THE VALUE OF DATA

Data Driven Policy Making for Criminal Justice Institutions in Pakistan

COVID-19

ADVOCACY BRIEF 7

Contents

1. STATEMENT OF THE PROBLEM

Rapid social, political, environmental and economic transformations across the world are becoming increasingly complex. Technological advancements, specifically the spread of access to the internet and social media, have made it possible for citizens to participate in public discussions and demand for more transparent and accountable processes. Policy makers have to respond to these developments through inclusive, responsive and equitable policy making. To ensure high quality service delivery to all segments of the population, policy makers have to rethink existing decision-making practices. Data driven policy making can address these demands and requirements.

Data driven policy making is based on empirical evidence. For this purpose context-specific, high quality data is collected, analysed and interpreted. The data allows governments and public bodies to better understand change and transformations as well as needs. The evidence is used to assess performance and progress, identify gaps and optimise responses. Based on this knowledge, policy makers can frame responses that are tailored to the needs of particular contexts and all sub-sections of a population. The data can also be presented to citizens to explain policy decisions, in this way increasing citizens' trust in institutions and curtailing the spread of misinformation. Lastly, data driven policy making allows for the effective allocation of resources and thus reduces costs.

High quality and live data that accurately depicts the needs, issues and challenges on the ground, is the corner stone of instigating effective, inclusive and appropriate decision-making. A central prerequisite for data-driven policy making are robust and standardised data collection and processing procedures, hence having a solid methodology in place that drives the process.

The COVID-19 pandemic is an example of when good, robust, accessible and timely data is necessary to make informed choices of policy and action. The COVID-19 emergency can also be an opportunity to initiate improved systems of data collection, record keeping and documentation.

> Data is information collected and collated for reference and analysis. It provides observable evidence of circumstances, conditions, perceptions and attitudes. Minimum standards for data collection and analysis are: (1) transparency and accountability (2) acknowledgement of possible biases and limitations (3) ethical considerations. Following these standards ensures data quality, i.e., (1) accuracy, (2) credibility (truth value), (3) consistency, and (4) neutrality of the collected information.

Criminal Justice System (CJS) bodies are among the most visible state institutions because they are often the first point of contact between citizens and state. Especially in emergencies, they are the first responders. In Pakistan, CJ institutions are confronted with diverse and highly complex duties and responsibilities, their performance is under constant scrutiny. Data driven policy making can offer CJ institutions a way to foster peace, security and public safety because it can help to enhance service delivery and address the needs of Pakistan's citizens in an inclusive and equitable manner. This policy brief outlines the value and relevance of the collection and analysis of high quality, real time data for policy analysis and decision-making, particularly in respect of the Criminal Justice System in Pakistan. The recommendations offer impulses for drafting data collecting and processing guidelines and highlight prerequisites for the successful use of data for policy making. These points can help policy makers draft plans for data management, practical guidelines, and standard operating procedures which can be adopted as policies.

2. DATA ENABLES DECISION MAKERS TO MAKE BETTER DECISIONS

The generation and analysis of high quality data enables decision makers to make better, targeted and more transparent decisions. When decisions are tailored to actual needs of all members of a society, they promote peace and reduce disputes. With better decisions, resources can be allocated more effectively and efficiently; this reduces costs while improving service delivery. Based on concrete evidence that is presented in an accessible and easily understandable manner, policy decisions can be better explained to citizens. Publicly sharing of credible and reliable data is crucial to counteract misinformation. Data driven policy making thus also enhances trust in government institutions and improves credibility and legitimacy of policies. Lastly, by referring to empirical evidence rather than possibly biased assumptions, data driven policy making can help to rationalise public and policy discussions on sensitive issues and can thus contribute to reducing disputes and conflict.

After disasters or in emergencies, all institutions of the criminal justice system have to re-align their operations to manage the situation. In such contexts data driven policy making is particularly useful because it allows for fast action, and customised, forward looking responses that meet rapidly changing needs and demands.

The Rule of Law Roadmaps in Sindh and Balochistan are based on a data driven policy making. An evidence-based policy making system, based on the regular collection of data, has been implemented and driven by a well-established governance structure consisting of a delivery unit based in the Home Department. The delivery unit initiates and drives regular stock-taking of current data together with nominated technical working groups from all criminal justice institutions and a Steering Committee consisting of institutional leadership that receives regular results to inform their policy decisions in a concerted manner in line with provincial set targets and priorities.

> **Obstacles to Data Collection and Analysis in Pakistan include:**
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> » disaggregated data is not available because standardised recording and documentation procedures are yet to be implemented;
> » data quality is difficult to ascertain because a large amount of data is recorded and transmitted manually which is prone to errors;
> » data is collected and stored in a disparate manner by various institutions of the government and does not reach the right decision makers at the right time;
> » existing technology and software are outdated and often not functional;
> » blanket internet connectivity is not given;
> » data is collected but not analysed and interpreted because expertise is missing.

2.1 Data Enables Inclusive Policy Making

In heterogeneous societies like Pakistan, managing diverse needs and expectations is one of the main challenges for State institutions and particularly the CJS. Through data, a given context or policy issue can be mapped comprehensively, i.e. actors and factors that impact the context can be identified. This allows thorough assessments of needs, particularly those of vulnerable groups. Carefully granulated data that represents all sections of society and includes a certain level of depth, enables decision makers to take into consideration the needs and expectations of all members of a population. Based on such evaluations, decision makers can set priorities and tailor policies to these needs. Inclusive policies minimise grievances, increase satisfaction and reduce potential for conflict.

2.1.1   Inclusive Policy Making Calls for Disaggregated Data

To formulate inclusive and context-specific responses, disaggregated data has to be available, i.e. data is collected and recorded to a certain level of detail. Hence, data can be sub-divided and broken down into smaller groupings. This allows comparisons, and disparities between groups to become visible. This is why disaggregated data is particularly important to highlight the needs of vulnerable groups because they are often differently affected by policies or change than other groups. All sub-populations present in a given context, particularly vulnerable groups, should be recorded separately in data sets.

2.1.2   Data and Inclusive Decision Making in Pakistan

Access to justice is an important topic in Pakistan. To devise policies to enable wider access to justice, CJ institutions have to understand reasons why many citizens lack access to justice or why they do not approach CJ institutions. Based on police records and demographic data disaggregated by gender, income or ethnicity, groups of people can be pinpointed that tend to register First Information Reports (FIRs) most often. The identified groups of people can then be compared to the demographic composition of the given area. Sub-sections of a population can be determined that appear to avoid registering FIRs. Based on this information, the needs of these specific groups of people can be assessed to understand why they do not approach the police and customised solutions can be found. In the past, the need for special reporting desks for women or transgender persons at the police stations became evident from such data. In this way data is pivotal for effective, inclusive and responsive decision-making that caters to divergent needs.

Similarly, CJ institutions have made an effort to increase the number of female officers and staff members. To devise affirmative action policies, decision makers have to locate reasons why fewer women join the service. From recruitment data disaggregated by gender it becomes evident how many women take and pass the entrance test. Next, employment data can be used to understand when and why women choose to leave service. A survey conducted among female officers and staff can provide information about working conditions and highlight opportunities, issues and needs. These different types of data sets taken together can provide a comprehensive understanding of the multivariate reasons why CJ institutions have fewer female employees. Policy makers can use these insights to amend existing recruitment processes or to devise affirmative action policies.

Disaggregated data can also inform operational decisions. For instance, the analysis of crime rate data disaggregated by neighbourhood might show an increase in robberies in a specific area, police officials can then modify patrolling patterns accordingly.

Particularly in emergencies, disaggregated data is imperative to identify groups that are affected the most. With this knowledge, decision makers can reallocate resources and personnel rapidly to alleviate grievances. In a health emergency like the COVID-19 pandemic, social distancing and hygiene rules are implemented in all prisons to prevent the spread of the virus. If disaggregated data of prisoners is readily available, inmates who are at high risk can be identified swiftly. Specific measures, such as special isolation wards for high risk prisoners can be devised to ensure their health and safety.

2.2 Data enables responsive and informed policy making

To measure policy implementation and track impact or to revise policies, performance data is crucial. The evaluation of performance data enables the assessment of progress and detection of gaps, outliers and unintended consequences of policies and their implementation. A gap analysis can identify loopholes and grey areas that need further attention and risks can be identified and calculated. Best practice examples can be pinpointed to serve as models and to highlight opportunities. The generation and analysis of disaggregated and real time data thus creates a constant feedback loop between policy making and implementation. When policy responses are constantly optimised and timely corrective action is taken, high quality service delivery can be ensured. Hence, with the availability of disaggregated and real time data, policy making becomes more proactive, more responsive and more calculated.

2.2.1 Responsive and informed policy making calls for real time data

To ensure responsive policy making, procedures have to be established to standardize the continuous collection of data at regular intervals and to monitor real time data. While up-to-date data can reflect conditions on the ground, the comparison with previously collected data can offer much deeper and detailed insights into social contexts that are in constant flux. Apart from improving service delivery, the constant assessment and evaluation of performance and implementation data can also reduce costs because informed decisions are more targeted and require fewer amendments and re-drafting.

Particularly in emergency situations quick access to current data is imperative to make swift decisions that fit the new conditions and to adjust operations. Specifically, real-time data allows for (1) the coordination of operational responses among diverse actors, (2) the allocation of critical resources, (3) the quick identification of affected and high risk areas or groups of people, and (4) the detection of anomalies and any operational obstacles.

The collection and accessibility of data requires technical infrastructure that enables safe data storage and data transfer and that offers processing and visualization options. Moreover, decision makers need to be able to access this data readily.

2.2.2 Data and Responsive Policy Making in Pakistan

> In Punjab and Sindh, Prison Information Management Systems have been implemented that replace a manual system with an automated one. Decision-makers get immediate access to real time data and use it to optimize operations and policy making. This system has proved particularly useful during the COVID-19 pandemic to get the relevant information related to inmates at hand in a single location accessible to all stakeholders. This system has been complemented with the development of a specific module, in Sindh, that collects health related data and requirements of inmates and new arrivals.

This data can be shared with judges as well as the Directorate of Reclamation and Probation to facilitate decision-making about the release of eligible inmates on probation and parole, respectively.

The revision of Standard Operating Procedures (SOPs) is another example where performance data enables responsive and swift decisions. The establishment of Child Protection Courts was accompanied with new SOPs. Since such courts are a novelty in Pakistan, their operations are still subject to revision and their impact cannot yet be fully predicted. To render Child Protection Courts more efficient and effective, while ensuring the wellbeing of children, their operation and performance needs monitoring to locate operational gaps and control for unintended consequences. Based on performance evidence, decision makers can optimise trial procedures or amend the SOPs.

> **Real-time and disaggregated data enables decision makers**
>
> » To frame context-specific and inclusive responses tailored to local needs
> » To identify gaps in operation and unintended side effects of policies and devise correctional responses rapidly
> » To measure and evaluate policy implementation and evaluate performance
> » To anticipate and model trends and formulate preventive measures
> » To allocate critical resources effectively and efficiently thus reducing costs
> » To build citizens' trust by presenting evidence thus increasing transparency
> » To counteract misinformation and rumours

2.3 Data enables proactive and preventive policy making

When disaggregated data is collected at regular intervals and compiled in a time series, it is possible to uncover patterns as well as outliers. This makes it possible to model likely future developments and thus anticipate trends and detect emerging issues. Models and projections reduce uncertainty. They can be used by policy makers to devise policies that include preventive measures on the operational as well as policy level. Decision making thus becomes more proactive and forward looking. In addition, fewer policy revisions are necessary which also reduces costs and saves time.

2.4 Data and Proactive Policy Making in Pakistan

Predictive modeling has been used extensively to make decisions about the release of prisoners on probation and parole. Prisoner demographics data can be used to conduct predictive modeling to predict the likelihood of recidivism as well as which prisoners might be more likely to commit violent crime if out of prison. People with petty non-violent crime propensity can be fined and released while people more likely to commit a serious crime may be detained. Predictive modeling and psychometrics may also be used to identify violent crime offenders and violent extremists. In Pakistan, psychometrics and data analytics are already in use for the identification of violent extremists. Similarly, in the US, the police have used predictive modelling to anticipate increases in risk crimes, followed by interventions to prevent those crimes from happening.

2.5 Data Driven Policy Making Requires High Quality Data

Data driven policy making is predicated upon the availability of high-quality data, the ability to store and transfer the data safely, the expertise to process, analyse and interpret the data and to visualise and present the data in an accessible manner.

High quality data is information that is systematically collected, processed and analysed according to a robust methodology. Standardised procedures need to be followed to ensure that the collected and analysed data accurately reflects the given conditions. It should be possible to disaggregate the data, this is why data collection strategies have to be devised to ensure that data is collected from all the relevant sub-sections of a given context. In addition, data has to be collected along specific variables that are necessary and relevant for grouping such as gender, age, special needs, ethnicity or income. Existing data entry forms and reporting formats need to be revised to include columns that capture such variables.

Solid and functional technical and digital infrastructure is a central requirement for data driven policy making. Safe storage of data and data security needs to be ensured. This also entails regular maintenance. Infrastructure is not only limited to equipment and internet access but also includes technical expertise, skill training and the employment of data experts.

The data management systems of CJ institutions should be interlinked and compatible to ease data sharing and data transfer. Moreover, linking data from CJ institutions with other government institutions can reduce workload and save time. For instance, if data management systems of the judiciary, the prison department and the health department were linked, it would facilitate the decision-making process regarding the granting of probation. If the Directorate of Reclamation and Probation could access police data, they could determine recidivism which would help them to determine eligible convicts for parole.

While companies operate under a strict legal framework that outlines the safe storage and processing of personal data of customers, similar regulations and guidelines should also be framed for CJ Institutions to avoid data breaches and the misuse of data.

One major milestone of the Rule of Law Roadmaps in Sindh and Balochistan is the establishment of a database. All CJS institutions contribute to this database via standardised data reporting formats. The data that is fed into the system is accessible in detailed form but is also visualised in infographics for immediate consumption. This data is available to each stakeholder thus facilitating data exchange and easing operations.

2.6 Conclusion

The prerequisites for data driven policy making are the standardisation of data collection and recording procedures, the development of infrastructure to ensure the safe storage and exchange of data, and skill training to promote the capacity of the work force. To this effect, each CJ institution should draft comprehensive data collection and processing plans that encompass these points. Such plans should be drafted for the provincial level, or depending on the unit, at the federal level. In a provincial coordination meeting among the departments of the criminal justice system, standardised minimum data collection and processing guidelines can be agreed upon. Based on this consent, regulations can be prepared and presented for adoption before the provincial and federal governments, respectively.

3. GENERAL RECOMMENDATIONS TO BE IMPEMENTED ACROSS THE CJS

Short Term

- Improve data collection practices, with emphasis on the recording of disaggregated data
  - » Authorise the addition of sub-categories to existing data categories, particularly to record data for vulnerable groups: gender, transgender, the elderly, the poor and children
- Assign focal persons in each department for enumeration and data processing and provide skills training to these focal persons
- Upgrade essential technical equipment to enable digital data collection and recording, particularly at the district level
- Policy and decision makers may emphasise the need for high quality data to create a demand

Medium Term

- Issue and implement uniform guidelines for the types of data to be collected by each CJ institution and to standardise data reporting formats
  - » Devise strategies to ensure the collection of representative and disaggregated data
  - » Determine intervals of data collection and submission
  - » Develop digital record keeping forms and systems to avoid transmission errors
  - » Present guidelines to the government for official endorsement and adoption
- Improve current data recording and documentation practices and record-keeping systems
  - » Adopt FAIR data principles (findable, accessible, interoperable, reusable)[1]
  - » Enhance technology and internet connectivity to ensure seamless and secure communication and data exchange between CJ Institutions, as well as secure data storage
  - » conduct regular servicing of technical equipment to ensure functionality
- Notify and fill positions for data experts including enumerators, data protection and data analysis officers
  - » Devise duty descriptions and work profiles for technical data experts
  - » Adopt data expert positions as permanent items in the human resources planning of CJ institutions
  - » Consult subject experts to enhance the explanatory power of the collected data
- Take stock of existing data sets and repositories and devise plans to link and integrate data
  - » build new or use existing platforms dedicated to data-sharing and data recording
- Identify data gaps and devise mitigation strategies

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1   Go FAIR. "Fair Principles." https://www.go-fair.org/fair-principles/.

Long Term

- Agree on minimum data collection and standardisation guidelines among all CJ Institutions of each province
- Present uniform data collection regulations for CJ Institutions to the respective provincial or federal government for adoption
- Present a draft budget for technical infrastructure development and maintenance to the government for adoption and inclusion of this item in the annual budget
- Similarly to the National Database and Registration Authority Ordinance, 2000 establish legal frameworks for CJ Institutions to ensure safe data storage and data protection
- Conduct capacity training on the importance of data and on the procedures of data collection with all officers and staff members involved in the recording and collection of data (police officers at *thanas*, doctors in wards)
- Conduct capacity training for the use of computers and digital data recording tools
- Update existing data storage systems to enable seamless integration of collected data to visualise data for public consumption
- Enable data sharing among institutions, between provinces and globally in order to compare data, enable predictions and modelling efforts and thus develop more robust policies (sharing platforms for Malaria and Ebola already exist and have been used successfully in response efforts)[2]
  » develop SOPs and protocols for data sharing
- Digitise existing data

2   Centre for Evidence-based Medicine, University of Oxford. 2015. "WHO consultation on data and results sharing during public health emergencies: Background briefing."

This advocacy brief is prepared by the UNODC's Criminal Justice and Legal Reforms Sub-Programme-II (SP-II).

The Criminal Justice and Legal Reforms Sub-Programme-II (SP-II) works as a strategic partner and advisor to the Government of Pakistan, delivering reforms across the criminal justice chain of institutions. The objective is to promote evidence-based programming to enhance the effectiveness, coordination and capacity of the criminal justice institutions towards administering fair, efficient and transparent access to justice and rule of law for the citizens. The SP-II also promotes robust and preventive measures to foster effective AML/CFT regimes in Pakistan to disrupt and prosecute financial crimes. A gender-sensitive approach cuts across the criminal justice reforms led by SP-II to empower the vulnerable and the less privileged groups through awareness of legal rights and access to justice.

The comprehensive approach of UNODC is aligned with Pakistan's vision 2025.
Striving to achieve the Sustainable Development Goal (SDG) 16 on Peace, Justice and Institutions: *"Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels."* Also contributing to the SDG Goals 3, 5, 8, 11, 15 and 17.