and 2023 (GIS based estimate)	Annual Future Housing Supply = 340,965 Units *based on 13 districts (excluding GB)

Indicator	Definition	Results
Housing Shortage and Housing Deficit		
Current Housing Shortage in Pakistan	Gap between current housing stock calculated from GIS data, and current housing needs i.e., total households (assuming each household requires one unit). The shortage in 13 districts (excluding GB) has been used to extrapolate shortage in Pakistan (see Chapter 6)	Basic Housing Shortage = 0.24 Million Units (Sample) Basic Housing Shortage = 2 Million Units (Pakistan)
Annual Change in Housing Shortage in Pakistan	The annual change in housing shortage is calculated via the difference between the estimated annual new housing stock and estimated annual future housing needs i.e., annual household formation. The results in 13 districts (excluding GB) has been used to extrapolate shortage in Pakistan	Annual Change in Housing Shortage (Deficit) = 25,054 Units (Pakistan)
Market Based Shortage in Pakistan	Gap between estimated housing stock actively listed in the market, and number of active consumers / households seeking housing in the market	Market Based Housing Shortage = 0.9 Million Units (Sample)
Housing Deficit a. Overcrowding b. Substandard Material c. Affordability (Urban)	Housing deficits refer to deprivations within the available housing stock itself. Thus, housing deprivations may exist when the minimum acceptable standards for adequate housing are being unmet. a. Households living in overcrowded conditions (greater than 3 people per room) b. Households living in units made of katcha/substandard materials such as mud, tin sheets, straw etc. c. Cost burdened urban households i.e., households with expenditure on housing leaves them with insufficient income to spend on other needs, compromising on overall household welfare	Overcrowded Households = 13 Million Units (Pakistan) Substandard Housing Units = 9 - 9.5 Million Units (Pakistan) Cost-Burdened Urban Households = 4.2 Million Units (Pakistan) Since these various deficits may be co-located, i.e., occurring at the same time, the total deficits may vary between 15 million (if deficits are mutually occurring) and 27 million units (not mutually occurring)

Housing Shortage in Pakistan (2023)**2.1 Mn****Housing Deficit in Pakistan (2023)****15 – 27 Mn**

Glossary of Abbreviations

Abbreviation	Full Form
DBR	Debt Burden Ratio
GDP	Gross Domestic Product
GIS	Geographic Information System
HBFC	House Building Finance Company
HIES	Household Integrated Economic Survey
HH	Household
ICT	Islamabad Capital Territory
IDI	In Depth Interview
KIBOR	Karachi Interbank Offered Rate
LFS	Labor Force Survey
LULC	Land Use Land Cover
MPMG	Mera Pakistan Mera Ghar
NPHP	Naya Pakistan Housing Program
PMRC	Pakistan Mortgage Refinance Company
PSLM	Pakistan Social & Living Standard Measurement Survey
SBP	State Bank of Pakistan
WB	The World Bank

Measuring Scale for Property Size

Measuring Unit	Conversion in Square Yards
1 Kanal	605 Square Yards
1 Marla	30.25 Square Yards
1 Square Meter	1.20 Square Yards
1 Square Foot	0.11 Square Yards

01

Introduction



Pakistan is facing myriad challenges in the face of a growing population and a troubled economy. According to the 2023 Census, Pakistan's population stands at 241.5 million, showing a significant increase of 33.82 million from the 2017 Census, with a population growth rate of 2.55 percent. Balochistan recorded the highest average population growth at 3.2 percent, followed by ICT at 2.8 percent, Sindh 2.57 percent, Punjab 2.53 percent, and Khyber Pakhtunkhwa (KP) with the lowest growth rate at 2.38 percent. With a rapidly growing and young population, the provision of adequate housing and shelter becomes very significant.

The economy has faced multiple challenges in recent times with an overall economic slowdown that hampered economic growth. The real GDP posted a growth of 0.29 percent in FY 2022-23 – however, per capita income decreased on account of currency depreciation, minimal GDP growth and rising population. However, in recent years, there has been unprecedented growth in the housing and construction finance sector, largely due to the government's and SBP's measures to promote housing and construction financing in the country. SBP introduced a series of prudential regulations which mandated all commercial banks to allocate at least 5 percent, and subsequently, 7 percent of their loan portfolios for housing and construction financing.

Additionally, the government introduced an interest rate subsidy program in 2002 to provide low-cost housing finance via the Mera Pakistan Mera Ghar program (a detailed review of these policies are provided in Chapter 7). As a result, the housing finance sector grew from a total value of PKR 148 Billion in June 2020, to PKR 450.8 Billion by June 2022, growing by 205 percent in this time. However, in 2023, this growth in housing and construction finance has slowed down, with the portfolio only growing to PKR 456.8 Billion by June 2023, due to inflationary pressure and rapid increase in interest rates.

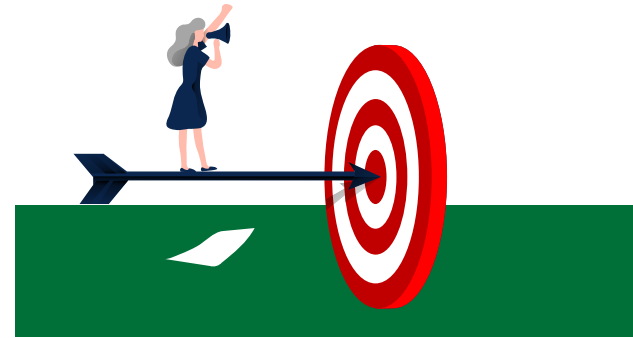
Real estate trends have been rapidly changing in the last few years and though real estate is a growing and profitable sector of the economy, there is concern about the affordability and accessibility of housing being produced by the private market.

Moreover, the current housing shortage in Pakistan is a widely debated issue, with a common perception that the housing market struggles to provide affordable housing, particularly for low-income families, leading to a growing shortage. Inadequate living conditions exacerbate the problem, with many households residing in overcrowded and dilapidated conditions due to a lack of affordable options. While estimates and numerical data highlight the deficit in housing units and the corresponding demand in Pakistan, they often lack the authenticity provided by primary sources. Despite widespread acknowledgment, estimates of the current housing backlog, annual housing demand, and future shortages vary. The current shortage is estimated at around 10 million units, projected to reach 13 million by 2025. Urban areas, notably informal settlements (katchi abadis), bear the brunt, with 47% of households residing in overcrowded conditions.

This report aims to address the housing situation in Pakistan to assess housing demand and housing needs in Pakistan, the availability and types of housing stock, and shortage of housing, particularly against housing needs, to ultimately identify opportunities for growth and improvement within the housing market of Pakistan. The findings of this report indicate a housing shortfall of **2.1 million** units in Pakistan; however, beyond the housing shortage, the quality and sufficiency of available housing stock are also significant concerns. Consequently, it is approximated that between 15 to 27 million existing units suffer from one or more deficiencies, including overcrowded living conditions, inferior materials, and unaffordable housing expenses.

02

Research Aims And Objectives



This research study aims to assess the shortage of housing unit i.e. gap between housing supply and housing needs; availability of housing stock in Pakistan; and among various other factors to ultimately identify opportunities for growth and improvement in the housing sector in Pakistan. Among other objectives, this research aims to analyze and understand key demographics relevant to the housing market, conceptualizing psychographics relevant to the buying, selling, and renting of houses, and consumer behavior and preference patterns in line with housing needs, wants and access.

A key outcome of this report will be to generate actionable recommendations based on data collected as part of this study, including strategies to address the demand-supply gap, enhance affordability, and improve market competitiveness.



Following are the research objectives:

- To determine the current housing demand, housing needs and supply of housing and identify the factors that drive demand and supply in major cities.
- Evaluate housing affordability across different income segments and determine the affordability gap by analyzing the relationship between housing prices and income levels.
- Assess the affordability challenges faced by different segments of the population.
- Understand the impact of government policies aimed at promoting affordable housing.
- Understand perspectives of real estate developers and investors, evaluating their challenges, strategies, and responses to government policies.
- Analyze the quality and adequacy of available housing stock, particularly, the prevalence of kutchra, pacca and semi-pacca houses and the availability of adequate infrastructure
- Evaluate the volume and impact of outstanding mortgages in the housing market.
- Determine opportunities for and prevalence of mortgages in the housing market.
- Identify the opportunities for growth and improvement and any emerging trends or patterns that can impact the housing sector in Pakistan.

Geographical Scope of the Research Study

Whilst the overall dynamics of the housing market in Pakistan are of interest, in order to present a more focused analysis, the study is primarily based upon the following 14 cities:

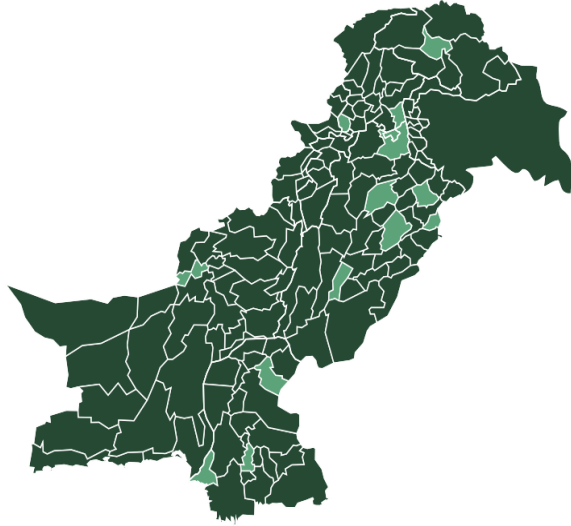


TABLE 1. **Geographical Scope of the Research Study**

S.No.	Cities	
1	First Tier	Karachi
2		Lahore
3		Islamabad
4	Second Tier	Rawalpindi
5		Faisalabad
6		Multan
7		Peshawar
8		Hyderabad
9	Third Tier	Sargodha
10		Abbottabad
11		Quetta
12		Gujranwala
13		Sukkur
14		Gilgit

03

Approach and Methodology



To ensure that the required qualitative and quantitative data is captured through all relevant sources, there are multiple tools that have been used to address the research objectives behind this study.

Primary Research Methods

The research methods employed in this study comprise Household Surveys, In-Depth Interviews (IDIs), GIS Mapping, and Secondary Research.

A comprehensive survey questionnaire was utilized to investigate various housing trends, including ownership status, housing demands, preferences, supply factors, financial considerations, future projections, and demographic and socioeconomic variables. Over 4000 responses were targeted across 14 selected cities, with strategic deployment of enumerators to ensure representation across various income segments within each city.

Additionally, 30 in-depth interviews were conducted to gain insights into housing market trends, challenges, opportunities, and the impact of government policies on affordable housing.

Stakeholders interviewed provided valuable perspectives on the supply and demand for both conventional and Islamic finance in the housing market.

Spatial data collection through GIS Mapping involved remote sensing of satellite imagery to gather information on land cover, land use, and building units within the project areas. Building footprints were identified and categorized based on size and usage, including residential and commercial structures. Horizontal and vertical measurements were also determined through geo-spatial data analysis.

Furthermore, secondary research sources were utilized to complement and reinforce the primary data collected, enhancing the robustness of the study's findings.

Our Methodology

Keeping in view sample global and national studies, we have attempted to develop an approach that captures all relevant variables and factors that have a significant impact in assessing housing demand and supply. As mentioned, there are numerous different data sources being used, with an equal reliance on primary and secondary data for verification purposes.

In the subsequent chapters, these variables will be assessed to develop an understanding of prevailing trends within each variable itself, and its impact on housing needs, housing demand and housing supply and consequently, housing shortage.

In particular, the following key parameters will be analyzed by the study:

Parameters	Input Variables	Source
Housing Needs & Housing Demand		
Factors Shaping Housing Needs, Housing Demand, and Consumer Preferences	Demographics – Population Growth, Urbanization, Migration Socioeconomic Conditions	Akados HH Survey; Census; HIES
Consumer Preferences for Housing	Active Consumers Vertical vs Horizontal Location Choice Unit Size Budget Range Consumer Preference by Income	Akados HH Survey
Housing Units needed by the Current Population	Population Number of Households	Census
Additional Units Needed Annually	Population Growth Rates Household Formation Rates	Census
Assessment of Affordability i.e., Housing Poverty	Income Expenditure	Akados HH Survey; HIES
Assessment of Quality i.e., Housing Adequacy	Overcrowding and Congestion Katcha, Pacca, and Semi Pacca Units Access to Infrastructure	Akados HH Survey; PSLM; Census
Constraints and challenges in meeting housing preferences	Consumer Perceptions and Experiences Expert Insights	Akados HH Survey; In Depth Interviews

Housing Supply

Land Availability and Utilization	Availability of Land – Land Use / Land Cover Building Density and Distribution Zoning and Building Regulations	GIS Mapping
Characteristics of Housing Supply	Tenure Status Unit Size Home Ownership Horizontal and Vertical Bifurcation Pricing Trends	Akademios HH Survey; GIS Mapping; Zameen.com
Total Housing Stock	Estimated from GIS Mapping	GIS Mapping
Future Housing Stock	Construction / Housing Growth Rates	GIS Mapping; Census

Housing Shortage

Basic Current Shortage	Total Housing Stock vs Total Population	GIS Mapping; Census
Future Shortage	Future Housing Stock vs New Household Formation	GIS Mapping; Census
Market Based Shortage	Active Consumers vs Housing Units Available in the Market	Census; Zameen.com
Housing Deficit in Terms of Quality	Overcrowding and Congestion Katcha, Pacca, and Semi Pacca Units Access to Infrastructure	Akademios HH Survey; PSLM; Census
Housing Deficit in Terms of Affordability	Pricing Trends vs Affordability Assessment and/or Budget Range	Zameen.com; Akademios HH Survey; HIES

Particularly, exploring housing shortage and deficit along various parameters has important implications for the type of policy interventions that are suitable to tackle the prevailing issues in the housing market. It may be implied that "shortage" means the lack of the required number of housing units and that this needs to be addressed via the increased supply of adequate housing options through the real estate sector. However, depending on the type of shortage or

deficit, there may be a range of applicable policy interventions. This can include, for example, regularization / rehabilitation of katchi abadis, investments in infrastructure development in underdeveloped regions, and incremental development to improve existing housing stock to reduce the housing deficits in terms of quality; or introducing viable housing finance products and market-based subsidy programs to improve affordability of existing and future housing stock.

04

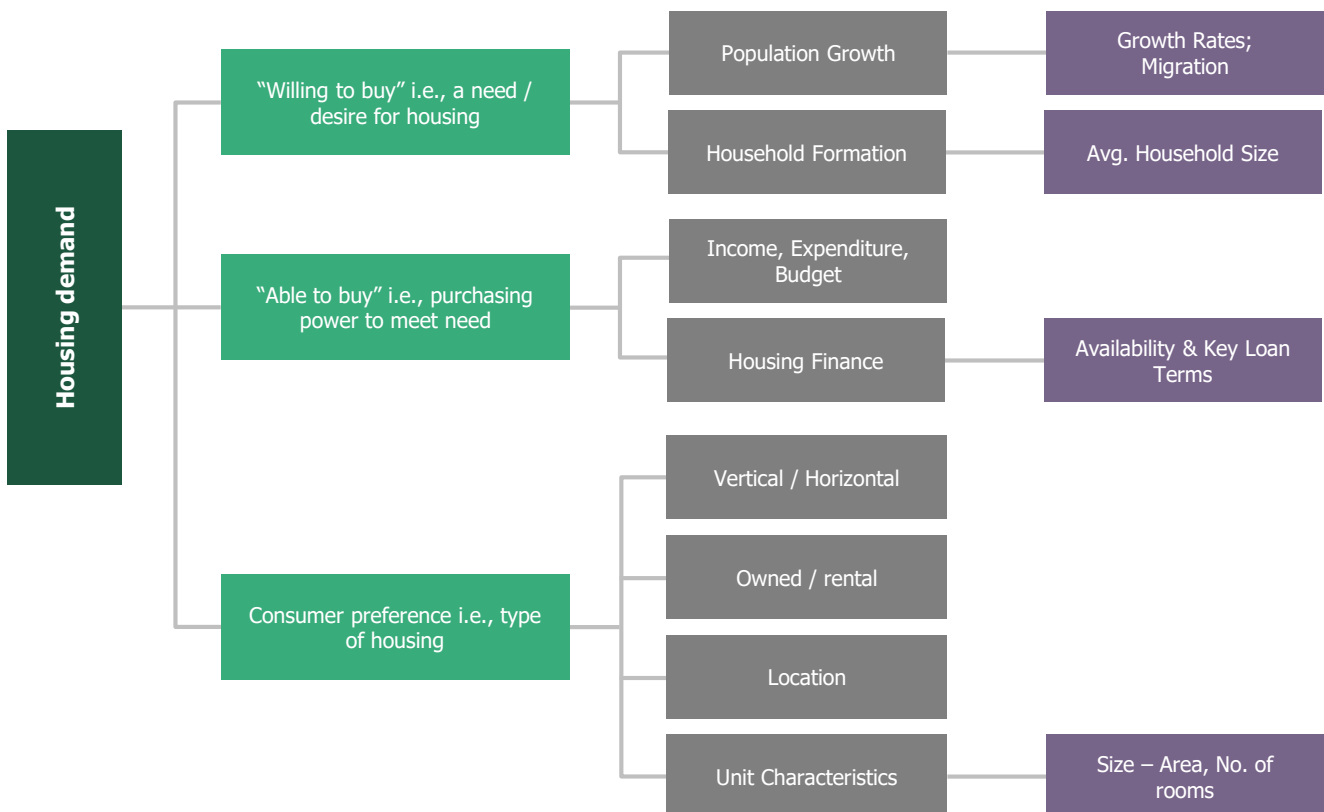
Housing Needs and Housing Demand in Pakistan



A comprehensive understanding of housing needs and demand in Pakistan has been a relatively neglected subject but in the context of rapid population growth and urbanization, its is very relevant for policy makers and decision makers at all levers of the public and private sector. This section of the report will delve in detail into the

factors and parameters that shape the growing housing demand and needs in the country. As the conceptual model below shows, housing demand / housing needs will be assessed along three key parameters – a willingness to obtain housing, the ability to obtain housing, and consumer preferences in relation to housing.

FIGURE 1. **Conceptual Model of Housing Demand**



Active Consumers In The Market

Overall, based on their responses, the survey respondents have been clubbed into the following

categories, in terms of current and future approach towards the housing market:

Categories	Responses
Past Consumers	<ul style="list-style-type: none"> Purchased a house / land / property in the past 5 years. Planning to construct a house on owned land / plot
Active Consumers	<ul style="list-style-type: none"> Currently looking for housing
Future Consumers	<ul style="list-style-type: none"> Planning to look into housing within the next 1 year Planning to look into housing in the near future
Inactive Consumers	<ul style="list-style-type: none"> None

It should be noted that respondents could choose more than one response, and thus, these categories are not mutually exclusive, and indeed

a former consumer may still actively or potentially be engaged in the housing market.

TABLE 2. **Types of Housing Market Consumers, by City**

City	Past Consumers		Active Consumers		Future Consumers		Inactive Consumers	
	No.	%	No.	%	No.	%	No.	%
Islamabad	130	39%	64	19%	130	39%	13	4%
Lahore	345	75%	25	5%	65	14%	28	6%
Faisalabad	156	35%	108	24%	166	37%	13	3%
Rawalpindi	15	5%	91	32%	177	63%	0	0%
Multan	155	56%	58	21%	33	12%	31	11%
Sargodha	149	44%	49	14%	81	24%	63	18%
Gujranwala	133	47%	11	4%	96	34%	44	15%
Karachi	249	50%	64	13%	133	27%	54	11%
Hyderabad	107	38%	102	36%	74	26%	2	1%
Sukkur	212	66%	80	25%	27	8%	4	1%
Peshawar	145	50%	18	6%	38	13%	88	30%
Abbottabad	71	25%	7	2%	8	3%	203	70%
Quetta	389	53%	179	24%	164	22%	2	0%
Gilgit	250	54%	35	8%	48	10%	127	28%
Grand Total	2506	47%	891	17%	1240	23%	672	13%

Decision Making Within The Housing Market

There are many qualitative factors that go into the decision making behind the purchase / rent of a housing unit and consumers tend to carefully assess various factors such as the location, accessibility, security, and affordability of available options. Overall, the availability of various

amenities, location, proximity to work and school, safety and security and availability of healthcare facilities are the top five factors influencing consumer choice of housing units in the market, as depicted in the table below.

TABLE 3. **Factors Influencing the Choice of Housing Unit**

Categories	Responses	Percentage
Affordability	<ul style="list-style-type: none"> Affordability Affordability of Utilities Maintenance & Repairs 	10%
Location	<ul style="list-style-type: none"> Location Proximity to Work / School Healthcare Facilities in the Vicinity Public Transport Access Walkability Nearby Parks & Recreation 	43%
Infrastructure & Amenities	<ul style="list-style-type: none"> Amenities 	12%
Return on Investment	<ul style="list-style-type: none"> Resale Value 	3%
Neighborhood & Community	<ul style="list-style-type: none"> Neighborhood / Community Family Friendly Environment Noise Levels Pet Friendly Policies 	14%
Safety & Security	<ul style="list-style-type: none"> Safety / Security 	8%
Housing Unit Characteristics	<ul style="list-style-type: none"> Size / Number of Bedrooms Accessibility (for people with disabilities) 	5%
Environment / Sustainability	<ul style="list-style-type: none"> Environment / Sustainability 	5%

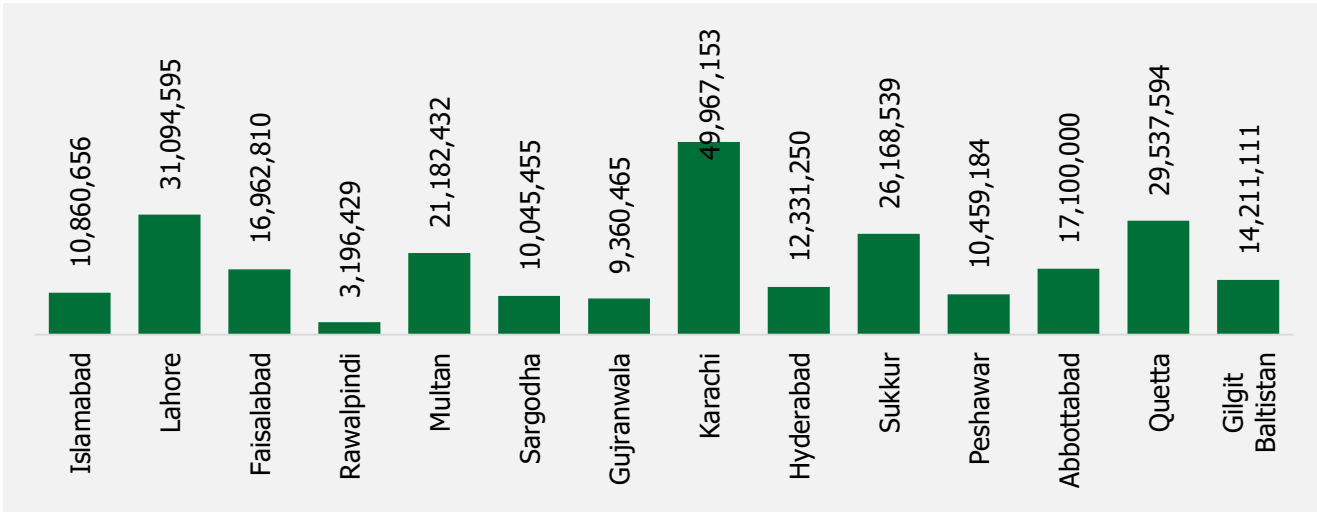
Source: Akademos Household Survey 2023

Budget Range of Consumers

Determining the budget ranges of housing market consumers is an important first step for assessing the level of affordability of available housing

options. The figures below show the budget ranges for purchasing and renting housing units among survey respondents.

FIGURE 2. Average Budget Range for Home Purchase (PKR), By City

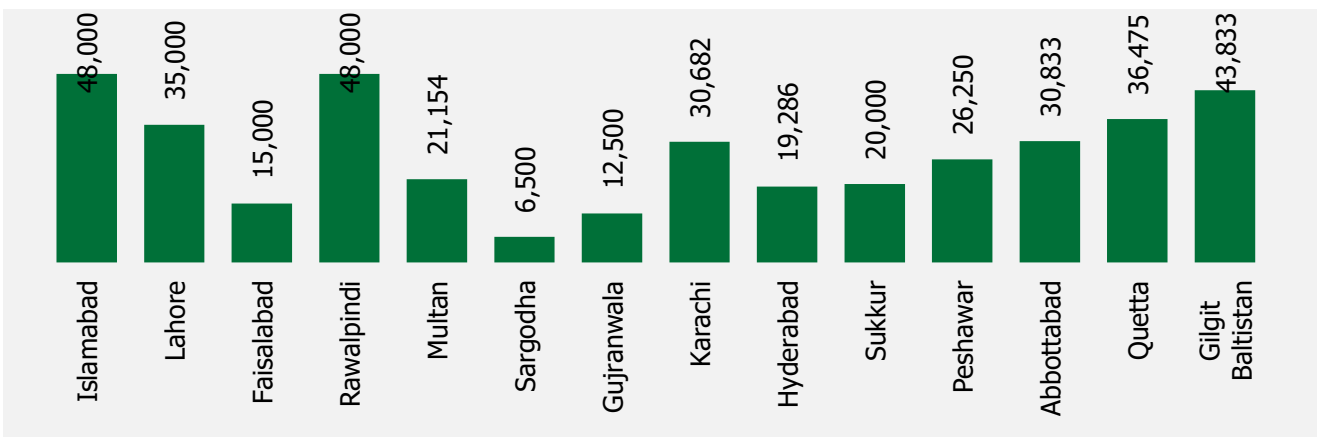


Source: Akademos Household Survey (2023)

Respondents in Karachi, Lahore, and Quetta have the highest average budget range for home purchase, whilst respondents in Rawalpindi, Gujranwala, and Sargodha have the lowest

average budget range for home purchase. In Rawalpindi particularly, the low budget range is contrary to the high income and expenditure levels.

FIGURE 3. Average Budget Range for Home Rental (PKR), by City



Source: Akademos Household Survey (2023)

Respondents in Islamabad, Rawalpindi and Gilgit have the highest average budget for home rental, whilst respondents from Sargodha, Gujranwala, and Faisalabad have the lowest average budget for home rental. These results vary from the city wise average budget for home purchase – notably, whilst respondents from Islamabad and

Rawalpindi have among the lowest average budget for home purchase, they have the highest average budget for home rental. On the other hand, cities like Sargodha and Gujranwala rank low for both average budget for home rental, as well as home purchase.

TABLE 4. Current and Estimated Future Population & Households, District Level

District	Population 2023	Population 2024	Population 2030	Households 2023	Households 2024	Households 2030
Islamabad	2,363,863	2,429,961	2,867,219	411,518	424,800	511,720
Lahore	13,004,135	13,347,841	15,609,474	2,012,526	2,053,782	2,316,260
Rawalpindi	6,118,911	6,247,251	7,075,840	999,347	1,017,712	1,131,975
Faisalabad	9,075,819	9,291,589	10,698,303	1,384,668	1,413,831	1,595,572
Multan	5,362,305	5,472,506	6,182,938	887,304	909,265	1,049,416
Sargodha	4,334,448	4,451,058	5,219,636	684,799	700,175	800,322
Gujranwala	5,959,750	6,134,479	7,295,845	849,524	865,572	972,249
Karachi	20,382,881	21,216,674	26,986,571	3,439,220	3,571,707	4,496,406
Hyderabad	2,432,540	2,473,633	2,735,185	448,479	450,446	460,397
Sukkur	1,639,897	1,666,610	1,836,281	268,755	269,668	274,716
Peshawar	4,758,762	4,846,027	5,404,270	691,505	727,758	987,359
Abbottabad	1,419,072	1,433,932	1,526,420	237,020	239,983	259,300
Quetta	2,595,492	2,654,211	3,035,499	288,690	289,374	293,395
Total	79,447,875	81,665,773	96,473,481	12,603,355	12,934,074	15,149,086
Pakistan	241,499,431	247,657,666	288,048,597	38,340,566	39,403,785	46,484,937

Source: Census 2023, Author's Calculations

The current i.e., 2023 population and household figures are reported from the Census 2023, whilst the future population is estimated using the district level annual population growth rate reported in the Census 2023, and the future households are estimated using the estimated average household size. In turn, the future average household size is estimated, by using Census data from 2017 and 2023. Particularly, the rate of change in average household size between 2017 and 2023 has been calculated, and it is assumed that this trend / rate of change will continue at the same pace in the future. Thus, if there is a decline in average household size in a region, this declining trend will continue in the future, and vice versa. This methodology ensures that changes in household size are accounted for when estimating future housing needs. Estimating household size is significant since it translates overall population growth into an estimated

number of households – for instance, in two regions with similar levels of population growth, the housing needs will be higher where there is a smaller average household size, and thus, a greater number of households that need housing.

Housing Need in Pakistan (2023)

38,340,566

As the average household size also varies over time due to social, cultural, and economic factors, calibrating the expected change in average household size gives us a more precise estimate of future housing needs.

TABLE 5. **Estimated Current and Future Urban Housing Demand, City Level**

City	Estimated Households 2023	Active Consumers (%)	Estimated Current Housing Demand	Future Consumers (%)	Estimated Future Housing Demand
Islamabad	234,225	19.0%	44,482	38.6%	90,354
Lahore	2,055,394	5.4%	110,982	14.0%	288,554
Rawalpindi	336,622	24.4%	82,066	37.5%	126,138
Faisalabad	568,034	32.2%	182,654	62.5%	355,272
Multan	345,661	20.9%	72,377	11.9%	41,180
Sargodha	116,564	14.3%	16,701	23.7%	27,607
Gujranwala	363,727	3.9%	14,088	33.8%	122,950
Karachi	2,890,578	12.8%	369,994	26.6%	768,894
Hyderabad	290,320	35.8%	103,904	26.0%	75,381
Sukkur	93,067	24.8%	23,051	8.4%	7,780
Peshawar	355,572	6.2%	22,146	13.1%	46,753
Abbottabad	42,946	2.4%	1,040	2.8%	1,189
Quetta	133,048	24.4%	32,446	22.3%	29,727
Gilgit	Unknown	7.6%	-	10.4%	-
Total	7,825,759	16.8%	1,075,931	23.4%	1,981,780
Pakistan (Urban)	15,017,015		2,520,279		3,507,459

Source: Akademos Household Survey 2023; Census 2023; Author's Calculations

The survey findings from 14 cities have also been extrapolated to estimate the current and future housing demand in urban Pakistan. Since the data which forms the basis for housing demand estimates is collected at the city level and given that real estate and housing markets operate in a contextual manner, these results have been applied to urban Pakistan only, and rural population is excluded, as we can expect different dynamics and factors influencing the expression of housing demand in rural areas.

Yet, even within urban areas, nearly 17 percent of existing households are actively seeking housing, whilst around 23 percent plan to do so in the near future or the next one year. This translates to a current urban demand of 2.5 million housing units and future urban demand of 3.5 million housing units. In conclusion, estimated housing demand is greater than housing needs, given that a national (urban plus rural) annual need for an additional 1.063 million units had been identified, at the current population growth and household formation trends. In comparison, current and future household demand figures, within just urban areas are higher.

Urban Housing Demand in Pakistan (2023)

2,520,279

However, household demand is not predicated upon the assumption of one housing unit per household and active and potential consumers include those who have already obtained either housing or property, as well as those who are currently living in an owned housing unit. Housing demand may also be higher as it includes households who do have housing but not home ownership – that is, households living in rental arrangements and seeking to purchase their own home. Furthermore, housing demand in this case may also stem from consumers who are seeking to move out of current living arrangements to form independent households.

Qualitative Housing Needs

The adequacy of available housing can be evaluated along several parameters including security of tenure, quality of construction material and dilapidation, congestion and overcrowding, and access to basic infrastructure including electricity, gas, water supply and municipal services. In Pakistan, there is no comprehensive data collection pertaining to the size and dynamics of informal housing markets, consequently it is difficult to determine the number of households facing a lack of tenure security. However, it has been estimated that in urban regions, 47% of households reside within informal settlements known as *katchi abadis*⁹. These areas lack adequate infrastructure and services, and households often live in overcrowded and congested conditions, emphasizing the critical inadequacy in Pakistan's housing supply. Furthermore, the state's response to these informal settlements has varied between piecemeal regularization and rehabilitation policies and legislation, and ad hoc removal and displacement of informal settlements to make way for other development.

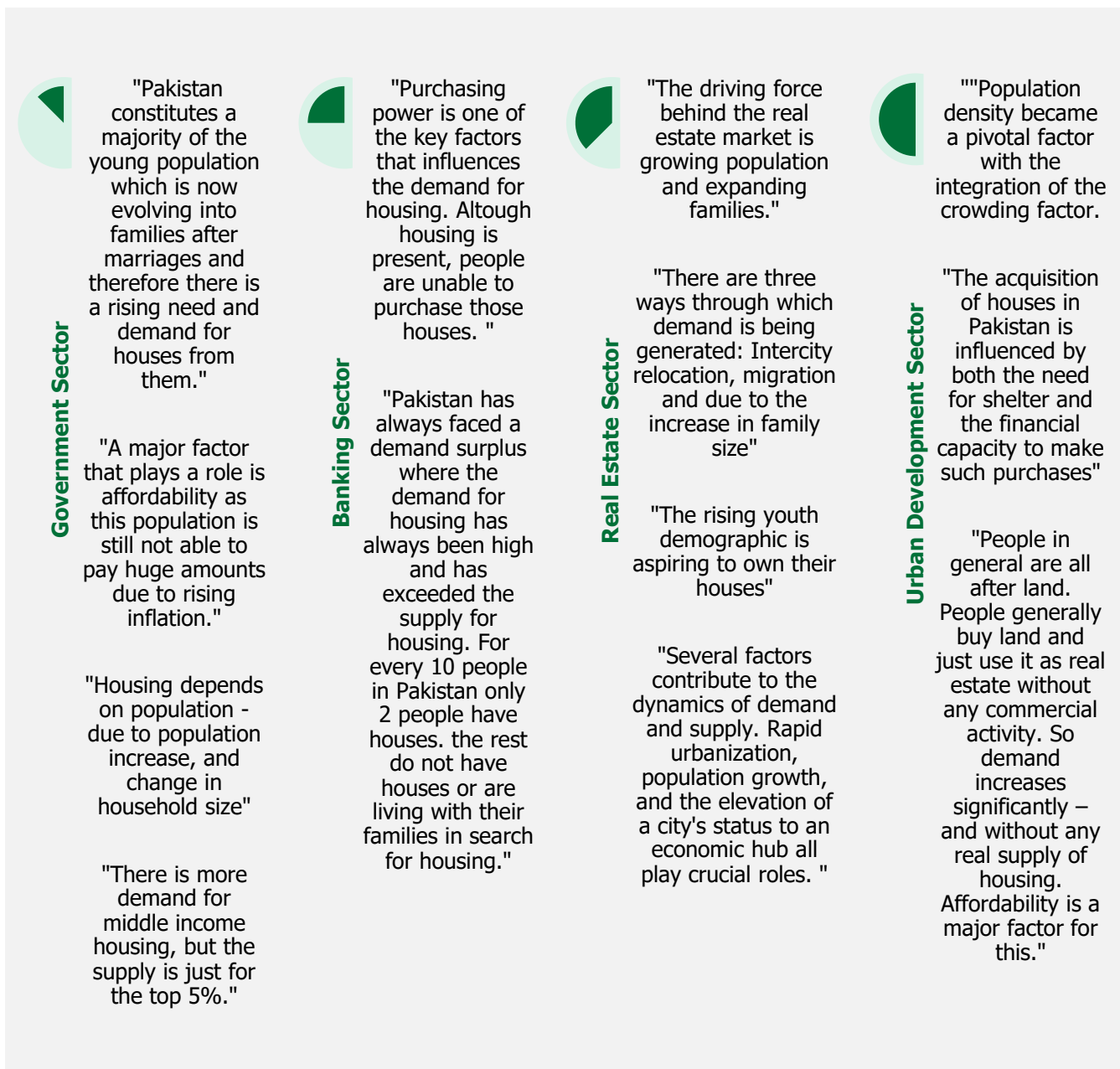
However, data collection regarding the lack of adequate housing in terms of appropriate living conditions has been conducted through various survey instruments, including the Pakistan Social and Living Standards Measurement Survey (PSLM), as well as through the Population Census. This includes data on household size and number of rooms per housing unit (which can be used to compute levels of overcrowding), construction material of housing units (which can be used to compute proportion of *katcha* and semi *pacca* units) and access to infrastructure and amenities. In particular, overcrowded living conditions are a form of housing deprivation and represent an implied unmet need in the housing market, that is forcing people to live in substandard conditions due to the lack of adequate and/or accessible housing options. Overcrowding is defined as a house where there are more than 3 people living in a room, as per the 2007 guidelines of the United Nations on Population and Housing.

⁹ International Growth Center 2016. Housing Inequality in Pakistan

In Depth Interviews with industry experts have also highlighted that a demand and supply mismatch exists, primarily in terms of affordability and purchasing power of households, which is in contrast to the rising prices of available housing

options. At the same time, high demand, particularly in areas with high migration, and urbanization rates, will lead to greater competition, higher prices and consequently, unmet housing needs.

FIGURE 4. Perspectives of Key Industry Experts Regarding Housing Demand Trends and Constraints



Key Insights and Trends

The key statistics and insights from the preceding chapter are summarized below:



Factors Driving Housing Needs & Demand

1. Population Growth Rate (2017 to 2023) = 2.55%
2. Urban Population Growth Rate (2017 to 2023) = 3.65%
3. Migrant Population in Urban Area (2021) = 12%
4. Average Monthly Income = PKR 105,256
5. Average Monthly Expenditure = PKR 72,499
6. Employment Status = 71% of respondents are either employed or self employed
7. Primary reason to look for housing = lifestyle change e.g., growing family, marriage, birth, retirement etc. (37%)



Housing Needs in Pakistan

1. Current Population (2023) = 241,499,431
2. Current Households (2023) i.e., total housing needs (assuming one unit needed per household = 38,340,566
3. Estimated Annual Household Formation in Pakistan = 1,063,219 (annual increase by 2.8%)
4. Percentage of Households Living in Overcrowded Conditions = 37%
5. Percentage of Households Living in Katcha Units = 23.75% to 25.23%
6. Percentage of Households Without Access to Gas = 62%
7. Percentage of Households Without Access to Electricity = 12%
8. Percentage of Households Without Access to Piped Drinking Water = 67%
9. Percentage of Cost Burdened Urban Households = 12% to 47% (varies district by district). In the lowest quintile, 30% to 70% of urban households are cost burdened (varies district by district)



Housing Demand in Pakistan

1. Urban Consumers actively seeking housing in the market = 2,520,279 households
2. Urban Consumers planning to seek housing in the market in future (in the "next 1 year" or in the "near future") = 3,507,459 households
3. Average Budget Range for Home Purchase = PKR 18 Million
4. Average Budget Range for Home Rental = PKR 30,732



Consumer Preference and Perception

1. Preference for Vertical Housing (78%) vs Horizontal Housing (15%)
2. Preferred Average Housing Unit Size = 7 Marla / 177 Sq Metre / 211.75 Sq Yards / 1,905.75 Sq Ft
3. Primary factor in choice of a housing unit = location e.g., proximity to work, school, public transport, healthcare facilities, park and recreation etc. (43%)
4. Perception of Available Housing = Abundant/Adequate (65%) vs Limited/Scarce (35%)

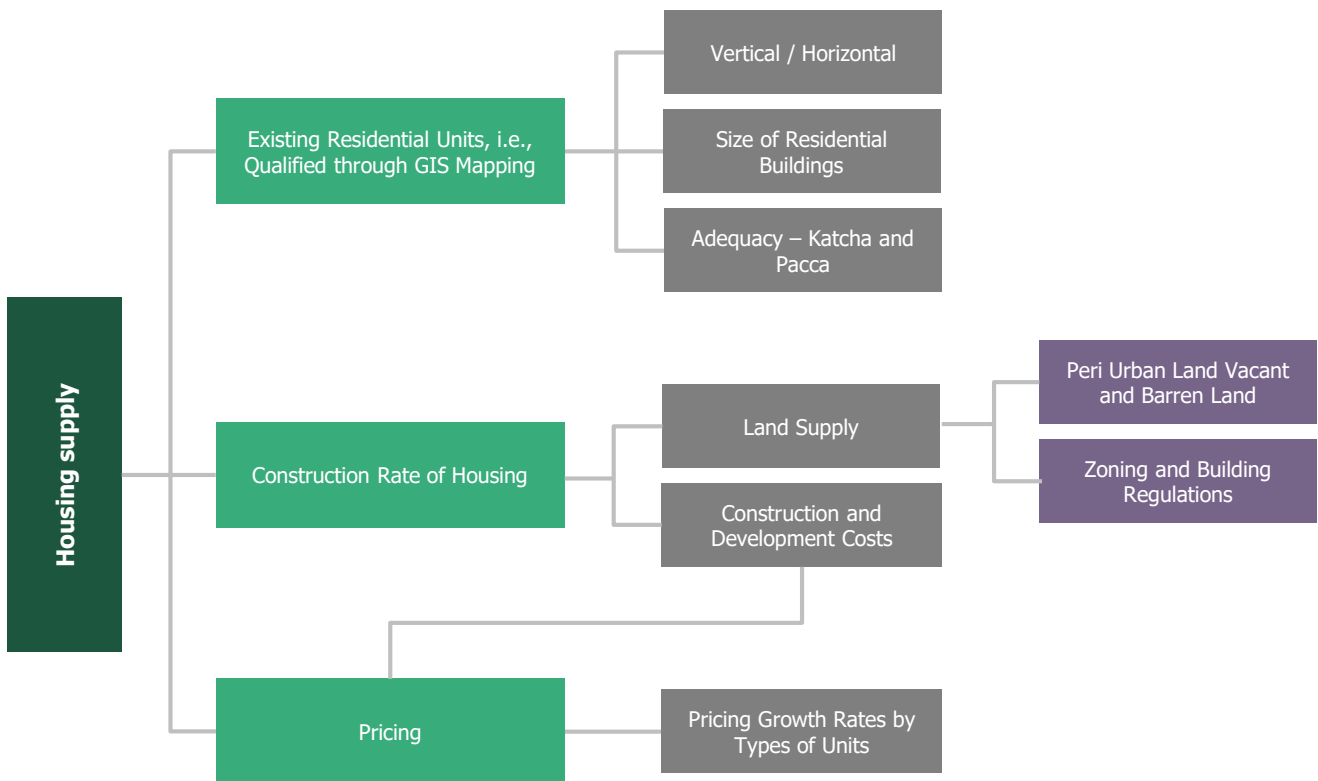
05 Housing Supply In Pakistan



In this section, a comprehensive study of the characteristics and the volume of housing supply will be studied, based upon the conceptual model depicted below. The current volume of housing supply will be estimated using GIS based mapping techniques and will be further bifurcated along

major characteristics such as the area of residential buildings, their typology (vertical or horizontal) and their adequacy. Furthermore, the major parameters and factors affecting housing supply and the real estate sector will be discussed in detail.

FIGURE 5. **Conceptual Model of Housing Supply**



Urbanization Trends And Land Supply

The urban population share has continued to increase in Pakistan, particularly in the provinces of Sindh and Punjab, resulting in high levels of housing demand and placing pressure upon the existing housing and land supply. The availability of developable land plays a key role in determining

the overall housing supply in an urban area, whilst the land utilization trends may determine how efficiently this available land supply is converted into the supply of housing units to cater to the needs of various segments of the population.

TABLE 6. Land Use / Land Cover Distribution (Hectares)

District	Built-Up		Bare		Vegetation		Trees		Water		Other	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Islamabad	46,751	49%	838	1%	16,615	17%	27,223	29%	1,172	1%	2,583	3%
Lahore	79,886	45%	4,117	2%	87,938	49%	3,741	2%	2,267	1%	891	0%
Faisalabad	144,577	23%	12,231	2%	432,385	70%	18,540	3%	6,085	1%	1,614	0%
Rawalpindi	131,465	25%	5,647	1%	181,361	34%	199,741	38%	7,157	1%	2,583	0%
Multan	96,795	26%	20,343	5%	227,771	61%	19,083	5%	6,988	2%	505	0%
Sargodha	131,465	25%	5,647	1%	181,361	34%	199,741	38%	7,157	1%	2,583	0%
Gujranwala	50,285	13%	5,715	2%	303,973	80%	5,118	1%	11,303	3%	1,272	0%
Karachi	61,586	17%	179,755	50%	30,712	9%	7,726	2%	13,123	4%	63,564	18%
Hyderabad	16,745	17%	18,130	18%	48,085	48%	10,153	10%	5,216	5%	1,556	2%
Sukkur	349,624	67%	45,485	9%	70,275	14%	20,757	4%	25,414	5%	6,704	1%
Peshawar	75,678	46%	3,677	2%	32,550	20%	28,795	18%	1,328	1%	22,107	13%
Abbottabad	43,010	23%	463	0%	3,572	2%	108,154	58%	845	0%	31,047	17%
Quetta	8,611	3%	264,336	94%	2,491	1%	237	0%	510	0%	4,396	2%

Remote Sensing of Satellite Imagery (Akademos GIS Mapping)

Land Use / Land Cover

As cities in Pakistan continue to expand horizontally, resulting in an increase in developed built up area. Particularly, more recent urban expansion is visible in the form of scattered pockets of urban built-up areas, that extend from the relatively contiguous urban core of the city, in one or more directions. At the same time, there may be significant patches of barren land, particularly in peri urban areas that are emerging as urban areas. The availability of barren land in close proximity to the existing built up and development areas, presents an opportunity to be availed as developable land for increasing housing supply.

Table 6 summarizes the land use / land cover distribution in thirteen districts. The maps depicting the geographical spread of land use / land cover in thirteen districts are presented subsequently in this report. The "Other" category includes elements such as grass, shrubs, and flooded vegetation. The concentration of built up is strongly correlated with the presence of urban areas. The development pattern illustrates that there are scattered "tendrils" like extensions of built-up areas around more contiguous built-up areas, particularly among major road networks, that tend to form as cities expand horizontally. These scattered zones, especially when located near the urban center, present opportunities for densification and infill development to increase housing supply.

Building Density

An assessment of building density gives us more information about the characteristics of urban expansion and land utilization. The maps depicting the distribution of building density in each of the thirteen districts receptively are presented subsequently in this report. In particular, areas where compact urban form i.e. higher building density is prevalent can be identified. Furthermore, areas with a more diffused urban form (lower building density) are also of relevance, as these present opportunities for densification and more efficient use of land, to increase housing supply and meet the housing

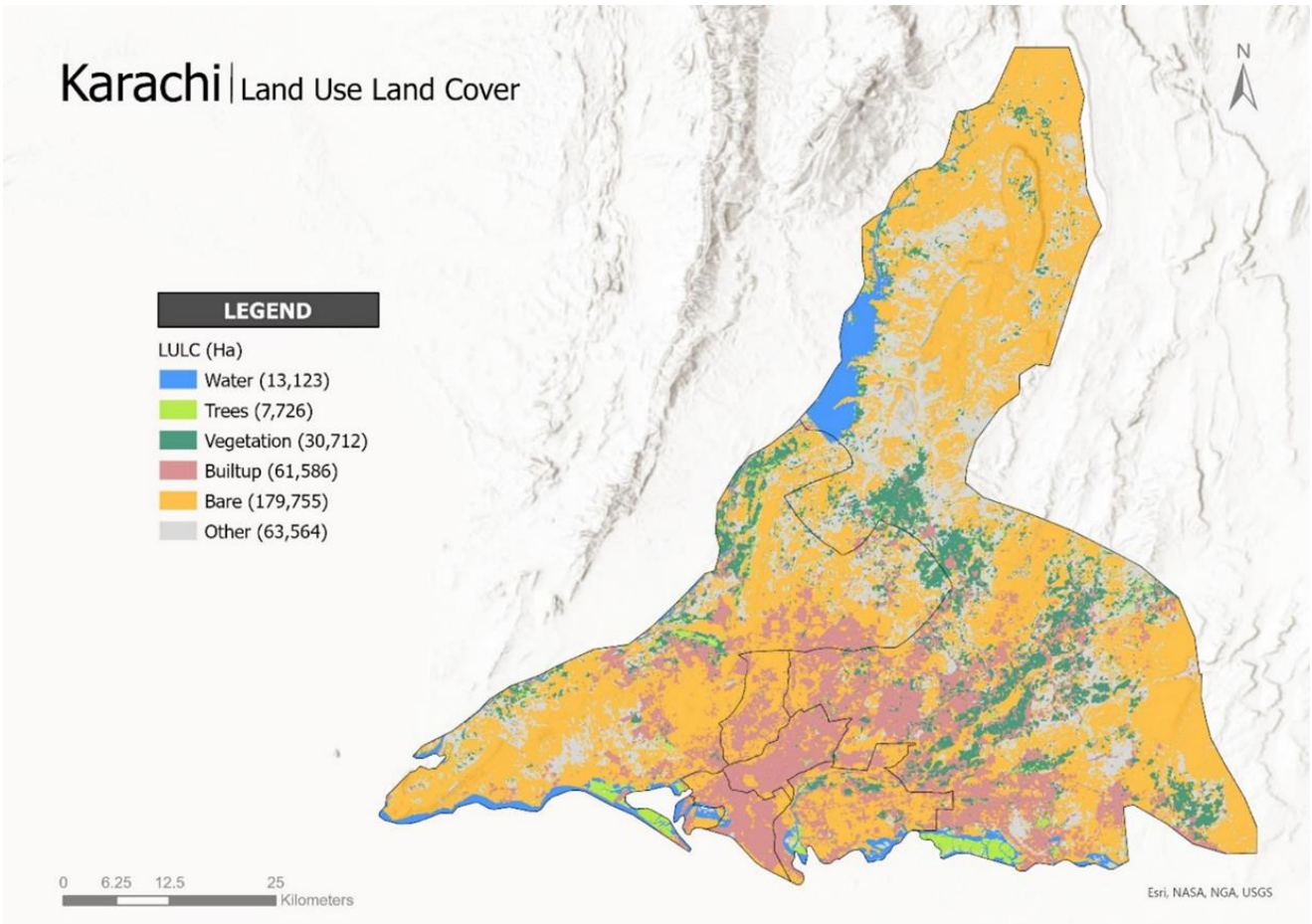
needs of the urban population. In particular, municipal governments can change zoning regulations to introduce up-zoning, and regulations that promote higher density vertical development. This may allow existing low density urban areas to transform into medium to high density areas, increasing the housing supply within existing city limits. It should be kept in mind however, that this would also require upgradation of municipal infrastructure to keep pace with the increased population as density increases, to ensure habitable living conditions.

The presence of highly dense clusters is also correlated with the presence of contiguous built up areas, as these are typically the historic urban cores of respective cities, with a high level of residential and commercial activity, and high population density. Highly dense clusters tend to diffuse into medium density "tendrils" like extensions, and these mimics the extensions of built-up area around the main urban cores. The horizontal expansion of cities is thus, is of a lower density. This diffusion of building densities then extend into low density rural areas within the district.

Spatial Distribution of Building Sizes

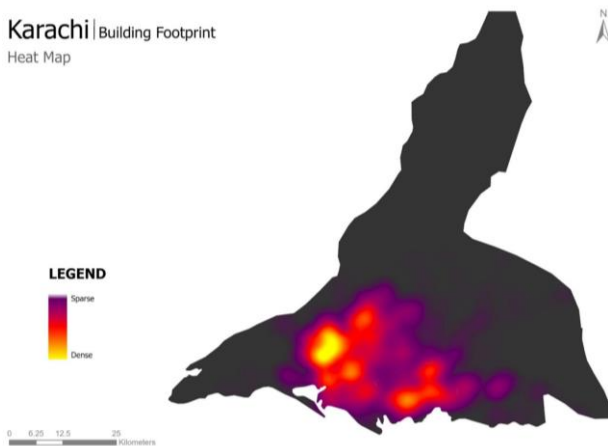
The size of building units and their spatial distribution also gives important information about current urban characteristics and utilization of available land in urban areas. In most cities, smaller building units are more prevalent with 3 Marla building units being the most recurring overall. However, notable exceptions include Islamabad, Rawalpindi, and Abbottabad where 10 Marla building units are the most frequently occurring. Building sizes can also be correlated with income and overall economic strength of the population base, as households tend to prefer larger household sizes as their level of affluence increases. Thus, in more affluent cities such as Islamabad and Rawalpindi, larger building sizes are prevalent.

MAP 1. Land Use Land Cover Karachi, 2023



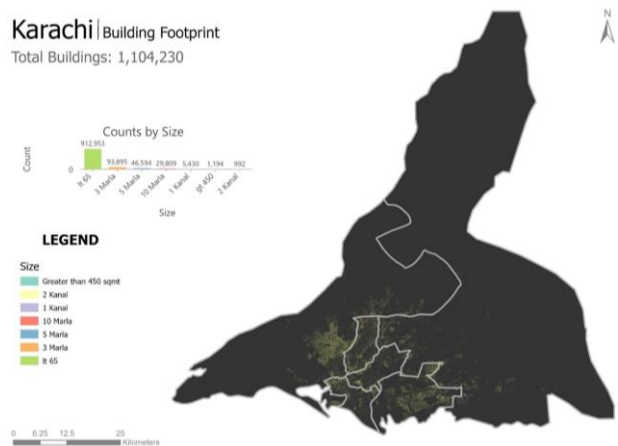
Source: Remote Sensing of Satellite Imagery

MAP 2. Heat Map of Building Density in Karachi, 2023



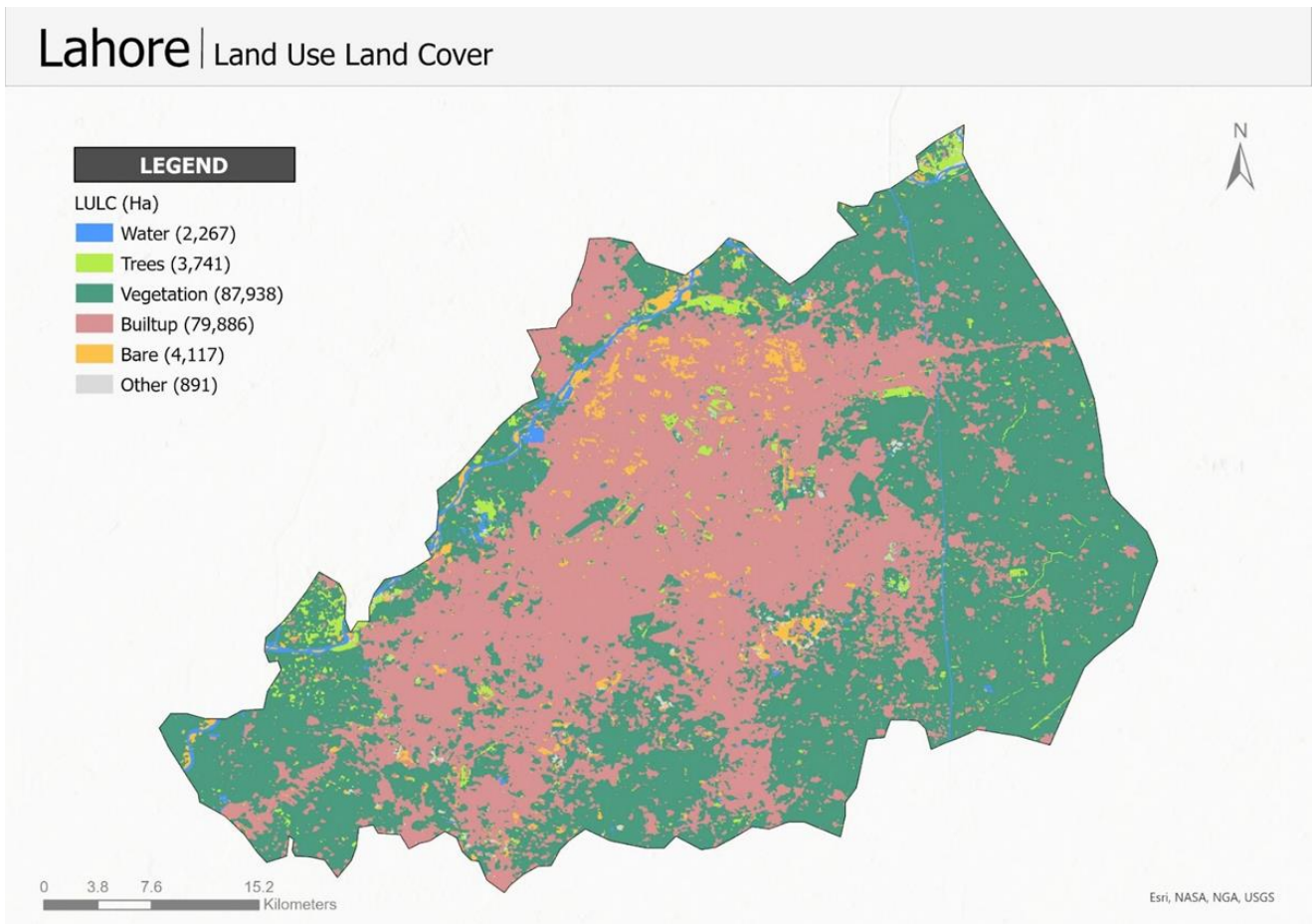
Source: Remote Sensing of Satellite Imagery

MAP 3. Spatial Distribution of Buildings by Size in Karachi, 2023



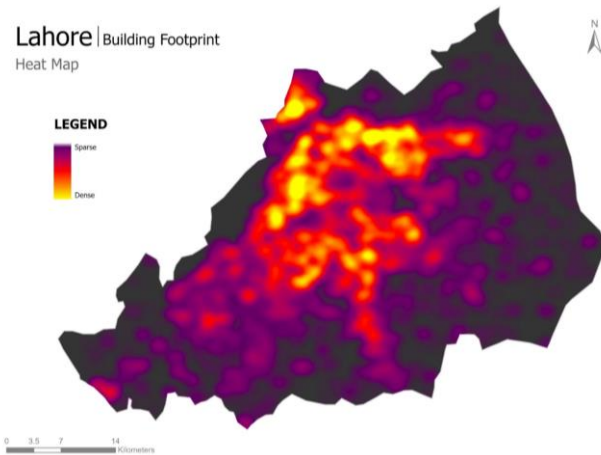
Source: Remote Sensing of Satellite Imagery

MAP 4. Land Use Land Cover of Lahore, 2023



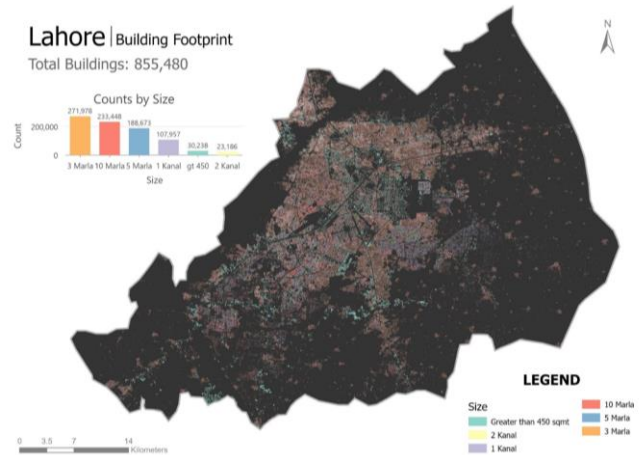
Source: Remote Sensing of Satellite Imagery

MAP 5. Heat Map of Building Density in Lahore, 2023



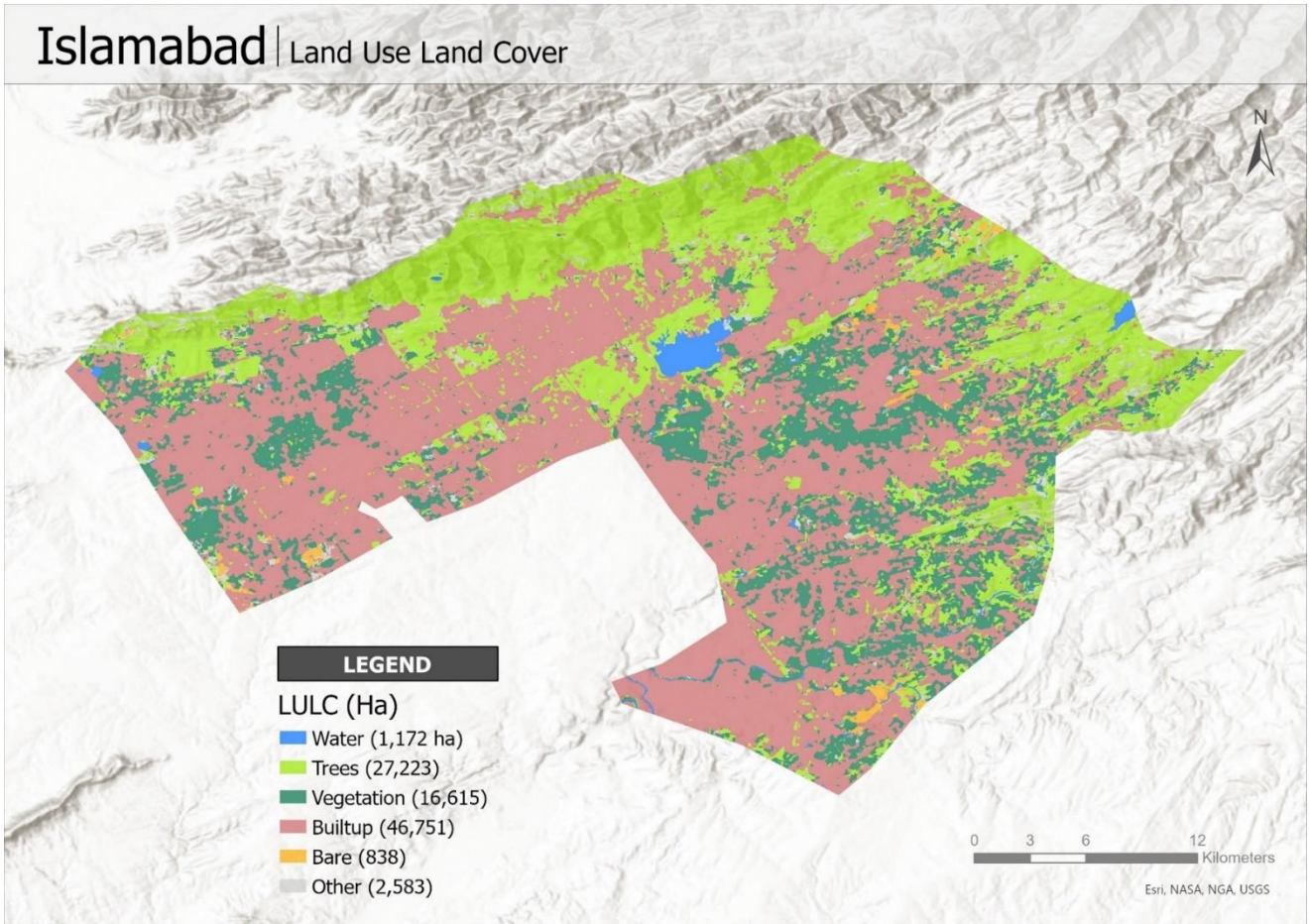
Source: Remote Sensing of Satellite Imagery

MAP 6. Spatial Distribution of Buildings by Size in Lahore, 2023



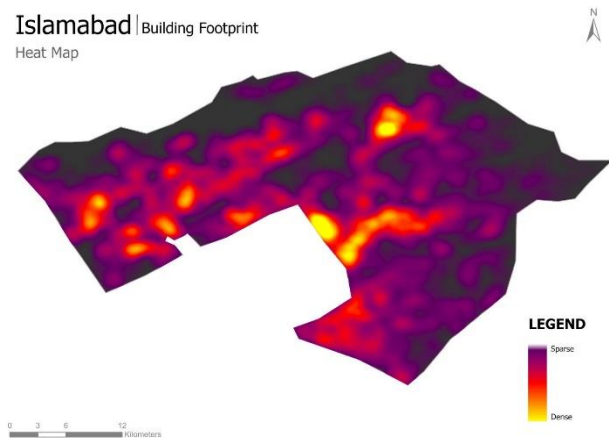
Source: Remote Sensing of Satellite Imagery

MAP 7. Land Use Land Cover of Islamabad, 2023



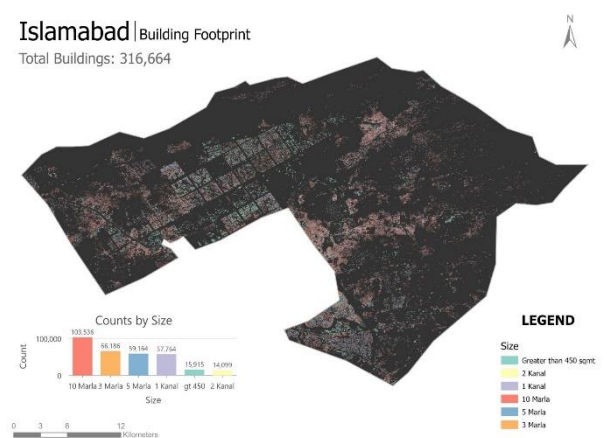
Source: Remote Sensing of Satellite Imagery

MAP 8. Heat Map of Building Density in Islamabad, 2023



Source: Remote Sensing of Satellite Imagery

MAP 9. Spatial Distribution of Buildings by Size in Islamabad, 2023



Source: Remote Sensing of Satellite Imagery

Quantitative Analysis of Housing Supply

A GIS based assessment and categorization of available building footprints has been carried out. This will help determine the number of residential buildings within each city, and further categorize them based on plot size, horizontal / vertical and other characteristics, including building height and building land use, particularly bifurcation into commercial and residential uses. In the case of vertical buildings, height data extracted from the Digital Surface Model (DSM), and Digital Elevation Model (DEM) will help estimate the number of stories, and subsequently, the number of housing units available within vertical residential buildings. Thus, the total housing units in each can be estimated accordingly.

Housing Supply in Pakistan (2023)

36,239,100

It is notable that the ratio of vertical buildings to vertical housing units is 8 units on average – that is, each vertical building supplies about 8 units on average. This is a significant multiplier effect and demonstrates that vertical buildings represent much more efficient land utilization to provide a greater number of units. Moreover, there is room to further maximize land utilization and increase housing supply, given that the majority of the vertical building stock is predominantly medium rise, thus, leaving room for further densification.

The housing supply observed in the sample districts has been used to extrapolate the total housing supply in the country, using the level of urbanization in respective districts as the basis for this method of estimation. Thus, the urban population ratio for each district in the sample, as well as remaining districts in Pakistan has been calculated. An estimation based on extrapolation between districts in the sample, and remaining districts in the country, with a similar level of urbanization has been conducted given that similar trends in the local real estate sector is expected between such comparable districts. For example, the supply levels trend observed in low urbanized districts in the sample, has been extrapolated to

all other districts with a similarly low urban population ratio. Since real estate markets are driven by population growth and urbanization pressures, the extrapolation of results across similar districts is expected to give a more accurate estimate of housing supply in Pakistan.

The methodology for estimated housing units based on GIS data on building stock relied primarily on the estimated building height, as well as the reported area of the building footprint. Thus, height data from DEM (ground height above sea level) and DSM (surface i.e., ground plus structure height above sea level) which report the average / approximated ground height and surface height in meters, within a pixel of 30m by 30m, was utilized. Thus, building height calculated from subtracting DEM from DSM, is also an approximated building height. This approximated building height was converted to a number of stories based on the local zoning and building regulations / bye laws as detailed in table 7. Furthermore, the area of the building footprint was utilized – firstly, a minimum building footprint area was established to ensure that “noise” i.e., structures and forms that were not buildings per say such as sheds, security cabins etc., were removed from the building count; and secondly, to estimate the number of units per story within each vertical building, by assuming the area of each unit based on trends observable on Zameen.com. Thus, the total number of units per story is equivalent to the building footprint area, divided by the assumed per unit area.

Lastly, whilst the majority of horizontal building stock is expected to be single family homes, there is the potential that horizontal buildings may also represent more than one unit per building given prevalent subleasing and rental practices, where rooms or portions within horizontal units may be subleased. Thus, based on the volume of sublease listings (both inactive and active) on Zameen.com, in respective areas, the proportion of sublease type horizontal building was assumed, and the number of units was estimated accordingly. All other horizontal buildings were assumed to represent one housing unit each. The total number of units is presented below:

TABLE 7. Estimated Housing Supply in Fourteen Districts

District	Horizontal Res. Buildings	Vertical Res. Buildings	Vertical: Three Story	Vertical: Four Story	Vertical: Four Story +	Horizontal Housing Units	Vertical Housing Units	Total Housing Supply
Islamabad	377,899	14,229	11,693	1,957	579	415,689	114,283	529,972
Lahore	1,251,380	89,449	75,229	10,883	3,337	1,439,087	515,675	1,954,762
Rawalpindi	746,993	38,426	31,674	5,388	1,364	821,692	298,269	1,119,961
Faisalabad	1,142,203	16,495	15,376	892	227	1,199,313	175,989	1,375,302
Multan	510,209	11,541	10,937	533	71	535,719	161,326	697,045
Sargodha	636,214	4,934	4,636	228	70	636,214	36,274	672,488
Gujranwala	711,819	25,773	24,328	1,264	181	711,819	236,942	948,761
Karachi	1,960,839	67,706	49,385	12,307	6,014	2,696,154	583,497	3,279,651
Hyderabad	289,725	2,718	1,939	569	210	304,211	45,666	349,877
Sukkur	259,897	4,370	3,937	357	76	259,897	36,315	296,212
Peshawar	603,171	7,695	6,836	618	241	633,330	71,330	704,660
Abbottabad	210,857	12,837	7,199	3,050	2,588	210,857	82,574	293,431
Quetta	121,676	591	429	100	62	139,927	2,413	142,340
Gilgit	58,330	1,708	1,168	332	208	61,247	13,761	75,008
Total	8,881,212	298,472	244,766	38,478	15,228	10,065,157	2,374,314	12,439,471

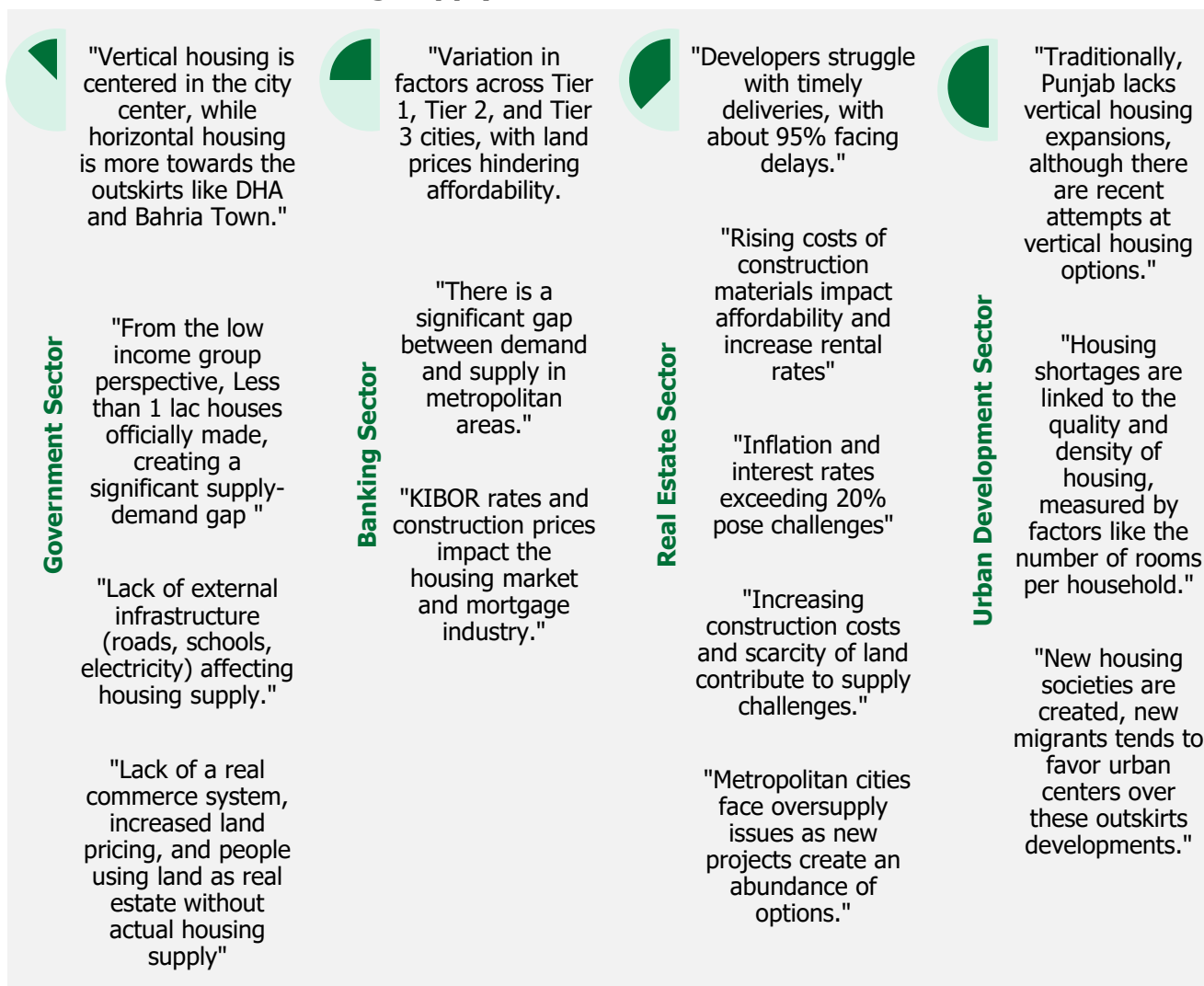
Source: Remote Sensing of Satellite Imagery; Author's Calculations

TABLE 8. **Current Housing Supply in Pakistan**

Urban Ratio	No. of Districts (Sample)	No. of HHs (Sample)	No. of Units (Sample)	No. of HHs (Pakistan)	No. of Units (Pakistan) - Estimated
0 to 35 percent	3	1,210,509	1,108,259	23,935,361	21,913,582
35 to 60 percent	6	4,643,097	4,723,152	7,605,080	7,736,205
60 to 80 percent	1	849,524	948,761	899,900	1,005,022
80 percent +	3	5,900,225	5,584,290	5,900,225	5,584,290
Total	13	12,603,355	12,364,463	38,340,566	36,239,100

Source: Remote Sensing of Satellite Imagery; Census 2023; Author's Calculations

Constraints and Challenges in the Housing Supply

FIGURE 6. **Perspectives of Key Industry Experts Regarding Challenges in Housing Supply**

Key Insights and Trends

The key statistics and insights from the preceding chapter are summarized below:



Factors driving Housing Supply in Pakistan

1. Urbanization and urban expansion is observed in major cities of Pakistan, in response to population growth and migratory pressure
2. Inflation and increase in construction prices is cited as a major factor by the real estate sector deterring housing supply in the current scenario
3. Outside the main urban cluster, where relatively high building density is observed, medium density levels are prevalent, presenting opportunity for densification
4. Zoning and building regulations do not promote vertical and high-density development



Characteristics of Current Housing Supply in Pakistan

1. Tenure Arrangements – 62 % of respondents live in owned units, while 38 % live in rental units
2. 92.6% of homeowners are male, indicating unequal access to home ownership for women
3. Majority of homeowners (65 %) are above the age of 45
4. Overcrowding – there are an average of four people per room, and 29 % percent of respondents are living in overcrowded units (with more than 3 people per room)
5. The average size of housing units is 6 Marla, as per the primary household survey
6. Residential Buildings = Horizontal (97%) vs Vertical (3%)
7. The average number of units per vertical building is 8 and would be higher for high rise buildings.
8. Housing prices have increased dramatically in the past two years, with steep growth curves being observed in all major cities

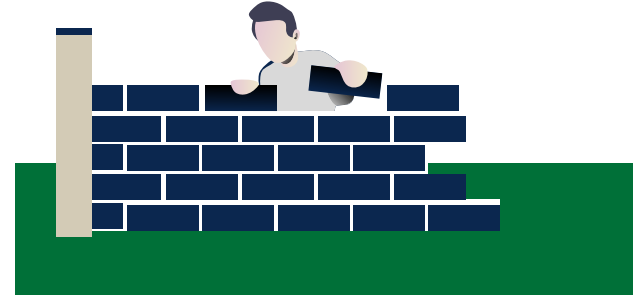


Current and Future Housing Supply in Pakistan

1. Current housing stock across the 14 districts is estimated to be 12,439,471 units and across Pakistan is estimated to be 36,239,100 units in 2023
2. Net annual increase in housing stock, across 14 districts, is expected to be around 340,000 units
3. Negative housing growth trend is observed in Quetta, Hyderabad, and Multan, due to higher depletion of housing stock as compared to new construction. This will increase the housing backlog in these cities in the long term

06

Housing Shortage – Demand and Supply Gap



The current housing shortage in Pakistan is a much debated issue and there is a commonly accepted perception that the housing market is unable to provide housing, particularly affordable housing that is accessible to low income families, leading to a growing housing shortage in Pakistan. Furthermore, another interrelated issue is the prevalence of inadequate living conditions. This means that even among housing units that are available, many households live in overcrowded, informal and/or dilapidated conditions due to a lack of affordable housing options within the market. Thus, the prevalence of substandard living

conditions is an implicit expression of a segment of housing demand that is unmet through the housing market.

However, more recently, the prevailing estimates of housing shortage have come under critique. For one, the growth in housing supply is estimated using intercensal growth rates that remain constant over time – yet ground realities suggest that the rate of housing construction and concurrently, the number of development permit have increased significantly in recent years.

Current Housing Shortage

The current housing shortage refers to the total housing supply against the total housing needs i.e., number of households.

Updated population and household figures from Census 2023 are available and have been used to assess shortage against the estimated housing supply calculated using GIS based data. Collectively, a shortage of 0.24 Million units has been estimated across 13 Districts (excluding Gilgit Baltistan, where updated population figures aren't available). This sample represents 33 percent of the total households in the country (Table 9).

The shortage observed in the sample districts has been used to extrapolate the total shortage in the country, using the level of urbanization in respective districts as the basis for this method of estimation.

Housing Shortage in Pakistan (2023)

2,101,466

Thus, the urban population ratio for each district in the sample, as well as remaining districts in Pakistan has been calculated. An estimation based on extrapolation between districts in the sample, and remaining districts in the country, with a similar level of urbanization has been conducted given that similar trends in the local real estate sector is expected between such comparable districts. For example, the shortage trend

observed in low urbanized districts in the sample, has been extrapolated to all other districts with a similarly low urban population ratio. Since housing demand and real estate markets are driven by population growth and urbanization pressures, the extrapolation of results across similar districts is expected to give a more accurate estimate of housing shortage in Pakistan.

TABLE 9. Current Housing Shortage in Thirteen Districts

District	Total Housing Supply	Households (Census 2023)	Housing Shortage
Islamabad	529,972	411,518	(118,454)
Lahore	1,954,762	2,012,526	57,764
Rawalpindi	1,119,961	999,347	(120,614)
Faisalabad	1,375,302	1,384,668	9,366
Multan	697,045	887,304	190,259
Sargodha	672,488	684,799	12,311
Gujranwala	948,761	849,524	(99,237)
Karachi	3,279,651	3,439,220	159,569
Hyderabad	349,877	448,479	98,602
Sukkur	296,212	268,755	(27,457)
Peshawar	704,660	691,505	(13,155)
Abbottabad	293,431	237,020	(56,411)
Quetta	142,340	288,690	146,350
Gilgit	75,008	Unknown	Unknown
Total (Sample)	12,364,463	12,603,355	238,892
<i>*13 Districts excluding GB</i>			

Source: Remote Sensing of Satellite Imagery; Census 2023; Author's Calculations

The highest levels of shortage are observed in the most highly urbanized districts (urban population is greater than 80 percent) and the least urbanized districts (urban population is less than 35 percent). In the former case, the real estate sector is unable to keep pace with rapid population growth and urbanization resulting in shortages, whilst in the former, local real estate markets are likely to be more nascent and sluggish to respond to market cues. In these districts, whilst the overall urban population may be low, in recent years the urbanization trend has picked up resulting in higher urban growth rates than rural growth rates. Yet, this trend has not been sufficient to mobilize the relatively stagnant real estate markets in smaller cities, with developers focusing towards large and medium sized urban centers. Thus, while these districts are urbanizing, they have not yet achieved sufficient critical mass to attract a well-developed real estate sector, resulting in housing shortages in these regions.

On the other hand, in districts with medium to moderately high levels of urbanization, an overall housing surplus is observed. Many include secondary urban centers (Multan, Gujranwala, Rawalpindi, etc.) where high levels of real estate activity and residential construction have been observed in recent times. These districts also have high urban growth rates, but unlike smaller urban regions, they have been the focus of real estate activity, with developers expecting high levels of housing demand in such regions in years to come, resulting in further construction. High levels of development have resulted in an overall surplus, although such a surplus may be absorbed overtime as population increases, and development activity reaches a plateau once the real estate sector observes prevalent surplus impact market pricing, and due to a shortage of land.

TABLE 10. **Current Housing Shortage in Pakistan**

Urban Ratio	No. of Districts (Sample)	No. of Units (Sample)	No. of HHs (Sample)	Shortage (Sample)	No. of HHs (Pakistan)	Shortage (Pakistan)
0 to 35 percent	3	1,108,259	1,210,509	102,250	21,913,582	2,021,779
35 to 60 percent	6	4,723,152	4,643,097	(80,055)	7,736,205	(131,125)
60 to 80 percent	1	948,761	849,524	(99,237)	1,005,022	(105,122)
80 percent +	3	5,584,290	5,900,225	315,935	5,584,290	315,935
Total (Sample)	13	12,364,463	12,603,355	238,892	36,239,100	2,101,466
<i>*13 Districts excluding GB</i>						

Source: Remote Sensing of Satellite Imagery; Census 2023; Author's Calculations

Overall, the rate of household formation is lower than rate of increase in housing supply and construction of new units, leading to a marginal reduction in the total housing shortage in each

year. However, while construction of units may be high paced, the accessibility to new housing stock remains a challenge.

Key Insights and Trends

The key statistics and insights from the preceding chapter are summarized below:



Quantitative Housing Shortage in Pakistan

1. Estimated Current Housing Shortage in 14 Districts = 0.24 Million
2. Estimated Current Housing Shortage in Pakistan = 2 Million
3. Districts with highest shortage – Multan (0.19 Million); Karachi (0.16 Million); Quetta (0.15 Million) and Hyderabad (0.1 Million)
4. Estimated Annual Change in Shortage (within sample districts) = surplus of 10,246 units
5. Estimated Annual Change in Shortage (within Pakistan) = deficit of 25,054 units
6. Estimated Market Based Shortage (within sample districts) = 0.9 Million



Qualitative Housing Deficit in Pakistan

1. Total Number of Households in Overcrowded Units = 13 Million, including 7 Million Rural Households and 6 Million Urban Households
2. Total Number of Households in Substandard Units = 9 to 9.5 Million, including 7.7 to 8 Million Rural Households and 1.2 to 1.4 Million Urban Households
3. Total Number of Housing Poor Urban Households = 2.5 Million in 13 districts alone and 4.2 Million in Pakistan overall

Housing deprivations are far more pervasive than housing shortage

The level of basic housing shortage indicates that there may be nearly sufficient housing stock to provide one unit to each household, and the existing backlog may reduce over time, if rapid pace of construction continues. Yet the pervasive, housing deprivations show the lack of equity in distribution and accessibility to quality housing.



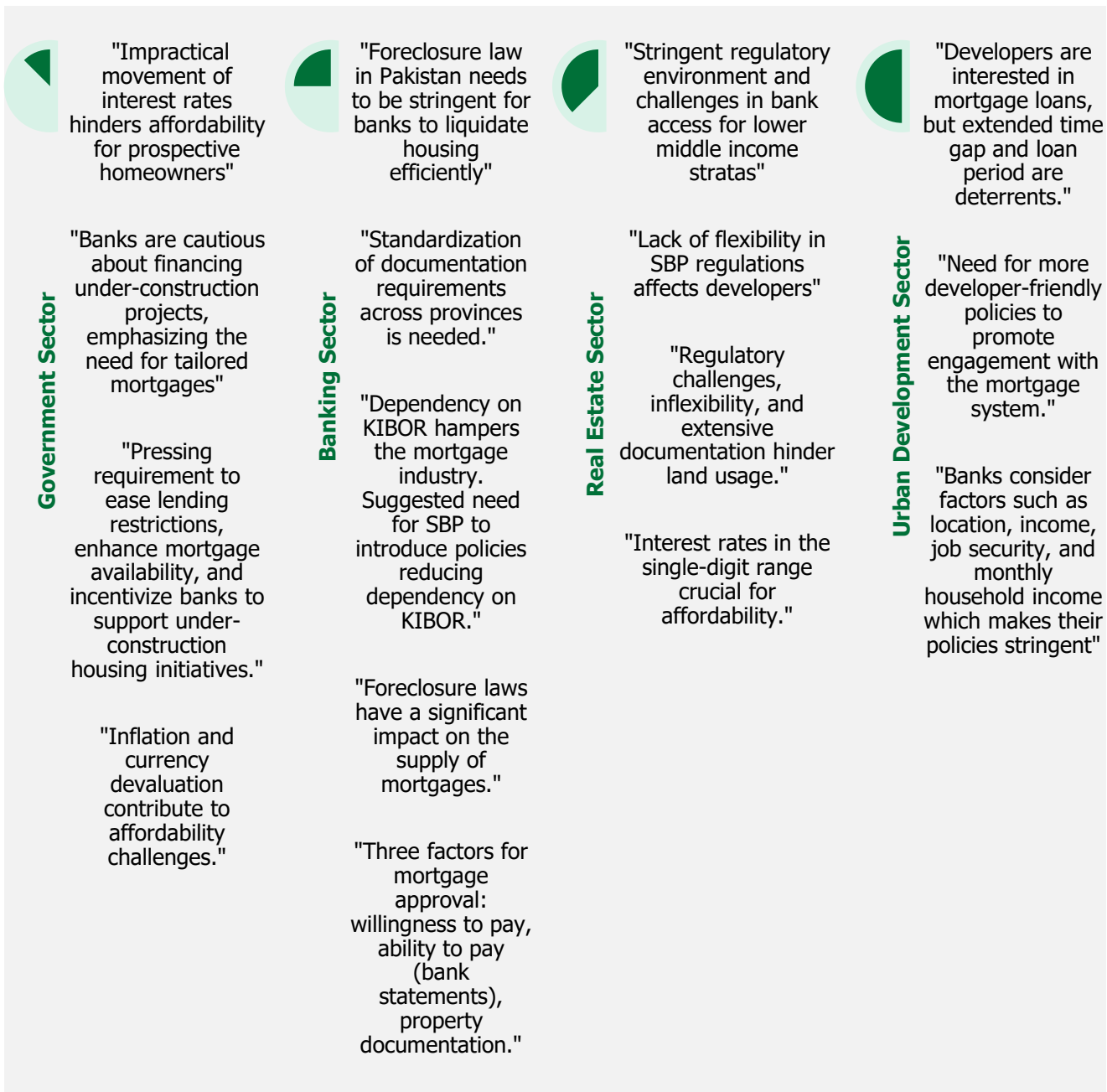
Consumer Perception of Housing Shortage

1. Around 50% percent of survey respondents do not perceive any mismatch between housing supply and demand. Around 20% believe that housing demand is greater than supply, and around 10% percent believe that supply is greater than demand
2. High population growth and rising property prices are the leading factors behind the perception that housing demand is greater than supply, according to survey respondents
3. Economic downturn, demographic shifts and overdevelopment of housing are the leading factors behind the perception that housing supply is greater than demand, according to survey respondents

07 Housing Finance in Pakistan



FIGURE 7. Perspectives of Key Industry Experts Regarding Challenges in the Housing Finance Sector



Key Insights and Trends

The key statistics and insights from the preceding chapter are summarized below:



Housing Finance Portfolio

1. Total Housing & Construction Finance Portfolio as of June 2023 = PKR 456.8 Billion
2. Proportion of consumers who have previously obtained housing finance is only 6.6%
3. Increasing market share of Islamic home finance – in 2021, these accounted for 60 % of total housing and construction finance loans as per SBP
4. Market share – Islamic home finance products obtained by 59.5 % percent of primary survey respondents vs. Conventional home finance obtained by 21.5 % of primary survey respondents.



Challenges in the Housing Finance Sector

1. Inflationary trend and rapid increase in interest rates
2. Discontinuation of government markup subsidy policy which was the driving force behind increased public interest in obtaining housing finance
3. Limited loan products and nascent market, lacking diversity of loan options, streamlined evaluation and documentation processes
4. Lack of foreclosure laws and regulations makes banks more risk averse, due to lengthy litigation process which increase the liability of potential Non-Performing Loans
5. Lack of long-term debt capital market resulting in banks lacking funds to extend mortgages



Consumer Preference and Perception of Housing Finance

1. Only 16 % of consumers are interested in obtaining housing finance in the future
2. Leading reasons for lack of interest in housing finance is that due to risk and debt averseness, high and fluctuating interest rates, lengthy approval processes and high down payments
3. Preference for Islamic Finance (74%) vs Conventional Banks (10.7%)

08

Government Policies & Interventions in the Housing Sector



The government's involvement is key in directing public expenditure towards housing affordability. The allocated and actual expenditure can vary due to government priorities across various sectors, and affordable housing has traditionally not been a subject of sustained attention and focus. Yet, in some cases, international and multilateral commitments can play a role in increasing government expenditure on housing. For instance, in Punjab, data from 2014 implies that government expenditure on housing almost doubled owing to the urgency of fulfilling the Millennium Development Goals (MDGs). However, there were discrepancies between planned vs. actual expenditure, which shows how important it is to have accurate demand-supply data in order to ensure a positive outcome of these initiatives.

Often government interventions in the affordable housing sector have consisted of development of public sector housing schemes, but these efforts

have not been sustained over time due to political turnover and have only been able to target a tiny fraction of those in need of affordable housing. However, in the past few years, there have been a series of policy interventions designed to incentivize the public sector and thus, reform the housing market in Pakistan. Thereby, on July 18, 2018 the State Bank of Pakistan (SBP) published the 'Policy for Promotion of Low Cost Housing Finance' which tackles both aspects of housing finance i.e. mortgage and construction finance. It introduces a subsidized mortgage financing policy to make housing affordable to low-income groups and also provides subsidized construction financing policy to incentivize builders and developers to increase the supply of low-income housing units. In addition to addressing reform in the housing finance sector, the government launched the Naya Pakistan Housing Program to involve the private real estate sector in affordable housing development.

Stakeholder Perception of Government Policies and Interventions

In order to substantiate the research outcomes of this study and develop a dynamic understanding of the housing market in Pakistan, In Depth Interviews (IDIs) will key stakeholders have been

an important component of the overall research methodology. In this section, the perspectives of various key segments in or related to the housing market will be discussed.

FIGURE 8. Perspectives of Key Industry Experts Regarding Government Policies & Interventions



09

Actionable Recommendations



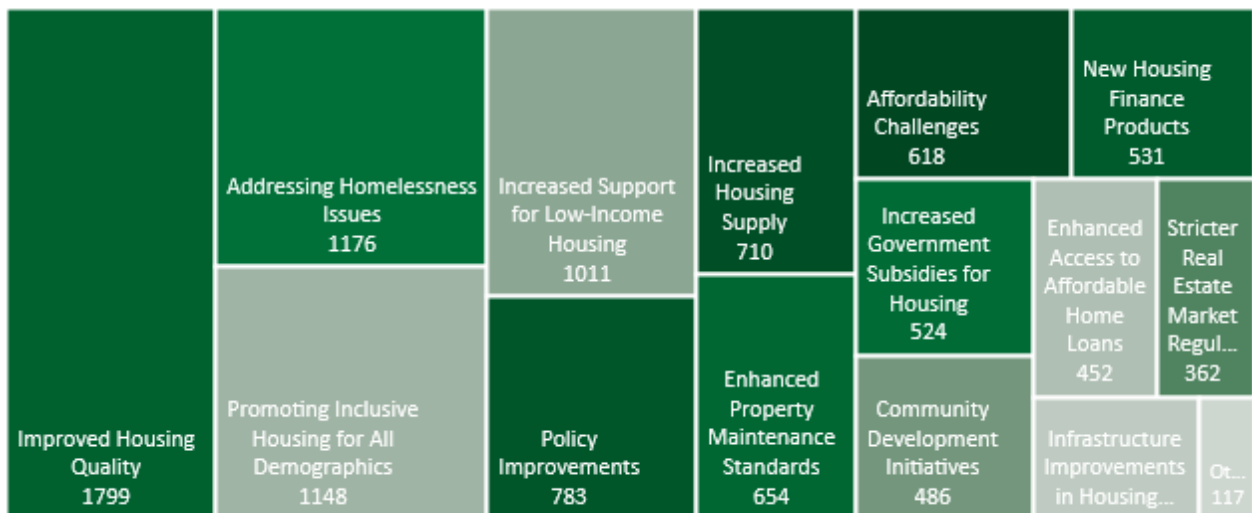
A crucial outcome of this research study is to develop actionable recommendations to help navigate the future of the housing market in Pakistan and achieve desired policy outcomes such as expansion of availability of affordable housing options in the market, and growth in the housing finance sector.

To this end, it is important to first understand in depth, the needs and recommendations put forth by consumers in the housing market, as well as recommendations made by key industry experts in various sectors including banking, real estate, urban development, and the public sector.

Actionable Recommendations by Housing Market Consumers

In this section, the perspectives of housing market consumers regarding future recommendations and required interventions in the housing market are presented in detail.

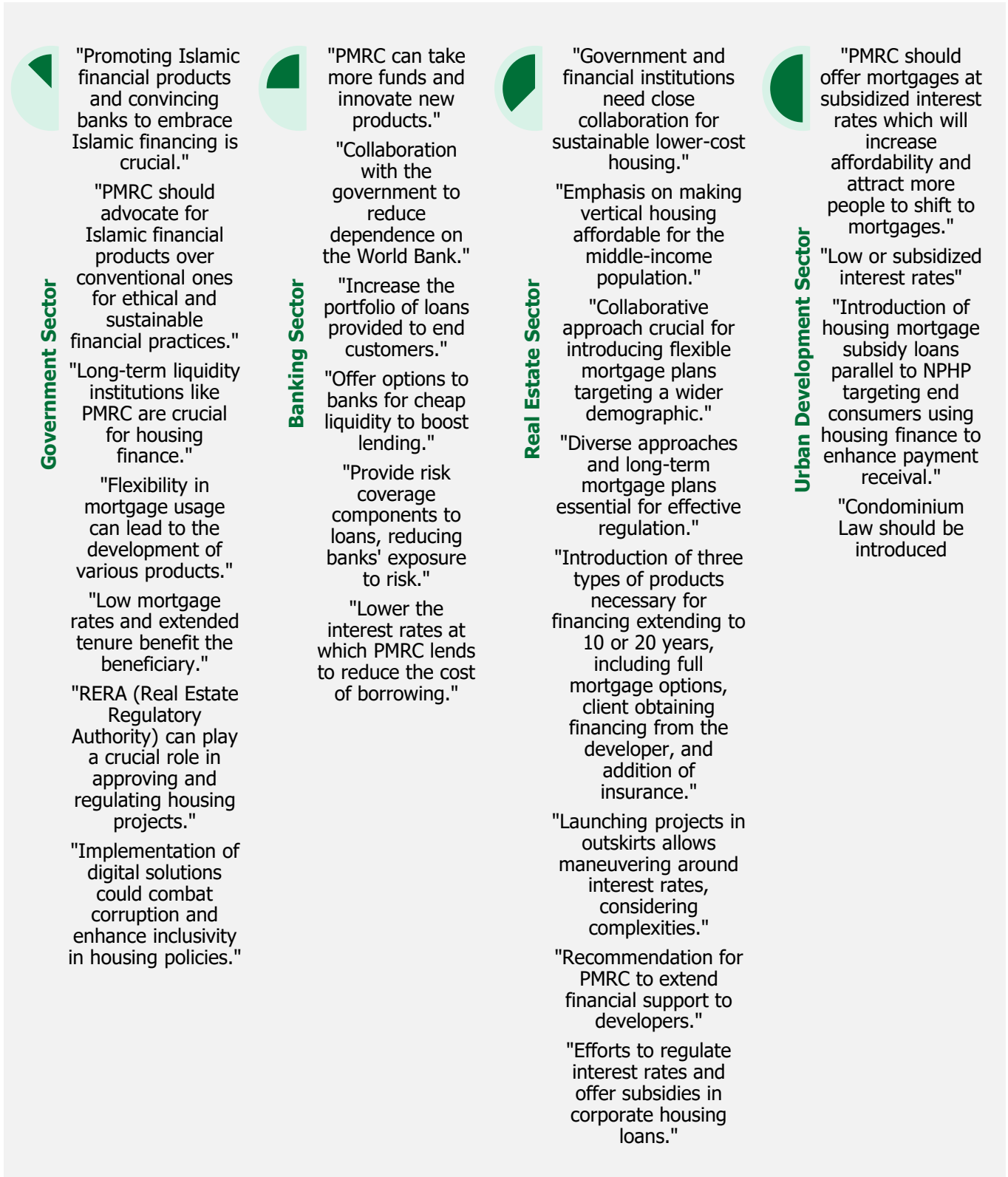
FIGURE 9. Recommendations made by Housing Market Consumers



Source: Akademos Household Survey 2023

Actionable Recommendations by Key Industry Experts

FIGURE 10. **Perspectives of Key Industry Experts Regarding Actionable Recommendations for the Housing Market**



Policy Recommendations for the Public and Private Sector

This section will synthesize the major policy recommendation and interventions highlighted throughout the report.

Banking Sector

- Capitalize on untapped, bankable market segments in secondary cities for housing finance provision.
- Diversify housing finance options: Islamic finance; rent-to-own housing finance; credit assessment for the low-income segment; microfinance for home improvement and incremental development.
- Increase the availability of construction financing.
- Long-term funding is required to promote mortgages for sustainable growth of the housing market in Pakistan. Subsidized credit lines are very important for promoting affordable housing.
- Guarantee funds play a vital role in promoting mortgage finance and help in building confidence among Primary Mortgage Lenders to explore new segments, which are necessary to increase the mortgage customer base.
- New townships with proper planning and infrastructure need to be developed.
- New housing projects/developments should have provisions for low-cost housing.
- Relevant laws and regulations should be introduced to prevent haphazard expansion of housing colonies.
- Strengthen the implementation and effectiveness of foreclosure laws.
- Standardize urban and rural mortgage loan documentation.
- The Government should allocate land to second and third-tier cities for the development of low-cost housing through public-private partnerships.
- The Government may allocate land and introduce reforms for slum upgrading and providing adequate housing.
- Banks should focus on second and third-tier cities for mortgage finance by identifying mortgageable societies.
- The PBA forum should be utilized to identify such societies for the benefit of the entire banking fraternity.

Regulatory Framework

- Introduce Condominium Law to regulate property rights within vertical residential developments.
- A Real Estate Regulatory Authority is needed to streamline regulatory processes for housing development.
- Introduce or streamline foreclosure laws and procedures.

Real Estate Sector

- Manage construction and development costs and achieve economies of scale through vertical development.
- Adopt low-cost building and construction techniques.
- Reduce construction costs through prefab housing techniques. Pilots can be conducted through public-private partnerships.
- Digitize property records nationwide; centralized title search should be available for property records.
- Rationalize registration and property transfer costs.
- The Government should contribute land at no cost for the development of affordable housing.
- For construction/mortgage purposes, PMRC should fund PFIs through subsidized funding from the GOP.

Municipal Governments

- Implement community-based slum upgrading and rehabilitation programs.
- Invest in public and municipal infrastructure to improve living conditions.
- Update zoning and building regulations to promote higher densities, vertical development, and upzoning.
- Streamline construction approval procedures to prevent development delays.

Public Sector

- Capitalize on untapped, bankable market segments in secondary cities for housing finance provision.
- Incentivize developers with vertical projects through reduced fees/taxes and expedited, prioritized approval processes.
- Provide subsidies to support home ownership and housing finance for marginalized communities.
- Promote real estate development in urbanizing regions through fee and tax reductions.
- Implement market-based programs to enhance the purchasing power and/or lower housing costs for low to middle-income households, such as rental vouchers, cross-subsidy programs, and interest rate subsidies.
- Provide subsidized funding to PMRC for targeted development of the mortgage sector.
- Implement building control regulations/laws/approvals/NOC issues.
- Address absence of slum regulations/Katchi abadi related issues.

10

Conclusion



The aim of this study on the housing market is to provide a useful reference point for estimating housing demand, supply, gap, and affordability in the housing market of Pakistan using primary and secondary data. The data and findings will be useful to policymakers, investors, developers, and other stakeholders in the housing market, providing them with insights into the underlying dynamics of the market and informing the development of effective interventions to address the housing market supply-demand gap in Pakistan.

To this end, this report has presented a detailed overview of key aspects of the housing market including a detailed assessment of the housing demand and housing supply in Pakistan from the data collected through primary household survey, GIS Mapping as well as secondary sources. The existing literature has also been assessed in order to provide a launching point from which a unique methodology and framework for estimating the housing shortage in Pakistan can be developed. This will enable the formulation of effective policy recommendations for relevant industry stakeholders.

Way Forward

The housing supply estimates presented in this study are based upon analysis of building footprints, digitized from open-source satellite imagery. However, the accuracy of these results may be improved by utilizing higher quality / higher resolution satellite imagery, enabling a more comprehensive and accurate digitization of building footprints – both in terms of the number

of buildings that are accurately digitized, as well as a more accurate capture of the size of each building. As a way forward, analysis of higher resolution satellite imagery can be piloted in one district, enabling a comparison of before and after results. If there is significant change or improvements, this approach may be adopted in the remaining districts of the project area as well.

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