

Integrated Data and Information Management for Social Protection

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In recent years there has been great focus on coordinating and harmonising systems for social protection. This has led to growing interest in exploring ways to integrate data and better handle information management across multiple programmes. The most cited example of such integration is Brazil's celebrated *Cadastro Único* (Single Registry, the term we will be using to describe such poverty databases), yet several other countries have been recently adopting innovative solutions and defining best practices that are still widely undocumented in the literature.

Of course, the level and quality of integration across the social protection sector that a country can achieve strongly depends on political will and contextual constraints and opportunities, more than technical 'fixes'. Nevertheless, a core set of lessons do emerge based on countries' experience in building integrated databases and management information systems in this field. This One-Pager sets out to summarise such evidence, based on a thorough review of the literature and country case studies (Barca and Chirchir 2014).

Administrative and institutional structure

Governance and institutional arrangements: The governance of an integrated system for data and information management is crucial to its success. Best practice internationally (e.g. Argentina, Chile, Indonesia, Mexico) stresses the importance of maintaining coordination and management independent from the management of individual programmes (e.g. within an independent agency or unit) and high enough in the government hierarchy to effectively coordinate with all stakeholders (including relevant Ministries such as Finance, Education and Health). It is also essential to clearly identify all stakeholders (data providers and users) and formalise their roles and responsibilities, possibly through legally binding agreements (e.g. Memorandums of Understanding, MoUs), carefully designed incentives and mutually agreed terms of reference.

Administrative structure and decentralisation: Coordinating the collection and processing of vast amounts of data from every administrative unit within a country is a challenging task, especially in highly decentralised contexts (e.g. Brazil, Indonesia). Best practice in these cases has been to decentralise implementation (e.g. data collection) while maintaining design and control functions at a central level (including verifying and validating data and targeting functions). Where possible, this can be facilitated by setting up web-based data sharing, including guaranteeing secure access of consolidated data to decentralised levels of government for their own use (thus increasing ownership).

Operational structure

Collecting data: Two main methods are prevalent for data collection: on-demand registration and census methods. Best practice is to combine the two to gain maximum benefits (e.g. Chile). However, data for Single Registries do not necessarily need to be collected ex novo. Where possible, countries have either 'piggy-backed' on existing data from national social protection programmes (e.g. *Bolsa Família* in Brazil and *BISP* in Pakistan), consolidated information from the databases of several programmes (e.g. Kenya) or virtually consolidated data from other sources (e.g. tax authorities and other ministries, as in Argentina and Turkey). Each approach has significantly different costs and benefits and should be adopted based on each country's specific constraints and opportunities.

Transforming data into information: Even complete, high-quality data are of no value unless they can be converted into information that is useful for making

decisions and improving programmes and policies. This entails clear processes for verifying, validating, updating and reporting on data—managed at central level and ideally based on virtual cross-checks with other databases (especially the Civil Registry) and in-the-field supervisions.

Targeting: Where targeting is pursued as an objective of the Single Registry, best practice has been to score and rank households at central level by the agency or unit responsible for the Single Registry, to avoid political interference. Programme implementers then use the national list as a base and adapt it to their purposes by adding further criteria, validating lists provided, and choosing what percentage of households ranked nationally are to be included locally.

Updating data: Given the transitory nature of poverty, it is obvious that any snapshot taken at a given point in time is likely to quickly become obsolete. International best practices to maintain the currency of Single Registry data include:

- scheduling deadlines for updating data through the census survey every two to three years—though many countries have found this hard to uphold due to budgetary reasons;
- integrating data online, including from local to central levels and across other institutions such as the Civil Registry (e.g. Argentina, Chile, Turkey); and
- integrating on-demand data collection approaches with census approaches.

Linking data: Integrating individuals' (and household) information across different databases can be incredibly simple but is only possible in the presence of a 'unique identifier': a number that uniquely identifies each citizen. In countries with robust systems of national identification (e.g. Pakistan, Turkey), this is not an issue. Other countries' solutions to providing such an identifier have included working with Civil Registry offices (e.g. Kenya, Uganda), assigning social identification numbers (e.g. Brazil, Mauritius, Mexico) and assigning new identification numbers for new applicants (with risks of duplication—Colombia).

Technological infrastructure

The technological infrastructure needed for a Single Registry can be created from scratch, at a cost. The key issues to consider include:

- data privacy: adhering to international protocols;
- transfer of information: ensuring effective transfer to different segments and levels of government—either web-based or batch processes;
- hardware: enough memory, processing capacity, sufficient number of servers etc.;
- back-up and security: must conform to ISO 27001—an approach to managing confidential or sensitive information so that it remains secure and confidential and retains its integrity; and
- software: ideally non-proprietary (open source) and built with iterative prototyping, whereby a system model is designed and customised based on user feedback.

Reference:

Barca, Valentina, and Richard Chirchir. 2014. *Single Registries and integrated MISs: De-mystifying data and information management concepts*. Oxford: Oxford Policy Management.

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