



Training Workshop on Transition to Register-based Approaches for Population and Housing Censuses

Ankara, Türkiye

12-15 June 2023

Pakistan Bureau of Statistics,
National Statistics Organization
Pakistan

About Pakistan

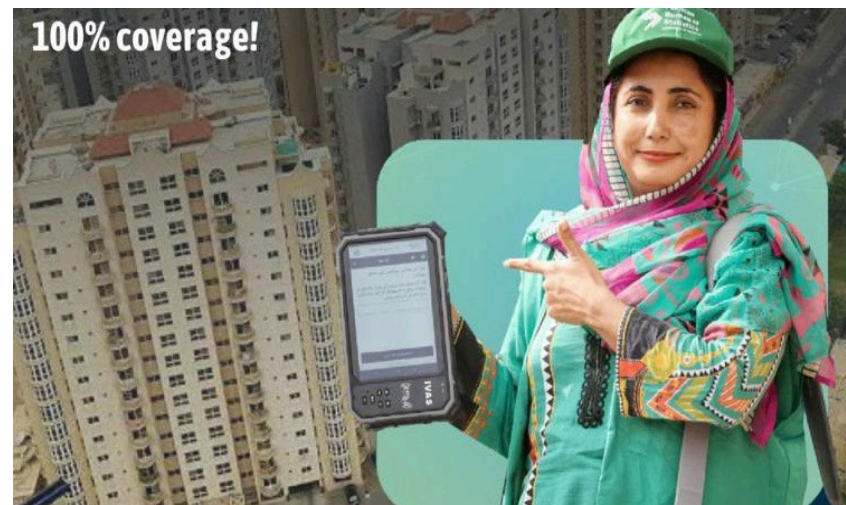
- **Population size:** 207 Millions (2017 Census, 5th Most Populated)
- **Male:** 106 million
- **Female:** 101 million
- **Area :** 796,095 km²
- **Capital:** Islamabad, Province: 4, Districts: 156



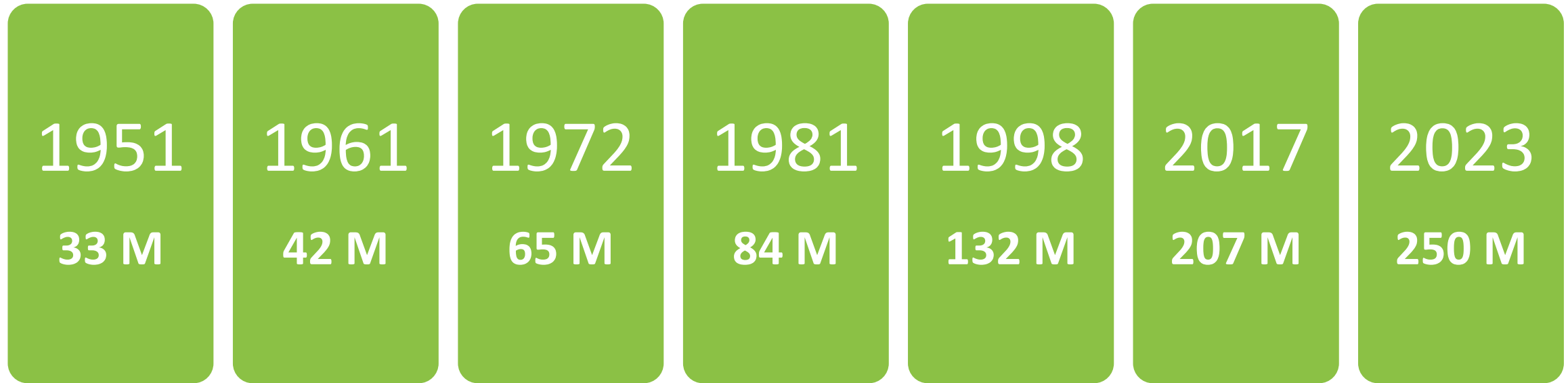


Interesting Fact about Pakistan

- Pakistan is a beautiful country having rich culture ,diverse weather and different landscapes People of Pakistan are friendly and they respect all culture
- But in the context of the occasion Pakistan have Concluded **First Ever Digital Census** in the History of Pakistan that too in very short span of time by using latest tool ,technology and concept.
- Pakistan is Planning to Conduct next census on the same approach that we are here to learn



History of Census in Pakistan



Census History



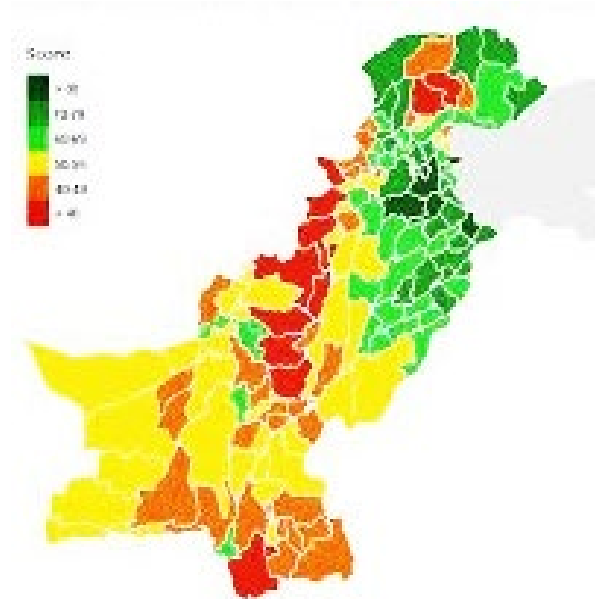
LATEST CENSUS(THE 7TH POPULATION AND HOUSING



➤ Overview of the most recent census: **First Digital Census**

Questionnaire include

- ✓ Demographic Characteristics,
- ✓ Education,
- ✓ Employment,
- ✓ Migration,
- ✓ Functional Limitation,
- ✓ Housing characteristics
- ✓ Source of information for the household



➤ First **Listing** of Structures, Units and Household and then **Enumeration**

- A ***De-jure*** method of enumeration counts people according to their ***usual residence*** which is defined as ***the place where he/she has lived continuously for at least six months with exception that the home less people were counted where ever they were found***

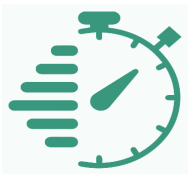


Development of Census Software

Pakistan Used Complete Enterprise Resource Planning (Set of Software's) to cover and digitize all aspect of census operation by using latest tool, technologies and IT concepts.

S. No	Modules Name
1	HR and Task Assignment
2	Inventory Management System
3	Area Frame Updation Application
4	Training Management System
5	Self-Enumeration Application
6	Listing Application
7	Enumeration Application
8	Mobile Device Management (MDM)

Sr. No	Modules Name
9	Complaint Management System
10	Trend Analysis / Supervisor Dashboard
11	Data Dissemination Dashboard
12	Data Cleaning Module
13	Tabulation / Reporting Module
14	CATI (for quality and coverage)
15	GIS Based Monitoring Dashboard
16	GIS Based Decision Support System





Salient Features of First Digital Census 2023

- **National Census Coordination Center (N3C)** for monitoring, coordination and decisions making. NSO Established of 495 Census Support Centers across Pakistan.
- Involvement of Stakeholders (especially provinces / political parties)
- **Pilot Census** to test the processes / tools techniques
- Use of **126,000(one hundred twenty six thousand) hardened Tablet** with Customized OS .Connected to online server with Private-Census Intranet for security ,privacy and effective control over the whole census infra structure .
- Use of **Self Enumeration** “Count Yourself”
- Collecting **Geo-Coordinates** at Structure, Unit and Household Level for digital marking of each unit
- Latest **High Resolution Satellite Imagery (digital maps and boundaries for each block)** (0.3m for urban & 0.98 m for other)
- Early Trend, Coverage, Missing and Result Analysis with 95% Live Data
- Establishment of Call center for Complaints and **CATI Post Enumeration Survey**



Pakistan Key Administrative Data Sources

- National Identity Card Holder (**NADRA**)
- Non-Pakistan / Afghan Refuges Card Holder / Registration Data (**NADRA**)
- Domicile, Family Tree, Marriages, Divorce, Birth and Death Certificate (**NADRA**)
- Structure / Buildings / Dwellings and Economic Units (**PWD, FBR, Land Dept.**)
- Education School, College, University, Madrasah Induction and Registration (**HED, HEC, Edu Depts.**)
- Health, Hospitalization, insurance, vaccine and immunization (**NIH**)
- Labor Force & Employment, Overseas, Govt. Servants, Pensioner Data
- Pakistan Social Living Measurement Survey – PSLM (**PBS**)
- Utility Services (Housing Services, e.g. Electricity, Gas, Water Supply, Internet)
- Mobile / Smart / Internet Users (**Telecommunication Companies**)





Use of administrative data

Has administrative data been previously used for census purposes or producing population statistics?

- **Have Administrative Data been used for Census: NO**

No, Administrative Data has not been used for census purpose.

In 2017 NADRA National ID Holder data was used but for only verification purpose

National Statistical Organization (NSO / PBS) uses various types of administrative data sets but not used for any Population Census purpose.

- **Explain Why**

Due to administrative data sets not complete and up to date to be used for population census which cover each and everyone.

Partial Coverage of CRSV (birth, death, marriage, family tree, domicile)

Practice, Maintenance and Data Quality and Dwelling, Education and Health Register

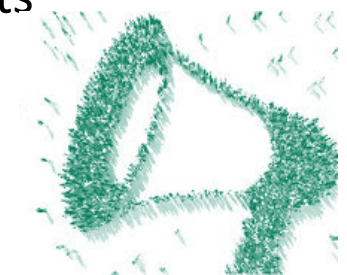




Challenges and solutions

- **What are the key challenges in using/enhancing the use of administrative data for census purposes**
 - Coordination barriers with administrative authorities
 - Effective update to date and fully covered CRVS system
 - Structures/ Dwelling / Economic Units records is not present
 - Need Ownership and allocation of Financial resources
 - Un-Registered / illegal Migrants / Borders Control
 - **What solutions have you developed or are considering?**
 - Integration of Different Registers / Database / Online System of various departments
 - Improve Civil Registration System & Vital Statistics System
 - Strong coordination among all the data providing authorities
 - Complete Coverage, Correctness, Updation, Quality and Access of Administrative Data
 - Strengthening of regularity authority in order to maintain dataset

PUBLIC PARTICIPATION

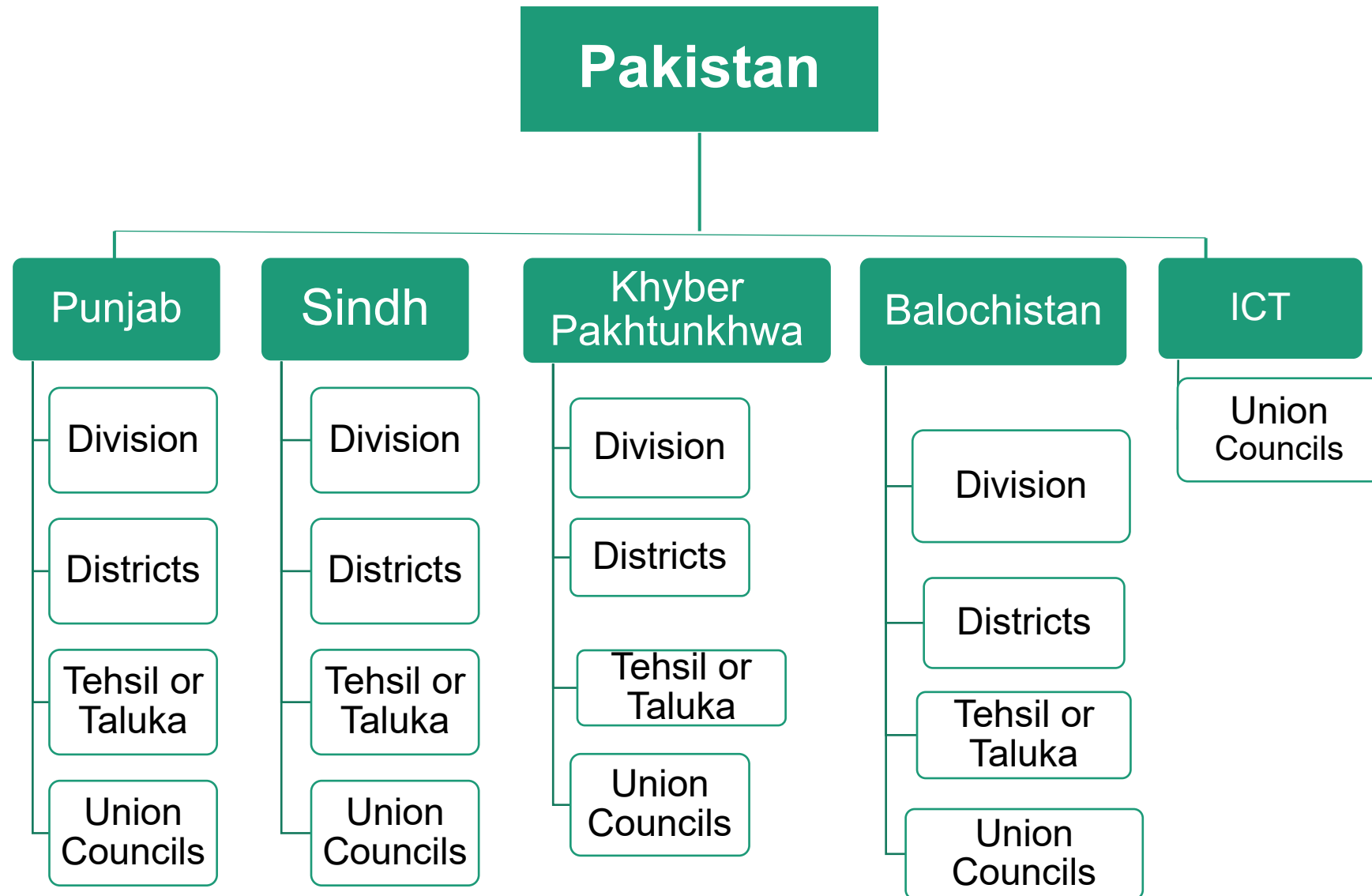




Enhancement of CRSV and Administrative Data

- **Promotion of CRVS** in the country with formulation of strong coordination mechanisms at National/Provincial levels
- Initiation of **CRVS Legislative Reforms**. Development and adoption of a uniform CRVS law, in place of current fragmented laws.
- **Coordination** with all sectors, including civil registration authorities, provincial and local governments, health and other relevant sectors, statistics authorities, development partners and civil society.
- **Universal civil registration** of births, deaths and other vital events. All individuals are provided with legal documentation of civil registration of births, deaths and other vital events, as necessary, to claim identity, civil status and ensuing rights.
- **Setting and Implementing 5 Year Goal** and work plan.

How CRSV Works in Pakistan Administratively (CRSV)





Future Use of Administrative Data for Census

- **Buildings / Dwellings:** structures, dwelling units, housing characteristics, like electricity, gas, water, telephone, internet, ownership, taxation
- **Education Register:** Literacy, Fresh Enrolment, Out of School, Technical Education, Drop rate, Medium (English / Urdu), Religious Education
- **Health Register:** Facilities, services, capacity, immunization, diseases, child birth, deaths and causes, infant & maternal mortality, disability etc.
- **Employment Register:** Govt. and Private Sector, Labour Data, Newly Created Jobs, Occupation, Income groups, un-employed, pensioners etc.
- **CRVS Register:** Birth, Death, Marriage, Divorce, Family Tree, Inheritance, religion, nationality, domicile, foreigners data registers.
- **Other Important Administrative Data** like employment, workforce, occupation & profession, in and out migration, overseas diaspora.



Transition to Alternative census methodologies

- Pakistan, planning to conduct future census based on approach of register base census, where each department / authority keep its relevant administrative data set up to date with full coverage.
- Already during briefings and training of Recent 7th Population census need for register based census was prime focus for next 8th census.
- It will help reduce the questionnaire, need and frequency to conduct census to gather data, instead updated data will be available all the time.
- It will cost efficient solution, as Pakistan is relatively populated, has diverse geography and sometime not possible to conduct whole census in a single period, due to weather issues.
- Already relevant department maintains this data but it is partially available least updated, and has data quality issues. Coverage, Quality
- De-Linking: Freezing NFC Award Distribution, quota, assembly representation, it will help increase population census data quality and reliability



Way Forward: Registers / Databases Integration

- Use of Existing Census data as foundation
- Identification of other related administrative datasets / registers
- Use of Unique Common Identifier to link different datasets (like NIC)
- Defining data sharing mechanism and frequency
- Integration of different datasets / register and departments
- Legislation to use administrative data and individual level access and sharing
- Regular Updation of established registers and quality enforcement
- Conducting Population Coverage Surveys to Identify coverage
- Using Geo-Coordinates as Sources of Map Data to track spread & resource planning
- Paying way to integrated national information system
- Integrated solution for effective Resource Planning and Data Oriented Policy Making

**Shukriya
(Thank you)**

