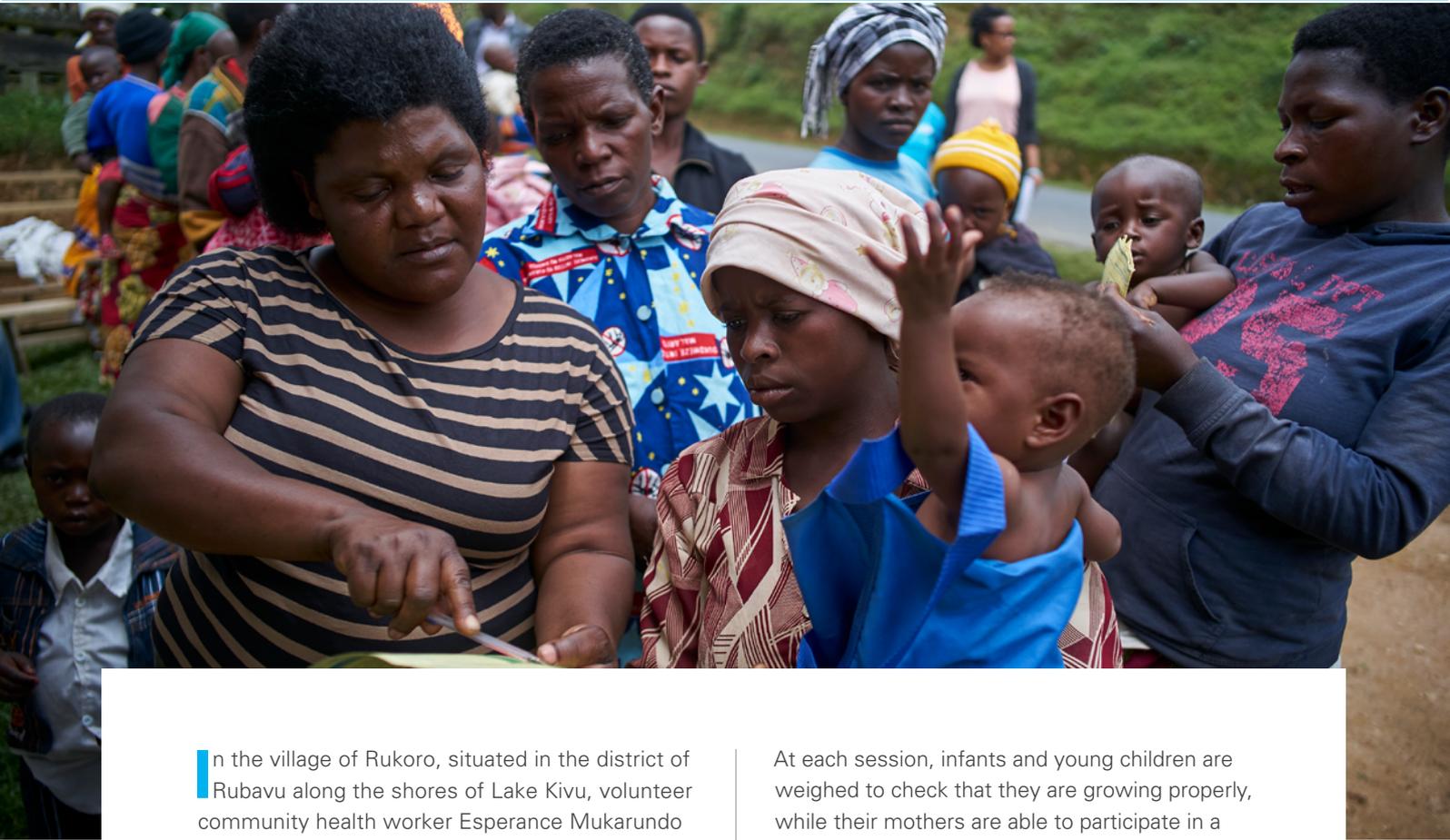


# MONITORING TRACKS MANY LEVELS OF CHANGE



In the village of Rukoro, situated in the district of Rubavu along the shores of Lake Kivu, volunteer community health worker Esperance Mukarundo recalls how only a year earlier, 28 children were detected as acutely malnourished. Most had been in the 'red' category, indicating severe acute malnutrition, which requires inpatient treatment at the local health centre. Today, 8 children still linger in the 'yellow' category, denoting moderate acute malnutrition, which can mostly be treated in families through improved feeding and care practices. But no child is in red. Mukarundo can foresee the day when even the yellow number drops to zero.

She tracks progress closely. Though the national standard is a monthly session, she gathers all mothers in the community who have malnourished children for a 'Child Growth' session each week. Collectively, they learn and reinforce the knowledge Mukarundo has shared with them about how to feed their children a diverse diet of foods appropriate to their age, practice good hygiene and manage small kitchen gardens that provide nutritious vegetables.

At each session, infants and young children are weighed to check that they are growing properly, while their mothers are able to participate in a savings group. Many have used sums from the group to purchase small livestock, such as hens that provide eggs for protein in children's diet. The goal eventually is for everyone in the group to be able to purchase health insurance, so that they can access the full range of health services for themselves and their families.

Mukarundo is highly motivated to lead the fight against nutrition in her village. Part of this is because she is supported by a local committee to eliminate malnutrition, which involves a number of local officials active on agriculture, economic development, health and other issues, including the village chief. Gone are the days when nutrition in the village was an issue mainly for community health workers.

Equally important has been the introduction of Rapid SMS, a system where community health workers use a mobile phone app to report a series of milestones essential to the health and nutrition of young children. It is one part of a system for

monitoring progress in combatting malnutrition that also includes the DevInfo database, which consolidates all indicators for the district plan to eliminate malnutrition.

Tracking in Rapid SMS starts during pregnancy and extends through age two, the so-called first 1,000 days of life. Data streams directly to health centres as well as the national health system, under the name of each mother, reducing the likelihood that individuals will be lost in more generic data collection, and incentivizing community health workers to follow up. If a mother misses a prenatal appointment, for instance, and the community health worker does not report that she has attended it, the system sends a message asking the health worker to follow up.

Speciose is a mother of three in Rukoro. For her first pregnancy, before Rapid SMS was introduced, she remembers she never saw a community health worker. She gave birth at home, as many women in the community have traditionally done. But for her second pregnancy, with Rapid SMS in place, the community health worker came knocking on her door. She received regular antenatal care and delivered at the hospital, after which the community health worker visited again to advise her to breastfeed exclusively until six months and to introduce a diverse diet of complementary foods after that point. Regular health screenings of her children, including growth monitoring, have found that they are well-nourished and thriving.

## A BRIEF OVERVIEW OF THE NUTRITION SITUATION IN RWANDA:



18%  
of children 6-23 months receive a minimum acceptable diet (up from 1% since 2010)



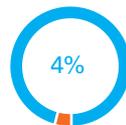
80%  
of households are food secure



54%  
have improved sanitation facilities (58% in 2010)



38%  
of children younger than five are stunted (down from 44% since 2010)



4%  
of handwashing facilities with soap and water is available in 4% of households (2% in 2010)



37%  
of children younger than five are suffering from anemia (down from 38% in 2010)



87%  
of children 0-6 months are exclusively breastfed



73%  
of households have access to an improved water source (75% in 2010)



2%  
of children younger than five are wasted (down from 3% since 2010)

Data sources: The RDHS 2014/15 and the CFSVA 2015.

## WHAT IS BEING DONE BY UNICEF

With support from the Dutch Government, SDC, the IKEA Foundation and USAID, UNICEF is implementing a multisectoral package of nutrition-specific as well as nutrition-sensitive interventions focusing on 19 out of 30 districts in the country. These interventions include:

**Support** to monthly community growth monitoring and promotion sessions, including cooking demonstrations, to teach caregivers on how to prepare a diversified diet from locally available ingredients

**Distribution** of micronutrient powders, Vitamin A and deworming to improve the micronutrient status of children and reduce anemia

**Support** to the management of severe acute malnutrition in children, including screening, referral and treatment

**Training** of caregivers of young children in establishing kitchen gardens and small livestock rearing to supplement the family's diet

**Establishment** of community saving and lending groups for

caregivers of young children to increase access to financing and income generating activities

**Support** to coordination, monitoring and evaluation, learning and knowledge management at district and national levels through training in DevInfo to track district plans to eliminate malnutrition, support to learning visits between districts and training in and support to operational research to capture lessons learned and best practices and identify drivers and barriers for effective nutrition interventions.

## BACKGROUND AND CONTEXT

Rubavu is one of 18 districts where UNICEF and six partners have backed a multisectoral approach to nutrition. The programme operates under the aegis of the Government of Rwanda's national nutrition programme, and through funding from the Government of the Netherlands, the United States Agency for International Development (USAID), the Swiss Development Cooperation (SDC) and the IKEA Foundation. The ACCESS Project is the partner in Rubavu district.

The multisectoral approach links the multiple issues critical to achieving sound nutrition among children, such as child feeding and care, hygiene, access to sufficient income and agricultural practices that make a diverse diet readily available. Districts selected for assistance include those with the highest rates of under-five stunting, poverty and food insecurity.

Rwanda's national plan to eliminate malnutrition, given a national move towards more decentralized provision of public services, prioritized the adoption of multisectoral district plans to eliminate malnutrition. Under these, different district actors plan and coordinate all activities required to reduce malnutrition, including by regularly monitoring and reviewing progress.

Monitoring is critical to track and manage the district plans and provides the evidence to identify

successful interventions as well as bottlenecks. UNICEF has supported districts in strengthening monitoring of interventions included in the district plans using DevInfo, a monitoring tool that can bring together data from diverse sectors and national systems, including nutrition, health and agriculture, and present them in visual compelling ways such as maps. These offer a dynamic visual measure of progress and gaps, including geographically across a district. DevInfo is the only data system in Rwanda that combines all elements of the multisectoral approach to nutrition and is fully aligned with the district plans. Each variable in each set of district data includes a baseline, regular updates and objectives.

UNICEF has also supported the Government in introducing RapidSMS in all 30 districts of Rwanda, including through the multisectoral nutrition programme. This enables patient level monitoring to complement the aggregated data produced by DevInfo. Evidence for improved nutrition programming is being generated through evaluations of different programmes, including one of the Dutch-funded nutrition programmes, where results are expected in early 2017. The national health management information system (HMIS) and SISCOM, a health financing database are also used to monitor nutrition interventions.



Representatives from various organizations and the district look at a map generated by DevInfo during a planning meeting in Gisagara District. © UNICEF/UN016888/Noorani

## METHODOLOGY

As part of identifying some lessons learned in Rwanda, UNICEF commissioned five briefs on themes central to the programme: behaviour change, multisectoral approaches to ending malnutrition, decentralization, monitoring and innovation.

The briefs are based on a review of documents outlining the scope of the programme and reporting on results, as well as over 75 semi-structured interviews with key informants, including national and local government counterparts, partners, men and women participating in the programme, and UNICEF staff in Kigali and New York. The interviews were designed to elicit both technical information and expertise on which interventions were most effective and which required improvement, as well as to capture and document the lived experiences of people who have benefited from project interventions.

The process was based on the pause, learn, share methodology developed by the National Aeronautics and Space Administration (NASA), the US space agency. Aimed at eliciting knowledge based on real-world experiences, it stresses taking time to reflect on recent events, which helps people learn what happened and why.

## LESSONS LEARNED AND RECOMMENDATIONS

### General considerations relating to monitoring for nutrition

#### Gaps remain in capacities to analyse data.

While data on health, including nutrition, is regularly compiled at the village, cell, sector, district and national levels, abilities to apply it to guide the district plans to eliminate malnutrition have required strong support from partners. One has offered regular refresher training for district staff on the basics of how to present and analyse data, seeking to overcome the tendency to think that it is enough to simply compile numbers.

Meetings of committees at different levels charged with implementing the district plans have provided opportunities to demonstrate data analysis in practice. Partners have used them to push people beyond just reviewing data to asking questions and thinking about what they can do about the problems revealed. If a child receiving milk at the health centre is still in the red category of moderate acute malnutrition after several months, why? Who is responsible? Why hasn't the case been resolved so far? What needs to be done next?

One partner has encouraged a more interpretive use of Rapid SMS data to detect risk factors for neglect and malnutrition. If the system reports that children are not being vaccinated or mothers are not going to antenatal care, for example, the community health worker can be tasked to proactively investigate these issues, while also asking about feeding and care practices.

#### Targets may be political rather than technical.

This concern was expressed by a district nutritionist who considered current targets on malnutrition and stunting, while driven by a strong sense of urgency and understanding of these issues as a threat to the future, are too ambitious. He felt the targets do not recognize the complexity of the issue or the time it will take to fully address it. This could lead to perverse incentives if people try to claim that progress is happening faster than it is, or to discouragement if the targets remain far off what has actually been achieved.

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*“You cannot talk malnutrition without data, and you cannot have sound data without strengthening community nutrition programmes as a source of it. While we need to do more on this, community growth monitoring has provided reliable evidence and shown the way forward.”*

—EMMANUEL BAGIRUWIGIZE, ACCESS

### **Monitoring needs to take place on many levels.**

One of the strengths of the multisectoral approach is that it involves people from many different backgrounds, including sectors of the government as well as people within communities. When they come together, whether in a savings and loan group for mothers or in a committee overseeing district plan to eliminate malnutrition, they in some sense monitor each other. That might involve an official from one sector asking fresh questions about data on another sector, or a mother asking another mother whether her child is gaining enough weight. Communities repeatedly demonstrated a comfort or solidarity around issues raised and discussed within community groups.

Partners stressed the importance of quality data originating in communities above all else, because they are the most direct and accurate reflection of the actual status of malnutrition and stunting. Having village level committees actively engaged in locally implementing the district plans can be one avenue of supporting data collection, such as through encouraging community health workers and reviewing progress on simple data on the number of malnourished children. One partner used community scorecards, where community members could track their own progress on basic indicators such as the number of malnourished children, kitchen gardens, small livestock and so on. Some questions were raised on this approach, however, in terms of how it might intersect with other data collection systems, whether it imposed additional duties on communities and how it could be sustained over time.

## **Strengths and weaknesses with using DevInfo as a tool to improve monitoring**

### **DevInfo’s flexible and visually compelling data presentations have generated wider interest in the nutrition agenda.**

Partners and district officials lauded DevInfo’s data presentation capability, which is unique in Rwanda. For an issue like nutrition that has traditionally been low on district development agendas, DevInfo’s colourful maps have been valuable in making the case for persuading a cross-section of people to get involved in eliminating it. This has particularly been the case with higher level leaders focused on multiple district priorities, many of whom have no background in either health or nutrition. One district mayor was so impressed by DevInfo that he suggested applying similar techniques to tracking crime. Another district has extended the system to early efforts to monitor the SDGs.

One benefit of DevInfo, according to district staff, is that it has indicators that can be changed, in contrast to the fixed indicators that characterize national data systems. This allows close alignment with local needs expressed in the district plans to eliminate malnutrition, which are supposed to be updated annually. DevInfo data is easily accessible on a personal computer, unlike national health data, which cannot always be readily obtained on demand, and in some cases require involvement of a data manager.

**DevInfo has required significant support to implement.** Despite training on rolling out the system, a variety of challenges were reported in several districts, requiring extensive investments of time by the partners. In one district, the quality of data improved greatly after the system was translated into Kinyarwanda. There was a learning curve around indicator definitions, some of which varied from national definitions and were not initially well understood.

Technical links to draw in existing data sources were seen as overly complicated, leading staff in one district, despite training, to revert to simply sending new data to the partner to process for inclusion in DevInfo. A district plan to eliminate malnutrition may have over 100 indicators across more than a dozen sectors; links have to be created separately for each data source.

Since DevInfo is based on the district level, people saw it as less useful on other levels, such as cells and sectors. Finally, there was a consistent suggestion that the system be put online, rather than confined to individual computers. Not only would this facilitate information sharing, but would avoid the risks associated with computers being lost or stolen, as happened in one district.

**Broader use of DevInfo may depend on central Government endorsement.** While people in district offices said they liked the idea of DevInfo, they repeatedly noted constraints on money and manpower to make use of it. Some questioned the wisdom of adding what they saw as another data system that needs active maintenance since there are already two systems for health data or three where Rapid SMS has been rolled out, as well as one for agriculture. Training has helped understand the distinct value of DevInfo in presenting information and combining data from different sectors, but there was still a general consensus that use of the system will mostly not extend beyond the life of the UNICEF programme unless it is mandated by the Ministry of Local Government.

Members of the committee to implement the District Plan to Eliminate Malnutrition in one district that is actively using the system said that they would like to be able to use DevInfo across districts to compare progress, which is currently not possible and would not be likely without a national rollout. UNICEF is planning to explore possibilities to roll out DevInfo to all districts, establish online DevInfo data bases, and link district level DevInfo systems with national monitoring and evaluation frameworks.

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*“Under the district plan to eliminate malnutrition, all members of the committee to implement the plan in our cell go to villages for supervision. That gives us the same level of understanding, and because we work as a team, we see more and know what we need to do next”*

—JEANNE UTAMURIZE, IN CHARGE OF GOVERNANCE IN KAMUHOZA CELL, RUBAVU DISTRICT.



Representatives from the district of Gisagara and various organizations watch a DevInfo slide show presentation tracking progress on the District Plan for the Elimination of Malnutrition. © UNICEF

## CONCLUSION

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In Rwanda, regular tracking of activities under the district plans to eliminate malnutrition has raised the visibility of nutrition issues, among technicians in diverse sectors as well as political leaders. It has allowed communities to proudly proclaim that they have no more acutely malnourished children and to realize where they still have more work to do. The UNICEF-supported programme has laid a foundation for strengthening nutrition-related data,

including by introducing the notion of looking at data across the different sectors that contribute to sound nutrition. At the same time, more needs to be done to strengthen local level skills related to multisectoral data analysis and linking analysis with decision making.. Not doing so poses the risk that benefits of the multisector approach will not be captured, and that collaboration among sectors will not advance or could decline over time.

## KEY RECOMMENDATIONS

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Despite the merits of DevInfo, there needs to be a clearer strategy to make sure this has national buy-in, and is not seen as an add-on responsibility.

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SMS technology can provide effective mechanisms to support identifying and following up malnourished children or those at high risk, in addition to providing messages on sound nutrition.

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Additional measures to validate data quality should be factored in, particularly in a multisector initiative that involves diverse measurements across different sectors, each of which may have its own challenges.

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Support for collecting, analysing and acting on data may need to be ongoing, and should be considered beyond initial training and/or the provision of technical inputs.

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## SOME QUESTIONS TO CONSIDER FOR FUTURE WORK

1. For a multisectoral initiative, how can different data systems be brought together?
2. How can data and monitoring capture connections across different sectors?
3. How developed are national/subnational capacities and systems to manage the kind of data collection and analysis required for a multisectoral programme? If there are gaps, how can these be filled, in terms of interim measures and the longer term?
4. How can community level data collection be improved? Can communities be directly involved in monitoring nutrition shortfalls? If so, how would this connect to more formal systems of data management and without overburdening communities and existing systems?

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For more on nutrition work in Rwanda, see:

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2. **Changing Behaviour through Building and Sharing Knowledge**
3. **Bridging Many Sectors to Accelerate Nutrition Results**
4. **Decentralized Planning Mobilizes Local Government to Act on Reducing Malnutrition**
5. **In Pursuit of Innovation**

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