Zimbabwe

Adaptive programming
Key to real-time monitoring for stunting reduction

Abstract

The Eastern and Southern Africa Region (ESAR) Programme Monitoring and Response (PMR) Initiative is supporting the United Nations Children’s Fund (UNICEF) in Zimbabwe to develop a community-based near real-time monitoring (NRTM) system to strengthen the evidence-base of the Multisectoral Community–based Approach for Reduction of Stunting (MSCBARS) Programme. Data from households with pregnant women and children under two years of age are complemented by an SMS-based social accountability system to capture client feedback on nutrition and associated interventions. Through citizen engagement, ward Food and Nutrition Security Committees (FNSSCs) use the data to develop and review community action microplans for stunting reduction. Four districts now produce evidence-based action plans informed by their NRTM dashboard data. Adaptive programming allows for responsive and flexible planning and was adopted by UNICEF Zimbabwe to accommodate the identification and resolution of issues which would naturally arise as a result of coordinating two nascent initiatives. Among other things, adaptive programming allowed UNICEF to address a disconnect between health facility-, village- and ward-level coordination structures, as well as the differing paces of the NRTM and MSCBARS programmes. Key learning has arisen around the need to balance delays in implementation, for example to strengthen system design, with undertaking activities in order to test their suitability.

Issue

Malnutrition, particularly child stunting or low height for age, continues to be a major public health concern and socio-economic challenge in Zimbabwe, affecting nearly one in three children under the age of five years (27.6 per cent). A new approach to reducing stunting among children coordinates action across sectors, including nutrition, agriculture and food security, health, water, sanitation and hygiene (WASH), education, and social protection. The MSCBARS Programme, managed by Zimbabwe’s Food and Nutrition Council, is being implemented in four pilot districts, Chiredzi and Mwenenzi in Masvingo Province, and Chipinge and Mutasa in Manicaland Province. The programme seeks to make communities agents for stunting reduction, by enhancing the capacity of community-based FNSSCs to use NRTM and social accountability data for local decision-making (Figure 1).

The MSCBARS Programme previously relied on sporadic and paper-based data-collection. To be effective, a timely data system was needed to manage, implement and monitor nutrition-specific and nutrition-sensitive interventions, and to track the nutritional status of pregnant women and infants. With funding from the US Fund for UNICEF and the Bill and Melinda Gates Foundation, and in partnership with the Government of Zimbabwe, UNICEF has developed a community-based NRTM system based on open source ODK software, to strengthen the evidence-base for the MSCBARS Programme. However, coordinating the two initiatives required an adaptive programming approach to address unforeseen challenges.
Strategy and implementation

The NRTM system design is based on monthly reporting cycles and collects data on nutrition-specific and nutrition-sensitive interventions, behaviours and practices, from households with pregnant women and children under two years of age. This is complemented by data from an SMS-based social accountability system, which allows 60 village committees to respond to monthly client satisfaction polls on stunting prevention service delivery, with the results fed back to sectors and communities for action. Secondary data are collected from district- and ward-level sectoral extension workers.

The qualitative and quantitative data are then fed back to communities in the four pilot districts via five digital dashboards which analyse and visualize data down to the ward level (Figure 2). These show the status of the tracked stunting-related indicators at given points and over time, such as the proportion of households with access to various crops and children receiving vitamin A supplements. SMS alerts are sent to communities on under-performing indicators so that corrective action can be taken.

To allow for flexibility to accommodate adjustments in design, it was planned that the system design process be executed in phases. Implementation was also phased to ensure that lessons were learned to guide the system design refinement process.

Figure 1: Zimbabwe’s Food and Nutrition Security Policy implementation structure, and utilization of NRTM data for action planning by FNSCs at the various governance levels

Lesson 2: Adapting from health facility to ward data-collection and entry

The NRTM data-collection system had been designed around the health facility, where it would be managed by the ward Environmental Health Technician (EHT). However, it emerged during implementation that not all wards had health facilities, and hence resident EHTs. Agricultural extension officers were therefore nominated as the ward focal points for data-collection supervision and entry. However, a further problem was that village health workers who collect the household data may report to more than one health facility, which are in different wards. This resulted in challenges in coordinating data-collection and entry, so the NRTM model was adjusted so that all data processing became ward-based. However, issues remain with coordinating data-collection at the ward level, from a lack of transport, smart phones and pens, to unreliable Internet connection and low motivation of data-collection volunteers. Matimbira Isheunesu, District Nutritionist and FNSC member, Chiredzi District, explains: “Data-collection on a monthly basis using volunteers that are receiving little or no incentives is proving to be the weakest link in this project as inconsistency in data-collection is the order of the day and excuses are also numerous.”

To address the challenge of recurrent shortages of loose paper data-collection tools in the field, UNICEF supported the design and printing of bound longitudinal registers so that a child register could capture and track all data for 24 months from birth, whilst a register for pregnant women could operate for nine months in one tool. In addition, the National Technical Committee is revitalizing the submission of ward-level data through enhancing the use of data-collection tools by ward FNSCs. There are also plans to incentivize village health workers for data-collection and to provide refresher training.

Lesson 3: System refinement as a phased process

In order to ensure that the system spoke to the data needs of users at all levels, it had to be subjected to critical analysis and interrogation by the different stakeholders and users. The technical design of the system was demonstrated to stakeholders for critical analysis and input during a number of ongoing performance reviews. Stakeholders identified design deficits that needed to be addressed to meet the information needs of the
MSCBARS Programme. This process resulted in critical adjustments, for example, in finalizing a functional feedback loop that provides dashboards to the FNSCs and communities which are the users and originators of data, and perfecting an alerts system that informs the FNSCs about key indicators whose performance is below expected levels and requires action.

It was critical that the system refinement process was executed in phases. Throughout the consultative process, stakeholders raised many issues which would have impeded the system design process had they all been incorporated into the system at the same time.

**Lesson 4: Adapting the pace of implementation**

Although the NRTM model was designed to strengthen the implementation of MSCBARS, the two initiatives had different funding sources and different implementation periods (18 months for NRTM and five years for MSCBARS). In order to meet its shorter timeline, NRTM was moving considerably faster and began to generate dashboards when the MSCBARS Programme team was not yet ready to utilize the data.

These shortcomings were addressed through adopting a joint work plan approach and weekly joint planning meetings between focal points of the two components. System changes also focused on aspects that had no implications for data-collection or system design (e.g. enhancing accessibility, analysis and presentation of data). The programme was scaled back to a few wards to generate enough data cycles to support the data utilization and social accountability components, and capacity was built for district-level personnel to provide technical support. As a result of these changes, the NRTM component became a fully functional model and the focus then shifted to data use and social accountability.
While NRTM is the catalyst, it is the community which are actually bringing about change and feeling its impact. The process and the changes made will last, as they are being integrated into the community and their ways of living.”

- Leonard Turugari

Munyaradzi Dodzo, Planning and Monitoring Specialist at UNICEF Zimbabwe, observes: “Development and deployment of an NRTM system should be done in distinct phases with clear objectives and cut-offs. However, the need for and limits of flexibility has to be factored into project design. A project like this is a balance between delaying things, for example to strengthen the design or seek additional funding, and just getting on with things in order to prove a solid concept and leaving a little to chance. We have been building the aircraft as we fly it, but so far we have not crashed! The best learning opportunity is often a failure or setback, so as a result of this approach we can see the destination more clearly than if we had tried planning everything too much in advance.”

Progress and results

Five learning wards in each of the four districts now produce evidence-based action plans informed by their NRTM dashboard data (Figure 3). For example, a monthly action microplan from a ward in Mwenezi District identified the five key problems of malnutrition, school dropouts, teenage pregnancies, low birth weight and lack of hygiene, and proposed associated interventions and target audiences, the resources needed, strategies for mitigating identified challenges, and actions.

Leonard Turugari comments: “While NRTM is the catalyst, it is the community which are actually bringing about change and feeling its impact. The process and the changes made will last, as they are being integrated into the community and their ways of living.”

Figure 3: Example of trends in indicators identified for action in a ward microplan

<table>
<thead>
<tr>
<th>Month</th>
<th>Proportion of breastfed children on minimum meal frequency 6 to 8 months</th>
<th>Proportion of children 0-23 months who were weighed in the past 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct 15 - Dec 15</td>
<td>77</td>
<td>78</td>
</tr>
<tr>
<td>Jan 16 - Mar 16</td>
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<td>Apr 16 - Jun 16</td>
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<td>Jul 16 - Sep 16</td>
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<tr>
<td>Oct 16 - Dec 16</td>
<td>86</td>
<td>89</td>
</tr>
<tr>
<td>Jan 17 - Mar 17</td>
<td>92</td>
<td>96</td>
</tr>
</tbody>
</table>

Source: NRTM system extracts, UNICEF, September 2016
Next steps

As Zimbabwe moves forward with the refinement and scaling up of the NRTM model its priorities are to ensure that the learning cycle has been completed in the 90 non-learning wards in the four districts. To make this effective, training on data analysis, interpretation and utilization for community action microplanning will be supported by data-collection and availability through the NRTM system. Data utilization will be monitored to ensure communities see the value added to development planning through the implementation of mainly low cost but high impact community-led interventions for addressing stunting.

Matimbira Isheunesu concludes: “If it is successful, the initiative has the potential to raise the standard of living in the communities in Chiredzi District to a point where every household owns or has access to a toilet, a nutrition garden for food diversity, safe water and is capacitated in social issues such as gender sensitivity, the significance of education, and utilization of available health services.”