

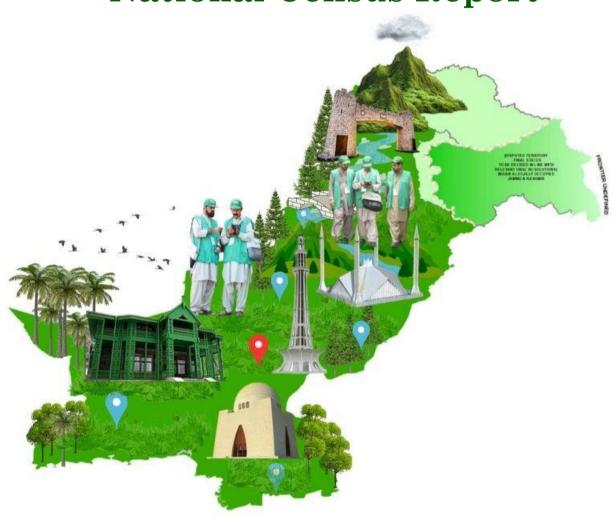


# 7<sup>th</sup> Population & Housing Census 2023

(First Ever Digital Census)



# **National Census Report**





# 7<sup>th</sup> Population and Housing Census 2023

(First-ever Digital Census of Pakistan)



## **National Census Report**

Government of Pakistan
Ministry of Planning Development and Special Initiatives
Pakistan Bureau of Statistics
Statistics House
21- Mauve Area, G-9/1, Islamabad
Pakistan

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#### **Forward**



The 7<sup>th</sup> Population and Housing Census-2023, in pursuance of the decisions made in 49<sup>th</sup> meeting of Council of Common Interests (CCI), was conducted digitally in the country during March to May, 2023. The exercise was accomplished by the Pakistan Bureau of Statistics with the assistance of consulting agencies, NADRA, NTC and SUPARCO, and cooperation of provincial and district administration in providing all kind of administrative and human support and Armed Forced for providing security during the whole census process, including the Pilot Census and Post Enumeration Survey of the Digital Census. I extend my

sincere gratitude to the officers and staff of Provincial Government Departments, as well as the personnel of the Armed Forces, who played a pivotal role in the success of this operation. Their dedication and involvement were truly commendable.

The Digital Census of Pakistan was notable for some of its distinctive features, particularly the deployment of a web portal for self-enumeration. Such an approach is rarely seen even at the global level. At regional level, no other country has ever attempted to empower their citizens by enabling them to submit their census data through self-enumeration. This is a remarkable achievement and great success story for the country. Similarly, it is essential that the successful utilization of 120,000 tablet devices in the field, development of a comprehensive Census Software Solution (ERP) consisting of sixteen distinct modules, training provided to the census field staff both on technical and IT aspects of the census, and development of other necessary IT related infrastructure to meet the requirements of the Digital Census are also to be highlighted.

Lastly, I am grateful to the officers and staff of the Ministry of Planning, Development and Special Initiatives for their exceptional cooperation with the PBS staff. Together, they worked tirelessly to efficiently finalize the results of Census-2023 in a remarkably short period of time, thus enabling us to reach this significant milestone.

(Ahsan Iqbal)
Minister for Planning, Development
and Special Initiatives

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For the successful completion of census operation the entire staff of PBS who provided the administrative support in the Head Office as well as Provincial/Regional, and Field Offices are to be congratulated for their dedication and motivation to accomplish this challenging task.

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## **Preface**



Population and Housing Census is an important national undertaking which serves as a comprehensive data collection exercise to gather information on various aspects of the population and housing conditions. It provides essential demographic information such as population size, age distribution, gender ratio, and other demographic indicators, as well as data on various socioeconomic factors such as education, employment, disability/functional limitation, and household amenities. This information is crucial for policymakers to formulate development plans and

policies that cater to the diverse needs of the population. Additionally, census data plays a significant role in electoral representation, resource allocation at both national and local levels, and determining funding distribution for development projects, social welfare programs, and infrastructure initiatives.

In Pakistan, since its inception, six population and housing censuses have been conducted at various intervals in the past. These censuses took place in 1951, 1961, 1972, 1981, 1998, and 2017. After some controversies arose regarding the reported census figures, the Council of Common Interests (CCI) while approving the results of 6<sup>th</sup> Population and Housing Census-2017 directed to conduct the next Population and Housing census as early as possible, utilizing the latest technology. Pakistan Bureau of Statistics (PBS) accordingly began preparations for the next 7<sup>th</sup> Population and Housing Census in the country.

In pursuance of the CCI decisions and recommendations of Census Advisory Committee constituted under the Chairmanship of Deputy Chairman Planning Commission to devise recommendations for adoption of the International best practices, PBS carried out the whole process of the 7<sup>th</sup> Population and Housing Census by using digital technology. Furthermore, in order to ensure smooth implementation of the census operation, a pilot census was conducted to thoroughly test all census-related procedures, methodologies, tools, and software.

The field operation of the census was commenced by structure listing on 1<sup>st</sup> March, 2023. The main census field enumeration began on 12<sup>th</sup> March, 2023, with the initial deadline for completion set on 4<sup>th</sup> April, 2023. However, in response to the requests from provincial governments for complete coverage, the field enumeration was extended four times by the Census Monitoring Committee, ultimately concluding on 30<sup>th</sup> April, 2023. In certain districts, mainly due to the under-enumeration, the census field operation was further extended until 21<sup>st</sup> May, 2023.

Furthermore, as approved by the CCI in its 49<sup>th</sup> meeting and recommended by the committee on *Trend Analysis of Census Data for 7<sup>th</sup> Population and Housing Census (Digital Census)* constituted to analyze trends and determine suitability of the census data, Post Enumeration Survey for the 7<sup>th</sup> Population and Housing Census-2023 was conducted during 8<sup>th</sup> July to 19<sup>th</sup> July, 2023. Accordingly, the final summary results of the 7<sup>th</sup> Population and



Housing Census-2023 were compiled by factoring in the findings of the Post Enumeration Survey and submitted for the approval of CCI on 2<sup>nd</sup> August, 2023. In its 50<sup>th</sup> meeting held on 5<sup>th</sup> August, 2023, the CCI considered the final summary results and unanimously approved the results of 7<sup>th</sup> Population and Housing Census-2023.

Conducting a census is a monumental task in itself, but the challenges grow exponentially when combined with the introduction of technology for the first time in the country. I extend my heartfelt gratitude and congratulations to Mr. Muhammad Sarwar Gondal, Member (Support Services/RM) and Project Lead for the Digital Census, Mr. Ayazuddin, Member (Census & Surveys) who commendably completed his tenure on 13<sup>th</sup> November 2024, Ms. Rabia Awan, Deputy Director General (Census Planning and Coordination/CPMU), and their entire team for their tireless dedication and efforts in successfully completing the census operation under challenging circumstances. I also wish to thank the provincial and district administrations for their active participation in providing administrative and human support; the consulting agencies, NADRA, NTC, and SUPARCO, for ensuring timely arrangements of essential hardware and software; and other stakeholders for their invaluable support. My special thanks go to the Armed Forces, whose relentless efforts were indispensable to the success of this endeavor.

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For the successful completion of census, I express my profound appreciation and admiration for the active and enthusiastic participation of the entire nation, without which this achievement would not have been possible.

(Dr. Naeem uz Zafar) Chief Statistician ستارهٔ امتیاز

August 2024



## Acknowledgement



Council of Common Interests (CCI), in its 45<sup>th</sup> meeting held on April 12, 2021, approved the final results of the 6<sup>th</sup> Population and Housing Census-2017 and decided that the process of the next census should start as early as possible according to international best practices by using latest technology. Recognizing the critical role of the census in shaping political representation and resource allocation, the Government of Pakistan established the Census Advisory Committee. This committee, comprising eminent demographers and experts from all provinces, was tasked

with developing recommendations for the 7<sup>th</sup> Population and Housing Census. To ensure credibility and transparency while aligning with global standards, the Census Advisory Committee conducted an in-depth review of international practices and United Nations principles. Based on their findings, the committee proposed conducting the 7<sup>th</sup> Population and Housing Census digitally, integrating Geographic Information System (GIS) technology for real-time monitoring and enhanced precision.

Traditionally, population and housing censuses in Pakistan have been conducted using paper-based methods. This approach underwent a significant change when, in its 49<sup>th</sup> meeting held on January 13, 2022, CCI approved the Census Advisory Committee's recommendations to conduct the 7<sup>th</sup> Population and Housing Census in digital format. In the meeting, CCI also approved the Census Work Plan, Census Questionnaire, and the establishment of the Census Monitoring Committee (CMC). The CMC was tasked with closely monitoring census activities to ensure the entire operation is conducted efficiently, transparently, and credibly. This decision represented a major step forward in expediting the census process in a technologically advanced and trustworthy manner.

PBS, accordingly, carried out the 7<sup>th</sup> Population and Housing Census by digitizing the whole census process starting from HR and Task Assignment Web Portal to Inventory Management, Communication Application, Complaint Management System, CATI Support Module and provision of Dashboards at provincial and census district level for monitoring and complete coverage. For census data collection, tablet devices equipped with various software applications, including house/structure listing and household enumeration software, were utilized. Many of the Modules envisioned for the Digital Census were thoroughly checked and their performance and output were verified during the pilot census conducted in 33 administrative districts across Pakistan during 20<sup>th</sup> July, 2022 to 3<sup>rd</sup> August, 2022. The main aim of the pilot census was testing of validity and suitability of the entire census plan and its organization.

Despite many impediments and challenging timelines, PBS completed main census related activities on time including training of 300 Master Trainers at Islamabad, training of 3460 Trainers at Divisional level and training of 120,000 Enumerators at Census District level



on both subject matter and IT related aspects of the Digital Census. Similarly, PBS and its stakeholders achieved major milestones, including, digitally updating of census blocks; acquisition of 120,000 tablets and their hardening; development of ERP system and acquisition of latest imagery of Pakistan prior to start of the main census field operation. The Digital Census also implemented a distinctive feature of self-enumeration through a web portal, thus enabling 2.6 million individuals to conveniently submit their census related information online.

I would like to especially acknowledge and congratulate Mr. Ayazuddin, former Member (Census & Surveys), and Ms. Rabia Awan, Deputy Director General (Census Planning and Coordination/Census Project Management Unit), along with the entire team from subject matter, support services, GIS, and field services, for their untiring efforts and commitment throughout the census operation. Their devotion and determination, particularly in the face of challenging circumstances, were truly commendable. Thanks to their collective efforts, the project was successfully completed within the stipulated timeframe.

While we should take pride in this accomplishment, I firmly believe that there is always room for further improvement. Therefore, I wholeheartedly welcome any constructive comments and suggestions from all the stakeholders involved. Let us continue to strive for excellence together.

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The Digital Census project has been a remarkable success, and I extend my sincere appreciation and admiration to the entire census team for their exceptional dedication and hard work.

(Muhammad Sarwar Gondal)

Member(Support Services/ RM) Project Lead Digital Census ستارهٔ امتیاز

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#### Acronyms

AJK Azad Jammu and Kashmir CAC Census Advisory Committee

CATI Computer Assisted Telephonic Interview

CCI Council of Common Interests

CDO Census District Officer

CMC Census Monitoring Committee
ERP Enterprise Resource Planning
FATA Federally Administered Tribal Areas

TATA Tederally Administrated Titoat Area

G2G Government to Government

GB Gilgit-Baltistan

GDP Gross Domestic Product
GFCF Gross Fixed Capital Formation
GIS Geographic Information System

GVA Gross Value Added

ICT Islamabad Capital Territory
IT Information Technology
KP Khyber Pakhtunkhwa
MDM Mobile Device Management
MoU Memorandum of Understanding
N3C National Census Coordination Center

NADRA National Database and Registration Authority

NCR National Census Report

NGO Non-government Organization NTC National Telecom Corporation NTC National Telecom Corporation

NTISB National Telecommunication and Information Technology

Security Board

PBS Pakistan Bureau of Statistics

PC Personal Computer

PDSI Planning, Development and Special initiatives

PES Post Enumeration Survey

POIs Points of Interest

PPRA Public Procurement Regulatory Authority
PSIC Pakistan Standard Industrial Classification

PSLM Pakistan Social and Living Standards Measurement Survey

PU Punjab University
QRF Quick Reaction Force
SDS Software-defined Storage
SIM Subscribers Identity Module
SOPs Standard Operating Procedures
SRS Software Requirements Specification

SUPARCO Pakistan Space and Upper Atmosphere Research Commission

TORs Terms of Reference

UAJ&K The University of Azad Jammu & Kashmir

UoP University of Peshawar
UTN Unique Token Number
VHR Very High Resolution
VPN Virtual Private Network



#### **EXECUTIVE SUMMARY**

The Sixth Population and Housing Census in Pakistan was originally scheduled for October 2008 but was conducted much later, from March to May 2017, due to various challenges and delays. Approval of the final census results was further delayed until 2021 due to controversies over the reported figures. However, in its 45<sup>th</sup> meeting on 12<sup>th</sup> April, 2021, the Council of Common Interests (CCI) finally approved the results and decided that the process of the next census should start as early as possible according to the international best practices by using the latest technology.

Accordingly, Government of Pakistan constituted Census Advisory Committee comprising of renowned demographers and experts to devise recommendations for the 7<sup>th</sup> Population and Housing Census. The Committee held several meetings and after detailed deliberations finalized the recommendations to carry out the census 'digitally' with real-time monitoring for transparency and broader acceptability. The CCI in its 49<sup>th</sup> meeting held on 13<sup>th</sup> January, 2022 approved the recommendations of Census Advisory Committee, census work plan with timelines, census questionnaire, and Census Monitoring Committee along with its comprehensive TORs.

In the light of the recommendations of Census Advisory Committee, PBS initiated a consultative process with provinces as well as academia and researchers and organized sensitization workshops for stakeholders and government functionaries, including Divisional Commissioners and Deputy Commissioners, to plan and prepare for the 7<sup>th</sup> Population and Housing Census.

To meet the requirements of a digital census, Census Coordination Center (N3C) was established at PBS headquarters to coordinate and monitor the census process in real time. Contracts were signed on Government to Government basis with consulting agencies, NADRA, NTC, and SUPARCO on a G2G basis after the due process for procuring census hardware and allied accessories, software, datacenter infrastructure, technical support for Census Support Centers, establishment of Call Center and provision of GIS imagery. Census Support Centers were set up at the Census District level (tehsils in Punjab, Sindh, and Khyber Pakhtunkhwa, and administrative districts in other regions) with the required IT equipment, furniture, and fixtures to ensure the system operated smoothly 24/7. PBS technical staff were assigned to these centers to provide coordination and support to field enumerators and supervisors.

Based on the recommendations of the Census Advisory Committee, a technical committee was formed to finalize the questionnaire for the 7<sup>th</sup> Population and Housing Census. The committee developed two forms: the house listing form and the main census enumeration form, incorporating extended and new questions on economic activity, demographics, and disability characteristics. To comprehensively explain census concepts and procedures, various manuals were prepared, supported by video clips and audio messages. To ensure field staff



were well-trained and understood the questionnaire thoroughly, a three-tier training plan was implemented: master trainers were trained in Islamabad, trainers at the divisional level, and enumerators at the tehsil level.

#### **CENSUS METHODOLOGY**

After detailed deliberations on the advantages and disadvantages of both defacto and dejure methodologies, the Census Advisory Committee recommended the dejure method of enumeration for the 7<sup>th</sup> Population and Housing Census. This decision considered the practical realities on the ground, the effectiveness of the dejure method, and the significant financial and human resource requirements of the de facto method.

The dejure method counts individuals based on their usual residence, defined as the place where they have lived continuously for at least six months or intend to live for the next six months. Temporary residents were not counted at their current location but at their usual place of residence. Similarly, individuals temporarily away for religious events, weddings, or training for less than six months were counted at their usual residence.

The 7<sup>th</sup> Population and Housing Census, similar to the previous censuses, primarily followed the dejure concept, however, the *"homeless"* population due to its nature was enumerated on a defacto basis.

#### PILOT CENSUS

While technological advancements have significantly streamlined the process of conducting a population census, they also bring certain risks and challenges. If not carefully managed, these risks can result in increased costs, delays in the census schedule, or compromised data quality. Therefore, a pilot census is a prerequisite and an integral part of the census process, particularly when new methodologies are introduced. A pilot census involves testing the coverage of areas and populations during the preparatory stages to assess the validity and suitability of the entire census plan and its organization. Its main objective is to evaluate, in real-world conditions, the cartography, methodology, organizational structure, data collection methods, questionnaire design, logistical planning, and the interaction and coordination of all resources involved in the census.

For the 7<sup>th</sup> Population and Housing Census, PBS conducted a pilot census from July 20 to August 3, 2022, across 33 administrative districts in Pakistan, including Azad Jammu and Kashmir and Gilgit-Baltistan. Master Trainers received three days of training at PBS headquarters from July 5-7, 2022, followed by field training for enumerators at 27 stations from July 13-17, 2022. Enumeration and supervisory staff were provided by the respective district administrations.

To ensure security, approximately 7,000 personnel from the Armed Forces, Civil Armed Forces, and Police were deployed. Additionally, 150 Quick Reaction Force centers were established, with the Civil Armed Forces and Pakistan Army serving as second- and third-tier responders, respectively.



The pilot census was initially planned to cover 417 blocks; however, three were dropped at the outset without any field activity. Of the remaining 414 blocks, 368 were fully enumerated, while 46 were partially enumerated—60% coverage—due to challenges such as rain, large block sizes, delays in tablet provision, battery issues, and mapping errors. The main issues and shortcomings identified during the pilot census were thoroughly analyzed, with recommendations proposed and suitable measures implemented to address them before the full rollout of the 7<sup>th</sup> Population and Housing Census.

#### FIELD OPERATION

The data collection process for the 7<sup>th</sup> Population and Housing Census began with the launch of a web portal for self-enumeration on 20<sup>th</sup> February 2023. By its closure on 10<sup>th</sup> March 2023, approximately 2.6 million individuals had submitted their data through the portal.

For the main census field operation, house and structure listing was carried out from 1<sup>st</sup> to 10<sup>th</sup> March 2023, followed by field enumeration starting on 12<sup>th</sup> March 2023, with an initial completion date of 4<sup>th</sup> April 2023. However, at the request of provincial governments to ensure complete enumeration, the Census Monitoring Committee extended the census field operation multiple times, ultimately concluding on 30<sup>th</sup> April 2023. In some districts, the field operation continued until 21<sup>st</sup> May, 2023, to ensure complete coverage, considering the existing ground realities.

Regarding the security of census field staff, the first-tier security, which involved accompanying enumerators, was the responsibility of the respective Provincial Home Departments through their Police, Frontier Constabulary, and Levies. The Civil Armed Forces and Pakistan Army were deployed as second- and third-tier responders.

To assess the accuracy and coverage of the 7<sup>th</sup> Population and Housing Census, Post Enumeration Survey was conducted from 8<sup>th</sup> to 19<sup>th</sup> July 2023, as per the decisions made in the 49<sup>th</sup> meeting of the CCI and the 15<sup>th</sup>-16<sup>th</sup> meetings of the Census Monitoring Committee.

#### **FINAL RESULTS**

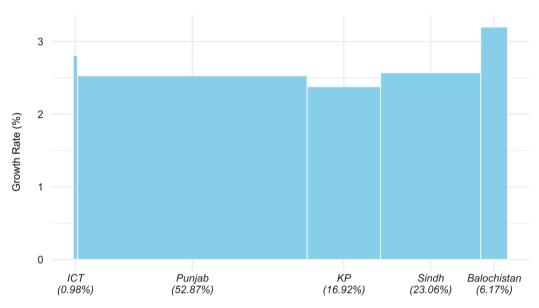
The final summary results of the  $7^{th}$  Population and Housing Census, incorporating the findings of the Post Enumeration Survey, were submitted to the CCI for approval on  $2^{nd}$  August 2023. In its  $50^{th}$  meeting on  $5^{th}$  August 2023, the CCI unanimously approved the census results.

According to the results of the 7<sup>th</sup> Population and Housing Census, Pakistan's population, including the four provinces—Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan—and Islamabad Capital Territory (ICT), has increased to 241.49 million (51.49% males, including transgenders, and 48.51% female), up from 207.68 million in the previous census. This reflects a relatively high average annual growth rate of 2.55% from 2017 to 2023, the highest in South Asia for 2023. Similarly, the average annual growth rates for Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan, and ICT are 2.53%, 2.38%, 2.57%, 3.20%, and 2.81%, respectively.



The population shares of Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan, and ICT are estimated at 52.87%, 16.92%, 23.06%, 6.17%, and 0.98%, respectively. Over time, Punjab's share of the total population has been declining, primarily due to the higher population growth in Sindh and Balochistan. Since 1951, Sindh's population share has risen from 17.9% to 23.1%, while Balochistan's share has increased from 3.5% to 6.2%. (The figure below depicts the average annual growth rates (bar height) and population shares (bar width) observed in the 7<sup>th</sup> Population and Housing Census for the regions: Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan, and Islamabad Capital Territory.)

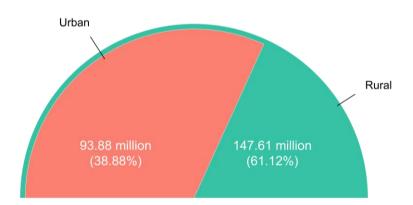
#### **Average Annual Growth Rates in Census 2023**



Region with Population Share

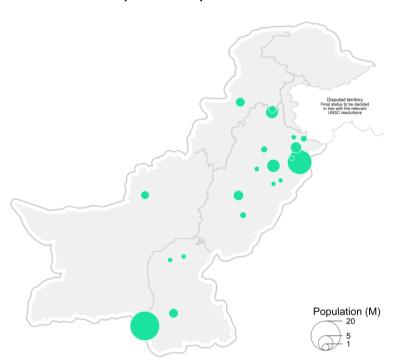
Urban population is 93.88 million (38.88%), comprising 48.75 million males (including transgender individuals) and 45.14 million females. In contrast, the rural population stands at 147.61 million (61.12%), with 75.60 million males (including transgender individuals) and 72.02 million females.

#### **Urban-Rural Population Split**





According to the 7<sup>th</sup> Population and Housing Census-2023, ten cities in Pakistan have population exceeding one million: Karachi (18.87M), Lahore (13M), Faisalabad (3.69M), Rawalpindi (3.36M), Gujranwala (2.67M), Multan (2.22M), Hyderabad (1.92M), Peshawar (1.91M), Quetta (1.57M), and Islamabad (1.11M). These cities collectively account for over 20% of Pakistan's total population and 54% of its urban population. In the 6<sup>th</sup> Population and Housing Census-2017, Karachi and Lahore recorded population of 14.88M and 11.12M, respectively, reflecting average annual growth rates of 4.05% for Karachi and 2.65% for Lahore by 2023. Notably, among the next ten cities, with population between half a million and one million, eight are from Punjab (Sargodha, Sialkot, Bahawalpur, Jhang, Shiekhupura, Gujrat, Sahiwal and Okara), two from Sindh (Sukkur and Larkana), while none belong to Khyber Pakhtunkhwa or Balochistan.



**Top 20 Most Populous Cities** 

Transgender population reported in the 6<sup>th</sup> Population and Housing Census-2017 was 21,774. However, as this was the first time data on transgender individuals was collected in the census, several challenges were faced in accurately capturing this segment of the population. Consequently, the reported figure was widely suspected to be an underestimation. In the 7<sup>th</sup> Population and Housing Census, the reported transgender population has decreased further to 20,331, accounting for a mere 0.01% of the total population. This decline may not necessarily reflect a demographic trend but rather methodological and social factors influencing data collection. The census follows international best practices, adopting a respondent-based inquiry approach. This methodology relies on household responses to gather accurate data on demographics, economic status, living conditions, and other variables critical for planning and policymaking. Therefrore, the individuals who chose to conceal their transgender identity were



recorded based on their self-reported sex, ensuring complete coverage as per the census guidelines. This practice, while aiming to maximize inclusivity and coverage, might contribute to the apparent underrepresentation of the transgender population in official statistics.

Population data by age and sex reveals that 50% of the population is under the age of 20, nearly 80% is below the age of 40, and only 20% is aged 40 or above. This demographic trend has significant economic implications. The rapid growth of the youth population may place additional pressure on the country's already limited economic resources, thus creating a risk that the job market may struggle to absorb the influx of young workers, potentially leading to higher unemployment, underemployment, and social unrest. To address these challenges and ensure sustainable growth, strategic planning is essential. This includes investing in education, enhancing skills development programs, and pursuing economic diversification to create more opportunities for the growing youth population (other indicators such as sex-ratio, population density, literacy and marital status are presented in detail in Chapter 4 "Demographic Characteristics").

The total number of housing units reported in the 7th Population and Housing Census is 38.3 million, compared to 31.9 million in the 6th Population and Housing Census-2017 and 19.2 million in the 5th Population and Housing Census-1998. However, the average household size has decreased to 6.3 persons, down from 6.4 in the 6th Population and Housing Census and 6.8 in the 5th Population and Housing Census (other housing related indicators are discussed in Chapter 5 "Housing Characteristics").



## **DIGITAL CENSUS 2023 AT A GLANCE**

% 52.87% 23.06% 16.92% 6.17% 0.98% 51.48% 48.51% 0.01% 61.12% 38.88%
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65.40%
30.86%
3.74%
34.9%
36.66%
5.65%
22.73%



## STRUCTURE OF NATIONAL CENSUS REPORT

This National Census Report of the 7th Population and Housing Census-2023 (The Digital Census) is structured into six chapters. Chapter 1 provides a comprehensive country profile, covering Pakistan's physical features, topography, water resources, climate, flora and fauna, administrative divisions, economy, health, and education.

Chapter 2 offers a detailed overview of Pakistan's population and housing census history, along with the rationale and requirements for conducting the Digital Census. Since an innovative approach was required to effectively communicate with the stakeholders and the public, as this was the first time PBS conducted the census digitally, the unique communication strategy adopted during the 7th Population and Housing Census-2023 is also detailed in the chapter at the end. The next, Chapter 3 presents key insights and summary results.

Chapters 4 and 5 provide an extensive overview of the demographic and housing characteristics observed in the 7th Population and Housing Census-2023. These chapters include information on indicators such as population growth, density, sex ratio, age structure, literacy rate, educational attainment, marital status, prevalence of disability, number of housing units, persons per room, house tenure, period of construction, materials used in the construction of walls and roofs, sources of drinking water, sources of lighting, types of fuel used for cooking and sources of information/communication within households.

The annexures including 30 statistical tables—with 19 focusing on population data, 6 on housing characteristics and 5 on listing information—census concepts and definitions, census questionnaire, and country maps for the public understanding and facilitation are placed at the end of the report.

#### **Structure of NCR:**

Chapter 1	General Description of Pakistan	
Chapter 2	History and Methodology of Census	
Chapter 3	Key Census Results and Insights	
Chapter 4	Demographic Characteristics	
Chapter 5	Housing Characteristics	
Data Tables		
Concepts and Definitions		
Census Questionnaire and Maps		

# Chapter-1

GENERAL DECRIPTION OF PAKISTAN



#### GENERAL DESCRIPTION OF PAKISTAN

Pakistan has a rich history dating back nearly 5,000 years to the Indus Valley Civilization (ca. 2500-1600 B.C.). Due to its strategic location, the subcontinent has been attracting a series of invaders—Aryans, Persians, Greeks, Arabs, and others—each Turks. contributing furthering a layer of complexity into the already intricate culture. Islam was introduced in the early 8th century. Subsequently, a succession of Muslim dynasties ruled from Delhi for the period from the early 13th century to the middle of the century when the subcontinent ultimately ruled by the British Crown.



**Gandhara Civilization** 

Historically, Gandhara occupying present-day Pakistani districts of Swat, Buner and Bajaur, was the main centre of Buddhism in Pakistan. Gandhara is the name of a semi-independent ancient kingdom (Mahajanapada located in modern day northern Pakistan and parts of eastern Afghanistan. Gandhara was located mainly in the valley of Peshawar, the Potohar plateau and on the Kabul River. Its main cities were Purushapura (modern Peshawar), literally meaning "City of Man", Varmayana (modern Bamyan) and Takshashila (modernTaxila).

The Kingdom of Gandhara lasted from the early 1<sup>st</sup> millennium BC to the 11<sup>th</sup> century AD. Its peak period was from the 1<sup>st</sup> century to the 5<sup>th</sup> century under the Buddhist Kushan Kings. The Gandhāri people were settled since the Vedic times on the banks of Kabul River (river Kubha or Kabol) down to its confluence with the Indus. Later Gandhara included parts of northwest Punjab. Gandhara was located on the northern trunk road (Uttarapatha) and served as a centre of international commercial activities. It was an important channel of communication with ancient Iran, India and Central Asia. The boundaries of Gandhara varied throughout history. Often the Peshawar valley and Taxila were collectively referred to as Gandhara and sometimes the Swat valley was also included. The heart of Gandhara, however, was always the Peshawar valley. The kingdom was ruled from the capitals at Pushkalavati (Charsadda), Taxila, Purushapura (Peshawar) and in its final days from Udabhandapura (Hund) on the Indus. According to the Puranas, they were named after Taksha and Pushkara, the two sons of Bharata, a prince of Ayodhya.

The Hindu term 'Shahi' is used by history writer Al-Biruni to refer to the ruling Hindu dynasty that took over from the Turki Shahiand and ruled the regon during the period prior to Muslim conquests of the 10<sup>th</sup> and 11<sup>th</sup> centuries. However, the name Gandhara disappeared after it was conquered by Mahmud of Ghazni in 1021 CE. During Mughal Muslim period, the area was part of Lahore and Kabul province.



#### **LOCATION**

#### **BOUNDARY**

#### **AREA**

Pakistan is located between 23°-42' and 36°-55' north latitudes and 60°-45' and 75°-20' east longitudes.

It is bounded on the north and north-west by Afghanistan, on the east and south east by India, on the south by the Arabian Sea, and on the west by Iran.

The Peoples Republic of China lies in the north and north-east alongside Gilgit-Baltistan.

Close along the northern borders is the Central Asia State of Tajikistan. The total area of Pakistan is 796,096 square kilometres. Approximately 468,000 square kilometres in the north and west consists of mountains and plateaus, while the remaining 328,096 square kilometres comprises of plains and dessert area.

Pakistan was emerged as an independent country on 14<sup>th</sup>August,1947 after partition of the sub-continent and end of British rule from India. The country was the outcome of the Pakistan Movement primarily led by Muhammad Ali Jinnah, the Founder of the Nation. Pakistan was originally consisted upon two separate parts, the Eastern Wing, which became an independent country in 1971 as present-day Bangladesh, and the Western Wing which constitutes the present-day Pakistan stretching from the mountains of Himalayas down to the Arabian Sea.

Pakistan adopted its first Constitution in 1956 and became an Islamic Republic with a parliamentary form of government based on the Westminster model. In 1962, this form of government was changed to the presidential system when the second Constitution was adopted under the General Ayub Khan's regime and the government was changed to the presidential system as practiced in the USA today. In 1973, Pakistan adopted a new Constitution reviving its previous parliamentary republic status with a federal government based in Islamabad. Pakistan became a federation of four provinces namely Punjab, Sindh, North-West Frontier Province (now Khyber Pakhtunkhwa) and Balochistan, along with Federally Administered Tribal Areas, Islamabad Capital Territory, and "such States and territories as or may be included in Pakistan, whether by accession or otherwise (AJK and GB)." The 1973 Constitution defined the administrative structure and distribution of power between the federal and provincial governments, and the division of responsibilities between the President and the Prime Minister, the latter assuming greater authority than before.

<sup>&</sup>lt;sup>1</sup> The Constitution of the Islamic Republic of Pakistan: As modified up to the February 28, 2012. Retrieved December 3, 2024, from https://na.gov.pk/uploads/documents/1333523681 951.pdf



Pakistan with a total population of 241,499,431 people as recorded in the Digital Census-2023 has become the fifth-most populous country in the world. In terms of land, it is the 33<sup>rd</sup> largest country spread over an area of 796,096 square kilometres. It is located strategically in South Asia with a 1,046-kilometres (650-miles) coastline along the Arabian Sea and the Gulf of Oman in the south. Pakistan is bordered with India to the east, Afghanistan to the west, Iran to the southwest, and China to the far northeast. It is separated narrowly from Tajikistan by Afghanistan's Wakhan Corridor in the northwest, and shares a maritime border with Oman.

Pakistan has a diverse ethnic and linguistic background having a long history of settlement and civilization that includes some of the most ancient cultures including the Mehrgarh and the Indus Valley Civilization. Later, it became home to kingdoms ruled by people of different faiths and cultures, including Hindus, Indo-Greeks, Muslims, Turco-Mongols, Afghans, and Sikhs. The area was ruled by numerous empires and dynasties including the Persian Achaemenid Empire, Alexander III of Macedon, the Indian Mauryan Empire, the Arab Umayyad Caliphate, the Gupta Empire, the Delhi Sultanate, the Mongol Empire, the Mughal Empire, the Afghan Durrani Empire, the Sikh Empire (partially), and most recently, the British Empire.<sup>2</sup>



Figure 1.1: Political map of Pakistan (Source: Survey of Pakistan)

- History Pak.com. Gandhara Civilization. Accessed May 21, 2018 for NCR-2017, from https://historypak.com/gandhara-civilization/.
- Historical Chronology of Pakistan (n.d.). Barcelona Center for International Affairs. Retrieved December 3, 2024, from https://ocd.lcwu.edu.pk/cfiles/History/Min/His/202/ChronologyPakistan.pdf.
- Wynbrandt, J. (2009). A Brief History of Pakistan. Infobase Publishing.

<sup>&</sup>lt;sup>2</sup> Some of the sources used for this section include:



#### 1.1 Physical Features and Topography

Pakistan has diverse geographical and physical features comprising of mountains, plain fertile land and deserts. It consists of the flat Indus plain in the east, and the Balochistan plateau in the west. It has one

of the world's highest mountain ranges—the Karakoram Range in the north and northwest part of the country. The world's second highest peak, the mighty K2 and the 62 kilometres long Baltoro Glacier, which is one of the longest glaciers outside the Earth's Polar Regions, are also situated in Pakistan.

Pakistan can be divided into four major areas in terms of physical features and topography:

- i. Mountainous and hilly areas
- ii. Plateaus
- iii. Plains
- iv. Desert areas

#### 1.1.1 Mountainous and Hilly Areas

The northern and western parts of Pakistan are mountainous regions that constitute the southwest extension of the Himalayan system. This mountainous range is further sub-divided into:

- i. Northern mountains
- ii. Western bordering mountains
- iii. Sulaiman mountains and Kirthar hills
- iv. Mountains and hills of Sub-Himalayas, Siwaliks.

#### I. Northern Mountains

The entire northern region of the country lies at the western part of the Himalayan Range and the Karakoram Range (Trans-Himalayan) covering an area of 300 kms, most of which fall in the Kohistan District of Khyber Pakhtunkhwa. A large part of the Himalayas are situated in the Azad Jammu and Kashmir having a height of 4,600 metres above sea level.

The Karakoram Range in the extreme north rises to an average height of 6,100 metres. The second highest peak in the world K2 (Godwin Austen), which is 8,611 metres above sea level, lies in

## Geographical description at a glance

Total Area: 796,096 km<sup>2</sup>

Highest Point: K2 (Mount

Godwin Austen) 8,611 m (28,251 ft)

Lowest Point: Arabian Sea

0 m (0.0 ft)

Longest River: Indus River

Largest Lake: Manchhar Lake

Deserts: Thar and Cholistan

Glaciers: Siachen, Hispar, Biafo, Baltoro, and Batura.

Coastline: 700 km

#### **Borders:**

Total:

6,774 km

Afghanistan:

2,430 km

China:

595 km

India:

2.240 km

Iran:

909 km

**Line of Control:** 

740 km



the Karakoram Range. Many glaciers such as Siachen, Hispar, Biafo, Baltoro,<sup>3</sup> and Batura cover these ranges and keep the region's temperature cold compared to other parts of the country.



K2: The Savage Mountain

The second highest mountain in the world, K2 is considered one of the most scariest and dangerous treks in the world for moutain climbers with a comparatively very high fatality count. (Photo by Daniel Born on Unsplash)



Baltoro Glacier

The Baltoro Glacier, at 62 kilometers long, is one of the longest glaciers outside the polar region. It is located in Baltistan, in the Gilgit-Baltistan region of Pakistan, and runs through part of the Karakoram mountain range.

<sup>&</sup>lt;sup>3</sup> The Baltoro Glacier, located in Gilgit-Baltistan, Pakistan, is one of the longest glaciers outside the polar regions, stretching approximately 63 kilometers (39 miles) through the Karakoram Range. It is renowned for its dramatic landscapes, with its ice mass surrounded by some of the world's highest peaks, including K2, Broad Peak, and the Gasherbrum massif. This glacier serves as a gateway to Concordia, a famed meeting point of glaciers offering breathtaking views of towering mountains. The Baltoro Glacier is fed by major tributaries like the Godwin-Austen and Vigne Glaciers and forms the headwaters of the Braldo River, eventually contributing to the Indus River system. (Baltoro image by Guilhem Vellut, licensed under CC-BY-SA-2.0. Source: https://en.wikipedia.org/wiki/Baltoro Glacier#/media/File:Baltoro glacier from air.jpg.





Figure 1.2: Location of K2 Within the Defacto Boundaries of Pakistan



Nanga Parbat: The Killer Mountain (8126m)



Gasherbrum I: The Hidden Peak (8080m)



Broad Peak from Concordia (8051m)



Gasherbrum II: The Shining Wall (8035m)

Figure 1.3: Pakistan's 4 Other Peaks Over 8,000 Metres in Height



The Hindu Kush Mountain Range branches off from the Himalayas at Pamir Knot where the borders of Pakistan, Afghanistan, and China meet. These mountains have high peaks such as the Tirich Mir (7,690 metres), and Noshaq (7,369 metres).

#### II. Western Bordering Mountains

The western bordering mountains run south from the Hindu Kush in several parallel ranges. South of the Kabul River, the direction of ranges changes from north-south to east-west. The Koh-i-Sufaid Mountains Range predominantly runs east to west with an average height of 3600 metres, with the highest peak Sakaram rising to 4,761 metres.

The passes through the western bordering mountains are of special geographical and historical importance. The Khyber Pass at Landi Kotal is 1,067 metres high and leads to the valley of Peshawar at the head of the Indo-Gangetic Plain. The Tochi Pass connects Ghazni of Afghanistan with Bannu of Pakistan via North Waziristan. The Bolan Pass follows the river, of the same name, and connects the Kachhi-Sibi plain with Quetta.

#### III. Sulaiman Mountains and Kirthar Hills

The Sulaiman-Kirthar Mountains lie between Balochistan Plateau and the Indus plains and belong to the Himalayan Orogeny. These mountains occupy the bordering region between the Iranian Plateau and the Indian subcontinent located to the east of the Lut Desert and to the west of the Indus River. The Sulaiman Mountains rise to an average height of 600 metres that gradually decreases southwards. Further south, the Sulaiman Mountains meet the Kirthar Mountains which merge into the Kohistan area of Sindh.

#### IV. Mountains and Hills of Sub-Himalayas

The Sub-Himalayas or Siwaliks are the southern most ranges which do not rise to great heights like the other Himalayan ranges. Their average height is 600-1200 metres. The highest point is near Sakesar at 1500 metres.

#### 1.1.2 Plateaus

The two important plateaus of Pakistan are the Balochistan Plateau and the Potohar Plateau.

#### I. The Balochistan Plateau

The Balochistan Plateau is located to the west of the Sulaiman-Kirthar Mountain Range. The plateau covers a large area and is divided into two parts by the Chaman and Ornach-Nal faults.

The western part is predominantly comprise of a number of sub-parallel ranges. The important ranges from south to north are the Makran Coastal Range (600 metres) and the Central Makran Range (900-1200 metres). There are also the Siahan, Ras Koh, and the Chagai ranges, which rise to the height of 1000 to 2000 metres. The highest peak, the Ras Koh has a height of 3,010 metres.





The Central Makran Range

Makran Coastal Highway

#### II. The Potohar Region

The Potohar Plateau lies to the south of the Northern Mountains between the Indus River on the west and the Jhelum River on the east. Its northern boundary is formed by the Kala Chitta Range and the Margalla Hills and the southern boundary by the Salt Range. The Soan Basin is located between the northern and southern ranges.





Kusak Fort: A standalone rock is visible from a distance and is similar to the world-famous Sigriya rock in Sri Lanka. Image courtesy of Dawn. Source: https://www.dawn.com/news/1261004, retrieved on December 6, 2024.



The Kala Chitta hills ranging from 450 to 900 metres in height are cut by deep valleys. A few miles north are the Margalla Hills with an average height of 900 metres, extending eastward up to the Kaurang River. The main Potohar Plateau extends north of the Salt Range and is 300-600 metres high. The Salt Range, with an average height of 750 to 900 metres has a steep face towards the south and slopes gently into the Potohar Plateau in the north. The Sakesar peak (1527 metres) is the highest point in the Salt Range.



Kala Chitta

#### **1.1.3 Plains**

The plains are mostly formed by the Indus River and its tributaries which can be sub-divided into four major parts:

- i. Trans-Indus plain
- ii. Upper Indus plain
- iii. Lower Indus plain
- iv. Deltaic plain

#### I. Trans-Indus Plain

The Trans-Indus Plain lies to the west of Indus River and includes the plains of Peshawar, Kohat, Bannu, and Dera Ismail Khan Divisions of Khyber Pakhtunkhwa and the sub-mountain plain in Dera Ghazi Khan Division of Punjab. Among these plains, the Peshawar Plateau is surrounded by mountains on three sides and is open on the eastern side along the Potohar Plateau.

#### II. Upper Indus Plain

The Upper Indus Plain is different from the Lower Indus Plain as the major tributaries of the Indus River including Jhelum, Chenab, Ravi, and Sutlej divide the land into several interfluves or doabs (a region lying between and reaching to the confluence of two rivers). The Upper Indus Plain is subdivided into four large doabs namely Sindh Sagar, Chaj, Rachna and Bari in addition to the Bahawalpur plain and Derajats or Sulaiman piedmont.

#### III. Lower Indus Plain

The Lower Indus Plain is monotonously flat, sloping to the south with an average gradient of only one meter in ten kilometres. The Kachhi-Sibi Plain is bounded on the north by the Marri-Bugti Ranges and on the west by the Kalat Ranges. The Sindh Plain forms the major part of the Lower Indus Plain. The Upper Indus Plain is agriculturally less developed with more water logging and salinity than areas further south. The Lower Sindh Plain which starts from Hyderabad is predominantly a cover flood plain.

#### IV. Deltaic Plain

The Indus Delta has its apex at some distance north-east of Thatta where distributaries spread out to form the Deltaic Plain. Two of the larger distributaries are Ochito and Gungro.



#### 1.1.4 Desert Areas

The desert areas of Pakistan lie along the south-eastern border of Pakistan and spread over an extensive area in eastern Bahawalpur Division covering Ghotki, Sukkur, Khairpur, Sanghar and Mirpur Khas. The desert area is separated from the central irrigated zone of the plain by the dry bed of the Ghagra River in Bahawalpur and the Eastern Nara in Sindh. The five deserts of Pakistan are:



- i. Thar Desert
- ii. Cholistan Desert
- iii. Thal Desert
- iv. Kharan Desert
- v. The Indus Valley Desert

#### I. Thar Desert

The Thar Desert (also known as the Great Indian Desert) is a large arid region in the northwestern part of the Indian subcontinent. It is the largest desert of Pakistan and the 18<sup>th</sup> largest desert in the world, with an area of more than 200,000 km<sup>2</sup>. The Thar desert covers eastern Sindh province and the southeastern portion of Punjab province<sup>4</sup> and some part of the Indian state of Rajhastan.

#### II. Cholistan Desert

The Cholistan Desert, also locally known as Rohi, is situated thirty kilometres from Bahawalpur District in Punjab Province and covers an area of 26,300 km.<sup>5</sup> It adjoins the Thar Desert extending over to Sindh and into India.

#### III. Thal Desert

The Thal Desert is situated in Punjab province between the Jhelum and Sindh rivers near the Potohar Plateau. Its total length from north to south is 306 kms while it ranges from 30-110 kms in width. This region is divided into the districts of Bhakkar, Khushab, Mianwali, Jhang, Layyah, and Muzaffargarh.

#### IV. Kharan Desert

Locally known as the Sandy Desert, the Kharan Desert is located in Balochistan province covering an area of about 48,051 km<sup>2</sup>. The largest playa (seasonal lake in a desert basin) of Balochistan is located in this desert, and is known as *Hamun-i-Mashkel*. The water of Kharan basin is entirely used for agriculture and domestic use and thus it is also called closed basin.<sup>6</sup>

<sup>&</sup>lt;sup>4</sup> Deserts Of Pakistan. InfopediaPK – All facts in one site. Accessed December 4, 2024, from https://infopediapk.weebly.com/deserts-of-pakistan.html.

<sup>&</sup>lt;sup>5</sup> ... ibid ...

<sup>&</sup>lt;sup>6</sup> Pakistan Travel Places. Kharan Desert. Accessed April 12, 2018 for NCR-2017, from https://pakistantravelplaces.com/destination/kharan-desert/



#### V. The Indus Valley Desert

The Indus Valley Desert covers an area of 19,424 km<sup>2</sup> in northwestern Punjab Province between the Chenab and Indus rivers. The Indus Valley Desert is dry with only 600–800 mm (20–30 in) of rainfall per year, and temperature ranging from freezing in winters to extremely hot (above 45°C /113°F) in summer.<sup>7</sup>

#### 1.1.5 Water Resources

All the major rivers and streams flowing through the country are part of the Indus River system which is the longest river flowing all through Pakistan. A few small rivers and streams in Balochistan are either lost in the inland drainage or flow directly to the Arabian Sea.

#### I. The Indus

The transboundary Indus river basin has a total area of 1.12 million km² distributed between Pakistan (47 percent), India (39 percent), China (8 percent) and Afghanistan (6 percent). The Indus river basin stretches from the Himalayan mountains in the north to the dry alluvial plains of Sindh province in Pakistan in the south and finally flows out into the Arabian Sea. In Pakistan, the Indus river basin covers around 520 000 km², or 65 percent of the territory, comprising the whole of the provinces of Punjab and Khyber Pakhtunkhwa and most of the territory of Sindh province and the eastern part of Balochistan. The drainage area lying in India is approximately 440 000 km², nearly 14 percent of the total area of the country, in the States of Jammu and Kashmir, Himachal Pradesh, Punjab, Rajasthan, Haryana and Chandigarh. Only about 14 percent of the total catchment area of the basin lies in China, covering just 1 percent of the area of the country, and Afghanistan, where it accounts for 11 percent of the country's area.<sup>8</sup>

In Pakistan, Indus River has two main tributaries: the Kabul on the right bank and the Panjnad on the left. The Panjnad is the flow resulting from the five main rivers<sup>9</sup>: Indus, Jhelum and Chenab, known as the western rivers, and Ravi, Bias and Sutlej, known as the eastern rivers.<sup>10</sup>

All the rivers of the Indus system are peren+nial. These rivers supply water to the entire Indus Basin Irrigation System, and are aided by a number of smaller rivers (Swat, Kunar in Chitral, Soan, etc.) and streams/Nullahs.

<sup>&</sup>lt;sup>7</sup> Southern Asia: Eastern Central Pakistan, Deserts and Xeric Shrublands (n.d.). WWF. Accessed April 4, 2018, for NCR-2017, from https://www.worldwildlife.org/ecoregions/im1302.

<sup>&</sup>lt;sup>8</sup> Indus Ttransboundary River Basin (2011). Food and Agriculture Organization of the United Nations. Retrieved December 3, 2024, from https://www.fao.org/aquastat/en/countries-and-basins/transboundary-river-basins/indus.

<sup>&</sup>lt;sup>9</sup> Literally, Punjab means five-waters.

<sup>&</sup>lt;sup>10</sup> The Indus Waters Treaty allocates the Western Rivers (Indus, Jhelum, Chenab) to Pakistan and the Eastern Rivers (Ravi, Beas, Sutlej) to India. At the same time, the Treaty allows each country certain uses on the rivers allocated to the other. The Treaty was signed in 1960 after nine years of negotiations between India and Pakistan with the help of the World Bank, which is also a signatory. The negotiations were the initiative of former World Bank President Eugene Black. Seen as one of the most successful international treaties, it has survived frequent tensions, including conflict, and has provided a framework for irrigation and hydropower development for more than half a century. Former U.S. President Dwight Eisenhower described it as "one bright spot ... in a very depressing world picture that we see so often." (Source: The World Bank at https://www.worldbank.org/en/region/sar/brief/fact-sheet-the-indus-waters-treaty-1960-and-the-world-bank)





The Indus River flows near Sukkur, a prominent city in Sindh, Pakistan.

#### II. Major Lakes

There are several natural and man-made lakes in Pakistan. The largest lake is the Manchar Lake, which is also the largest lake in South Asia. The Rush Lake, situated at an altitude of 4,700 metres, is the highest lake in Pakistan and the 25<sup>th</sup> highest in the world. The second highest lake in Pakistan is the Karambar Lake, with an altitude of 4,272 metres. One of the well-known artificial lakes is Banjosa Lake.

Lake Saiful Muluk is a stunning alpine lake located near the town of Naran in the Kaghan Valley, Khyber Pakhtunkhwa, Pakistan. It is famous for its breathtaking natural beauty, crystal-clear waters, and surrounding snow-capped peaks, including the towering Malika Parbat, the highest peak in the area.

Attabad Lake, also known as Gojal Lake, is located in the Hunza Valley, Gilgit-Baltistan, Pakistan. It was formed on January 4, 2010, due to a massive landslide near the village of Attabad, which blocked the Hunza River. The resulting natural dam created the lake, submerging several villages, agricultural land, and a portion of the Karakoram Highway.

Besides these, there are some other beautiful scenic lakes, which are the centre of attraction for travelers and tourists from across the world.





20





Lake Saiful Muluk





Manchar Lake





Rush Lake





Attabad Lake



#### 1.1.6 Climate

Pakistan extends north-south over a considerable expanse of latitude (23°-42' north to 36°-55') and a distance of about 1,600 kilometres from the sea. This latitude, together with the diversity of topography results in varied temperatures at different locations at any given time.

In the plain areas, the hottest month is June, while in the hill stations the hottest month is usually July. In hilly areas, summer temperatures are like winter temperatures influenced by altitude and the 'face' of the land. In the coastal areas, the summers are milder. Temperatures in January are quite low in the northern, western, and north-western mountains, making these regions the coldest regions in the winter with heavy snowfall. For example, Skardu District experiences temperatures as low as -10 °C in the winter months of December and January. Quetta, the capital city of Balochistan province, also experiences severe winters and snowfall on its mountains. On the contrary, Jacobabad in Sindh province is considered as the hottest city in Pakistan with usual temperature around 50°C in the summer months. Other areas such as Turbat, Kech and Sibbi in Balochistan also experience extremely high temperatures in summer.

The monsoon and the western depression are the two main seasons for rainfall in Pakistan,. The monsoon rainfall takes place from July to September, contributing to high levels of humidity in the air. The western depression brings rainfall primarily during December to March. ]

Pakistan's monthly climatology of average minimum surface air temperature, average mean surface air temperature, average maximum surface air temperature and precipitation 1991-2022 can be seen in Figure 1.4.<sup>11</sup>

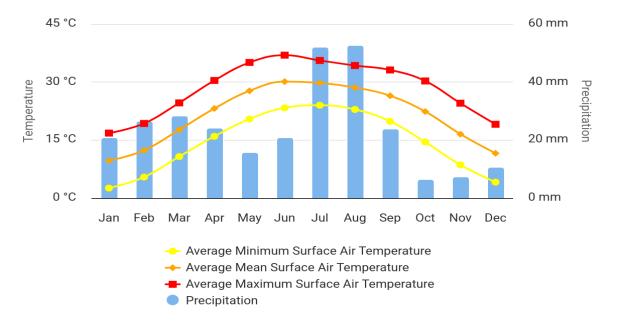


Figure 1.4: Pakistan's Monthly Average Temperature and Precipitation, 1991-2022

<sup>&</sup>lt;sup>11</sup> Climate change knowledge portal for development practitioners and policy makers. The World Bank. Retrieved December 21, 2024, from https://climateknowledgeportal.worldbank.org/country/pakistan.



#### 1.2 Flora and Fauna

#### 1.2.1 Flora

Pakistan's native flora offers varied climatic zones which range from arid and semi-arid to temperate and tropical. The northern and north-western highlands are mostly covered with coniferous forests. Fir (Abies pindrow) and Spruce (Picea smithiana) occupy the highest altitudes, Deodar (Cedrus deodara) and blue pine (Pinus wallichiana), the intermediate heights and chir pine (Pinus roxburghii) occupy the lower areas.



Deodar – Cedrus deodara



Gulab – Rosa Indica



Kiker - Acacia nilotic



Shisham – Dalbergio Sissoo

The Eastern Plains of Punjab and Sindh are covered with species including Shisham (*Dalbergio sissoo*) and Kiker (*Acacia nilotica*), especially along the banks of River Indus. Kair (*Capparis aphylla*) is a common source of firewood, especially in the desert areas of Punjab and Sindh.



#### **1.2.2** Fauna

Pakistan is home to many species of fauna including 177 mammals and 660 bird species. <sup>12</sup> Large varieties of deer, fox, wild boar, bear, crocodile, and jackals are commonly found in forest areas. Pakistan is also home to endangered species including snow leopards, Indus river dolphin, and Markhor. Various species of partridges, pheasants, pelicans, cuckoo, owls, pigeons, parrots, sandgrouse and eagles are commonly found in Pakistan. An estimated population of one million birds migrates southwards during winter. Most of them land on the wetlands along the Indus River in the Sindh Province. These freshwater wetlands provide suitable habitats and feeding opportunities to a wide variety of water-birds passing through Indus flyway.

Pakistan has approximately 200 freshwater fish species. The famous fish species include *Rahoo*, *Singhara*, and *Malli*. In addition to fish, some 700 marine species of invertebrates include crab, shrimp and prawn and another 300 species of shellfish. Both categories of species are of significant economic importance to Pakistan. <sup>13,14</sup>



Blind Dolphin of the Indus River



Chinkara Deer



Chakor, National Bird of Pakistan



Markhor The National Animal of Pakistan

<sup>&</sup>lt;sup>12</sup> Roberts, T. (1977). Mammals of Pakistan. London and Tonbridge: Ernest Benn Limited.

<sup>&</sup>lt;sup>13</sup> Fauna and Endangered Wildlife of Pakistan. Accessed May 21, 2018 for NCR-2017, from http://pakistanpedia.com/f\_f/fauna.html.

<sup>&</sup>lt;sup>14</sup> Attribution: Several high-definition images featured in the last two sections, "Physical Features and Topography" and "Flora and Fauna," were sourced from Wikipedia.



#### 1.3 Administrative Structure

Pakistan is administratively divided into four provinces, namely Khyber Pakhtunkhwa, Punjab, Sindh, and Balochistan. Islamabad is the capital territory. The autonomous regions which are part of Pakistan include Azad Jammu and Kashmir and Gilgit Baltistan.

Each province is divided into divisions which are sub-divided into districts. Each district is further sub-divided into tehsil/sub-division to facilitate administrative functioning. Generally, a sub-division comprises of one tehsil/taluka, but in some cases more than one tehsil/taluka fall under one sub-division.

The revenue system of Pakistan has two types of areas to manage the administrative structure, i.e., settled and unsettled. In rural areas, settled areas are those where the smallest administrative unit i.e. *Mauza/Deh* has a measured area with a unique serial number called the *Hadbast* or serial number with a delimitation well defined and documented. Unsettled areas are those where revenue settlement has not taken place so far, and the smallest administrative unit is called a village.

On the other hand, all localities which are either Metropolitan, Muncipal Corperations., Muncipal Committees, Town Committees or Cantonments are treated as urban. During the 7<sup>th</sup> Population and Housing Census-2023, the areas notified as urban by the respective provincial governments were treated as urban for the data collection purpose. Table 1.1 gives breakdown of administrative units by province and other areas in Pakistan according to the Census-2023.

**Tehsils** Villages/ Urban **Administrative Units** Divisions **Districts** /Talukas Muazas Areas 30 591 46697 Pakistan 136 615 24700 Puniab 9 36 146 282 Khyber Pakhtunkhwa 7 148 9821 35 67 Sindh 6 30 138 5690 202 Balochistan 8 34 158 6357 63 **ICT** 129 1

**Table 1.1: Administrative Units of Pakistan** 

Source: Provincial Revenue / Local Government Departments

#### **1.4** Legislative Structure

The Parliament of Pakistan, according to the 1973 Constitution, is bicameral and legislative branch of the government. Article 50 of the Constitution clearly states that the Parliament of Pakistan consists of the President and two Houses known as the National Assembly and the Senate.





#### 1.4.1 President of Pakistan

The President of Pakistan is the ceremonial Head of State and a figurehead who is the civilian Commander-in-Chief of the Pakistan Armed Forces. The Constitution of Pakistan vests him with powers of granting pardons, reprieves, and making important military appointments in consultation with and approval from the Prime Minister.

#### 1.4.2 National Assembly

The National Assembly of Pakistan has a total of 336 members, including 60 seats reserved for women and 10 for non-Muslims as per Article 51 of the Constitution. The seats in the National Assembly are allocated to provinces and federal capital *on the basis of population, as officially published in the last preceding census*. The present composition of seats of National Assembly is shown in Table 1.2.

#### The Parliament House

The Parliament House building in Islamabad was inaugurated on 28<sup>th</sup> May, 1986. It took exactly 11 years to build. It was designed by Edward Durel Stone, an architect from USA.

The five storied building has a total floor space of about 598,000 sq. feet. The Senate Hall and the National Assembly Hall are situated back to back on the second floor and separated by a common area housing the lifts.

Source: Senate of Pakistan at https://www.senate.gov.pk/



The National Assembly Hall

**Table 1.2: Distribution of National Assembly Seats by Province** 

	Punjab	Khyber Pakhtunkhwa	Sindh	Balochistan	Federal Capital	Total
General	141	45	61	16	3	266
Women	32	10	14	4	0	60
Non-Muslims	-	-	-	-	-	10
Total	173	55	75	20	3	336

Source: National Assembly of Pakistant at <a href="http://na.gov.pk/">http://na.gov.pk/</a>.



#### 1.4.3 The Senate

The Senate is a permanent legislative body with equal representation from each of the four provinces (23 seats), elected by the members of their respective provincial assemblies. Additionally, there are representatives from Islamabad Capital Territory (4 seats) as well.

Both the Senate and the National Assembly can initiate and pass legislation except for finance bills, which is the prerogative of the National Assembly. The present structure/composition of seats of the Senate of Pakistan is given in Table 1.3.



The Senate Hall

Table 1.3: Composition/ Structure of the Senate of Pakistan

Provinces / Territories	General	Technocrats / Ulema	Women	Non- Muslims	Total
Punjab	14	4	4	1	23
Khyber Pakhtunkhwa	14	4	4	1	23
Sindh	14	4	4	1	23
Balochistan	14	4	4	1	23
Federal Capital	2	1	1	-	4
Total	58	17	17	4	96

Source: Senate of Pakistant at https://senate.gov.pk/.

#### 1.5 Executive Structure

#### 1.5.1 Prime Minister of Pakistan

The Prime Minister of Pakistan is the executive head of the Government of Pakistan, constitutionally designated as the Chief Executive. He is popularly elected by the direct elections in the Parliament. The Prime Minister is responsible for appointing a Cabinet as well as running the government affairs. The Prime Minister duly appoints the chairmen and executives in almost all state institutions and corporations which include:

- Federal Secretaries in the administrative positions of the government.
- Key administrative and military personnel in the Pakistan Armed Forces.
- Chairmen and other Members of the Federal Commissions and public institutions.
- Ambassadors and High Commissioners to other countries.<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> Official Gateway to the Government of Pakistan. Accessed May 13, 2018 for NCR-2017, from https://pakistan.gov.pk/.



#### 1.5.2 Provincial Governments

Each provincial government in Pakistan follows a structure similar to that of the federal government, comprising a Governor, a Council of Ministers led by the Chief Minister, and a provincial assembly. Members of these assemblies are elected through universal adult suffrage, with additional seats reserved for women and minorities to ensure inclusive representation.

Pakistan's four provinces enjoy considerable autonomy in running public affairs. The 18<sup>th</sup> Amendment Bill passed in the year 2010 greatly empowered the provinces by giving them financial autonomy to implement policy and programmes and delegating authority from the federal government to the provincial governments to administer functions of the province. The provision of public services in the areas such as health, education, population welfare, agriculture, environment and infrastructure is now the responsibility of the provincial governments. Although a well-defined division of responsibilities exists between federal and provincial governments, some functions allow both levels to legislate and establish departments for implementation. This shared authority is intended to enhance service delivery but requires coordination to avoid duplication and ensure effective resource use. Governors act as the formal heads of the provinces, but their role is largely ceremonial. The real executive authority lies with the Chief Ministers, who hold primary responsibility for provincial governance and decision-making.

#### 1.5.3 Local Governments

The local government system is based on the federated structures of a three-tier system of district (zila), tehsil and union councils. Each level of local government has defined functions and service responsibilities, for example, agriculture, community development, education and health is managed at district level, municipal infrastructure services at tehsil level, and community-based services at union council level. The levels of government are integrated through a bottom-up planning system, the council electoral arrangements, and specific procedures for monitoring service delivery. <sup>16</sup>

The District Councils and Metropolitan Corporations are the highest tier of local government in the five provinces, whilst both urban and rural local governments have two or three tiers in all provinces except Khyber Pakhtunkhwa, where councils are not identified as either urban or rural. Under the 18<sup>th</sup> Constitutional Amendment, the Provincial Assembly of Balochistan passed the Local Government Act (LGA) in 2010, whereas the Provincial Assemblies of Punjab, Sindh and KP passed their LGAs in 2013. However, the LGA in all provinces has not been executed effectively as no province has yet devolved sufficient functions and powers to the local governments and have retained the authority to suspend or remove the heads of the elected local governments.

Furthermore, despite the provision of the local government system, devolution of power in true sense is yet to take place in the country. Management of the administrative Districts still lies effectively with the bureaucratic setup in the form of the Deputy Commissioner or DC's offices. Deputy Commissioner is the executive head of the district who looks after the administrative matters such as

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<sup>&</sup>lt;sup>16</sup> The local government system in Pakistan. Commonwealth Local Government Forum. Retrieved May 13, 2018 for NCR-2017, from http://www.clgf.org.uk/default/assets/File/Country\_Profiles/Pakistan.pdf.



law and order and development schemes and projects. He/she resolves public grievances and supervises working of all the government functionaries in the district.

Deputy Commissioners are usually assisted by the Additional Deputy Commissioners, Assistant Commissioners, District Monitoring Officers, Tehsildars and other junior ranking staff. Despite efforts to transfer power from the powerful bureaucracy to local governments, the desired results have yet to be achieved.

#### 1.6 Judiciary

Pakistan's judicial system operates at the federal, provincial, and district levels, comprising a Supreme Court, Provincial High Courts, Sessions Courts, Magistrate Courts, and various special courts and tribunals. Additionally, the country has a Federal Shariat Court, which ensures laws align with Islamic principles.

#### 1.6.1 Supreme Court of Pakistan

The Supreme Court of Pakistan was established under the Constitution of 1956, succeeding the Federal Court created in 1948, which itself replaced the Federal Court of India, established in 1937. Since its inception, the Supreme Court has retained its name and jurisdiction through successive legal frameworks, including the Constitution of 1973.

As the highest appellate court and court of last resort, the Supreme Court is the final arbiter of the law and the Constitution in Pakistan. Its decisions are binding on all other courts, and all executive and judicial authorities



Supreme Court of Pakistan

are obligated to act in aid of the Court. The Constitution outlines detailed provisions regarding the Court's composition, jurisdiction, powers, and functions, ensuring judicial independence and its separation from the executive.

The Supreme Court has a unique responsibility to maintain harmony and balance among the three pillars of the State. As the guardian of the Constitution, it is entrusted with preserving, protecting, and defending the Constitution while safeguarding the fundamental rights of all citizens of Pakistan.



#### 1.6.2 Federal Shariat Court

The Federal Shariat Court was established on 26<sup>th</sup> May,1980 by the President's Order No.1 of 1980 as incorporated in part VII of the Constitution of Pakistan, 1973 under the title of chapter 3A. This Court is a unique institution with no parallel in the entire Muslim world. It is backed by powerful provisions of the Constitution. The preamble of the Constitution explicitly affirms that sovereignty over the entire universe belongs to Almighty Allah alone and the authority to be exercised by the people of Pakistan within the limits prescribed by Him is a sacred trust. Article 2A lays down that the principles and provisions set out in the Objectives



Federal Shariat Court of Pakistan

Resolution are a substantive part of the Constitution. Article 227 makes it incumbent that all existing laws shall be brought in conformity with the injunctions of Islam as laid down in the Holy Qur'an and the Sunnah of the Holy Prophet (peace be upon him), and Chapter 3-A which pertains to the functions and organization of Federal Shariat Court, empowers the court and entrusts it with the responsibility to examine and decide the question whether or not any law or provision of law is repugnant to the injunctions of Islam as laid down in the Holy Qur'an and the Sunnah of the Holy Prophet (peace be upon him) . "Law" is defined in article 203 B( C ) of the Constitution and includes any custom or usage having the force of law but does not include the Constitution, Muslim personal law, any law relating to the procedure of any court or tribunal.<sup>17</sup>

#### 1.6.3 High Courts

There are five high courts of Pakistan, each based in the capital city of the four provinces, plus one in the federal capital, Islamabad. Articles 192 to 203 of the Constitution of Pakistan outline the constitution of the courts, appointment of the judges, their oath of office, and jurisdiction of the high courts.

At the time of partition in August 1947, the Lahore High Court, the Dhaka High Court, the Chief Court of Sind and the Judicial Commissioner's Court in the North-West Frontier Province were deemed to be the four high courts of Pakistan. In 1955, the Dhaka High Court and the Lahore High Court became the High Court of East Pakistan and the High Court of West Pakistan, respectively. The West Pakistan High Court had benches at Karachi and Peshawar as well as circuit courts at Quetta (replacing the Judicial Commissioner in Balochistan) and Bahawalpur (replacing the High Court of Judicature at Baghdad-ul-Jadid).

As the province of West Pakistan was dissolved in 1970, three high courts were established: Lahore High Court, Peshawar High Court, and Sind and Balochistan High Court (with its principal seat at Karachi). In 1976 the Sindh and Balochistan High Court was split into the High Court of Sind (Karachi) and the High Court of Balochistan (Quetta). In 1985 the Lahore High Court had Benches at

<sup>&</sup>lt;sup>17</sup> Federal Shariat Court of Pakistan. Accessed December 15, 2018, from https://www.federalshariatcourt.gov.pk/en/home/.



Bahawalpur, Multan and Rawalpindi; the High Court of Sind at Sukkur; the Peshawar High Court at Abbottabad and Dera Ismail Khan and the High Court of Baluchistan at Sibi.

In 2007, the government proposed a fifth high court to cover the Islamabad Capital Territory. This proposal was blocked by the Lahore High Court, but the decision was overturned by the Supreme Court of Pakistan on 24 December 2007. As a result of the 18<sup>th</sup> constitutional amendment, the Islamabad High Court was established in 2010. The amendment also established the Mingora Bench of the Peshawar High Court and the Turbat Bench of the High Court of Baluchistan.<sup>18</sup>

#### 1.6.4 Other Courts and Tribunals

District and Sessions Courts exist in every district of each province and have civil and criminal jurisdiction. They try all offenses, including capital cases, and hear appeals from the Magistrate Courts. The Sessions Courts' verdicts can be appealed to the High Courts.

The Magistrate Courts try all non-capital offenses, and their verdicts can be appealed to the Session Courts or the High Courts, depending on the circumstances. Magistrate Courts are allocated local jurisdictions, and there are a number of Magistrate Courts in a town or city.

In addition, there are special courts and tribunals to deal with specific kinds of cases, such as drug courts, commercial courts, labor courts, traffic courts, an insurance appellate tribunal, an income tax appellate tribunal, and special courts for bank offences. There are also special anti-terrorism courts to try offences by terrorists. The appeals from special courts go to High Courts except for labor and traffic courts, which have their own forums for appeal while the appeals from the tribunals go to the Supreme Court.

#### 1.7 Economy

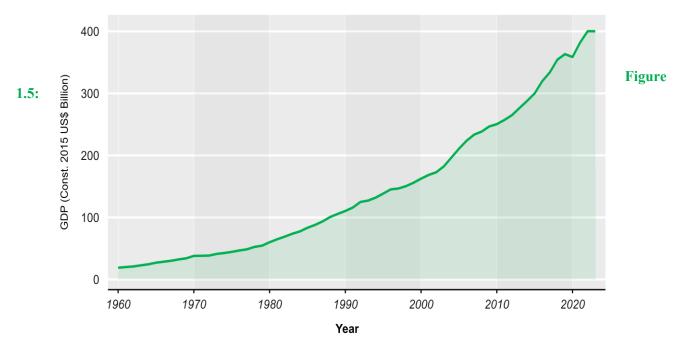
Pakistan's economic growth has experienced significant volatility over the years, largely due to the political instability, inconsistent economic policies, and complex geo-political dynamics. Political uncertainty has led to disruptions in long-term economic planning and development and therby made it challenging to implement and sustain policies needed for stable economic growth, thus resulting in periods of short boom followed by downturns. Geo-political dynamics also play a critical role, as Pakistan's location, bordering Afghanistan, India, and China, makes it a focal point of regional and international interests. While strategic location brings opportunities, it also creates vulnerabilities, with tensions affecting trade, investment flows, and security expenditures. Together, these factors have limited Pakistan's ability to maintain consistent economic progress, highlighting the importance of stable governance and well-planned, continuous economic policies to support long-term development.

In 2023, Pakistan's GDP, measured in constant 2015 US dollars, was approximately \$400 billion, while the GDP of regional neighbors India and China reached \$3.2 trillion and \$17.17 trillion, respectively. This stark difference is especially notable given that Pakistan, India, and China had comparable GDP levels in the period from 1960 to 1980. Over the decades, however, India and China implemented sustained economic reforms and diversified their economies, which enabled them to achieve rapid growth and emerge as leading global economies. Meanwhile, Pakistan's economic

<sup>&</sup>lt;sup>18</sup> High courts of Pakistan. Wikipedia. Accessed December 15, 2018, from https://en.wikipedia.org/wiki/High\_courts\_of\_Pakistan.

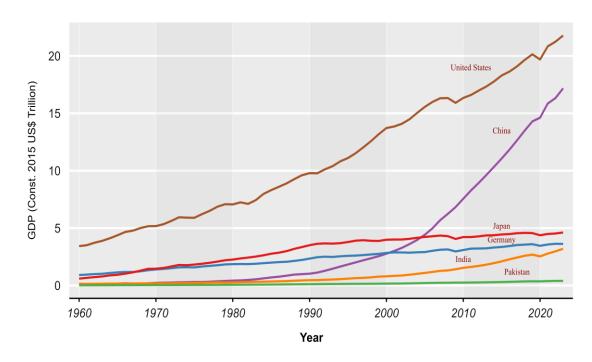


progress has been more limited, largely due to the factors mentioned earlier, which have hampered similar levels of growth. Figures 1.5 and 1.6 provide a comparative view of Pakistan's GDP growth from 1960 to 2023 alongside that of the world's five largest economies, including India and China, highlighting the widening economic gap over time.<sup>19</sup>



Data source: World Development Indicators, The World Bank

Pakistan's GDP from 1960 to 2023 at Constant 2015 US\$ Billion



Data source: World Development Indicators, The World Bank

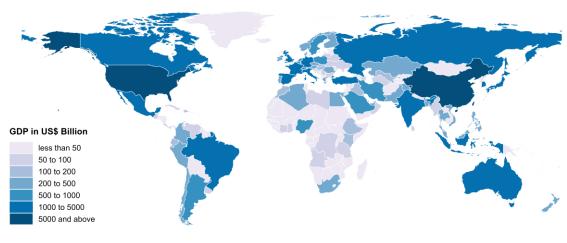
Figure 1.6: GDP Comparison with the World Top Five Economies

<sup>&</sup>lt;sup>19</sup> Since consistent time series data from PBS's National Accounts is not readily available, GDP data for Pakistan and other countries from the World Development Indicators has been used.



With regard to per capita income, Pakistan's GDP per capita in 2023 was estimated approximately 1,616 at constant 2015 US\$, which is significantly lower than the global average and global median income. This indicates that Pakistan's economic output per person remains relatively low compared to both the world average and many middle-income countries.

When comparing Pakistan to its regional neighbors, its GDP per capita is lower than India (\$2,236), China (\$12,175), and Iran (\$5,668) but slightly higher than Bangladesh (\$1,885). This suggests that while Pakistan's economic performance is comparable to some neighboring Asian countries, it lags behind larger economies like China and Iran. The relatively low GDP per capita underscores the need for policies aimed at enhancing productivity, industrial growth, and economic diversification to improve overall living standards in the country.



Data source: World Development Indicators, The World Bank

Figure 1.7: World GDP in 2023 at Constant 2015 US\$

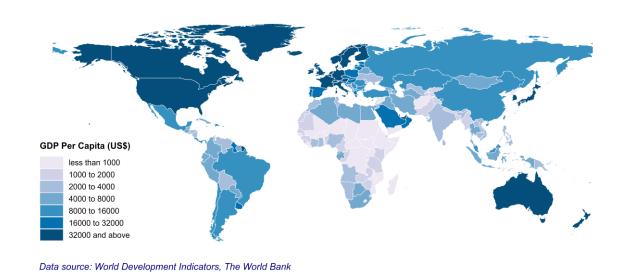


Figure 1.8: World GDP Per Capita in 2023 at Constant 2015 US\$



In the Financial Year 2023, the severe macroeconomic imbalances, flood damages, domestic supply shocks, and international economic slowdown dampened the economic growth to just 0.29 percent. Following the budget announcement in June-2022, positive economic expectations and the performance of key indicators resulted in the government projecting GDP growth of approximately 5 percent in FY2023. However, the economy lost momentum in the first quarter due to the severe downturn in the global economy and flash floods of July-August 2022 that affected 33 million people and as a result the economy suffered from significant domestic supply disruptions.

The flood damage was estimated at Rs 3.2 trillion (US\$14.9 billion), the loss to GDP at Rs 3.3 trillion (US\$15.2 billion), and recorded need for rehabilitation of damages at Rs 3.5 trillion (US\$16.3 billion). On the international front, the prolonged Russia-Ukraine conflict adversely affected global growth and inflation remained unexpectedly high. Pakistan's GDP<sup>20</sup> grew by -0.21% in FY2023, with 2.27% growth in agriculture, -3.74% in industrial sector, and -0.01% in services sector. The per capita income decreased from US\$ 1765 to US\$ 1551. This deceleration was attributed to the significant depreciation of PKR and the contraction in economic activity.

In FY2023, the Investment-to-GDP ratio was 14.1%, down from 15.6% in FY2022. Gross Fixed Capital Formation (GFCF) across the private, public, and general government sectors declined significantly by 14.9% compared to FY2022.

# GDP Growth -0.21% (FY2023) ● Agriculture 2.27% ● Industries -3.74% ● Services -0.01% Per Capita Income (US \$) 1,551 Investment 14.13 (as % of GDP)

#### Growth and Investment

At the disaggreagetd level, the revised growth estimates for the agriculture, industrial, and services sectors were estimated at 2.27%, -3.74%, and -0.01%, respectively, in FY2023. The sectoral contributions to the economy were estimated at 23.2% for agriculture, 18.4% for industry, and 58.4% for services. Over time, Pakistan's economy has gradually shifted away from agriculture, with the sector's share in GDP declining from 31.75% in 1999-2000 to 23.2% in 2022-23, indicating a growing reliance on industry and services for economic activity.

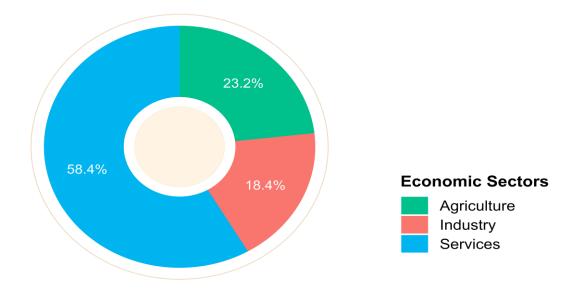
13.00 (as % of GDP)

Savings

-

<sup>&</sup>lt;sup>20</sup> Gross Value Added of agriculture, industrial and services sectors at basic prices.





Data source: National Accounts of Pakistan Bureau of Statistics

Figure 1.9: Sectoral Shares in GDP during the Financial Year 2023.

#### 1.7.1 Agriculture Sector

In July and August 2022, Pakistan experienced a heavy monsoon season that severely impacted the agriculture sector, particularly the crops and livestock sub-sectors. This damage had a spillover effect on the industry and related services, as disruptions in agricultural output affected broader supply chains. Domestic production fell short of demand, leading to a sharp increase in the prices of essential food items, which reached unprecedented levels. The total estimated damage in the agriculture sector was approximately Rs 800 billion (US\$ 3.725 billion).

Despite the flash floods in 2022, damage to Kharif crops, and the high base effect of the previous year's growth of 4.27%, the agriculture sector recorded a growth of 2.27% during FY2023. The increase in important crops stood at 0.34%. Two important crops, i.e., cotton and rice, were badly damaged by the floods. A decline of 41.0% was observed in cotton which resulted in the production of 4.910 million bales as compared to 8.329 million bales in the previous year. Similarly, rice witnessed a decline of 21.5% in production standing at 7.322 million tonnes as compared to 9.323 million tonnes in FY2022. The loss in important crops to some extent was compensated by growth in the production of wheat (7.45%) and maize (15.33%). The production of wheat and maize stood at 28.161 million tonnes and 10.985 million tonnes, respectively, compared to 26.209 million tonnes and 9.525 million tonnes during the previous year.

The livestock sector, which contributed 62.23% to agriculture and 14.40% to GDP, grew by 3.70% in FY2023, up from 2.25% in the previous year. The fishing sector, accounting for 1.37% of agricultural value addition and 0.30% of GDP, saw growth of 0.60%, compared to 0.35% in the previous year. The forestry sector, contributing 2.41% to agricultural value addition and 0.60% to GDP, grew significantly at 16.63% in FY2023, compared to 4.07% in the previous year, primarily due to increased timber production. Conversely, cotton ginning, with a 0.97% share in agriculture and 0.20% in GDP, declined by 22.84% due to a drop in cotton production. Table 1.4 presents the gross value



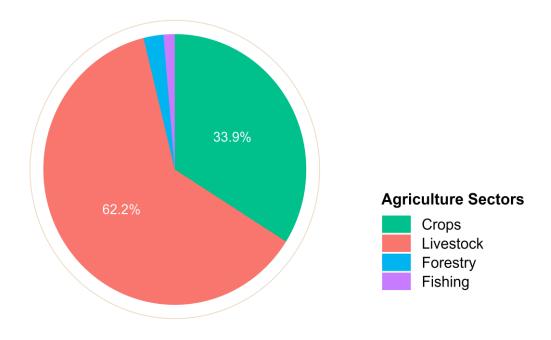
added for 2021-22 and 2022-23 at constant basic prices, the growth rates for 2022-23 over 2021-22, and the respective shares of agriculture sub-sectors in the overall agriculture sector and total GDP of the country (A relative view of gross value added of the agriculture sub-sectors is given in Figure 1.10).

Table 1.4: GVA of Agriculture at Constant Basic Prices of 2015-16

(Rs. Million)

S.No.	Agriculture Sectors	2021-22(F)	2022-23(R)	Growth rate (%) 2022-23/ 2021-22	Share in Agriculture (%)	Share in GDP (%)
1	Crops	3,083,439	3,051,587	-1.03	33.99	7.87
i.	Important Crops	1,681,708	1,687,411	0.34	18.79	4.35
ii.	Other Crops	1,289,069	1,277,242	-0.92	14.23	3.29
iii.	Cotton Ginning	112,662	86,934	-22.84	0.97	0.22
2	Livestock	5,387,611	5,587,125	3.7	62.23	14.41
3	Forestry	185,162	215,946	16.63	2.41	0.56
4	Fishing	122,435	123,166	0.6	1.37	0.32
Total		8,778,647	8,977,824	2.27	-	23.16

Note: F stands for final and R for revised estimates.



Data source: National Accounts of Pakistan Bureau of Statistics

Figure 1.10: GVA Contribution of Agriculture Sub-sectors.











#### 1.7.2 Industrial Sector

The combination of challenges, including the global economic slowdown, flood damages, and the State Bank of Pakistan's restrictive measures—such as high-interest rates, import restrictions, and limitations on letters of credit—aimed at addressing the balance of payments and curbing inflation, posed significant obstacles for businesses, consumer confidence, and investment. Consequently, the industrial sector faced setbacks from both domestic and external pressures, leading to a slowdown in performance during FY2023. Large-Scale Manufacturing , which accounts for nearly 71% of the manufacturing sector and 46% of the industrial sector, recorded a contraction of 9.87%, compared to impressive growth of 11.90% in the previous year. The two other components of manufacturing, small scale and slaughtering, posted growth of 9.14% and 6.41% during FY2023, respectively. The positive growth in small scale and slaughtering was probably driven by the substitution effect of restricted imports. Overall, the industrial sector posted negative growth of 3.74% in FY2023, compared to robust growth of 7.01% in FY2022.

The mining and quarrying sector contributes approximately 1.6% to Pakistan's GDP and directly employs around 200,000 people. This sector encompasses the extraction of natural resources such as minerals, coal, and precious stones, as well as the production of fuels like coal and petroleum, which are critical for energy generation. Additionally, it includes quarrying activities, involving the extraction of construction materials such as sand, gravel, and limestone, which are vital for industries like cement, construction, and steel.

Despite its importance, the mining and quarrying sector faces considerable challenges, including outdated mining practices, insufficient investment, and weak government policies and regulations. In



FY2023, it recorded negative growth of 3.31%, due to a decline in the production of natural gas, crude oil, and exploration cost, following a sharp contraction of 6.66% in the previous year.

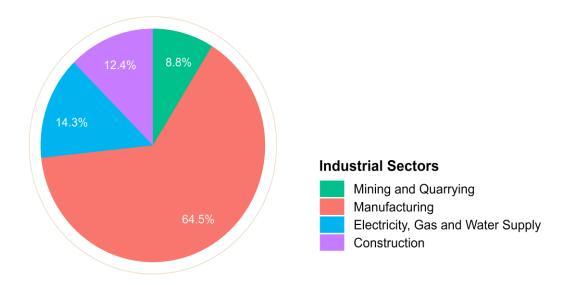
Another key component of the industrial sector, construction—which contributed 12.44% to industry and 2.29% to GDP—registered negative growth of 9.25% in FY2023. This decline was primarily attributed to conservative reporting of construction-related expenditures by both private and public sector enterprises, as well as an unusual increase in the relevant deflator, namely the Wholesale Price Index (WPI) for building materials. In contrast, the Electricity, Gas, and Water Supply sector, which accounts for 14.26% of industry and 2.63% of GDP, posted a growth of 9.95%. A key factor behind this positive trend was the 28.0% increase in Public Gross Fixed Capital Formation (GFCF) during FY2022 within this sector. The lag effect of this investment significantly contributed to the growth observed. Table 1.5 presents the gross value added for the years 2021-22 and 2022-23 at constant basic prices, the growth rates for 2022-23 over 2021-22, and the respective shares of industrial sub-sectors in the industry and total GDP of the country (a relative view of gross value added of the industrial sub-sectors is given in Figure 1.11).

Table 1.5: GVA of Industry at Constant Basic Prices of 2015-16

(Rs. Million)

S.No.	Industrial Sectors	2021-22(F)	2022-23(R)	Growth rate (%) 2022-23/ 2021-22	Share in Industry (%)	Share in GDP (%)
1	Mining and Quarrying	651,208	629,670	-3.31	8.82	1.62
2	Manufacturing	4,864,350	4,606,868	-5.29	64.48	11.88
i.	Large Scale	3,626,559	3,268,778	-9.87	45.75	8.43
ii.	Small Scale	768,249	838,435	9.14	11.74	2.16
iii.	Slaughtering	469,542	499,655	6.41	6.99	1.29
3	Electricity, Gas and Water Supply	926,804	1,019,017	9.95	14.26	2.63
4	Construction	979,221	888,670	-9.25	12.44	2.29
Total		7,421,583	7,144,225	-3.74	-	18.43

*Note: F stands for final and R for revised estimates.* 



Data source: National Accounts of Pakistan Bureau of Statistics

Figure 1.11: GVA Contribution of Industrial Sub-sectors



#### 1.7.3 Services Sector

The services sector mantained the largest share of nearly 58% in GDP for the last several years. In FY2023, the sector recorded a slight contraction of 0.01%, with mixed performance across industries.

The Wholesale and Retail Trade industry, accounting for 31.06% of services and 18.15% of GDP, declined by 3.99%, primarily due to a 1.03% drop in crop output and a 9.87% decline in large-scale manufacturing. On the contrary, Transportation and Storage, the second-largest services sector, and Accommodation and Food Services activities grew by 3.76% and 4.14%, respectively. However, Information and Communication contracted by 0.82%.

The Finance and Insurance industry shrank significantly by 9.42%, largely due to a high CPI-based deflator. Real estate activities grew by 3.66%, while Public Administration and Social Security saw a 7.02% decline, also attributed to the high deflator. Education witnessed a growth of 5.15% due to public sector expenditure, and Human Health and Social Work activities increased by 8.87%, due to the general government. Growth in other private services was 4.27%. Table 1.6 presents the gross value added for the years 2021-22 and 2022-23 at constant basic prices, the growth rates for 2022-23 over 2021-22, and the respective shares of services sub-sectors in the services sector and total GDP of the country (A relative view of gross value added of the services sub-sectors is given in Figure 1.12). <sup>21</sup>

Table 1.6: GVA of Services Sector at Constant Basic Prices of 2015-16

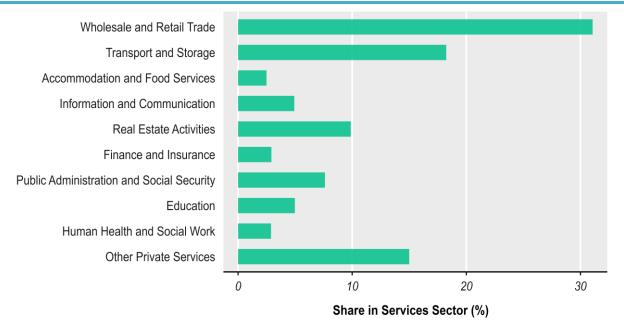
(Rs. Million)

S.No.	Services Sectors	2021-22(F)	2022-23(R)	Growth rate (%) 2022-23/ 2021-22	Share in Services (%)	Share in GDP (%)
1	Wholesale and Retail Trade	7,325,882	7,033,762	-3.99	31.06	18.15
2	Transport and Storage	3,980,936	4,130,519	3.76	18.24	10.66
3	Accommodation and Food Services Activities (Hotels & Restaurants)	541,222	563,604	4.14	2.49	1.45
4	Information and Communication	1,125,119	1,115,886	-0.82	4.93	2.88
5	Finance and Insurance Activities	730,220	661,448	-9.42	2.92	1.71
6	Real Estate Activities	2,156,942	2,235,936	3.66	9.88	5.77
7	Public Administration and Social Security (General Government)	1,853,122	1,722,958	-7.02	7.61	4.44
8	Education	1,071,646	1,126,861	5.15	4.98	2.91
9	Human Health and Social Work Activities	600,835	654,153	8.87	2.89	1.69
10	Other Private Services	3,257,106	3,396,145	4.27	15.00	8.76
	Total		22,641,272	-0.01	-	58.41

Note: F stands for final and R for revised estimates.

<sup>&</sup>lt;sup>21</sup> Additional data sources for the Economy section, beyond those mentioned in the text, include the Pakistan Economic Surveys for 2022-23 and 2023-24, as well as the National Accounts tables available on the PBS website: https://www.pbs.gov.pk/content/national-accounts.





Data source: National Accounts of Pakistan Bureau of Statistics

Figure 1.12: GVA Contribution in the Services Sector of the Economy

#### 1.8 Health

Healthcare is recognized as a basic human right in Pakistan's Constitution, emphasizing importance of a healthy population for economic productivity and national development. Pakistan is committed to providing equitable access to health and nutrition services for all, aligned with international standards the and country's commitment to achieving the health and well-being targets of SDG 3. The National Health Vision 2016-2025 outlines a reform agenda aimed at improving the public health delivery system through carefully planned, needs-based interventions.

#### **Key Health/RH Indicators**

• Infant Mortality Rate: 60

Maternal Mortality Ratio: 186

• Life Expectancy: 67.3 years

• Total Fertility Rate: 3.7

• Contraceptive Prevalence Rate: 34%

Source: HIES 2018-19 and Pakistan Demographic and Health Survey, 2019 in Pakistan Economic Survey

In Pakistan, approximately 53% of healthcare services are delivered by the private sector, while the public sector accounts for the remaining 47%. Since the devolution of the health sector to the provinces under the 18<sup>th</sup> Constitutional Amendment, each province has been responsible for designing its own health strategies. Despite these efforts, significant gaps remain in meeting the healthcare needs of the population, and the quality of public healthcare services—where most low-income individuals seek care—is often inadequate. Some provincial efforts are underway to improve access to and quality of healthcare facilities. Additionally, the federal government implements programs such as the National Maternal and Child Health Programme and initiatives to control malaria, TB, and HIV/AIDS. However, Pakistan still faces challenges in advancing its healthcare system to reach standards seen in more

<sup>&</sup>lt;sup>22</sup> National Health Accounts, 2021-22, Pakistan Bureau of Statistics.



developed countries. As a low-income country, Pakistan allocated 1% of its GDP (federal and provincial health expenditures) to public healthcare expenditure in 2021-22.<sup>23</sup>

#### 1.8.1 Healthcare System

The healthcare system in Pakistan includes both public and private health facilities. Public sector services are offered at the federal, provincial, and district levels through a network of rural health centers, basic health units, dispensaries, and district/tehsil headquarters hospitals, supported by medical professionals. With growing population pressure on public health institutions, the private sector has increasingly helped meet the rising demand where public facilities are limited. The number of private hospitals, clinics, and diagnostic



labs has grown significantly, especially in urban areas, contributing notably to healthcare services across the country.

Pakistan National Health Accounts 2021-22 estimates total health expenditures in Pakistan at Rs. 1,962 billion, marking an increase of Rs. 496 billion, or about 34%, from the fiscal year 2019-20 in nominal terms. In 2021-22, financing sources show that the general government contributed 47% of the total health expenditures, while the private sector accounted for 52.6%. Of this private sector share, 89% was out-of-pocket (OOP) spending by households. Contributions from development partners or donor organizations represented a small share, making up 0.4% of total health expenditures.

#### 1.8.2 Healthcare Delivery System

#### I. Primary Healthcare

Primary healthcare is the first point of contact for most patients, especially in rural areas, where it offers both preventive and curative services. Basic Health Units (BHUs), located at the Union Council level, serve a population of approximately 25,000 people. These facilities provide preventive, curative, and referral services and support Lady Health Workers (LHWs) with clinical, logistical, and managerial assistance. As of 2022, there are 5,520 BHUs operating across Pakistan. Rural Health Centres (RHCs) serve as a further level of care, catering to a catchment area of up to 100,000 people.

#### 1.8.2.1 Secondary Healthcare

This intermediate level of healthcare provides technical, therapeutic, and diagnostic services and functions as the first referral level, operating at the district and tehsil levels. It includes specialist consultations and hospital admissions. Tehsil Headquarter and District Headquarter Hospitals serve populations ranging from 0.5 to 3 million people. These facilities offer a wide range of services, including basic and comprehensive emergency care, obstetric services, preventive and curative care,

<sup>&</sup>lt;sup>23</sup> PRSP Budgetary Expenditures (Finance Division) in Pakistan Economic Survey, 2023-24.



diagnostics, and inpatient services. They also handle referrals from Basic Health Units (BHUs), Rural Health Centres (RHCs), and the Lady Health Workers Programme.

#### **1.8.2.2** Tertiary Healthcare

Tertiary healthcare hospitals offer specialized inpatient care and provide advanced healthcare services, typically to inpatients and those referred by primary or secondary healthcare providers.

Tables 1.7 and 1.8 provide important information on healthcare access in Pakistan. Table 1.7 lists the number of healthcare institutions across the country, including hospitals, dispensaries, RHCs, TB clinics, BHUs, and Maternal and Child Health (MCH) Centers. Table 1.8 outlines the availability of healthcare personnel, such as doctors, dentists, and nurses, and their accessibility to the population.

**Health Institutions** Mother and Year **Rural Health** TB **Basic Health** Hospitals **Dispensaries** Child Health Clinics Units (BHUs) Centres(RHCs) Centres 2018 1279 5671 686 441 5527 747 2019 1282 5743 670 412 5472 752 719 410 2020 1289 5849 5561 752 2021 1276 5832 736 416 5559 781 2022 1284 5584 697 417 5520 798

Table 1.7: Healthcare Institutions, 2018-22

Sources: PM&DC, Nursing Council, Provincial Health Directorates & PBS

Table 1.8: Healthcare Personnel, 2018-22

Manpower	2018	2019	2020	2021	2022	2023(P)
Registered Doctors	220,829	233,261	245,987	266,430	282,383	299,113
Registered Dentists	22,595	24,930	27,360	30,501	33,156	36,032
Registered Nurses	108,474	112,123	116,659	121,245	127,855	127,855
Population per Doctor	964	936	911	862	834	
Population per Dentist	9,426	8,760	8,186	7,530	7,104	
Population per Bed	1,611	1,634	1,523	1,573	1,553	

Sources: PM&DC, Nursing Council, Provincial Health Directorates & PBS

#### 1.8.3 Family Planning and Primary Health Care

Under the Family Planning and Primary Health Care Programs, over 100,000 Lady Health Workers (LHWs) were recruited to improve rural health. Their services have positively impacted the health of women and children by promoting better sanitation, birth spacing, iron supplementation, expanded vaccination coverage, and prenatal and postnatal care. Despite the Population Welfare Program being in place since the 1960s, access to quality services





remains limited. This is reflected in high fertility rates and low contraceptive use, particularly among poor and rural women. Table 1.9 provides details on the supply of various family planning related services in Pakistan from 2017 to 2022.

Table 1.9: Contaceptives and CYP of Population Welfare Programme

	Family Planning Services Prevalence									
Year	IUD (No. of cases)	Sterilization (No. of cases male/female)	Oral pills (No. of cycles)	Condom (Units)	Injectable vials	Norplant (Cases)	Couple year of Protection (CYP)			
2017-18	1,828,543	173,686	16,849,976	270,806,881	8,170,274	133,152	15,755,706			
2018-19	1,868,090	159,327	17,743,448	290,678,700	7,942,245	245,634	16,384,477			
2019-20	2,257,972	127,158	1,6285,388	25,9783,023	7,978,831	379,273	17,743,708			
2020-21	2,491,972	48,941	16,121,006	270,564,742	7,760,302	742,896	17,161,323			
2021-22	2,449,148	86,595	15,753,315	276,546,948	6,714,004	1,019,668	16,307,362			

Source: Annual Contraceptive Performance Report, 2021-22 (PBS)

#### 1.9 Education

The Article 37-B of the 1973 Constitution of Pakistan lays down that, "The State shall be responsible for eradication of illiteracy and provision of free and compulsory education up to secondary level, within minimum possible time".

The Article 25A–Right to Education–of the Constitution states that, "The State shall provide free and compulsory education to all children of the age of five to sixteen years in such manner as may be determined by law."

Education plays a pivotal role in a nation's economic development, driving social progress, economic prosperity, and human resource advancement. It empowers individuals and communities to harness their full potential and is closely linked to socio-economic growth. In this context, establishing a widely accessible, high-quality, and equitable education system is essential for building a progressive society. Goal 4 of the Sustainable Development Agenda (SDGs) 2030 seeks to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all."



#### **Key Education Indicators**

Literacy Rate: 62.8%

Male Literacy Rate: 73.4% Female Literacy Rate: 51.9%

Source: Labor Force Survey 2020-21



Pakistan is committed to achieve Goal 4 of SDGs pertaining to the quality of education, which stipulates equitable education, removal of discrimination, provision, and up-gradation of infrastructure, skill development for sustainable progress, universal literacy, numeracy and enhancement of the professional capacity of teachers. Different measures taken up by the federal and provincial governments to raise the standards of education in terms of quality education as a part of government's commitment to accomplish Goal 4 of SDGs by enhancing access to education by establishing new schools, upgrading the existing schools, improving learning environment by providing basic educational facilities, digitization of educational institutions, enhancing resilience of educational institutions to cater for unforeseen situations, promoting distance learning, capacity building of teacher, and improving hiring of teachers, particularly hiring of science teachers to address the issues of science education, etc.<sup>24</sup>

The following sub-sections provide a brief overview of Pakistan's education system.

#### 1.9.1 Pre-Primary Education

Pre-primary education is a vital constituent of a child's elementary education. Internationally, it is recommended that every child must be provided with pre-primary education to prepare him/her for the later stages of education. Prep or Katchi class is meant for children between 3 to 4 years of age to get pre-primary education.

#### 1.9.2 Primary Education (ClassesI-V)

Primary education is the most important and crucial stage for a child's education. At the national level, a total of 160,157 primary schools with 452,666 teachers were functional in 2022-23. Primary enrolment was 24.04 million in 2022-23.



#### 1.9.3 Middle Education (Classes Vi-Viii)

Middle schools include grades six through eight and the official age-group is 10-12 years for this level. During academic year 2022-23E, a total of 48,059 middle schools with 431,597 teachers were functional in the country. Enrollment in middle schools in 2022-23 was 9.10 million.

#### 1.9.4 Secondary/High Education (Classes IX- X)

High/Secondary school is the final stage of schooling that includes grades 9 and 10. During 2022-23E, at the national level, a total of 35,263 high schools with 592,006 teachers were functional in the country. Enrollment stood at 4.64 million in 2022-23.

<sup>&</sup>lt;sup>24</sup> Pakistan Economic Survey 2022-23. Finance Division. Government of Pakistan.



#### 1.9.5 Higher Secondary / Inter Colleges (ClassesXI-XII)

The higher secondary schools/inter colleges in Pakistan include grades 11 and 12. A total of 8,778 higher secondary schools/inter colleges with 183,258 teachers were functional in 2022-23E with enrollment amounting to 2.3 million students.

#### 1.9.6 Technical & Vocational Institutes

Technical and vocational education is an educational activity that imparts academic and technical knowledge and skills to individuals. A total of 4,281 technical and vocational institutes with 18,375 teachers and an enrollment of 439,062 students was recorded in 2022-23.



#### 1.9.7 Degree Colleges (ClassesXIII-XIV)

In 2022-23, a total of 2,735 degree colleges were recorded, with 62,321 teachers and an enrollment of 627,264 students.

#### 1.9.8 Universities (Classes XV Onwards)

University education provides not only the advanced skills essential for every labor market but also critical training for professionals such as teachers, doctors, nurses, civil servants, engineers, humanists, entrepreneurs, scientists, social scientists, and many others. A total of 228 universities with 72,717 teachers were functional in higher education in Pakistan in 2022-23. Total enrollment in universities in Pakistan was 2.4 million in 2022-23. <sup>25</sup>

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<sup>&</sup>lt;sup>25</sup> Data source for this section is "Pakistan Education Statistics 2022-23. Pakistan Institute of Education (PIE). Ministry of Federal Education and Professional Training. Government of Pakistan".

### **Chapter-2**

## HISTORY AND METHODOLOGY OF CENSUS



#### HISTORY AND METHODOLOGY OF CENSUS

Pakistan since its inception has conducted seven Population and Housing Censuses. The first census was conducted in the year 1951 by the Office of the Census Commissioner, Ministry of Interior, Home and Kashmir Affairs, covering the then two units i.e. East and West Pakistan. This was followed by the second census in 1961. The third census, originally scheduled for 1971, was delayed by one year due to the separation of East Pakistan. Subsequently, in 1972, the Census Organization was established on a permanent basis as an attached department of the Ministry of Interior to undertake Population & Housing Census and to manage data collection procedures as a regular activity. The census in 1972, therefore, was conducted by the Census Organization, which collected data on total population and core demographic characteristics of population of Pakistan, hitherto known as West Pakistan.

In 1973, the Registration Department was established as an attached department of the Ministry of Interior, under the Census Commissioner, to register vital events such as births and deaths in the country. Subsequently, in 1976, the Census and Registration Organization was created as an attached department of the Ministry of Interior by merging both the Registration Department and the Census Organization. However, in March 1978, a dedicated organization for conducting Population & Housing Census, known as the Population Census Organization (PCO), was carved out of the Census and Registration Organization. PCO was attached to the Statistics Division, and its subordinate offices were established at the provincial level. In November 1980, PCO conducted a House Listing Operation, followed by the fourth Population and Housing Census in March 1981. This Census was conducted in a more organized manner, using the Short Form comprising of core demographic questions and a Long Form seeking further details on the characteristics of population.

The Fifth Population & Housing Census, which was due in March 1991, was conducted in March 1998 after a delay of seven years. This delay was primarily due to the lack of consensus among the provinces regarding the dates and procedures, as well as concerns about the completeness and accuracy of population reporting. These issues were resolved through consultations with relevant stakeholders. To ensure complete coverage and smooth data collection in the field, it was decided to involve the Armed Forces for the first time in the census operation. The Census-1998 provided detailed data on the population and its socioeconomic characteristics at national, provincial, district, and tehsil levels, and even down to the mouza/ deh/ village level. This data was widely used for future population projections and development planning in the country.

After the promulgation of the General Statistics (Re-organization) Act, 2011, Pakistan Bureau of Statistics (PBS) was established after merging of three organizations, namely Federal Bureau of Statistics, Population Census Organization, Agricultural Census Organization, and Technical Wing of Statistics Division. As per the Act 2011, Pakistan Bureau of Statistics (PBS) is mandated, in addition to other data collection activities, to conduct population and housing census in the country. The Sixth Population and Housing Census in Pakistan was originally scheduled for October 2008 but was conducted much later, from March to May 2017, due to



various challenges and delays. The Census was postponed for almost nine years due to reasons such as the adverse law and order situation in the country, a shortage of staff and manpower, and insufficient financial resources. In 2016, the Supreme Court of Pakistan took Suo Moto notice (Case No. 09 of 2016) of the delayed census and directed the Government to conduct the long-overdue Census in March 2017. Accordingly, the Council of Common Interests (CCI) in its meeting held on 16<sup>th</sup> December, 2016 approved the conduct of 6<sup>th</sup> Population and Housing Census (Census-2017) in two phases with effect from 15<sup>th</sup> March, 2017.

Accordingly, Census operation was conducted from 15<sup>th</sup> March, 2017 to 24<sup>th</sup> May, 2017 in two phases. Each phase had duration of 30 days. Phase-I started from 15<sup>th</sup> March and ended on 14<sup>th</sup> April, 2017 in which 61 administrative Districts comprising of 79,773 blocks were enumerated. Phase-II was started with a gap of 10 days from 25<sup>th</sup> April and completed on 24<sup>th</sup> May, 2017. The field operation consisted of first 3 days for house listing followed by 10 days for population count and one day for enumeration of homeless population.

As in previous censuses, De-Jure enumeration method was employed in Census-2017. In this method people are counted at their usual place of residence. The time period of residence was defined as 6 months and above. The homeless population was counted using the De-Facto method.

The provisional summary results for Census-2017 were compiled after retrieval of Enumerator Forms (REN-2) from the field. After the requisite approval from CCI, accorded in its meeting held on 25<sup>th</sup> August, 2017, the provisional results were released through press and placed on the website of PBS for general use of the government functionaries, academia, researchers and public at large.

In general, the successful completion of Census-2017, which was held after a gap of 19 years, was appreciated at various levels. However, at the same time certain concerns were raised by the provinces especially Sindh regarding methodology of Census 2017, field operation monitoring and processing of final results. As general elections 2018 were approaching and latest census data was needed for delimitation purpose, CCI in its meeting held on 13<sup>th</sup> November, 2017 inter alia approved provisional results at block level of Census-2017 for the purpose of Article 51 (5) of the Constitution, as provided in the Constitution (Amendment) Bill, 2017.

As per timeline given by the CCI for presentation of final results of Census-2017 by the end of April 2018, PBS compiled these results and presented in a departmental briefing session with the Prime Minister held on 30<sup>th</sup> April, 2018. After a presentation, the Prime Minister directed to place the final results of Census-2017 before the CCI for decision. Accordingly, summary for CCI was initiated seeking approval of the final results of Census-2017. However, the Chairman CCI while considering the proposal of Ministry of Statistics regarding approval / release of the final results of Census-2017 mentioned that since the government has already made the 24<sup>th</sup> Constitutional Amendment for using provisional Census-2017 results for the forthcoming election 2018 and the subsequent by-elections, hence releasing of final result at this stage may affect the delimitation exercise being carried out by



the Election Commission of Pakistan. The proposal of approval / release of final results of Census may be deferred for the time being and may be placed before the incoming Government.

Therefore, after Elections 2018, the matter was considered in the Cabinet meeting held on 11<sup>th</sup> February, 2020 and a Committee of Ministers under the Chairmanship of Mr. Ali Haider Zaidi, Minister for Maritime Affairs was approved to deliberate and make recommendations for finalization of results of Census-2017 within a period of two months. The decision of Cabinet dated 11<sup>th</sup> February, 2020 was as under:

"The Cabinet considered the summary titled 'Approval of Results of the 6<sup>th</sup> Population and Housing Census-2017' dated 21<sup>st</sup> January, 2020, submitted by Planning Development & Special Initiatives Division and approved the following Committee of Ministers to deliberate and make recommendations for finalization of the results of Census-2017 within a period of two months:

- 1. Mr. Ali Haider Zaidi, Minister for Maritime Affiars (Convener)
- 2. Dr. Fehmida Mirza, Minister for Inter-Provincial Coordination
- 3. Mr. Nur-ul-Haq Qadri, Minster for Religious Affaris & Interfaith Harmony.
- 4. Dr. Zubaida Jalal, Minister for Defense Production
- 5. Dr. Muhammad Farogh Naseem, Minister for Information Technology & Telecommunication"

In compliance of Cabinet decision various meetings of the Ministers' Committee were held and detailed deliberations were made involving all the stakeholders.<sup>26</sup> After reviewing the whole process, Ministers' Committee finalized their recommendations / report for approval of Census-2017 results. The recommendations of Ministers' Committee are reproduced as below:

- a) In the larger national interest,  $6^{th}$  Population and Housing Census-2017 should be accepted as final although there are reservations on the said census.
- b) Next census should be held at the earliest possible time which may be determined after in-put from all the stakeholders; and may be held before lapse of period of 10-years from the date of 6<sup>th</sup> Population and Housing Census-2017.
- c) Use of technology should be ensured in order to remove doubts/concerns that were expressed in respect of 6<sup>th</sup> Population and Housing Census-2017 and the same do-not re-occur.
- d) A committee may be constituted under Ministry of Information Technology comprising of NADRA, Election Commission of Pakistan, Pakistan Bureau of Statistics- with the mandate to suggest optimum use of technology to achieve objectives of census reflecting the ground realities.

<sup>&</sup>lt;sup>26</sup> First meeting of Ministers' Committee was held under the Chairmanship of Mr. Ali Haider Zaidi, Minister for Maritime Affairs on 3<sup>rd</sup> March, 2020. Second meeting was held on 15<sup>th</sup> July, 2020. Whereas third and fourth meetings were held on 13<sup>th</sup> August, 2020 and 10<sup>th</sup> September, 2020, respectively. Similarly, fifth and sixth meetings were held on 9<sup>th</sup> Oct., 2020 and 21<sup>st</sup> Oct., 2020, respectively.









Figure 2.1: Glimpses from the Meetings of Cabinet committee of Ministers

Subsequently, the Ministry of PDSI submitted a summary in the light of Minister's Committee recommendations to the Cabinet on 14<sup>th</sup> February, 2020 for its consideration and approval. The Cabinet approved the proposal of Ministry of PDSI and decided as under:

"The Cabinet considered the summary titled "Approval of Results of the 6<sup>th</sup> Population and Housing Census-2017" dated 14<sup>th</sup> December, 2020 submitted by the Planning, Development & Special Initiatives Division, and approved the proposal contained in para 5 thereof."

Proposal at Para-5 of the Summary was as under:-

"Approval of the Cabinet is solicited to place the recommendations of the Ministers' Committee, regarding approval of the final results of Census-2017, before the CCI for final approval."

CCI in its 44<sup>th</sup> meeting held on 7<sup>th</sup> April, 2021 considered the summary of the recommendations of Minister's Committee for approval of final results of Census-2017. However, for detail deliberations it was decided to hold the CCI meeting on 12<sup>th</sup> April, 2021 on one-point agenda i.e. "Notification of results of Census-2017." Accordingly, in its 45<sup>th</sup> meeting held on 12<sup>th</sup> April 2021, the CCI approved the final results of the 6<sup>th</sup> Population and Housing Census-2017 and decided that "the process of the next census should start as early as possible according to international best practices by using latest technology."



The decision of 45<sup>th</sup> meeting of CCI is reproduced as under:

"The CCI decided to approve the Final results of the 6<sup>th</sup> Population and Housing Census, 2017 in the larger national interest. The Decision was taken by majority vote, in terms of Rule 5(10) of the Rules of Procedure of the Council of Common Interests, 2010, as seven members supported the approval of Final Census Results while the Chief Minister Sindh opposed it. The CCI directed that the process of next Census should start as early as possible according to international best practices by using latest technology."

## 2.2 The Digital Census 2023

In compliance to the CCI decision made in its 45<sup>th</sup> meeting, PBS started preparatory work to conduct first ever Digital Population and Housing Census in the country. For this purpose, Government of Pakistan constituted a Census Advisory Committee (CAC) comprising of renowned demographers and experts to devise recommendations for adoption of International best practices by using latest technology for the 7<sup>th</sup> Population and Housing Census. The Committee held several meetings and after detailed deliberations finalized the recommendations to carry out the census "digitally" with real-time monitoring for broader acceptability.

The main recommendations of Census Advisory Committee are reproduced as follows.

- Census must be conducted digitally with real-time online monitoring and geotagging of all structures
- Ensure universality: Counting of whole population residing in country at the time of the census irrespective of its status/ holder of CNIC or not
- De-jure method of enumeration is recommended (person is enumerated at usual place of residence). This method is the widely used method internationally and used in all previous censuses in Pakistan.
- Single census questionnaire may be administered which should be strictly in relevance to the Objectives of Census.
- Law enforcement agencies may be used for security but not for enumeration / verification.
- Field data collection/monitoring may be carried out by provincial government staff. Comprehensive trainings and involvement of graduate students in the enumeration process is recommended.
- Involvement of stakeholders (especially provinces/political parties) from start to end (Planning to finalization of results)
- Establishment of National Census Coordination Center (N3C) with representation of provincial governments for effective monitoring, coordination and policy decisions.
- Effective publicity campaign with effective use of social media for clarity regarding the primary objective of census which may begin early and extend right up to the release of the first initial results.

• Conduct of Pilot Census for checking the whole process and conduct of post enumeration survey for assessing reliability of data and coverage.









Figure 2.2: Glimpses from the Meetings of Census Advisory Committee.

The Federal Cabinet in its meeting held on 5<sup>th</sup> October, 2021 approved the recommendations of the Census Advisory Committee for forwarding to Council of Common Interest (CCI), with work plan of 18 months to complete the task by December 2022, so that upcoming General Elections of 2023 may be conducted on the basis of the results of the 7<sup>th</sup> Population & Housing Census.

CCI in its 49<sup>th</sup> meeting held on 13<sup>th</sup> January, 2022 approved the recommendations of Census Advisory Committee for conduct of 7<sup>th</sup> Population and Housing Census, along with Census work plan with timelines, Census Questionnaire, Census Monitoring Committee (CMC) and its TORs, as follows.



**Table 2.1: Composition of the Census Monitoring Committee** 

S. No.	Designation	Status
1	Deputy Chairman Planning Commission	Chairman
2	Secretary, M/o Planning Development and Special Initiatives	Member
3	Secretary IPCC	Member
4	Secretary, Finance Division	Member
5	Chief Secretaries (Punjab, KP, Sindh, Balochistan, AJ&K, GB)	Member
6	Chief Statistician, PBS	Member
7	Director General (Military Operations Directorate)	Member
8	Chairman, NADRA	Member
9	Sr. Member Board of Revenue, (Punjab, KP, Sindh, Balochistan, AJ&K, GB)	Member
10	Provincial Census Commissioners (Punjab, KP, Sindh, Balochistan,)	Member
11	Census Commissioners, AJ&K, GB	Member
12	Secretary, Local Government Department (Punjab, KP, Sindh, Balochistan,	Member
	AJ&K, GB)	
13	Secretary, Education Government of (Punjab, KP, Sindh, Balochistan,	Member
1.4	AJ&K, GB)	M 1
14	Member (Census & Surveys), PBS, Islamabad	Member
15	Member (Support Services), PBS, Islamabad	Member / Secretary
16	Managing Director, NTC	Member
17	Principal information officer/ DG, Press Information Department	Member
18	Chief Commissioner –Islamabad Capital Territory Administration	Member
19	Co-opted member/members with the permission of the Chair	Member

#### **Terms of Reference (TORs) of CMC:**

- i. Oversee/ Monitor census activities to ensure an expeditious transparent and credible census operations.
- ii. Supervision of activities to ensure timely support to PBS regarding
  - Availability / Appointment of Census field staff for enumeration /field duties from the Education, Revenue, Local Government and Population Welfare Departments by Provincial/ Regional Governments.
  - Nomination/Appointment of Census District Officers/ Other logistic support by Provincial/ regional governments
  - Policy guidance for appropriate mechanism for enumeration/ monitoring in security related areas etc.
- iii. Monitoring of work of Coordination Committees/ Vigilance Teams at various levels.
- iv. Periodic review of progress of Census operations & monitoring of control room activities.
- v. Supervision and evaluation of Pilot Census and recommendations for roll out of Census 2022.
- vi. Any other action required from time to time.

All key decisions regarding the 7<sup>th</sup> Population and Housing Census-2023 were made by the Census Monitoring Committee under the chairmanship of the Minister for Planning,



Development, and Special Initiatives, who also served as Deputy Chairman of the Planning Commission. The CMC's decisions included approval of revised census timelines, collection of data on migrants from Illegally Indian Occupied Jammu and Kashmir (IIOJK), determination of census enumeration methodology, appointment of Provincial Census Commissioners (PCCs), arrangements for census field security, allocation of the census budget, special arrangements for census operations in snowbound areas, inclusion of CNIC data in the census questionnaire, launch of census field enumeration, formation of a Demographers Committee with provincial representation to analyze census data with abnormal trends, technical input and forensic audit of census data by NADRA and SUPARCO, conduct of a fresh census in three districts of Kohistan with a special strategy to prevent over-reporting, extension of census enumeration time, and conduct of the Post Enumeration Survey from July 8 to July 19, 2023, in line with the best international practices. The detail of the various meetings of the CMC is provided in Table 2.2.

**CMC CMC** Venue Venue Date Date **Meetings** Meetings 1 st  $\mathbf{9}^{\text{th}}$ March 22, 2023 Islamabad May 10, 2022 Islamabad 2<sup>nd</sup> 10<sup>th</sup> Islamabad July 26, 2022 Karachi April 8, 2023 3<sup>rd</sup>  $11^{th}$ Islamabad September 12, 2022 Karachi April 15, 2023  $4^{th}$  $12^{th}$ Islamabad December 14, 2022 Islamabad April 28, 2023 5<sup>th</sup> 13<sup>th</sup> Islamabad Islamabad January 17, 2023 May 10, 2023 14<sup>th</sup> 6<sup>th</sup> Islamabad February 21, 2023 Islamabad May 17, 2023  $7^{\mathrm{th}}$ 15<sup>th</sup> Islamabad March 2, 2023 Islamabad June 7, 2023  $8^{th}$  $16^{th}$ Islamabad Islamabad March 11, 2023 June 27, 2023

**Table 2.2: Census Monitoring Committee Meetings on Census-2023** 

#### 2.2.1 Consultative and Sensitization Process

In the light of the recommendations of Census Advisory Committee, PBS initiated consultative process and sensitization workshops for planning/preparation for the next Census-2023, details of which are given in the following sub-sections.

#### 2.2.1.1 Consultative Meetings with Provinces

The Population & Housing Census is crucial national exercise linked with provision of data for key policy making matters regarding development programs, political representation and resource allocation which have far reaching impacts. Keeping in view the importance and sensitivity of matter and decision of CCI "to conduct next census as early possible by using modern technologies", the Committee after series of meeting devised recommendations and strongly proposed that in order to bring transparency, credibility and ownership of whole census processes, Provinces must be involved from start to end i.e. from planning to compilation of census results.

The 7<sup>th</sup> Population and Housing Census online orientation meeting with Chief Secretaries of all Provinces/regions was held on 13<sup>th</sup> Aug 2021 under the Chairmanship of Secretary, Ministry of PDSI. It was decided that physical meetings of PBS teams will be held



with provincial governments/Azad Jammu and Kashmir (AJK) and Gilgit-Baltistan (GB) for detailed deliberations and feedback on recommendations before its finalization for approval from the appropriate forum. In pursuance of the decisions of the above meeting, six meetings with provinces have been conducted. These meetings are a remarkable step towards confidence building of stakeholders/provinces which will be helpful in gaining the support of provinces during census process and acceptability of census results. Detail of the meetings is given in Table 2.3.

Table 2.3: Consultative meetings with provinces on Census-2023

Province	Date	Main Decisions
Punjab	6 <sup>th</sup> Sep. 2021	<ul> <li>The census questionnaire will be shared with stakeholders/departments and finalized after feedback.</li> <li>All provincial departments will extend their support/cooperation to the PBS in conducting the Census-2022.</li> </ul>
Sindh	8 <sup>th</sup> Sep. 2021	<ul> <li>Census questionnaire and informative videos would be translated into regional languages.</li> <li>Bureau of Statistics Sindh will be engaged in the upcoming census and will be given representation in the technical committees.</li> <li>Comprehensive recommendations from the province will be shared with PBS after consultation with political leadership.</li> </ul>
Balochistan	10 <sup>th</sup> Sep. 2021	Assured full support in terms of provision of field staff and administrative arrangements for successful conduct of census.
Khyber Pakhtunkhwa	13 <sup>th</sup> Sep. 2021	PBS assured that all the feedback regarding the process and tools will be incorporated in the recommendations after completion of all consultations.
Gilgit Baltistan	16 <sup>th</sup> Sep. 2021	<ul> <li>It is recommended that all stakeholders must be consulted on relevant matters.</li> <li>District administration may be taken on board and part of committees for coordination.</li> </ul>

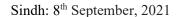
The PBS team presented the detail regarding the broader recommendation of the Census Advisory Committee with clear road map and timelines to complete the process. It was informed that as per directions of the CCI, the upcoming Census will be the first ever "Digital Census" of Pakistan, the detailed methodology and use of modern technology was explained and highlighted the role of provinces in the field of data collection and monitoring process. It was informed that all the feedback regarding process and the tools will be incorporated in the recommendations after completion of all consultations before final approval.

After completion of consultative meetings, PBS started sensitization workshops at provincial headquarters in universities by inviting statisticians, demographers, academia, researchers and students etc., to involve the public at the planning and preparatory stag of the digital census.





Punjab: 6th September, 2021







Balochistan: 10<sup>th</sup> September, 2021

KP: 13<sup>th</sup> September, 2021

Figure 2.3: Consultative Meetings with Provinces

#### 2.2.1.2 Sensitization Workshops with Stakeholders

Keeping in view the challenging timelines of activities of the first–ever digital census, the worthy Minister for PDSI during a review committee meeting held on 26<sup>th</sup> November, 2021, emphasized on the prior sensitization of the forthcoming Population and Housing Census, first ever digital census, to improve the role of stakeholders as well as public through the conduct of workshops/seminars throughout the country. In this regard PBS decided to conduct Sensitization workshops at provincial level to bring awareness about the census process among the masses and to avoid the trust deficit by engaging academia, universities, researchers, demographers, data users, NGOs and other stakeholders. Six sensitization workshops were conducted at six cities as per the below detail:

**Table 2.4: Sensitization workshops with stakeholders** 

Sensitization workshops	Venue	Date
1 <sup>st</sup>	Islamabad	December 24, 2021
2 <sup>nd</sup>	Lahore	December 28, 2021
3 <sup>rd</sup>	Karachi	December 30, 2021
4 <sup>th</sup>	Peshawar	January 5, 2022
5 <sup>th</sup>	Muzaffarabad	January 10, 2022
6 <sup>th</sup>	Quetta	January 30, 2022









Punjab: 28th December, 2021



Sindh: 30<sup>th</sup> December, 2021



KP: 5th January, 2022



AJK: 10<sup>th</sup> January, 2022



Balochistan: 30<sup>th</sup> January, 2022

Figure 2.4: Sensitization Workshops at Provincial/Regional Headquarters

Consultative process, sensitization workshops and preparatory process for Census-2022 were going side by the PBS. Therefore, the requirements for digital census were studied through research process and consultations.

#### 2.2.1.3 Sensitization Workshops with Government Functionaries

In pursuance of the decision of Council of Common Interest (CCI) and on direction of Minister for PDSI in the meeting held on 19<sup>th</sup> May, 2022 with chief ministers and provincial governments, a third round of sensitization process was started w.e.f 23<sup>rd</sup> May, 2022 and workshops were held by the PBS team at all provincial/ regional headquarters. The primary objective of the workshops was to explain about the roles and responsibility of provincial/ district administration regarding the conduct of Census-2022. Therefore, the relevant



Secretaries, Divisional Commissioners and Deputy Commissioners were invited for these workshops. Chief Secretaries of the respective governments were chief guests of these events. The detail of the workshops conducted at six cities is as under:

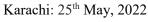
**Table 2.5: Sensitization workshops with government functionaries** 

Sensitization workshops	Province	No. of divisions	Venue	Date
1 <sup>st</sup>	Punjab	9	Lahore	May 23, 2022
2 <sup>nd</sup>	Sindh	7	Karachi	May 25, 2022
3 <sup>rd</sup>	Balochistan	8	Quetta	May 27, 2022
4 <sup>th</sup>	Khyber Pakhtunkhwa	7	Peshawar	May 30, 2022
5 <sup>th</sup>	Azad Jammu and Kashmir	3	Muzaffarabad	June 6, 2022
6 <sup>th</sup>	Gilgit Baltistan	3	Gilgit	June 11, 2022





Lahore: 23<sup>rd</sup> May, 2022

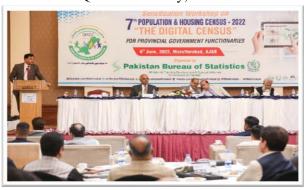






Quetta: 27th May, 2022

Peshawar: 30<sup>th</sup> May, 2022





Muzaffarabad: 6th June, 2022

Gilgit: 11th June, 2022



## 2.2.2 Role of Service Providing Agencies

After approval of the recommendations of Census Advisory Committee and work plan of 18 months to conduct 7<sup>th</sup> Population and Housing Census-2023 by the CCI in its 49<sup>th</sup> meeting, PBS, keeping in view the challenging timelines, engaged for the Government to Government (G2G) solution National Database and Registration Authority (NADRA), Space and Upper Atmosphere Research Commission (SUPARCO) and National Telecom Corporation (NTC) for provision of software, hardware, latest high resolution imagery and allied services required for successful completion of the digital census field operation. The following Table 2.6 summarizes the role of consulting agencies, NADRA, SUPARCO and NTC regarding provision of hardware and software during the conduct of 7<sup>th</sup> Population and Housing Census-2023.

Table 2.6: Role of Consulting Agencies during the Digital Census-2023.

Task	Description	Responsibility
Tablet device and allied accessories	Provision of 126000 tablet devices and allied accessories Provision of 126000 secure data SIMs Hardening and preparation of tablet devices Dispatching and retrieval of tablet devices	NADRA
Datacenter and Infrastructure	Compute storage and network resources Two sites, one primary site at NTC Islamabad and one disaster recovery site at NTC Lahore Intranet and internet connectivity of sites Software licenses required for the datacenter	NTC
Census Support Centers	IT support to field staff Provision of internet devices	NADRA, NTC & PBS
Call center	Establishment of call center at PBS HQ Operationalization of call center for 6 months Technology transfer to PBS	NTC & PBS
Census Software	Provision of complete turnkey solution Hosting of census software solutions at infrastructure provided by NTC Syncing of data and data security	NADRA, NTC & PBS
GIS imagery	Provision of GIS imagery	SUPARCO

## 2.2.3 Census Software

For the Digital Census-2023, initially eighteen software modules were considered to facilitate various tasks in a digital format. However, upon careful internal discussions and considerations, it was determined that some of these modules shared similar features. As a result, the Supervisor Dashboard and Data Synchronization modules were combined with the Indicator and Trend Analysis and Android House Listing and Enumeration Data Collection modules, respectively. The final list of modules, comprising sixteen in total, can be seen in Table 2.7.



Table 2.7: Software Modules Finalized for Digital Census-2023

S. No.	Software Modules	S. No.	Software Modules
1	Self-enumeration web portal	9	GIS based Dashboard Monitoring System
2	HR & Task Assignment Web Portal	10	Dashboard for Trend Analysis
3	Training Web portal	11	Data Cleaning Module
4	Inventory Management	12	Complaint Management System
5	Android House listing App	13	Reporting Module
6	Android Enumerator Data Collection app	14	Public Data Dissemination Portal
7	Communication application	15	CATI support module
8	Area Frame Updation Application	16	MDM

#### 2.2.4 Census Hardware and IT Infrastructure

PBS has its own datacenter, but unfortunately, the existing infrastructure was not reliable enough to support the extensive census operation. As a result, it was necessary to upgrade the entire datacenter to meet the necessary standards for power backups, precision cooling, network and server security, environmental monitoring and control, fire suppression systems, and access control systems. Additionally, a secondary site with disaster recovery capabilities had to be introduced. However, given the tight schedule for the census, procuring and completing the necessary upgrades for the datacenter was not feasible. Therefore, the well-established tier-III Datacenter Infrastructure of National Telecom Corporation (NTC) suitable for this exercise was utilized to provide round-the-clock support, with multiple active sites including a dedicated disaster recovery site.

The hardware and IT related requirements chalked out for the Digital Census-2023 included 126000 tablet devices with allied accessories, hardening and preparation of tablet devices, internet SIMs from Telco's, compute storage and network resources, two sites one primary site and one disaster recovery site, intranet and internet connectivity of sites, data security, IT support to field staff from Census Support Centers, and establishment of call centers. PBS accordingly engaged National Database and Registration Authority (NADRA) for provision of 126000 tablets with allied accessories (secured, hardened devices), Census Software Solution (Enterprise Resource Planning - ERP), Data SIMs and secure data connectivity, and census field support services.



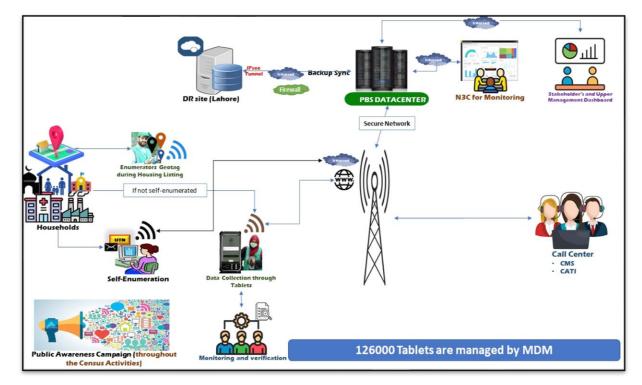


Figure 2.5: Digital Architecture Used in Census-2023

#### 2.2.5 Provision of Call Center Services

A call center by the NTC was established at the PBS headquarters to facilitate smooth communication between the public and the Census administration during and after the census exercise. This call center served as a central hub of information, handling not only general complaints but also inquiries from the public regarding the census process, on-field activities, and frequently asked questions about the census. Additionally, it was utilized for Computer-Assisted Telephone Interviewing (CATI) approach after the census field operation.

#### 2.2.6 Acquisition of High Resolution Imagery

Digital maps of area frame are at the crux of digital enumeration. PBS had already digitized its area frame, which consisted of approximately 182,000 blocks and conducting surveys through tablets using the digitized block boundaries. However, due to the sensitivity and magnitude of the census project, PBS decided to acquire the latest satellite imagery accurate to a level that does not affect the accuracy of geo-tagging of structures. For this purpose, PBS held several meetings with SUPARCO, the National Space Agency of Pakistan specializing in GIS and Space Science research, to discuss and determine the imagery and GIS requirements. After extensive discussions between the technical experts from both sides, the following services were decided to be acquired from the SUPARCO.

- High resolution digital satellite imagery of 0.3-meter resolution for 18 districts and 0.98-meter resolution for remaining areas for reconciliation and ground reference (not more than 6 months old).
- Support in terms of infrastructure and human development for hosting of Digital Enumeration Area Maps on PBS server.



#### 2.2.7 Deployment of Census Field Staff

As per the previous practices, the field operation of 7<sup>th</sup> Population and Housing Census was conducted and supervised through the respective provincial government's machinery. The Provincial Chief Secretaries being the administrative heads of the provinces implemented the census plan prepared by the Federal Government, and all the orders and instructions in this respect were issued from their offices down to the level of Divisional Commissioners, Deputy Commissioners and Assistant Commissioners.

Similarly, from administrative and organizational point of view, Census Districts were established all over the country, including Gilgit-Baltistan and Azad Jammu & Kashmir, for effective coordination and implementation of Digital Census activities. In Punjab, Sindh and Khyber Pakhtunkhwa, tehsils were declared as Census Districts, whereas in the rest of the country including Gilgit-Baltistan and Azad Jammu & Kashmir, Admn. districts were declared as Census Districts. The respective administrative heads of the admn. districts and tehsils were notified as Census District Officers (CDOs). These Census Districts were divided into Census Charges, Census Circles, and Census Blocks.

PBS ensured effective coordination with provincial and regional administration by deploying its own staff members, including Statistical and Geographical assistants, to work alongside Census District Officers at 495 Census Districts. These staff members acted as a crucial link between PBS administration, provincial and regional administration, and local field staff. They facilitated timely and efficient communication regarding census instructions, complaints and suggestions, as well as logistic support.

#### 2.2.8 Establishment of Census Support Centers

Since the Digital Census was being carried out first time in the country, therefore, to keep the process smooth and ensure availability of system alive 24/7, dedicated Census Support Centers on the recommendation of Census Advisory Committee were established at the Tehsil/Census District level. These centers played a vital role in facilitating the census field operation. They were responsible for a range of tasks, including the distribution and collection of tablet devices, as well as installation and configuration of census applications. Moreover, they performed as Control Room and Complaint Inquiry Office in each Census District. These centers were equipped with all the necessary IT equipment, furniture, fixtures, and technical staff. The technical staff, mostly from PBS, were assigned to provide support to the technical field staff, enumerators, and supervisors.

## 2.2.9 Pilot Census of Digital Census-2023

Pilot census serves as a thorough assessment of all the census procedures. Its primary objective is to evaluate effectiveness and suitability of the complete census plan and its organizational framework by conducting a trial run. This entails ensuring comprehensive coverage of both geographic areas and population segments. More specifically, pilot census aims to test the accuracy of cartography, methodology, data collection methods, questionnaires, logistical



planning, as well as the interaction and coordination among all the resources involved in the census.

The pilot census of Digital Census-2023 encompassed twelve specific objectives aimed at rigorously testing the following aspects.

- i. Effectiveness and comprehensibility of training materials and procedures to impart trainings to the master trainers and enumerators.
- ii. Capabilities of enumerators to comprehend the census concepts within a short span of time and implement in the field with maximum efficiency and accuracy.
- iii. Applicability and suitability of census questionnaire, clarity of its wording, sequence of questions, and response biases.
- iv. The enumeration workload and time required to carry out the enumeration.
- v. Suitability of coordination mechanism for logistic support in the field and necessary communication to and from PBS representatives in the field and other field staff such as enumerators/ supervisors etc. to devise effective strategy to deal with day to day issues.
- vi. Census tablets and other hardware for their suitability in the field, especially durability of tablet battery and charge banks to keep tablets alive during the whole enumeration time of a day.
- vii. Census software and GIS for their reliability, accuracy, efficiency and security.
- viii. Digital block maps with high-resolution imagery and capability to properly identify to the enumerators their assigned blocks and to help recognize block overlapping/ non-coverage etc.
- ix. Compatibility between the hardware and different census software and to sort out issues prior to start of full scale census enumeration.
- x. Network availability and proper and easy log-in capability of the devices.
- xi. Proper, effective and secure data synchronization and transmission to the central database.
- xii. Real-time monitoring in the field and at PBS headquarter to deal with block identification/ overlapping, non-coverage and other issues requiring regular and immediate action from the concerned in the field and at PBS headquarter.

In light of the objectives of the pilot census, which was to thoroughly test all the new technologies adopted for the Digital Census, the PBS Technical Committee decided that instead of utilizing a representative sample, the main focus should be on evaluating the entire process of the Digital Census under diverse conditions. In order to accomplish this, a study was conducted on the block-wise information and after detailed deliberation it was decided to select a sample of around 500 blocks from clusters of districts keeping in view factors such as density, accessibility, and topography of the area. Consequently, a total of 417 blocks were selected from 33 administrative districts for the pilot census. The selected administrative districts for Pilot Census can be seen in Figure 2.7, whereas district-wise breakdown of the selected blocks is given in the subsequent Figure 2.8.



Field operation of the pilot census was carried out from July 20, 2022 to August 3, 2022 in 33 selected Administrative Districts across Pakistan, including Azad Jammu & Kashmir and Gilgit Baltistan. For the pilot census field operation, a three-day training session for the Master Trainers was held at the PBS headquarters from July 5 to July 7, 2022. The Master Trainers then imparted training to the enumerators in the field at the selected 27 stations from July 13 to July 17, 2022. The district administration of each province/district provided the enumeration and supervisory staff. The enumerators were selected from various provincial departments, and the enumeration was conducted under the supervision of the tehsil and district administration in their respective jurisdictions. As the pilot census was digital, tablet devices were used, and two software modules were developed and utilized for this purpose.

Several key issues were identified during the pilot census. Firstly, the tablets used during the process experienced fast battery drainage, resulting in frequent interruptions. The SIM cards provided did not always match the local network, causing connectivity problems. Another challenge was the technical deficiency of the staff deputed at the Census Support Centers in each census district. This hindered smooth execution of the data collection process. Moreover, the enumeration blocks in Balochistan and Khyber Pakhtunkhwa were situated far away from the Census Support Centers, leading to delays and logistic difficulties. Furthermore, there were delays in resolving technical problems that arose during the enumeration. Adverse weather conditions also posed a challenge in conducting the field operation effectively. Lastly, there were compatibility issues between the SUPARCO satellite imagery and PBS maps, which impacted accuracy of the data collection process.

The issues identified during the pilot census were assessed thoroughly and appropriate corrective measures were taken prior to commencement of the main census activities and field operation for the census data collection.

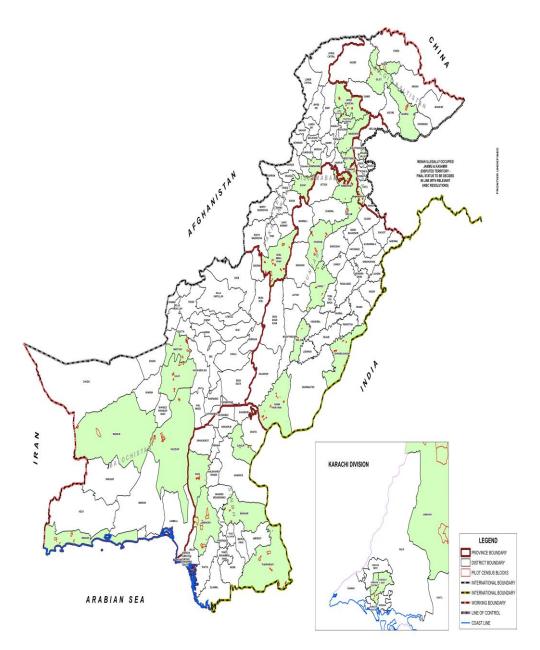


Figure 2.6: Admn. Districts Selected for the Pilot Census



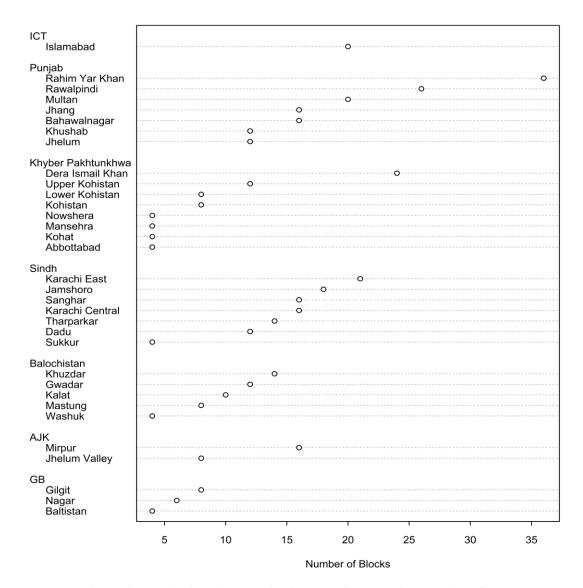


Figure 2.7: District-wise Detail of Blocks Selected for the Pilot Census

## 2.2.10 Training of Census Staff

As 7<sup>th</sup> Population and Housing Census-2023 marked Pakistan's transition towards Digital Census, a well-structured training program for enumerators was vital to the success of the census. This census not only employed digital data collection methods but also gathered information on economic establishments to support the development of the Economic Census frame. Recognizing the need for well-trained field staff, PBS prioritized an extensive training program covering both subject matter and IT-related aspects of the Digital Census to ensure its effective execution. A three-tiered training plan was devised: The first tier involved training Master Trainers in Islamabad; the second tier consisted of training Trainers at the Divisional level; and finally, the third tier involved training supervisors and enumerators at the Tehsil level.



The training of 328 Master Trainers took place in Islamabad from December 5 to December 15, 2022. Highly experienced Super Trainers meticulously evaluated each trainee based on preand post-test scores, punctuality, and overall engagement. To maintain high standards, only 76 individuals were selected as Master Trainers through a rigorous assessment process. In response to participants' feedback, a concise training manual was also introduced to streamline the training process for trainers and enumerators in the subsequent phases.

The Training of Trainers (TOT) was conducted across 76 divisions nationwide from December 19 to December 23, 2022, successfully preparing 2,875 trainers. Despite various challenges, this phase effectively equipped trainers with essential skills and knowledge. Master Trainers continued to assess participants based on their test scores, punctuality, and engagement to ensure the highest level of preparedness. These trainers were then responsible for training the enumerators in the next phase.

The Training of Enumerators (TOE) was held at 992 venues across Pakistan. Its primary objective was to familiarize enumerators with advanced data collection methods and technology, ensuring accuracy, reliability, and transparency in the census process. A total of 120,929 enumerators were successfully trained for the census field operations, marking a significant milestone in the implementation of Pakistan's firstever Digital Census. To provide a glimpse of the master training sessions, a selection of photos is shown in Figure 2.9.



















Figure 2.8: Training of Master Trainers for the Census Field Activities

#### 2.3 Enumeration Method and Field Operation

The 6<sup>th</sup> Population and Housing Census-2017 of Pakistan, similar to earlier censuses, was conducted using a mixed approach, defecto cum dejure. The census mainly followed the dejure concept, which considers the usual place of residence for counting the population. However, only the "homeless" population was counted using a defacto basis. This mixed approach is also commonly used in other countries of the sub-continent.

The Census Advisory Committee after detailed deliberations on the advantages and disadvantages of both defacto and de-jure methodologies, taking into account the practical realities on the ground, evaluating effectiveness of the de-jure method, as well as considering the significant financial and human resource requirements of the defacto method, recommended the de-jure method of enumeration for the 7<sup>th</sup> Population and Housing Census-2023. The de-jure method of enumeration involves counting individuals based on their usual residence, which was defined as the place where they have continuously lived for at least six months (excluding temporary absences for holidays or work). Additionally, the intention to live in a particular place for at least six months was also considered when determining usual place of residence. Individuals who were temporarily residing in a place were not counted, as they were enumerated at their usual places of residence. Likewise, individuals who were temporarily out of the country or city to attend religious events, weddings, or trainings for less than six months were counted at their usual places of residence.



The data collection process of the Digital Census-2023 began with the deployment of a web portal for self-enumeration on 20<sup>th</sup> February, 2023. This marked a significant milestone, as only a few countries worldwide have attempted and achieved such an endeavor for their population. Around 2,600,000 individuals submitted their data through the self-enumeration portal till its closing date on 10<sup>th</sup> March, 2023. The process of listing houses and structures took place between 1<sup>st</sup> – 10<sup>th</sup> March, 2023, while the census field enumeration began on 12<sup>th</sup> March, 2023, with an initial completion date of 4<sup>th</sup> April, 2023. However, based on the requests from provincial governments for complete enumeration, the field operation was extended four times by the Census Monitoring Committee until 30<sup>th</sup> April, 2023. In certain districts, the census field operation was further extended until 21<sup>st</sup> May, 2023, mainly due to under-enumeration.

## 2.4 Post Enumeration Survey

One of the main recommendations made by the Census Advisory Committee was to conduct Post Enumeration Survey (PES) of the 7<sup>th</sup> Population and Housing Census-2023. The recommendation was approved by the CCI during its 49<sup>th</sup> meeting held on 13<sup>th</sup> January, 2022. Moreover, during the census field operation, PBS constituted two Committees: *Technical/Expert Committee on Census-2023* for periodic review with provincial and district stakeholders to ensure credible census field operation and committee on *Trend Analysis of Census Data for 7<sup>th</sup> Population and Housing Census (Digital Census)* to analyze trends and determine suitability of the census data prior to placing it before the competent forum for approval. The Committee held several meetings and after detailed review of the census data recommended to conduct Post Enumeration Survey to address the issues of over- or under-enumeration identified through demographic techniques in certain areas of the county.

Therefore, during the 15<sup>th</sup> meeting of the Census Monitoring Committee chaired by the Minister for PD&SI on 7<sup>th</sup> June, 2023, it was decided that Post Enumeration Survey may be conducted in order to assess accuracy and the coverage extent of the Digital Census-2023. The methodology for conducting the PES and incorporating its findings into the final Digital Census-2023 results was approved in the subsequent 16<sup>th</sup> meeting of the Census Monitoring Committee held on 27<sup>th</sup> June, 2023. Accordingly, the Post Enumeration Survey (PES) of Digital Census-2023 was conducted from 8<sup>th</sup> to 19<sup>th</sup> July, 2023, in accordance with the decision made in the 49<sup>th</sup> meeting of CCI and 15<sup>th</sup>-16<sup>th</sup> meetings of Census Monitoring Committee.

For the PES, a sample of 2500 Enumeration Blocks was selected from 48 administrative districts (overall level) with relative margin of error (RMOE) of 1.1%. The sample was selected using stratified random sampling where strata within provinces were made on the basis of similar characteristics like growth rates, population etc. Each stratum represented distinct districts. The 48 selected districts represented their respective stratum from which the sample was selected. The sample size was further proportionally allocated to urban and rural part of each district. Provincial and rural/urban breakdown of the PES sample is given in Table 2.8.

Province	Rural	Urban	Total
Punjab	471	586	1057
Khyber Pakhtunkhwa	287	93	380
Sindh	313	538	851
Balochistan	124	43	167
Islamabad	23	22	45
Total	1218	1282	2500

The PES enumerators and supervisors who were selected from the Digital Census-2023 staff, were assigned new blocks during the PES field activities in order to ensure independence of the survey. To further ensure that the PES field staff was well-prepared, they underwent a refresher course and were equipped with the training materials, including a comprehensive manual. The manual was designed with the PES objectives in mind and provided clear guidelines on understanding the objectives, methodology, and techniques of the survey.









Figure 2.9: Training of Enumerators for the PES Field Activities

The PES field operation lasted for a total of 12 days. On the 8<sup>th</sup> of July 2023, the PES field operation was commenced with clear instructions to the enumerators to conduct listing and enumeration as separate activities. The initial three days of the PES field operation were dedicated to listing, while the remaining nine days were allocated for enumeration. To ensure comprehensive and accurate coverage, SUPARCO maps of the blocks were provided to the enumerators in both electronic form on their Tablets and in hard copy. Enumerators were instructed to assign a unique PES number to each structure within the selected block, regardless



of the numbering used in the census. For example, structures were labeled as PES 001, PES 002, and so forth. Each enumerator was required to enumerate only one PES block.

During the PES field activities, it was crucial to ensure safety and trust of the enumerators, as they faced resistance from respondents who were skeptical due to isolated incidents reported in the media. To address this, man-to-man security was provided to the enumerators, not only for their protection but also to encourage better response rates. The main census field operation had previously suffered from non-response and less coverage, largely attributed to the lack of security measures. Recognizing this, it was imperative to prioritize the provision of man-to-man security for the field staff during the PES, in order to achieve more accurate and reliable results.

## 2.5 Finalization and Approval of Census Results

Census is the 9<sup>th</sup> subject of the Federal Legislative List Part-II and according to the Article 154 of the Constitution of the Islamic Republic of Pakistan, the Council of Common Interests (CCI) is entrusted with the responsibility of formulating and regulating policies pertaining to matters in Part-II of the Federal Legislative List. Additionally, the CCI is also responsible for exercising supervision and control over the relevant institutions.

Accordingly, the final summary results of the 7<sup>th</sup> Population and Housing Census-2023 were compiled by factoring in the findings of the Post Enumeration Survey and submitted for the approval of CCI on 2<sup>nd</sup> August, 2023. In its 50<sup>th</sup> meeting held on 5<sup>th</sup> August, 2023, the CCI considered the final summary results and unanimously approved the results of 7<sup>th</sup> Population and Housing Census-2023, as follows:

"The CCI considered the Summary titled "Results of 7<sup>th</sup> Population and Housing Census-2023 (The Digital Census)" dated 2<sup>nd</sup> August, 2023, submitted by Ministry of Planning, Development and Special Initiatives and unanimously approved the results of 7<sup>th</sup> Population and Housing Census-2023 (The Digital Census), as mentioned in Annex-V of the Summary and reproduced at para-7 above, for publication and for use / information of general public."





Figure 2.10: Glimpses from 50th Meeting of CCI held on 5th August, 2023



## 2.6 Census Communication and Trust Building Strategy

Overall success of census depends on the positive response and engagement of the general public and stakeholders, which can only be achieved through the implementation of significant confidence-building measures and targeted publicity campaigns. An effective Media campaign plays a crucial role in clearly communicating purpose of Census to the public and stakeholders. Therefore, the smooth execution of field operations, reduction of enumeration costs, and improvement of data quality hinge on a meticulously designed and executed Media Campaign. The primary focus of the Media Campaign for the 7th Population and Housing Census was to strategically choose the appropriate timing and channels to disseminate accurate messages, motivating the right audience and ensuring inclusion.

The results of the 6th Population and Housing Census were conditionally approved by the Council of Common Interest (CCI) during its 45th Meeting on April 12, 2021, with directives to promptly conduct the next census utilizing the latest Technologies. In line with this, a Census Advisory Committee (CAC) led by the Deputy Chairman of the Planning Commission (DCPC) was established, comprising distinguished Demographers and Experts tasked with providing recommendations for the 7th Population and Housing Census. Through thorough deliberations and the formation of various groups to analyze best practices and identify previous census shortcomings, the Committee worked towards formulating recommendations for the upcoming census.

Under the guidance of the CAC, the Media Working Group extensively reviewed UN Guidelines, past practices, stakeholder concerns, international observers' feedback on the publicity campaign of the 6th Population and Housing Census, communication strategies of developed countries, and the evolving landscape due to digitization. This comprehensive analysis informed the recommendations put forth for the Publicity Campaign of the 7th Population and Housing Census, that are as follows:

- i. Publicity campaign from start to end (planning to approval of Census results) will engage masses through media interventions and confidence building to ensure interest and cooperation in Census data collection.
- ii. Media cell of PBS will plan and execute a Public Awareness Campaign with trained officers at central and regional levels.
- iii. Information, Education and Communication (IEC) materials like logo, brochure, posters, songs, and slogans will be used for promotion.
- iv. Community Awareness Programs will include seminars, walks, and innovative activities to engage different groups.
- v. Local level media campaign will broadcast messages in local languages to build community confidence in Census.
- vi. Media engagement will disseminate Census message through various platforms including electronic, print, and social media.
- vii. Advertising agencies will be involved in creating and publishing Census content through different communication channels.
- viii. Media workshops will sensitize mainstream media on Census importance and accuracy.



- ix. Stakeholders will be continuously involved and consulted to develop a proper communication strategy.
- x. Census publicity will be integrated into manual, training, and field operations to engage public directly.
- xi. Continuous monitoring of the publicity campaign is essential to address any disinformation and ensure confidentiality of shared information.

Recommendations and Media Strategy for 7th Population and Housing Census were approved by Cabinet and Council of Common Interest.

## 2.6.1 Implementation of Communication Strategy

For Implementation of Communication Strategy, the Publicity Campaign was divided into different phases i.e., Planning, Education / Awareness, Motivation, Reminder, Thank You, and Data Dissemination. To optimize budget, Social Media was used in early phases, mainstream Media in later phases.



Figure 2.11: Phases of Publicity Campaign

## 2.6.2 First Phase: Campaign Strategic Planning (Aug 21-Jan 22)

#### I. Formation of Dedicated Media Cell

On recommendations of Census Advisory Committee, a dedicated Media cell was established under the Census Project Management Unit (CPMU). the duties of Media Cell included designing a work plan for Publicity Campaign, hiring media firms, finalizing advertisement content, videos, press releases, running media campaigns, monitoring media, conducting interactive sessions with media and archiving media activities.

#### II. Comprehensive Work Plan with appropriate timelines.

For implementation, a work plan was proposed. The communication campaign was divided into seven phases, aligning with the census timelines. Timelines and activities were planned for each phase. Timings and tactics were adjusted during implementation in response to changing realities.

## III. Appointment of Media Spokesperson / Focal Person

Mr. Muhammad Sarwar Gondal, Member (IT/SS), being the Project Lead of 7th Population & Housing Census, the First Ever Digital Census was Appointed as Focal person / Media Spokesperson for 7th Population and Housing Census, 2023. The main task of Focal Person was to communicate following key messages:



Mr. Muhammad Sarwar Gondal (Member SS/RM) Media Spokesperson / Focal Person

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- Census for Policy Making
- Census Enumeration Methodology (where to be counted?)
- Participate in the Census for your Future
- To counter misconceptions and rumors regarding use of Census data and Census process. (Crisis Management).

## IV. Budget Proposal for Publicity Campaign

Keeping in view the importance of the Publicity Campaign, an appropriate budget was proposed especially for Social Media Publicity Campaign.

#### V. Involvement of Media Partners

The first step to achieve support of General Public in Census process was to run a successful campaign on Print, Electronic and Social Media. According to Press Information Department (PID) policies, all advertisements for a Campaign on Print and Electronic are made through Advertising Agencies. Therefore, to get the desired dissemination of Census message, the specialized advertisement agencies / firms were hired by PBS as per PID Policies.

## VI. Hiring of Media Advertisement Agencies

Print and Electronic Media Publicity firms were hired as per policy of Press Information Department (PID). Advertisement for agencies was published through PID. PID accredited agencies were eligible to compete. Selection committee evaluated and finalized selection of Advertising Agencies for Census-2023. Committee comprised of PBS representative, PID representative, and External Media Expert. Agencies submitted proposals and presented to Selection Committee. They had to propose logo, slogans, TVC's, personality endorsement, media launch ideas, and community awareness programs. Agencies also had to propose strategies for false news / rumors, merchandising, and campaign monitoring. Content must highlight Census date, duration, purpose, importance, an role of general public. 23 companies participated in tender, 17 approved for review, 10 shortlisted for final presentation, and 3 were selected on basis of Creative work on 15<sup>th</sup> February, 2022. The selected agencies were:

- M/s Creative Junction Pvt. Ltd
- M/s Adage Communications Pvt. Ltd
- M/s Midas Pvt. Ltd.

#### VII. Work Distribution:

While no strict rules for assigning work to agencies by PID, the usual procedure involves announcing competition for every publicity assignment, receiving proposals from three companies, and allocating work accordingly. Pakistan Bureau of Statistics also followed this criterion.

#### VIII. Hiring of Social Media Firm

No one can deny the importance of social media for spreading messages to desired audience. Hiring a Social Media firm for the 7<sup>th</sup> population and Housing Census was recommended by the Census Advisory Committee. A Request for Proposal (RFP) was prepared based on the



recommendations. RFP outlined the requirements and selection criteria for the social media firm. M/s MindMap Communications Pvt. Ltd. was hired after fulfilling all formalities. The contract was signed on 18<sup>th</sup> March, 2022 between PBS and M/s MindMap Communication. A selection committee chaired by Mr. Ayazuddin, Member Census and Surveys was formed. 4 Companies tendered. Submissions were thoroughly reviewed. After fulfilling all formalities, a company was hired for one-year Social Media campaign.

# 2.6.3 Second Phase: Early Education Phase (Feb 22-Sep 2022)

## I. Census Logo

Designing logo for first ever digital Census was an important milestone achieved by PBS. All agencies submitted different designs. Committee comprising of Senior officers thoroughly reviewed all logos. Logo by M/s Adage Communications Pvt. Ltd. was selected. Logo was unveiled by Federal Minister Professor Ahsan Iqbal on 20th June, 2022 at PBS Head Office.









Figure 2.12: Unveling of Census Logo



#### II. Finalization of IEC material

IEC and branding material like Flyers, Bags, Caps, Vests prepared before start of Census. Publicity content was continuously revised based on phases of Publicity Campaign, languages, and target audience. Publicity content for Print and Electronic Media Campaign, Explainer Videos, Census Jingles, and video messages of Brand Ambassadors were submitted by advertising agencies and shortlisted by committee.



Figure 2.13: IEC Material

#### III. Standard policies of Advertisement in Field

To proceed for a standardized publicity campaign throughout the country, instructions (SOPs) on Publicity Campaign were also circulated in Field through operational manual. Similarly, the policy for inauguration of field activities was circulated among field force.

#### IV. Campaign on Social Media

Keeping in view the importance of social media, 6 PBS social media handles were utilized to engaged followers and cover all target audience. Due to publicity budget rationalization the campaign was restricted to social media during early education phase.



## V. Publicity in social media during Education Phase









Figure 2.14: Screen Shots of different Tutorial Video

#### VI. Other Activities

Regular press releases and tickers were shared with Media after each activity of 7th Population and Housing Census. Links with media houses and channels were established for talk show appearances, Columns in Newspapers, Panel Discussions and Interviews.

## 2.6.4 Third Phase: Awareness Phase (Oct 22- Jan 23)

## I. Brain Storming Session with Demographers

One-day brain storming session with Demographers was held on 2<sup>nd</sup> December, 2022. Conceptual manuals, videos. and presentations for training of Staff Field were shared. Initiatives allowed for gathering feedback on methodology, questionnaire, and training material. Concerns about methodology were addressed.



Figure 2.15: Brain Storming Session with Demographers



#### II. First Media Briefing

Media was briefed about the upcoming Digital Census in a Press Briefing on 13th Jan, 2023 at National Census Coordination Centre (N3C) PBS, Head Office, Islamabad.



Figure 2.16: : Media Briefing

## III. Engagement of National and International Organizations

Relevant national and international organizations were oriented through a dedicated session on 27th Jan, 2023, providing them with a thorough understanding of census procedures. This enhanced their confidence and facilitated their cooperation.



Figure 2.17: Session with National & International Organizations

#### IV. Brief to Census Commissioners about their role in Census

Provincial Census Commissioners were also briefed about their role through informative Session on 26<sup>th</sup> January 2023.



Figure 2.18: Session with National & international organizations



## V. Song Competition

Pakistan Bureau of Statistics launched a census song competition on social media. The theme was "tum he say hay tumhara kal". Muhammad Danish Butt won and was awarded token money by Chief Census Commissioner at the inauguration ceremony of Self-Enumeration Portal.



Figure 2.19: Launch of Census Song Competition on Social Media "Tum he sy hay tumhara kal"

## VI. Social Media Campaign during Trainings

The training of Field Force for First Ever Digital Census was held in three Phases. During all Phases of Training, the Social Media Pages of PBS gave updates on activities of the exercise.











## VII. Publicity in Print Media during Awareness Phase



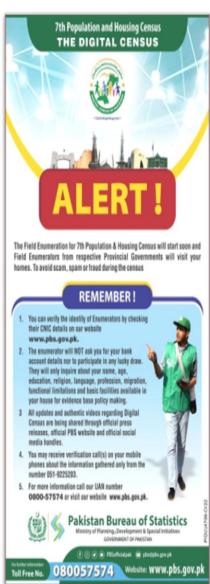




Figure 2.20: Publicity in Print Media during Awareness Phase

# 2.6.5 Fourth Phase: Motivation (Self Enumeration and Field Enumeration) (Feb 23-Apr 23)

Motivation Phase was the most important phase. Details of Publicity Campaign during Motivation Phase are as follows:

## I. Building Confidence of Media

Efforts were made to engage with media through interactive sessions and press briefings to disseminate accurate census information. Sessions included visits by senior journalists at PBS head office on 6th Feb, 2023, interactions with Media Persons at Provincial Census Coordination Centre (P3C) Lahore on 9th Feb, 2023, and Media Briefings on 16th and 27th Feb, 2023 at PBS Head office.





Figure 2.22: Interaction with Media Briefings (8th Feb, 2023)



Figure 2.21: Media Persons (16th Feb, 2023)



Figure 2.24: Interactive session with senior journalist (27th Feb, 2023)



Figure 2.23: Interaction with Media Persons (25<sup>th</sup> March, 2023)

## II. Inauguration of Self Enumeration Portal and release of Census Song

To give ownership of first Digital Census of Pakistan to the General Public, **PBS** launched Self-Enumeration Portal. The portal allowed respondents to enter household information. Federal Minister IT&T inaugurated the portal. Main Media Houses and Social Media covered the ceremony. PBS Social Media handles provided live coverage. Census Song was released. Winners of online song competition were awarded during the ceremony.



Figure 2.25: Inauguration of Self Enumeration Portal



## III. Publicity during Self-Enumeration

Launching ceremony of Self-Enumeration portal was covered live by PBS Social Media. Tutorial videos about filling information through portal were posted on Social Media. Thematic campaigns and reel campaign were shared through social media. Mainstream Media was also engaged in delivering Census message to General Public.



Figure 2.26: Publicity during Self-Enumeration



## IV. Inauguration of Field Operation by local Influential at tehsil / district and provincial level and by Chief Census Commissioner at National Level

The policy for Inauguration of Field activities was already circulated. Therefore, the Field Operation was inaugurated by Chief Census Commissioners at PBS, Head office Islamabad on 1st March, 2023. The inauguration was followed by a Media Talk by Chief Census Commissioner. The same procedure was followed at local levels. All the activities were highlighted by Social Media handles of PBS and got coverage in Media.

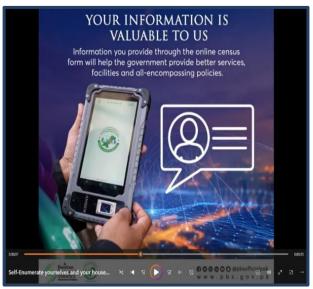


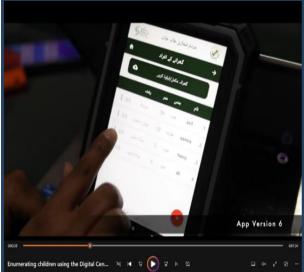


Figure 2.27: Inauguration of Filed Enumeration

## V. Social Media Publicity Campaign during Motivation Phase

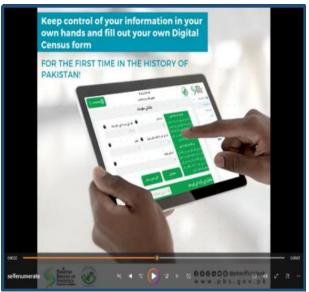
Keeping in view importance of social media, main emphasis of Publicity Campaign during motivation Phase was Publicity through social media. Thematic Campaigns posted through all social Media Handles during Field Enumeration to motivate General Public. Special animated tutorial videos made to illustrate procedure of Self Enumeration. Emphasis of all posts was communicating Digital Census updates. Further, videos posted to motivate Census Staff and Enumerators.















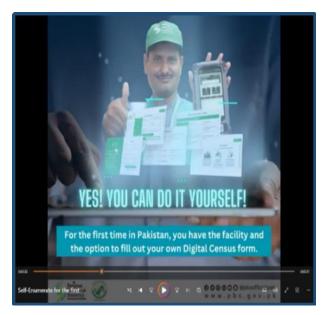
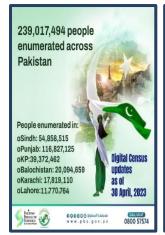




Figure 2.28: Publicity on Social Media during Self Enumeration Phase

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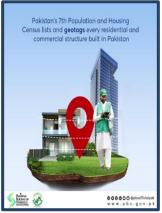






















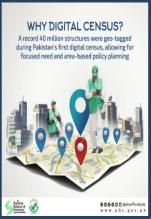










Figure 2.29: Social Media Posts during Motivation Phase



#### VI. Involvement of Influencers to boost Social Media Campaign

Influencers like **Ahsan Khan, Sarwat Gillani, Umer Alam** and **Junaid Niazi** having millions of followers, recorded messages for Population Census on their respective social media. **Dr Arfa Sayeda Zehra**, an Educationist and Urdu Language Expert also motivated general public to participate in census through PBS Social Media platforms.

In short, a Social Media Campaign was launched in which PBS successfully highlighted the information about Digital Census related information, use of Census Data, Facts and myths about Census and clarified fake News trending about Digital Census.



Figure 2.30: Involvement of Influencers to boost Social Media Campaign

#### VII. Mainstream Media (TV, Radio, Print) Campaign during Field Enumeration

The Publicity Campaign on Mainstream Media included:

#### i. TV

Advertisement on TV consisted of 789 spots of 30 seconds to 1 minute duration. The total air time for the advertisements was 9 hours 43 minutes and 50 seconds with 25 days of appearance on TV during the Campaign. 25 National and 9 Regional News channels were utilized throughout the campaign during peak hours. The Channels were carefully chosen on the basis of National and Regional representation and Target Rating Point (TRP) of particular Channel at that time. Besides, interviews, beepers, documentaries and tickers also went on air during prime time and morning shows in different phases of campaign. The time duration of these activities was 2 hours 48 minutes. Total viewership remained 182.7 million (all spots added). The census messages were conveyed through famous celebrities like **Bushra Ansari** and **Javed Sheikh** on TV and Radio.

Publicity Mode	Details							
	No of	Total Spots / Insertions (Paid)	Total Spots / Insertions	Channels/ Newspapers / Stations		Coverage / Viewership / Readership		
	days		(unpaid)	National	Regional			
TV	25	Spots: 789 (9 hours 43 minutes 50 seconds)	13 (interview, beepers) + documentaries + tickers  (2 hours 48 minutes)	25	9	182.7 Million (all spots added) (paid)		











Figure 2.31: Publicity on Electronic Media during Census

#### ii. Print

Print Media Campaign consisted of 21 days of advertisement with 420 insertions on 12 National (English & Urdu) and 16 Regional Newspapers with readership of 4788K per day.

All advertisements were coloured and were published on front pages of Newspapers. To get maximum coverage, the Newspapers were selected on the basis of Audit Bureau of Circulation (ABC) Certification. Apart from advertisements, more than 50 press releases covering important news on census activities were published in different National and Regional Newspapers throughout the Campaign. These advertisements got coverage in all important newspapers. Interviews of Chief Census Commissioner, Dr. Naeem uz Zafar and official spokesperson / Member SS/RM, Mr. Muhammad Sarwar Gondal were also published in different Newspapers.

Publicity Mode	Details						
	No of days	Total Spots / Insertions (Paid)	Total Spots / Insertions (unpaid)	Channels/ Newspapers / Stations		Coverage / Viewership /	
				National	Regional	Readership	
<b>Print</b> 23 420		420	Interviews +Press releases	12 (per day average)	16	Readership:4,788 K per day	



Figure 2.32: Advertisements in Print Media during Census

#### iii. Radio

Radio Campaign included 961 spots in 25 days. The time duration was 5 hours and 57 minutes. Pakistan Super League (PSL) transmission of Radio Pakistan was sponsored by PBS. Apart from Radio spots, announcements about participating in Census were also made through all frequencies of Radio Pakistan covering 98% population and 80% area of Pakistan including all major cities. Interviews and podcasts of Chief Statistician and Official Spokesperson were also broadcasted from Radio Pakistan and were repeated on different frequencies. Unpaid campaign consisted of 2 hours' announcements during PSL matches apart from regular advertisements. Through Radio Pakistan transmission those remote areas were covered where no other way of communication approaches.

	Details						
Publicity Mode	No of days	Total Spots / Insertions	Total Spots / Insertions	Channels/ Newspapers / Stations		Coverage / Viewership / Readership	
		(Paid)	(unpaid)	National	Regional		
Radio	25	Spots:961 (5 hours 57 minutes)	1 hour interview, 2 hours announcements (PSL)	Radio Pakistan	FMs	98% population and 80% of total area in Pakistan (Radio Pakistan) All main Cities FMs)	



#### VIII. Outdoor Publicity Campaign and Community Awareness Program

An Outdoor publicity campaign is the most effective way to enhance awareness. Therefore, PBS devised a wide-ranging strategy for Outdoor Publicity Campaign of 7<sup>th</sup> Population and Housing Census. The outdoor campaign consisted of Banners / Streamers display, Leaflet distribution, branding of PBS offices and vehicles and Community awareness programs such as use of IEC material (bags, caps and vests) by enumerators, meetings at grass root levels, Census Walks, participation in IT Expo and announcements etc. The content was carefully designed in a manner that not only communicated the census message to general public but also motivated them to become a part of this important exercise in huge national interest. The

details of outdoor Publicity Campaign are given below:

#### IX. Displaying of Banners and streamers

Banners were displayed at important public places like five main airports of Pakistan, prominent toll plazas, railway stations, PSO pumps, Census Support Centers and main locations in Islamabad and other cities. Streamers were also displayed alongside important roads to announce the start of 7<sup>th</sup> Population and Housing Census. The basic purpose was to communicate to General audience that census is in progress and their participation is important.



Figure 2.33: Census banner displayed at PSO Pump





Figure 2.34: Displaying of Census Banners at main areas during Census

#### X. Distribution of Leaflet/Flyers/Broachers

Flyers / Leaflets were distributed at public places like Toll Plazas, PSL Matches, Roads, Railway Stations, Malls and Educational Institutes etc. The main targe t was Educational Institutes where along with distribution of Flyers, the Census message was also verbally conveyed to the students by PBS representatives. The content of Flyers was targeted, creative and simple. In addition to that, it covered all the aspects to create general awareness about first ever Digital Census.



Figure 2.35: Distribution of Flyers to create general awareness among audience about Digital Census



#### XI. Branding of PBS offices, Vehicles and Census Support Centers

For widespread communication of Census message, branding of PBS offices and vehicles was carried out. Office branding strengthens organization's relationship with its employees and brings a sense of responsibility about the successful completion of the activity. It also gives an impression to outsiders that something important is in progress. Keeping this in view, all offices of PBS and Census Support Centers displayed banners and X-stands containing informative material on 7<sup>th</sup> Population and Housing Census within their premises. Similarly, Vehicle branding is a cost-effective way that captures a wider audience. All the vehicles used by PBS head office and Provincial offices used car back screen stickers during Field enumeration of First ever digital census.



Figure 2.36: Branding of PBs Vehicle to capture wider audience during field enumeration

#### XII. Community awareness Programs

The basic purpose of community awareness programs was to increase the community's knowledge about the purpose, procedure and importance of Population and Housing Census and counter all the misconceptions about the process and use of data. These programs included meetings at grass root level i.e., Hujra, Baithak, Announcements in mosques and through loudspeakers in streets, Census awareness walks in all major cities, participation in IT Expo with stalls of Self Enumeration and information about digital census, Seminar, workshops and orientation sessions about Digital Census and Use of IEC material like caps, vests and bags by enumerators. The outdoor publicity campaign of 7<sup>th</sup> population and Housing Census successfully gained the desired response from audience and played active role in success of Census.











Figure 2.37: Community awareness program during Digital Census



#### XIII. Involvement of Stakeholders during the motivation Phase of Digital Census 2023

#### i. Consultation with Demographers regarding data trends

A committee of renowned Demographers was constituted for "Trend Analysis of Census Data" for 7<sup>th</sup> Population and Housing Census. Several meetings of Committee were held. These exposures gave PBS an opportunity to get benefit from the expertise of renowned Demographers.



Figure 2.38: Consultation with Demographers regarding data trends

#### ii. Consultation with Provincial Administration regarding Field Operation and Results

Regular meetings between **Pakistan Bureau of Statistics higher management and ICT** and **Provincial administration** were held throughout the Field Operation of 7<sup>th</sup> Population and Housing Census to take important decisions about Census Field activities with consultation of stakeholders. Provincial Functionaries also remain part of the regular meetings of Census Monitoring Committee in which important decisions about 7<sup>th</sup> Population and Housing Census were taken.









Figure 2.39: Consultation with provincial administration about filed enumeration results



#### iii. Building Confidence among Media

The interactive sessions with Media include Press Briefing on 16<sup>th</sup> March, 2023 and 22<sup>nd</sup> May, 2023 at National Census Coordination Centre (N3C) at PBS Head Office, Interaction with Media Persons at Provincial Census Coordination Centre (P3C), Lahore at 9<sup>th</sup> Feb, 2023 and Media interactive session at Provincial Census Coordination Centre (P3C), Karachi on 25<sup>th</sup> March, 2023. Media was also invited in all the interactive sessions with stakeholders at Islamabad and Provinces and inauguration ceremony of Field Enumeration on 1<sup>st</sup> March, 2023 at PBS Head office. Main stream media was also invited at Press Conference at PBS Head Office to announce the closure of Field Operation and all digital activities on 22<sup>nd</sup> May, 2023 and were provided the latest updates on Pakistan's First ever Digital Census. These interactions helped Media to play the role of PBS Ambassadors in conveying the message of Digital Census to General Public and stakeholders.



Figure 2.40: Press Conference at PBS HQ to announce closure of Field Operations

#### iv. Engaging Political Parties

Political parties were invited to participate in interactive session on first ever Digital Census on 28<sup>th</sup> April, 2023. Parliamentarians from all Political Parties were invited, their concerns were also addressed during the session and were provided clarity on the census procedures.



Further, they were also briefed through one-on-one meetings and live talk shows on important NEWS Channels. This exercise fostered their confidence in the transparency and credibility of the census. In short, PBS utilized all modes of communication to run an effective Publicity Campaign. By involving stakeholders at every stage, the 7<sup>th</sup> Population and Housing Census has established transparency and credibility, addressed concerns and ensured a collective ownership and acceptance of the process.

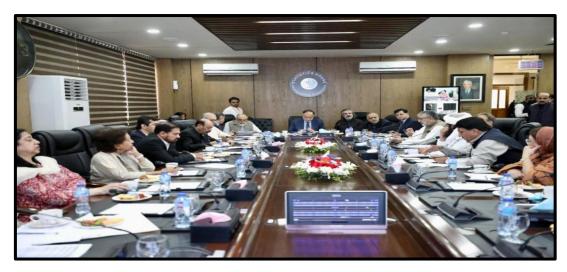


Figure 2.41: Interactive session with Political Parties

# XIV. Daily Media Monitoring Reports and addressing Queries of Political Parties and other Stakeholders

#### i. Counter Strategy on Census Matters

- The questions raised by Political parties, provinces and other stakeholders through different forums and other news about Digital Census were continuously monitored in Print, Electronic and Social Media by a dedicated team of Media Cell.
- A report on daily basis was prepared in this regard throughout the Campaign.

All the tangible queries were placed before senior management and then the queries were replied and clarified in appropriate manner i.e., through Social Media handles of PBS, Press releases, interviews in talk shows, tickers and advertisements on Print and Electronic Media. Replies to Frequently asked questions (FAQ's) were also posted through social media pages of PBS.

#### ii. Monitoring of Publicity Related activities in Field

A dedicated team from Media Group in head office was responsible for getting feedback from field about the activities related to Publicity Campaign of 7th Population and Housing Census.

#### 2.6.6 Fifth Phase: Reminder Phase (May 23)

The Field operation of 7th Population and Housing Census was not closed before making sure that all the Households in every city, village and district have been counted. For that purpose, Reminder messages were circulated through Social, Print and Electronic Media and UAN Number was provided to register complain. All complaints received through UAN Numbers, Social Media or any other way was forwarded to concerned authorities and properly addressed

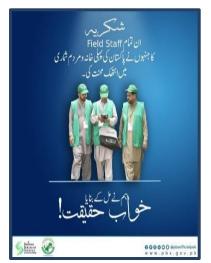


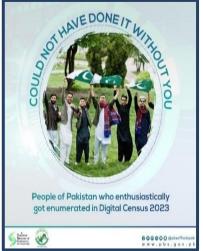
and all low coverage and under coverage areas were covered by the enumerators during Reminder Phase.

A specialized campaign was also launched in areas with low response rate in which UAN number was repeatedly announced to complain if enumerator had not visited. This campaign remained active on different FM and MW frequencies for three days before the end of Field Enumeration.

#### 2.6.7 Sixth Phase: Thank-You Phase (June 23-Aug 23)

After completion of Field Operation, PBS expressed its gratitude to all collaborating partners, stakeholders and General Public. Thank you messages were circulated through social media just after completion of Field activities. After approval of final results of Census 2023, Thank you message was circulated through Print and Social Media all over Pakistan.





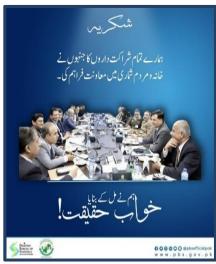


Figure 2.42: Thankyou message on print and social media

#### I. Issuance of Commemorative Postage Stamp

In order to commemorate the historic milestone of the successful completion of 1<sup>st</sup> ever Digital Census, PBS issued special postage stamp with Census logo in collaboration with Pakistan Post Office Department (PPOD). The Postage Stamp symbolizes pride and recognition for the remarkable achievement of transitioning from paper based to digital census. The postage Stamp was unveiled in a ceremony held on 8<sup>th</sup> June, 2023 at PBS



**Head office, Islamabad.** The ceremony was attended by representatives from Pakistan Post, NADRA, NTC, SUPARCO and senior officers of PBS. **The stamp was unveiled by Chief Census Commissioner, Dr. Naeem uz Zafar.** PPOD arranged a purchase stall for the audience for walk-in purchase of Postage Stamp issued.







Figure 2.43: Issuance of Commemorative Postage Stamp

#### II. Brand Building of PBS

The Campaign on Social Media handles of PBS remained active in all Phases of Digital Census 2023. The Campaign started from making pages on six platforms during 'Planning Phase'. Afterwards, during 'Early Education Phase' efforts were made to gain followers and engage audiences, then introductory posts about PBS and Digital Census were started during 'Awareness Phase' before the Census, followed by an extensive campaign during Enumeration in 'Motivation Phase' and finally ended with thanking the audience and stakeholders for their support during the whole activity during 'Thank-You Phase'.

#### 2.6.8 Major Highlights of Social Media Campaign.

To run an effective Social Media Campaign following tasks were performed:

#### I. Media Management, Digital PR, Audience and Media Engagement, Shout-outs etc.

Total of 21052 static, animated and videos were created and disseminated around the census through social media handles of PBS.Using a bell curve marketing strategy 8 social and digital media ads were produced and advertising campaigns were run, resulting in over 1.4 million landings through social media on the self-enumeration portal in the first week alone.

Three top 3 trends, two national songs, an online song competition, influencer marketing and metaverse marketing Trending (#2) and Narrative Building, Twitter Space Discussions added more value to the campaign.



## Conversations generated around census

9	39830 Twitter	<b>P</b>	7 Youtubers
<b>(</b>	5417 Facebook (Groups & pages)		305 Podcasts, 3636 On forums
0	1914 Instagram, 100+ Instagram Content	NEWS	12680 News
0	355 Tiktok,	<b>E</b>	5125 Videos
	2388 Blogs		14907 Web
X	1 Twitter Trend - #DigitalCensusPk  1 Twitter Space Discussion		295 Articles
11	International News Coverage Reuters, AP & Al Jazeera	O	200 Instagram Placements through 10 Releases, 4 Podcasts

### II. Thematic Campaigns on Awareness, Motivation & Action to highlight PBS

Digital Census, Updates, Capturing Work, Facts, Data, Debunking, News, Announcements etc. were designed.



Figure 2.44: Thematic Campaign in Awareness, Motivation & Action



i. Motivational Videos for Census staff and Enumerators especially females involved in Digital Census encouraged the staff to work dedicatedly for the National task.







Figure 2.45: Motivational Videos for Census Staff and Enumerators

#### III. Page Management & Reporting

The comments and responses on Social Media Pages were regularly monitored. Responded to over 1000 comments and messages daily with a total of over 300,000 overall with a 100% response rate.



#### IV. News and Announcements about Digital Census

All important updates, information and announcements were regularly posted on social media handles.

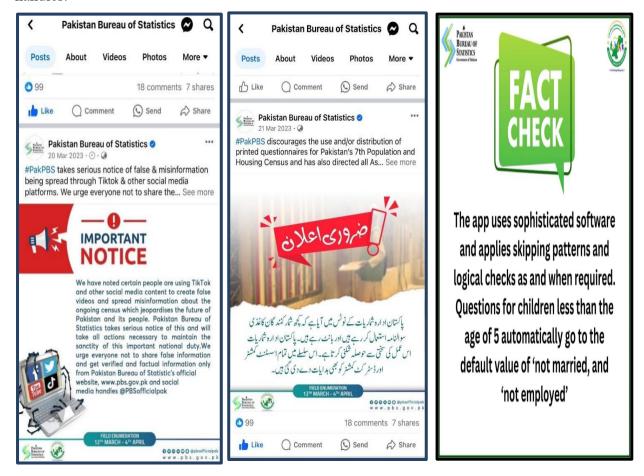


Figure 2.46: Announcement on Social Media about digital census

#### V. Crisis Communication, Risk Management and Media Management

Crises were mitigated through direct alternate and counter narratives and indirect counter narratives using influencers. Through Social Media handles during CEnsus, PBS:

- Mitigated 15 Trolls
- Generated Counter-Narratives on 4
  Themes (MQM, NADRA,
  Enumerators, Sindh Government)
- Mitigated 4 Account Attacks
- Managed 121 DM Conversations to Mitigate Negative Conversations On Twitter and Facebook



Figure 2.47: Crisis, Risk & Media Management



#### VI. Selected Post from Social Media handles



Figure 2.48: Posts on Social Media during Digital Census - 2023

#### 2.6.9 Data Dissemination Phase

#### I. Data Producers and Data Users Dialogue Workshops.

Pakistan Bureau of Statistics (PBS) in collaboration with UNFPA Pakistan hosted series of Dialogue Workshops between Data Users and Data Producers at Federal and Provincial levels from 20th November, 2023 to Dec, 2023. The workshops were attended by Stakeholders and Development partners i.e., Public organizations, Provincial Bureau of Statistics, researchers, data users and representatives from International Organizations etc. The workshop were



helpful in devising strategy for dissemination of Census 2023 data by gathering diverse perspectives, identifying needs, and addressing any existing gaps in the data dissemination process.





Figure 2.49: Data Users and Data Producers Dialogue Workshop Islamabad (20th November, 2023)

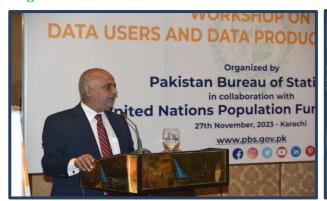




Figure 2.50: Data Users and Data Producers Dialogue Workshop Lahore (27th November, 2023)





Figure 2.51: Data Users and Data Producers Dialogue Workshop Peshawar (18th December, 2023)





Figure 2.52: Data Users and Data Producers Dialogue Workshop Karachi (7th December, 2023)



#### II. Launching ceremony of Key Finding Report of Census 2023

The **launching ceremony of Key Finding Report of Census 2023** was held on 19<sup>th</sup> July 2024. The event was attended by Federal minister PD & SI, Mr. Ahsan Iqbal. All stakeholders were present at the occasion. The announcement of Census results was made through all Media Channels. This communication effort encouraged audience to use the data and to continue interacting with PBS after completion of Census.























Figure 2.53: Launching Ceremony of Key Findings Report of Census 2023-19th July, 2024



KEY CENSUS RESULTS AND INSIGHTS



#### KEY CENSUS RESULTS AND INSIGHTS

This chapter highlights key insights from the 7<sup>th</sup> Population and Housing Census-2023. Detailed results are presented in Chapter 4 "*Demographic Characteristics*" and Chapter 5 "*Housing Characteristics*."

#### 3.1 Average Annual Growth Rates

The final results of the Digital Census-2023 were officially announced on August 7, 2023, through a gazette notification. Figure 3.1 illustrates the average annual growth rates for Pakistan, its four provinces—Punjab, Khyber Pakhtunkhwa, Sindh, and Balochistan—and the Islamabad Capital Territory as recorded in the Digital Census-2023. Additionally, Table 3.1 provides province-wise breakdown of the total population and average annual growth rates observed during the last three censuses. As can be seen, Pakistan's population has reached to 241.49 million up from 207.68 million in 2017. This reflects an average annual growth rate of 2.55% from 2017 to 2023. The growth rates observed for Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan, and ICT are 2.53%, 2.38%, 2.57%, 3.20%, and 2.81%, respectively.

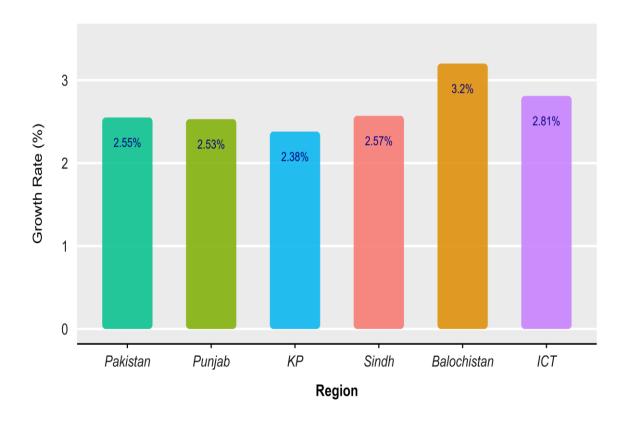


Figure 3.1: Growth Rates observed in the Digital Census



Region/ Province	Populati	Population (Million Nos.)			Annual Growth Rate (%)		
Region/ Province	1998	2017	2023	1998	2017	2023	
Pakistan	132.35	207.68	241.49	2.69	2.40	2.55	
Punjab	73.62	109.98	127.68	2.64	2.13	2.53	
Khyber Pakhtunkhwa	20.92	35.50	40.85	2.72	2.82	2.38	
Sindh	30.44	47.85	55.69	2.80	2.41	2.57	
Balochistan	6.57	12.34	14.89	2.47	3.37	3.20	
Islamabad	0.81	2.01	2.36	5.19	4.91	2.81	

Figure 3.2 provides a further comparative analysis by highlighting the average annual growth rates recorded in the last six censuses conducted in the country. A concerning observation is the rise in Pakistan's population growth rate to 2.55% in the Digital Census-2023, which comes after a steady decline since the 3<sup>rd</sup> Population and Housing Census held in 1972. This increase poses significant challenges for the policymakers, as it is expected to place added pressure on already limited resources—such as education, healthcare, and infrastructure—and intensify the strain on job markets as the labor force rapidly expands. Rising population growth threatens sustainable development, making it harder to reduce poverty and improve living standards. Therefore, the trend underscores the urgent need for effective population control measures, enhanced family planning initiatives, and substantial investments in social services. These actions are essential to addressing the challenges posed by a growing population and to promoting sustainable economic development.

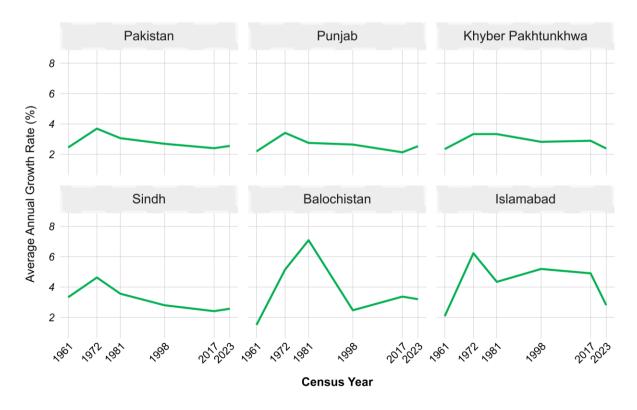


Figure 3.2: Growth Rates observed during the Last Six Censuses

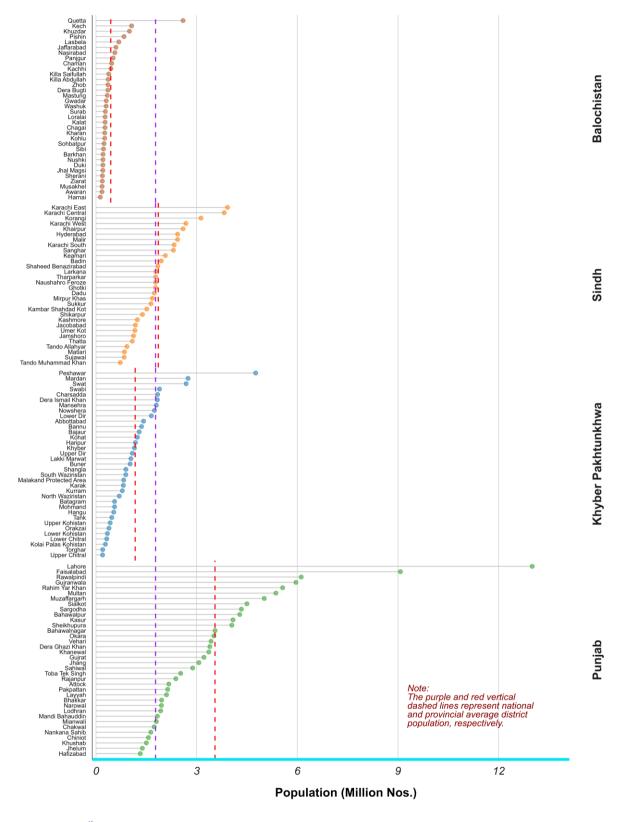


#### 3.2 District-level Population Dynamics

At the disaggregated level, the total population count, as recorded in the 7<sup>th</sup> Population and Housing Census-2023, at the district level, is shown in Figure 3.3. As can be seen, the districts with relatively high population across the four provinces include Lahore and Faisalabad in Punjab; Peshawar in Khyber Pakhtunkhwa; Karachi East and Karachi Central in Sindh; and Quetta in Balochistan. Additionally, Figures 3.4&3.5 illustrate district-level average annual growth rates across the four provinces, revealing notable variations both within and between provinces. Some districts show relatively low growth rates, while others exhibit unexpectedly high increases. Districts with growth rates near or above 4% include:

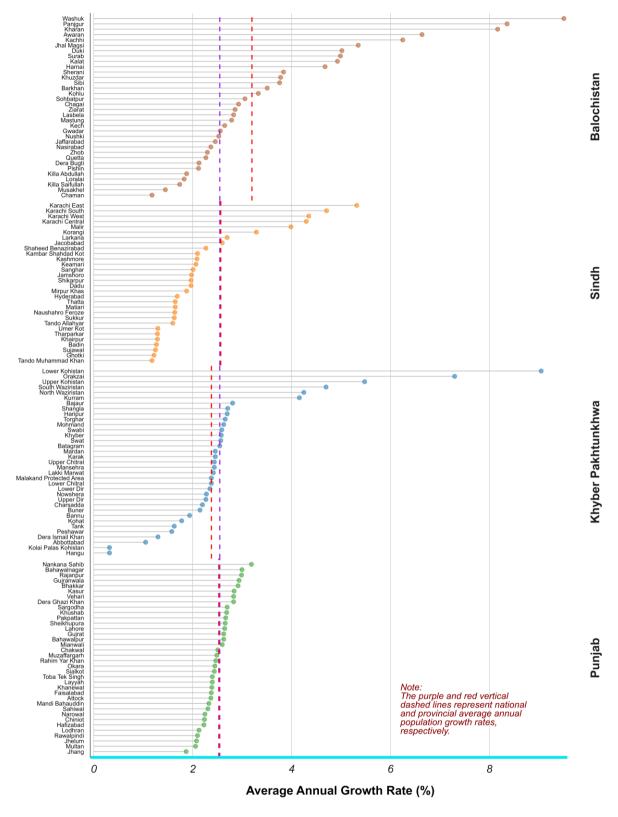
- In Khyber Pakhtunkhwa: Lower Kohistan (9.05%), Orakzai (7.3%), Upper Kohistan (5.48%), South Waziristan (4.7%), North Waziristan (4.25%), and Kurram (4.16%).
- In Sindh: Karachi East (5.32%), Karachi South (4.71%), Karachi West (4.35%), Karachi Central (4.3%), and Malir (3.99%).
- In Balochistan: Washuk (9.51%), Panjgur (8.36%), Kharan (8.17%), Awaran (6.64%), Kachhi (6.25%), Jhal Magsi (5.35%), Duki (5.02%), Surab (4.99%), Kalat (4.93%) and Harnai (4.68%).





Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.3: Population Count by District



Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.4: Average Annual Growth Rates by District

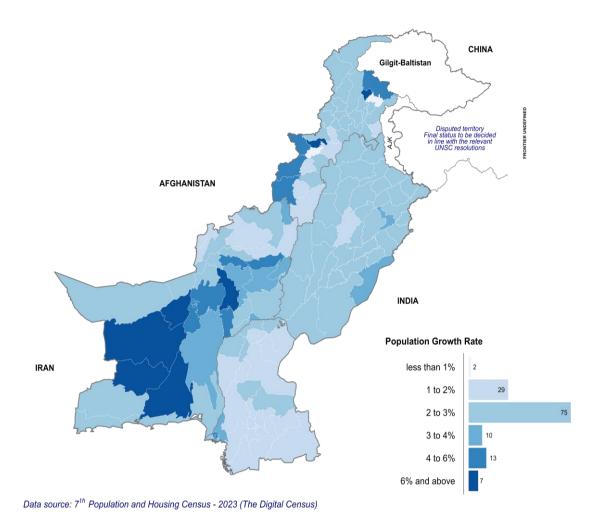


Figure 3.5: Map Showing AAGRs by District

#### 3.3 Provincial Population Shares

Figure 3.6 portrays population share trends at the provincial level and for Islamabad Capital Territory during all the Population and Housing censuses conducted in the country. It is evident that the share of Punjab has consistently declined over the years. For instance, in the 1951 census, Punjab accounted for 60.9% of the population, but this figure decreased to 52.9% during the Digital Census-2023. The decline in Punjab's share can be attributed mainly to the higher population growth observed in Sindh and Balochistan provinces. During this period, the population share of Sindh increased from 17.9% to 23.1%, while Balochistan's share grew from 3.5% to 6.2%. On the other hand, Islamabad Capital Territory experienced a moderate increase in its share, approximately 0.7% during the same period. (Figure 3.7 shows population shares for the provinces and ICT observed during the 7<sup>th</sup> Population and Housing Census-2023.)



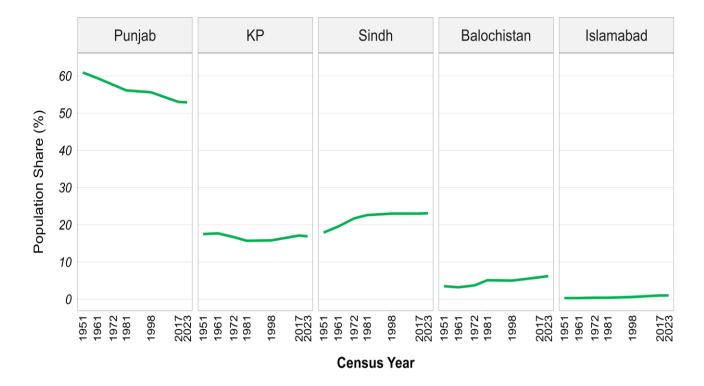
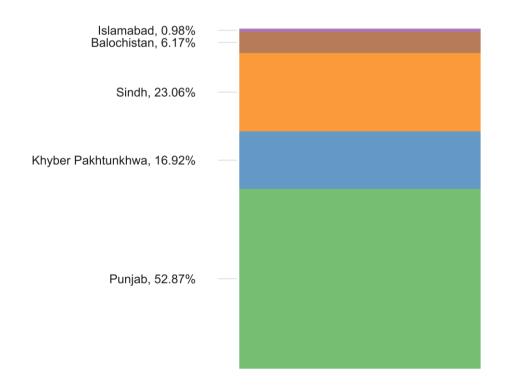


Figure 3.6: Trends observed in Provincial Shares



Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.7: Provincial Shares in Census-2023



#### 3.4 Leading Cities by Population Size

According to the 7<sup>th</sup> Population and Housing Census-2023, the top twenty most populated cities<sup>27</sup> in Pakistan account for nearly 24% of the country's total population and over 60% of its urban population. These cities, in order of population size, are: Karachi, Lahore, Faisalabad, Rawalpindi, Gujranwala, Multan, Hyderabad, Peshawar, Quetta, Islamabad, Sargodha, Sialkot, Bahawalpur, Jhang, Shekhupura, Gujrat, Sukkur, Larkana, Sahiwal, and Okara. Among these, ten cities have population exceeding one million: Karachi (18.87M), Lahore (13M), Faisalabad (3.69M), Rawalpindi (3.36M), Gujranwala (2.67M), Multan (2.22M), Hyderabad (1.92M), Peshawar (1.91M), Quetta (1.57M), and Islamabad (1.11M). These cities collectively account for over 20% of Pakistan's total population and 54% of its urban population—the two mega urban centers, Karachi and Lahore together comprise nearly 34% of Pakistan's total urban population. In the 6<sup>th</sup> Population and Housing Census-2017, Karachi and Lahore recorded population of 14.88M and 11.12M, respectively, reflecting average annual growth rates of 4.05% for Karachi and 2.65% for Lahore by 2023. Notably, among the next ten cities, with population between half a million and one million—the cities represented by small grey dots

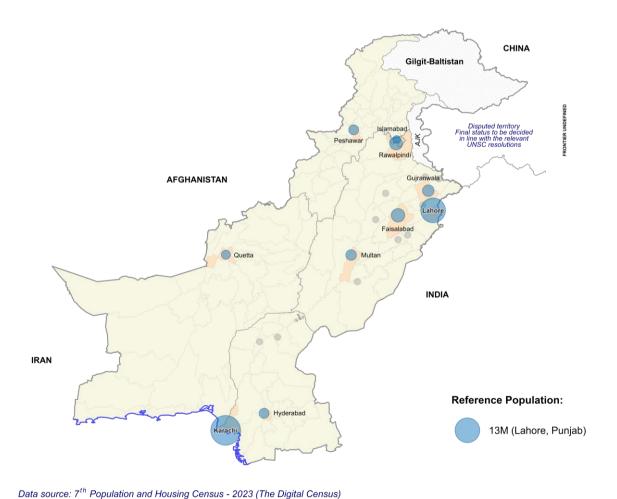


Figure 3.8: Top 20 Most Populated Urban Centers in Pakistan

<sup>&</sup>lt;sup>27</sup> A citiy is an urban locality or agglomeration of more than one urban localities.



in Figure 3.8—eight are from Punjab (Sargodha, Sialkot, Bahawalpur, Jhang, Shiekhupura, Gujrat, Sahiwal and Okara), two from Sindh (Sukkur and Larkana), while none belong to Khyber Pakhtunkhwa or Balochistan.

#### 3.5 Age and Gender Distribution

The age-sex population distribution, excluding the head count without any additional information, for the four provinces and ICT observed during the Digital Census can be seen in Figure 3.9. The most striking feature of the age-sex population distribution is that over half of the population recorded during the census is under 20 years old, nearly 80% is under 40, and only 20% is above 40. This demographic trend carries significant economic implications for the country as the rapid growth of the youth population may further strains the already meagre economic resources of the country. Thus there is a risk that the job market may not be able to absorb this influx, potentially leading to higher unemployment, underemployment, and social unrest. Strategic planning, investment in education, skills development, and economic diversification are therefore essential to address these challenges and ensure sustainable growth. Furthermore, Figure 3.9 also highlights differences in male and female population across different age groups. As the overall sex ratio has risen from 104.91 observed during the 6<sup>th</sup> Population and Housing Census-2017 to 106.12 derived for the Digital Census, the increase is, however, more pronounced in the lower age groups, particularly for those under 20 years old, where the male population exceeds the female population by over 4 million.

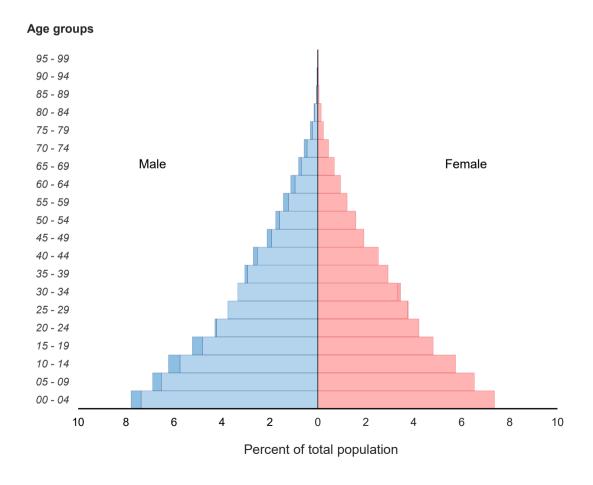


Figure 3.9: Population Pyramid (Age-sex Population Distribution)



#### **Population Density Analysis** 3.6

Population density, measured as people per square kilometer of land area, is estimated at 303.36 in the Digital Census at the national level. However, the population is not uniformly distributed across all the regions. Balochistan, with its challenging terrain, has a more dispersed population, whereas Punjab, Sindh, and Khyber Pakhtunkhwa provinces have higher population concentrations—Population density for Punjab, Khyber Pakhtunkhwa, Sindh, Balochistan and Islamabad Capital Territory in the Digital Census has been estimated at 535.64, 348.94, 339.60, 35.53 and 2211.22 persons per square kilometer, respectively. Major urban centers like Karachi, Lahore, Faisalabad, Multan, Rawalpindi, Hyderabad, Peshawar, Sukkur, and Rahim Yar Khan are particularly densely populated.

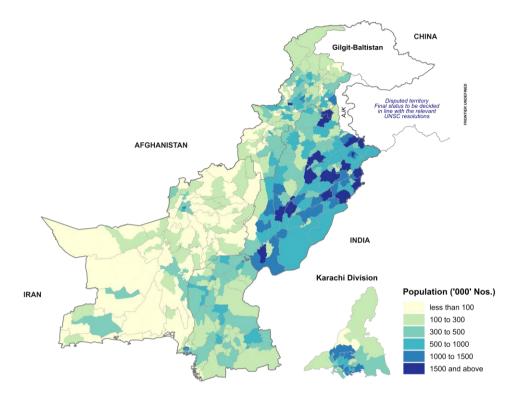
In Pakistan, following a Population and Housing Census, population density is traditionally mapped at the district level. However, this method has its own limitations, as population concentrations often vary significantly within districts, with city tehsils typically being more densely populated than surrounding areas. To address this, tehsil-level mapping of population density for the Digital Census has been introduced. This approach provides a more accurate representation, revealing that some tehsils in districts like Bahawalpur, Dera Ghazi Khan, Khairpur, and Jamshoro are actually less populated than they would appear under the district-level mapping. It also highlights the diverse population distribution within Balochistan province, which would otherwise be obscured if district-level aggregation is employed. (The Tehsil-level population distribution and population density observed during the 7th Population and Housing Census-2023 are presented in Figures 3.10 & 3.11, respectively.)

The top 15 tehsils with the lowest and highest population densities are shown in Table 2.2. As is obvious, variation in the population density across the country is remarkably huge. For example, Nokundi tehsil in the Chagai district has an extremely low population density of only 1.90 people per square kilometer, whereas in stark contrast, Lyari tehsil in Karachi South district has been estimated with an astonishingly high population density of approximately 158,000 people per square kilometer<sup>28</sup> (For further clarity regarding the high population density in certain districts of Karachi Division, tehsil-level density map of Karachi Division, with classification specific to the area, is provided in Figure 3.12).

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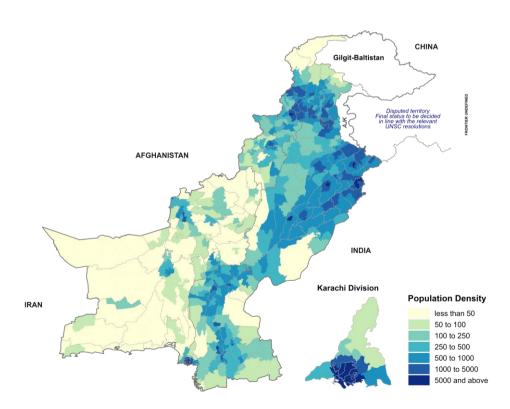
<sup>&</sup>lt;sup>28</sup> To place this figure in a global context, Manila may serve as a benchmark, with over 42,000 people living in every square kilometer, making it one of the most densely populated cities in the world.





Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.10: Tehsil-level Population Distribution



Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.11: Tehsil-level Population Density (People/km²)



Table 3.2: Top 15 Tehsils with the Lowest and Highest Population Density

Lo	owest Density Tehs	ils	Highest Density Tehsils			
District Tehsil		Density	District	Tehsil	Density	
Chagai	Nokundi	1.90	Karachi South	Lyari	158,313	
Chagai	Taftan	2.07	Karachi South	Garden	125,705	
Chagai	Yak Machh	3.03	Karachi Central	Liaquatabad	91,284	
Awaran	Awaran	3.50	Karachi Central	Nazimabad	71,593	
Zhob	Kashatoo	3.65	Karachi West	Orangi	66,324	
Sibi	Sangan	3.94	Karachi Central	New Karachi	64,763	
Panjgur	Gichk	4.00	Karachi East	Jamshed Quarters	59,638	
Awaran	Jhal Jhao	4.41	Karachi South	Aram Bagh	59,306	
Sibi	Kot Mandai	4.93	Karachi East	Ferozabad	58,385	
Washuk	Mashkhel	5.76	Karachi West	Mominabad	52,669	
Kalat	Gazg	5.96	Korangi	Model Colony	49,088	
Khuzdar	Aranji	6.78	Karachi Central	Gulberg	43,837	
Awaran	Gishkore	6.87	Karachi Central	North Nazimabad	40,105	
Washuk	Washuk	7.42	Korangi	Landhi	35,858	
Kharan	Tohmulk	7.85	Karachi East	Gulshan-E-Iqbal	33,776	

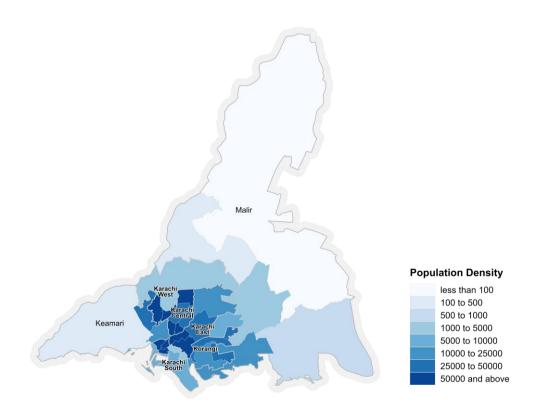


Figure 3.12: Population Density of Karachi Division

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Although Figures 3.10&3.11 effectively illustrate the population distribution and density from the 7th Population and Housing Census-2023, the broad classification of data can sometimes obscure underlying patterns. For example, in the case of total tehsil-level population, the highest class—representing tehsils with a population of 1.5 million or more—also includes ten tehsils: Lahore City, Rawalpindi, Faisalabad City, Model Town, Shalimar, Multan City, Gujranwala City, Islamabad, Peshawar, and Sialkot. However, despite a class gap of half a million or less in the preceding classes, the population of these tehsils range between 2 million and 4.2 million. wide range makes This classification less intuitive and may lead to misinterpretation.

Therefore, a proportional symbol map, which scales symbols continuously based on exact data values rather than graduated into classes of only a limited number of sizes, may better reveal patterns and insights within the data.

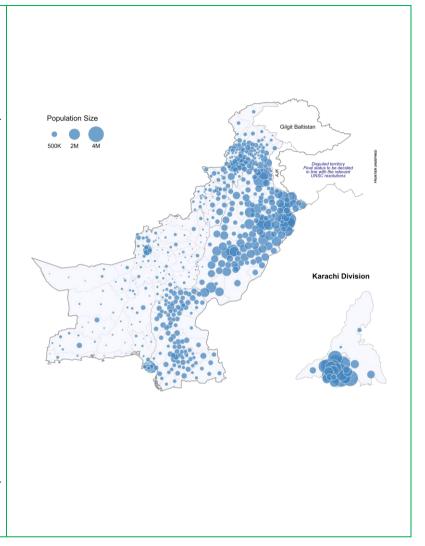


Figure 3.13: Tehsil-level Population Distribution at Continuous Scale<sup>29</sup>

#### 3.7 Inter-Regional Migration

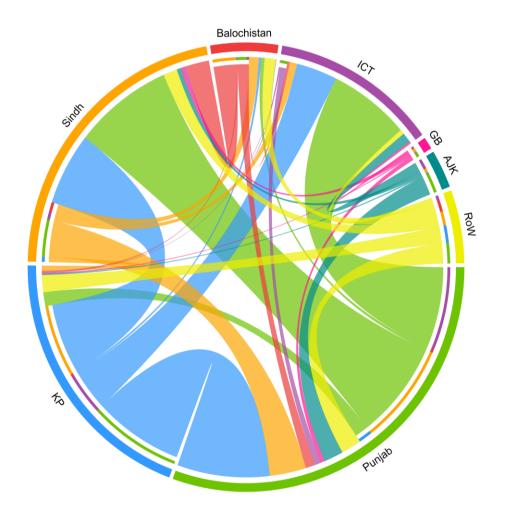
The 7<sup>th</sup> Population and Housing Census-2023 provides important insights regarding interregional migration trends<sup>30</sup> across Pakistan. Punjab, with a population exceeding 127 million, emerges as both a major source and destination of migration, with large numbers of people moving to and from other provinces. Notably, the highest migration flow is from Punjab to Sindh, accounting for approximately 50.2% of Punjab's total migration. Sindh, home to around 55.7 million people, particularly Karachi, serves as a key economic hub attracting migrants from various regions. Another significant migration flow is from Punjab to Islamabad Capital Territory (ICT), representing about 41.2% of Punjab's migration.

<sup>&</sup>lt;sup>29</sup> The legend only represents the main graph, thus excluding the zoomed-in inset graph for Karachi Division.

<sup>&</sup>lt;sup>30</sup> Migration estimates are derived based on respondents' birth district and their current district of residence.



Similarly, inter-provincial migration from Khyber Pakhtunkhwa, with a population of approximately 40 million, to Punjab is substantial, comprising about 44.9% of KP's total migration, making it one of the most significant migration corridors. Additionally, migration from Khyber Pakhtunkhwa to Sindh and Islamabad accounts for 34.1% and 19.8% of KP's total migration, respectively. Migration from Sindh to Punjab is also notable, standing at 62.4% of Sindh's total migration. Balochistan, with a population of about 14.9 million, experiences limited inward migration due to its lower urbanization and economic opportunities. The interplay of migration between these regions highlights the role of economic hubs in shaping internal migration trends, with cities such as Karachi and Lahore serving as key destinations for incoming populations. Figure 3.14 depicts inter-regional migration patterns observed in the 7<sup>th</sup> Population and Housing Census-2023,<sup>31</sup> with ribbons are colored based on the origin (out-migration region).



**Figure 3.14: Inter-regional Migration Trends** 

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<sup>&</sup>lt;sup>31</sup> For Gilgit-Baltistan (GB) and Azad Jammu and Kashmir (AJK), only out-migration is considered.



#### 3.8 Inter-Censal Literacy Trends

Literacy rates vary significantly across regions. The 7<sup>th</sup> Population and Housing Census-2023 estimates literacy rates at 60.65% for Pakistan overall, with 83.97% in Islamabad Capital Territory (ICT), 66.25% in Punjab, 51.09% in Khyber Pakhtunkhwa, 57.54% in Sindh, and 42.01% in Balochistan. As illustrated in Figure 3.15, district-level data further highlights disparities in literacy attainment. While districts such as Rawalpindi, Karachi Central, Gujrat, Jhelum, Karachi East, Korangi, Lahore, Karachi South, Sialkot, Chakwal, Abbottabad, Gujranwala, Narowal, Haripur, Upper Chitral, Faisalabad, Toba Tek Singh, Mandi Bahauddin, and Attock report literacy rates exceeding 70%, others like Torghar, Nasirabad, Kohlu, Sujawal, Thatta, Bajaur, Dera Bugti, Sherani, Lower Kohistan, Washuk, Upper Kohistan, and Kolai Palas Kohistan struggle with rates below 30%.

Additionally, a comparison with the 5<sup>th</sup> Population and Housing Census-1998<sup>32</sup> reveals that progress in literacy over the past 25 years has been uneven across districts. Some districts, including Upper Chitral, Nushki, Mansehra, Lower Dir, Duki, Kasur, Musakhel, Kharan, Lower Chitral, Upper Dir, Karachi South, and Hafizabad, have made remarkable gains, with literacy rates increasing by more than 25 percentage points. In contrast, districts such as Tando Allahyar, Tando Muhammad Khan, Bannu, Malir, Mirpur Khas, Ziarat, Upper Kohistan, Kolai Palas Kohistan, Karachi Central, Karachi East, Korangi, Washuk, Chagai, Keamari, Kambar Shahdad Kot, Thatta, and Sujawal have shown only marginal improvements, with increases of less than 10 percentage points. Notably, Quetta is the only district that has experienced a decline in literacy rates over this period.

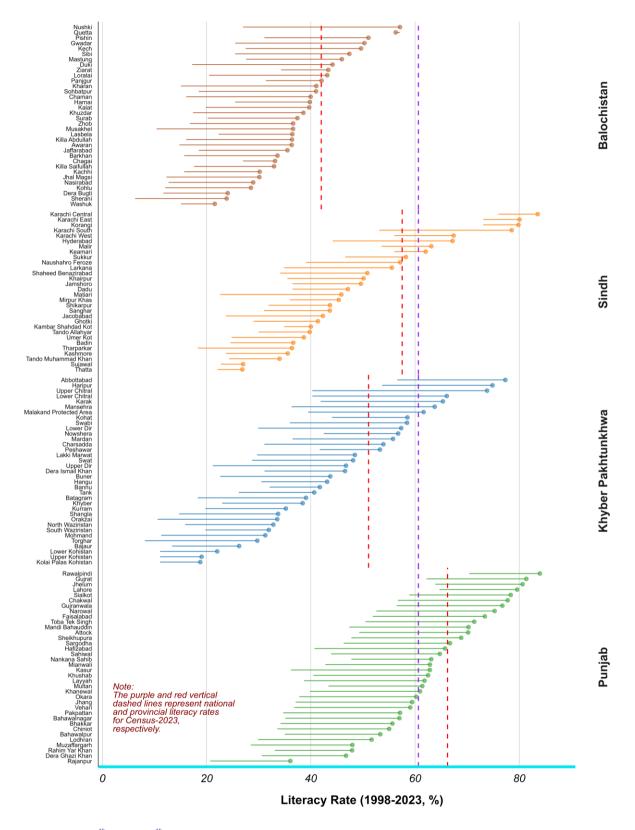
These disparities in literacy attainment highlight the need for region-specific educational policies, improved infrastructure, and targeted initiatives to bridge the literacy gap, particularly in underdeveloped areas. Addressing these challenges will be crucial for ensuring equitable access to education and fostering long-term socio-economic development across the country.

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<sup>&</sup>lt;sup>32</sup> The 5<sup>th</sup> Population and Housing Census-1998 has been selected for comparison primarily because variables such as literacy evolve slowly over time. To observe significant variations and meaningful trends in the data, a longer time span is essential.





Data sources: 5<sup>th</sup> (1998) & 7<sup>th</sup> (2023) Population and Housing Censuses

Figure 3.15: District-level Inter-censal Literacy Improvements

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#### 3.9 Literacy Gaps Across Genders

The literacy gap between male and female in Pakistan remains a pressing concern. While male literacy rates are significantly higher across all provinces, female literacy rates are considerably lower, particularly in rural areas. Urban areas generally report higher literacy rates due to better access to educational institutions, infrastructure, and resources. However, in rural regions, socio-cultural restrictions and economic constraints continue to hinder girls' access to education.

According to the 7<sup>th</sup> Population and Housing Census-2023, the disparity between male and female literacy rates is stark. In Khyber Pakhtunkhwa, where the overall literacy rate is 51.09%, female literacy lags far behind male literacy, with a gap of 27.42 percentage points—the highest gender gap among all the provinces. Similarly, the gap in Balochistan is 17.70 percentage points, in Sindh 14.02 percentage points, in Punjab 11.79 percentage points, and in Islamabad Capital Territory (ICT) is 9.10 percentage points. At the national level, the overall literacy gap between male and female stands at 16.16 percentage points. (Literacy rates by gender and urban/rural breakdown observed in the 7<sup>th</sup> Population and Housing Census-2023 can be seen in Table 3.3.)

Male **Female** Overall **Region/ Province** Urban Total Urban Total Rural Urban Rural **Total** Rural Pakistan 78.13 61.02 68.00 69.71 41.67 52.84 74.09 51.56 60.65 Punjab 80.37 65.91 71.98 74.01 50.51 60.19 77.30 58.37 66.25 Khyber Pakhtunkhwa 75.06 62.55 64.57 55.39 33.76 37.15 65.55 48.35 51.09 Sindh 48.06 64.23 27.52 50.21 76.27 67.80 72.26 38.14 57.54 Balochistan 64.51 44.16 50.50 46.49 26.59 32.80 55.86 35.74 42.01 Islamabad 87.19 89.13 88.23 77.87 80.16 79.13 82.91 84.88 83.97

Table 3.3: Literacy Rates by Gender and Urban/Rural Breakdown

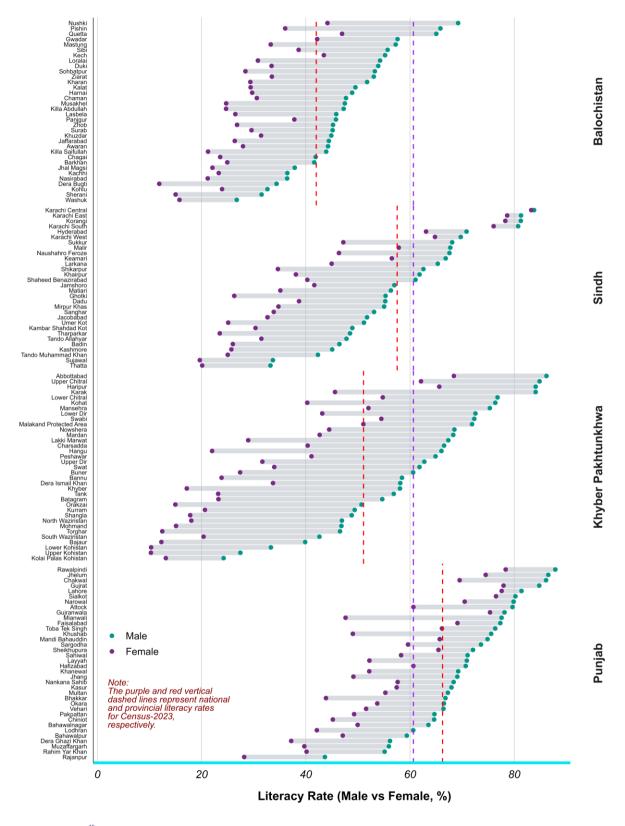
At the district level, literacy gap between males and females, as portrayed by Figure 3.16, varies significantly across Pakistan. Several districts have reported gender literacy gap exceeding 30 percentage points, all of which are located in Khyber Pakhtunkhwa province. These districts include Hangu, Khyber, Karak, Lakki Marwat, Kohat, Orakzai, Bannu, Torghar, Tank, Buner, Mohmand, Batagram, Upper Dir, and Shangla. These areas face deep-rooted socio-cultural and economic challenges that disproportionately affect female literacy. On the other hand, some districts have made notable progress in narrowing the gender literacy gap, reporting disparities of less than 10 percentage points. These districts include Malir, Rawalpindi, Narowal, Mandi



Bahauddin, Islamabad, Kohlu, Faisalabad, Panjgur, Hyderabad, Gujrat, Sheikhupura, Karachi West, Karachi South, Lahore, Sialkot, Korangi, Gujranwala, Karachi East, and Karachi Central. Many of these districts are urban centers with better access to educational infrastructure, resources, and awareness campaigns promoting gender equality in education.

It is important to note that 14 districts have reported female literacy rate below 20%. Of these, 10 are from Khyber Pakhtunkhwa—Khyber, Orakzai, Torghar, Mohmand, Shangla, North Waziristan, Bajaur, Lower Kohistan, Upper Kohistan, and Kolai Palas Kohistan. Three districts belong to Balochistan—Dera Bugti, Sherani, and Washuk— while Sindh has one, Sujawal.

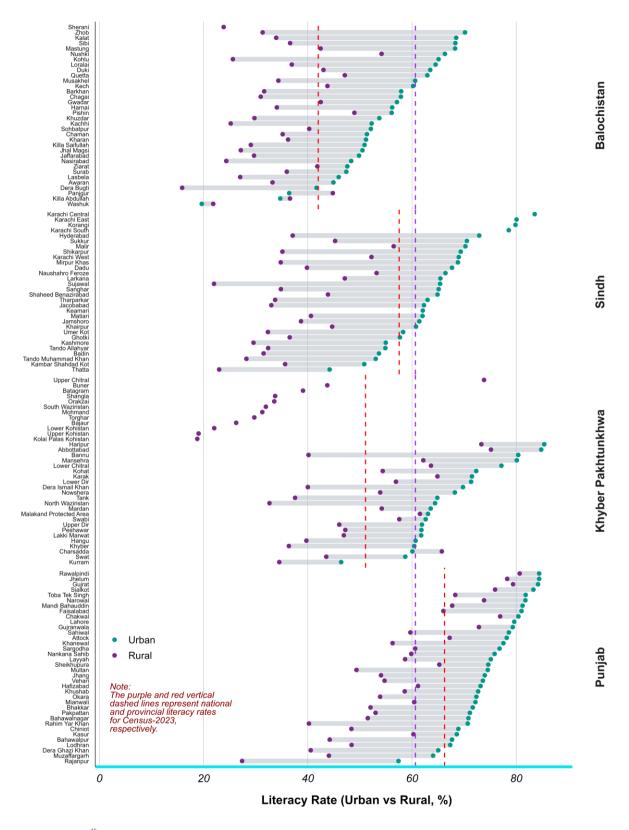
With regard to regional literacy differences, Figure 3.17 presents the literacy gap between urban and rural areas across Pakistan. Among the provinces, Punjab shows a relatively smaller difference, while Sindh and Balochistan exhibit more pronounced disparities. At the district level, a rural-urban literacy gap exceeding 30 percentage points is observed in Sujawal, Bannu, Kohlu, Zhob, Hyderabad, Kalat, Shikarpur, Mirpur Khas, North Waziristan, Sibi, Rahim Yar Khan, Sanghar, and Rajanpur. Districts with gaps ranging from 20 to 30 percentage points include Dera Ismail Khan, Jacobabad, Tharparkar, Dadu, Loralai, Tank, and several others. In contrast, districts with the smallest literacy differences, below 10 percentage points mostly in Punjab and Khyber Pakhtunkhwa—include Malakand Protected Area, Chakwal, Rawalpindi, Gujrat, Swabi, and others. Surprisingly, in a few districts such as Panjgur, Charsadda, Washuk, and Killa Abdullah, rural literacy rates are reported to be higher than urban rates. A similar pattern is seen in the Islamabad Capital Territory. The remaining districts either show a difference between 10 to 20 percentage points or lack either rural or urban areas altogether. For instance, some districts of Karachi and Lahore have no rural population, while several districts in Khyber Pakhtunkhwa and one in Balochistan (Sherani) are entirely rural with no urban areas.



Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.16: Gender Disparities in Literacy Attainment





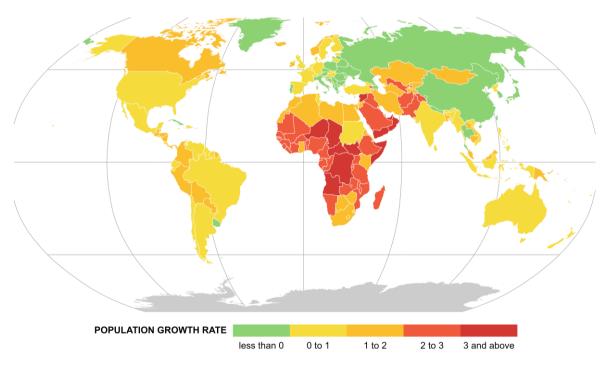
Data source: 7<sup>th</sup> Population and Housing Census - 2023 (The Digital Census)

Figure 3.17: Urban-rural Literacy Differences



#### 3.10 Pakistan in Global Population Context

In 2023, global population growth rates varied significantly, with only around 50 countries, including Pakistan, experiencing growth above 2%, and just 13 countries exceeding a 3% growth rate. These countries are predominantly developing nations in the Middle East and Africa, including Syria, which saw a population growth rate of 4.92%, Oman at 4.59%, the UAE at 3.70%, Niger at 3.31%, Yemen at 3.03%, Mozambique at 2.94%, Saudi Arabia at 2.39%, Bahrain at 2.31%, Qatar at 2.24% and Iraq at 2.15%. Conversely, the majority of European and American countries, along with Australia and several Asian nations, experienced population growth rates below 1% in 2023. This stark contrast highlights a troubling trend: population growth is more pronounced in regions with fewer economic resources, while it is slower in wealthier parts of the world. This observation underscores the challenging living conditions in many developing countries, where rapid population growth can strain already limited resources. The distribution of countries according to their population growth rates in 2023 is illustrated in Figure 3.18.

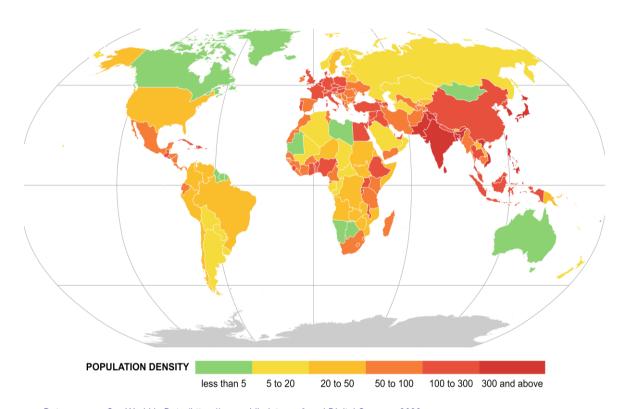


Data sources: Our World in Data (https://ourworldindata.org/) and Digital Census - 2023

Figure 3.18: Countries as per their Population Growth rates in 2023



Figure 3.19 illustrates the distribution of countries according to population density, measured in people per square kilometer, in 2023. As can be observed, there is a significant variation in population density across the globe, with some countries experiencing extreme levels of concentration while others have much sparser populations. Only around 50 countries have a population density exceeding 300 people per square kilometer. Among these, Monaco leads with a staggering population density of 26,145 people per square kilometer, followed by Macao and Singapore at 22,310 and 8,476, respectively. Other notable countries include Hong Kong at 6,772, Bahrain at 2,005, Maldives at 1,753, Bangladesh at 1,317, Palestine at 899, Taiwan at 658, and Mauritius at 627. Additionally, Lebanon has a density of 564, the Netherlands at 537, South Korea at 523, India at 484, Belgium at 387, Sri Lanka at 366, Japan at 330, Pakistan at 321, and Vietnam at 320. Out of the remaining countries, around 123 countries have a population density of less than 100 people per square kilometer, while 70 countries have a density of less than 50.



Data sources: Our World in Data (https://ourworldindata.org/) and Digital Census - 2023

Figure 3.19: Countries as per their Population Densities in 2023

# **Chapter-4**

## DEMOGRAPHIC CHARACTERISTICS





## 7th Population & Housing Census 2023

"FIRST EVER DIGITAL CENSUS"







51.48%



FEMALE 48.51%



AVERAGE ANNUAL **GROWTH RATE** 2.55%



HOUSEHOLD SIZE

6.30



**URBAN** 39%



RURAL 61%



MARRIED 65.97%



NEVER MARRIED 29.75%

#### MOTHER TONGUE



**PUSHTO** 18.15% BALOCHI

3.38%

**PUNJABI** 36.98% SINDHI 14.31%

SARAIKI



DISABLED POPULATION

3.1%



Functional Limitation Population

9.6%

#### POPULATION WITH AGE GROUPS



UNDER 5 15.17%

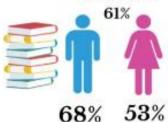
05 - 1629.64% 15 - 29 26.03%

BELOW 18 46.77%

BELOW 40 79.12%

65 & ABOVE 3.55%

LITERACY



**OUT OF SCHOOL 5-16 YEAR** 



25.37 MILLION i-e 35.60%

1/3 OF CHILDREN (5-16)YEAR OUT OF SCHOOL IN PAKISTAN



### **Demographic Characteristics**

#### 4.1 Population Size, Growth And Distribution

#### 4.1.1 Population Size and Growth

The population of Pakistan according to the Census-2023 has been recorded as 241.50 million (241,499,431), showing an increase of 33.81 million 16.28% from the previous Census of 2017. Table 3.1 shows that the population size of Pakistan has grown from 33.74 million in 1951 to 241.50 million in 2023, showing an increase of 207.76 million over the last 73 years. It is evident from Table 4.1 that Pakistan's population shows a steep rise in numbers since the year 1981 due to high growth rates experienced in the past with high population momentum.

Description	1951	1961	1972	1981	1998	2017	2023
Population (in 000's)	33,740	42,880	65,309	84254	132,352	207,685	241,499
Intercensal Increase (%)	-	27.09	52.31	29.01	57.09	56.92	16.28
Cumulative Increase (%)	-	27.09	93.57	149.72	292.27	515.55	615.76
Intercensal Average Annual Growth Rate	-	2.45 (1951-	3.69 (1961-	3.06 (1972-	2.69 (1981-	2.40 (1998-	2.55 (2017-
(%)		61)	72)	81)	98)	17)	23)

**Table 4.1: Population Size and Intercensal Growth Rates Since 1951** 

#### 4.1.2 Population Distribution by Administrative Units

The total population is 241,499,431 million, which includes individuals from restricted areas for whom only headcounts are available. Consequently, detailed demographic characteristics such as age, mother tongue, religion, disability, migration, literacy, employment and nationality are available for only 240,458,089 million people.

According to the Census-2023 results, Punjab has the largest share in Pakistan's population constituting 52.87%. The percentage shares of other provinces and territories of Pakistan in descending order are: Sindh 23.06%, KP 16.92%, Balochistan 6.17%, and ICT 0.98% (Table 4.2).

Table 4.2: Area, Population Density and Average Household size by Administrative Units: Census – 2023

Administrativ e Unit	Area (Sq. Km)	Population 2017 Number Percent		Population 2023 Number Percent		Population Density	Househol d Size
Pakistan	796,096	207,684,626	100	241,499,431	100	303.4	6.26
Khyber Pakhtunkhwa	101741	35,501,964	17.09	40,856,097	16.92	401.6	6.92
Punjab	205,345	109,989,655	52.96	127,688,922	52.87	621.8	6.39
Sindh	140,914	47,854,510	23.04	55,696,147	23.06	395.2	5.63
Balochsitan	347,190	12,335,129	5.94	14,894,402	6.17	42.9	6.43
ICT	906	2,003,368	0.96	2,363,863	0.98	2609.1	5.75



When compared with population figures of Census-2017. The percentage share of Balochistan's population share has increased by 0.23 percentage points in Census-2023 and Sindh's by only 0.02 percentage points, whereas Punjab's share has decreased by 0.09 percentage points. Furthermore, ICT has slight increase by 0.02 percentage points and KPK (merged FATA) decreased 0.18 percentage points. The reasons for this changed proportion of population could be either due to rate of natural increase or migration effects of people in different areas which needs further analysis.

#### 4.1.3 Household Size

The average household size of Pakistan is estimated as 6.3 persons in Census-2023 which has slightly declined from previous estimate of 6.4 persons in Census-2017. The average household size in rural and urban areas is 6.3 and 6.2 persons in Census 2023, respectively. Among the administrative units of Pakistan, the highest average household size is recorded in KPK with an average of 6.9 persons. For other administrative units of Pakistan, Balochistan has an average household size of 6.4 persons, Punjab has 6.4 persons on average, ICT has 5.5 persons and Sindh has 5.6 persons on average. Although an overall decline in the average household size is witnessed in all the administrative units compared to the Census-2017, the change is too small to have a notable effect on family size per household, reinforcing the fact that the norm and desire for large household sizes still persists in Pakistan.

#### 4.1.4 Rural-Urban Distribution of Population



Rural 61%



Urban 39%

According to the Census-2023, the rural population of Pakistan is recorded as 147,614,729 persons which is 61.12% of Pakistan's total population. This percentage has declined from the previous estimate of 63.56% in Census-2017. Compared to this, the urban population is recorded as 93,884,702 persons in Census-2023 which is 38.88 % of the country's total population indicating an increase of only 2.44 percentage points from the previous proportion of 36.44% in Census-2017. This depicts that all provinces have a predominantly rural population while Khyber Pakhtunkhwa has the highest concentration of rural population as compare to other provinces (Figure 4.1).

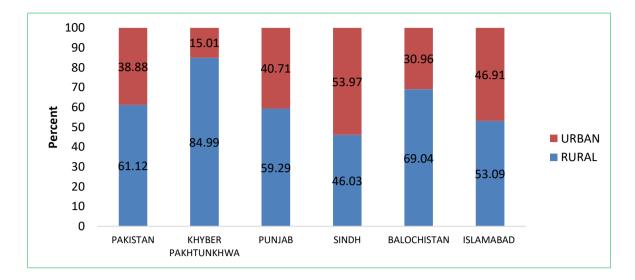


Figure 4.1: Rural/Urban Distribution by Administrative Units -Census 2023

Among administrative units, Sindh has the highest proportion of urban population 53.97% whereas KP has the highest proportion of rural population i.e. 84.99%. Punjab and Balochistan are overwhelmingly rural with respective proportion of 59.29% and 69.04% of population residing in rural areas. Although Punjab still has a majority of population living in rural areas, its urban population is growing at a fast pace making the province more urbanized by the day.

The total number of rural localities in Pakistan are 46,697 in Census-2023 as verified by revenue department. Out of these, only 17.86% have populations of 5,000 and above, whereas the remaining have less than 5,000 inhabitants. Among the provinces, Punjab has the highest number of rural localities 52.89%.

Table 4.3 shows the number of rural localities by size of population and their distribution by administrative units indicating that in terms of inhabitation in rural localities. Further disaggregation of the rural population by size shows that localities with a population between 2000-4999 persons are the largest in number with 26.59% - followed by rural localities with a population between 1000-1999 persons with 19.99%. Rural localities having a population of 200-499 persons are 10.29%.

Overall Punjab province has the highest concentration of rural population followed by KP, Balochistan and Sindh.

Table 4.3: Number of Rural Localities by Population Size and Administrative Units : Census-2023

Population Size Group	Pakistan	KP	Punjab	Sindh	Balochistan	ICT
Total	46,697	9,821	24,700	5,690	6,357	129
5,000 and Above	8,340	1,818	4,348	1,756	375	43
2000-4999	12,417	1,952	7,386	2,292	764	23
1000-1999	9,334	1,988	5,319	902	1,111	14
500-999	6,950	1,792	3,348	369	1,416	25
200-499	4,808	1,366	1,883	175	1,376	8
Less than 200	3,821	758	1,657	127	1,265	14
Un-inhabited	1,027	147	759	69	50	2



Table 4.4 illustrates population percentage as per urban localities. The number of urban localities in Census- 2023 is 657, increasing from 586 in Census-2017. Urban localities disaggregated by population size shows that despite having only 46 localities, the highest percentage of population i.e. 55.15% resides in the high population group i.e. 500,000 and above. Whereas for the population size less than 50,000, only 10.265 of total urban population resides covering 3258 urban localities.

This contrast highlights the concentration of the urban population in larger cities, while smaller localities contribute less to the total urban population. It also points out to a broader trend of urbanization in Pakistan, where larger cities are growing at a faster rate than smaller ones. In Census-2023 urban localities have been counted as per notification by the respective Provincial/Local Government Departments including Cantonment Boards.

Table 4.4: Number of Urban Localities by Population Size: Census-2023

Population Size Group	No. of Localities	Population	Percent of Population
500,000 and Above	46	51,781,590	55.15
200,000 to 499,999	0,000 to 499,999 43		13.29
100,000 to 199,999	76	10,530,232	11.22
50,000 to 99,999	134	9,461,324	10.08
25,000 to 49,999	200	7,144,107	7.61
10,000 to 24,999	128	2,321,212	2.47
5000 to 9,999	18	134,826	0.14
Below 5000	12	36,963	0.04
Total	657	93,884,702	100

#### 4.1.5 Population of Major Cities

A city is an urban locality or agglomeration of more than one urban locality. According to the Census-2023 results, there are thirteen cities\* with a population of more than one million and their total population accounts for 26.31% of Pakistan's total population and 56.55% of its total urban population. The largest city of Pakistan is Karachi with a population of 18.8 million having a share of 7.8 % of Pakistan's total population and 20% of Pakistan's urban population. Lahore is the second largest city with a population of 13 million followed by Faisalabad with a population of 3.6 million and Rawalpindi with 3.3 million. The population of these four cities accounts for 16.11 % of the total population, which means that every sixth person in Pakistan lives in these four major cities. During the intercensal period of 2017-2023, Rawalpindi being declared is the fastest growing city followed by Quetta. Table 4.5 gives the population of the thirteen largest cities of Pakistan as recorded in Censuses conducted from 1951 to 2023.



	City*33	1951	1961	1972	1981	1998	2017	2023
1	Karachi	1,068,459	1,912,598	3,515,402	5,208,132	9,339,023	14,884,402	18,868,021**
2	Lahore	849,333	1,296,477	2,169,742	2,952,689	5,443,495	11,119,985	13,004,135
3	Faisalabad	179,127	425,248	823,343	1,104,209	2,008,861	7,882,444	9,075,819
4	Rawalpindi	236,877	304,175	614,809	694,834	1,409,768	5,402,380	6,118,911
5	Gujranwala	120,852	196,154	323,880	600,993	1,132,509	5,011,066	5,959,750
6	Multan	190,122	358,201	538,949	732,070	1,197,384	4,746,166	5,362,305
7	Hyderabad	241,801	434,537	628,631	751,529	1,166,894	2,199,928	2,432,540
8	Peshawar	151,435	217,885	272,697	566,248	982,816	4,331,959	4,758,762
9	Quetta	83,892	106,633	158,026	285,719	759,941	2,269,473	2,595,492
10	Islamabad	-	-	76,641	204,364	529,180	1,009,003	1,108,872
11	Sargodha	78,447	129,291	200,460	291,362	458,440	3,696,212	4,334,448
12	Sialkot	156,378	167,294	203,650	302,009	421,502	3,894,938	4,499,394
13	Bahawalpur	41,646	84,377	133,782	180,263	408,395	3,669,176	4,284,964

**Table 4.5: Population of Major Cities: Since 1951** 

#### 4.2 Population Distribution by Sex, Age and Marital Status

#### 4.2.1 Sex Ratio

The sex ratio is considered to be an important demographic indicator showing the number of males per hundred females in a population and is reflective of the gender balance in the country. It is greatly affected by sex differentials in mortality and migration as well as under or over enumeration of male and female population. The sex ratio, in turn affects fertility, mortality, migration, labour force composition and other related factors.

According to the Census-2023, the overall sex ratio in Pakistan is 106.2 as shown in Table 4.6. The sex ratio has increased from 104.9 in Census-2023 to 106.2. The sex ratio is

\*\* Karachi Entire urban population of Karachi Division.

Lahore Entire Lahore District.

Faisalabad Muncipal Corporation.

Gujranwala Gujranwala Muncipal Corporation + Gujranwala Cantonment.

Peshawar Muncipal Corporation + Peshawar Cantonment.

Multan Muncipal Corporation + Multaan Cantonment.

Rawalpindi Rawalpindi Muncipal Corporation + Rawalpindi Cantonment + Chaklala Cantonment. Hyderabad Hyderabad Muncipal Corporation + Oasimabad Muncipal Committee

+ Hyderabad Cantt.

Islamabad Urban Population of Islamabad.

Quetta Quetta Muncipal Corporation + Quetta Cantonment.

Bahawalpur Bahawalpur Muncipal Corporation + Bahawalpur Cantonment.
Sargodha Sardogha Muncipal Corporation + Sargodha Cantonment.
Sialkot Muncipal Corporation + Sialkot Cantonment.



slightly higher in urban areas as 108.1 compared to rural areas as 105.0 of Pakistan. This may attributed to the migratory pattern of males to urban centres for work and education .

The sex ratio at birth in the Census-2023 is 105.2 decreasing from 106.3 since the Census-2017. In rural and urban areas, the sex ratios at birth are 105.3 and 104.9 respectively. Looking at sex ratios by age groups, the overall sex ratio for ages below 15 years is recorded as 106.3, whereas the sex ratio for working-age population between the ages 15-64 years is 105.1 males per hundred females. The sex ratio for the 65 years and above population has increased from 109.4 in 2017 to 122.5 in 2023. The age pattern of sex ratios is reflective of the changes in components of demographic change, i.e., fertitlity, mortlity and migration that needs further analysis of data.

Sex Ratio (2017) Sex Ratio (2023) Ages All Areas Urban All Areas Rural Urban Rural All ages 104.91 103.59 107.24 106.20 105.00 108.12 At birth 106.28 105.75 105.17 105.32 104.90 106.55 Less than 15 years 108.34 108.87 107.24 106.43 106.42 106.44 102.22 99.17 108.24 15 - 64 years 107.11 105.09 102.94 65 + years109.36 109.24 109.60 122.46 120.50 125.77

Table 4.6: Sex Ratio by Selected Age Groups and Rural/Urban: Census Year 2017 and 2023

Table 4.7 shows the sex ratios by various administrative units of Pakistan. It is observed that the sex ratio is highest in Islamabad with 112.6, followed by Balochistan 109.5, Sindh 108.8, Punjab 105.3 and KP 104.3. Further analysis is required to explain varying sex ratios among provinces. It is pertinent to mention that big urban center has usually higher sex ratios due to migration of males from small cities and rural areas especially fro work.

	C	ensus— 201'	7	<b>Census— 2023</b>			
Administrative Units	All Areas	All Areas Rural Urban		All Areas	Rural	Urban	
Pakistan	104.91	103.59	107.24	106.20	105.00	108.12	
KP	102.54	101.37	107.74	104.25	103.86	106.51	
Punjab	103.41	102.15	105.59	105.24	104.18	106.80	
Sindh	108.29	107.54	108.99	108.79	106.89	110.45	
Balochistan	110.82	110.46	111.78	109.45	109.85	108.50	
ICT	110.68	108.21	113.18	112.60	109.80	116.03	

Table 4.7: Sex Ratio by Administrative Units Rural/Urban

#### 4.2.2 Age Structure

The interaction of births, deaths, and migration has a considerable impact on the demographic behavior and emerging socio-economic characteristics of any society. However, like other developing countries, age reporting is not very accurate in Pakistan. This could be ascribed to illiteracy and ignorance about ages, and age heaping (tendency or digital preferences to report ages ending in 0 and 5 followed by even numbers.

According to the Census-2023, the population less than 15 years of age is 40.56% of the total population, reflective of high fertility levels. The population share below the age of five years is 15.17%, and below one year old is 2.15% of the total population. Moreover, more



than half of the population of Pakistan i.e., 55.89% lies in the working-age group of 15-64 years. The age group of 65 years and above represents only 3.55% of the total Pakistan population.

The age group representing youth (15 to 24 years) constitutes 18.56% of the total population and the age group of 15 to 29 years constitutes 26% of the total population, indicating that about 66.6% of population is below the age of 29 years, which is approximately 160 million people. The adult population above the age of 18 years has a share of the total population as 53.23%.



Less than 1 year

Total: 2.15% Male: 2.16% Female: 2.18%



Less than 5 years

Total: 15.17% Male: 15.14% Female: 15.20%



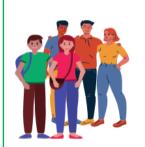
Less than 10 years

Total: 28.59% Male: 28.52% Female: 28.67%



Less than 15 years

Total: 40.56% Male: 40.61% Female: 40.52%



15-24 years

Total: 18.56% Male: 18.50% Female: 18.62%



18 & above

Total: 53.23% Male: 53.08% Female: 53.38%



15-64 years

Total: 55.89% Male: 55.59% Female: 56.19%



#### 65& above

Total: 3.55% Male: 3.79% Female: 3.29%

Table 4.8 portrays the distribution of population by age group and sex. The male population comprises of 51.5% of the total population, whereas the female population constitutes 48.5%. The age group with the highest number of people is 0 to 4 years, with percentage shares of 7.8% and 7.4% for males and females respectively. The percentage shares show a progressively decreasing trend for higher age groups indicating a young population.



Table 4.8: Population by Sex and Age Groups: Census – 2023

Age Groups	Male		Fema	le	Total*		
	Number	Percent	Number	Percent	Number	Percent	
All							
Ages	123,845,012	51.5	116,613,077	48.5	240,458,089	100	
00-04	18,744,989	7.8	17,726,432	7.4	36,471,421	15.2	
05-09	16,566,852	6.9	15,705,284	6.5	32,272,136	13.4	
10-14	14,973,045	6.2	13,817,137	5.7	28,790,182	12.0	
15-19	12,584,225	5.2	11,569,893	4.8	24,154,118	10.0	
20-24	10,326,849	4.3	10,141,864	4.2	20,468,713	8.5	
25-29	8,950,199	3.7	9,016,962	3.7	17,967,161	7.5	
30-34	7,733,666	3.2	8,026,004	3.3	15,759,670	6.6	
35-39	7,316,551	3.0	7,047,727	2.9	14,364,278	6.0	
40-44	6,473,516	2.7	6,063,242	2.5	12,536,758	5.2	
45-49	5,096,271	2.1	4,624,839	1.9	9,721,110	4.0	
50-54	4,220,110	1.8	3,827,003	1.6	8,047,113	3.3	
55-59	3,455,969	1.4	2,933,026	1.2	6,388,995	2.7	
60-64	2,706,476	1.1	2,278,774	0.9	4,985,250	2.1	
65-69	1,920,994	0.8	1,651,505	0.7	3,572,499	1.5	
70-74	1,385,959	0.6	1,076,494	0.4	2,462,453	1.0	
75+	1,389,341	0.6	1,106,891	0.5	2,496,232	1.0	

The Census 2023 population data reveals a broad base, highlighting a high proportion of younger individuals, with approximately 80% of the population being under the age of 40. As the population structure moves upward through the age brackets, there is a noticeable decline, reflecting a relatively smaller working-age and older population. This pattern indicates a youthful demographic profile, where the majority are in the younger age group, and there is a tapering in the middle-aged and senior segments. Such a demographic distribution suggests potential for future growth but also presents challenges related to employment, education, and the eventual need for increased support for an aging population in the years to come.

Table 4.9 portrays the age distribution data across different regions of Pakistan with notable variations. Younger age groups form a significant proportion of the population, with Balochistan having the highest percentage in all categories under 15 years, reaching 49.66% for those below 15. Islamabad, in contrast, has the lowest percentage of young individuals, reflecting an older demographic.

Table 4.9: Province Wise Percentage of Population for various Age Groups: Census-2023

Age Groups	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Less than 1 Year	1.92	2.27	2.08	2.33	1.23
Less than 5 Years	15.62	14.38	15.69	19.56	10.40
Less than 10 Years	30.55	26.64	29.93	36.18	21.30
Less than 15 Years	43.45	38.21	41.78	49.66	32.28
15-24 Years	19.04	18.39	18.37	19.43	18.51
18 & Above	50.00	55.77	51.99	43.36	61.77
15-64 Years	53.28	57.78	55.16	48.23	63.40
40-65 Years	15.49	19.11	17.52	12.33	21.92
65 & Above	3.26	4.00	3.06	2.11	4.31



The working-age population, 15-64 years is highest in Islamabad with 63.40% and Punjab with 57.78%, suggesting a relatively more balanced demographic structure. Balochistan has the lowest share with 48.23%, implying a higher dependency burden.

For older age groups 40-65 years and 65+ years, Punjab and Islamabad again show higher percentages, with Islamabad having the largest share of people aged 65 and above with 4.31%. This indicates a gradually aging population in these regions compared to Balochistan, which has the smallest elderly proportion 2.11%, highlighting a much younger population profile.

#### 4.2.3 Dependency Ratio

The dependency ratio is the proportion of dependents (young and elderly) to the working-age population. A high dependency ratio indicates more economic pressure on the workforce to support non-working individuals. A low dependency ratio suggests a larger working population relative to dependents, easing economic strain.

Table 4.10 shows that the overall age dependency ratio for all sexes is 78.92% as compared to 78.65% in Census 2017. The age dependency ratio for male is 79.86%, female is 77.96% and for transgender is 8.11%. the age dependency ratio is much higher in rural areas i.e. 86.24% compared to urban areas as 68.46%.

Dependency		2017		2023			
ratio	All Areas	Rural	Urban	All Areas	Rural	Urban	
All Sexes	78.65	87.44	65.12	78.92	86.24	68.46	
Male	80.95	91.56	65.24	79.86	88.07	68.41	
Female	76.32	83.38	65.03	77.96	84.37	68.55	
Transgender	8.86	12.27	6.23	8.11	12.11	6.92	

Table 4.10: Population of Province by Sex and Age Groups, Census-2023

Table 4.11 shows that the dependency ratio varies significantly across regions and rural /urban areas of Pakistan. Balochistan has the highest dependency ratio with 107.35%, which means that there are more dependents than working-age individuals in rural areas 113.90% experiencing an even greater burden. Khyber Pakhtunkhwa with 87.67% and Sindh with 81.31% also have high dependency ratios, particularly in rural regions, where Sindh reaches 97.84%, as compare to 69.23% in urban areas. Punjab with 73.06% shows a more balanced dependency ratio, though still higher in rural 78.17% than urban areas 66.08%. Islamabad has the lowest dependency ratio 57.72%, reflecting a strong working-age population and lower economic pressure. Overall, urban areas consistently have lower dependency ratios than rural regions, highlighting better economic opportunities and demographic balance in cities.



Table 4.11: Province Wise Age Dependency Ratio Census-2023

Danandanay watia	2023						
Dependency ratio	All Areas	Rural	Urban				
Khyber	97 67	90.73	72.01				
Pakhtunkhwa	87.67	90.73	72.01				
Punjab	73.06	78.17	66.08				
Sindh	81.31	97.84	69.23				
Balochistan	107.35	113.90	93.37				
Islamabad	57.72	58.79	56.47				

#### 4.2.4 Marital Status

The Census- 2023 also provides information on population distribution by marital status i.e married, never married, widowed, divorced and seperated. Table 4.12 shows the percentage distribution of population by marital status and age sex for persons aged 15 years and above. The data shows that overall 29.75% are never married, 66.12% are currently married, 3.78% are widowed, 0.35% are divorced and 0.15% are separated (separated category introduced in Census-2023 and included in married category.

Table 4.12: Number and Percentage of Population (15 Years And Above) by Marital Status and Age Groups: Census – 2023

			Cen	sus-2023		
Province/A	Area	Total	Never Married	Married	Widowed	Divorced
Pakistan	Total	142,924,350	42,524,711	94,499,824	5,400,798	499,017
rakistali	Percent	100	29.75	66.12	3.78	0.35
Khyber	Total	22,980,957	6,672,554	15,586,866	694,694	26,843
Pakhtunkhwa	Percent	100	29.04	67.83	3.02	0.12
Punjab	Total	78,673,948	23,598,193	51,360,627	3,345,906	369,222
ruijao	Percent	100	29.99	65.28	4.25	0.47
Sindh	Total	32,392,442	9,586,422	21,546,766	1,168,165	91,089
Silidii	Percent	100	29.59	66.53	3.61	0.28
Balochistan	Total	7,330,880	2,181,322	4,994,184	147,619	7,755
Daiocilistali	Percent	100	29.75	68.13	2.01	0.11
Islamabad	Total	1,546,123	486,220	1,011,381	44,414	4,108
IsiaiiiaUaU	Percent	100	31.45	65.41	2.87	0.27

Figure 4.2 illustrates the marital status of the population aged 15 years and above according to the Census-2023. The data shows that 66.12% of individuals in this age group are married, making it the dominant category, while 29.75% have never married, reflecting factors such as delayed marriage, educational pursuits, or economic considerations. A small segment only 4% is widowed, potentially indicating demographic trends, life expectancy differences, or cultural practices regarding remarriage. Notably, the divorced category is reported at 0%, suggesting that divorce is either rare or underreported, likely influenced by socio-cultural norms. Overall, the distribution highlights the prominence of marriage within the adult population, while also underscoring the socio-economic and cultural contexts that shape marital decisions.

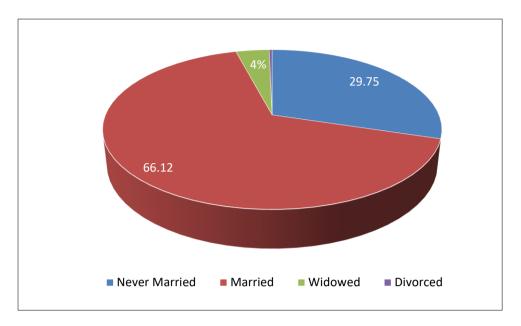


Figure 4.2: Percentage Distribution of Population (15 Years And Above) by Marital Status- Census 2023

Figure 4.3 highlights the province-wise distribution of the married population in Pakistan as a percentage of the total married population. Punjab dominates with the highest share of 54.35%, followed by Sindh at 22.80%. Khyber Pakhtunkhwa accounts for 16.49%, while Balochistan contributes 5.28%. Islamabad has the smallest percentage, making up only 1.07% of the total. Collectively, Punjab and Sindh form the majority, encompassing over three-quarters of the married population. This data showcases significant demographic variations across provinces.

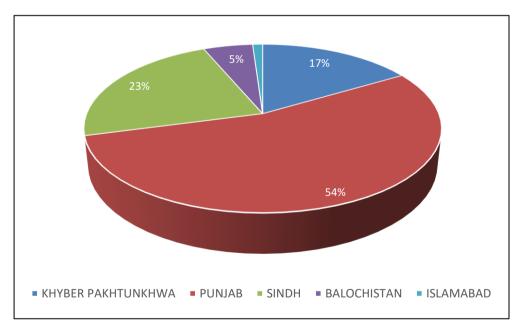


Figure 4.3: Percentage Distribution of Province Wise Marrird Population - Census 2023



Figure 4.4 highlights notable differences in marital status between males and females. The percentage of never-married males 34.13% is higher than that of females 25.09%, indicating a gender disparity in singlehood. In contrast, a higher proportion of females 68.51% are married as compared to males 63.59%. The widowed population is also significantly higher among females 5.76% than males 1.91%, likely due to differences in life expectancy and remarriage patterns. The overall age pattern of marital status plays a crucial role in shaping fertility rates and future population growth.

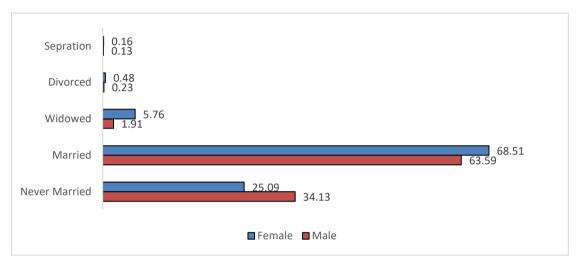


Figure 4.4: Percentage Distribution of Province Wise Married Population - Census 2023

#### 4.2.5 Marital Status of Females in Reproductive Age Groups

Figure 4.5 illustrates the distribution of marital status across urban, rural, and total population. The majority of individuals are married with 68.64%, in rural areas showing a higher proportion as compared to urban areas. The second most common category is Never Married with 29.44%, where urban areas slightly exceed rural percentages. 1.41% females are widowed makeing up a small proportion with similar values across all categories, while 0.38% are Divorced whereas 0.13% separated. Overall, the Urban and Rural distributions closely mirror the Total percentages, emphasizing the dominance of the Married and Never Married groups in the population.

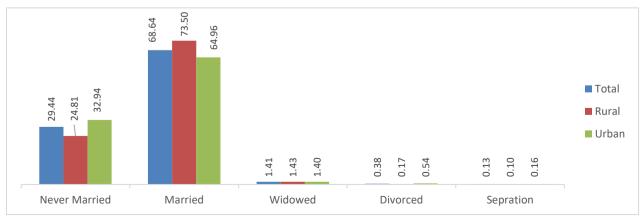


Figure 4.5: Percentage Distribution of Marital Status of females of reproductive age by Region Census-2023



Figure 4.6 illustrates the marital status distribution among females across different reproductive age groups (15–49 years). It reveals that marriage is the predominant status across all age groups. 93.17% of Married women observed in the age group of 35-39 years while, women aged 20–24, have a higher proportion of individuals who are 44.24% "Never Married" which decreases as age increases. Widowed and divorce are more noticeable in older age groups, indicating shifts in marital status with age. Separation is consistently minimal across all age ranges. Overall, the chart highlights the dynamic nature of marital status throughout a woman's reproductive years.

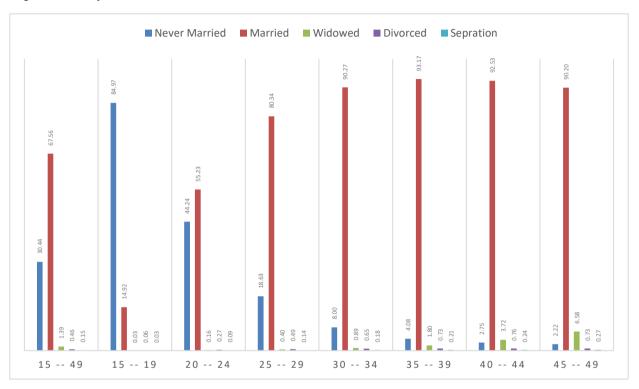


Figure 4.6: Percentage Distribution of Female of Reproductive Age (15-49 Years) by Marital Status: Census-2023

#### 4.3 Distribution of Population by Religion and Mother Tongue

#### 4.3.1 Population Distribution by Religion

The Population of Pakistan is predominantly Muslim, with the majority i.e. 231,68 million with 96.35 % reported as Muslim. The rural areas have 96.47% of Muslims, wheras urban areas stand at 96.16%. The percentage of total non-muslim population recorded in Census-2023 is 3.65%. The largest among minorities are Hindus i.e. 3.9 million with 1.61 % followed by Christians i.e. 3.3 million with 1.37 %. The number of christian population in urban areas has been recorded as 2.24%. Figure 4.7 illustrate the percentage of Non-Muslims. The total Non-Muslims population according to Census-2023 is 8.771 Million. Hindu Jati has the highest share among the Non-Muslims population with a percentage of 44.09% while Qadiani/Ahmadi has the lowest share with a percentage of 2.0%. Scheduled castes, Christians and Others contributes 15.39%, 37.63% and 1.03% respectively among the Non-Muslims population.



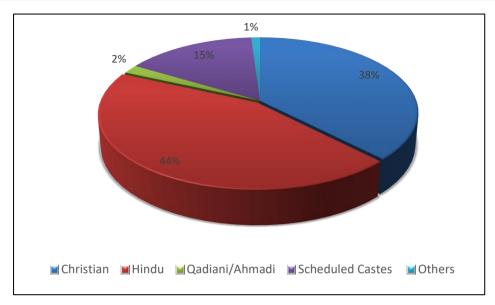


Figure 4.7: Percentage of Population by Non-Muslims

Table 4.13 provides religious demographic information based on the Census- 2023 data by province. The distribution varies across provinces where Khyber Pakhtunkhwa and Balochistan are almost absolute Muslim majority provinces, while highest number of non-Muslims reside in Sindh, followed by Punjab. The trends are same as compared to census 2017, the only difference is in improvement in reporting of scheduled caste by clear differentiation between Hindu and scheduled caste. Provincial analysis also shows variations in non-Muslim population. Sindh has the highest proportion of non-Muslims, with 6.43 percent Hindus and 2.38 percent Scheduled Castes, making it the most religiously diverse province. Punjab follows, with 1.93 percent Christians and 0.18 percent Hindus. Islamabad ranks next, with 4.26 percent Christians, the highest Christian proportion in any region. Balochistan and Khyber Pakhtunkhwa have the lowest non-Muslim populations, with Christians forming the largest minority at 0.43 percent and 0.33 percent, respectively.

Table 4.13: Number and Percentage of Population by Religion : Census year 2023 by Province

		Census-2023								
Province/ Area		Total	Muslim	Christian	Hindu	Qadiani/ Ahmadi	Scheduled Castes	Others		
Dalai stan	Total	240,458,089	231,686,709	3,300,788	3,867,729	162,684	1,349,487	90,692		
Pakistan	Percent	100	96.35	1.37	1.61	0.07	0.56	0.04		
Khyber	Total	40,641,120	40,486,153	134,884	5,473	951	629	13,030		
Pakhtunkhwa	Percent	100	99.62	0.33	0.01	0.002	0.001	0.03		
Duniah	Total	127,333,305	24,462,897	2,458,924	228,559	140,512	21,157	21,256		
Punjab	Percent	100	97.75	1.93	0.18	0.11	0.02	0.02		
Sindh	Total	55,638,409	50,126,428	546,968	3,575,848	18,266	1,325,559	45,340		
Siliuli	Percent	100	90.09	0.98	6.43	0.03	2.38	0.08		
Balochistan	Total	14,562,011	14,429,568	62,731	57,010	557	2,097	10,048		
Daiochistan	Percent	100	99.09	0.43	0.39	0.003	0.01	0.07		
Islamabad	Total	2,283,244	2,181,663	97,281	839	2,398	45	1,018		
Isiaiiiabau	Percent	100	95.55	4.26	0.04	0.11	0.001	0.04		



#### **4.3.2** Population Distribution by Mother Tongue

According to the Census-2023, Punjabi is the most widely spoken language in Pakistan identified by 36.98% of the population as their mother tongue which has slightly decreased from Census-2017 with 38.78% (Tabel 4.14). The second most spoken language is Pushto 18.15% which has marginally decreased from Census-2017 with 18.24% followed by Sindhi 14.31% which has decreased from Census-2017 with 14.57%. The share of other languages spoken in Pakistan are: Saraiki 12.00%, Urdu 9.25%, Balochi 3.38%, Hindko 2.69%, Others 1.39%, Brahvi 1.16%, Mewati 0.46%, Kohistani 0.43%, Kashmiri 0.11%, Shina 0.05%, Balti 0.02%. The percentage of Kalasha is very nominal. Additionally, five new languages Shina, Balti, Mewati, Kalasha, and Kohistani have been included in the Census-2023.

Table 4.14: Percentage of Population by Mother Tongue : Census Year 2017 and 2023

		2017			2023			
Language	Number	Percentage		Number	Percentage			
	Total Speakers	All Areas	Rural	Urban	Total Speakers	All Areas	Rural	Urban
Urdu	14,706,159	7.08	1.35	17.07	22,249,307	9.25	1.51	21.50
Punjabi	80,536,390	38.78	35.93	43.74	88,915,544	36.98	34.23	41.32
Sindhi	30,256,372	14.57	16.38	11.41	34,401,564	14.31	16.43	10.94
Pushto	37,885,441	18.24	21.68	12.24	43,633,946	18.15	22.44	11.36
Balochi	6,281,087	3.02	3.33	2.50	8,117,795	3.38	3.84	2.65
Kashmiri	359,669	0.17	0.12	0.26	274,080	0.11	0.07	0.19
Saraiki	25,324,637	12.19	15.01	7.29	28,849,579	12.00	14.86	7.47
Hindko	5,065,879	2.44	2.57	2.22	5,590,559	2.32	2.69	1.75
Brahvi	2,567,677	1.24	1.42	0.91	2,778,670	1.16	1.39	0.79
Shina *	-	-	-	-	116,951	0.05	0.05	0.04
Balti *	-	-	-	-	52,134	0.02	0.01	0.05
Mehwati *	-	-	-	-	1,094,219	0.46	0.46	0.44
Kalasha *	-	-	-	-	7,466	0.00	0.00	0.00
Kohistani *	-	-	-	-	1,039,007	0.43	0.67	0.06
Others	4,701,315	2.26	2.21	2.37	3,337,268	1.39	1.35	1.44

<sup>\*</sup> Asked for the first time in Census-2023.

#### 4.4 Distribution of Population by Nationality

A person's nationality is where they are a legal citizen, usually in the country where they were born. Nationality in international law can be called and understood as citizenship, or more generally as subject or belonging to a sovereign state, and not as ethnicity. It is worth mentioning that after inclusive consultation, in census 2023 unlike 2017, non-nationals are further disaggregated into four categories, i.e. Afghani, Bengali, Chinese and others, separate numbers are collected for them.

Table 4.15 displays the Nationality of the Population of Pakistan based on 2017 and 2023 censuses. In Census 2023, the total population of Pakistan is around 240.5 million, with over 238.38 million being Pakistani citizens i.e. 99.12% and about 211.64 million Non-National residents i.e. 0.88%. In rural areas, there are 99.18% Pakistani and 0.82% Non-National whereas in urban areas there are 99.01% Pakistani and 0.99% Non-National.



<b>Table 4.15: Nationality</b>	by Region in Census 2017	and 2023

	Nationality	y Census-2017	Nationality Census-2023		
Area	Pakistani	Non-National	Pakistani	Non-National	
All Areas	99.33	0.67	99.12	0.88	
Rural	99.39	0.61	99.18	0.82	
Urban	99.21	0.79	99.01	0.99	
Nationality	206,287,447	1,397,179	238,332,010	2,126,079	

#### Province Wise Analysis of Non-National

Table 4.16 shows that the majority of non-nationals in Census 2023 are Afghanis i.e. 1,923,453 while remaining are almost nominal with Bengali (26,900), Chinese (3,568) and Others (172,158) living in Pakistan. The Afghani population living in Rural area (1,095,726) are more than Urban area (827,727). Similarly, Bengali, Chinese and Others Non-Nationals living in Rural areas are greater in number than those living in Urban areas.

Among the provinces, Khyber Pakhtunkhwa has the highest number of Afghan nationals (939,878), making up 2.31% of its population. Balochistan follows with 474,812 Afghanis (3.26%), the highest proportion among all provinces. In Sindh, 145,875 Afghan nationals (0.26%) reside, while Punjab has Afghan National 310,832 (0.24%). The capital, Islamabad, has 52,056 Afghan nationals (2.28%). Other nationalities, including Bengalis, Chinese, and various others, are present in much smaller numbers across all provinces.

Table 4.16: Nationality by Region and Catagories Census-2023

A		Nat	ionality Cens	sus-2023		
Area		Pakistani	Afghani	Bangali	Chinese	Others
Pakistan	Total	238,332,010	1,923,453	26,900	3,568	172,158
Pakistan	Percent	99.12	0.80	0.01	0.001	0.07
Daniel	Total	146,066,316	1,095,726	5,484	1,717	99,140
Rural	Percent	99.18	0.74	0.004	0.001	0.07
T.TI	Total	92,265,694	827,727	21,416	1,851	73,018
Urban	Percent	99.01	0.89	0.02	0.002	0.08
Khyber	Total	39,668,974	939,878	539	266	31,463
Pakhtunkhwa	Percent	97.61	2.31	0.001	0.001	0.08
Domink	Total	126,959,469	310,832	1,224	1,843	59,937
Punjab	Percent	99.71	0.24	0.001	0.001	0.05
Sindh	Total	55,426,749	145,875	24,137	757	40,891
Sinan	Percent	99.62	0.26	0.04	0.001	0.07
Dalaahistan	Total	14,049,619	474,812	926	314	36,340
Balochistan	Percent	96.48	3.26	0.01	0.002	0.25
Tolomobod	Total	2,227,199	52,056	74	388	3,527
Islamabad	Percent	97.55	2.28	0.003	0.02	0.15



#### **District Wise Analysis of Non-National**

The four districts with higest percentage having higher Non-National nationals in Census-2023 are from Balochistan. These are Quetta, Pishin, chagai, Killa Saifullah and Peshwar from Khyber Pakhtun Khawa with population i.e. 11.98%, 11.66%, 8.09%, 7.83% and 7.64%. The population of Non-Pakistani nationals is lowest in Sindh, Larkana district with 0.0304% population whereas district, Umerkot, Kambar Shadad Kot and Shikar pur are 0.0414%, 0.0355% and 0.0402% with population of Non-Pakistani. The District Okara from Punjab is 0.0412% with Non-National National.

District wise population of Non-National has been depicted in the figure 4.8. The data, categorized into different Non-National population brackets ranging from 0.25% to 5.01% and above as shown below:

- Up to 0.25 Non-National: 0.25% Non-National population reside in 69 districts of Pakistan that show a significant portion.
- 0.26 0.50 Non-National: There are 17 districts falling in this bracket.
- 0.51 1.00 Non-National: There are 13 districts falling in this Range.
- 1.01 2.00 Non-National: There are 16 districts falling in this Range.
- 2.01 5.00 Non-National: 13 district Fall in this Category.
- **5.01 or above Non-National:** There are only 8 districts in this bracket.

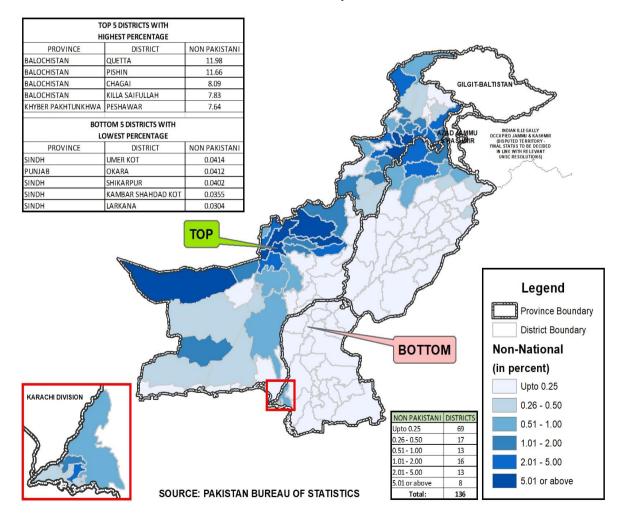


Figure 4.8: District Wise Non-National National Census -2023



#### 4.5 Population With Disability

In the previous censuses i.e. 1981, 1998, the question for gauging the exact nature of disability was asked in the long form which was enumerated on the sample based and according to them the percentage of disabled population was 0.49% and 2.38% respectively. However, this information could not be collected in census 2017 due to dropping of sampled enumeration based on Long form. During preparations of Census-2023, a Technical Committee was constituted for designing of questionnaire by Census Advisory Committee, comprising of renowned demographers and experts. They had thoughtfully considered about the inclusion of questions regarding disability. After detailed deliberations with all the stakeholders, the Technical Committee recommended to include set of questions designed by Washington Group on Disability Statistics (WG). Disability statistics are measured through proxy as per guidelines provided by Washington Group on Disability Statistics (WG) by combining two options i.e. a lot of difficulty to perform the activity and cannot perform the activity at all.

As per Table 4.17, the total number of disabled population in Pakistan according to the Census-2023 is recorded as 7,448,574 out of which 54.89% are male, 45.10% are female. Table 3.15 shows that disabled persons constitute only 3.10% of the total population. The disability rate for male (disabled male as a percentage of total male population) is 3.30% and for the female (disabled female as a percentage of total female population) is 2.88%. Out of the total disabled population, 63.57% are recorded in rural areas where as 36.43% are residing in urban areas.

Description	Total Disabled Population	Male	Female						
Total	7,448,574	4,088,899	3,359,675						
Rural	4,735,395	2,583,031	2,152,364						
Urban	2,713,179	1,505,868	1,207,311						
Disability Percent									
Total	3.10	3.30	2.88						
Rural	3.22	3.42	3.00						
Urban	2.91	3.11	2.70						

Table 4.17: Disabled Population and Percentage Distribution by Sex and Rural/Urban,

#### **Province wise Analysis of Disabled Population**

The figure 4.9 depicts that in province Khyber Pakhtunkhwa, Punjab and Islamabad 3% population is disabled while in Sindh and Balochistan, it is only 2%. However, percentage of female population is less disabled as compared to male population in all provinces alongwith Federal Capital Islamabad.

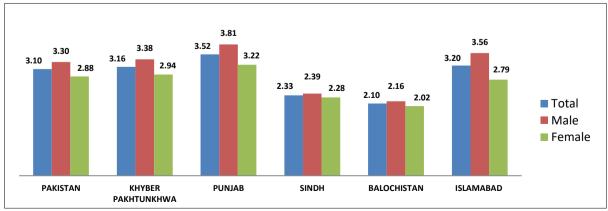


Figure 4.9: Percentage of Disabled Population



#### 4.5.1 Population with Functional Limitation

It is pertinent to mention that the same set of questions has been used in recent censuses conducted in the majority of countries including UK, Maldives etc. It is also added here that these questions only ascertain the severity of the issue to perform the said activity and cannot exactly gauge whether the people are disabled or otherwise.

These questions are designed to ascertain functional limitations in any of the activities like seeing, hearing, walking/climbing, in communication or remembering/concentration or washing/dressing/holding/writing etc.

Functional limitation is a measure of an individual's ability to perform daily activities. It is assessed based on the following criteria:

- a) Less difficulty to perform the activity: Some individuals may experience minor difficulties in carrying out certain tasks.
- b) A lot of difficulty to perform the activity: Others may face significant challenges and require assistance or adaptations to complete their daily functions.
- c) Cannot perform the activity at all: Some individuals may be unable to perform specific activities independently

It is important to note that an individual may encounter multiple difficulties in performing their daily functions. According to the Census-2023, the total population with functional limitations in Pakistan is recorded as 23,170,373. Out of this population, 52.83% are male and 47.17% are female. Table 4.18 shows that persons with functional limitation make up only 9.64% of the total population in Pakistan. The population of male with functional limitation (functional limitations in male as a percentage of total male population) is 9.88% and for the female (functional limitations in female as a percentage of total female population) is 9.37%. Furthermore, out of the total population with functional limitations, 58.83% reside in rural areas, while 41.17% reside in urban areas. This distribution emphasizes the importance of considering both rural and urban contexts when addressing the needs of individuals with functional limitations. It is essential to recognize that functional limitations can vary in severity and impact an individual's ability to perform daily activities. Some individuals may face fewer difficulties in performing activities, while others may encounter significant challenges or be unable to perform certain activities altogether.

Table 4.18: Population and Percentage Distribution of Functional Limitation by Sex and Rural/Urban, Census-2023

Description	Total *Population by Functional Limitation	Male	Female						
Total	23,170,373	12,239,992	10,930,381						
Rural	13,630,475	7,158,341	6,472,134						
Urban	9,539,898	5,081,651	4,458,247						
	Functional Limitation percent								
Total	9.64	9.88	9.37						
Rural	9.26	9.49	9.01						
Urban	10.24	10.50	9.96						

<sup>\*</sup>Note: It is possible that an individual can face more than one difficulty in performing his daily functions.



#### Province wise Analysis of Population with Functional Limitation

Figure 4.10 shows the high percentage of functional limitations in male in all provinces of Pakistan. The Punjab has 10.61% population with functional limitations which is high among all provinces followed by Sindh (9.24%) Khyber Pakhtunkhwa (8.38%) and Balochistan (6.40%).

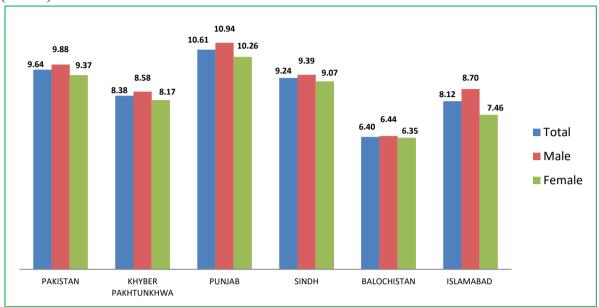
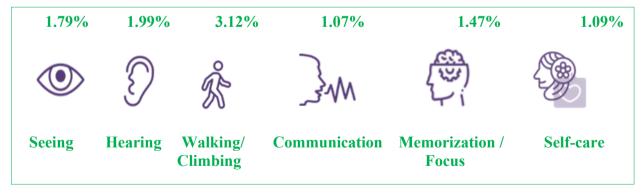


Figure 4.10: Functional Limitation by Provinces Census 2023

#### 4.5.2 Population with Functional Limitation by categories

According to the Census-2023, a segment of population of Pakistan faces functional limitations that affect daily activities. A total of 3.12% population have trouble in walking or climbing, 1.99% population have hearing impairments, while 1.79% experience visual impairments. Additionally, 1.47% struggle with memory or concentration, 1.09% face self-care difficulties, and 1.07% have communication challenges.



In Table 4.19, it is evident that 7,493,240 individuals face difficulty in walking or climbing, making it one of the most commonly reported challenges in performing daily functions. Across all categories, males report higher functional limitations than females. For instance, 3.24% of males have difficulty walking or climbing compared to 2.99% of females. Similar patterns are observed in other categories, highlighting the need for inclusive policies and enhanced accessibility measures.



Table 4.19: Population and Percentage Distribution of Functional Limitation With Categories by Sex and Rural/Urban, Census-2023

Functional Limitation by Category								
Category	Total Population by Functional Limitation	Male	Female					
Seeing	4,314,433	2,285,068	2,029,365					
Hearing	4,778,218	2,520,248	2,257,970					
Walking/climbing	7,493,240	4,008,994	3,484,246					
Communication	2,584,399	1,419,295	1,165,104					
Memorization/focus	3,538,180	1,899,015	1,639,165					
Self care etc.	2,611,695	1,362,575	1,249,120					
	Functional Limitation Per	rcent						
Seeing	1.79	1.85	1.74					
Hearing	1.99	2.04	1.94					
Walking/ Climbing	3.12	3.24	2.99					
Communication	1.07	1.15	1.00					
Memorization/ Focus	1.47	1.53	1.41					
Self care etc.	1.09	1.10	1.07					

(\*Note: Sum of percentage of all categories is not equal to 100% as it is possible that an individual can face more than one difficulty in performing his/her daily functions.)

#### 4.6 Education

#### 4.6.1 Literacy

Literacy is an important indicator of education and it has significant impact on development and socio-economic growth of the country. It is fundamental to development as it drives economic growth, improves health, enhances educational opportunities, and fosters a more engaged and equitable society.

A person who can read and write with understanding in any language make simple calculation is treated as literate. The literacy rate, according to Census-2023, is recorded as 60.65% for population 10 years and above as compared to 58.92% in Census-2017 as shown in Table 4.20. This rate is higher for males 68.00% than for females 52.84% and for transgender 40.15%. The literacy rate of 74.09% in urban areas is much higher than that of rural areas which is 51.56%.

Table 4.20: Literacy rate by Sex and Rural/Urban : Census Year 2017 and 2023

Area	2017					202	3	
	All Sexes	Male	Female	Trans gender	All Sexes	Male	Female	Trans gender
All Areas	58.92	67.79	49.69	38.76	60.65	68.00	52.84	40.15
Rural	50.06	61.32	38.57	30.51	51.56	61.02	41.67	32.94
Urban	73.22	77.97	68.13	45.48	74.09	78.13	69.71	42.40
Total Literates (N)	87,484,486	51,334,291	36,141,755	8,440	104,148,094	60,187,586	43,952,346	8,162

Although the literacy rate for both males and females has increased since 2017, as per the Census-2023 results, the gender-gap in literacy still persists as illustrated in figure 4.11.

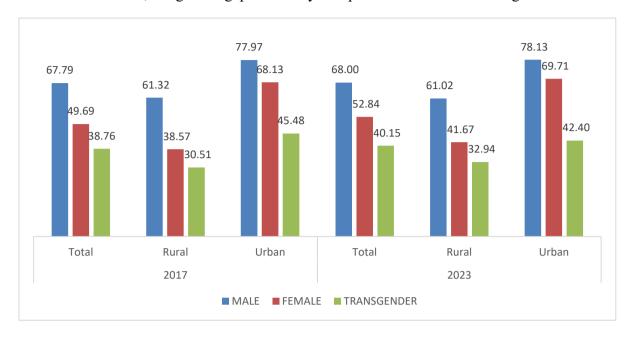


Figure 4.11: Literacy Rate by Sex and Rural/Urban: Census-2017&2023

Analyzing by gender and region, it is revealed that there is stark difference in urban rural in terms of male & female literacy. The gender gap in urban areas is around 9 percentage points while the same in rural areas is 20 percentage points. This implies there is strong need to work in rural areas of province for education infrastructure alongwith emphases in quality for increasing literacy in rural areas.

#### **Province Wise Analysis of Literacy**

Table 4.21 shows variations in the literacy rate by administrative units for rural/urban areas and provinces of Pakistan according to Census-2023. The literacy rate in ICT is the highest with 83.97% among all the administrative units of Pakistan. Among the provinces, Punjab has the highest literacy rate of 66.25% followed by Sindh as 57.54%, Khyber Pakhtunkhwa as 51.09% and Balochistan with 42.01% respectively. In rural areas, Punjab and KP have taken the lead with literacy ratio of 58.37% and 48.35%, respectively. In urban areas, on the other hand, Punjab has the highest literacy ratio of 77.30% followed by Sindh at 72.26%.

Table 4.21: Literacy Rate by Administrative Units: Census – 2023

	Pakistan	KP	Punjab	Sindh	Balochistan	ICT
All Areas	60.65	51.09	66.25	57.54	42.01	83.97
Rural	51.56	48.35	58.37	38.14	35.74	84.88
Urban	74.09	65.55	77.30	72.26	55.86	82.91
Total Literates (N)	104,148,094	14,420,285	61,882,702	22,431,392	3,904,799	1,508,916



#### **District Wise Analysis of Literacy**

A comprehensive analysis of literacy rate in Pakistan aims to identify disparities, understand regional educational challenges, and inform policy decisions to improve literacy outcomes across districts. The literacy rate across 136 districts shows an average literacy rate of 60.65%. The districts with literacy rates higher than the average of 60.65% are 39. Whereas, 97 districts fall below the average literacy rate of 60.65%. This average serves as a benchmark to assess the distribution of literacy rates in the districts of Pakistan.

The literacy rates across the districts reveal a diverse distribution. The data, categorized into different literacy rate brackets, is as follows:

- Up to 20.0% Literacy: 2 districts i.e. District Sherani and District Lower Kohistan Central fall into this category, indicating that in these areas, the literacy rate is relatively low.
- **20.1% to 40.0% Literacy**: There are 42 districts that a significant portion of districts have literacy rates within this range, reflecting moderate levels of literacy.
- 40.1% to 60.0% Literacy: The largest group with 52 districts where literacy rates fall into this bracket, suggesting a better literacy scenario compared to the previous categories.
- **60.1% to 80.0% Literacy**: there are 34 districts in this range, showing higher literacy levels and suggesting a more educated population in these areas.
- **80.1%** and Above Literacy: Only 6 districts, achieves this high literacy level, indicating that there are a few districts with exceptionally high literacy, it represents a small fraction of the total districts.

Province Punjab leads in literacy rate, while Balochistan faced low literacy rate among four provinces of Pakistan as most of the district of Balochistan literacy ranged from 20% to 40%. The highest literacy rate among 136 Districts of Pakistan is of Islamabad (83.91%) followed by District Karachi Central (83.65%), District Rawalpindi (83.23%), District Gujrat (81.34%) and District Jhelum, (80.63%).

By analyzing the low ranked districts in terms of literacy rates, the Lowest literacy rate has been observed in District Kolai Palas Kohistan with 18.80%. Other districts with lowesr literacy rate are District Upper Kohistan with 19.05%, District Washuk with 21.66%, District Lower Kohistan Central with 22.04% and District Sherani with 23.86%. The districts stand in the low rank may attribute to factors like remote and rugged terrain, limited resources, infrastructural deficiencies, traditional norms & security concerns etc.



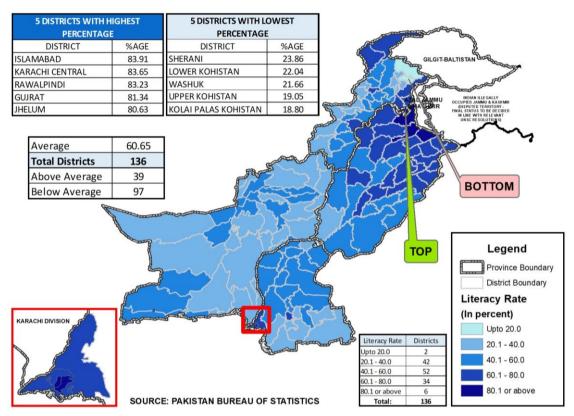


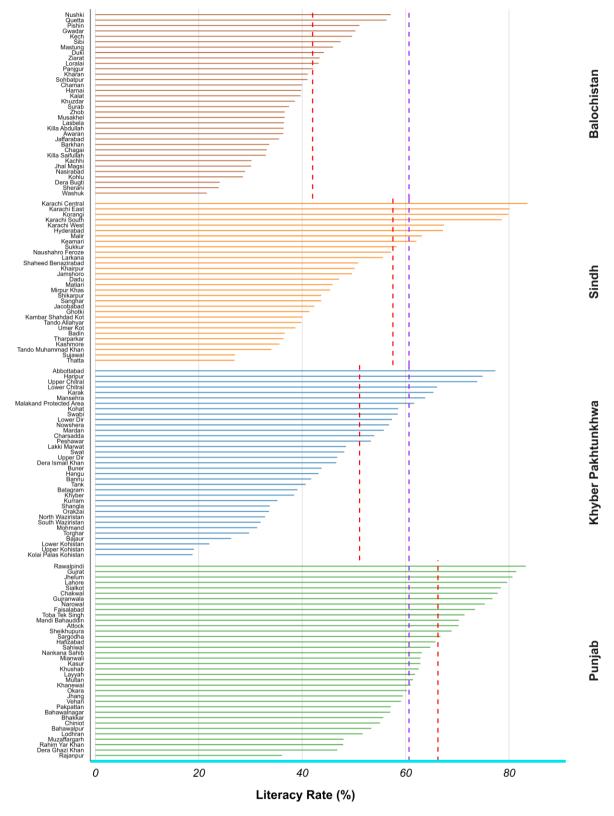
Figure 4.12: Literacy Rate in Pakistan, Census-2023

Figure 4.13 presents a district-wise comparison of literacy rates (ages 10 and above) across Pakistan, with the purple and red vertical dashed lines representing the national and provincial averages, respectively. Disparities among provinces reflecting variations in educational infrastructure, socio-economic conditions, and policy implementation. In Balochistan, only 10 districts surpass the provincial average literacy rate 42.01%. Alarmingly, all 34 districts are bellow the national average, indicating a severe educational crisis. Districts such as Washuk, Sherani, and Dera Bugti report alarmingly low literacy levels due to inadequate school facilities, widespread poverty, and socio-cultural barriers that particularly hinder female education.

Sindh shows a similar pattern, with 23 out of 30 districts falling short of the national literacy benchmark. Only 8 districts exceed the provincial average literacy rate of 57.54%. Rural areas such as Thatta, Sujawal and Tando Muhammad Khan remain significantly behind, primarily due to economic challenges, limited access to quality education, and entrenched social barriers.

In Khyber Pakhtunkhwa (KP), 14 out of 35 districts remain below the national average, with remote and tribal areas such as Kohistan and Bajaur reporting some of the lowest literacy rates, primarily due to geographical inaccessibility, poor school infrastructure, and security challenges that have disrupted education over time.

Punjab, on the other hand, performs significantly better, with only 5 out of 36 districts failing to reach the national literacy threshold. Cities like Lahore, Rawalpindi, and Faisalabad benefit from better educational infrastructure, extensive literacy programs, and government initiatives. However, some districts, including Rajanpur and Dera Gazi Khan, still struggle due to localized poverty and lack of adequate schooling facilities.



(The purple and red vertical dashed lines represent national and provincial average literacy rates, respectively.)

Figure 4.13: District Wise Comparison of Literacy Rate (10 Years and Above)



#### 4.6.2 Out of School Children (OOSC) 5 – 16 Years

Out of school children (OOSC) 5-16 years are calculated from children who have never been to school and dropped from school. It is an important development indicator reflecting the exclusion of potential future literate work force.

As per Table 4.22 Census-2023 there are 71.27 million children aged 5-16 years in Pakistan. Out of which 45.90 million (64.40%) are currently attended school and 25.37 million (35.60%) are currently out of school. Disaggregated out of school children (35.60%) reveals that, there are 28.11% who have never been to school and 7.49% are those who ever attended and then dropped from school.

Table 4.22: Region & Gender Wise Population Aged 5-16 Years and Out Of School Children Aged 5-16 Years (In Million)

Regio	on / Sex	Total Population	In-School	Out of School Children	Never to School	Drop Out	In- School	oosc	Never to School	Drop Out
	All Sexes	71,270,068	45,896,687	25,373,381	20,033,448	5,339,933	64.40	35.60	28.11	7.49
Total	Male	36,881,757	24,917,199	11,964,558	9,141,561	2,822,997	67.56	32.44	24.79	7.65
Total	Female	34,386,146	20,979,071	13,407,075	10,890,485	2,516,590	61.01	38.99	31.67	7.32
	Trans- gender	2,165	417	1,748	1,402	346	19.26	80.74	64.76	15.98
	All Sexes	45,533,569	26,703,963	18,829,606	15,618,360	3,211,246	58.65	41.35	34.30	7.05
Rural	Male	23,564,559	14,927,334	8,637,225	6,969,648	1,667,577	63.35	36.65	29.58	7.08
Kurai	Female	21,968,105	11,776,429	10,191,676	8,648,143	1,543,533	53.61	46.39	39.37	7.03
	Trans- gender	905	200	705	569	136	22.10	77.90	62.87	15.03
	All Sexes	25,736,499	19,192,724	6,543,775	4,415,088	2,128,687	74.57	25.43	17.15	8.27
Urban	Male	13,317,198	9,989,865	3,327,333	2,171,913	1,155,420	75.01	24.99	16.31	8.68
Olball	Female	12,418,041	9,202,642	3,215,399	2,242,342	973,057	74.11	25.89	18.06	7.84
	Trans- gender	1,260	217	1,043	833	210	17.22	82.78	66.11	16.67

The out of school analysis reveals that the gender disparity is wider for both rural and urban as percentage of out of school females are higher with 46.39% and 25.89% as compared to 36.65% and 24.99% respectively for males. This may be due to social context, less education facilities for females in their areas.

#### Province Wise Analysis Out of School Children (OOSC) 5-16 years

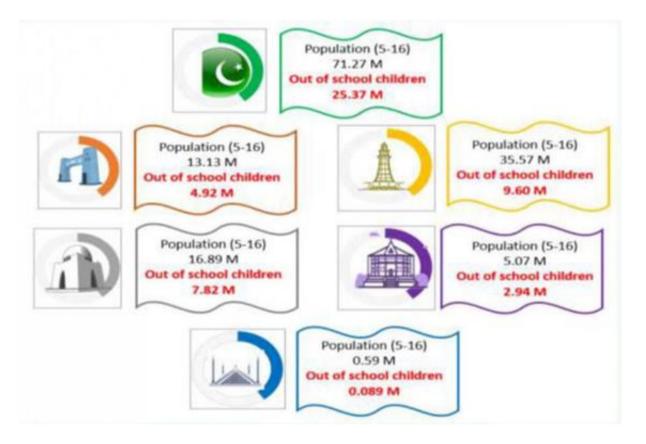
According to the 2023 Census, Punjab has the highest school enrollment rate at 73.02%, followed by Khyber Pakhtunkhwa with 62.51%, Sindh at 53.71%, and Balochistan with the lowest enrollment rate of 42.03%. Islamabad has the highest enrollment rate at 84.94%, with



only 15.06% of children out of school. Table 4.23 highlights the proportion of children out of school, Balochistan has the highest percentage, with 57.97% of children not enrolled in school, followed by Sindh at 46.29%, Khyber Pakhtunkhwa at 37.49%, and Punjab having the lowest proportion of out-of-school children at 26.98%.

Table 4.23: Province Wise Population Aged 5-16 Years and Out Of School Children Aged 5-16 Years (In Million)

Region / Sex	Total Population	In-School	Out of School Children	Never to School	Drop Out	In- School	Out of School Children	Never to School	Drop Out
Khyber Pakhtunkhwa	13,133,856	8,209,704	4,924,152	4,259,321	664,831	62.51	37.49	32.43	5.06
Punjab	35,578,562	25,978,398	9,600,164	6,443,194	3,156,970	73.02	26.98	18.11	8.87
Sindh	16,891,397	9,073,149	7,818,248	6,616,348	1,201,900	53.71	46.29	39.17	7.12
Balochistan	5,074,550	2,132,860	2,941,690	2,674,108	267,582	42.03	57.97	52.70	5.27
Islamabad	591,703	502,576	89,127	40,477	48,650	84.94	15.06	6.84	8.22



In figure 4.14, the gender-wise distribution of out-of-school children across provinces reveals that Punjab has 4.77 million males and 4.09 million females out of school, whereas Sindh shows a relatively balanced but still concerning figure of 1.73 million males and 1.53 million females. In Khyber Pakhtunkhwa 2.00 million males and 2.92 million females remain out of school, indicating a significant gender gap. Balochistan exhibits similar trends, with 1.42 million males and 1.40 million females deprived of education.



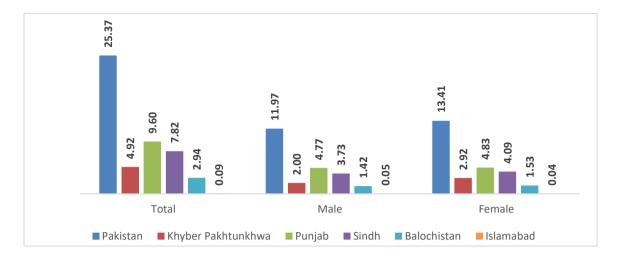


Figure 4.14: Percentage of Population for Out Of School Children Aged 5-16 Years (In Millions)

#### District Wise Analysis Out of School Children (OOSC) 5-16 years

The OOSC Percentage across 136 districts shows an average OOSC Percentage of 35.6%. The districts with OOSC Percentage higher than the average of 35.6% are 84. Whereas 52 districts fall below the average OOSC Percentage of 35.6%. This average serves as a benchmark to assess the distribution of out of school children (OOSC) Percentage in the districts of Pakistan.

A comprehensive analysis of National-level Out of School Children (OOSC) in Pakistan aims to identify disparities, understand regional educational challenges, and inform policy decisions to improve literacy outcomes across districts.

The Out of School Children across the districts reveal a diverse distribution. The data, categorized into different literacy rate brackets, is as follows:

- Up to 15.0% OOSC Percentage: There are 8 districts fall into this category, indicating that in these areas, the OOSC Percentage is relatively low. Which is good sign for education.
- 15.1% to 30.0% OOSC Percentage: There are 35 districts that a significant portion of districts have OOSC Percentage within this range. In this range more children are out of school as compared to previous bracket.
- 30.1% to 45.0% OOSC Percentage: there are 26 districts where OOSC Percentage fall into this bracket.
- 45.1% to 60.0% OOSC Percentage: there are 32 districts in this range, showing higher OOSC Percentage which indicates more out of school children percentage in these areas.
  - **60.1% and Above OOSC Percentage:** there 35 districts, with highest level of OOSC Percentage, which indicates a worst scenario compared to the previous categories. In this range most of the children are out of school.

By analyzing the low ranked districts in terms of OOSC Percentage which depicts better situation, the Lowest OOSC Percentage has been observed two districts of province Khyber Pakhtunkhwa i.e. in District Upper Chitral (10.46%), District Abbotabad (11.79%), two districts of Province Punjab i.e. District Sialkot (12.62%), District Jhelum (12.70%) and one district of province KP, district Haripur (13.68%). The lower OOSC percentage indicates that the district is good at education and most of the children are going to school.

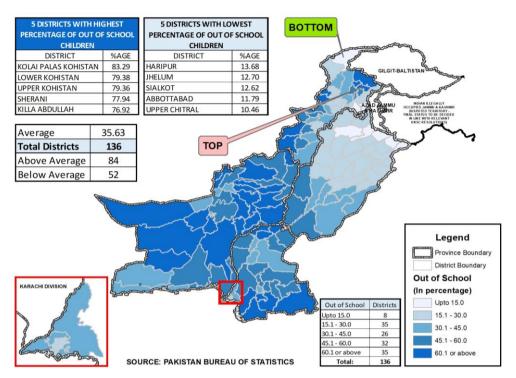


Figure 4.15: District Wise Out of School (05-16) In Pakistan, Census-2023

Figure 4.16 provides a district-wise comparison of out-of-school children (ages 5-16) across Pakistan, with the purple and red vertical dashed lines representing the national and provincial averages, respectively.

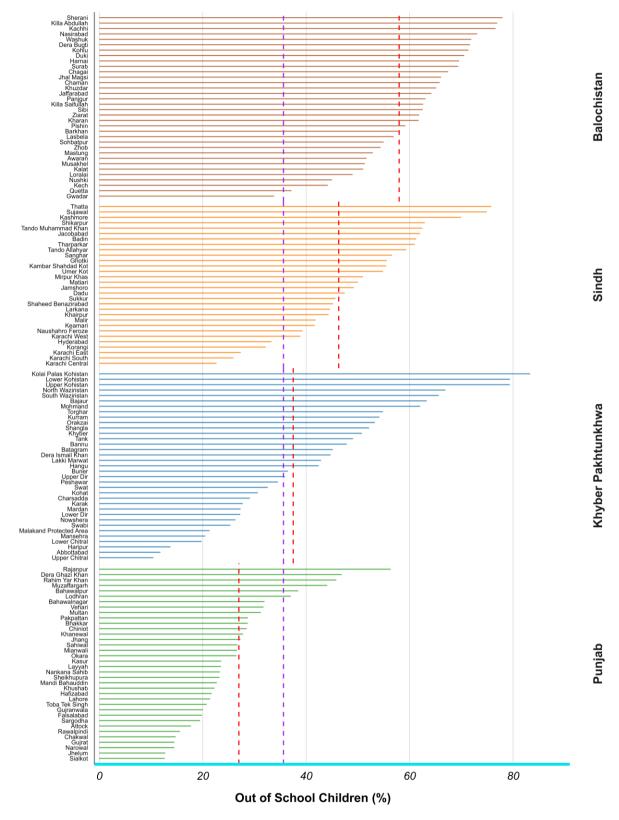
In Balochistan, 33 out of 34 districts have out-of-school rates higher than the national average of 35.60%, making it the most affected province. Districts like Sherani, Killa Abdullah, and Kacchi show alarmingly high percentages of children not attending school, primarily due to inadequate educational facilities, long travel distances to schools, and cultural restrictions, especially for girls.

Sindh follows closely, with 25 out of 30 districts exceeding the national average. Rural areas such as Thatta, Sujawal and Kashmore struggle with low school enrollment due to extreme poverty, child labor, and lack of government intervention, whereas urban centers like Karachi report relatively better school participation.

In Khyber Pakhtunkhwa (KP), 19 out of 35 districts have out-of-school rates above the national average, with districts such as Kolai Palas, Kohistan and Waziristan facing significant educational challenges due to difficult terrains, security issues, and limited access to schools. Punjab, however, shows a comparatively better situation, with only 6 out of 36 districts having out-of-school rates above the national threshold. While most urban areas in Punjab benefit from better infrastructure and strong education policies, some southern districts, such as Rajanpur and Dera Gazi Khan, still struggle with high dropout rates due to economic hardships and lack of educational awareness.

These regional variations highlight the urgent need for targeted policy measures to reduce the number of out-of-school children. Provinces like Balochistan and Sindh require significant investment in school infrastructure, teacher availability, and financial support programs to encourage enrollment. In KP, security concerns and geographical challenges must be addressed by introducing mobile schools and community-based learning centers.





(The purple and red vertical dashed lines represent national and provincial average out of school rates, respectively.)

Figure 4.16: District Wise Comparison of Out Of School Children (5-16 Years of Age)



#### 4.6.3 Gender Parity Index

Gender parity refers to relative equality between men and women, or girls and boys, in terms of numbers and proportions in a given area. The gender parity index measures the progress towards gender parity in participation and/or educational opportunities for females compared to males. It refers to the ratio of any quantifiable indicator for men compared to the same indicator for women. For example, the gender parity index in primary education is the ratio of female students to male students. The gender parity index of 1 indicates the parity/equality between females and males. A value of less than 1 generally indicates a disparity in favor of boys/men, while a value greater than 1 indicates disparity in favor of girls/women.

#### **District Wise Analysis of Gender Parity index**

The top district among 136 districts of Pakistan i.e, District Karachi Central (99.36%), Karachi East (96.73%), District Gujranwala (96.45%), District Korangi (96.36) followed by Sialkot (95.38%).

Figure 4.17 represents the gender parity in terms of literacy. The gender parity index data across the 136 districts shows an average gender parity index of 77.71%, where 27 districts have gender parity index higher than the average and 109 districts fall below the average gender parity index. The data, categorized into different brackets based on literacy is as follows:

- Up to 40.0% Gender Parity Index: 11 districts belong to this category which indicates the lowest gender parity index.
- **40.1% to 60.0%** Gender Parity Index: There are 39 districts fall in this category reflecting moderate levels of gender parity index.
- **60.1% to 80.0%** Gender Parity Index: There are 57 districts lie in this category which shows that a significant portion of districts lie within this range.
- **80.1% and Above** Gender Parity Index: There are 29 districts belong to this category. which indicates that the female and male enjoy the same opportunities and rights in education.



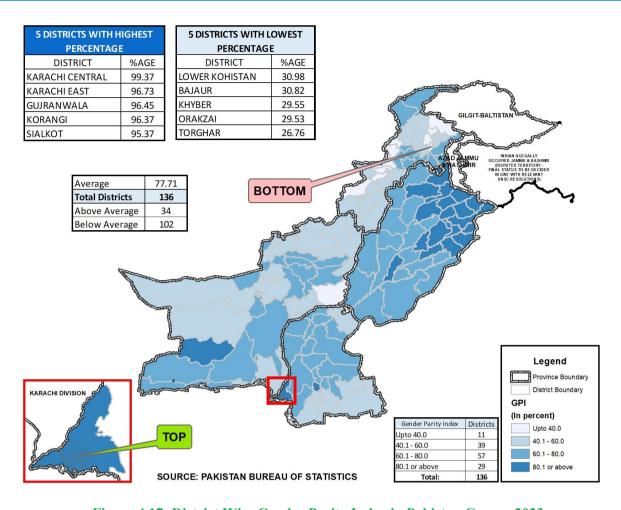


Figure 4.17: District Wise Gender Parity Index in Pakistan Census-2023

By analyzing the low ranked districts in terms of gender parity index, it is found that the five lowest ranked districts are from Province Khyber Pakhtunkhwa. The district Torghar of Khyber Pakhtunkhwa 26.75% with the lowest gender parity index while other Districts with lowest gender parity index are Orakzai 29.54%, Khyber 29.55%, Bajaur 30.82% and Lower Kohistan 30.99%.

#### 4.6.4 Educational Attainment

Educational attainment levels provide the trained and qualified manpower, which is essential

for increasing productivity, accelerating economic growth, and improving skills of individuals. According to Census-2023, 59.40% of the population aged 5 years and above have attended school and attained some level of education, while a significant proportion 40.60% of the population has never received any formal education. (Figure 4.18)

The total number of educated people in Pakistan, with some educational attainment is recorded as 115,551,039 in Census-2023. Table 3.24 shows that out of the total literate population,

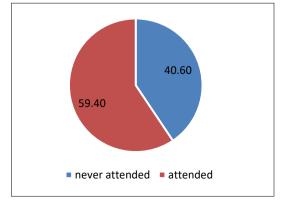


Figure 4.18: Percentage of Population Who Have Attended School



22.25% have passed only primary, 17.37% have passed only middle and 17.85% have completed matriculation. The percentage falls to 8.86% for intermediate, 6.15% for bachelors and 2.89% for masters and above level of education. In addition, only 0.21% hold a diploma or certificate. Educational attainment is generally higher in urban areas compared to rural areas, except for primary and below primary levels.

The table 4.24 also presents educational attainment by gender, where women have higher proportions of completing primary level education than that of men and this difference is greater in rural areas than in urban areas. This pattern, however, is reversed for middle and higher levels of education where men exceed from their female counterparts in terms of educational attainment.

Table 4.24: Educational Attainment Levels by Sex and Rural/Urban: Census – 2023

Education		All Aı	eas			Rur	al			Urb	an	
	All Sexes	Males	Females	Trans gender	All Sexes	Males	Females	Trans geders	All Sexes	Males	Females	Trans gender
Below Primary	27.89	26.61	29.59	12.06	32.98	30.78	36.24	11.60	22.45	21.77	23.28	12.17
Primary	22.25	21.77	22.90	27.55	25.55	24.76	26.70	30.16	18.74	18.29	19.29	26.92
Middle	17.37	18.40	15.99	20.62	17.32	18.69	15.28	22.95	17.43	18.06	16.67	20.05
Matri	17.85	18.95	16.37	13.64	16.05	17.74	13.55	14.48	19.76	20.36	19.04	13.43
Inter	8.86	8.98	8.71	4.53	6.88	7.38	6.15	4.39	10.98	10.85	11.14	4.57
Graduate (2Years)	4.29	4.10	4.54	1.24	2.76	2.71	2.82	1.38	5.93	5.72	6.18	1.20
Graduate (4Years)	1.86	1.98	1.71	0.74	1.04	1.15	0.87	0.88	2.74	2.94	2.50	0.70
Master & Above	2.89	2.74	3.08	0.67	2.03	1.97	2.12	0.94	3.79	3.63	4.00	0.61
M.Phil/ Ph.D	0.35	0.36	0.34	0.15	0.21	0.23	0.17	0.06	0.50	0.51	0.50	0.17
Diploma/ Certificate	0.21	0.28	0.12	0.23	0.16	0.20	0.11	0.31	0.26	0.37	0.14	0.21
Others	1.05	1.09	0.99	0.72	0.91	0.87	0.97	1.19	1.19	1.35	1.00	0.61
Total Literate – 5 years+ (N)	115,551,039	66,100,487	49,442,390	8,162	59,626,618	35,547,650	24,077,373	1,595	55,924,421	30,552,837	25,365,017	6,567

Figure 4.19 illustrates the percentage distribution of the population based on level of educational attainment. A significant portion of the population, totaling 67.51%, falls below the matriculation level, including those with middle 17.37%, primary 22.25%, and below primary 27.89% education. This indicates a major challenge in educational retention beyond the early years. Meanwhile, 26.71% of the population has completed matriculation 17.85% and intermediate 8.86%, showing a relatively better representation at the secondary level. The percentage of graduates remains low, with only 6.15% of the population having attained a 2-year 4.29% or 4-year 1.86% graduate degree. Higher education attainment is even lower, as only 3.45% of the population has completed master's 2.89% The data highlights the need for improved access to higher education, as the majority of the population does not progress beyond secondary schooling.



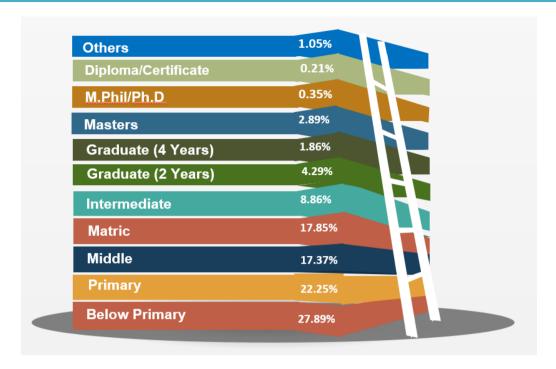


Figure 4.19: Percentage of Population with Educational Attainment

## 4.7 Employment

Employment refers to an activity in which an individual works regularly for another person and gets remunerated in return. Those who are employed by others are known as employees. The person who engages others to work regularly for them is known as an employer. In Census 2023, two questions were asked regarding employment with reference of past one year of working with reference to the census period. The employment statistics captured in Census 2023, cannot be exactly comparable with Labour Force Survey due to its extensive nature and the reference period. The objective of its capturing in Census 2023 is to take snapshot of employment along with other demographic indicators.

Overall 66.22 million 38.57% people are employed in Pakistan during the reference period of past one year. Table 4.25 reveals employment statistics in Pakistan, breaking down the data by total employment and different employment categories. In Pakistan 38.57%, were employed including 59.68% and 16.10% males and females respectively. Whereas percentage of male employees is lower in rural area i.e. 58.61% as compared to urban areas i.e. 61.23%. However, percentage of females' employees higher in rural with 18.93% as compare to urban areas with 11.81%. The male percentage in urban is mainly due to higher number of self employed in non-agriculture activity and employer in urban areas with 31.20% and 17.72% respectively as compared to rural with 7.14% and 5.68% respectively. This may due to business and services opportunities.

Paid employees are higher than all other categories. Paid employees are 34.97% in Pakistan with greater proportion in urban areas 52.71% as compared to rural areas 23.47%. The percentage of paid employees are higher in urban due to high percentage of females in urban, with 57.28%, working in public and private sector as compare to female working in rural areas with 9.28%.



The population having its own land and own livestock is included in the category Self Employed (agriculture). In Pakistan 16.88% employees are Self Employed in agriculture this percentage is higher in male than female population with 19.09% and 8.18%. respectively.

Table 4.25: Percentage of Population by Employment, Sex and Rural/Urban, Census-2023

Employment		Total			Rural			Urban	
Employment	Total	Male	Female	Total	Male	Female	Total	Male	Female
Population 10	171,714	88,533,	83,181,	102,453	52,403,	50,050,	69,260,	36,130,	33,130,
Years & Above	,532	171	361	,550	111	439	982	060	922
Employed	38.57	59.68	16.1	39.22	58.61	18.93	37.59	61.23	11.81
Paid Employee	34.97	37.92	23.31	23.47	27.85	9.28	52.71	51.9	57.28
Own Account (Agri)	16.88	19.09	8.18	24.99	29.53	10.3	4.36	4.6	3.04
Own Account (Non-A)	19.77	23.36	5.6	14.64	17.72	4.66	27.69	31.2	7.89
Employer	5.65	6.29	3.1	5.01	5.68	2.84	6.62	7.14	3.72
Unpaid F.Helper (agri)	14.78	9.34	36.24	23.64	15.62	49.61	1.1	0.61	3.88
Unpaid F.Helper (Non-A)	7.95	4	23.56	8.24	3.59	23.3	7.51	4.55	24.19
Unemployed	10.91	11.37	10.42	12.79	13.37	12.18	8.13	8.47	7.75
Not L.F & Stud (15 to 24)	40.7	23.9	58.41	55.77	42.91	25.02	61.54	59.78	37.33

Regarding contributing family worker (unpaid family helper) both in agriculture and non-agriculture activity the percentage of female population with 36.24% and 23.56% respectively is higher than the male percentage 9.34% and 4.00% respectively. The percentage is higher in rural areas as females are mostly employed in agriculture sector contributing family worker.

According to Census 2023 the unemployed population is 10.91% in the province which is higher in rural areas with 12.79% as compared to urban areas with 8.13%.

As Pakistan population is predominantly young and 18.56% population are of age 15-24. Therefore, an indicator for youth (15-24) "Not in employment and education" has been calculated which shows that in Pakistan 40.70% of youth are not in employment and education. The percentage is higher in females with 58.41% than males with 23.90%. This needs immediate policy interventions to bring this potential to efficient utilization for country prosperity.

#### **Province Wise Analysis of Employment**

The Census-2023 data provides a detailed overview of employment trends across Pakistan's provinces, revealing notable regional differences in labor force participation and employment types. Table 4.26 revels that Punjab and Sindh exhibit the highest proportions of employed individuals, at 40.45 percent and 40.28 percent respectively, suggesting more robust labor markets. Balochistan follows closely with 38.99 percent, while Khyber Pakhtunkhwa reports the lowest employment rate at 29.91 percent, highlighting potential economic or structural challenges in the province.

In terms of paid employment, Sindh leads with 41.75 percent, reflecting a stronger presence of formal wage-earning jobs, followed by Punjab at 34.14 percent and Khyber Pakhtunkhwa at



33.09 percent. Balochistan, however, has a significantly lower share of paid employees at just 14.72 percent, indicating a higher dependence on informal or self-employed work. Agricultural own-account workers are most prominent in Balochistan at 20.39 percent, followed by Punjab at 17.78 percent and Sindh at 16.13 percent, pointing to agriculture's continued importance in these economies. For non-agricultural own-account work, Khyber Pakhtunkhwa shows the highest proportion at 18.91 percent, followed closely by Balochistan at 19.93 percent.

The share of the population working as employers remains relatively low across all provinces, ranging from 3.95 percent in Balochistan to 6.22 percent in Punjab. Unpaid family helpers, both in agriculture and non-agriculture, are particularly prevalent in Balochistan, where 9.55 percent of the population is engaged in such work—highlighting the role of family labor in the region's economic structure

Unemployment is a major concern, especially in Balochistan, which records the highest unemployment rate at 53.68 percent, followed by Khyber Pakhtunkhwa at 46.19 percent. Sindh and Punjab show relatively lower unemployment levels, at 27.86 percent and 22.20 percent respectively. Additionally, a large proportion of youth aged fifteen to twenty-four is not part of the labor force or is engaged in studies, with Khyber Pakhtunkhwa again leading at 47.87 percent, followed by Balochistan at 46.61 percent, Sindh at 42.56 percent, and Punjab at 36.93 percent. These figures underline the need for region-specific strategies to boost employment opportunities and youth engagement across the country.

Population	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Employed	29.91	40.45	40.28	38.99	37.07
Paid Employee	33.09	34.14	41.75	14.72	55.74
Own Account (Agri)	13.72	17.78	16.13	20.39	4.37
Own Account (Non-A)	18.91	21.71	15.25	19.93	26.64
Employer	5.14	6.22	4.87	3.95	6.93
Unpaid F.Helper (agri)	6.20	8.84	6.57	9.55	3.45
Unpaid F.Helper (Non-A)	6.20	8.84	6.57	9.55	3.45
Unemployed	46.19	22.20	27.86	53.68	19.15
Not L.F & Stud (15 to 24)	47.87	36.93	42.56	46.61	33.34

Table 4.26: Province wise Percentage of Population by Employment, Census-2023

## 4.8 Migration

Migration is to move from one place, or locality to another due to any reason. In Census 2023 the migration has been captured as Intra provincial migration and Inter provincial migration.

**Intra provincial migration** is the movement of people from one geographic area to another within the same province or territory. The district or city of birth within the province is different from her/his district/city of enumeration within the province.

**Inter provincial migration** is the movement of people from one province or territory to another within a country



The migration in Table 4.27 is calculated for the person whose district of birth is different from current district of residence.

In Census 2023, migration to abroad is not captured as the objective is to capture the movement within the province and from one province to another province.

The Table 4.27 reveals that total migration in Pakistan is 5.44% which is higher for urban areas 9.00% as compared to rural areas with 3.19%. The total male migration is 5.14% which is high in urban areas with 8.92% as compare to rural with 2.72%. The total female migration is 5.75% which is higher in urban areas with 9.08% as compare to rural with 3.68%.

		Total			Rural			Urban				
Indicators	Total	Male	Female	Trans Gender	Total	Male	Female	Trans Gender	Total	Male	Female	Trans gender
Migration	5.44	5.14	5.75	13.94	3.19	2.72	3.68	9.40	9.00	8.92	9.08	15.37
	Reasons Migration											
Job/ Business	19.84	37.42	3.15	35.87	15.30	31.65	2.61	32.97	22.37	40.16	3.50	36.43
Education	4.21	5.95	2.55	2.08	2.64	4.12	1.49	1.76	5.09	6.82	3.25	2.14
Marriage	19.62	1.16	37.16	0.07	25.70	1.47	44.52	0.22	16.22	1.01	32.37	0.04
With family	43.08	38.77	47.18	7.76	41.19	41.47	40.99	11.43	44.13	37.49	51.20	7.06
Back To Home	0.36	0.50	0.23	0.32	0.46	0.73	0.24	0.44	0.31	0.38	0.22	0.29
Others	12.90	16.21	9.73	53.90	14.71	20.55	10.16	53.19	11.88	14.14	9.45	54.03

Table 4.27: Percentage of Migration by Gender and Rural / Urban

The perception of moving to urban areas is substantiated by the evidence from data for reasons of migration as illustrated in Figure 4.20. It is found that highest reason cited for migration is moving with family with 43.08% followed by job/business with 19.84%, others with 12.90%, marriage with 19.62% and education with 4.21%.

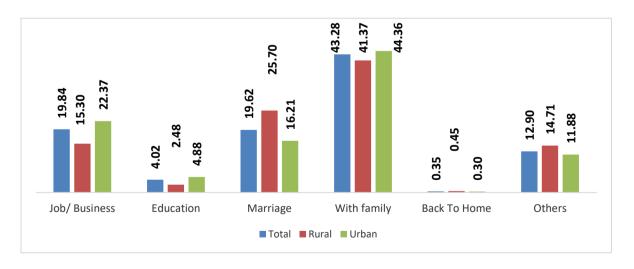


Figure 4.20: Reasons of Migration by Rural/Urban

Analyses of migration by age groups shows that the migration in the age group 25-40 as depicted in figure 4.21 is highest with 31.35% from all other age groups, followed by 41-60 age group with 23.20% and 15-24 age group with 18.55%. Remaining groups have less concentration of migrated population The age group 25-40 years is the group of young population where the reason for migration of population is due to job/ business and marriage.



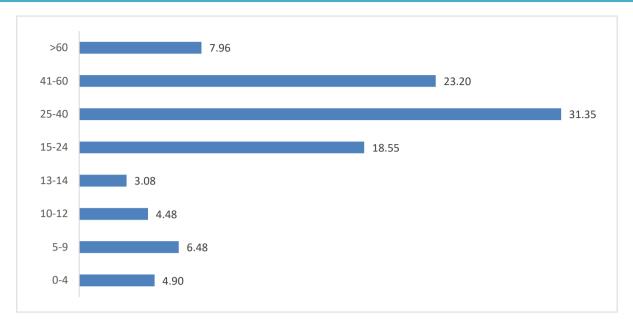


Figure 4.21: Migration by age groups

According to the 2023 Census, migration rates across Pakistan's regions show significant variation as depicted in Table 4.28. Islamabad has the highest migration rate at 47.40%, followed by Punjab at 5.75%, Sindh at 5.44%, Khyber Pakhtunkhwa at 3.01%, and Balochistan with the lowest rate of 2.96%.

The high migration rate in Islamabad can be attributed to its status as the capital city, offering better infrastructure, economic opportunities, and resources, attracting people from various regions for employment, education, and improved living standards. Punjab and Sindh have moderate migration rates, reflecting their large urban centers like Lahore and Karachi, which are major economic hubs that draw people for work and education.

Assar/ Darasinas		Migration Census-2023							
Area/ Province	Total	Male	Female	Transgender					
Khyber Pakhtunkhwa	3.01	2.92	3.11	18.17					
Punjab	5.75	5.11	6.41	12.75					
Sindh	5.44	5.60	5.25	14.28					
Balochistan	2.96	2.96	2.96	5.75					
Islamabad	47.40	47.71	47.05	76.30					

Table 4.28: Percentage of Migration by Provinces, Census-2023

On the other hand, Balochistan has the lowest migration rate, likely due to fewer economic opportunities, geographic challenges, and a relatively less urbanized environment. Khyber Pakhtunkhwa also has a relatively low migration rate, possibly due to regional instability or limited economic pull compared to other provinces.

These migration trends reflect the disparities in economic development, urbanization, and social opportunities across the country, with Islamabad leading due to its central position and the higher concentration of resources and opportunities

# PART - IV HOUSING CHARACTERISTICS





## 7th Population & Housing Census 2023

"FIRST EVER DIGITAL CENSUS"







**ELECTRICITY** 84.03%

## **FUEL USED FOR** LIGHTINING



**SOLAR** 7.74%



**OTHERS** 8.23%



GAS/LPG /LNG 42.03%



**FIRE WOOD** 52.72%



**OTHERS** 5.25%



PAKKA HH 67%

#### TYPE OF HOUSING UNIT



**SEMI PAKKA** HH 13%



**KACHA HH** 20%



**HIGH RISE STRUCTURE** (RESIDENTIAL, ECONOMICAL, RESIDENTIAL & ECONOMICAL)

114,159

#### MAIN SOURCE OF DRINKING WATER (INSIDE AND OUTSIDE)



TAP WATER 32.35%



**MOTOR PUMP** 

45.87%



FILTRATION PLANT

6.41%



**BOTTLE WATER** 

1.47%



**DUG WELL** 4.21%



**OTHER** 9.69%



TOILET FACILITIES



**SEPARATE** TOILET 68%



**FLUSH** 81%



NON FLUSH 7%



NO TOILET 13%



## HOUSING CHARACTERISTICS

A total of fourteen (14) main questions were asked in the Census-2023 to collect and assess the housing characteristics of the province. The questions ranged from tenure of the housing unit to the number of family members living abroad (who stayed abroad for six months or more). The main focus was on assessing the type of housing units, type of material used in construction and the type of housing facilities available in the housing unit. This part of the Provincial Census Report has been divided into two sections namely: Type of Housing Units which constitutes information such as level of congestion, nature of tenure, period of construction of owned housing units, construction material used for construction of walls & roofs while the second part comprises of Availability of Housing Facilities, including information on sources of drinking water, lighting, fuel used for cooking, availability of kitchen, bathroom, Toilet facility.

## 5.1 Type of Structures

The sustainable housing and infrastructure development is the concern, before taking a step towards contributing to this sector. It is important for everyone to be aware of different types of buildings, their structure types and geographical location. Every constructor, be it an individual building a new home or a builder developing a vertical city, needs to have the proper information to be able to build in compliance with government regulations.

As Census is a complete count of all structures and population of country, therefore, to capture the different variations in structure as per changing ground realities. PBS with the consultation of all stakeholders and recommendations of technical committees, included the question regarding the type of structure with different variations along with identification of 23 different types of entities i.e houses, hospital, shops. The type of structures has been included first time in Census-2023. Following the categories that were included to determine.



Normal Residential: 1-3 Story Residential Buildings



Normal Economic: 1-3 Story Economic Activity Buildings



Normal Economic + Residential: 1-3 Story Multi-Purpose Buildings



Multistory Residential: All structures with 4 and above floors



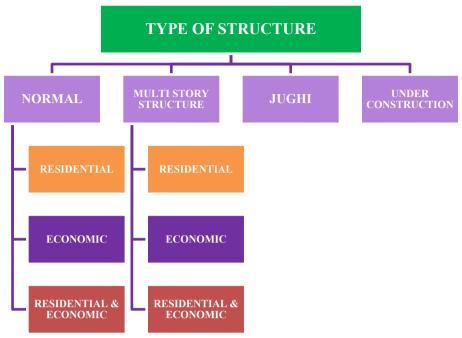
Multistory Economic:

All structures with 4 and above floors with Economic Activity Buildings



Multistory Economic + Residential: More than 3 Floors Multi-Purpose Buildings





The Table 5.1 provides a breakdown of different types of structures in Pakistan across its provinces, including multi-story buildings, residential and economic structures, informal structures, and under-construction buildings. Residential structures have the highest percentage of 79.43% of total buildings in Pakistan showing a strong focus on housing. At provincial level, Khyber Pakhtunkhwa with 81.60% has the highest proportion of residential structures whereas Punjab with 78.57% and Sindh with 79.73% have slightly lower proportions. The analysis of residential structure is showing that Pakistan's infrastructure is largely residential, with less emphasis on mixed-use buildings or economic structures.

Total multistory structures of Pakistan are 114,148 out of which 64.38% are multi-story residential structure followed by multi-story residential & economic structures with 28.96% and multi-story economic structures with 28.96%. Multi-story residential structures are predominantly found in Sindh Province, accounting for 64.84% of the total, largely due to the prevalence of flat-type residential blocks in its urban areas. Likewise, Sindh also leads in the combined category of multi-story residential and economic structures, representing 74.63%, followed by Punjab at 15.45%, Islamabad at 4.00%, Khyber Pakhtunkhwa at 3.98%, and Balochistan at 1.93%.

Overall, Pakistan has a very low percentage (0.02%) of multi-story economic structures, indicating limited presence of high-rise business buildings. Islamabad has the highest share of multi-story economic structures with 0.19% as it serves as a corporate hub with financial institutions, multinational offices and embassies whereas Punjab, Sindh and Khyber Pakhtunkhwa have 0.02%. Balochistan stands at lowest with 0.01 % showing limited business activity.

Pakistan's national share of economic structures is 13.44% reflecting that the economic structures make up a smaller proportion when compared to residential buildings 79.43%, indicating Pakistan's focus on housing over commercial development. Punjab has the highest percentage with 14.78% in economic structures, showing its role as Pakistan's economic hub.



The national percentage of Jughi/ Jhompri/ Tent/ Cave is 1.39% whereas Balochistan has the highest proportion of this category of structure with 4.28% signifying that rural communities rely on temporary shelters due to underdeveloped housing infrastructure. On the other hand, Khyber Pakhtunkhwa has the lowest percentage with 0.20% indicating that rural communities have traditional but more permanent housing structures.

Pakistan's national share of under-construction structures is 2.42% showing that Pakistan is experiencing significant growth in construction activity, with rapid urban expansion. Islamabad has the highest percentage i.e. 6.56%, reflecting heavy infrastructure and real estate investment whereas Punjab has the lowest share i.e. 2.39%, indicating a more stable and mature infrastructure base.

**Table 5.1: Residential Structures of Housing Units by Province** 

Area /	Province		Pakistan	KP	Punjab	Sindh	Balochistan	Islamabad
	Residential Structure		73,490 ( <b>0.19%</b> )	3,391 ( <b>0.06%</b> )	18,136 (0.08%)	48,389 ( <b>0.63%</b> )	1,437 ( <b>0.06%</b> )	2,137 (0.51%)
Residential Structure	Economic Structure		7,593 ( <b>0.02%</b> )	1,191 ( <b>0.02%</b> )	3,533 ( <b>0.02%</b> )	1,815 ( <b>0.02%</b> )	259 ( <b>0.01%</b> )	795 ( <b>0.19%</b> )
	Residential & Economic Structure	M	33,065 ( <b>0.09%</b> )	1,317 ( <b>0.02%</b> )	5,109 ( <b>0.02%</b> )	24,678 ( <b>0.32%</b> )	637 ( <b>0.03%</b> )	1,324 ( <b>0.32%</b> )
	Residential Structure		30,434,514 ( <b>79.43%</b> )	4,689,072 ( <b>81.60%</b> )	17,379,863 (7 <b>8.57%)</b>	6,163,126 ( <b>79.73%</b> )	1,864,928 ( <b>80.91%</b> )	337,525 ( <b>80.96%</b> )
Normal Structures	Economic Structure		5,151,063 ( <b>13.44%</b> )	756,175 (13.16%)	3,270,252 (14.78%)	825,884 (10.68%)	267,313 (11.60%)	31,439 ( <b>7.54%</b> )
	Residential & Economic Structure	T BE	1,160,304 ( <b>3.03%</b> )	96,991 <b>(1.69%)</b>	810,060 ( <b>3.66%</b> )	215,689 (2.79%)	23,950 (1.04%)	13,614 ( <b>3.27%</b> )
	Jughi/ Jhompri/ Tent/ Cave		530,918 (1.39%)	11,477 ( <b>0.20%</b> )	104,267 ( <b>0.47%</b> )	313,738 ( <b>4.06%</b> )	98,723 ( <b>4.28%</b> )	2,713 ( <b>0.65%</b> )
	Under- Construction Structure		927,160 ( <b>2.42%</b> )	186,798 ( <b>3.25%</b> )	528,470 ( <b>2.39%</b> )	136,920 (1.77%)	47,622 ( <b>2.07%</b> )	27,350 ( <b>6.56%</b> )



## **5.1.1** Type of Housing Units

#### I. Level of Congestion - Persons and Rooms

According to the Census-2023, there are 38.29 million households as compared to 31.92 million enumerated in Census-2017, which shows an increase of 6.37% during the intercensal period of 2017-2023. The distribution of housing units according to rural urban domains in Pakistan is 60.77% and 39.23% respectively as shown in Table 5.2.

Level of congestion in terms of persons and rooms per housing unit reflect the living standard of a society. It also helps in determining the overall requirement of housing units and ultimately provides a base for policy formulation and future planning at micro and macro level. The average household size has decreased from 6.4 persons reported in Census-2017 to 6.3 persons in Census-2023.

Table 5.2: Indices of Level of Congestion in Housing Units by Rural/Urban, Census-2017 and 2023

Level of Congestion		2017			2023	
	All Areas	Rural	Urban	All Areas	Rural	Urban
Average Household size	6.4	6.6	6.1	6.3	6.34	6.25
Houses with Single Room (%)	31.4	34.8	25.7	31.79	37.48	22.99
Houses with 2-4 Rooms (%)	58.7	56.0	63.0	60.52	55.93	67.64
Houses with 5 and More Rooms (%)	10.0	9.2	11.3	7.68	0.89	6.11
Housing Units Breakdown by Rural/Urban (%)	100	62.1	37.9	100.00	60.77	39.23
Number of Households	31,915,884	19,834,199	12,081,685	38,292,556	23,268,867	15,023,689

The percentage of single room houses has marginally increased from 31.4% in Census-2017 to 31.79% in Census-2023. This change is particularly notable in rural areas with 37.48%, where overcrowding in one-room units has been a significant issue, however there is decline in urban areas from 25.7% in Census 2017 to 22.99% in Census 2023. This shift also highlights the ongoing challenges in providing adequate housing for all. The percentage of housing units with two to four rooms has increased from 58.7% in Census-2017 to 60.52% in Census-2023. This change is due to significant increase in urban areas from 63% in Census-2017 to 67% in Census-2023. Whereas housing units with five and more rooms have decreased to 7.68% in 2023 as compared to 10.0% in Census-2017. (Figure 5.1).

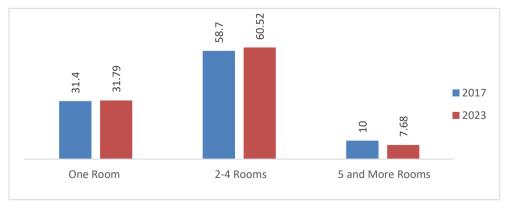


Figure 5.1: Housing Units by Number of Rooms, Census-2017 and 2023



Table 5.3 highlights the level of congestion in housing units across Pakistan's provinces. Sindh experiences the highest congestion, with 50.31% of housing units having only a single room, while Punjab and Khyber Pakhtunkhwa have a majority of 2-4 room units, indicating moderate living space. Balochistan also shows a considerable percentage of single-room units with 32.72%, reflecting housing challenges. The proportion of housing units with five or more rooms remains low across all provinces, with Khyber Pakhtunkhwa and Balochistan having slightly better conditions than Sindh.

Table 5.3: Indices of Level of Congestion in Housing Units by Provinces, Census-2023

			2023		
Level of Congestion	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Average Household size	6.9	6.44	5.65	6.43	5.52
Housing Units with Single Room (%)	27.52	24.24	50.31	32.72	8.1
Housing Units with 2-4 Rooms (%)	62.83	67.01	46.07	57.67	77.06
Housing Units with 5 and More Rooms (%)	9.65	8.75	3.61	9.6	14.83
Number of Households	5,861,457	19,839,980	9,862,870	2,317,256	410,993

#### II. Nature of Tenure

The nature of tenure is defined by the type of house ownership. In Census-2017, the categories included Owned, Rented, and Rent-Free. However, in Census-2023, for the first time, additional classifications Government, Non-Government, and Others have been introduced. In the Census-2017, these classifications were grouped under the broader categories of Owned, Rented, and Rent-Free.

Government Houses refer to accommodations allocated by the government to its employees, while Non-Government Houses are those provided by private sector organizations to their employees. The category "Others" includes all housing arrangements that do not fall into these specified types. This classification aims to provide accurate data, enabling the government to develop housing schemes based on the actual housing situation.

Of the total housing units enumerated in the Census-2023, there is a marginal decline in the proportion of owned houses i.e. 81.91% as compared to 82.14% in the Census-2017 as shown in Table 5.4. Rented housing has increased slightly from 11.53% to 11.87%, suggesting a growing reliance on rental properties. The proportion of rent-free housing has notably decreased from 6.33% to 4.2%, possibly reflecting changing socioeconomic conditions. Additionally, government-owned housing now constitutes 0.96%, while the "Others" category has risen to 0.91%, showing diversification in housing tenure.



Table 5.4: Percentage of Housing Units by Nature of Tenure and Rural/Urban, Census-2017 and 2023

Tenı	IMO.		2017		2023			
1 6110	ire	All Areas	Rural	Urban	All Areas	Rural	Urban	
Owned	Percent	82.14	89.00	70.87	81.91	88.94	71.02	
Rented	Percent	11.53	3.78	24.27	11.87	4.15	23.82	
Rent Free	Percent	6.33	7.22	4.86	4.20	5.32	2.45	
Govt.								
House	Percent	-	-	-	0.96	0.27	2.03	
Non-								
Govt.								
House	Percent	-	-	-	0.14	0.15	0.14	
Others	Percent	-	-	-	0.91	1.16	0.53	
Numb	er of							
Housel	holds	31,915,884	19,837,143	12,078,741	38,292,556	23,268,867	15,023,689	

Table 5.5 highlights provincial differences in housing tenure from the 2023 Census. Balochistan with 85.76% and Punjab with 84.31% have the highest percentage of owned houses, reflecting a strong culture of homeownership, while Sindh with 76.14% has the lowest ownership rate among the provinces. Sindh also has a relatively high rental rate with 15.78% compared to other provinces.

The percentage of rent-free housing is slightly higher in Balochistan 5.3% followed by Sindh 5.36%, possibly due to joint-family living arrangements, while Punjab with 3.45% and Islamabad with 2.49% have the lowest share.

Table 5.5: Province wise Percentage of Housing Units by Nature of Tenure, Census-2023

			2023		
Tenure	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Owned	83.98	84.31	76.14	85.76	53.27
Rented	10.27	10.55	15.78	6.22	36.35
Rent Free	4.48	3.45	5.36	5.3	2.49
Govt. House	0.7	0.9	1.01	0.91	6.98
Non-Govt. House	0.05	0.13	0.24	0.07	0.14
Others	0.52	0.66	1.47	1.75	0.76
Number of Households	5,861,457	19,839,980	9,862,870	2,317,256	410,993

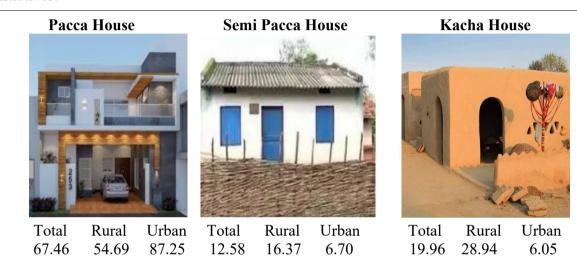
#### **III. Contraction Material of House**

Census-2023 collects information regarding pacca house, semi pacca house and kacha house. Pacca house is defined as a well-constructed, permanent or concrete house made of durable materials such as bricks, cement and steel etc. The roof and walls of a pacca house are made from durable materials like cement concrete, burnt bricks, jack board, timber or stone. Semi pacca house is defined as house made of pre- fabricated material. It also includes house either roof or wall made of pre-fabricated material. The house having roof made of cement and wall made up of ply wood are also declared as semi pacca house. Kacha house includes the houses



where walls are made of bamboo, mud or ply wood/ card board and roof is made by cement/ iron sheet or garder / T-iron or pre-fabricated material.

The Pacca, Semi Pacca and Kacha House aims to assess the affordability and accessibility of housing, tracking changes in construction costs and property values. It is fundamental to a country's development as it provides a foundation for stability and security, enabling individuals and families to invest in their future. The analysis informs policy decisions, helping governments and stakeholders address housing shortages and promote affordable housing initiatives.



In rural areas of Pakistan majority of houses have kacha structures with 28.94%. Pacca houses are 67.46 %, higher in urban areas with 87.25% as compared to rural areas with 54.69%. Semi pacca houses are higher in rural areas as compared to urban areas with 16.37%.

#### **IV. Province Wise Analysis of Pacca Houses**

Table 5.6 illustrates the distribution of Pacca, Semi-Pacca, and Kacha houses across Pakistan's provinces. Pacca houses, built with durable materials like concrete and bricks, are most common in Islamabad with 97.35% and Punjab with 80.80%, indicating better infrastructure. Sindh with 57.69% and Khyber Pakhtunkhwa with 55.57% have moderate percentages, while Balochistan with 19.64% has the lowest, reflecting underdeveloped housing conditions.

Semi-Pacca houses, made from a mix of durable and temporary materials, are more common in Khyber Pakhtunkhwa with 19.58% and Balochistan with 16.78%, while Punjab with 11.93% and Sindh with 9.19% have lower percentages.

Kacha houses, constructed from mud and other temporary materials, are highly prevalent in Balochistan with 63.58% and rural Sindh with 61.01%, highlighting severe housing inadequacies. Sindh overall has a significant proportion with 33.11%, while Punjab with 7.26% and Khyber Pakhtunkhwa with 24.85% have lower percentages.

The data reflects stark regional and urban-rural disparities in housing quality, with Islamabad and Punjab showing the most developed housing infrastructure, while Balochistan and rural Sindh face severe housing challenges.



Table 5.6: Percentage of Pacca, Semi Pacca and Kacha Houses by Provinces, Census-2023

				2023		
Construction Material		Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Dance	Total	55.57	80.80	57.69	19.64	97.35
Pacca House	Rural	50.35	72.99	27.25	10.65	98.38
nouse	Urban	83.90	92.06	85.62	42.50	96.09
Carri Danas	Total	19.58	11.93	9.19	16.78	1.21
Semi Pacca House	Rural	21.67	16.41	11.74	15.62	0.91
nouse	Urban	8.23	5.49	6.86	19.73	1.58
Vaslas	Total	24.85	7.26	33.11	63.58	1.44
Kacha	Rural	27.98	10.60	61.01	73.73	0.71
House	Urban	7.86	2.45	7.52	37.77	2.33

#### V. District Wise Analysis of Pacca Houses

The Pacca house concentration in Pakistan aims to assess the affordability and accessibility of housing, tracking changes in construction costs and property values. This analysis informs policy decisions, helping governments and stakeholders address housing shortages and promote affordable housing initiatives.

The average structure of house breakdown identifies that across 136 districts percentage pacca house is 67.46%. The districts with pacca house is higher than the national average of 67.46%, are 48, whereas, 88 districts fall below the national average of pacca house. This average serves as a benchmark to assess the socioeconomic development, urbanization, and housing quality disparities across districts, enabling targeted interventions and policy decisions to bridge the gaps and promote equitable growth and development.

The pacca house concentration across the districts reveal a diverse distribution (Figure 5.2). The data, categorized as follows:

- Up to 20.0% Pacca House: The 40 districts with up to 20% Pacca House ownership require urgent government attention and targeted interventions.
- 20.1% to 40.0% Pacca House: The 23 districts with Pacca House rates between 20-40% indicate moderate levels of socioeconomic development and urbanization. This range suggests a balance between rural and urban populations, with opportunities for targeted investments to further improve housing quality and infrastructure.
- **40.1% to 60.0% Pacca House:** The 16 districts with Pacca house rates between 40-60% indicate better economic stability and infrastructure development. This range suggests a strong foundation for middle-class growth and moderate urbanization.
- **60.1% to 80.0% Pacca House:** there are 29 districts in this range. Suggesting a well-educated population with improved living standards and economic stability.
- **80.1% and Above Pacca House:** 28 districts achieve this high pacca house level, indicating exceptional educational attainment and socioeconomic prosperity.

While analysing districts it is observed that out of 136 districts of Pakistan, Pacca housing unit is reported in Karachi South with 97.4% while other districts with Pacca housing unit are district with Islamabad 97.4%, district Karachi Central with 96.5%, district Korangi with 96.5% and district Lahore with 96.3%

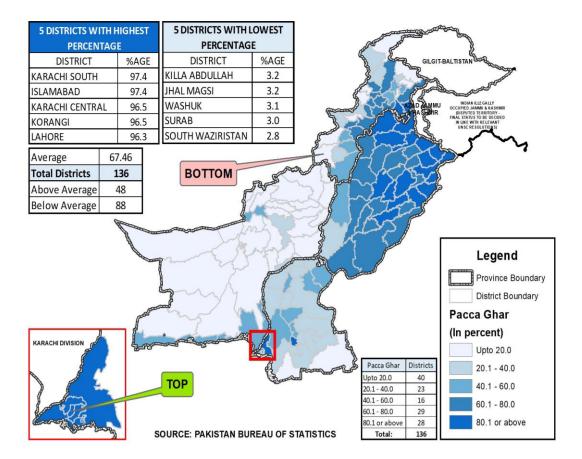


Figure 5.2: District Wise Pacca Housing Units Pakistan, Census-2023

By analyzing the low ranked districts in terms of Pacca house, the Lowest percentage is observed in district South Waziristan 2.8%. The other districts with lower percentage of Pacca houses are district South Waziristan 2.8%, Surab 3.0%, district Washuk 3.1%, district Jhal Magsi with 3.2% and district Killa Abdullah 3.2%. The reason for lower percentage of pacca houses is due to many factors like limited resources, lack of infrastructural resources, Rural-urban migration & traditional norms etc.

#### VI. Period of Construction

The period of construction of a house refers to the specific time frame or year in which the house was built. This information helps in assessing the age of the house, its structural condition, and the materials used during construction. It is often categorized into different time periods for census, real estate, and urban planning purposes.

As reflected in Table 5.7, 3.07% of the owned houses were found under construction in the Census-2023. The recent trend of under construction houses is higher in rural areas as compared to urban areas.

It is found that in rural area vast majority of houses i.e. 33.64% are relatively newly constructed within a period of 10-19 years and in urban areas the majority i.e. 33.49% lies within a period of 10-19 years followed by 31.02% within 20-49 years. The proportion of house built for 10 to 19 years remains the highest with 33.58%, whereas the house under constructed remains the lowest with 3.07%.



Table 5.7:Percentage of Owned Housing Units by Period of Construction and Rural/Urban, Census-2023

Decided Constanting	2023						
Period of Construction	All Areas	Rural	Urban				
All Categories	100	100	100				
Under Construction	3.07	3.74	2.03				
3 years and below 3	12.19	13.91	9.52				
4-9 years	21.25	23.31	18.05				
10-19 years	33.58	33.64	33.49				
20-49 years	25.05	21.19	31.02				
50 years and above	4.86	4.20	5.87				
Number of Households	38,292,556	23,268,867	15,023,689				

Table 5.8 presents the 2023 Census data on the construction period of owned housing units across Pakistan's provinces. The percentage of houses currently under construction is highest in Balochistan with 7.71%, followed by Sindh with 5.28%, indicating ongoing housing development in these regions. In contrast, Punjab with 1.67% and Islamabad with 1.36% have the lowest percentages, suggesting a slower pace of new construction.

Houses built in the last three years are most prevalent in Balochistan with 18.97%, followed by Sindh with 16.84%, reflecting relatively newer housing stock. Punjab with 10.2% and Khyber Pakhtunkhwa with 8.47% have fewer new constructions, while Islamabad stands at 11.35%.

The majority of houses in all provinces fall within the 10 to 19-years category, with Punjab having the highest proportion at 37.04%, followed by Khyber Pakhtunkhwa with 32.89% and Islamabad with 33.47%. Sindh and Balochistan have slightly lower percentages at 28.79% and 26.22%, respectively.

Older housing stock, built between 20 to 49 years ago, is most common in Khyber Pakhtunkhwa with 30.19%, followed by Punjab with 25.52% and Islamabad with 24.39%. Sindh with 22.64% and Balochistan with 18.31% have relatively fewer houses in this category, indicating more recent development.

Houses aged 50 years and above are most prevalent in Khyber Pakhtunkhwa with 8.5%, followed by Balochistan with 7.43%, showing that traditional housing structures remain in use. Punjab with 3.48% and Islamabad with 4.85% have the lowest share of such old houses, reflecting more modern housing trends.

Overall, the data shows that Balochistan and Sindh have a higher share of new housing developments, while Punjab and Khyber Pakhtunkhwa have older yet more established residential areas. Islamabad has a balanced mix of housing ages, with a relatively lower proportion of newly built and very old houses.

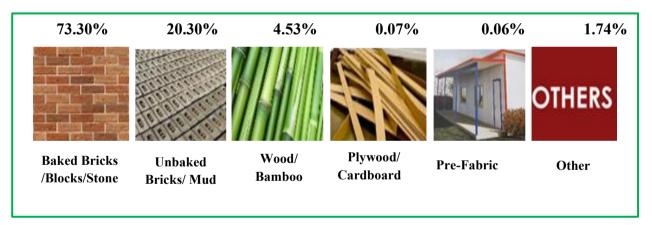


Table 5.8: Provincial Percentages of Owned Housing Units by Period of Construction,
Census-2023

	2023								
Period of Construction	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad				
Under Construction	2.38	1.67	5.28	7.71	1.36				
3 years and below 3	8.47	10.2	16.84	18.97	11.35				
4-9 years	17.58	22.09	21.58	21.36	24.58				
10-19 years	32.89	37.04	28.79	26.22	33.47				
20-49 years	30.19	25.52	22.64	18.31	24.39				
50 years and above	8.5	3.48	4.87	7.43	4.85				
Number of Households	5,861,457	19,839,980	9,862,870	2,317,256	410,993				

#### VII. Construction Material Used for Outer Walls

Quality of housing units and living standards can be assessed through the construction material used for the walls and roofs of the housing units. In Census 2023, different categories like Baked Bricks/Blocks/Stones, Unbaked Bricks/ Mud, Wood/Bamboo, Plywood/ Cardboard, Pre-Fabric & others were asked to assess the housing construction material as depicted in following Table.



Majority of houses with 73.30% in Census-2023 have reported that their walls are made of baked bricks/ blocks/ stones as compared to 74.25% reported in Census-2017. The percentage is higher in urban areas with 90.32% as compared to 62.31% in rural areas in Census-2023. Moreover, the walls made of unbaked bricks with mud bonding is 28.66% in rural areas and 7.35% in urban areas in the Census-2023.

The use of wood bamboo for construction of walls has decreased slightly from 5.37% in Census-2017 to 4.53% in Census-2023. The concentration is higher in rural areas with 6.65% as compared to 1.23% only in urban areas.

The categories of Plywood/Cardboard and Pre-Fabric have been included in Census-2023. Nominal houses reported these categories with 0.08% and 0.06% in rural areas and for urban areas 0.04% and 0.07% respectively.

Quality indices of construction regarding outer walls are shown in the Table 5.9':



Table 5.9: Number and Percentage of Housing Units by Construction Material Used for Outer Walls, Census-2023

Construction Mater	: a l		2017			2023	
Construction Mater	Construction Material		Rural	Urban	All Areas	Rural	Urban
Baked Bricks / Blocks / Stones	Number	23,697,939	12,740,291	10,957,648	28,067,958	14,499,070	13,568,888
	Percent	74.25	64.22	90.72	73.30	62.31	90.32
Unbaked Bricks / Mud	Number	5,866,688	5,119,185	747,503	7,773,166	6,668,312	1,104,854
	Percent	18.38	25.81	6.19	20.30	28.66	7.35
Wood / Bamboo	Number	1,714,628	1,499,733	214,895	1,736,239	1,547,408	188,831
	Percent	5.37	7.56	1.78	4.53	6.65	1.26
Plywood/Cardboard	Number	-	-		26,053	19,367	6,686
	Percent	-	-	0.00	0.07	0.08	0.04
Pre-Fabric	Number	-	-	-	24,045	13,153	10,892
	Percent	-	-	-	0.06	0.06	0.07
Others	Number	636,629	477,934	158,695	665,095	521,557	143,538
	Percent	1.99	2.41	1.31	1.74	2.24	0.96
Number of Househo	Number of Households		19,837,143	12,078,741	38,292,556	23,268,867	15,023,689

<sup>\*</sup>Plywood/Cardboard and Pre-Fabric has been added in Census-2023

Regional variations in building practices and infrastructure development across Pakistan's provinces is depicted in Table 5.10. Durable structures made of baked bricks, blocks, or stones are most common in Islamabad with 97.71% and Punjab with 86.6%, while Balochistan has the lowest at 22.36%, reflecting a reliance on traditional materials.

Mud and unbaked bricks are widely used in Balochistan with 61.02%, followed by Khyber Pakhtunkhwa with 28.29% and Sindh with 23.79%, whereas Punjab and Islamabad have significantly lower shares, indicating a shift toward modern housing. Temporary materials like wood and bamboo are prevalent in Sindh with 12.32% and Balochistan with 9.55%, but minimally used in Punjab and Islamabad. Plywood, cardboard, and pre-fabricated materials remain rare across all regions.

Balochistan and Sindh have the highest percentage of mixed or alternative materials, reflecting informal housing trends, also depends on traditional construction methods, underscoring regional development gaps.

Table 5.10: Province wise Percentages of Housing Units by Construction Material Used for Outer Walls, Census-2023

Construction Material (Outer		2023						
Walls)	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad			
Baked Bricks / Blocks / Stones	67.16	86.6	61.15	22.36	97.71			
Unbaked Bricks / Mud	28.29	11.84	23.79	61.02	1.53			
Wood / Bamboo	2.72	0.7	12.32	9.55	0.35			
Plywood/Cardboard	0.05	0.02	0.15	0.2	0.02			
Pre-Fabric	0.03	0.03	0.12	0.16	0.04			
Others	1.74	0.82	2.47	6.71	0.35			
Number of Households	5,861,457	19,839,980	9,862,870	2,317,256	410,993			



#### VIII. Construction Material Used for Roofs

The use of material for construction of roofs is also used to assess the living standards and to collect data for appropriate policy making for disasters. In Pakistan the highest percentage of material used for roofs is Garder/T. Iron with 35.81%. The category of Pre-Fabric has been included in Census-2023 with the share of 0.24%. The data for this category was not available in Census-2017. The use of unspecified material in construction of roofs has decreased from 2.07% in Census-2017 to 1.94% in Census-2023.



Table 5.11 reveals that the rural areas have predominately higher percentage of housing units i.e. 41.97% which have roofs constructed using Garder/T. Iron as compared to 26.28% in urban areas. The second most prominent method used in pakistan for roof is RCC/RBC with 32.03%. This clearly depicts that in urban areas majority i.e. 56.14% used RCC/RBC while in rural areas the most prevalent is Garder/T.Iron followed by Wood/Bamboo. Almost 1/3 of houses 26.28% in urban areas are also using Garder/T.Iron as material of construction for roofs.

Table 5.11: Number and Percentage of Housing Units by Construction Material Used for Roofs, Census-2023

Construction N	<b>Material</b>		2017			2023	
		All Areas	Rural	Urban	All Areas	Rural	Urban
RCC/RBC	Number	8,978,024	2,606,324	6,371,700	12,265,098	3,831,457	8,433,641
	Percent	28.13	13.14	52.75	32.03	16.47	56.14
Cement/Iron Sheet	Number	1,979,953	987,893	992,060	2,436,900	1,171,023	1,265,877
	Percent	6.20	4.98	8.21	6.36	5.03	8.43
Garder/T-Iron	Number	12,195,735	8,792,771	3,402,964	13,712,540	9,764,984	3,947,556
	Percent	38.21	44.32	28.17	35.81	41.97	26.28
Wood/Bamboo	Number	8,051,943	6,926,152	1,125,791	9,043,480	7,885,764	1,157,716
	Percent	25.23	34.92	9.32	23.62	33.89	7.71
Pre-Fabric*	Number	-	-	-	92,558	33,851	58,707
	Percent	-	-	-	0.24	0.15	0.39
Others	Number	710,229	524,003	186,226	741,980	581,788	160,192
	Percent	2.23	2.64	1.54	1.94	2.50	1.07
Number of Hou	Number of Households		19,837,143	12,078,741	38,292,556	23,268,867	15,023,689

\*Pre-Fabric was added in Census-2023

Table 5.12 shows that RCC/RBC roofs, which are durable and commonly used in urban areas, are most prevalent in Islamabad at 85.26%, demonstrating a high level of modern construction. Punjab and Khyber Pakhtunkhwa have similar adoption rates at 34.03% and 35.16%,



respectively, while Sindh lags slightly at 29.9%. Balochistan has the lowest percentage at 6.64%, indicating a reliance on traditional and less permanent roofing materials.

Garder/T-Iron roofs, a semi-permanent option, are most common in Punjab at 47.74%, showing a regional preference for cost-effective but durable roofing. Sindh follows with 26.16%, Balochistan with 23.53%, and Khyber Pakhtunkhwa with 18.59%.

Wood and bamboo roofs, which are traditional and more common in rural or less developed areas, are predominant in Balochistan at 58.78% and Sindh at 33.45%. Khyber Pakhtunkhwa also has a significant share at 33.79%, while Punjab has a much lower rate at 12.08%.

Cement and iron sheet roofing, often used as an affordable alternative, is most used in Khyber Pakhtunkhwa at 9.91%, followed by Sindh at 7.34%. Punjab and Islamabad have lower shares at 5.16% and 6.76%, respectively, while Balochistan has the least at 3.46%.

Pre-fabricated roofing remains rare across all provinces, with Sindh and Balochistan showing slightly higher adoption at 0.55% and 0.58%, respectively. Punjab and Khyber Pakhtunkhwa have minimal usage at 0.08% and 0.14%.

Overall, the data highlights significant regional differences in roofing materials. Islamabad and Punjab have a strong inclination toward modern and durable structures, while Balochistan and rural Sindh continue to rely on traditional materials like wood and bamboo. These disparities reflect differences in economic development, infrastructure availability, and regional construction trends.

Table 5.12: Province wise Percentages of Housing Units by Construction Material Used for Roofs, Census-2023

Construction	2023								
Material ( Roofs)	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad				
RCC/RBC	35.16	34.03	29.9	6.64	85.26				
Cement/Iron Sheet	9.91	5.16	7.34	3.46	6.76				
Garder/T-Iron	18.59	47.74	26.16	23.53	6.15				
Wood/Bamboo	33.79	12.08	33.45	58.78	1.37				
Pre-Fabric*	0.14	0.08	0.55	0.58	0.09				
Others	2.4	0.91	2.6	7.02	0.37				
Number of Households	5,861,457	19,839,980	9,862,870	2,317,256	410,993				

## **5.1.2** Availability of Facilities in Housing Units

#### I. Source of Drinking Water

In Census 2023, information has been collected from households about the main source of drinking water. The main categories include Tap Water, Motorized Pump, Hand Pump, Dug Well, Spring, Bottle Water, Filtration Plant and Tanker/Truck/Water bearer.

Easy access to drinking water serves as an index of quality living. For the first time category of Bottled Water, Filtration Plant and Tanker/Water Bearer has been added in Census



2023 to reflect ground trends. The availability of drinking water through all sources in the Pakistan reported in the Census-2017 and Census-2023.

Table 5.13 reveals that 63.63% of households in census 2023 reported that their main source of drinking water is inside of the house as compared to 86.09% in 2017. The detailed analysis of data depicts that the percentage of households with the main source of drinking water outside house in Census 2023 is higher with 33.66 % as compared to 13.91% only in 2017, categories wise analysis revels that this is mainly due to the inclusions of Tanks/Water Bearer with 8.86%, Bottled water with 4.38% and Filter plant with 19.05%. The percentages are highest in urban areas with 14.57%, 10.03% and 35.30% respectively mainly due to quality of water supply at home, which is not suitable for drinking. This shows the diverse trends in the water access and in quality in Urban/Rural areas.

Table 5.13: Number and Percentage of Housing Units by Source of Drinking Water and Rural/Urban, Census-2017 and 2023

Comment of the Water		2017		2023			
Sources of Drinking Water	All Areas	Rural	Urban	All Areas	Rural	Urban	
Lucido the House	27,475,469	16,558,459	10,917,010	25,403,691	15,460,998	9,942,693	
Inside the House	86.09	83.47	90.38	66.34	40.38	25.97	
Tap water	38.01	32.26	46.71	38.30	33.38	45.95	
Motor pump/hand pump(bore hole)	51.43	54.83	46.28	57.44	61.45	51.20	
Protected well	2.66	3.44	1.49	2.42	3.22	1.17	
Un-protected well	1.26	1.82	0.40	0.27	0.38	0.10	
Others	6.64	7.64	5.12	1.57	1.57	1.57	
O-4-1-4b. H	4,440,415	3,278,684	1,161,731	2,888,865	7,807,869	5,080,996	
Outside the House	13.91	16.53	9.62	33.66	33.56	33.82	
Tap water	21.88	21.58	22.73	20.62	23.64	15.97	
Motor Pump/Hand Pump(bore hole)	23.54	23.77	22.91	23.06	26.94	17.10	
Protected Well	5.26	6.58	1.53	3.62	5.42	0.86	
Un-Protected Well	4.91	6.39	0.73	3.58	5.61	0.46	
Bottled Water*	-	-	-	4.38	0.70	10.03	
Spring	7.70	10.11	0.90	7.23	11.63	0.48	
Canal/River/Pond	11.13	13.35	4.87	5.88	8.08	2.51	
Filtration Plant*	-	-	-	19.05	8.48	35.30	
Tanker/Water Bearer*	-	-	-	8.86	5.15	14.57	
Others	25.58	18.23	46.33	3.71	4.36	2.71	
Number of Households	31,915,884	19,837,143	12,078,741	38,292,556	23,268,867	15,023,689	

Figure 5.3 illustrates that main source used inside the house for drinking water is Motor Pump/Hand Pump water with 57.44% followed by Tap with 38.30% which has increased trend as compared to Census 2017 with 51.43% and 38.01% inside drinking water concentration in Pakistan.



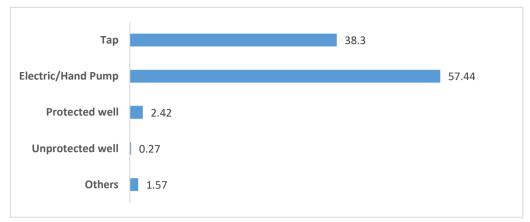


Figure 5.3: Percentage of Housing Units by Source of Drinking Water (Inside House)

Figure 5.4 illustrates that main source used outside the house for drinking water is Motor Pump/Hand Pump water with 23.06% followed by Tap with 20.6%.

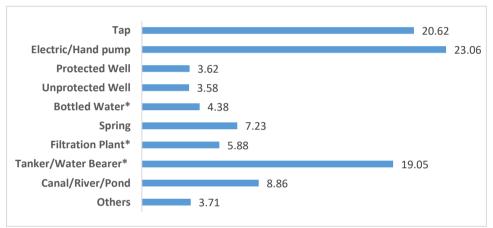


Figure 5.4: Percentage of Housing Units by Source of Drinking Water (Outside Home)

#### **Province Wise Analysis of Drinking Water Facility**

The availability of drinking water inside and outside households across different provinces in Pakistan, based on Census 2023 is shown in Table 5.14. Punjab has the highest number of households with access to drinking water inside the house, reaching 14.13 million, followed by Sindh with 6.28 million and Khyber Pakhtunkhwa with 3.80 million. In contrast, Balochistan shows a concerning trend, where more households rely on outside sources (1.37 million) compared to those with water inside the house (0.95 million). The data indicates that Balochistan faces significant challenges, with a large portion of its population lacking direct household access to water.

Table 5.14: Drinking Water Facility Inside/Outside the house by provinces

Province/ Area	Number of Households	Inside the House	Outside the House
Khyber Pakhtunkhwa	5,861,457	3,804,386	2,057,071
Punjab	19,839,980	14,131,447	5,708,533
Sindh	9,862,870	6,276,126	3,586,744
Balochistan	2,317,256	950,393	1,366,863
Islamabad	410,993	241,339	169,654



Figure 5.5 illustrates the percentage of housing units by source of drinking water in different provinces of Pakistan, as recorded in the Census 2023. Punjab has the highest percentage (71.23%) of households with water available inside, while only 28.77% depend on external sources. Khyber Pakhtunkhwa follows closely with 64.91% having inside access and 35.09% relying on outside sources. Similarly, Sindh shows a comparable trend, with 63.63 % having water inside and 36.37% outside.

However, Balochistan stands out as the only province where a majority (58.99%) of households rely on external sources, while only 41.01% have access inside. This disparity indicates better infrastructure in Punjab, Sindh, and Khyber Pakhtunkhwa, whereas Balochistan faces significant challenges in water accessibility.

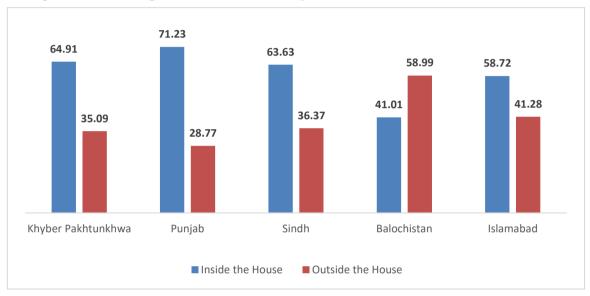


Figure 5.5: Province wise Percentages of Housing Units by Source of Drinking Water, Census-2023

According to Figure 5.6 Punjab has the highest percentage of households using tap water at 45.93%, followed by Khyber Pakhtunkhwa at 34.49% and Sindh at 31.93%, while Islamabad and Balochistan have relatively lower access at 24.47% and 25.17%, respectively. The use of motor pumps or hand pumps is the most common across most provinces, with Punjab leading at 57.70%, followed by Islamabad at 48.72%, Khyber Pakhtunkhwa at 37.26%, and Sindh at 33.91%. Balochistan has the lowest reliance on this source at 16.78%, indicating limited groundwater extraction infrastructure.

Dug wells are the least utilized source overall, with Balochistan having the highest proportion of households depending on them at 18.43%, followed by Khyber Pakhtunkhwa at 10.68%, while Punjab, Sindh, and Islamabad show minimal reliance at 3.56%, 0.97%, and 3.49%, respectively. The data highlights significant regional disparities in water access, with Punjab having the best-developed infrastructure, while Balochistan remains the most dependent on traditional water sources. The heavy reliance on motor pumps in Punjab, Sindh, and Islamabad also raises concerns about groundwater depletion. These findings emphasize the need for improved water supply infrastructure, particularly in Balochistan, and sustainable water resource management across all provinces.



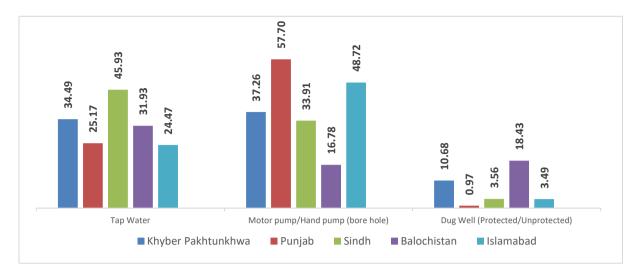


Figure 5.6: Province wise Percentages of Sources of Drinking Water District Wise Analysis of Drinking Water Facility (Inside House)

The Figure 5.7 illustrates the inside drinking water concentration in districts of Pakistan. In Pakistan only 66.34 percent households have the facility of drinking water within the premises, the remaining 33.66 are using drinking water outside source. Among Province, Punjab with 71 % leads in drinking water inside house, while Balochistan is ranked lowest among four provinces of Pakistan with 41 %.

The average drinking water facility inside house across 136 districts stands at 66.34%. The districts with toilet rates higher than the average of 66.34% are 50. Whereas, 86 districts, or over half of Pakistan's total, have drinking water facility below 66.34%. This average provides a baseline for evaluating the equitable distribution of drinking water facility across Pakistan's districts. The drinking water inside house rates across the districts reveal a diverse distribution.

- Up to 20.0% Drinking Water Rate (Inside House): Five districts i.e. Jhal Magsi, Kolai Palas Kohistan, Kohlu, Tharparker and Barkhan, lies in this category shows that less than 20% households have drinking water facility inside house. This depicts severe issues of water facility Inside House creates several health and other issues.
- 20.1% to 40.0% Drinking Water Rate (Inside House): 30 districts shows that a significant percentage of these households do not have drinking water facility inside the house, reflecting moderate levels of water scarcity Inside House and underscoring the need for targeted interventions to enhance water infrastructure and accessibility.
- 40.1% to 60.0% Drinking Water Rate (Inside House): 33 districts with drinking water rates between 40.1% and 60.0%, indicating relatively better access of drinking water Inside Houses.
- 60.1% to 80.0% Drinking Water Rate (Inside House): 43 districts in this range, indicating significant advancements in water accessibility, with nearly two-thirds to three-quarters of households enjoying clean drinking water, setting a strong foundation for public health and well-being
- 80.1% and Drinking Water Rate (Inside House): 25 districts with drinking water rates above 80.1%, achieving this high level of access to drinking water facility Inside House, demonstrating exceptional success in water infrastructure development and management.



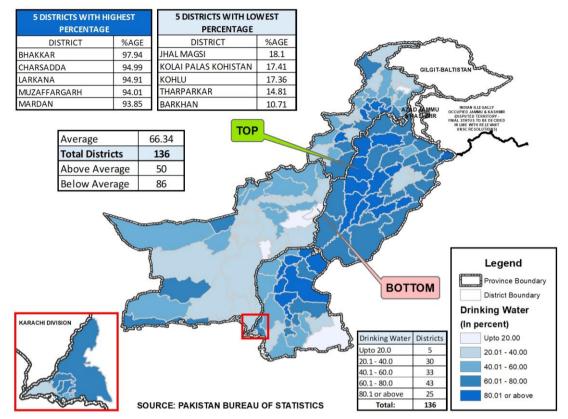


Figure 5.7: District Wise Drinking Water Facility (Inside House) Pakistan, Census-2023

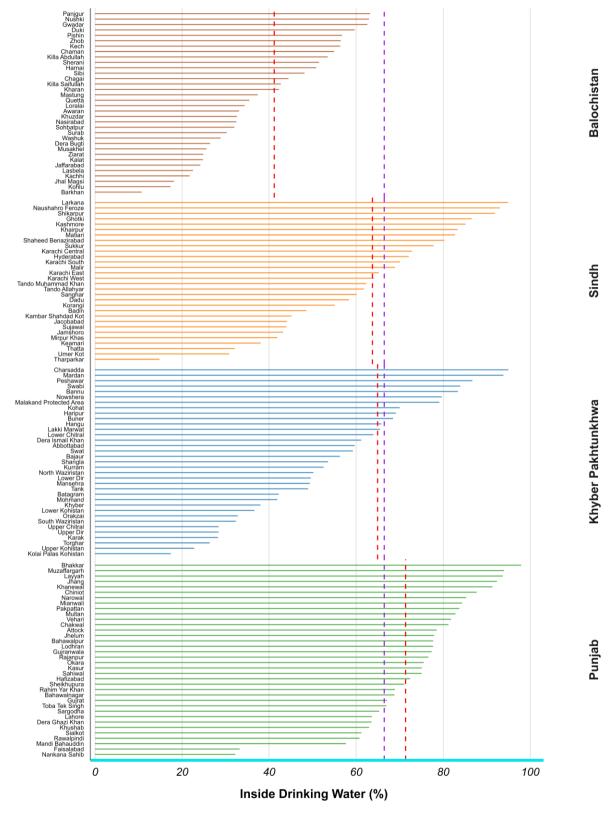
By analyzing high and low rank districts, The districts with highest percentage of drinking water inside premises includes Bhakkar (97.94 %) Charsada (94.99%), Larkana (94.91%), Muzafargarh (94.01%) and Mardan (93.85%). The districts with lowest percentage were also observed which includes Jhal Magsi (18.1%), Kohlu (17.41%), Kolai Palas Kohistan (17.41%), Tharparkar (14.8%) and Barkhan (10.71%).

The district wise drinking water (inside the premises) comparison of all four provinces of Pakistan, is also illustrated in the Figure 5.8. The Purple and red vertical dashed lines represent national and provincial average of drinking water facility (Inside House). Districts bars shown in descending order with respect to percentages of drinking water (inside the premises).

Punjab leads in the percentage of households with access to drinking water inside the premises, with 27 districts exceeding the national average and 22 districts surpassing the provincial average of 71.23%. In Khyber Pakhtunkhwa, 10 districts are above the national average, while 12 outperform the provincial average of 64.91%. In Sindh, urban districts like Karachi report higher access to inside drinking water, whereas rural districts show comparatively lower levels. Overall, 13 districts in Sindh exceed the national average, and 15 surpass the provincial average of 63.63%.

However, Balochistan has the lowest percentages overall, with all of its districts falling well below the national averages, indicating severe water accessibility issues. Some of the most affected districts in Balochistan include Barkhan, Kohlu and Jhal Magsi where access to drinking water inside homes is alarmingly low. Similarly, in Sindh, districts such as Tharparkar, Umerkot, Thata, and Kimari also show lower-than-average accessibility, highlighting critical infrastructure gaps.





(The purple and red vertical dashed lines represent national and provincial average drinking water inside the house rates, respectively.)

Figure 5.8: District Wise Comparision of Drinking Water Facility Inside the Premises



#### II. Source of Lighting

In Census 2023 along with other sources, solar panels source is also included to assess the main sources of electricity. Solar energy is environmentally friendly technology, a great energy supply and one of the most significant renewable and green energy sources. Solar lighting plays a vital role in nation development by providing energy access to remote communities, powering essential services like healthcare and education, and reducing reliance on fossil fuels as well as boosts economic growth by creating jobs in the solar industry and reducing energy costs for businesses and households. Additionally, solar lighting enhances energy security, mitigates climate change, and supports sustainable development goals.

Electricity is the major source of lighting in the Pakistan. It is observed that 84.03% of houses all over the Pakistan has reported electricity as main source of lighting in Census-2023 as compared to 87.87% in Census 2017. It seems that in Census 2017 due to the non-availability of Solar panel codes the response regarding solar panels was recorded in electricity, as the difference between electricity and solar panel in 2017 and 2023 is now clearly evident in solar panel along with other usage.



Table 5.15 reveals that availability of electricity in urban areas is higher with 95.41% as compared to 76.69% in rural areas. The solar panels have shown more usage in rural areas than urban areas with 11.19% and 2.38% respectively, may be due to non-availability of electricity in that area.

A significant decline has been observed in the use of Kerosene Oil as a source of lighting which was reported as 3.67% in Census-2017 to 1.23% in Census-2023. This decrease has also been seen in rural and urban areas of the Pakistan.

Moreover, the percentage of use of other sources of lighting covered under the category of others has decreased from 8.28% in Census-2017 to 6.81% in Census-2023.



Table 5.15: Number of Housing Units by Source of Lighting and Rural/Urban, Census-2017 and 2023

				1025					
Source Of L	iohtenino		2017			2023			
Source of E	·5·····	All Areas	Rural	Urban	All Areas	Rural	Urban		
Elastnisitus	Number	28,043,661	16,316,837	11,726,824	32,179,042	17,845,650	14,333,392		
Electricity	Percent	87.87	82.25	97.09	84.03	76.69	95.41		
Solar Panel	Number	-	-	-	2,962,152	2,604,924	357,228		
Solar Panel	Percent	-	-	-	7.74	11.19	2.38		
V 0:1	Number	1,170,740	1,055,361	115,379	471,530	428,521	43,009		
Kerosene Oil	Percent	3.67	5.32	0.96	1.23	1.84	0.29		
C I	Number	57,484	47,892	9,592	5,413	2,560	2,853		
Gas Lamp	Percent	0.18	0.24	0.08	0.01	0.01	0.02		
C	Number	-	-	-	52,382	47,797	4,585		
Generator	Percent	-	-	-	0.14	0.21	0.03		
D:- C	Number	-	-	-	15,043	10,752	4,291		
Bio Gas	Percent	-	-	-	0.04	0.05	0.03		
O41	Number	2,643,999	2,417,053	226,946	2,606,994	2,328,663	278,331		
Others	Percent	8.28	12.18	1.88	6.81	10.01	1.85		
Number of Housing Units		31,915,884	19,837,143	12,078,741	38,292,556	23,268,867	15,023,689		

<sup>\*</sup>Solar Panel, Generator and Biogas were not included in Census-2023

#### **Province Wise Analysis of Electricity**

Electricity remains the primary source of lighting across all provinces, with the highest percentage in Islamabad at 96.68%, followed by Punjab at 94.95%, Khyber Pakhtunkhwa at 79.90%, Sindh at 70.33%, and the lowest in Balochistan at 57.11% as shown in Table 5.16.

The use of solar panels as an alternative source is most prevalent in Balochistan, where 26.4% of households rely on it, followed by Khyber Pakhtunkhwa at 13.06% and Sindh at 12.58%, while its usage remains minimal in Punjab and Islamabad at 1.69% and 2.20%, respectively.

Table 5.16: Province wise Percentages of Housing Units by Source of Lighting

			2023		
Source of Lightening	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Electricity	79.90	94.95	70.33	57.11	96.68
Solar Panel	13.06	1.69	12.58	26.4	2.20
Kerosene Oil	0.45	0.64	2.07	4.95	0.15
Gas Lamp	0.01	0.01	0.01	0.05	0.01
Generator	0.73	0.02	0.03	0.14	0.02
Bio Gas	0.04	0.02	0.06	0.13	0.02
Others	5.8	2.68	14.92	11.22	0.91
Number of Housing Units	5,861,457	19,839,980	9,862,870	2,317,256	410,993

## **District Wise Analysis of Electricity**

District wise use of electricity has been depicted in the figure 5.9. Electricity as source of lighting in Pakistan aims to identify disparities, understand technological challenges, and inform policy decisions to improve electric supply across districts. In Pakistan, 84% of household are using Electricity as source for lighting in 2023. The average electricity



availability across 136 districts stands at 84.03%. The districts with electricity rates higher than the average of 84.03% are 59. Whereas, 77 districts, or over half of Pakistan's total, have electricity rates under the average. This average provides a baseline for evaluating the equitable distribution of electricity across Pakistan's districts.

District-wise electricity rates show a wide disparity. The data, categorized into different electricity rate brackets, is as follows:

- Up to 20.0% Electricity: 5 districts i.e. District Sherani, District Kohlu, District Kolai Palas Kohistan, District Awaran, District Tharparkar fall into this category, indicating that availability of electricity is very low and need policy intervention.
- 20.1% to 40.0% Electricity: There are 16 districts that have electricity rates within this range, reflecting low levels of electricity. Most of the districts in this range are from Balochistan province.
- 40.1% to 60.0% Electricity: There are 25 districts where electricity rates fall into this bracket, suggesting efficient energy supply systems. Most of the districts in this range are from Balochistan and Sindh province.
- 60.1% to 80.0% Electricity: There are 26 districts in this range, showing moderate rate of electricity and suggesting a better electricity scenario compared to the previous categories.
- 80.1% and Above Electricity: The largest group with 65 districts, shows that significant households in these districts have electricity as a source of lighting, indicating widespread electrification. Majority of the districts in this range are from Punjab.

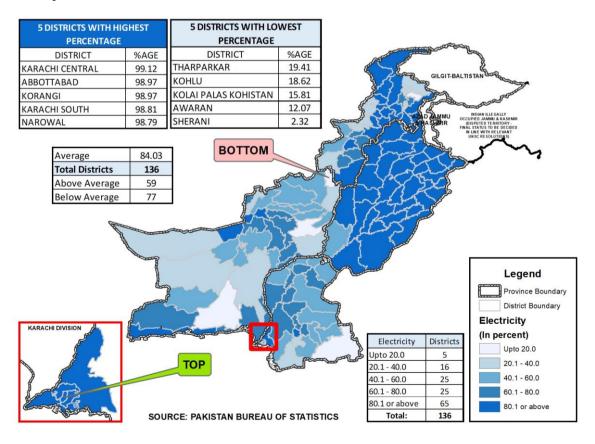


Figure 5.9: District Wise Electricity as a Source of Lighting Pakistan, Census-2023



In Islamabad 97 percent households are using electricity as source of Lighting. While comparing district Karachi Central, Abbottabad, Korangi, Karachi South and Narowal with 99% are the top ranked district within their respective province. Whereas district like Tharparkar, Kohlu, Kolai Palas Kohistan, Awaran and Sherani are the lowest in ranking with range of 19% to only 2% houses with availability of electricity as main source of light. The districts stand in the low rank owing to many factors like remote and scattered population, scarce resources, inadequate infrastructure, inefficient transmission and distribution of electric supply, traditional norms & security concerns etc.

## **III. Fuel Used for Cooking**

In the Census-2023, Fire wood remains the major source of fuel used for cooking, with 52.72% of households relying on it. However, its usage has declined from 58.44% in Census-2017, indicating a gradual shift toward alternative fuels. Natural Gas (Sui Gas) is being used by 37.83% of housing units in Census-2023.

The categories of LPG/LNG, Electricity, Biogas and Dung cake have been included in Census-2023 with 4.20%, 0.11%, 0.11% and 3.88% respectively. The other sources of cooking fuel have also decreased from 3.51% reported in Census-2017 to 1.02% in Census-2023.



The reliance on wood is significantly higher in rural areas, where 75.16% of households use it, compared to only 17.97% in urban areas. Natural gas/Sui gas remains the second most common cooking fuel, with an overall usage of 37.83% in 2023, showing a slight decline from 37.86% in 2017. The availability of Sui Gas is highly skewed toward urban areas, where 73.92% of households rely on it, whereas in rural areas, its usage is limited to only 14.53% as depicted in Table 5.17.

LPG/LNG is used by 4.20% of households, with a higher prevalence in urban areas at 6.21% compared to 2.91% in rural areas. The use of kerosene oil for cooking has declined from 0.19% in 2017 to 0.12% in 2023, with rural areas reporting a slightly higher reliance at 0.16%, compared to only 0.06% in urban areas.

These findings indicate a shift toward cleaner energy sources, though rural areas remain largely dependent on traditional fuels like wood and dung piles. Expanding access to modern cooking fuels such as Natural /Sui Gas and LPG/LNG, especially in rural regions, remains a key challenge for sustainable energy development in Pakistan.



Table 5.17: Number of Housing Units By Sources of Cooking Fuel Used, Census-2017 and 2023

Evel Hand for C	Fuel Used for Cooking		2017		2023			
ruel Used for Co			Rural	Urban	All Areas	Rural	Urban	
Wood	Number	18,652,61 9	16,175,168	2,477,451	20,188,669	17,488,204	2,700,465	
	Percent	58.44	81.54	20.51	52.72	75.16	17.97	
Sui Gas	Number	12,082,36 6	2,862,798	9,219,568	14,485,324	3,380,382	11,104,942	
	Percent	37.86	14.43	76.33	37.83	14.53	73.92	
I ma/I ma(Cyrlindan)	Number	-	-	-	1,609,038	676,413	932,625	
Lpg/Lng(Cylinder)	Percent	-	-	-	4.20	2.91	6.21	
Kerosene Oil	Number	60,942	42,819	18,123	45,166	36,632	8,534	
Kerosene On	Percent	0.19	0.22	0.15	0.12	0.16	0.06	
Electricity	Number	-	-	-	43,824	27,443	16,381	
Electricity	Percent	-	-	-	0.11	0.12	0.11	
Bio Gas	Number	-	-	-	43,796	27,559	16,237	
Dio Gas	Percent	-	-	-	0.11	0.12	0.11	
Duna Dilaa	Number	-	-	-	1,484,558	1,356,478	128,080	
Dung Piles	Percent	-	-	-	3.88	5.83	0.85	
Others	Number	1,119,957	756,358	363,599	392,181	275,756	116,425	
Others	Percent	3.51	3.81	3.01	1.02	1.19	0.77	
Number of Housing	g Units	31,915,884	19,837,143	12,078,741	38,292,556	23,268,867	15,023,689	

<sup>\*</sup>LPG/LNG (Cylinder), Electricity, Bio gas and Dung Piles were not included in Census-2017.

#### **Province Wise Analysis of Electricity Main Fuel Used for Cooking**

The Census 2023 data on cooking fuel usage across Pakistan's provinces reveals significant regional variations, as shown in Table 5.18. Fire wood remains the dominant cooking fuel in Khyber Pakhtunkhwa with 71.38% and Balochistan with 70.06%, indicating a heavy reliance on traditional biomass, while Punjab stands at 49.94% and Sindh at 44.8% showing considerable usage. In contrast, Islamabad has the lowest dependence on wood at 13.16%, as modern fuels are more accessible.

Census 2023 information revealed that use of Natural Gas (Sui Gas)/LPG/LNG in Sindh province is highest with 47.37% followed by Punjab with 39.43% and Khyber Pakhtunkhwa with 22.56% reflecting better gas infrastructure in these areas. Whereas Balochistan records the lowest rates among the four provinces. Notably, most districts in Balochistan have Natural Gas (Sui Gas)/LPG/LNG penetration of only up to 10%.

Table 5.18: Province wise Percentages of Housing Units by Cooking Fuel Used, Census-2023

Fuel Used for Cooking		2	2023		
ruel Used for Cooking	Khyber Pakhtunkhwa	Punjab	Sindh	Balochistan	Islamabad
Wood	71.38	49.94	44.8	70.06	13.16
Sui Gas	22.56	39.43	47.37	17.86	61.54
LPG/LNG(Cylinder)	2.9	5.4	1.94	3.27	24.31
Kerosene Oil	0.06	0.04	0.17	0.73	0.06
Electricity	0.15	0.08	0.08	0.47	0.05
Bio Gas	0.06	0.08	0.19	0.2	0.13
Dung Piles	1.91	4.34	4.07	4.77	0.05
Others	0.99	0.68	1.38	2.64	0.7
Number of Housing Units	5,861,457	19,839,980	9,862,870	2,317,256	410,993



#### District Wise Analysis of main fuel i.e Natural Gas (Sui Gas)/LPG/LNG used for Cooking

Availability of Natural Gas (Sui Gas)/LPG/LNG for cooking purpose provide an environment friendly solution for sustainable growth. Figure 5.10 depicts district wise utilization of Natural Gas (Sui Gas)/LPG/LNG for cooking purpose showing disparity within the provinces.

The highest Natural Gas(Sui Gas)/LPG/LNG utilization among 136 Districts of Pakistan is in Islamabad (85.85%) while other districts with highest rates are District Karachi Central with 98.67%, District Korangi with 98.65%, District Karachi South with 97.17%, District Karachi East with 95.18% and District Lahore with 92.08%. Whereas Upper Kohistan stands with 0.42%, Kolai Palas Kohistan with 0.53%, Torghar with 0.62%, Kohlu with 0.65%, district Barkhan with 0.66%, are the bottom district within their respective province.

The Natural Gas (Sui Gas)/LPG/LNG utilization across the districts reveal a diverse distribution. The data, categorized into different Natural Gas (Sui Gas)/LPG/LNG rate brackets, is as follows:

- Up to 10.0% Natural Gas (Sui Gas)/LPG/LNG: The largest group with 45 districts where Natural Gas (Sui Gas)/LPG/LNG utilization fall into this bracket suggesting a critical need for targeted interventions to improve energy access and infrastructure in these districts.
- 10.1% to 20.0% Natural Gas (Sui Gas)/LPG/LNG: 30 districts where Natural Gas (Sui Gas)/LPG/LNG utilization fall within this range, indicating incremental progress in energy access, but still requiring focused efforts to bridge the gap and achieve universal coverage.
- 20.1% to 30.0% Natural Gas (Sui Gas)/LPG/LNG: 19 districts where Natural Gas (Sui Gas)/LPG/LNG utilization fall into this bracket, suggesting significant progress in Natural Gas (Sui Gas)/LPG/LNG adoption.
- 30.1% to 40.0% Natural Gas (Sui Gas)/LPG/LNG: 9 districts fall within this bracket, indicating higher.
- 40.1% and Above Natural Gas (Sui Gas)/LPG/LNG: 33 districts have achieved an impressive GAS/LPG/LNG utilization of 40.1% or higher, indicating better access and economic development.

By analyzing the low ranked districts in terms of percentage of households using Natural Gas(Sui Gas)/LPG/LNG utilization, the Lowest Natural Gas(Sui Gas)/LPG/LNG percentage has been observed in District Upper Kohistan with 0.42% while District Barkhan with 0.66%, District Kohlu with 0.65%, District Torgarh with 0.62% and District Kolai Palas Kohistan with 0.53% have slight better share than Upper Kohistan but still lies at lowest ranked districts in terms of usage of Natural Gas(Sui Gas)/LPG/LNG.



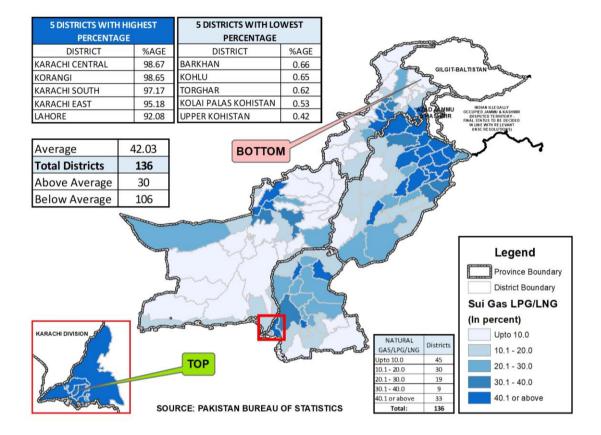


Figure 5.10: District Wise Sui Gas and LPG/LNG Pakistan, Census-2023

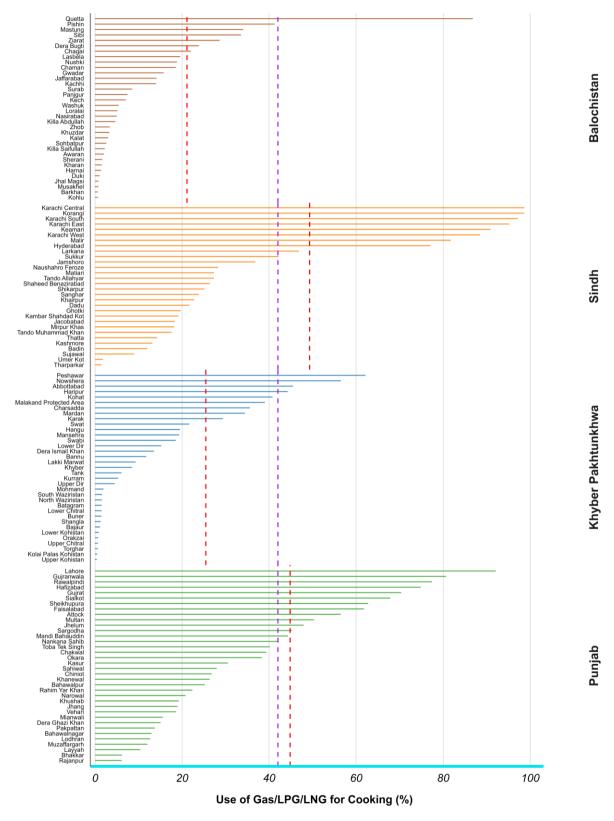
The districts stand in the low rank owing to many factors like remote terrain, resource scarcity, infrastructure gaps, entrenched traditional norms, and ongoing security concerns etc. The district Natural Gas (Sui Gas)/LPG/LNG comparison is also illustrated in the Figure 5.11. The Purple and red vertical dashed lines represent national and provincial average of Natural Gas (Sui Gas)/LPG/LNG. All districts bars shown in descending order with respect to out of percentages of Natural Gas (Sui Gas)/LPG/LNG.

Pakistan's district-level average utilization of Natural Gas (Sui Gas)/LPG/LNG stands at 42.03%. While 30 districts exceed this benchmark, 106 fall below it, highlighting significant disparities in fuel availability across the country. This national average serves as a vital reference point for identifying and addressing inequalities in the distribution of these fuel resources.

Provincial trends reveal even deeper disparities, particularly in Balochistan and Khyber Pakhtunkhwa. In Balochistan, only 7 districts surpass the already low provincial average, and just 1 district exceeds the national benchmark. Quetta, the provincial capital, reports the highest percentage of Natural Gas (Sui Gas)/LPG/LNG facility usage in the province. In Sindh, only 8 districts are above the provincial average, and just 10 exceed the national threshold. In Khyber Pakhtunkhwa only 4 districts are above the national average and 9 districts are above the provincial average; Peshawar leads the province with 62.16% of its population utilizing these facilities. These figures underscore the urgent need for targeted efforts to improve fuel availability, particularly in underserved regions.

Punjab, in contrast, performs significantly better, with Lahore standing out as the top-performing district where 92.08% of the population has access to these fuel sources.





(The purple and red vertical dashed lines represent, respectively, national and provincial average rates for Gas/LPG/LNG used as main fuel for cooking.)

Figure 5.11: District Wise Comparison of Main Fuel i.e. Natural Gas (Sui Gas)/LPG/LNG Used for Cooking



## IV. Availability of Kitchen, Bathroom and Toilet Facilities

The information on the availability of kitchen, bathroom, and Toilet facilities within the premises of housing units was also collected in the Census 2023 as shown in Table 5.19.

**Kitchen:** It was found that 60.40% of the housing units in the Pakistan have a separate kitchen as reported in Census-2023. Separate kitchen is more prevalent in the urban areas with proportion of 71.66% as compared to rural areas where it stands at 53.13%. The facility of shared kitchen is recorded at 17.36% of housing units in Census-2023, a decrease from 24.57% in Census- 2017. Moreover, 22.24% of housing units have no kitchen facility in the Pakistan with 30.26% in rural areas and 9.82% in urban areas.

Punjab and Islamabad have the highest percentage of households with a separate kitchen facility, at 62.76% and 85.04%, respectively, reflecting better housing conditions and infrastructure. Khyber Pakhtunkhwa follows with 62.12%, while Balochistan has 53.06%, and Sindh has the lowest percentage at 55.33%, indicating a relatively higher prevalence of shared or absent kitchen facilities as illustrated in Figure 5.12. The percentage of households with no kitchen facility is most pronounced in Sindh at 20.97%, followed by Balochistan at 15.06%, Khyber Pakhtunkhwa at 14.09%, and Punjab at 26.5%.

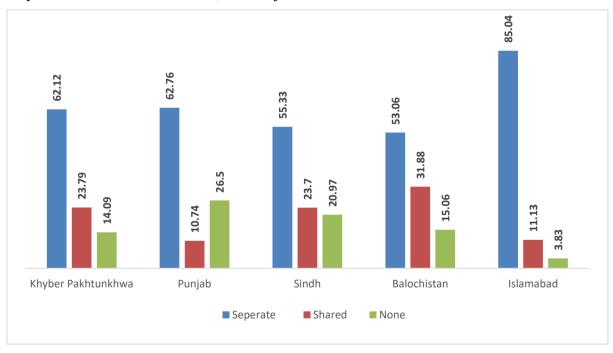


Figure 5.12: Provincial Percentages of Housing Units by Kitchen Facility Used, Census-2023

**Bathroom:** The availability of separate bathroom facility in the housing units has been reported as 66.60% of the total housing units in Census-2023 increasing from 54.27% reported in Census-2017. The incidence of separate bathroom is more common in urban areas i.e. 77.61% as compared to rural areas i.e. 59.50%. The shared bathroom facility has decreased from 23.60% in Census-2017 to 18.07% in Census-2023. Shared bathrooms in housing units of urban area i.e. 17.25% are less than in rural areas where it is found as 18.60% of housing facilities. Moreover, 15.33% of the housing units have no bathroom at the province level, while 21.90% in rural areas, and 5.14% of housing units in urban areas do not have a bathroom.



**Toilet:** The term "sanitation" encompasses more than just cleanliness; it includes hygiene, the effective collection of liquid and solid waste, and their environmentally responsible disposal. A well-functioning sanitation system acts as a barrier against fecal diseases by ensuring proper collection and disposal of human waste, while also minimizing the risk of groundwater and distribution system contamination that could pose health risks through drinking water. Sanitation is also a key indicator of the Sustainable Development Goals (SDGs), particularly "Goal 6".

It may be noted that of housing units reported having Toilet facility is 87.14% in Census-2023 as compared to 84.98% in Census-2017, shows an increase of 2.16% as compared to 2017.

In Census-2017, the availability of Toilet facility in housing units was accounted as either the housing unit has separate, shared or no Toilet facility and further the options available were that the Toilet was either connected with sewerage system, connected with septic tank, connected with open drain, pit with slab, other, or none of these options. However, in Census 2023, the breakdown for Flush and Non-Flush Toilet were introduced and separate options for flush and non-flush categories were introduced as in Flush Toilet the options were same as in Census 2017 but the options for Non-Flush Toilet was either connected with dry raised toilet, dry pit toilet and other. It was found that 40.86% of the total housing units reported the availability of Toilets connected with sewerage, from which 69.39% of housing units are in urban areas and 18.56% of housing units are in rural areas. Moreover, 19.50% of housing units have reported Toilets connected with septic tanks, with the incidence higher in rural areas as compared to urban areas, and 16.48% of housing units have their Toilet connected with open drain. Furthermore, 15.67% housing units reported the Toilet facility as pit with slab type with higher incidence in rural areas at 23.99% as compared to urban areas at 5.01%, and 5.30% of housing units reported their Toilet facility to fall under the category 'other'. Moreover, 12.86% of housing units have no Toilet facility shows decrease as compared to 17.99% reported in Census 2017.

The dry raised Toilet and dry pit Toilet was included in Census 2023 and the values reported are 0.65% and 1.54% respectively.

The reason of no toilet at higher side in Census 2023 is may be due to flood in 2022. The prevalence of such housing units with no toilet is higher in rural areas i.e. 19.50%, as compare to urban areas where it is 2.57%. In urban areas, the proportion of housing units with no Toilet facility has increased from 2.13% in Census-2017 to 2.57% in Census-2023. In rural areas during the same period this proportion is decreased from 22.88% to 19.50% (Table 5.19).



Table 5.19: Percentage of Housing Units Having Kitchen, Bathroom and Toilet Facilities and Rural/Urban, Census-2017 and 2023

н . в		2017		2023					
Housing Facilities	All Areas	Rural	Urban	All Areas	Rural	Urban			
Kitchen									
Separate	54.83	48.39	65.41	60.40	53.13	71.66			
Shared	19.33	17.90	21.66	17.36	16.61	18.52			
None	25.84	33.71	12.93	22.24	30.26	9.82			
Bathroom									
Separate	61.47	54.27	73.28	66.60	59.50	77.61			
Shared	21.79	21.12	22.90	18.07	18.60	17.25			
None	16.74	24.61	3.82	15.33	21.90	5.14			
Toilet (Flush)									
Connected with Sewerage	31.47	10.59	65.75	40.86	18.56	69.39			
Connected with Septic Tank	13.05	15.98	8.24	19.50	26.74	10.25			
Connected with Open Drain	14.92	16.46	12.39	16.48	20.06	11.91			
Pit with Slab	21.74	28.75	10.24	15.67	23.99	5.01			
Toilet (Non-Flush)									
Dry Raised toilet *	-	-	-	0.65	0.94	0.28			
Dry Pit toilet *	-	-	-	1.54	2.37	0.48			
Other*	3.79	5.34	1.25	5.30	7.35	2.67			
Toilet Availability									
(Separate + Shared)	84.98	77.12	97.84	87.14	80.50	97.43			
None (No Toilet)	15.02	22.88	2.13	12.86	19.50	2.57			
Number of Households	31,915,884	19,837,143	12,078,741	38,292,556	23,268,867	15,023,689			

<sup>\*</sup>Asked for the first time in Census-2017

Figure 5.13, highlights significant variations in access to sanitation. Flush toilets are the most commonly used facility, with Islamabad leading at 96.49% and Punjab at 88.25%, followed by Khyber Pakhtunkhwa at 81.18%, Sindh at 70.63%, and Balochistan at 53.52%. These figures indicate that urban areas, particularly in Islamabad and Punjab, have better access to proper sanitation infrastructure compared to rural and underdeveloped regions.

The use of non-flush toilets is highest in Balochistan at 23.36%, followed by Sindh at 10.3%, Khyber Pakhtunkhwa at 8.74%, Punjab at 2.24%, and Islamabad at only 2.51%. The presence of non-flush toilets suggests a lack of adequate sanitation infrastructure in many areas, particularly in Balochistan and Sindh, where water shortages and poverty contribute to the continued use of such facilities.

The percentage of households with no toilet facility is highest in Balochistan at 23.12%, followed by Sindh at 19.34%, Khyber Pakhtunkhwa at 10.08%, Punjab at 9.5%, and Islamabad at just 1%. The high proportion of households without toilets in Balochistan and Sindh reflects critical infrastructure challenges, emphasizing the urgent need for improved sanitation services in these regions.

Overall, the data reveals stark disparities in sanitation access across provinces, with Islamabad and Punjab having the best facilities, while Balochistan and Sindh lag behind in both flush toilet access and overall sanitation coverage. These findings highlight the need for targeted policy interventions to improve sanitation infrastructure, particularly in rural and underdeveloped areas, to ensure better hygiene, public health, and overall living conditions.



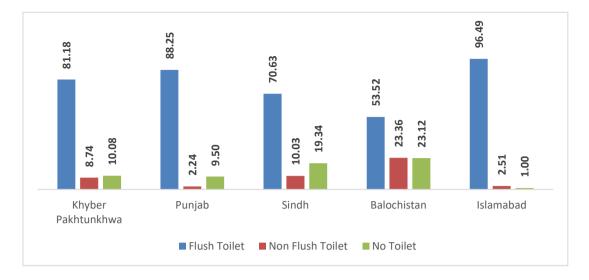


Figure 5.13: Provincial Percentages of Housing Units by Toilet Facility Used, Census-2023

## **District Wise Analysis of Toilet Facility (Flush)**

In Pakistan, toilet facility vary widely within districts. The district wise analysis has been conducted to identify disparities, understand challenges, and inform policy decisions to improve toilet facilities across districts. For purpose of analysis toilets are categorized into three main types: Flush, Non-Flush, and No Toilet. Toilets (Flush) are further divided into categories such as: Flush connected to a sewer, Flush connected to a septic tank, Flush connected to a pit, Flush connected to an open drain.

District-wise toilet rates show a wide disparity (figure 5.14). The toilet availability for houses includes any of the flush and non-flush facility. The data, categorized into different toilet rate brackets, is as follows:

- Up to 50.0% Flush Toilet: 33 districts fall into this category, indicating that in these areas, the Flush Toilets facilities are comparatively low.
- 50.1% to 65.0% Flush Toilet: 20 districts that have toilet rates within this range, reflecting low levels of toilet facility at home.
- 65.1% to 80.0% Flush Toilet: 21 districts where toilet rates fall into this bracket, suggesting better sanitation facility.
- **80.1% and Above Flush Toilet:** The largest group with 62 districts, shows that significant portion of districts with availability of toilet.

Provincial comparison reveals that the highest percentage of households with flush toilets is in Punjab, where 88 percent household reported flush toilet in 2023. While in Balochistan only 54 percent households have access to the Flush toilet. In Pakistan Karachi Central and Korangi are top ranked the districts where 97.4% household have access to Flush Toilet, followed by Gujranwala (96.8%), Karachi South (96.6%) and Islamabad (96.5%).

The Flush toilet availability across 136 districts stands at 80.61%. The districts with Flush toilet, higher than 80.61% are 61. Whereas, 75 districts, or over half of Pakistan's total, have Flush toilet access under 80.61%. This number provides a baseline for evaluating the equitable distribution of toilet across Pakistan's districts.



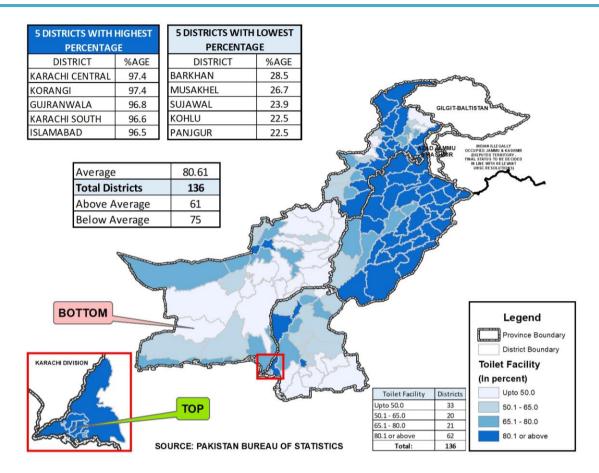


Figure 5.14: District Wise Toilet Facility Pakistan, Census-2023

By analyzing the low ranked districts in terms of the Flush Toilet facilities, has been observed in District Barkhan (28.5%), Musakhel (26.7%), Sujawal (23.9%), District Kohlu (22.5%), and Panjgur (22.5%). The districts stand in the low rank owing to many factors like remote and scattered population, scarce resources, inadequate infrastructure, traditional norms.

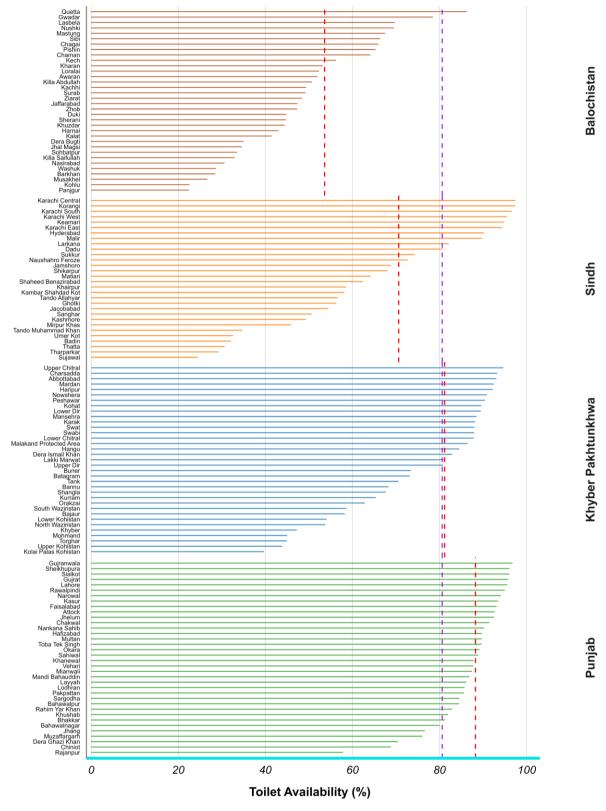
The district wise toilet availability (flush) comparison is also illustrated in the figure 5.15. The Purple and red vertical dashed lines represent national and provincial average of toilet facility (flush), respectively. All districts bars shown in descending order with respect to percentages of toilet availability (flush).

Punjab leads in the availability of flush toilet facilities, with 30 districts surpassing the national average while 18 exceed the provincial average of 88.25%. Khyber Pakhtunkhwa follows closely, with 19 districts above the national average and 17 performing better than the provincial average of 81.18%.

In Sindh, 9 districts are above the national average and 12 districts are exceeding the provincial average of 70.62%. However, districts such as Sujawal, Tharparkar, Thatta, Badin, Umerkot and Tando Muhammad Khan reflect lower-than-average access, pointing to critical gaps in the availability of flush toilet facilities.

Balochistan reports the lowest access overall, highlighting severe sanitation challenges. Only district Quetta surpass the national average, and 9 are above the provincial average of 53.52%. Districts such as Panjgur, Kohlu, Musakhel, Barkhan, and Washuk are among the most affected, with alarmingly low availability of flush toilet facilities.

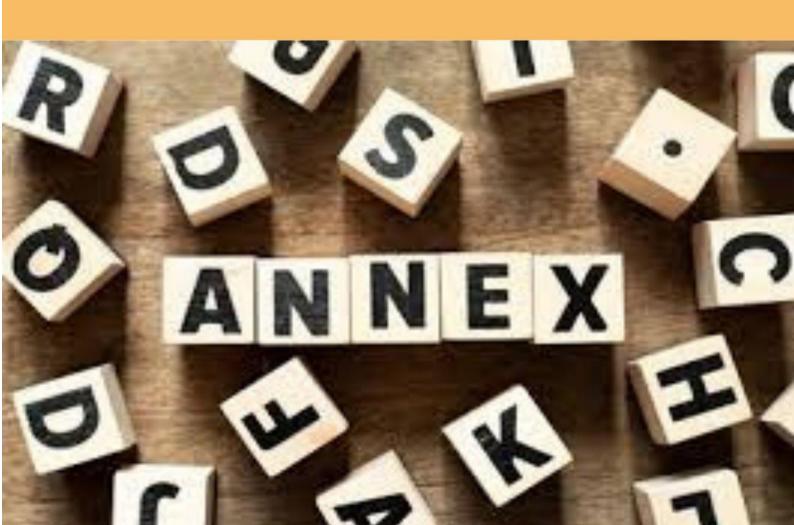




(The purple and red vertical dashed lines represent national and provincial average inside toilet availability rates, respectively.)

Figure 5.15: District Wise Comparison of Toilet Availability (Flush Toilet)

# **ANNEXURES**



فسطنت فهرست خلة جانب ک تابی کے دوران خلی بازی کھیر کھر اگر مرد شکاری کے دوران آباد ہو کیا ہو کا تک جاری کھرانے کا نمور دری کریں۔ دور کامل کیر ایش کے بروران کا میں انسان کے دوران کے میں انسان کے دوران کے میں انسان کے دوران کے میں کھیری

كالم نير اين كوز ( 3) درج يو در كالم فير ( 3) من قارت كي يون في مناجت سهاكم نير ( 5) دو ( 6) كوير كريك

فرست فالمديات كى يادى كم بعد اكر آياد كرفال وركيا و وكالم لورى على - درج كريد



## **Annexure-A House Listing Form-I**

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## **Annexure-B Census Form**

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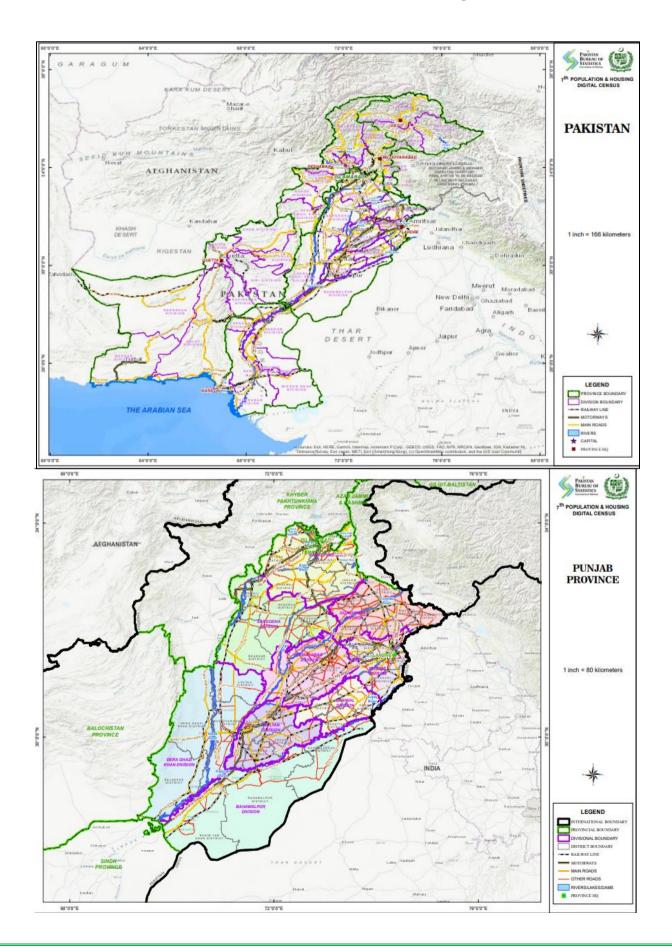


## **Annexure-B Census Form**

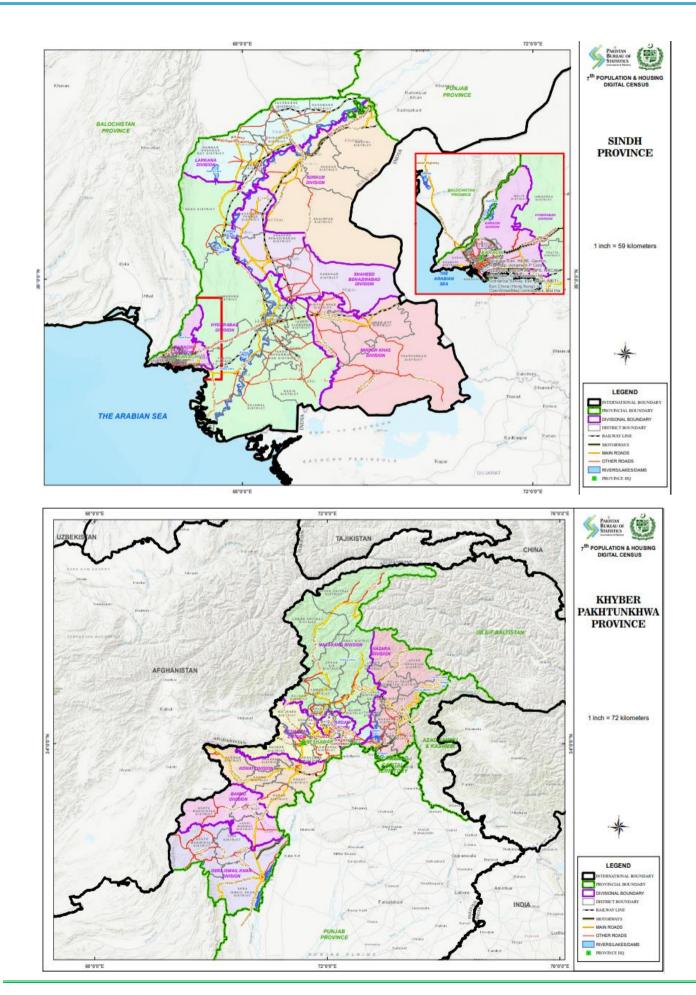
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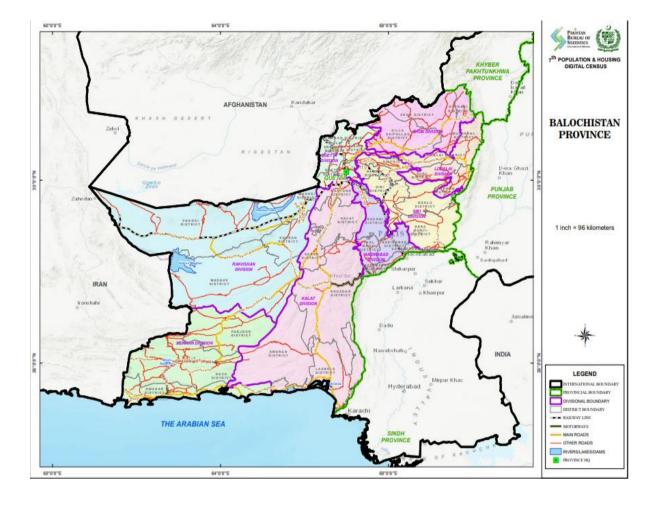
## **Annexure-C National and Provincial Maps**













## **Concepts and Definitions**

#### **Defacto** method

A defacto census allocates individuals to the place where they are enumerated—typically where they spend the night of the census day. In other words, it is a process in which persons are counted based on their location on the census date. This census procedure is generally completed within a single day.

## **Dejure method**

A dejure census tallies people according to their regular or legal residence. In other words, it is a process in which persons are counted at their usual place of residence. Using this method, the Census is completed over a duration of one to two weeks. However, Population and Housing Census data is collected according to a specific Census Day.

#### **Urban Area**

All localities that were designated as Metropolitan Corporation, Municipal Corporation, Municipal Committee, Town Committee, or Cantonments at the time of the census are considered urban, as declared by the respective Provincial Government Departments.

#### Household

A household refers to a group of people living together who have collective arrangements for cooking and eating. A person living alone is also considered to constitute a household. The distinguishing characteristic of a household is its common cooking arrangements.

## Housing unit

A Housing Unit refers to a separate and independent place of abode inhabited by one household, or, if vacant, intended for habitation by one household. It does not necessarily mean a separate building, as a building can contain one or more housing units. Additionally, any place not intended for habitation but occupied by a household at the time of the census was also treated as a housing unit.

## Room

A room is defined as a space in a housing unit with a roof and walls from floor to ceiling. This includes sleeping, dining, drawing, study, children's, and servant's rooms but excludes the kitchen, bathroom, latrine, balcony, porch, and motor garage. A store is considered a room if it is being used as a sleeping room; otherwise, it is not.

### Age

Age is recorded as of the last birthday.



#### **Marital Status**

Marital status is classified into never-married, married, widowed, and divorced. Never-married applies to individuals who have never been married. Married includes those currently living as husband and wife, as well as those living apart but with a living spouse. This category also encompasses couples whose marriage (Nikah) has been solemnized but the giving away ceremony has not yet occurred. Widowed refers to a person whose spouse has died and who has not remarried. Divorced applies to both the divorcer and the divorcee, provided they have not remarried.

## Religion

Religion is recorded and tabulated as reported by the respondents.

#### Literate

A person who can read a newspaper and write a simple letter in any language with understanding and can make simple calculation is treated as literate.

#### **General Education**

It includes educational programme of Primary, Middle, Matriculation, Intermediate and Bachelor's degree in arts or science.

## **Economically Active Population**

An economically active person is someone aged 10 years and above, of either sex, who is engaged in some work for pay or profit, including unpaid family helpers. This also includes individuals who are not currently working but are looking for work or are temporarily laid off.

#### **Functional Limitation**

A mental and physical functional limitation is a disorder or difficulty in performing one or more major life activities in a person's current social environment. This can be due to a physical, mental, or psychological illness, or impairment of any part of the body, such as a missing or damaged body part. Such functional limitations may include difficulties in seeing, hearing, talking, walking, cleaning, washing, remembering, focusing, and more. Persons facing any one of these limitations, or multiple limitations, are considered as Persons with Mental and Physical Functional Limitations.

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