ACCOUNTABILITY INITIATIVE
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Field Notes on Accountability

Interactive Voice Response System: Closing Feedback Loops and Enhancing Accountability in the Mid-Day Meal Scheme

Field Notes on Accountability

The Field Notes Series seeks to document the implementation of accountability mechanisms built into key government programmes for service delivery. These include programs such as the Mahatma Gandhi National Rural Employment Scheme, Public Distribution System, Mid-Day Meals Scheme and others.

No. 5
The current note summarises the key issues affecting the Mid-Day Meal Scheme in Uttar Pradesh and Bihar, and suggests policy recommendations for improving the scheme. It focuses primarily on how the Interactive Voice Response System (IVRS) can be used to strengthen the Scheme.

Other Field Notes
No. 1: Incentivising Rural Sanitation – The Nirmal Gram Puraskar.

No. 2: Rogi Kalyan Samitis: New Spaces for Participation

No. 3: Social Audits in the Public Distribution System: A case study from Andhra Pradesh

No. 4: A Case Study of Interactive Voice Response System based Daily Monitoring in Uttar Pradesh

Introduction

Government of India's Mid-Day Meal Scheme (MDMS) is the largest public school-feeding programme in the world. Launched in 2001, it provides hot, cooked meals to all government elementary school children every school day. The objectives and potential benefits of MDMS are three-fold: increased enrolment, attendance and retention; improved child nutrition; and social equity. A detailed description of the MDMS structure is available in the PAISA Report, *PAISA District Surveys: Mid-Day Meal Scheme (2012)*.

This note draws primarily from fieldwork conducted in Uttar Pradesh's Hardoi district and Bihar's Nalanda district during the Mid-Day Meal Scheme-PAISA District Surveys in July 2012 and February 2013. It analyzes key problems in the implementation of the IVRS at the district, block and school-levels and offers policy changes to address the same.

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Background and Context

In order to create a system that is responsive, the Governments of Uttar Pradesh and Bihar introduced the Interactive Voice Response System (IVRS) to ensure real-time monitoring of the scheme. The IVRS for MDMS was launched first in Uttar Pradesh in June 2010 and the information gathered is accessible through a government-generated username and password on www.upmdm.in. Bihar followed suit in April 2012 (albeit in a limited fashion) on its web site, www.dopahar.org, and made the IVRS data public in November 2012. While the IVRS has been effective in collecting data from the school on a daily basis, it has not successfully replaced a more cumbersome paper-intensive data collection system or plugged gaps in the existing monitoring system in these states.

Use of Interactive Voice Response System (IVRS) in the MDMS

Box 1: How is the IVRS used in the MDMS?

The procedure involves the following steps:

- The headmaster is the primary respondent for the Scheme at the school-level. An automated telephone call is made to headmasters/teachers responsible for MDM, asking them to key in the number of children who have been served MDM that day.

- This call is made between 10:30 am and 12:30 pm every morning. If the headmaster is unable to take the call, the call is automatically routed to the school's most senior teacher.

- Every day, the headmaster/teacher inputs how many students have received their Mid-Day Meal for that day. When they are unable to answer the IVRS call, headmasters/teachers get a repeat-call later that evening so that they can key in their answers.

- A web-based MIS, called the Daily Monitoring System (DMS), is generated by a central server, which electronically collates and analyses data.

- Daily reports detailing the number of children who have received a Mid-Day Meal through the scheme are created. Once compiled, the database can be sorted and analysed by various categories in real time.

Source: Pathak, R (2012), "A Case Study of Interactive Voice Response System based Daily Monitoring in Uttar Pradesh," Field Notes on Accountability, No. 4, *Accountability Initiative: New Delhi. Available at <http://accountabilityindia.in/sites/default/files/policy-brief/ivrs_final_9feb2012_le_4.pdf>*

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The IVRS makes the headmaster the primary respondent, since he/she is the principle authority accountable for the implementation of the MDMS at the school. However, the failure to implement MDMS effectively at the school-level is often a consequence of a number of inter-related factors.

Summary of issues ailing IVRS in the MDMS

Field-work conducted in Uttar Pradesh and Bihar during the PAISA District Surveys (2013) and Pathak (2012)[1] reveal the following issues with the IVRS for the scheme:

1) Limited response from local bureaucracy

The idea behind the IVRS is that if the school reports problems at the school level, district-level staff must visit the school to investigate the problem. Currently, monitoring visits are not based on the IVRS, nor are they followed-up by corrective action to ensure that the MDM scheme is not interrupted. Instead, the officials visit those schools that require the most pressing attention – based on hearsay or complaints that generate significant attention by the staff, parents or administration, and 3-4 other schools that happen to fall along the way.[2]

While the schools visited during fieldwork in Uttar Pradesh reported being responsive to data collection at their end, they felt that the administration did not follow up with equal speed. For example, during the field study, three headmasters reported that they were unable to serve Mid-Day Meals for over a week in 2011-12; they relayed this information through the IVRS as well. However, the Block administration had not paid them a visit to inquire about their problems creating a perception amongst the Headmasters that the IVRS was a futile exercise.

In Bihar, the IVRS asked additional questions once a week, such as whether the school had enough foodgrains and cooking cost funds available. What this was successful in doing, was creating a perception among teachers that it was a useful tool to send real-time information about shortage of

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[1]Pathak, R (2012), "A Case Study of Interactive Voice Response System based Daily Monitoring in Uttar Pradesh," *Field Notes on Accountability, No. 4*, Accountability Initiative: New Delhi. Available at <http://accountabilityindia.in/sites/default/files/policy-brief/ivrs_final_9feb2012_le_4.pdf>

[2]Each State Government sets guidelines for Block and District-level officials to monitor the Scheme. According to the State MDM Guidelines issued in Uttar Pradesh, each member of a District taskforce and Block taskforce has to monitor at least five schools every month. District task force includes members from the Basic Shiksha Adhikari (BSA), to the District Panchayat Members, and District Development Officer and Block task force includes Assistant Basic Shiksha Adhikari (ABSA), to the Block Development Officer to an officer from District office. In Bihar, District officials and MDM-BRPs must visit at least 30 schools each month. Block Education Officers are mandated to cover every school in their block on a regular basis.

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foodgrains or funds at the school-level. However, this information was not actually used by the district or block officials, as discussed below.

2) Data accuracy

Headmasters/teachers serve meals as well as report on how many children are fed in a day. These reports collected by the IVRS are not available to the public or cross-verified by members of the community, thus making it hard to validate the data entered by headmasters. RTE mandates that communities and especially School Management Committee (SMC) members should monitor the Scheme at the school level. Currently, however, they are not invested in the Scheme and left out of the IVRS information loop altogether. This is reflective of the larger issues faced by SMCs in India, where they have not been strengthened and equipped to play an active role in their schools' management.

3) Inadequate information collected

The IVRS was introduced to provide real-time information about scheme implementation at the school-level. However, since the performance of the school is intricately linked with the quantity, quality and timing of grain and grants given to the school to cook a meal, the data currently collected by the IVRS is not enough to diagnose problems effectively. At present, the most important data gaps in the IVRS include: the quantity, quality and timing of grains, and the amount and timing of grants received by the school. Coverage of this information would enable officers to monitor the scheme efficiently.

4) Limited engagement with IVRS data at district-level and below

MDM officials at the block and district levels in Bihar stated that responses through IVRS were collated directly at the state-level. Thus, they were unaware of how the data was analyzed at the state-level. The block and district-level officials only had to verify that HMs were responding to the IVRS each day. The MDM-Block Resource Persons (BRP) – block-level officials hired on contract specifically to monitor MDM in schools specifically - only went to check problems at a school in case the HM had not responded for seven working days. District and block staff do not use the IVRS to determine schools they will monitor. They generally choose a school that they may have received a complaint from or one that they need to follow-up on for other reasons, or sometimes even at random, and visit others that happen to fall on the way. Thus, the manner in which they meet their minimum quota of thirty schools to be visited each month remains ad hoc.

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In Uttar Pradesh, district officials shared that if a school is unable to serve their meals for over three days, officials responsible for monitoring the meal at the Block level must visit the school to investigate the problem. However, this rule was conveyed to us in conversation and has not been included in the formal MDM monitoring guidelines.

In summary the IVRS, especially in Bihar, is a monitoring tool used only by State-level officials, with the district and block officials playing a minimal role in its implementation and data analysis. The local bureaucracy has not clearly understood the purposes of the IVRS and thus their monitoring activities do not engage with the data in any way. It is imperative that such information gaps between the authorities implementing the scheme (i.e., district and block) and monitoring the scheme (all levels) are corrected.

5) Problems with network coverage

At the district-level in Uttar Pradesh, officers stated that not all headmasters answered their calls each day. Therefore, district officers did not have a complete record of meals served and could not use the IVRS to calculate the quantum of grain and grants utilized on a monthly basis – which is the current intended use of the IVRS in the State. According to district officials, schools that were remote did not respond to the phone call during school hours or respond to repeat calls, as their headmasters did not always have network coverage. At the time of the study (February 2013), district officials followed a cumbersome process to analyze school-level consumption patterns. Block officials first collected schools' written records, which were then digitized at the district level, before any analysis was undertaken. This process was further exacerbated by the fact that there was only one MIS officer in the district– upon whom all the responsibility of digitizing and analyzing the data rested.

6) Limited resources

Conversations with District and Block officials revealed that they did not have the time or human and monetary resources required to visit all schools, especially in Uttar Pradesh. As explained above, schools that they did visit were not prioritized based on IVRS data. These officials were not mandated by the district or State to monitor schools based on the IVRS data. As a result, they picked schools at 'random,' often admitting to picking two-three schools on the route that they chose to travel on any given day.

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7) Lack of clear grievance redress mechanisms

Neither implementers nor beneficiaries currently have systematic avenues for airing their grievances about the scheme, especially anonymously. For example, headmasters and teachers often do not know who to turn to when their questions or complaints are not addressed by the block officials and are often disillusioned about approaching the District Authority. Cook-cum-helpers, who frequently face delays in receiving their salaries, also do not have a formal avenue for registering complaints. Finally, there are no formal guidelines or mechanisms for helping students, SMC members, and community members at large register their complaints. Even when headmasters or community members do know who to approach, they are often hesitant to do so due to either the perceived indifference of officers or out of fear or repercussions.

The IVRS could provide a single platform to record and monitor the status of all grievances – for the complainant as well as the officers responsible for ensuring that complaints are addressed. At present, informal complaints go unnoticed until the matter escalates.

Proposed recommendations for improving IVRS

The previous section outlined the major problems afflicting the MDMS in general and the IVRS in particular. In this section, we recommend a few policy changes that would help address some of these issues.

1) Increase engagement of officials by making IVRS data the basis for monitoring

The biggest issue facing the scheme at present is the limited nature of monitoring by officials. The IVRS database can be used as a benchmark to visit schools that report of a problem consistently. For example, if a school reports being unable to serve a meal more than twice a week or over five times a month, it must be made mandatory for the cluster and block level staff to visit that school to inquire of the problem. In Bihar and Uttar Pradesh, the IVRS analysis must be used by the Block and District staff to enable them to monitor schools more efficiently.

2) Increase data accuracy by triangulating IVRS information generated

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Parents and students are currently left out of the feedback system. They are an important source of information with regard to collecting data on how the school functions. Phone numbers of SMC members could be added to the IVRS database and phone calls could be made to them in the evenings to check if their child/ward received a meal in the school that day. Reports from the schools and beneficiaries could be conflated to increase transparency of the data entered in the IVRS by teachers and filled in school records. Finally, data from the IVRS (if a school has not served MDM for over 3 days) should be sent back to people who can respond quickly to the problems faced at the school level through SMS or a recorded phone call. This could include students, and stakeholders who are closest to the school, such as the SMC, *Gram Sabha* and lower-level administrators (Cluster and Block).

3) Link IVRS to a Financial Management System (FMS) to address data gaps

Technology can be drawn effectively in a number of ways to resolve information gaps between schools and the administration. In particular, the IVRS can be linked to a financial management system (FMS) that enables tracking of funds in real time. First, the existing FMS can be developed and strengthened keeping in mind the recommendations of the Technical Advisory Group for Unique Projects[3], Government of India, especially the Expenditure Information Network (EIN) described in its Report. Then, the IVRS can be linked to the FMS as described below.

There are certain data points that are not currently being captured by the IVRS. It could be improved to include the following:

- Timing and quantum of foodgrains and cooking costs received, and then utilized by the school; timing of receipt and payment of cooks' salary; opening and closing balance of school's MDM account. This can be done once a month and linked to the district's MIS. Currently there is a separate MIS in Bihar, which captures consumption data, based on which funds, and grains are sent to the school. This MIS is based on Utilization Certificates collected from the school each month, which in turn are based on the school's registers. Thus, the MIS does not currently capture the timing of grain and fund delivery or the quality of grain delivered.
- All Monthly & Quarterly Progress Reports (MPR& QPR) and Utilization Certificates (UC).

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[3] See Government of India (2011), *Report of the Technical Advisory Group for Unique Projects*. Available here: http://finmin.nic.in/reports/tagup_report.pdf.

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- All critical foodgrain-related information including Release Orders (RO) and Store Issue Order (SIO) prepared by the Food Corporation of India (FCI) and State Food Corporation (SFC) management systems.

In addition, SMS's or automated calls can be sent to all HMs with details on fund and foodgrain transfer to close the information gap between schools and the administration.

4) Strengthen grievance redress mechanisms through a helpline

A special helpline number could be created for HMs and SMC members to record issues emerging in their schools. The system could address general queries & provide real-time support (about norms, procedures, readily available answers for FAQ – such as what to do in case of grain/fund shortage, etc.). This could be facilitated by providing a menu of services, which the caller could choose by keying in number on her phone. Importantly, grievances could be recorded in the IVRS database along with details on the specific official responsible for resolving this grievance. A tracking system can also be introduced to enable HMs and SMC members to track progress on their grievance.

5) Increase citizen involvement and use of data by making records public

As the Report of the Technical Advisory Group for Unique Projects (2011) mentions, "[a] transparency portal leads to monitoring and feedback at various levels: within the service provider, within Government, and by citizens at large." (P 58, Chapter 9) Currently, web sites such as www.dopahar.org and www.mdmsbihar.org of the Government of Bihar and www.upmdm.in of the Government of Uttar Pradesh need further improvement to put out school-level data on the MDMS in the public domain. Detailed data on these websites can be accessed only if you have a government generated username and password. In particular, greater interaction and user-interface with the data must be allowed to enable real-time analytics of the data and quicker detection of problems.

Conclusion

The IVRS has been introduced in Uttar Pradesh and Bihar to address the constraints that afflict the monitoring framework and information channels in the Mid-Day Meal Scheme. At present, it has been successful in collecting data to simplify analysis for the higher (State) levels of the administration. However, for it to truly address deeper structural problems – such as involving

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beneficiaries to participate in monitoring, replacing paper-intensive documentation and easing monitoring pressures, several steps needs to be taken. As discussed above, the information collected by IVRS should expand to cover the entire process of the Scheme and not just the final step of serving the meal, such as the flow of funds and foodgrains. Importantly, the information collected from the school should be triangulated by various sources, including beneficiaries and community members. All of the data collected should be made more transparent, with universal access in real-time. Finally, the administrative system should be overhauled to use this information to deliver on outcomes.

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