Social protection Management Information Systems (MIS)

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Question

Are there successful examples of Management Information Systems in social protection programmes? What are the reasons for their success and what impact have they had in making social protection programmes more effective and efficient?

Contents

1. Overview
2. Impact
3. Success factors
4. References

1. Overview

Management Information Systems (MIS) are the systems through which social protection programmes perform functions such as identification of beneficiaries, compliance with conditions, grievance redress, and generating payment lists (Chirchir & Kidd, 2011). Most countries are moving towards an online, computerised system, but some MIS remain paper-based and manual.

MIS are useful because integrated data management of social protection programmes can lead to more equitable distribution of resources; provide oversight of multiple schemes; establish links with other services; and increase efficiency through economies of scale (Barca & Chirchir, 2014). The literature suggests that using MIS effectively is primarily a political and policy issue rather than one of technical innovation, as they require effective staffing, adequate financing, and political will (Barca & Chirchir, 2014).

There is a considerable literature on policy guidance, design guidelines, and a general agreement on what constitutes best practice for MIS, but little systematic evidence of what works (Barca & Chirchir, 2014). This rapid review was unable to find any evaluations of MIS, and very few reports containing reasons for success. Most literature on MIS explains design principles. The few papers which have examples of systems
actually in use often do not assess reasons for success or failure. This report is therefore very limited in presenting evidence on what works.

The report first summarises the impact which MIS have had on social protection programmes, then presents the slim evidence on success factors for MIS. These include:

- **Political will**: from the policy level and from staff.
- **Technology**: at an appropriate level for staff.
- **Flexible incremental systems**: which can adapt when the programme changes.
- **Simplicity**: ensuring the MIS is not over-burdened.
- **Staffing**: increasing capacity.
- **Administrative structure**: a combination of centralised and decentralised structures.
- **Financing**: MIS are expensive and external financing is often needed.
- **Accountability**: checks and balances to ensure effectiveness.

A separate GSDRC Helpdesk query reviews national unified single registries for social protection, a related component for MIS (Rao, 2013).

### 2. Impact

Integrated data management of social protection programmes can lead to more equitable distribution of resources; provide oversight of multiple schemes; establish links with other services; and increase efficiency through economies of scale (Barca & Chirchir, 2014). MIS cannot be used to measure the impact of a social protection programme on recipients (Chirchir & Kidd, 2011).

It is generally agreed that MIS enable better organisation of programme services, help identify differences in coverage and detect anomalous situations (Villalobos et al., 2010). They also help improve accountability, auditing, and transparency processes (Villalobos et al., 2010).

More broadly, MIS contribute to better coordination of services and linking beneficiaries with other government programmes (Villalobos et al., 2010). Information in the MIS can be used by other programmes, for example to target different beneficiaries.

Barca and Chirchir (2014) show that integrated MIS have achieved the following impacts, within limitations:

- More equitable approach to the distribution of resources based on objective and comparable information.
- Increased responsiveness and inclusiveness of interventions.
- Able to serve both the chronic poor and those structurally vulnerable to poverty, as well as respond to individual shocks or large crises.
- Increased transparency and accountability as programme information can be more easily shared and compared.
- Facilitated oversight of multiple schemes and reporting to policy-makers.
- Avoidance of duplication of effort, for example in data collection activities for programme targeting.
Establishment of a common payment system across all schemes, increasing efficiencies and saving costs.

Avoidance of fraud or simply keep track of who is receiving what.

They also note a series of impacts which might be expected from MIS, but where there is little evidence of this type of experience:

- Increased linkage to the complementary institutional framework and wider social and economic policies in place.
- Increased knowledge on issues around poverty and vulnerability.
- Enabled transition of beneficiaries between schemes as their circumstances change.
- Establishment of more effective emergency responses.

The Kenya Orphans and Vulnerable Children cash transfer acknowledged the MIS as a success factor in the programme (Jackson et al., 2011). It improved managers’ understanding of implementation and helped them keep track of reaching OVCs. The system also allowed mid-course corrections which would not have been possible without the MIS. It supported planning; accurate and efficient targeting, enrolment, payments, and report writing. Programme staff emphasised the importance of the system in playing a central role in the success of the programme.

3. Success factors

Political will

Barca and Chirchir (2014) identify political will as the key success factor in implementing integrated MIS.

In Kazakhstan, a conditional cash transfer (CCT) programme run by an NGO, BOTA, actively involved the programme director and staff in the development of the MIS from the outset (Saidulloev & Dersham, 2013). After the MIS was established, a working group was formed to note changing needs and expectations and make adjustments to the MIS (Saidulloev & Dersham, 2013). This helped staff buy-in to the MIS and develop ownership.

In South Africa, the South Africa Social Security Agency (SASSA) staff wanted to use other departments’ data to cross-check beneficiary information (GIZ, 2012). Other departments were reluctant to share data until SASSA negotiated a win-win situation by providing data which other departments did not have.

Technology

Many countries’ MIS are not yet electronic. It is widely assumed in the literature that an electronic management system will be more effective and accurate than a paper-based one. This seems to be borne out in case study experience. For example, GIZ supported the establishment of a pilot electronic system in Kyrgyzstan (GIZ, 2014). The system now performs automated calculations instead of manual, which improves efficiency and accuracy. It allows easy updating of beneficiary information and the ability to capture characteristics over time. Automated functions means it is easy to generate reports based on location, demographics and other variables. Overall, this electronic system has improved targeting and administration.
The softwares developed for Latin American CCT MIS are highly appropriate and tailored specifically to the programmes (Villalobos et al., 2010). This makes them much more useful than off-the-shelf solutions, and they have become widely used in the region. Electronic systems have been used to set up automated alerts when anomalous or critical situations arise, which improves managers’ ability to respond (Villalobos et al., 2010).

Technology must be appropriate for the technical capacity of staff and for the context. In Kazakhstan, Personal Digital Assistants were rejected in favour of small netbook computers because of the ease of typing, and because netbooks could be linked into the main MIS more easily (Saidulloev & Dersham, 2013). The literature strongly emphasises that a successful MIS will use technology appropriate to staff capacity, and not use advanced systems just because they are available (Barca & Chirchir, 2014).

**Flexible incremental systems**

Brazil, Kenya and Mauritius have adopted an iterative approach to their MIS design, which accepts and incorporates feedback from users (Barca & Chirchir, 2014). This tailors the systems to users’ needs, and also fosters a sense of ownership which enables staff to successfully manage the system (Barca & Chirchir, 2014).

MIS which have been built in a modular fashion have been successful (Villalobos et al., 2010). This allows managers to add a new MIS module if the social protection programme changes or adds new components. This flexibility supports the ongoing review and updating which is expected in a social policy programme (Villalobos et al., 2010).

The MIS in the Kazakhstani BOTA programme is identified as successful because it has been flexible (Saidulloev & Dersham, 2013). Over time, the needs of the programme have changed, and the MIS has been able to design, test and implement new functions and modules, which have kept the programme management effective and efficient. This is partly facilitated by in-house capacity to develop and update the MIS.

**Simplicity**

MIS are necessarily large and complex systems. There is some evidence from low-income countries that monitoring compliance with conditions places too great a burden on MIS and cannot be undertaken effectively (Chirchir & Kidd, 2011). Conditions and appeals systems increase the complexity of MIS and potentially make it less effective, leading to an argument that simpler social protection schemes may make the MIS more effective (Chirchir & Kidd, 2011). In large-scale schemes and higher-income countries, MIS tend to collect less information about beneficiaries than in smaller and lower-income situations (Chirchir & Kidd, 2011). The authors suggest that this shows that well-developed MIS are streamlined and minimalist, and that collecting large amounts of data is not always necessary.

**Staffing**

Different countries have recognised that staffing is important for managing MIS effectively. Strategies include (Barca & Chirchir, 2014):

- Designing incentives for attracting and retaining staff (Costa Rica).
- Developing manuals and enforcing their use (Brazil, Colombia, Costa Rica and Mexico).
- Hosting capacity-building days and ongoing training (Brazil, Chile, Iraq, Lebanon, Palestine and Turkey).
- Conducting thematic working groups (Kenya).
- Conducting online education and online consultations (Chile).

In Kazakhstan, the BOTA CCT programme hired an external firm to establish the MIS, and simultaneously hired an MIS specialist to work alongside this team (Saidulloev & Dersham, 2013). This process helped ensure that the specialist knew the MIS well by the time it was handed over (Saidulloev & Dersham, 2013). Staff technical capacity to manage the database is crucial.

**Administrative structure**

A combination of centralised and decentralised management appears to be effective. Overall design and guidance can be centralised, while implementation and data collection is best handled at a municipal level (Barca & Chirchir, 2014).

Brazil’s Cadastro Único database is led by the Ministry of Social Development but day-to-day management is performed by Caixa Econômica Federal (Caixa), a federal bank (Barca & Chirchir, 2014). The municipality is responsible for registering families and updating their information, while the states provide capacity building, infrastructure and identification documents (GIZ, 2012). The oversight of the Ministry means there is a big-picture view of national policies and coverage. The Ministry has entered formal management agreements with municipalities which set out the framework for decentralised implementation (Lindert et al., 2007). This helps clarify the institutional roles, responsibilities and minimum standards expected.

Barca and Chirchir (2014) identify that it can be effective to have an independent unit run a MIS, separate from social protection programme implementers. This can help coordinate the many stakeholders.

**Financing**

MIS are expensive to build and run (Barca & Chirchir, 2014). External financing, especially from the World Bank, has been a key factor in the establishment of several successful systems (Barca & Chirchir, 2014).

Financing can also be used to increase performance. Brazil’s Cadastro Único provides financial incentives to implementing municipalities to encourage quality management (Barca & Chirchir, 2014). These payments, provided monthly, have had a significant impact on the quality and validity of data entries in the MIS (GIZ, 2012). Municipalities are provided funding to invest in:

- Creation of poverty and vulnerability indicators.
- Identification and characterisation of the more vulnerable segments of the population.
- Efforts towards priority attendance of the most vulnerable families.
- Constitution of a network of social promotion and protection which corresponds to existing policies.

**Accountability**

Brazil’s Cadastro Único database has information on 21 million households, which is used to target several different safety net programmes, including Bolsa Familia (Barca & Chirchir, 2014). There are a series of accountability measures built in to the system to help ensure fairness and accuracy: grievance redress...
mechanisms; targeting limits for each municipality; and cross-checking information against other databases (Barca & Chirchir, 2014). For further research on accountability mechanisms in social assistance programmes, see Browne (2014).

**Known challenges**

This section details a few of the issues which are known to hamper success.

Unique national ID numbers for individuals are considered necessary to link beneficiaries with other programmes. However, they are not in wide usage in low- and middle-income countries, which hampers the development of integrated systems (Barca & Chirchir, 2014).

MIS require trained staff, and staff turnover can be a problem if there is a need for training on complex electronic systems (GIZ, 2014).

4. References


http://www.gsdrc.org/go/display&type=Helpdesk&id=1178


https://www.ids.ac.uk/files/dmfile/rr69.pdf


Key websites
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Expert contributors
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