

DEVELOPMENT ADVOCATE

Pakistan

VOLUME 11 / ISSUE 1 | MARCH - APRIL 2024



DATA FOR DEVELOPMENT





DEVELOPMENT ADVOCATE
Pakistan
VOLUME 11 / ISSUE 1 | MARCH - APRIL 2024

Disclaimer

The views expressed here by external contributors or the members of the editorial board do not necessarily reflect the official views of the organizations they work for and that of UNDP's.

The designations employed and the presentation of material on the map on the report's cover do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations or UNDP concerning the legal status of any country, territory, city or area or its authorities, or concerning the delimitation of its frontiers or boundaries.

Jammu and Kashmir: The grey dotted line represents approximately the line of control in Jammu & Kashmir. The state of Jammu & Kashmir and its accession is yet to be decided through a plebiscite under the relevant United Nations Security Council Resolutions.



Contents

EDITORIAL

- 01** Data for Risk-Informed Policymaking in Pakistan By Dr. Samuel Rizk

MAIN ANALYSIS

- 03** Enhancing Data Governance in Pakistan By Tariq Malik

INFOGRAPHIC

- 09** Pakistan's Survey Ecosystem By DAP Team
11 Institutional Policies and Mechanisms for Data Governance By DAP Team

THOUGHT PIECES

- 13** Unlocking Statistical Power for Public and Private Sector Growth By Dr. Naeem Uz Zafar
17 Evidence-integrated Data for Development By Dr. Fareeha Armughan
21 Reimagining Pakistan's Data Ecosystem By Abdul Sattar Babar
25 Unlocking Development Through Collaboration: The Case of MICS By Sadaf Zulfiqar, Azhar Amir & Omaira Chaudhry
29 Intellectual Property Rights for Growth By Ambassador (r) Farukh Amil
33 Human Rights Data and Its Discontents By Shmyla Khan

REGIONAL LENS

- 37** Building Bridges for Development Data By Jon Hall & Nicole Igloi

PROVINCIAL PERSPECTIVES

- 39** Strengthening Data for Punjab's Regional Development By Javeria Khalid
41 Amplifying SDGs Reporting and Tracking in Sindh By Naveed Shaikh
43 Bridging Khyber Pakhtunkhwa's Data Gap By Syed Sabir Hussain Shah
45 Improving SDG Monitoring and Reporting in Balochistan By Zahoor Ahmed

CASE STUDIES

- 47** Uplifting Pakistan's Least Developed Districts By Kashif Sehgal
49 iVerify: Empowering the Electorate By Meeran Jamal
53 Knowing Your Epidemic: Data and HIV Access in Pakistan By Heather Doyle
57 SAARCFINANCE Seminar: Potential Role of Big Data in Economic Policy By DAP Team

A FINAL WORD

- 59** What Can Data Do for Women in Pakistan? By Van Nguyen



Editorial Board

- Dr. Samuel Rizk**
Resident Representative, UNDP Pakistan
- Ms. Van Nguyen**
Deputy Resident Representative, UNDP Pakistan
- Ms. Ammara Durrani**
Assistant Resident Representative
Development Policy Unit, UNDP Pakistan
- Mr. Amir Goraya**
Assistant Resident Representative
Resilience, Environment and Climate Change Unit, UNDP Pakistan
- Mr. Kaiser Ishaque**
Assistant Resident Representative
Democratic Governance Unit, UNDP Pakistan
- Mr. Mustafa Mahmood**
Assistant Resident Representative
Crisis Prevention and Inclusion Unit, UNDP Pakistan
- Mr. Shuja Hakim**
Communications Unit Head a.i., UNDP Pakistan

Editorial Team

- Momina Sohail**
Editor / Communications and Publication Analyst
- Umer Akhlaq Malik**
Policy Analyst
- Hasnat Ahmed**
Graphic Designer

Development Advocate Pakistan provides a platform for the exchange of ideas on key development issues and challenges in Pakistan. Focusing on a specific development theme in each edition, this quarterly publication fosters public discourse and presents varying perspectives from civil society, academia, government and development partners. The publication makes an explicit effort to include the voices of women and youth in the ongoing discourse. A combination of analysis and public opinion articles promote and inform debate on development ideas while presenting up-to-date information.

United Nations Development Programme Pakistan

4th Floor, Serena Business Complex,
Khayaban-e-Suharwardy, Sector G-5/1,
P. O. Box 1051,
Islamabad, Pakistan

For contributions and feedback, please write to us at:
pak.communications@undp.org

- www.facebook.com/undppakistan
- www.twitter.com/undp_pakistan
- www.instagram.com/undp_pakistan
- www.undp.org/pakistan

Data for Risk-Informed Policymaking in Pakistan

While progress of any country is a function of how inclusive, responsive, and forward-thinking its development policies are, these policies will only be as good as the evidence upon which they are built.

The definition of 'data' will differ from country to country, context to context and even individual to individual. Even more so, what data is and what it can do changes so rapidly that it can be hard to grasp and to use it to its full potential. Whether we conceive of data as artificial intelligence, pursue a more traditional approach of data-as-surveys, or use technology-heavy methods derived from the use of drones or geospatial mapping – the benefits of using data for evidence-based analysis, policy- and decision-making are undeniable.

It is also important to consider the timeframe which data is assessing, whether it is data for a retrospective review and lessons learned, data for today's decision-making imperatives, or data for the future (forecasting, early warning, etc.). From a development lens, all three timeframes are critical and useful.

With only six years left for achieving the Sustainable Development Goals, there is no doubt that we need to collectively improve our practice, our effectiveness, and significantly scale-up our ambition. The 2024 UNDP Human Development Report highlights dramatically rising inequalities between the wealthiest nations and the poorer ones, a dynamic that risks becoming permanent and that will be

accelerated by the effects of climate change. This is particularly true for Pakistan where the development trajectory has remained modest at best. The Pakistan 2023 SDG Insights Report showed the country to be on track to achieve only 35 out of 169 SDG targets. UNDP's latest Human Development Index ranking shows Pakistan at 164 out of 192 countries, in the 'low development' category.

What's the way back to a positive development trajectory? As Agenda 2030 approaches its culmination, UNDP is accelerating SDG momentum by using data analytics, innovative trends reporting, data management, and data governance to measure countries' progress as well as project their needs and opportunities for post-2030 action. While progress of any country is a function of how inclusive, responsive, and forward-thinking its development policies are, these policies will only be as good as the evidence upon which they are built. If Pakistan is to overcome the existing digital divide, and make the benefits of technology equally accessible to all segments of society, an enormous opportunity awaits to boost its human development.

Pakistan's best example of processing and leveraging data for development is the National Database and Registration Authority (NADRA), which has



By
Dr. Samuel Rizk
Resident Representative,
UNDP Pakistan



revolutionized e-governance by providing a comprehensive database of citizens' information. This initiative has facilitated greater inclusivity in government services, enabling more efficient and transparent delivery of public services to all segments of society. Another example where data can play a crucial role is in promoting accountability and transparency by allowing stakeholders to monitor the implementation of policies, track the allocation of resources, and evaluate the effectiveness of development initiatives. The Ministry of Planning, Development and Special Initiatives Public Sector Development Program (PSDP) data portal launched in 2023 is a step in the right direction, as it will provide greater insight into the development projects being undertaken across the country, making citizens understand the objectives, scope, and impact of each project as well as making allocations more accessible to the public, transparent, and accountable. On a more local level, the country's fintech and agritech sectors are already using artificial intelligence and advanced analytics to increase production and expand financial access for small-scale farmers.

The opportunities to use data for development are enormous and range from integrating traditional sources like household surveys, to innovative new tools such as geospatial data, satellite imagery, mobile device data, and data from social media, as well as innovative partnerships between the public and the private sector. However, these benefits can only be harvested when we overcome our hesitancy to use data to its full potential, while still mitigating potential risks and unintended consequences. For

policymakers, this approach is critical given the speed at which developments in the digital and artificial intelligence space are happening, and where data collection, analytical tools, and legislation are unable to keep up.

Over the past one decade, UNDP has partnered with the federal and provincial governments to establish a range of innovative data tools and systems to support Pakistan's SDGs mainstreaming, localization, and acceleration efforts. The Multidimensional Poverty Index, for instance, is now the basis of national efforts aimed at uplifting Pakistan's least developed districts and regions and bringing them on par with the rest of the country. Similarly, a first-ever Government-UNDP SDG Investor Map for 2023 served as a dynamic tool to identify a range of market-specific impact investment opportunities for SDG-aligned private sector resources and capital deployment in Pakistan, all at a time of increased fiscal pressures.

Data, if collected, analyzed and utilized productively, and ethically, can become a renewable resource to power inclusive growth, innovation, and sustainable development. Can data become the solution to the development challenges we face? Not alone. But data can help us develop solutions based on evidence, and help us refine development interventions along the way, for more insight, impact, and effectiveness. The future of development in Pakistan will clearly be strengthened by digital awareness, digital literacy, and digital inclusion.

Enhancing Data Governance in Pakistan

Pakistan is inundated with data, but it lacks insights. Use it for evidence-informed policy development by letting it speak.

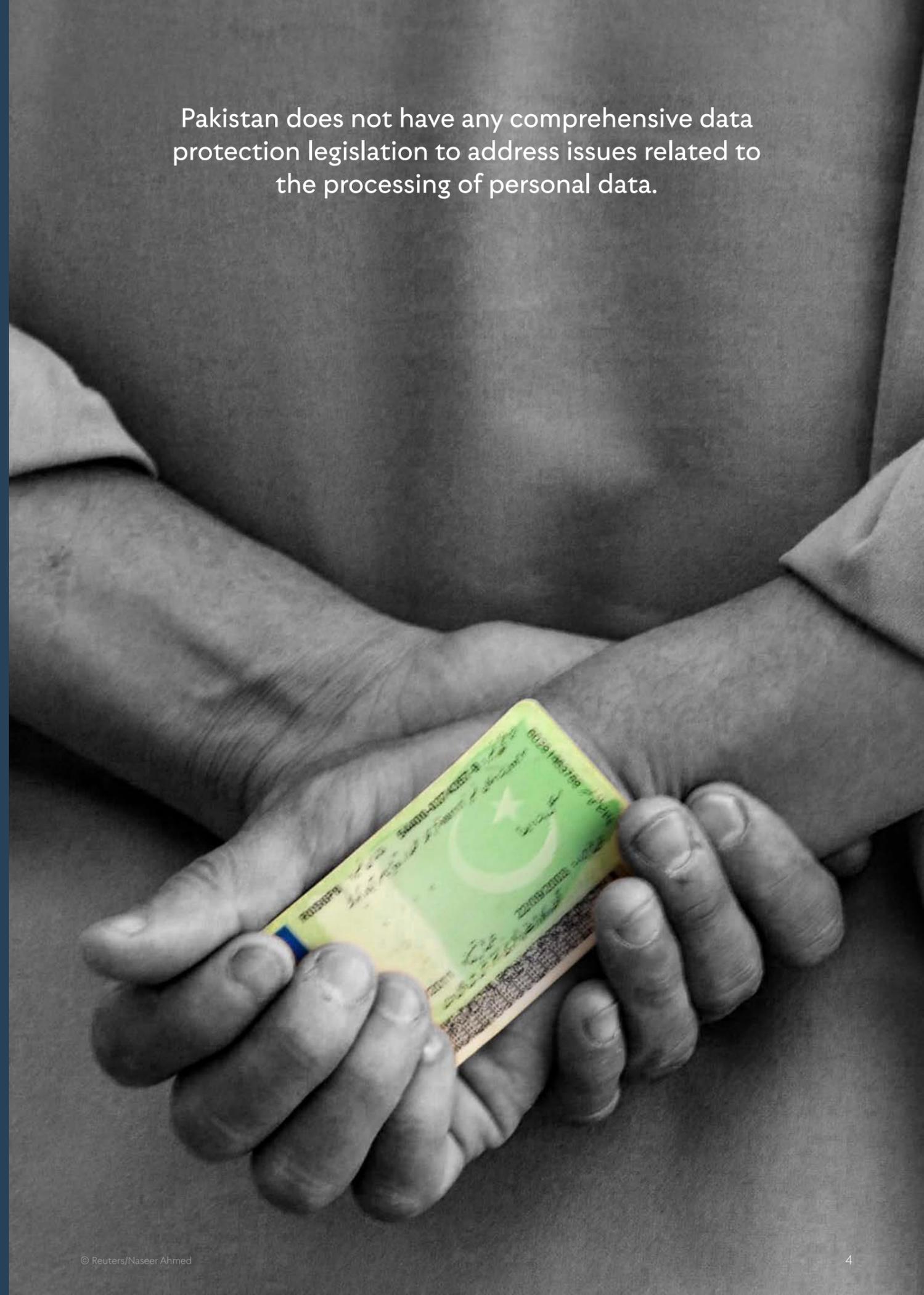


By

Tariq Malik

Former Chairman,
National Database and Registration Authority (NADRA)

Pakistan does not have any comprehensive data protection legislation to address issues related to the processing of personal data.



Putting in place data-driven decision-making tools encourages openness in the formulation of public policy.

From the sciences to healthcare, from finance to the internet, the industries may be different, but they all tell a similar story: the volume of data in the globe is expanding quickly, outstripping not just our machines but also our imaginations. Nevertheless, the true revolution lies not in data processing technology but in the utilization of data and data itself. That's why I always debate that the "bigness" of Big Data is not about size but the value it creates. It is high time that we use data for evidence-informed decision-making.

Data-driven decision-making systems have earned prominence in recent years as an essential instrument for reforming policy-making in developing nations such as Pakistan. Making evidence-informed decisions based on data can result in more open, effective, and efficient governance. Decisions

based on factual evidence rather than intuition are made possible through data-driven decision-making. This method aids in the creation of policies that are more likely to address the real needs and difficulties that people confront, producing results that are more significant and long-lasting. Decision-makers can learn which areas need the greatest focus and resource allocation by examining pertinent data. This assists in distributing resources as efficiently as possible and guarantees that funds are allocated to projects that have the best chance of producing positive outcomes. Putting in place data-driven decision-making tools encourages openness in the formulation of public policy. Accountability among government officials and agencies is improved as a result of its ability to track important performance metrics and measure progress. This leads to the enhancement of public service delivery. Policymakers can better satisfy



© Fahim Siddiqui, White Star



© AP Photo/K.M. Chaudary

A data governance framework ensures that the data utilised for decision-making is accurate, consistent, and dependable by establishing standards and procedures for data quality.

population expectations by customizing services through data analysis on citizen needs, feedback, and behavior. This will ultimately improve the overall quality of public services.

populations, thereby lowering inequalities and fostering inclusive growth.

Data-driven policymaking holds substantial potential for addressing the socioeconomic challenges faced by Pakistan. In this way, the nation's numerous socioeconomic problems will be easier to comprehend, prioritise, and resolve. The most important socioeconomic issues facing Pakistan, such as poverty, unemployment, access to healthcare, the standard of education, and infrastructural deficiencies, can be identified and prioritised with the use of data analysis. Data can help policymakers better allocate resources, implement targeted interventions for more efficient use of financial resources, and address socioeconomic disparities across the nation by illuminating the scope and underlying causes of these challenges. Data-driven policymaking ensures that the demands of vulnerable and marginalised groups are sufficiently met, which promotes more inclusive socioeconomic development. Policies and programs can be adjusted through data analysis to better serve these



© codastory.com

Sources for Data-Driven Policymaking

Pakistan has a number of important data sources that can be used for data-driven policymaking to address socioeconomic issues. Evidence-based policy decisions and initiatives can be informed by the useful insights and information found in these repositories. The primary data repositories in Pakistan are as follows:

- **Census Data:** Pakistan Bureau of Statistics (PBS) is the principal organisation in charge of gathering and disseminating government data on a range of socioeconomic variables in Pakistan. It is an essential resource for evidence-based policymaking since it offers a wealth of statistics on population, labour force participation, health, education, agriculture, industry, among other topics. Last year, PBS conducted its first ever Digital Census in the country using latest technologies. This technological intervention helped PBS conduct the Census in a transparent, accurate, and comprehensive manner.
- **Citizens' Registry:** National Database and Registration Authority (NADRA) maintains extensive digital data related to citizen registration, including demographic and biometric information and family composition. This repository is highly valuable for understanding population dynamics and demographic trends, which are essential for designing targeted socioeconomic policies. Additionally, NADRA's biometric verification services and its country-wide IT infrastructure makes it pivotal in executing any e-governance initiative.
- **Social Protection Database of Households:** Benazir Income Support Program (BISP) maintains a National Socio-Economic Registry (NSER) for almost each household in the country. The registry contains socio-economic variables including employability, education and skill matrix, assets in terms of land or livestock, mode of communication, and all other proxies to determine living standards.
- **Financial Inclusion Data:** State Bank of Pakistan (SBP) collects and maintains current data on monetary and fiscal indicators, financial inclusion, the operation of the banking sector, and other economic issues. This data can be instrumental in formulating policies related to economic stability, financial inclusion, and development.

By making use of these primary data sources available in Pakistan, policymakers will be better equipped to prioritise interventions, make well-informed decisions, and track the results of their actions. This will ultimately lead to more focused and efficient methods to tackling the socioeconomic problems facing the nation.

While there is an urgency to deploy Digital Public Infrastructures at dizzying speed, we need to be cognizant of the fact that privacy issues and data breaches are becoming the norm.

Apart from these datasets' ability to close gaps in the nation's evidence-based decision making, a data governance framework is necessary for organizations to properly manage and make use of their data assets. It offers a framework and a set of procedures to guarantee that data is handled sensibly, safely, and in accordance with the goals of the organization and applicable laws. Pakistan does not have any comprehensive data protection legislation to address issues related to the processing of personal data. The Prevention of Electronic Crimes Act (PECA) is currently the only piece of legislation that provides a legal framework in relation to various kinds of electronic crimes and also extends to unauthorised access to personal data. Furthermore, the Personal Data Protection Act was proposed by the Ministry of Information Technology and Telecommunication (MOITT) but has not yet been enacted into law. The Bill will apply to anyone who processes, controls, or approves the processing of any personal data, provided that the data subject, data controller, or data processor (local or foreign) is located in Pakistan. Once it is enacted, the Bill will serve as the primary

piece of legislation governing controllers and processors of personal data in Pakistan.

A data governance framework ensures that the data utilised for decision-making is accurate, consistent, and dependable by establishing standards and procedures for data quality. This is crucial for organisations to have confidence in their data-driven insights and operational processes. Inaccurate data can result in deceptive assessments, poor performance reviews, and inefficient use of resources.

In today's diverse and interconnected world, the inclusivity of data acquisition systems is crucial for organizations to ensure that their data collection processes encompass a wide range of perspectives and experiences. In data collecting systems, inclusivity refers to taking into account and allowing for a variety of data sources in order to offer an in-depth and precise overview of the subject matter. It seeks to collect information from every conceivable demographic category, including various age groups, genders, ethnic

Digital Public Goods must be designed with a 'Privacy by Design' principle in mind.

groupings, and socioeconomic backgrounds, without bias or discrimination. By using this method, the data is guaranteed to be reliable and to provide a complete and more accurate picture of the population. Inclusivity in data acquisition aligns with ethical considerations by ensuring that the data collection process respects the dignity and privacy of all individuals and segments of the population involved. As a result, the state's reputation is improved and citizen trust is increased.

Regardless of how valuable data is, it is worthless if it is not available and usable. A data in a silo is equivalent to not having data in the first place. The data gains more value and gets refined on being shared and used by multiple stakeholders. Decision-makers are better able to generate positive results and meaningful insights when they have access to easily available and useful data. Real-time or near-real-time data availability can be particularly valuable in dynamic and fast-paced decision-making environments. Data dependability and quality are prerequisites for its usage. Data that is trustworthy, accurate, and of high quality is easier to use in decision-making procedures. Usable data should be presented in a format that is easily interpretable and digestible for decision-makers having non-IT backgrounds. Data visualisation tools and techniques play a crucial role in making complex datasets more comprehensible, thereby enhancing their usability.

Data should be in line with the end user's particular requirements. Customised or targeted data provisioning can ensure that business users have access to the most pertinent information for their particular decision-making requirements. Data should also be easily integrated into decision-making procedures. Utilizing platforms that enable data interoperability across diverse systems or data-driven decision support systems may be part of this integration.

While there is an urgency to deploy Digital Public Infrastructures at dizzying speed, we need to be cognizant of the fact that privacy issues and data breaches are becoming the norm. Hence, data security and individual privacy protection becomes critical. The Universal Declaration of Human Rights (UDHR), which established the right to privacy as a basic human right, was approved by the UN General Assembly in 1948 under the darkness of war. Article 12 of the Declaration stated that, "No one shall be subject to arbitrary interference with his privacy, family, home, or correspondence," and that the state must protect individuals from such interferences by enforcing legal protections.

Protecting sensitive information must be an organisation's top priority if it hopes to uphold trust and adhere to legal requirements. To prevent unwanted access, this can be

accomplished by using strong encryption techniques for data, both in transit and at rest. Digital Public Goods must be designed with a 'Privacy by Design' principle in mind. Access control techniques including multi-factor authentication and role-based access aid in limiting authorised personnel's access to data. It is crucial to set up strong incident management procedures and a data breach response plan. This includes timely detection, containment, and notification procedures in the event of a data breach to minimise its impact on individuals and the organisation.

Implementing international data protection laws, such as the California Consumer Privacy Act (CCPA) and the General Data Protection Regulation (GDPR), can be quite beneficial. These laws set forth particular guidelines for managing and safeguarding personal information of individuals. Respecting privacy requires being open and honest about data collection methods and getting people's express consent before collecting their personal data. People ought to be able to control their permission choices and be fully informed about how their data is being used.

Leveraging data for informed decision-making is crucial to address Pakistan's socioeconomic challenges. It enables policymakers to prioritise interventions effectively, leading to focused approaches in tackling poverty, unemployment, and healthcare access while also promoting inclusive development. In this context, establishing a strong data governance framework is essential for ensuring data accuracy and reliability, boosting confidence in data-driven insights. Furthermore, prioritising data security and individual privacy protection is imperative to maintain trust and meet legal requirements in today's evolving data landscape, in order to ensure we Leave No One Behind.



Digital tracking ID slip at a NADRA Registration Centre.

Pakistan's Survey Ecosystem

Frequency¹

Socio-Economic

Household Integrated Economic Survey (HIES) Biennially

Pakistan Bureau of Statistics

The HIES is conducted periodically to gather comprehensive data on household income, expenditures, and living standards in Pakistan.

- 2005 ● 2006 ● 2008 ● 2011 ● 2012 ● 2014 ● 2016 ● 2019

Pakistan Demographic Survey

Inter-census periods

Pakistan Bureau of Statistics

The PDS is conducted between census periods to provide reliable data on demographic indicators.

- 2001 ● 2003 ● 2005 ● 2006 ● 2007 ● 2020

Pakistan Labour Force Survey

Annual

Pakistan Bureau of Statistics

The survey collects a set of comprehensive statistics on the various dimensions of the country's civilian labour force to pave the way for skill development, planning, and employment generation.

- 1964 to 2021



National/Provincial Pakistan Social and Living Standards Measurement (PSLM) Biennially

Pakistan Bureau of Statistics

The PSLM Survey gathers socioeconomic data at provincial and district levels. It aids in formulating poverty reduction strategies and development plans.

- 2006 ● 2007 ● 2008 ● 2009 ● 2012 ● 2014 ● 2019

Multiple Indicator Cluster Surveys (MICS) Annual

Provincial Bureaus of Statistics and UNICEF Pakistan

The MICS are the largest source of statistically sound and internationally comparable data on children and women worldwide.

- Punjab ● 2004 ● 2008 ● 2011 ● 2014 Sindh ● 2014
- KP ● 2008 Balochistan ● 2004 ● 2010 AJ&K ● 2008

Special Survey for Evaluating Socio-Economic Impact of Covid-19 On Wellbeing Of People

Pakistan Bureau of Statistics

The Special Survey is designed with the objective of evaluating the socio-economic impact of COVID-19 on the wellbeing of people for informed decision-making at the policy level.

- 2020

1. The actual frequency varies from the officially stated frequencies of various surveys.

Health



National Nutrition Survey (NNS)

Ministry of National Health Services Regulations and Coordination

A country-wide survey to collect information on the nutritional status of women and children, food security, and household water quality.

- 2011 ● 2018



Pakistan Maternal Mortality Survey (MMS)

National Institute of Population Studies (NIPS), Ministry of National Health Services Regulations and Coordination

The PMMS is the first exclusive nationwide survey implemented with the purpose of assessing where Pakistan stands on maternal health indicators.

- 2019



Pakistan Demographic Health Survey (PDHS)

National Institute of Population Studies (NIPS), Ministry of National Health Services Regulations and Coordination

A nationally-representative household survey that provides data for a wide range of monitoring and impact evaluation indicators in the areas of population, health, and nutrition.

- 1991 ● 2007 ● 2013 ● 2018

Census

Census of Manufacturing Industries

Pakistan Bureau of Statistics

The census measures production, structural changes, input-output data, value added, GDP contribution, asset changes, employment data, and industrial taxes of medium and large-scale manufacturing industries in Pakistan.

- 1954 to 2016 (every five years)

Pakistan Mouza Census

Pakistan Bureau of Statistics

Update district-wise administrative structures and assess rural development, providing crucial data for planning rural projects and evaluating past initiatives.

- 1970 ● 1979 ● 1983 ● 1988 ● 1993
- 1998 ● 2003 ● 2008 ● 2020

Agriculture Machinery Census

Agricultural Census Organization

Periodic stocktaking of agriculture machinery.

- 1974 ● 1984 ● 1994 ● 2004



Pakistan Housing and Population Census

Pakistan Bureau of Statistics

A detailed enumeration of the country's population.

- 1951 ● 1961 ● 1972 ● 1981
- 1998 ● 2017 ● 2023

Pakistan Agriculture Census

The Agricultural Census Organization

The census provides information on size of farm, land utilization, irrigated area and sources, and other aspects for evidence-based policy designing.

- 1960 ● 1972 ● 1980 ● 1990 ● 2000 ● 2010

Pakistan Livestock Census

Agricultural Census Organization

The census provides comprehensive statistics on livestock, milk production, commercial poultry, and number of animals slaughtered.

- 1986 ● 1996 ● 2006

Institutional Policies and Mechanisms for Data Governance

E-Governance

E-Toll Collection System

NADRA developed an e-toll collection system to handle toll collection, contributing to smoother traffic management.

2007



Punjab E-Khidmat Markaz

Integrated 17 governmental services for citizens, including birth, marriage, divorce certificates, NADRA e-sahulat, route permits, and more.

2015



The Pakistan Citizen's Portal

Developed as a platform for public grievance management and enabled individuals to submit complaints directly to their government.

2018



Contactless Biometric Verification Services

NADRA pioneered contactless biometric verification, positioning Pakistan as a global leader in adopting this technology.

2021



2008

NADRA Kiosk and e-Sahulat

Facilitated online payments and collections for individuals and organizations, and carried out identity verification through multiple outlets.



2017

Pakistan Single Window

Digitalized trade and related government services, reducing the time and cost of doing business.



2021

Pakistan's Instant Payment System

Facilitated seamless digital transactions across individuals, businesses, and government bodies in real-time.



2022

Digital Payment Systems

Transformed 17,000 e-Sahulat locations into feature-rich ATMs, expanding electronic payment options for seamless public transactions.



Policy

Electronic Transactions Ordinance 2002

Provided facilitation of records, information, communications, and transactions in electronic form.



2002



The Prevention of Electronic Crimes Act 2016

Addressed cybercrimes and promoted cybersecurity through legal frameworks and enforcement mechanisms.

2016



Punjab Land Records Authority Act 2017

Facilitated the digitization of land records in Punjab, for increased transparency, reduced corruption, and improved data quality.

2017



Digital Pakistan Policy

Envisioned becoming a strategic enabler to accelerate digitization, expand the knowledge-based economy, and foster growth.

2018



Personal Data Protection Bill 2022

Regulated the collection, processing, and storage of personal data, aiming to safeguard individuals' privacy rights.

2022

Data Quality

2004



Machine Readable Passports

NADRA transitioned from manual to modern Machine-Readable Passport (MRP) issuance, enhancing security.

2012



Smart National Identification Cards (SNIC) introduced by NADRA

The card paved the way for online identification, electronic voting, pension disbursement, social and financial inclusion programmes, and other digital services.

2019



National Immunization Management System (NIMS)

NIMS, originally developed for COVID-19 vaccine registration, aimed to streamline all national immunization activities on a single platform.

2023



First Digital National Census

The 7th National Census of the population carried out by PBS utilised 126,000 android-based smart devices equipped with house listing and enumeration applications.

Unlocking Statistical Power for Public and Private Sector Growth

The benefits of data for public and private sector growth needs to be made more obvious, with red flags raised for losses from the non-use of data, mutual and societal gains highlighted for evolving and fostering partnerships, and a national perspective set in sight when establishing priorities.



By
Dr. Naeem Uz Zafar
Chief Statistician,
Pakistan Bureau of Statistics

PBS has digitalized its data collection and dissemination over the last seven years. Starting from major instruments like the Pakistan Social & Living Standards Measurement to the Labor Force Survey to weekly price collection, everything is collected digitally, while tracking enumerators' movements digitally so as to ensure the quality of collected data. The latest addition in this series is the 7th Housing & Population Census, which is the first digital census of Pakistan and brings the potential of huge dividends if we are willing to capitalise on it.

Before talking about possible gains, it's worthwhile to talk what's been collected in the 7th census, and even before that, to highlight that the census is meant for development planning, which is why it enumerates the access of the populace to basic social services besides counting individuals and

households. All of this is done to create a landscape of the populace's access to basic development needs at a most granular, administrative level. This is done with hope that this information will be used in formulating policies for improving access to basic socioeconomic and development needs. Now let's share what this census has collected: The census has enumerated more than 241 million individuals and also collected the socio-demographic information of these individuals. The census has geotagged more than 40 million structures where these individuals were enumerated. These structures can be purely residential, mixed, or purely economic.

Now, we move on to how the gains can accrue. Let's begin with possible gains for the public sector and then talk about what's in it for the private sector. Consider age-cohort pyramids at every administrative level, starting from



The promises and business cases stemming from the fusion of Big Data and structured data are monumental when compared to those that arise out of structured data alone.

provinces to Tehseels. To be specific, let's take the school age female population in some Tehseel. For any given age cohort, this number shows the demand of specific education level in that administrative area. Now let's consider the geotags of schools, both public and private, and see if they can fulfil the specific education demand in that Tehseel. We can even make pyramids of school level, primary, middle, secondary, and higher secondary and compare them with pyramids of age-cohorts at any administrative level and see the access situation in a snap. The same analysis can be done for healthcare services at any administrative level to see the situation of access to health, and the same can be continued with access to WASH. Too many pyramids to analyze in a province! We can always switch to other visualisations, bubble charts, color coding, etc. - anything which helps us

grasp the situation easily.

This is low-hanging fruit; let's jump towards higher branches. Suppose this landscape is shown to stakeholders, such as the provincial education department. We can ask them to overlay the governance and quality data of each school in a Tehseel. This will tell us why people, despite being less affluent, prefer to send their children to private school? This will be obvious from public or private school enrollment comparisons in a given neighborhood. We can even overlay the average scores from continuous and summative assessments and task the education administration with improving the numbers. It's now clear that the access landscape can be overlaid with an assessment landscape to facilitate education management and governance. This is true for other



© Pexels/Kindel Media



© AFP

In leveraging big data, we focus on creating compelling narratives through data integration and insight generation.

sectors too.

This was just one way of making data use exciting and effective; it can be extended to fiscal resource mobilisation, disaster risk management, and more. For example, the census shows the housing density at every administrative level, along with the types of houses - multistory, mixed modes, pure commercial, etc. A simple comparison of the density of these attributes with the urban or rural status of an administrative area can tell us if features are too urban to reconcile with a rural status in revenue papers. This anomaly can also be juxtaposed with property tax to assess the resource potential.

We have discussed enough of the public sector. Let us now talk about attractions for the private sector. The same example of housing density can be used. Let's take two comparable Tehseels in housing density, retail density, and bank density. Suppose the ratios differ across two Tehseels. I am sure, if nothing grave is underlying the difference, retailers and banks will rush to find a proximal place for undertaking new investments. The same can be extended for creating an

attraction for businesses related to agri inputs, such as quality seeds, fertilisers, pesticide, agri-chemicals, agri-equipment rentals, services for agricultural machinery, etc. It is not difficult to see that this data can spur investment and economic growth.

So far, I have just talked about business cases for structured data, mostly collected by PBS. I have not talked about the fusion of Big Data and Structured Data. The promises, the business cases, and the inclusions from this fusion are monumental when compared with those stemming from structured data alone.

However, none of this will happen on its own. The benefits should be made obvious, red flags should be raised for losses from the non-use of data, mutual and societal gains must be highlighted for evolving and fostering partnerships, and a national perspective must be in sight when setting priorities. All of this needs engagement, discussions, debate, partnerships, platforms, and more. PBS plans to hold a Data Fest in Autumn of 2024, entitled 'Data for Good Life', that aims to focus on each of these pillars in turn.

Evidence-integrated Data for Development

Not conceptualising an evidence-based policy design leads us to a 'black box' of development, where public policy failures happen all the time in the shape of program logic not producing outcomes as expected, and where there is no explanation for why things happen.



By
Dr. Fareeha Armughan
Sr. Research Fellow & Head, Center of Evidence Action Research (CEAR), SDPI

The world we live in is complex, where we have to navigate strategically to find tangible solutions to stern policy problems. When we talk about the developing world, it is even more complex, volatile, and mercurial in terms of finding solutions. This is where the role of evidence-based policymaking comes in.

Some myth-busting at first regarding the distinction between data and evidence. A classic case is that of education in Pakistan, where the focus has essentially been on enrolment over time.

- Pakistan has high primary, secondary and tertiary enrolment rates over the decades, numbers that tell us that we are doing well in terms of education.
- However, enrolment does not

guarantee learning.

- It is all about learning outcomes from the lens of evidence, and we are currently facing the crisis of 'learning poverty' in Pakistan, where 43 million children in school are not learning adequately and only 23 percent of students aged 10 can read and understand an age-appropriate text.

What is evidence-based policymaking? It is an ideology or mindset where evidence is integrated with data - where it permeates the entire policy design and standalone data is not the decisive element in determining policy.

Evidence-based policymaking design for development comes with a certain protocol. It first asks the policymakers to think through theory to gain theoretical insights. The theory is at the very heart of the evidence design.

When we talk about the developing world, it is even more complex, volatile, and mercurial in terms of finding solutions. This is where the role of evidence-based policymaking comes in.



Evidence-based policymaking is not only holistic but intensively systematic in nature.

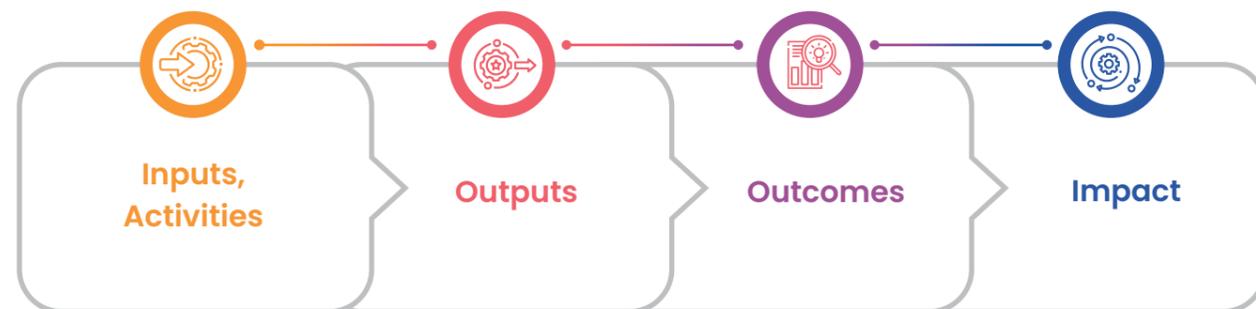
Following this, the emphasis is on developing, evaluating, and refining the theory of change - the detailed chains of causal pathways or mechanisms of change - from policy intervention to impact.

After setting up a concrete theory of change around the policy problem, the next step is to take a deep dive into data and understand what it tells us and what it does not. What is the data trying to reveal and what is it trying to conceal? How can we know the source and the quality of the aggregated data?

The next step is to contextualise the development policy problem. Evidence design is always deeply embedded in the context, into the primary and secondary root causes of the problem. It is important to note that imported models have no place in this type of policy design! It then further asks to factor in the political economy comprising of underlying assumptions, risks, and environmental factors that may potentially influence policy results.

The process does not end here. It then further moves to considering the 'counterfactual' - an alternate reality of what

Evidence-based Policymaking Design



© UNDP Pakistan



© LUMS

would have been the outcome if the policy had not been introduced. Constructing the counterfactual in evidence-based policymaking lays the foundation for evaluating the impact. Comparing the 'treated' ones versus the 'controlled' ones under a particular development intervention, and identifying any statistically significant differences between them, depicts the eventual quantified impact of the policy intervention.

Hence, evidence-based policymaking is not only holistic but intensively systematic in nature. Another glorious aspect is its 'problem-driven bottom-up' approach, where jumping to conclusions and solutions is prohibited. Instead, problem identification and navigation by default leads to a solution.

In the context of Pakistan, the chronic issue we are facing in our development paradigm is that we lack the mindset of evidence. We do not have time for evidence. In fact, we like our data sitting up on the shelves! For us, impact evaluations are cumbersome, time consuming, and come with a cost. We prefer employing reverse engineering, where we think of a solution first and then take it to the population of interest, instead of mapping the population first for a tailored needs assessment. We have precedence for scaling up of development innovations without pilot testing them. More ironic is that in our result-based matrix (RBM) of planning and development, we have been confusing the 'outcome' for the

eventual 'impact' for decades. We are inclined towards celebrating numbers and success stories, and committing the folly of not recognising the distinction between 'noise' and the quantified 'impact'.

Not conceptualising an evidence-based policy design leads us to a 'black box' of development, where public policy failures happen all the time in the shape of program logic not producing outcomes as expected, and where there is no explanation for why things happen. If some development design works, no information is available about why it worked, and conversely, if it fails, there is no information about why it failed.

Hence, the big idea is to get policymakers, researchers, academia, and people to think carefully and systematically about how policies and programs impact the development process. A true evidence-based policy considers what has worked and what has not worked in the past, and can be evaluated for its impact. This requires us to define the causal chain and the counterfactual, identify and evaluate the evidence to demonstrate impact, and account for alternative explanations and unintended consequences of our policy decisions. Policymakers and researchers must be equipped with the tools to truly detect evidence of policy impact and use these tools for better policies for development.

Reimagining Pakistan's Data Ecosystem

Ranging from developing countries like Bangladesh to developed countries like the UK, national statistics are instrumental in refining national policy and research projects. However, when it comes to Pakistan, there is a glaring absence.



By
Abdul Sattar Babar
CEO,
Ipsos in Pakistan

A little over twenty years ago, I travelled to Dhaka from Dubai on a work trip. As fate would have it, I ran into an old friend from university on the flight. We spent our time conversing and catching up on each other's lives. Once we landed at Dhaka's rather modest airport and were supposed to board the conventional bus which would take us to the immigration and baggage claim, I noticed a luxurious car waiting for him on the tarmac next to the plane. Intrigued but not wanting to come across as impolite, I merely exchanged lodging details with him and planned to meet up later in Dhaka.

Later, I met my friend again and I couldn't help but inquire about the car I had spotted at the airport earlier. His reply was casual, "Babar, I'm investing in this country, and they show respect to investors in their own way". I asked him why he would be shifting his business

out of Pakistan, and he replied, "They are open, transparent and fast." I realized the true essence and significance of his remarks within my stay over there.

As South Asia's regional research head of a multinational company, I was supposed to audit the local research function and see if it complied with global guidelines and utilised optimum sample designs and methodologies. In a bid to learn the basics about Bangladesh, I inquired about its demographic information from a local colleague, and in turn received an entire CD containing data not only about major demographics, but the nation's economy and labour force too. Their national statistics bureau had made all this data available for public consumption. For someone expecting just a verbal brief or a few PPT slides, this was no less than a revelation, especially since CDs were a rarity in



Pakistan ranks only 87 out of 186 countries on the World Bank's Statistical Performance Indicators (SPI) framework.

Pakistan at that point. The data immensely helped me appreciate their prevailing practices and streamline the research designs where needed. I pondered upon the notion of a nation that might have seemed visibly distraught due to its struggling physical infrastructure, but with a commendable take on investments and data collection and utilisation, especially as compared to Pakistan.

Twenty years later, for a project that largely aimed to transform Pakistan's education system, we were working in collaboration with some highly esteemed professors in Cambridge. During our discussions, I learned about a standard practice in the UK where each child, upon enrolment in school, is assigned a National Pupil Number (NPN). This unique identifier is used to track and record a student's performance against conventional predetermined indicators, which informs policy decisions. As one of the professors tasked with explaining the differing behaviour of girls and boys at various education levels, evaluated through NPN data, I was struggling to secure a reliable source for accurately quantifying and identifying out-of-school children in Pakistan.

Over 30 years in my professional journey, the two experiences mentioned above, and many more, have provided me an insight on how differently countries approach data utilisation. Ranging from developing countries like Bangladesh to developed countries like the UK, national statistics are instrumental in refining national policy and research projects. However, when it comes to Pakistan, there is a glaring absence.

A few months back, my team and I were working on a research proposal where we required numbers and insights about Pakistan's Wholesale, Retail, and Trade (WRT) segments. It was disheartening to realise that the last economic census was conducted nearly 20 years ago. This showcases just one instance of many of the dearth of data availability in Pakistan. Since both the 2017 and 2023 censuses and their details have never been made public, it has led to Pakistan being excluded from many multi-country studies because of the inability to design and apply robust scientific sampling open to public scrutiny. Acquisition of such data from relevant public offices is a daunting task due to information being

barricaded strictly behind bureaucratic hurdles.

These factors coupled together might be the very reason behind Pakistan being ranked 87 out of 186 countries in the World Bank's Statistical Performance Indicators (SPI) framework. Hence, it felt like a breath of fresh air when UNDP took initiative, shedding light on the significance of this issue. The case is also taken up in the annual report of the State Bank of Pakistan (2023-2024), which states that the statistical system of Pakistan is under-researched.¹

The value of data in a nation's progress is threefold.

1. First, data serves as a foundation for evidence-based **policymaking**, facilitating adjustments, policy calibrations, and impact assessments.
2. Second, data can **disseminate market information**, reducing asymmetries and driving market efficiency and optimization, which benefits the country's businesses.
3. Third, data can **stimulate competition** on a subnational scale by offering a means for regional comparisons. This is achieved by monitoring performance against quantifiable targets such as economic growth and unemployment.

Therefore, I firmly believe that a robust national statistical system can bring about significant improvements in governance, economy, social protection, and in leveraging our most significant demographic asset - our youth.

Governance: Open data access supports tracking governance issues and evaluating performance across all levels through Key Performance Indicators (KPIs). Remember: What gets measured gets managed.

Economy: Data democratisation can help expand the tax net and reduce tax evasion by making it easier to identify potential taxpayers and scrutinise financial transactions.

Social Protection: Detailed socioeconomic, education, and health data can guide us in creating impactful social protection initiatives that reach the grassroots level.



© AFP

A robust national statistical system can bring about significant improvements in governance, economy, social protection, and in leveraging our most significant demographic asset - our youth.

Demographic Dividend: Data on our youth's characteristics, specifically their academic and vocational strengths, can help us effectively engage and utilise this significant demographic.

What Steps Can Pakistan Take to Establish a Robust Data Ecosystem?

While we have delved into the issues at hand and the potential opportunities that could arise from successfully addressing them, it is equally essential to outline the proactive steps that Pakistan, from the national to the tehsil level, could take to cultivate a sturdy data ecosystem. I would like to present several key recommendations in this context:

1. The use of computers should be mandated in all public offices, consigning the culture of 'files' to history. This would set the trajectory for enhanced **collection of administrative data**. Subsequently, stakeholders can discern which data should remain confidential or be made public. This would also facilitate the timely release of public data.

2. Public officials should be trained on how to handle and interpret data, enabling them to appreciate data as a valuable tool rather than associating it solely with issues of national security. Encouraging **data democratization** would allow stakeholders to view data as a usable asset, rather than isolating it in information silos. It is worth noting that data, much like food, loses its usefulness if not utilised.

3. Finally, the **National Statistical System** should be formalised into a regulatory body. This regulator should aim to integrate data from entities such as NADRA, SECP, FBR, BISP, HEC, and the Provincial Bureaus of Statistics, and should report directly to the Prime Minister of Pakistan. It is paramount that the regulator remains independent, impartial, unbiased, and free from political influences. This approach would enable the entity to effectively coordinate seamless data sharing among departments, troubleshoot existing issues, and disseminate information to the public.

1. State Bank of Pakistan. (2023). Annual Report 2022-2023 The State of Pakistan's Economy. Retrieved from <https://www.sbp.org.pk/reports/annual/aarFY23/Chapter-07.pdf>

Unlocking Development Through Collaboration: The Case of MICS in Pakistan



Sadaf Zulfiqar

OIC, Chief Social Policy,
UNICEF



Azhar Amir

Data and Research Consultant,
UNICEF



Omaira Chaudhry

Social Policy Consultant,
UNICEF

The involvement of non-governmental entities in data collection, analysis, and policy advocacy is not just supplementary, but also transformative. UNICEF's Multiple Indicator Cluster Surveys are one such example.

In the realm of data-driven development, the spotlight often shines brightly on governmental initiatives. Indeed, governments play a pivotal role in data collection, analysis, and policymaking. However, amidst this focus, the invaluable contributions of non-governmental entities – from development sector organisations to civil society groups and private sector entities – are sometimes overshadowed. Yet, their involvement is not just supplementary, it is transformative, fostering robust and inclusive development data ecosystems, particularly in contexts like Pakistan. This collaborative approach not only enhances the quality and breadth of data but also promotes transparency, innovation, and accountability in addressing so-

cioeconomic challenges.

In Pakistan, like many other developing nations, the government faces numerous challenges in collecting comprehensive and timely data due to resource constraints, logistical hurdles, and institutional limitations. However, the demand for accurate and disaggregated data to inform evidence-based policymaking and address pressing development issues remains paramount. This is where non-governmental actors step in to fill the gap and complement government efforts. A shining example of this collaborative endeavour is the Multiple Indicator Cluster Surveys (MICS) conducted by UNICEF, which underscores the immense value of har-



The MICS provides comprehensive data on the well-being of women and children nationwide, making it an invaluable tool for policymaking and programme planning.

nessing data beyond the government.

Since its launch in 1995, MICS has evolved into one of the most comprehensive sources of data on the well-being of children and women nationwide. To date, a total of six rounds of MICS have been conducted in Pakistan. These surveys have provided comprehensive data covering a wide range of socioeconomic indicators, including 32 SDG indicators related to child and maternal health, education, nutrition, and other areas, making them invaluable tools for policymaking and programme planning. Through a rigorous methodology and standardised survey tools, MICS ensures the comparability and reliability of data across different provinces and regions (both at the district and division level).

What sets MICS apart is its inclusive approach, which involves partnerships with government agencies, development partners and academic institutions at every stage of the survey process. From questionnaire design and sampling to data collection, analysis, and dissemination, stake-

holders collaborate closely to ensure the relevance, accuracy, and utility of the data collected. Moreover, MICS surveys prioritise the participation of marginalised and vulnerable groups, ensuring that their voices are heard and their needs are addressed in policy formulation and programming.

Another key strength of the MICS is its adaptability to diverse contexts. In Pakistan, where the challenges of development are multifaceted and complex, MICS has been instrumental in leveraging technology, such as Computer-Assisted Personal Interviewing (CAPI), through digital data collection via tablets, providing granular insights into the country's progress towards achieving key development indicators. By collaborating with local partners - including governmental statistical agencies such as the Provincial Bureau of Statistics, and academic institutions - UNICEF has been able to tailor MICS surveys to capture the nuances of Pakistan's socioeconomic landscape accurately.

MICS data serves as a valuable resource for researchers,



© UNICEF Pakistan

Data-driven development in Pakistan cannot thrive in isolation; it requires a symphony of efforts from governmental, non-governmental, and private sector actors.

practitioners, and advocates working to advance the rights and well-being of children and women in Pakistan. The availability of reliable and up-to-date data enables policymakers to monitor progress, identify gaps, and target interventions where they are most needed. For example, the MICS data on child stunting rates brought attention to the critical issue of malnutrition in Pakistan. Moreover, the influence of MICS extends far beyond data collection, serving as a catalyst for evidence-based policymaking, programme planning, and resource allocation in Pakistan. For instance, MICS results played a pivotal role in informing various initiatives, including the formulation of the Punjab Finance Commission Awards, Punjab Growth Strategy 2018, and 2023 (both of which used MICS results as benchmarks and baselines), as well as the development of the National Multi Poverty Index and Child Multidimensional Poverty Index.

In addition to MICS, UNICEF also rolls out the National Nutrition Survey under a joint collaboration between the Ministry of National Health Services, Regulations and Coordination, and the Aga Khan University; as well as the Child Labour Survey with provincial Planning and Development Departments, provincial Bureau of Statistics,

International Labour Organization, and non-profit research centres.

Therefore, data-driven development in Pakistan cannot thrive in isolation; it requires a symphony of efforts from governmental, non-governmental, and private sector actors. The success of initiatives like the MICS underscores the transformative potential of this multi-stakeholder approach. As Pakistan navigates its development journey, embracing the full spectrum of data sources and stakeholders is not just a strategic imperative; it's a moral imperative. By harnessing the power of data beyond the government, Pakistan can forge a path towards inclusive growth, equitable development, and a brighter future for all its citizens.



© UNICEF Pakistan

Intellectual Property Rights for Growth

With Intellectual Property firmly an integral part of the global economy, it is vital for Pakistan to not be left behind. This is because the world has rapidly moved from simply the trading of goods to the trading of ideas.



By
**Ambassador (r)
Farukh Amil**
Chairperson IPO, Pakistan

Intellectual Property (IP) is directly linked to development in numerous ways. Finding relevance to virtually all Sustainable Development Goals, IP is a critical tool for empowerment. Creativity and innovation run today's world of the Knowledge Economy, which is nurtured in an enabling IP environment. With IP firmly an integral part of the global economy, it is vital for Pakistan to not be left behind. The world has rapidly moved from simply the trading of goods to the trading of ideas.

Today, the shrinking world is characterised by increased globalisation together with ever-increasing competition and control of resources. In this tight space, disruptive technologies are increasing disparities between and within societies. Pakistan, with its huge potential, abundant resources but with a growing population, cannot vacillate. It must secure its place in the global

economy. This can only be done with an enabling business environment, which thrives on innovation, entrepreneurial spirit, and opportunity creation especially for the youth. Advanced countries are racing far ahead with their ever-improving technologies. The gap is increasing.

For the development challenge to be holistically addressed, it is equally important to advocate correcting the inherent imbalance in the global trading system, which remains heavily tilted in favour of the developed countries. Set against grim challenges of the 21st century, such as climate change and pandemics, global society is undergoing fundamental restructuring. The Fourth Industrial Revolution characterised by automation, robotics, and Artificial Intelligence amongst other things has provided runaway opportunities for those who have grasped the challenge. Others who do



New ideas, once secured with IP tools and with the partnership of business and industry, will provide critical pathways for development.

not step up will inevitably fail their societies. But, there is no opting out. The increasing gap between developed and developing countries and within societies will only widen to the detriment of everyone. Whole segments of society within any country cannot be excluded from technological change and innovation, and hence development. The COVID-19 pandemic, deadly and disruptive as it was, with a stressful impact on development budgets, simultaneously highlighted the complex and unavoidable interconnectivity of all countries.

The role of IP is therefore critical in national development and national economic security. As we are becoming increasingly dependent on technology in all walks of life, the value of innovation and creativity is vital. Equally, the protection and promotion of national resources becomes crucial to harness national wealth. This can only take root and flourish if a strong IP system is in place. A stable IP environment becomes a magnet for future creativity and innovation, and provides opportunities for the youth. A country that creates and innovates will succeed in development.

The future of any country is its youth, both girls and boys. There has to be a grassroots awareness of the potential of IP as early as at the school level. The younger generation absolutely must be in step with global knowledge and standards. Digital connectivity and e-commerce will empower the youth in remote areas, giving them equalised access. Formal teaching and incorporation of IP into the National Curriculum will develop the mindset of coming generations, so as not just to innovate but encourage them to secure protection of their Intellectual Property Rights and protect rights to the nation's traditional knowledge and heritage, and not allow others to appropriate what is rightfully theirs.

With the strong emphasis on automation in the reality of the post-COVID world, it is critical to bring the window of opportunity online to the established business community and, critically, to innovators sitting in the smallest villages of Pakistan to help them transform their ideas into viable, profitable enterprises. IP must be at the forefront of democratising access for all citizens. Automation opens



© pandaily.com

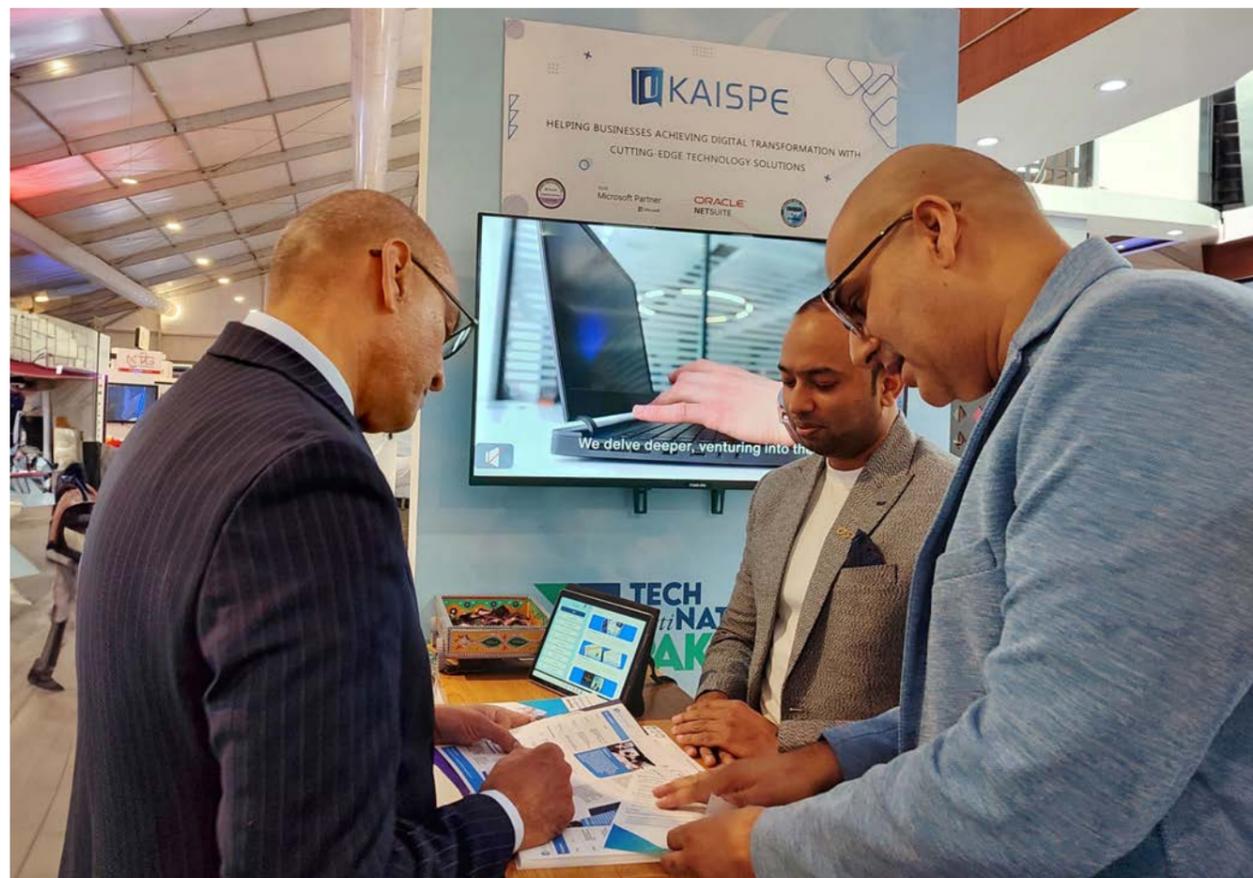
While development has to be geographically horizontal, it also has to be societally vertical.

doors for all, irrespective of gender or location. Far-flung areas have immediate and equal access. Cumbersome procedures are simplified when a streamlined online system is available as a user-friendly interface, and that too in local languages. This is at core of development, driven by self-empowerment and creation of opportunities previously denied. IPO-Pakistan is determined to bring all citizens, including the differently-abled, onboard the path of progress and development. 2023 even saw Pakistan accede to the Marrakesh Treaty on Visually Impaired Persons.

The universities and institutions, especially those engaged in research and product development, business incubation centres, and startups that foster a 'can-do' sense of achievability, are critical in changing the mind-set of a nation. New ideas, once secured with IP tools and with the partnership of business and industry, will provide critical pathways for development. A limited IP culture and weak IP enforcement are also challenges that need to be overcome. Adherence to global standards on IP, through international treaties and societal practices, will enhance Pakistan's reputation as a country serious about following international norms, and more significantly, will be seen as an investment-friendly destination with a strong enforcement regime. Knowledge of IP Rights and opportunities is critical in shifting

a society of consumers (of ideas and products of others) to creators who build up knowledge and create wealth for themselves and for future generations – a solid base for growth and development.

The importance of innovation and solution-based business activities is vital in the age of climate change and definitely required as human- and climate-induced disasters multiply in ferocity and the consequent urgent need for disaster mitigation strategies grows. As the inevitable world famine looms closer, Pakistan must have a resilient, science-based technical response with innovative strategies. The importance cannot be understated in a country with a burgeoning population. It is heartening to see that there is progress in IP in the agri-tech sector at universities, given that Pakistan is an agricultural economy and many of the development challenges are in the rural areas. While development has to be geographically horizontal, it also has to be societally vertical. Equally, development cannot be sustainable when the rural-urban divide persists and development disparities increase, which in turn have profound effects on human dignity. That is precisely why knowing IP Rights is an opportunity driver and equalizer in the context of development.



© KAISPE

Human Rights Data and its Discontents

Safeguards such as anonymising data and providing resources for support can be part of a holistic approach to collecting and disseminating data on human rights.



By
Shmyla Khan
Human and Digital Rights
Researcher and Campaigner

Addressing human rights issues in difficult environments can be extremely challenging. This is compounded by the dearth of data availability on human rights, often by design. Information about human rights is often subject to obfuscation and requires extensive effort to obtain or gather. This context makes access to and leveraging data about issues of human rights even more urgent.

Human rights defenders, movements, academics, and communities have spearheaded efforts to gather evidence, identify patterns, and prove that human rights violations are taking place. This often requires creative means of gathering data, when traditional avenues are foreclosed, such as documenting violations through pictures and videos, spatial mapping, and turning to whistleblowers, to name a few. Moreover, quantitative data alone tells an incomplete

story. It is only through the collection and analysis of qualitative data, which encapsulates experiences and context, that we can sketch a truer picture of lived realities.

Data regarding human rights frequently harbours security threats for those collecting it and those represented therein. This makes data regarding human rights subject to several ethical and safety safeguards because, while data can be used for good, it can sometimes do more harm than the intended benefit. For instance, while collecting data regarding gender-based violence is imperative in understanding the prevalence of patriarchal violence, care must be taken to ensure that the subjects of the data are not re-traumatised or made to face insecurity through the published data. Safeguards such as anonymising data and providing resources for support can be part of a holistic approach to collecting and



Data can often be a double-edged sword from a human rights perspective.

disseminating data on human rights.

Data can often be a double-edged sword from a human rights perspective. While data is often evidence, it also has implications for privacy and surveillance of marginalised communities. Care must be taken when documenting challenges encountered by historically persecuted populations. Otherwise, human rights researchers run the risk of creating repositories of data that can be used by oppressive states and other actors to identify and potentially target these communities.

While data regarding human rights is essential to bear witness to different forms of human rights issues, the process of obtaining this data can often be quite extractive. Palestinian writer Mohammed El-Kurd in a recent essay states, "Growing up, field workers and human rights researchers were constant guests in our house. I would show them pictures of my grandmother being beaten by settlers to try to make the

case, as they'd eat maqluba from our table every Friday. And I would offer my analysis - 'This is what I think is happening' - but they wouldn't take it, as if to say, 'I just want pictures of your bruises, a sample of your blood, and I'll announce what's happening later.'"¹

El-Kurd's experience of providing evidence to 'prove' human rights illustrates the inherent power dynamic between data and data subject - well-meaning interventions to generate human rights data can often contribute to the dehumanisation of the very people we seek to assist.

Marginalised communities have a complicated relationship with data. All groups marginalised on the basis of their gender, race, class, ethnicity, nationality, (dis)ability, and age, among other factors, frequently find themselves excluded from datasets and often go 'uncounted'. Their experiences are less likely to be represented in literature, scientific data, and government measures such as the census. In Pakistan,



© UNDP Pakistan



© Arif Ali/AFP via Getty Images

In Pakistan, women and transgender people are systematically undercounted in the national census.

women and transgender people are systematically undercounted in the national census.² This issue is exacerbated by the advent of technology, particularly artificial intelligence, which frequently relies on incomplete or incorrect datasets to arrive at conclusions and outcomes that perpetuate existing biases.

Efforts to improve the quality and inclusion of datasets are not straightforward. In my research on data justice with marginalised communities including religious and gender minorities and refugees, the underlying theme that emerged was the indifference of these communities to data. While there was a clear desire to be part of datasets they have historically been excluded from, especially datasets that have material consequences on their lives such as the

National Database and Registration Authority (NADRA) database, they saw little value in data collected by the development sector.

These observations were indicative of the lack of community-driven data for development, where communities represented in data often had very little control over how they are represented and how the data is used. This relationship must change and it will require a systemic renegotiation of power with the communities we work with. Data, devoid of thoughtful interventions, is not the silver bullet it is touted to be. However, data and development practitioners must recognise the transformative power of data when employed appropriately.

1. el-Kurd, M. (2023, November 27). The Right to Speak for Ourselves. Retrieved from <https://www.thenation.com/article/world/palestinians-claim-the-right-to-narrate/>

2. Azam, O. (2023, May 22). A transgender-blind census. Karachi. Retrieved from <https://www.geo.tv/latest/487921-a-transgender-blind-census>

Building Bridges for Development Data



Jon Hall

Statistician and Economist, working at UNDP's Inclusive Growth team



Nicole Igloi

Policy Specialist in sustainable development, working in UNDP's Human Development Report Office

The gap between those who produce statistics and those who use them plays out in many areas - from statistical publications that are difficult to comprehend, to ministers that prefer policy-based evidence to evidence-based policy.

There are not very many jokes about statisticians, but one of the better ones asks, 'How do you spot an extrovert statistician?'. The answer, of course, is that they stare at **your** shoes when they are speaking to you'.

While there may be some truth to this, many other stereotypes about statisticians are far from the mark.

From Australia to Zambia, ask policymakers about their colleagues in the National Statistical Office (NSO) and you will often hear opinions like, "too slow ... too cautious ... unaware of the realities of policymaking and politics ... do not have to answer to ministers every day".

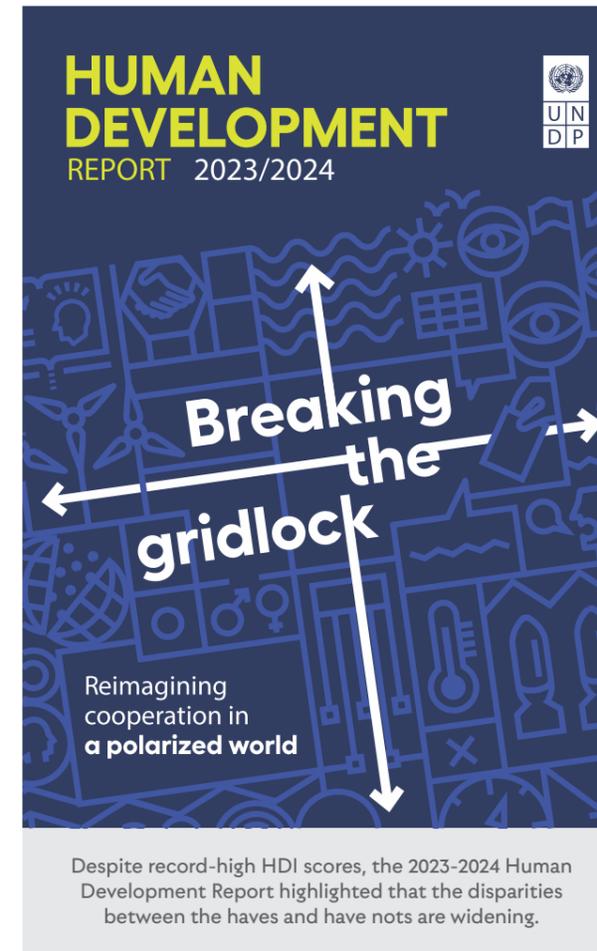
But statisticians can also be guilty of unfair generalizations. Walk into any NSO and ask what they think of policymakers, and you might hear the view that their colleagues are "overly political ... ready to twist numbers to suit their ministers ... ignorant of what it takes to produce accu-

rate statistics."

Both views are largely unfair and often driven primarily by a lack of understanding of the realities of work in a statistical office or line ministry, rather than the truth. But the gulf is real, and the gap between those who produce statistics and those who use them plays out in many other areas - from statistical publications that are difficult to comprehend to ministers that prefer policy-based evidence to evidence-based policy.

Anyone who cares about better decision-making and more effective development policy making should care about evidence and the vital role that statistics, and statistical offices, play in that process. And so by extension, they should care about bridging the divide between the producers and users of statistics. One way to help bridge the gap is by finding new ways for statisticians and policymakers to work together more directly.

National human development reporting, when done properly, brings together a wide range of actors to discuss aspects of a country's development through the human development lens.



Despite record-high HDI scores, the 2023-2024 Human Development Report highlighted that the disparities between the haves and have nots are widening.

Human development reporting – at the global, regional or national level – can play a role.

At the global level, UNDP's Human Development Index (HDI) - an average measure of a country's income, education and health - generates headlines whenever it is updated. What inevitably follows are requests for urgent briefings on why a country's HDI has changed (or more usually why it has fallen – a rising HDI seems to generate less concern). Ministers are demanding answers! This attention to the HDI from the press and government shines a spotlight on the national statistics upon which the index is constructed, and inexorably leads to new and greater dialogue between national statisticians and policy makers.

Meanwhile at the country level, national human development reporting, when done properly, brings together a wide range of actors to discuss aspects of a country's development through the human development lens. Inevitably, this will involve statistics, and hopefully, the statisticians that produced them. The process of preparing the report can highlight important data gaps and showcase new ways to present data to engage the media or in a for-

mat that could prove more useful to policymakers, as was the case when UNDP Pakistan produced its 2020/21 National Human Development Report which showcased new inequality indices for several groups.

It is no longer – and perhaps never was – enough for statistical offices to release a set of tables or a dry publication and trust in some higher power that policymakers will find the data, make the effort to understand the data, and then actually use the data to inform their thinking. And statistics that are not used - no matter how accurate - are simply not useful.

On the other hand, policymakers should recognize the importance of engaging with statisticians early on when designing new policies, and also understand the importance of having a more realistic view of what data might be available, and the subtleties of interpreting it correctly.

Greater dialogue between the two professional communities, and stronger personal relationships between individuals in both groups, can help immensely. And this can be one serendipitous benefit from collaborative work around human development reporting.



The Asia-Pacific Regional Human Development Report 2024 painted a picture of long-term progress, but also persistent disparity and widespread disruption.

Strengthening Data for Punjab's Regional Development



By

Javeria Khalid

M&E Analyst, Punjab SDGs Unit,
UNDP, Pakistan

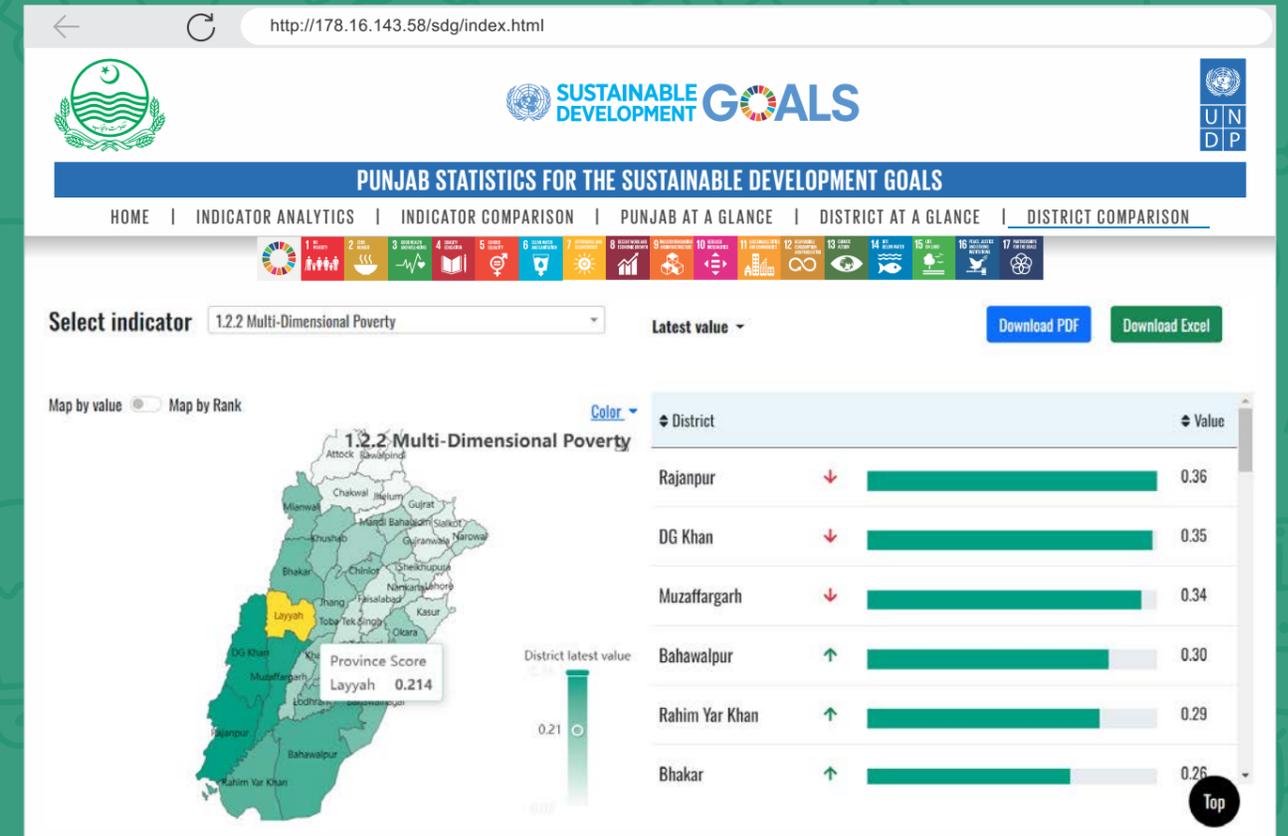
For effective data collection on the 244 SDG indicators, the Punjab SDGs Unit Board analyzed all public data sources in 2018, drawing important conclusions to bolster the province's data ecosystem.

The discussion on the post-2015 development agenda and the Sustainable Development Goals (SDGs) has renewed interest in the quality and availability of statistics for management, program design, and monitoring performance. Most of the necessary statistics are produced by national statistical systems in developing countries, and this data is a crucial component for good governance. Without information on where people live, how much they earn, and what services they can access, it is impossible to respond to their needs. Therefore, improving statistics requires investment in national and provincial statistical capacity.

The role and the capacities of national and sub-national statistical systems are crucial for effective monitoring and reporting on SDGs indicators around social, economic and environmental dimensions of sustainable development. The era of MDGs witnessed lack of statistical capacities at the national and sub-national level to ensure timely collection and analysis of data on MDG indicators. That is why, for many of The MDGs indicators, data was not regularly collected or largely remained unavailable.

The 2030 Agenda on SDGs, due to its ambitious nature, put a lot of burden on statistical capacities of governments to report on 244 indicators. To report on these indicators, a thorough overview of national statistical capacities to identify gaps and recommendation to enhance statistical capacities was essential. The review of national and sub-national statistical capacities with respect to 244 SDGs indicators started back in 2016 by considering all public data sources, including surveys, publications and administrative datasets. The analysis of statistical capacities at the national level revealed that, 43 out of 244 indicators are global in nature, meaning they are not applicable to the national context. For almost half of the remaining 201 indicators, data is fully or partially available and for the remaining half, major efforts are required to address data gaps and to ensure reporting at the national level.

The analysis of the data ecosystem at the national level lays a strong foundation for provincial governments to further analyse their statistical capacities to ensure efficient and effective data collection on SDG indicators, applicable at the provincial level. The process started in 2018, where the Punjab SDGs Unit, P&D Board, analysed all public data



Punjab has now become the first province to develop its SDGs Data Dashboard, supporting the provincial Bureau of Statistics and provincial line departments to report SDG-related data.

sources, including household surveys, administrative datasets available with different line departments, and publications available at the national and provincial level. The analysis at the provincial level reveals that, out of 244 indicators, 161 indicators are applicable to Punjab, whereas the remaining indicators are a combination of global and national level indicators, which are not relevant to the provincial context.

The review of provincial statistical capacities reveals that, in terms of data availability Punjab's statistical capacities over the period have improved, where Multiple Indicator Cluster Surveys (MICS) 2017 has been a great support in terms of providing data on 35 SDG indicators. At the provincial level, the data of around 90 indicators relevant to Punjab is fully or partially available. More data needs to be made available at the district level, along with data drilled down to the tehsil level for evidence-based decision making.

Punjab has now become the first province to develop its SDGs Data Dashboard, an online web-based dashboard to present data on SDG indicators pertaining to Punjab in a user-friendly manner. The online dashboard supports the provincial Bureau of Statistics and provincial line departments to report SDG-related data. The online dashboard

allows users to download datasheets and present them graphically.

Supporting the efforts of Government of Punjab for regional equalization through indicators comparing South Punjab with the rest of Punjab has been a cornerstone of the work done by the Punjab SDGs Unit. The main publications of the Punjab SDGs Unit in this regard include the South Punjab Regional Indicators report that computes regional estimates for around 40 indicators using secondary data sources including MICS, Pakistan Social And Living Standards Measurement (PSLM), Labour Force Survey (LFS), and others. The Socioeconomic Baseline Profile Report of South Punjab is also a comprehensive analysis of the political, social, and economic indicators in South Punjab, particularly in healthcare, education, agriculture, industry, and governance. All this analysis feeds into the South Punjab Regional Development Plan 2030, which will be a strategic guide to policymakers for informed development planning and public sector investments.

In this way, the power of data analytics can be harnessed to create valuable insights into complex provincial challenges, enabling policymakers to devise targeted interventions to lead to sustainable development.

Amplifying SDGs Reporting and Tracking in Sindh



By
Naveed Shaikh
Project Manager, Sindh SDGs Unit,
UNDP, Pakistan

With the help of the Sindh SDGs Unit, SDGs-linked data tagging, collection, and analysis were institutionalised and different evidence-based products were prepared to inform policy formulation decisions on SDG mainstreaming.

In the first phase of the Sindh SDGs Programme, an effort was made to use data evidence to inform policy and integrate Agenda 2030 in the province's Government Institutions. However, significant data gaps around SDG indicators were identified during the initial phase of SDG implementation. Only 33 percent of the data was available for provincially applicable SDG indicators in Sindh. National and Provincial Government Surveys such as Pakistan Social And Living Standards Measurement (PSLM), Multiple Indicator Cluster Surveys (MICS), and Pakistan Demographic and Health Survey (PDHS) were not aligned with meta-data language.

To overcome this, SDGs-linked data tagging, collection, and analysis were institutionalised to strengthen data reporting. In addition, different evidence-based products and reports were prepared to inform policy formulation decisions on SDG mainstreaming.

Since 2018, the Sindh Bureau of Statistics has made SDG reporting a regular practice in Sindh. This has significantly increased SDG reporting from 33 percent in 2018 to 61 percent in 2024. One of the key actions taken in this regard was the addition of specific indicators, such as 32 SDGs, in the MICS. The survey has provided data on essential indicators, including multidimensional poverty, stunting, and education completion rates. The data has also been used to create Sindh District Profiles for all 28 districts, and has helped formulate 17 SDG-aligned headquarter town plans.

In 2018-19, the Provincial SDGs framework was developed as a road map for mainstreaming SDGs in Sindh. The framework was guided by the data-driven UNDP Multilayered Nest Methodology, with the prioritization matrix using data available for each SDG target to rate 174 provincial applicable targets in the 'high', 'medium,' and 'low' categories. The data evidence generated through the prioritization tool fur-



In the future, an Expenditure Tracking Dashboard will be developed to guide policymakers on district-level allocation decisions based on SDG indicators' performance trends.

ther guides departments to align their plans and resources with prioritised SDGs. Examples include aligning the Sindh Poverty Reduction Strategy and Sindh Education Sector Plan (2019-2024) with data evidence from the provincial SDGs framework for Sindh.

To inform policy decisions on resource allocation towards SDGs, costing models for SDG 2: Zero Hunger, SDG 6: Clean Water and Sanitation, and SDG 7: Affordable and Clean Energy were developed. In Sindh, over 40 percent of the population faces moderate to severe food insecurity, and one out of two children under five face stunted growth. The costing model for SDG 2: Zero Hunger estimated that PKR 296.8 billion was required to eliminate food insecurity and stunted growth. The model also developed costed intervention plans presented to government policymakers, academia, and the Sindh Accelerated Action Plan for Reducing Stunting program. In the SDG 6 costing study, it was estimated that PKR 114 billion was required per year to achieve SDG 6.1 and 6.2 targets. The findings were adopted as part of the Government of Sindh's efforts to increase allocation towards safely managed drinking water and sanitation.

The SDGs Expenditure Tracking System has been developed in Sindh, with over 10,000 cost centers under devel-

opment. The recurrent budget has been mapped and tagged against SDGs at the Target and Indicator levels in the SAP-based Government Financial Management Information System (GFMS). This exercise aims to track individual expenditure heads via disaggregated budget codes. Based on successful uptake, SDGs-related expenditure reports are generated. In the future, an Expenditure Tracking Dashboard will be developed to guide policymakers on district-level allocation decisions based on SDG indicators' performance trends.

Sindh's situation has been further exacerbated by the recent floods of 2022, and the effects of COVID-19, in which the poverty level in Sindh has increased with a broader effect on social, economic, and environmental well-being. As part of UNDP's digital transformation strategy (2022-2025) and the Sindh government's vision to develop an integrated data architecture in Sindh, a digital portal for SDGs reporting and tracking has been formulated in Sindh. The portal aims to improve data reporting on SDGs for weak-performing sectors to guide the formulation of enabling policy frameworks. The portal will also guide departments in monitoring and validating SDG data while increasing institutional capacity, so that departments can set milestones based on indicator risks, and ensure that we Leave No One Behind.

Bridging Khyber Pakhtunkhwa's Data Gap



By

Syed Sabir Hussain Shah

Project Manager, Khyber Pakhtunkhwa SDG Unit
UNDP, Pakistan

The Khyber Pakhtunkhwa SDG Unit has helped prepare District SDG Scorecards, ranking all districts across 33 SDG indicators, and helping inform policy decisions regarding district-based allocation of resources.

In Khyber Pakhtunkhwa, a dedicated SDG Support Unit was established to mainstream, accelerate, and provide policy support for achieving the Sustainable Development Goals in the province. Among others, an important step was to develop a Provincial SDGs Framework with the objectives to establish the relevance of the global goals in a provincial context, establish a baseline on SDG indicators to the extent data permits, and prioritise and set SDG targets till 2030.

The initial review of the Global Goals revealed that 111 targets out of a total of 169, and 171 indicators out of 244, were found relevant in the provincial context. This formed the basis of our journey towards an efficient data ecosystem, as data was required for establishing the baseline on SDG indicators around 2014-15, as well as prioritising the targets.

A mixed methodology was adopted, comprising of scanning of surveys and secondary data sets, estimating indicators employing metadata definitions, and authentication and validation exercises to establish a baseline on provincially relevant SDG indicators. The exercise resulted in establishing a baseline on 82 SDG indicators around 2014-15, out of the 171 provincially relevant indicators. This, how-

ever, left a data gap that needed to be filled in. We undertook another study analysing the administrative data sets being gathered by provincial departments, and the mining of already available data sets like Multiple Indicator Cluster Surveys (MICS), Pakistan Social And Living Standards Measurement (PSLM), etc., to see the possibility of estimating more indicators as per meta data definitions. This resulted in estimating around 114 out of 171 indicators, along with a plan for estimating the remaining 57 indicators either through updating the existing survey modules or conducting new surveys.

The data ecosystem was an essential base for prioritising SDGs targets with the Provincial SDGs Framework, wherein the target prioritisation part was guided by UNDP's data-driven Multilayered Nest Methodology using various criteria. This was required to prioritise SDGs targets in terms of High, Medium, and Low priority, along with bifurcating every priority level in short, medium, and long-term. This was not possible without data or evidence.

In Khyber Pakhtunkhwa, data availability on erstwhile FATA was a key challenge. Since the merger, the Provincial Bureau of Statistics (P-BOS) and Pakistan Bureau of Statistics (PBS) have extended key surveys like the MICS and the PSLM to



© AP Photo/Fareed Khan

For the first time, data has now become available for the Newly Merged Districts, providing policymakers and development partners with deeper insights into the socioeconomic, environmental, and governance sectors of the region.

the Newly Merged Districts. These efforts, for the first time, have resulted in the availability of data for the Newly Merged Districts, which has provided policymakers and development partners with deeper insights into the socioeconomic, environmental, and governance sectors of the region. In addition, both P-BOS and PBS are increasingly broadening the scope of key surveys to cover as many SDGs indicators as possible.

These efforts have helped us in preparing District SDG Scorecards, wherein all the districts have been ranked across 33 SDG indicators, including key indicators such as multidimensional poverty, food security, stunting, wasting, maternal mortality ratio, infant mortality ratio, literacy rates, and so on. The scorecard is of key importance in informing policy decisions regarding allocation of resources to various sectors at the district level. Another important outcome of the data ecosystem is the mapping of Provincial Progress on SDG indicators, which shows the trajectory of progress, stagnation, or deterioration of the situation on SDG indicators in the province.

Moreover, budgetary data, expenditure tracking, and their alignment with SDGs and associated targets is another important aspect. Both the development and current sides of provincial budgets serve as critical inputs for an effec-

tive contribution towards achieving SDGs targets and bringing in a positive fluctuation on the indicators. We have two key management information systems at the provincial level, including the Planning Commission Forms Management System (PCFMS), managed by the P&D Department for development budgets, and the SAP system, managed by the Finance Department, mainly for current budgets. With the approval of the Provincial SDGs Framework by the provincial government, we embedded all the goals - 111 provincially relevant targets duly bifurcated as high, medium, and low priority, and the associated 171 indicators, into PCFMS, wherein every development intervention can be linked with relevant SDGs, targets, and indicators. Likewise, in the SAP system, around 13,000 cost centres have been mapped with SDGs, prioritised targets, and indicators.

The current data on SDG indicators provides a solid base for evidence-based policy planning and decision-making. Nevertheless, it is evident that data availability on social sector SDG indicators surpasses that of indicators related to the economic, environmental, and governance sectors. Moving forward, concerted efforts must be made to bridge this gap, and to ensure comprehensive data coverage across all sectors, enabling better informed decision-making for sustainable development.

Improving SDG Monitoring and Reporting in Balochistan



By

Zahoor Ahmed

M&E Officer, Balochistan SDG Unit
UNDP, Pakistan

Through the continuous efforts of the Balochistan SDG Unit, provincial data gap analyses were conducted and administrative datasets reviewed for missing indicators. This led to SDG data being available for 69 indicators compared to just 27 indicators previously.

The Planning and Development Department (P&DD), Government of Balochistan, with the support of the SDG Unit Balochistan, has established a well-organised coordination mechanism with government line departments to monitor the SDG Agenda at the provincial level. This includes the formation of the Provincial Technical Committee (PTC), the SDGs Task Force, District SDGs Committees for all districts, and the nomination of departmental focal persons for SDGs to supervise and guide the achievement of SDGs at strategic, operational, and implementation levels. This includes conducting data gap analyses to inform targeted collection efforts and enhancing the overall reliability and comprehensiveness of datasets.

The role of data and statistics is crucial in monitoring and reporting the progress of SDG targets and indicators. With 247 indicators, comprehensive data ecosystems and statistical capacities are essential for measuring change in the SDGs. Initially, data on SDGs indicators in Balochistan was

not very strong. During the development of the Provincial SDGs Framework in 2018, it was found that data was available for only 27 indicators in Balochistan, accounting for a mere 15 percent of the 175 provincial and district level SDG indicators. It was noted that these 27 indicators included those for which data was partially available, with data being completely available for only 13 indicators in Balochistan. To address this challenge, the key recommendations from the Provincial SDGs Framework were leveraged to create a holistic action plan for data improvement. Mechanisms for effective monitoring and reporting on SDG indicators were also established to ensure a rich and comprehensive data ecosystem.

Through continuous efforts and provincial data gap analyses in 2021, SDG data improved, from only being available for 53 indicators in Balochistan, compared to 27 previously. The review of administrative datasets for missing SDG indicators conducted in 2022 further improved the province's data status. Currently, data is available for 69 provincial

Data gap exercise/indicator progress



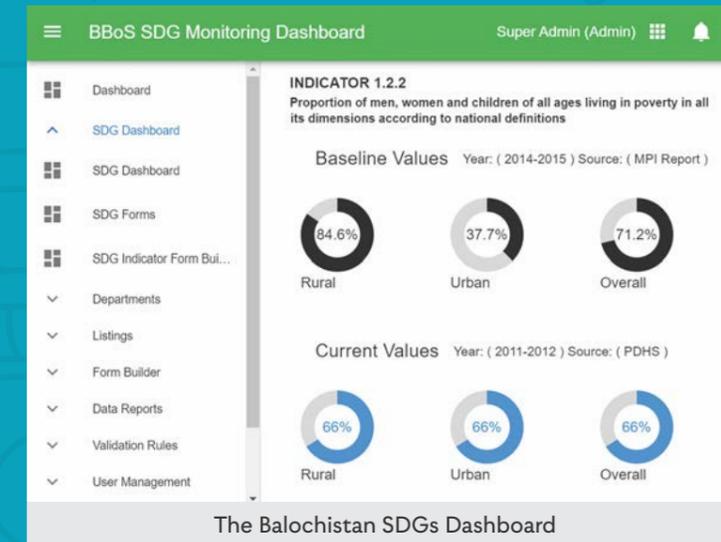
The snapshot above exhibits Balochistan's SDG data improvement between 2018 and 2023.

The Balochistan SDGs Dashboard will enhance SDG monitoring and reporting, as well as provincial annual statistical data, by providing an online web-based system accessible to line departments. This dashboard will be managed by the Balochistan Bureau of Statistics.

SDG indicators. The progress of SDG indicator data is also informed by the recently published Multiple Indicator Cluster Surveys (MICS) 2019-20 Balochistan report, which provides the latest values for 40 SDG indicators.

To further strengthen the SDG data ecosystem in Balochistan, the SDG Unit conducted a Capacity Needs Assessment (CNA) of the Provincial Bureau of Statistics. The assessment identified the need to enhance the capacity of the Provincial Bureau of Statistics, which is responsible for collecting data from line departments for reporting in the statistical yearbook. In response to the findings of the CNA study, the SDG Unit, in collaboration with the Planning and Development department (P&DD), initiated the development of an SDGs dashboard. This digital platform will streamline monitoring and reporting of SDGs by allowing departments to not only report on and monitor SDG indicators, but to also present the statistical yearbook data which is, at the moment, collected manually from line departments. The Dashboard will be easily accessible by all departments to input their departmental data, with the Balochistan Bureau of Statistics being able to generate quick and customised reports at will. The Dashboard development is currently in the final stages.

Additionally, to address missing SDG indicators in Balochistan, the SDG Unit also launched an exercise to develop survey plans and questionnaires for indicators not covered in existing surveys and administrative data sets. Once finalised, this report will support the Government of Balochistan in planning and budgeting for surveys, to col-



lect data for the missing SDG indicators.

In conclusion, the P&DD, Government of Balochistan, with the support of the SDG Unit Balochistan, has made significant efforts in enhancing the province's capacity to monitor and advance the SDG Agenda. Through strategic interventions such as the development of the Provincial SDGs Framework, capacity need assessment of the Balochistan Bureau of Statistics, and initiatives to address data gaps, the SDG Unit has laid a strong foundation for sustainable development in Balochistan.

Uplifting Pakistan's Least Developed Districts



By

Kashif Sehgal

UNDP Consultant and
Director, International Consulting Associates

Harnessing data for targeted interventions could catalyse the transformation of Pakistan's socioeconomic landscape.

In the remote district of Torghar, Khyber Pakhtunkhwa, a 52 year old Muzaffar Khan from Tehsil Dor Mera narrates the struggles of a community grappling with inadequate healthcare. Despite massive investment by the Government on the Rural Health Centre (RHC), it remains non-functional, lacking staff, essential medicines, and equipment. This situation forces residents to travel to Battagram for medical treatment, adding financial strain to their lives.

Muzaffar's story is a reflection of the struggles faced by the residents of this remote district, where the promise of healthcare remains an unfulfilled dream. The absence of these critical facilities is a stark reminder of the gap between policy announcements and their implementation on the ground. "It's as if the very essence of healthcare has been stripped away, leaving behind empty promises that mock our daily struggles," Muzaffar laments.

This story resonates with the experiences of the 14 million people living in Pakistan's 20 least developed districts. These regions confront a multitude of challenges that include, but are not limited to, inadequate physical and digital connectivity, social issues such as a lack of facilities re-

lating to healthcare, education, water, sanitation, and hygiene (WASH), and a scarcity of economic opportunities. Despite efforts to foster development, significant obstacles persist, particularly in certain districts that experience notably poorer development outcomes relative to others.

In an effort to address these disparities and promote regional equalization, the Government of Pakistan, in collaboration with the United Nations Development Programme (UNDP) in Pakistan, has identified 20 districts for priority intervention. This selection is informed by their prior joint work on the Multidimensional Poverty Index (MPI), which highlights the complex challenges these districts face. Thus, the Ministry of Planning, Development, and Special Initiatives (MoPD&SI), has launched a strategic program known as the 'Special Development Initiative for the Uplift of the 20 Poorest Districts in Pakistan.' This initiative aims to achieve regional balance by implementing targeted interventions in the country's most underdeveloped districts. The core objective of this initiative is to promote equitable development across these regions by concentrating efforts on five key areas of development.

Through this focused approach, the initiative seeks to ad-



© UNDP Pakistan

The primary research conducted across 20 districts provided an understanding of the regional specifics, which was instrumental in designing bespoke development initiatives.

dress and mitigate the disparities in development outcomes for 11 districts in Balochistan, 5 in Sindh, 3 in Khyber Pakhtunkhwa, and 1 in Punjab. The initiative is data-driven, relying on both primary and secondary sources to craft comprehensive District Development Plans. This data was collected through a comprehensive methodology that involved an in-depth analysis of secondary sources, including statistics from the Pakistan Bureau of Statistics (PBS), Multiple Indicator Cluster Surveys (MICS), and the Pakistan Social and Living Standards Measurement (PSLM).

To enhance the robustness of findings, this secondary data was further validated by primary research conducted in 20 districts. This primary research comprised interviews, surveys, and Key Informant Interviews (KIIs) with a diverse group of stakeholders, including community elders, youth, students, and women. Their perspectives provided an understanding of the regional specifics, which was instrumental in designing bespoke development initiatives. Additionally, the collaboration with SDG Units across provinces facilitated engagements with various provincial departments, ensuring that the interventions were well-informed and aligned with local needs. Critical qualitative data emerged from these extensive consultations.

The data gathered presents insightful findings with significant implications for socioeconomic development strate-

gies. For example, in Shangla District of Khyber Pakhtunkhwa, the data indicates that 99 percent of households possess smartphones, presenting a unique opportunity for widespread internet access if 3G/4G connectivity were made available. This not only suggests a readiness for digital inclusion, but also indicates that the majority of the population is in a position to afford digital connectivity. By leveraging this high smartphone penetration rate, there is a potential to extend broadband or fiber optic infrastructure throughout the district, opening up avenues for youth to acquire technical and vocational skills through online platforms, and to facilitate innovative tele-education and telehealth initiatives.

Harnessing data for targeted interventions, such as improving digital infrastructure, could catalyse the transformation of the socioeconomic landscape. The goal is to ensure that data-driven decisions pave the way for sustainable development and a higher quality of life for all residents in these districts.

UNDP Pakistan's approach meticulously blends qualitative and quantitative research to tackle the challenges within these districts. The goal is to foster a data-informed, strategic framework for sustainable development, aiming to lift these regions towards improved socioeconomic status and ensure we leave No One Behind.



iVerify: Empowering the Electorate



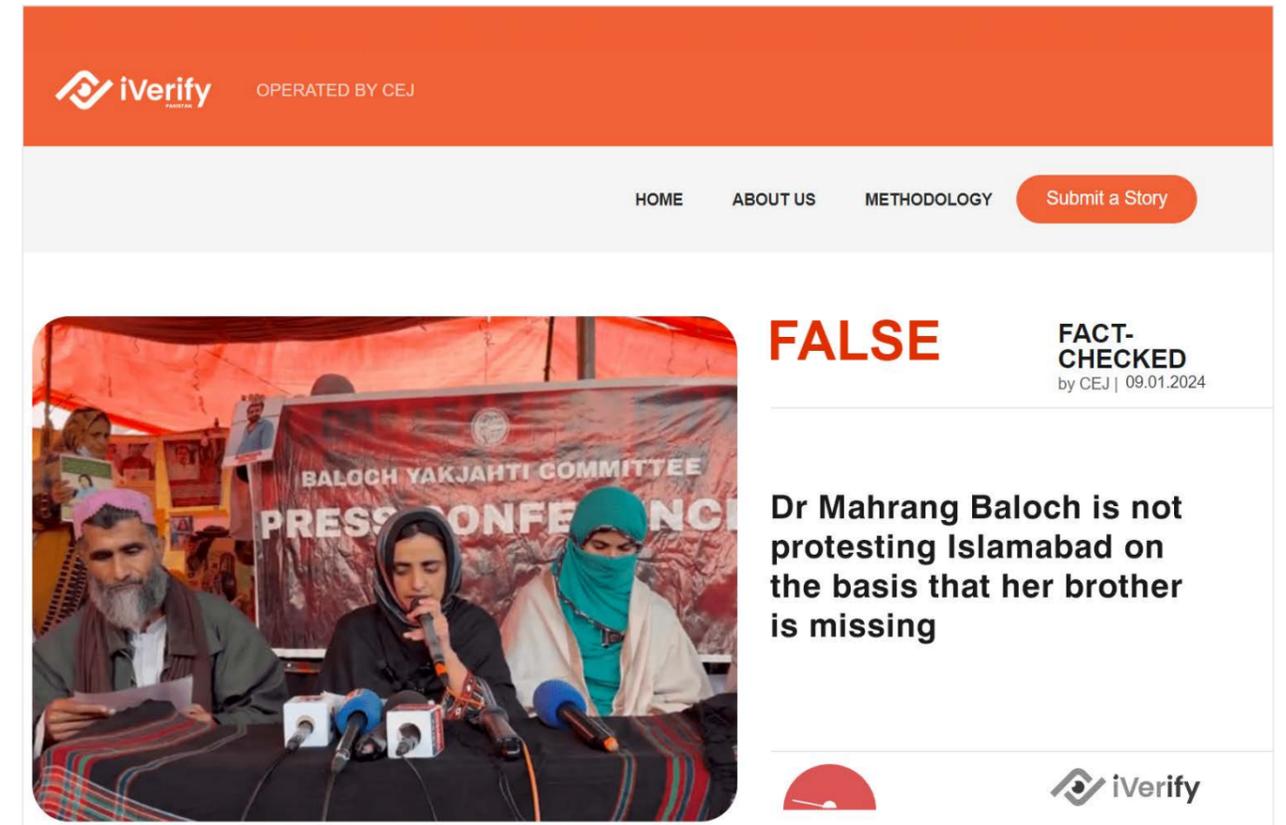
By
Meeran Jamal
Election and Inclusion Officer,
Strengthening Electoral and Legislative Processes (SELP),
Democratic Governance Unit, UNDP Pakistan

By ensuring voters' access to verified information, iVerify plays a crucial role in enhancing the integrity of the electoral process, thereby contributing to the nation's democratic health and stability.

In the rapidly evolving digital landscape of Pakistan, where misinformation threatens the basic human right to information and decision making. The strategic deployment of data-driven solutions stands as a crucial beacon of truth and progress. Central to this endeavour is iVerify, an innovative fact-checking tool to identify false information and prevent and mitigate its spread.

iVerify is technically developed and supported through the UNDP Chief Digital Office and the UNDP Brussels-based Task Force on Electoral Assistance. In Pakistan, iVerify is launched under the ambit of the Safe Digital Environment Programme (SDEP) by UNDP Pakistan, in collaboration with the Foreign, Commonwealth & Development Office (FCDO) and USAID, an initiative that aims to nurture digitally literate citizens capable of contributing to vibrant, truthful digital spaces. iVerify has been entrusted to the Centre of Excellence in Journalism (CEJ) at the Institute of Business Administration, a testament to iVerify's independence and non-partisan commitment to uphold information integrity across Pakistan's evolving digital landscape.

While the iVerify tool has a cross-sectoral role, given the election year and politically charged landscape of Pakistan, in its first phase it was designed to fortify Pakistan's digital democracy by addressing the challenges posed by misinformation in the electoral process. Its core objectives encompass the combatting of misinformation through rigorous fact-checking of pre-and post-election-related news and claims. The iVerify team also endeavours to improve transparency and accountability within electoral processes, holding political entities to higher standards of data sharing



Technology alone cannot turn the tide against misinformation.

integrity. Ultimately, by ensuring voters' access to verified information, the larger SDEP and iVerify play a crucial role in enhancing the integrity of the electoral process, thereby contributing to the nation's democratic health and stability.

Data serves as the cornerstone of iVerify's operational mechanism. iVerify leverages artificial intelligence and machine learning technologies to meticulously scan through vast amounts of online information i.e., qualitative data on digital platforms. This data is selected and analysed as per a list of pre-selected targeted keywords. In Pakistan's case, given this was the election year, the list included words around elections, politicians, the political landscape, and hate speech, aiming to enhance the integrity of the electoral process by providing voters with access to accurate and reliable information. This initial step underscores the critical role of qualitative data as both the subject and tool of scrutiny, marking the first line of defence against the spread of falsehoods. Upon flagging suspicious content, iVerify's dedicated team undertakes a meticulous verification process, comparing the flagged stories against verified data sources, while simultaneously using other AI tools for image, content, and video verification. This comparison

highlights the indispensable role of accurate, reliable data in discerning truth from fiction.

However, technology alone cannot turn the tide against misinformation. Recognizing this, iVerify has established formal partnerships with leading media outlets through Memorandums of Understanding (MOUs) such as with Dawn, Geo, and Independent Urdu. These collaborations



Data is not just a tool for combating misinformation, but a foundational element that supports informed policy decisions.

are not merely symbolic; they are instrumental in extending iVerify's reach, enhancing its credibility, and, crucially, amplifying the dissemination of verified information to a broader audience to build trust in electoral outcomes and the democratic framework of the nation.

The initiative's impact transcends the digital realm. By publishing fact-checked stories in collaboration with reputable media partners and engaging in public education campaigns, iVerify is creating a more informed electorate. This is not just about correcting individual pieces of misinformation, but about cultivating a culture of critical engagement with information – meaning online data in its various forms - where voters are empowered to seek out truth and make decisions based on accurate data.

In a recent incident dated March 21, 2024, a concerning post circulated across various digital platforms, allegedly showcasing a statement attributed to a Harvard professor denigrating Pakistanis as 'toxic' and 'ill-mannered'. Swiftly,

the iVerify Team undertook a meticulous fact-checking endeavor, ultimately debunking the claim as false. This underscores the tangible benefits of this approach, highlighting how verified information can clarify misunderstandings and positively impact individuals' lives. The dedicated fact-checking team at CEJ has been relentless in their pursuit of truth, verifying over 67 stories since iVerify's launch, primarily focusing on political misinformation while also addressing issues of gender bias and hate speech. This tireless effort underscores iVerify's comprehensive approach to fostering a factual and reliable digital space.

The influence of data-driven approaches, as embodied by iVerify, transcends the immediate challenge of misinformation, touching on broader socio-economic implications. Data becomes a key informant of evidence-based policymaking, driving interventions that aim for inclusive growth and address pressing socioeconomic challenges. In this light, data is not just a tool for combating misinformation, but a foundational element that supports informed



As Pakistan strides forward in its digital transformation, initiatives like iVerify offer valuable lessons on harnessing data for the greater good.

policy decisions, contributing significantly to Pakistan's development trajectory.

Additionally, the commitment to enhancing digital literacy through targeted educational programs under the SDEP initiative reflects an understanding of the critical need for a data-savvy citizenry. By conducting targeted training programs in 15 universities across the country to equip individuals with the skills to critically evaluate information, the role of data information in creating a resilient, informed society capable of navigating the complexities of the digital age has been further cemented.

As iVerify continues to establish its presence within Pakistan's data and information ecosystem, it encounters challenges and has considerable ground to cover before fully realising the transformative potential of data in creating a more transparent, equitable, and informed society. For this potential to be actualised, it is imperative that the wider community acknowledges the critical importance of data integrity and the necessity of fact-checking before disseminating any information. iVerify plays a crucial role in this context, and its impact could be further amplified if there is a collective shift towards valuing and upholding the accuracy of information.

As Pakistan strides forward in its digital transformation, initiatives like iVerify offer valuable lessons on harnessing data for the greater good, ensuring that the nation's digital landscape is marked by integrity, inclusivity, and informed progress.



Knowing Your Epidemic: Data and HIV Access in Pakistan



By

Heather Doyle

Project Manager, Global Fund,
UNDP Pakistan

Pakistan is at a precipice in its HIV response: with the right investments, HIV infections will decrease and the country can avoid a generalised epidemic.

Pakistan is at a precipice in its HIV response: with the right investments, HIV infections will decrease and the country can avoid a generalised epidemic. To this end, using data for decision-making will be one of the most critical tools at the government's disposal. However, policymakers and programme planners must also consider how data management impacts issues related to patient privacy, equitable and accessible health services, and the right to information.

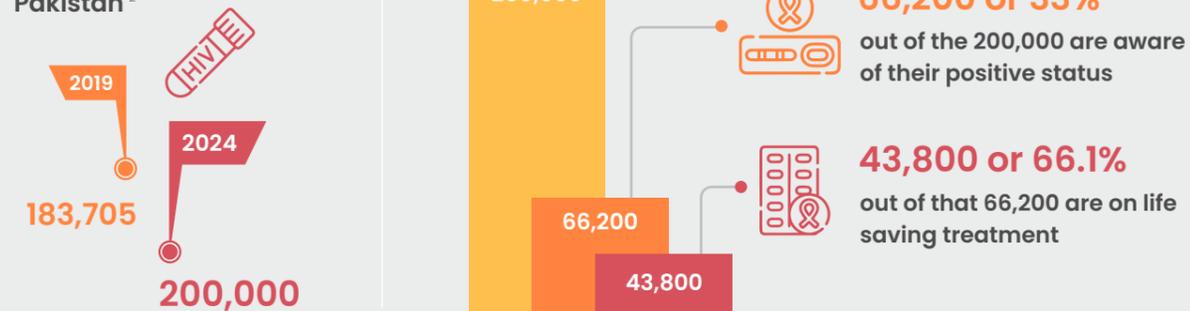
Since 2003, the Global Fund to Fight AIDS, TB and Malaria has invested more than USD 800 million in Pakistan's HIV response in addition to resources from the Government.¹

Unfortunately, these investments have not produced impressive results.

Opportunities for improving data in Pakistan's HIV response

Pakistan has already invested in developing a Management Information System for HIV, collecting pertinent data from 89 HIV centres and 53 prevention services sites. Additionally, UNDP is supporting the Government of Pakistan in the implementation of the 6th round of the Integrated Biological and Behavioural Surveillance (IBBS) survey this year. The IBBS is a national survey that measures

People Living with HIV in Pakistan²



1. The Data Explorer (theglobalfund.org)

2. National AIDS Control Programme (NACP) – Common Management Unit (cmu.gov.pk)



Pakistan has already invested in developing a Management Information System for HIV, collecting pertinent data from 89 HIV centres and 53 prevention services sites.

the behavioural drivers and prevalence of the HIV epidemic, Hepatitis B & C, and syphilis in populations most impacted by HIV. Supplementing regular monitoring and the IBBS with additional surveillance data collected from other multiple and available sources, as recommended by WHO in their policy brief on strengthening routine HIV surveillance systems,³ will greatly improve the understanding of the epidemic. Regular surveillance can also help avoid epidemic outbreaks like the 2019 Larkana outbreak, which was particularly tragic, as 80 percent of the 751 HIV positive individuals found were children.⁴

HIV policy makers should also agree on a national approach to Unique Identifier Codes (UICs) for people registering for prevention services. A UIC is any set of numbers, letters, symbols, or unique biomarkers (i.e., fingerprints) that can be used to identify an individual. A national UIC would streamline services, improve data reliability, and address the issue that many of the people most impacted by HIV are excluded from services as they do not have their National Identity Card (CNIC) numbers available.

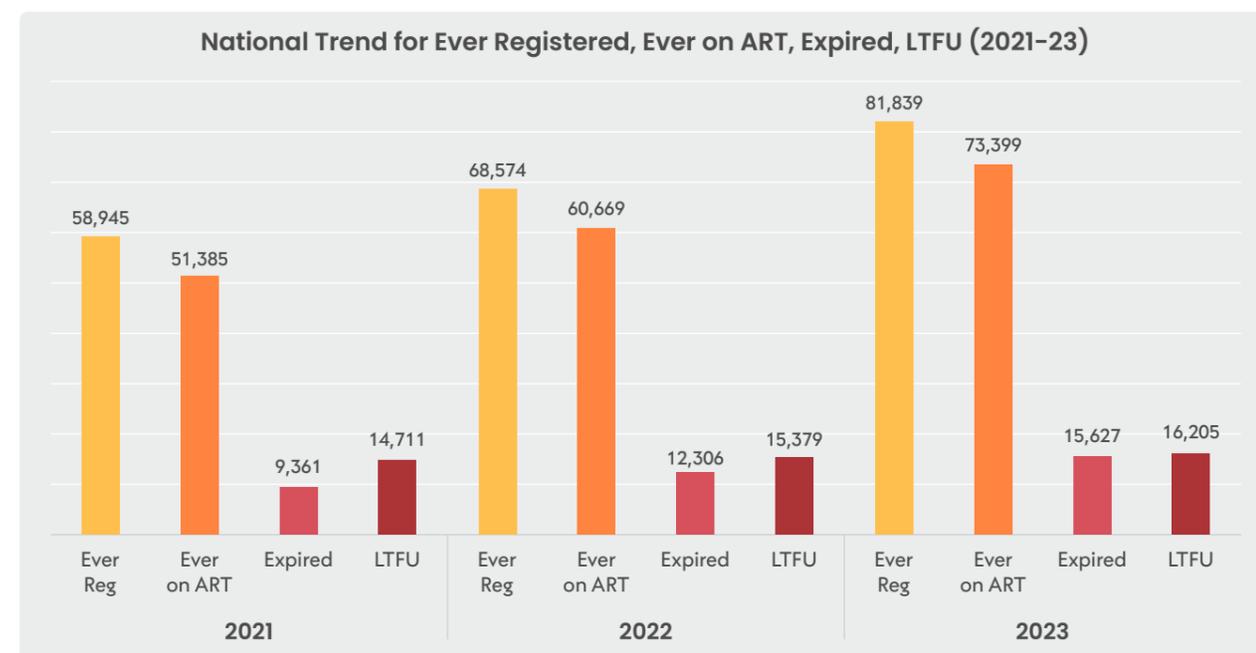
Lastly, using data for decision-making requires coordination. Since 2021, the United Nations Development Programme and UNAIDS have supported a quarterly Inter-Provincial Coordination Meeting (IPCM) hosted on a rotating basis by provincial AIDS control programs to review data and make programming adjustments. Regular coordi-

nation platforms are vital, and data must be presented in a way that allows policy makers to understand where the problems lie. UNDP is working with CyberVision International to develop a digital dashboard for the National and Provincial AIDS Control Programmes to bring together procurement, finance, and programme data, so it is easier to see the connections and encourage evidence-based decision-making for the HIV programme in Pakistan.

Protecting and promoting human rights in health data evolutions

The epidemic in Pakistan is concentrated in some of the country's most marginalised communities –sex workers, people who use drugs, transgender individuals, prisoners, and men who engage in same-sex practices. People living with HIV face some of the worst stigma in the world. This year, UNDP worked with UNAIDS and the Association of People Living with HIV (APLHIV) to update the HIV Stigma Index, last done in 2014. According to this survey, 64 percent of people who inject drugs, 52 percent of transgender people, 31.2 percent of men engaging in same-sex practices, and 35.2 percent of female sex workers report being discriminated against. The study also documents high levels of violence, discrimination across health, employment, and other social services, as well as social exclusion.

These issues contribute to Pakistan having one of the high-



3. Policy brief on harnessing the strength of routine data for HIV surveillance (who.int)
 4. HIV outbreaks in Pakistan - The Lancet HIV



© UNDP Pakistan

Community data collection or community-led monitoring (CLM) is an excellent way to improve service quality.

est rates of 'lost to follow-up' (LTFU) in the region – or patients that have started HIV treatment but stopped. The number of patients lost to follow-up has increased from 14,711 in 2021 to 16,205 in 2023, as indicated in the graph.⁵ However, they are not truly lost, but choosing not to access the free treatment, owing to the conduct they are subjected to in healthcare facilities, often with tragic consequences. In 2023, 15,627 people died from HIV, which are entirely preventable deaths.

Innovative and bold use of community data would complement increased HIV surveillance, and ensure the principles of knowing the epidemic by ensuring communities are at the center of solutions. Community data collection or community-led monitoring (CLM) is an excellent way to improve service quality. UNDP is supporting community organisations to carry out CLM, so that they are empowered to hold care providers accountable to make the changes required to improve services, including decreasing the stigma and discrimination in care settings.

Ultimately, harnessing data for improved HIV outcomes in Pakistan is not only an imperative, but an opportunity for

transformative change. It is possible to ensure people's privacy and other rights are protected, and still leverage data to understand the dynamics of the epidemic, identify gaps in service delivery, and advocate for policy reforms. By doing so, we can enhance access to prevention, treatment, and care services for all affected communities.



© UNDP Pakistan

5. Based on national MIS data provided by the National AIDS Control Programme (NACP) in Pakistan.

SAARCFINANCE Seminar: Potential Role of Big Data in Economic Policy

Under the umbrella of SAARFINANCE, the State Bank of Pakistan (SBP) conducted a host of seminars, with the 15th session on 6 March 2024 exploring the potential role of big data in economic policy. The seminar was attended by a wide range of local and international participants and speakers, including Central Bank delegates from SAARC member countries, representatives from BigTech firms, officials from various government departments, national statistical organisations (NSOs), and financial institutions.

The keynote speeches and the panel discussions illuminated how the world today is dominated by technology and innovation that is increasingly being powered by 'Big Data', a term that describes large, hard-to-manage volumes of structured and unstructured data that come from diverse sources on a day-to-day basis. The seminar uncovered the following insights:

Leveraging big data for progress

Speakers highlighted how big data is not only empowering private enterprises to enhance consumer experiences but also enabling governments to formulate more effective economic policies and enhance service delivery. This shift towards data-driven governance offers unprecedented opportunities for inclusive growth and development.

Balancing risks and opportunities

The discussions emphasized the imperative for policymakers to be fully aware of the advantages and disadvantages of big data. Some of the risks that were discussed included security risks, analytical risks, data protection risks, and digital exclusion. Therefore, the seminar highlighted that while big data presented many opportunities for innovation and insight, organisations and policymakers must implement robust safeguards and ethical frameworks to ensure its responsible use.



Promoting cross-border data flows

The seminar also discussed the importance of safe and regulated cross-border data flows. According to Meta, restrictive data policies and stifled data flows have the potential to reduce Pakistan's volume of trade by as much as 3.7 percent. Therefore, the majority sentiment was in support of data flows, which were seen as crucial to improving cross border and regional trade.

"The unprecedented volume of data generated by digital devices underscores the potential of effective data utilisation in contributing to sustained economic growth, societal welfare, poverty reduction, and improved living standards across the diverse SAARC region".

Jameel Ahmed
Governor, State Bank of Pakistan



Highlights of the Keynote Speech

By

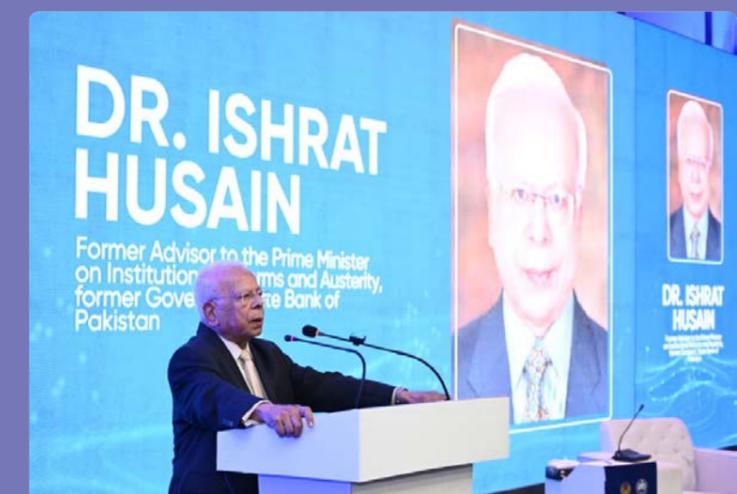
Dr. Ishrat Husain

Former Advisor to the Prime Minister on Institutional Reforms & Austerity,
Former Governor SBP

Dr. Ishrat's book, 'Development Pathways: India, Pakistan and Bangladesh 1947- 2022', is the first empirically based, data-driven exercise which tries to identify the common success factors behind the development journeys of these three countries and explore the pain points and risks for the future development. In his keynote speech, Dr. Ishrat lays out seven key lessons that enunciate policy risks from within this book.

- Economic Policy Continuity:** The type of government (democratic, authoritarian, etc.) is less important than the consistency and predictability of economic policies. Stability in policies attracts investment and fosters economic growth.
- Pragmatic Policy Choices:** Economic policies should be driven by pragmatism rather than rigid ideological labels. Adaptation to changing circumstances and adopting pragmatic approaches lead to successful outcomes, as seen in India's shift from socialism to liberalisation.
- Domestic Resource Mobilisation:** Excessive reliance on external assistance can discourage domestic resource mobilisation efforts. Emphasising domestic savings and investment is crucial for sustained economic development.
- State-Market Collaboration:** A combination of strong, effective government and a well-functioning competitive market is necessary for shared prosperity. Examples from Nordic countries, East Asia, and Bangladesh show the benefits of collaboration between the state, private sector, and NGOs.

- International Engagement:** Participation in international trade, technology transfer, capital flows, and migration can positively impact the domestic economy. China's economic growth through export-oriented strategies and India's similar approach highlight the benefits of global engagement.
- Investment in Human Capital:** Investing in human capital, financial inclusion, and female empowerment contribute to equitable, inclusive, and sustained growth. Examples from Bangladesh demonstrate the positive impact of such investments on social indicators and economic growth.
- Devolution and Decentralization:** Devolving financial, legal, and administrative powers to local governments enhances the delivery of basic public services and overall domestic resource mobilisation. Effective decentralisation improves governance and empowers local communities.



What Can Data Do for Women in Pakistan?



By

Van Nguyen

Deputy Resident Representative,
UNDP Pakistan

Highlighting the many data challenges faced by professionals while working on gender issues, UNDP Pakistan's policy brief entitled 'SDG 5 - Gender Equality: Gaps, Challenges, and the Way Forward' pertinently observes: "there are many models for measuring gender inequality; no model is perfect".¹

One of the challenges in achieving gender equality is the issue of **gender biases** in data. These biases often stem from historical inequalities, societal norms, and systemic discrimination, which result in skewed representations. For example, patriarchal gender roles may influence the types of data collected, and from which parties, leading to under-representation or misrepresentation of needs. The same can be said when it comes to analysis of these data.

It is vital that the root causes of these **structural challenges** in global and national data collection and analytical processes on gender equality are fully addressed. This necessitates a concerted effort to expand the scope of data collection, incorporate diverse perspectives, and prioritize indicators that reflect the multifaceted realities of women's lives across different country and cultural contexts.

Using innovative data collection methodologies can make data more **inclusive and representative**. For example, digital surveys can reach remote areas and marginalized groups such as women, who are more likely to be missed out through traditional data collection methods. As an example, Pakistan's first digital census - conducted in 2023 - aimed to account for traditionally excluded or miscounted groups such as the transgender population, by making processes more transparent. This was also one of the research methodologies adopted for our upcoming Pakistan National Human Development Report 2024 on Digital Transformation, wherein Digital Hotspot Surveys were conducted to get

more representative data on how the people of Pakistan - especially women and girls -- interact with the country's digital landscape.

From a duty bearer perspective, making latest gender and sex-disaggregated data accessible through compelling narratives and data visualizations will improve understanding of gender data and facilitate analyses that inform policy choices. This is important not only for policymakers but also other stakeholders. These include academics who study critical development challenges from a gender lens; civil society organizations that work towards the betterment of women in different contexts; the media that shines a spotlight on the trials and tribulations faced by women; the private sector making investments in women's financial inclusion and economic empowerment.

Looking at data from a right holder perspective and to make data both gender-responsive and gender-transformative, it is essential that more women step into positions of **data leadership, management, and governance**. This is especially important for Pakistan, where political representation for women remains skewed, with only 15.2 percent of political representatives being women, including only one-tenth of all ministers and one-fifth of all parliamentarians. Women's thought leadership and decision-making on data systems, processes and governance will bring more ownership for evidence-based policies that are informed by ground realities, are equitable and inclusive.

In the Age of Information and the Fifth Industrial Revolution, women need to be envisioned dynamically. More than being relegated as mere data sets on the sustainable development map, they need to be empowered to become data architects of their futures.

1. <https://www.undp.org/sites/g/files/zskgke326/files/2023-03/SDG-5%20Gender%20Equality%20by%20Saba%20Gul%20Khattak.pdf>





United Nations Development Programme Pakistan

4th Floor, Serena Business Complex,
Khayaban-e-Suharwardy, Sector G-5/1,
P. O. Box 1051, Islamabad, Pakistan