ECA Regional Forum on Management Information Systems and Modernization of Social Protection Programs

“Challenges of Data Integration”

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Outline...

Introduction
- Definition (Database, MIS, IMIS and Single Registry)
- Types of Social Protection MISes

Integration
- Why integrate (purpose or objectives)?
- Models of integration based on the key SP schemes objectives
- Implementation approaches (Centralized Registry, Decentralized Registry and Hybrids)

Cross-cutting issues and challenges
- International practices and experiences
- Choices and trade offs

Country Examples
- Latin America (Chile, Brazil)
- Africa (South Africa, Kenya)
- Asia Pacific (Indonesia)
- Central Asia (Uzbekistan) and Europe (Turkey)
A (i). Definition of “Databases”, “Single Registry” and “Integrated Management Information Systems”...

Within the SP context, the terms “MIS”, “database”, “single registry”, “IMIS” are often used interchangeably. They've different meanings and yet linked functionally:

- A **database** is a system intended to organize, store, and retrieve large amounts of data easily and a ‘**registry**’ is an official written record of names or events or transactions.

- An **MIS** (Programme MIS in Social Protection Context) is a system that transforms the data that is retrieved from a programme’s database (or in some cases, different databases linked to different ‘modules’) into information that can be used for efficient and effective management.

- **Single Registry** is a listing (database) of all people/households who have been registered (i.e. interviewed if using a census approach to data collection or submitted an application if the approach was on-demand);

- An **integrated system for information management** refers to the broader system that enable the flow and management of information within and between SP programmes (and sometimes beyond, to other sectors)
A (ii). Types of SP MISes: A. Programme MIS  B. Single Registry  C. Integrated Management Information System (IMIS)…
B (i) Why integrate (purpose and objectives)?

<table>
<thead>
<tr>
<th>Policy Objectives</th>
<th>Operational Reasons</th>
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<td>1. Increased responsiveness and inclusiveness of interventions</td>
<td>1. Facilitate oversight of multiple schemes</td>
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<td>2. Increased transparency and accountability</td>
<td>2. Avoid duplication of efforts (e.g. data collection)</td>
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<td>3. Increased linkage to the complementary institutional framework (e.g. common payment systems)</td>
<td>3. Increase efficiencies (e.g. common payment system)</td>
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<td>4. Increased knowledge on issues around poverty and vulnerability</td>
<td>4. Help to avoid double dipping and benefit fraud and keep track of who is receiving what benefit</td>
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<td>5. Enable the transition of beneficiaries between schemes as their circumstances change</td>
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B (ii). Different integration models based on SP schemes objectives: a. providing oversight and M&E, b. consolidating targeting, c. integrating operations and services...

B (iii) Approaches to integrating SP schemes in middle-income countries...

Option 1: Fully Centralized integration (National level management (e.g. Kenya’s National Safety Net Programmes))...
B (iv) Approaches to integrating SP schemes in middle-income countries...

Option 2: De-centralized integration (local management (e.g. Uzbekistan, Brazil’s Cadastro Unico use of municipalities))...
B (v) Approaches to integrating SP schemes in middle-income countries...

Option 3: Hybrid integration (national and local management (e.g. Mauritius and south Africa))...
C (i) Key cross cutting issues and trade offs…

**Administrative and institutional aspects**

- **Governance and institutional arrangements**
  - Harmonisation is best achieved if responsibility for coordination and management is independent from the management of individual SP programmes *(Trade off: The more complex and inter-linked the overall information management set-up the more difficult the institutional arrangements are to set up)*
  - Clear identification of all relevant stakeholders and formalization of their roles and responsibilities

- **Administrative structures and decentralisation.**
  - Decentralised implementation with centralised design and verification of data *(Trade Off: Local authorities might have a stronger incentive to facilitate the access to SP programmes to those who are not necessarily deserving or multiple roles e.g. Mahallas in Uzbekistan)*
  - Sharing consolidated data through web-access with decentralised levels of government, though this is often impeded by technical and institutional constraints
C (ii). Cross cutting issues: institutional and governance and potential challenges of “information silos” ...

E-GOVERNMENT PLATFORM
NATIONAL IDENTIFICATION REGISTER (NIR)
C (iii) Key cross cutting issues and trade offs…

Operational and implementation aspects

- Linking databases
  - Some form of unique ID for individuals is needed to link Registry information and beneficiaries with other systems and national social protection schemes
  - Solution to providing IDs includes working with national registry offices, assigning social ID numbers and assigning new ID numbers for new applicants (risks of duplication)

- Integrating services
  - Services and operations that have been integrated include payments, grievances and conditionality enforcement
Examples of trade-offs made and growth trajectories by followed by some countries in integrating data within SP Sector and beyond...

**Source:** Valentina, B. and Chirchir, R. (2014) Single Registries and Integrated MISs: de-mystifying Data and Information Management Concepts, DFAT, Forthcoming
D(ii). Kenya: National Safety Net Programme: Social assistance sector integration for the purpose of coordination, oversight and programme monitoring...

- HSNP – Hunger Safety Net Programme
- CT-OVC – Orphans and Vulnerable Children Programme
- OPCT – Older Persons Cash Transfer Programme
- UFSP – Urban Food Subsidy Programme
- PwSD – Persons with Severe Disability Programme
- IPRS – Integrated Population Registration Service
D (iii). Indonesia: *Data Terpadu* (BDT) or Unified Data Base (UDB): Sector integration designed with objective of harmonising targeting...

- The reason for database creation was to improve the targeting system of Indonesia’s main poverty alleviation programmes.
- The aim was to reduce poverty targeting from poverty by 8-10% by 2014.
- Part of the drive towards improving targeting effectiveness was due to analysis of Susenas (national socioeconomic survey) data that showed how many poor families did not receive social assistance programmes that were supposedly provided to them.
- The UDB now covers 24 million households (96 million individuals) located in over 77,000 villages nationwide – making it one of the largest database in the world.
- The data is managed within the Tim National Percepatan Penanggulangan Kemiskinan, (TNP2K) (or the National Team for the Acceleration of Poverty Reduction), within office of the Vice President.
D (iv) South Africa: Legacy SOCPEN and push towards National Integrated Social Information System (NISIS): Sector integration to achieve operational effectiveness...

- Republic of South Africa’s (RSA) Department of Social Development runs one of the largest social assistance programmes in the world.
- It currently processes 16,054,955 grants monthly.
- The cost of these programmes is estimated to be 3.5 percent of the country’s gross domestic product.
- Beyond the legacy system that started delivering grants it, South Africa is now setting its eyes on cross sector integration.
- In 2006, it launched its National Integrated Social Information System (NISIS) with the aim of eradicating poverty in South Africa through use of enabling technologies that support improved planning, targeting, coordination and delivery of anti-poverty statistics.

**Source:** Valentina, B. and Chirchir, R. (2014) Single Registries and Integrated MISs: de-mystifying Data and Information Management Concepts, DFAT, Forthcoming
D (v) Mauritius : “twin registries”: Sector integration to achieve operational effectiveness and efficiency...

- Mauritius is a middle-income Indian-ocean island with a population of 2 million.

- A significant advantage for Mauritius is that majority of its citizens have a National Identification Number (NID), a key pillar in administration of its social protection scheme. The implementation of the NID began in 1986, three years before the Ministry of Social Security and National Solidarity (MoSS) embarked on an ambitious plan to put an electronic MIS in place.

- The current Identification Number is a function of four elements: surname, date of birth (6 characters), place of birth (2 characters), number on birth register (4 digits, max 9999) and check digit algorithm.
D (vi) Turkey: Integrated Social Assistance Information System: Sector integration to achieve operational effectiveness and efficiency...

- Process management and information system which carries out application, enquiry, decision-making, delivery and monitoring phases of social assistance procedures.

- Launched in 2009 as a collaboration between the Ministry of Family and Social Policy (MFSP), the General Directorate of Social Assistance (GDSA) and the Scientific and Technological Research Council of Turkey (TÜBİTAK).

- ISAS links applicants’ data to other databases of social assistance programmes.

- In 2013, a total of 6.4 million households and 23 million people were enrolled in the system.

D (vii) Chile: Integrated System for Social Information (SIIS): Complex cross sector integration to achieve operational effectiveness and efficiency...

- Cited as the most advanced example of integrated data management across the SP sector and beyond
- The legal foundation for SIIS was established in 2008, through the ‘Decreto Supremo N.160’
- The key management and coordination for SIIS is performed by the Social Division of MIDEPLAN, the Ministry of Planning
- SIIS is a software application (‘Platform’) that allows the interoperability between many different databases belonging to different public entities

E. Conclusion... Integration is about context and there is no one solution fits all...

“Integrated SP MIS”

Targeting

Payments

Complaints and Grievances

Monitoring And Evaluation