Accelerating Nutrition Improvements

BEST PRACTICES FOR SCALING UP

Examples from Ethiopia, Uganda and the United Republic of Tanzania
Accelerating Nutrition Improvements in sub-Saharan Africa (ANI) was implemented in 11 countries\(^1\) in collaboration between the ministry of health, the World Health Organization and local partners. It was supported by Global Affairs Canada.\(^2\) In the period 2013–2016, all 11 countries implemented nutrition surveillance activities to strengthen health information systems. Four of those countries\(^3\) also carried out nutrition surveys, while three, Ethiopia, Uganda and the United Republic of Tanzania received additional support to scale up nutrition interventions, with a focus on the district level.

Activities for scaling up took place within country-led programmes and strategies and within existing systems in order to avoid duplication and ensure sustainability. All three countries focused on essential maternal, infant and young child nutrition actions during the 1000 days that span conception to the child’s second birthday.

This package presents a description of best practices emanating from the scaling-up work, and describes the processes, techniques and approaches used. These practices were chosen because they led to sustainable results or because they exemplify important values in the processes of planning and implementation.

The nine best practices described in this package are:

- Making the case for addressing anaemia among adolescent girls in Ethiopia
- Strengthening technical skills of health workers improved the quality and coverage of nutrition services in Ethiopia
- Use of outreach strategies to scale up dissemination of nutrition messages reinforced health sector delivery of essential nutrition actions in Ethiopia
- Comprehensive information allowed Uganda to develop nutritious, locally available and affordable recipes for complementary feeding
- Adopting and adapting international guidelines ensured an evidence-informed approach to improving nutrition in Uganda
- Participatory district assessments brought stakeholders together around evidence-informed nutrition actions in Uganda
- Stronger nutrition surveillance within the health system ensured better detection and management of child undernutrition in the United Republic of Tanzania
- Scaling up social and behaviour change communication at community level improved maternal, infant and young child feeding practices in the United Republic of Tanzania
- District-level investments for nutrition increased in the United Republic of Tanzania when capacity was developed for multisectoral planning and budgeting

The three countries showed significant common achievements linked to the best practices

**Increased attention to nutrition:** Government ownership of nutrition interventions was essential in strengthening and accelerating the pace of implementation. Working through formally established community networks and government institutions, ANI has helped strengthen government capacity to prioritize, finance and implement nutrition actions. In Ethiopia, local evidence convinced policy-makers of the need to address anaemia among adolescent girls. In Uganda, participatory district assessments brought stakeholders together around evidence-informed nutrition actions. In the United Republic of Tanzania, district-level investments for nutrition increased when capacity was developed for multisectoral planning and budgeting.

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1 Burkina Faso, Ethiopia, Mali, Mozambique, Rwanda, Senegal, Sierra Leone, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe.
2 Formerly the Canadian Department of Foreign Affairs, Trade and Development.
3 Rwanda, Sierra Leone, Zambia and Zimbabwe.
Enhanced capacity leading to improved quality and coverage of nutrition services: The hands-on nature of scaling-up activities strengthened the capacity of frontline health workers to: promote maternal, infant, young child and adolescent nutrition, manage severe acute malnutrition, carry out social and behaviour change communication and conduct activities on infant and young child feeding and on growth monitoring and promotion. Strengthened technical skills of health workers improved the quality and coverage of nutrition services in Ethiopia. Skills were also enhanced to develop local-food-based recommendations for complementary feeding in Uganda. In the three countries, a total of 9521 officials and health workers at national and sub-national levels were trained on strengthening nutrition services during the course of ANI implementation. Capacity building activities were complemented by post-training follow-up supervisory visits and performance review meetings, which helped ensure the quality of services provided.

An independent external evaluation of the ANI project concluded that scale-up activities led to strong community mobilization around nutrition activities, increased maternal knowledge of the determinants and prevention of child malnutrition in all its forms, active participation of community leaders and fathers in sensitization activities and an improved understanding of the nutritional needs of pregnant and lactating women.

Improved nutrition services focusing on evidence-informed actions: Drawing on the skills of partner nongovernmental organizations with experience in community work, ANI activities contributed to enhancing service delivery at first-level health facility and community levels. The participatory methods applied in the design, implementation and validation of nutrition actions ensured that innovations were based on evidence and were culturally appropriate, and that skills remained within the community to perpetuate acquired good practices. In Uganda, comprehensive information allowed the development of nutritious, locally available and affordable recipes for complementary feeding. Uganda also adopted and adapted international guidelines, which ensured an evidence-informed approach to preventing and controlling malnutrition in all its forms. In the United Republic of Tanzania, stronger nutrition surveillance within the health system ensured better detection and management of child undernutrition.

Reaching out through health and non-health channels: Multiple communication channels were utilized to reach as many community-level target audiences as possible. In Ethiopia, community outreach strategies through, for example, schools and volunteer systems reinforced health sector delivery of essential nutrition actions. Engaging adolescents as nutrition promoters had the double advantage of improving their own nutrition and improving family practices. In the United Republic of Tanzania, scaling up social and behaviour change communication at national, regional, district and community levels improved maternal, infant and young child feeding practices. As part of the outreach, multiple materials for information, education and communication were developed and disseminated to health workers, child caregivers, schoolchildren and the general public. These included posters, brochures, recipe cards, radio messages, T-shirts and other personal collectibles.

More information about ANI can be found at http://who.int/nutrition/ANI_project
Making the case for addressing anaemia among adolescent girls in Ethiopia

Introduction
The Ethiopia National Nutrition Programme 2013–2015 recommended the provision of iron and folic acid supplements to adolescent girls in order to tackle anaemia before pregnancy, and this was incorporated into the ANI project. However, as this would constitute a new intervention in Ethiopia, the planning process required a full understanding of the needs for and feasibility of the proposed intervention. This was done in three steps.

Step 1. Confirming the need to address anaemia among adolescents
The Ethiopia Demographic and Health Survey 2011 reported that overall anaemia rates had decreased among women of reproductive age, and surveys had found adequate intakes of iron-rich foods among women. Nevertheless, given the particular vulnerability of adolescent girls due to rapid growth and the effects of the onset of menstruation, it was considered necessary to monitor and further assess the rates of anaemia in that age group. The Federal Ministry of Health therefore decided to investigate the feasibility of different options for providing iron-folic acid supplements.

Step 2. Conducting a needs and feasibility assessment of iron-folic acid supplementation among adolescent girls
The Addis Ababa University School of Public Health Science was engaged to conduct a survey of anaemia and of the feasibility of mechanisms for delivering supplements in three districts. The survey covered 1323 adolescent girls, 87% of whom were in school. The results of the survey indicated that anaemia rates ranged from 24% to 38%, with an average rate of 29%. Fewer than half of the girls were aware of what anaemia is, and about one third knew of the relationship between anaemia and the intake of iron-rich foods. The great majority of girls interviewed would be willing to take iron-folic acid supplements to improve their health as well as their capacity to learn and to work. Most indicated they would prefer receiving supplements through the health system.

Given the high rate of anaemia found among adolescent girls by the survey, the Federal Ministry of Health decided, in collaboration with WHO, the Micronutrient Initiative and the Global Alliance for Improved Nutrition (GAIN), to further review the impact of iron-folic acid supplementation on anaemia among...
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Step 3. Planning actions based on locally generated evidence

The anaemia study highlighted the need for action by the government and development partners. The anaemia rates observed among adolescent girls indicated the need for intermittent iron-folic acid supplementation as per WHO guidelines, and therefore it was decided to pilot this in ANI focus areas. Meanwhile, communication materials used in outreach activities to adolescent girls were revised to further focus on preventing anaemia through behavioural and food-based approaches; these will be used in and beyond the ANI focus areas.

Results of the process

The anaemia study provided valuable information to the government and development partners including UN agencies, donors and international non-governmental organizations, for their ongoing work in Ethiopia. The need to identify and address the root causes of anaemia in the target group is also being emphasized in the forthcoming National Nutrition Programme.

References

https://extranet.who.int/nutrition/gina/en/node/17834
WHO. Intermittent iron and folic acid supplementation in menstruating women.
http://www.who.int/entity/elena/titles/iron_women/en/index.html

The observed high anaemia rates led to a revision of training and materials as well as community outreach activities to focus on promoting the intake of iron-rich foods and other measures of anaemia prevention.

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Use of outreach strategies to scale up dissemination of nutrition messages reinforced health sector delivery of essential nutrition actions in Ethiopia

Introduction
The Ethiopia National Nutrition Programme 2013-2015 committed to scaling up nutrition actions through the health system, through community-based health extension services (Health extension workers) and through community structures (Health development army volunteers). Through the ANI project, the Federal Ministry of Health leveraged non-health outreach structures including communities and schools to widen the dissemination of nutrition messages, following four main steps.

Step 1. Developing behaviour change communication materials for communities
Information, education and behaviour change communication materials were developed and adapted to promote nutrition-related practices at the community level and in schools. These were based on family health cards and tools previously developed by the Federal Ministry of Health and distributed to households through the health system.

Step 2. Training of local leaders and media personnel
As part of the ANI project, local authorities were engaged in workshops on nutrition, while orientation meetings were held for schoolteachers and other influential community personnel. In addition, local media personnel were trained on nutrition messages and how best to integrate these into their broadcasted programmes.

Step 3. Reaching out to communities through mobile vans and other channels
Mobile vans were used to disseminate nutrition messages at public gatherings, such as markets.

Health extension workers in ANI project areas reported that the combination of health and non-health strategies used to reach communities helped them succeed in reaching a much wider audience.
or religious events. Other channels included the Health development army volunteers and the monthly meetings of pregnant women, where discussions of infant and young child nutrition took place incorporating demonstrations on preparing adequate complementary foods with locally available ingredients.

**Step 4. Reaching out through schools**

Science classes and nutrition clubs also provided opportunities to teach school children about nutrition and health practices. The children then helped disseminate nutrition messages at home and in their neighbourhoods, using the behaviour change communication materials and child nutrition card.

**Results of the process**

A total of 131,289 copies of information, education and behaviour change communication materials were distributed through training courses, sensitization, review meetings, and visits to places such as health centres, health posts, households and schools. In addition, 146 sessions to promote nutrition-based messages using mobile vans reached 355,700 people in ten districts, and 86 schoolteachers were trained to teach nutrition to their students.

Health extension workers in ANI focus areas reported that the variety of strategies used to reach communities helped them succeed in reaching a much wider audience with the nutrition messages. Local leaders now reinforce these key nutrition messages to communities and families. Students who have learnt about nutrition in the school curricula and in nutrition clubs talk to their parents about how babies grow smart and strong if they are exclusively breastfed for the first six months of life. The effect of these efforts to widely disseminate nutrition messages will continue much beyond the life of the ANI project.

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ACCELERATING NUTRITION IMPROVEMENTS IN SUB-SAHARAN AFRICA (ANI)

Best practices for scaling up

Strengthening technical skills of health workers improved the quality and coverage of nutrition services in Ethiopia

The Ethiopia National Nutrition Programme 2013–2015 committed to scaling up nutrition interventions through the health system, notably through Primary Health Care Unit health centres and health posts, as well as volunteers and outreach systems. Three main steps were followed to strengthen technical skills for delivering essential nutrition actions related to adolescent, maternal, infant and young child nutrition (AMIYCN) and to the management of severe acute malnutrition (SAM).

Step 1. Updating of national training materials on AMIYCN and on SAM management

Training materials were updated based on the latest WHO guidelines, then finalized and printed. The materials include facilitator guides, participant manuals, quick references for managing SAM, job aids for AMIYCN, and a tool to support counselling on complementary feeding.

Step 2. Cascade training of health workers

Capacity was built on AMIYCN and on SAM management through training of trainers and subsequent cascade training. In total, 777 health workers were trained on AMIYCN and 709 on managing SAM. They in turn further trained Health extension workers and Health development army volunteers on AMIYCN counselling, on cooking demonstrations, and on identifying and referring children with SAM.

The AMIYCN training focused on behaviour change communication, on skills for counselling and negotiation, and on the preparation of complementary foods for children aged 6–24 months using local ingredients. Practical sessions on preparing complementary foods were conducted in communities using varied food items collected from households and nearby markets.

The SAM training equipped health workers with the basic knowledge and skills needed to manage severe and moderate malnutrition in children less than 5 years of age. This training was conducted using modular materials based on relevant WHO guidelines and the national protocol. It included classroom and practical sessions on principles of care, management of cases in outpatient and inpatient situations, feeding and daily care, as well as monitoring and reporting of therapeutic feeding programme data.

Step 3. Post-training follow-up through supportive supervision

Post-training follow-up visits were conducted to all targeted health facilities. These visits provided the opportunity to evaluate how well the trained health workers applied the acquired skills and to provide reinforcement where needed. A comprehensive checklist was used to enhance the quality of the supervisory sessions. Discussions of challenges encountered in delivering nutrition services were institutionalized in monthly meetings between health centre staff, Health extension workers and Health development army volunteers.

Nutrition interventions are now considered to be among the most important maternal and child health activities. In Moseb Terera, for example, health development army volunteers raise community awareness of proper nutrition, while health extension workers counsel mothers and screen children. All families have basic information about proper nutrition and know the measures to take in case of undernutrition. In just one year’s time, the number of children needing outpatient therapy decreased from 70 to only one.
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Testimony by a Health development army volunteer

A Health development army volunteer who leads a team of 30 other volunteers explains:

“With the training on nutrition, the volunteers discuss and find practical ways of improving feeding practices in the village. For example, they demonstrate preparing a porridge that includes grains and legumes in the ratio of 3:1, enriched with collard greens, potatoes, vegetable oil, and milk. They add the iodized salt after the porridge is removed from the cooker so that minerals do not evaporate. While the children are being fed, the volunteers discuss health and nutrition issues with the mothers using teaching aides when needed. Some volunteers have also started backyard gardens and distribute seedlings among the community members.”

In addition, the health centre staff meets monthly with health extension workers and local community leaders to discuss performance, identify problems, and find solutions. This follow-up system helps ensure a continued focus on providing quality nutrition services.

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Best practices for scaling up

Participatory district assessments brought stakeholders together around evidence-informed nutrition actions in Uganda

The Uganda Nutrition Action Plan (UNAP) 2011–2016 called for strengthened district-level planning, coordination and responsibility. The ANI project supported a four-step process to strengthen district plans and ensure appropriate support from the national level.

**Step 1. Generating evidence at district level to inform scaling up**

The existing commitment and capacity to scale up nutrition actions were evaluated through participatory assessments in the six ANI-supported districts. The assessment methodology was based on Landscape Analysis country assessment tools, perception surveys of the ANI Performance Monitoring Framework and stakeholder mapping through UNAP-SUPA. A total of 216 interviews were carried out with nutrition managers in government and partner agencies and with health facility personnel at national, district, and community levels. This activity required the prior training of 23 national and district health facility managers.

The interviews revealed that the high national-level commitment to nutrition programming was not always translated to district level, where a lack of specific nutrition plans and inadequate financing of nutrition-related activities were observed. Nutrition activities often did not adhere to national guidelines. There was some knowledge related to stunting and anaemia, but less awareness of their causes including inadequate infant and young child feeding practices. Gaps in capacity were also identified, with a need for clear terms of reference for district nutrition focal persons. Finally, there was an uneven distribution of the work of nongovernmental organizations and considerable overlap in activities due to weak district coordination mechanisms.

**Step 2. Agreeing on recommendations for closing gaps in commitment and capacity**

The findings of each district assessment were discussed during a consensus meeting with district-level stakeholders including department heads, members of the district council, health facility managers, health workers, religious leaders and members of village committees. Participants identified the main gaps to be addressed, and agreed on actions to be taken by various stakeholders.

Specific recommendations largely concerned improved planning, decision-making, coordination and tracking of resources. Required support for scaling up nutrition actions mainly focussed on building capacity, strengthening health systems, facilitating coordination and providing the necessary equipment, supplies, materials and tools. It was also agreed to include local nongovernmental organizations in capacity-building efforts, to conduct village meetings to review nutrition interventions that were currently being implemented, and to strengthen supportive supervision.

A set of general recommendations was developed to enhance the scale-up of nutrition actions at district level throughout the country. For example, it was

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1 Uganda Nutrition Action Plan 2011–2016 (UNAP) Scaling-Up Planning Approach (SUPA), part of a pilot exercise carried out by the Prime Minister’s Office supported by REACH.
recommended that the Ministry of Health should disseminate nutrition-related IEC and other materials more widely, that districts should mainstream nutrition in their annual budgets, and that health facilities should nominate nutrition focal persons.

Step 3. Strengthening capacities for district planning

To support the recommended activities, 24 district health team members and four national staff were trained to plan, cost and implement nutrition programmes as part of health sector planning. Training modules were modelled on WHO materials for managing maternal and child health programmes. 2

Step 4. Developing and implementing district-level nutrition action plans

Each of the six ANI-supported districts used the assessments to develop district nutrition plans. These plans focused on evidence-informed interventions, such as early and exclusive breastfeeding, appropriate complementary feeding and supporting healthy dietary practices among women of reproductive age and adolescent girls. Emphasis was put on food-based approaches that use locally available nutrient-dense foods.

Results of the process

All districts developed action plans for scaling up nutrition activities, which were linked with other ANI activities such as training and supportive supervision. This process built the capacity of staff in the


Ministry of Health, national academic institutions and nongovernmental organizations to: comprehensively and jointly assess the commitment and capacity to scale up nutrition actions at district level, agree on recommendations for closing observed gaps and incorporate and budget for recommended actions in district nutrition plans. It should also be noted that the inclusion of all relevant stakeholders as part of the project team was essential, and the multiple meetings and gatherings throughout the process fostered strong district level coordination.

Although the ANI project focused on only six districts, the results of these assessments pinpointed common gaps in commitment and capacity that should be helpful for planning for scale-up across the entire country.

References


“...When I went to visit one of my beneficiaries, I found another partner providing the same resources to the same household that I had gone to visit...”

NGO respondent in Iganga District
Adopting and adapting international guidelines ensured an evidence-informed approach to improving nutrition in Uganda

The Uganda Nutrition Action Plan (UNAP) 2011–2016 emphasized growth monitoring and the provision of appropriate nutritional care at health facility and community levels. The process of adopting and adapting international guidance on child growth monitoring and promotion as well as on detection and management of cases of severe acute malnutrition (SAM) entailed three main steps.

**Step 1. Recognizing the need to update national guidelines and protocols**

The UNAP 2011–2016 highlighted the need for integrating actions to prevent and control malnutrition in all its forms; it also called for scaling up related cost-effective community-based initiatives including growth monitoring and promotion and the management of SAM. At a stakeholder meeting held to review the need for updating existing guidelines and protocols and to identify challenges in using them, it was recognized that existing national materials were not aligned with recent global guidance. The updated global manual on infant and young child feeding and growth assessment emphasizes the timely identification of – and effective counselling to prevent – stunting among children 0–23 months of age. The revised global SAM guidelines allow more children to be treated at home with the appropriate nutritional and medical care.

**Step 2. Building capacity to update national protocols, guidelines and training materials**

With the participation of nutritionists from the national and district levels and the support of WHO, global tools were assessed and adapted to the local context. This included pictures, questions and answers, and the use of locally available tools and equipment to assess, evaluate and monitor the provision of services. In the context of the ANI project, workshops and training courses were organized on SAM management and on the protocol for growth monitoring and promotion. The workshops focused on strengthening the capacity of Ministry of Health staff at district and national levels, but also involved national research institutions and nongovernmental organizations.

In addition, the national guidelines, protocols and training materials on Integrated Management of Acute Malnutrition (IMAM) were revised to align with updated WHO recommendations on criteria for admission and discharge, as well as on selected aspects of nutritional and medical management. A five-day training course on Inpatient therapeutic care¹ was developed for senior nurses/midwives, clinicians and nutritionists. Draft manuals for outpatient therapeutic care, supplementary feeding programmes and community participation were also developed.

¹ The training package contains an introduction, seven training modules, clinical instructor, facilitator and course director guides, photo booklets, answer booklets and a training video.
Step 3. Training health workers and rolling out the revised guidelines and protocols

In total, 554 health workers and village health teams were trained on infant and young child feeding and community-level growth monitoring and promotion. An additional 549 health workers were trained on the management of SAM; 165 of these were provided mentorship and supportive supervision.

Results of the process

The activities described are part of an integrated package for monitoring and promoting children’s growth, including referral and the appropriate management of SAM cases. The process built the capacity of Ministry of Health staff, national academic institutions and nongovernmental organizations to review global guidance, adapt it to the national context, and roll out actions to community level. Whereas ANI support was limited to six districts, the updated protocols and training materials will benefit the entire country.

During health facility mentorship on the management of children with SAM, it was noted that some facilities had adopted clinical monitoring forms such as the critical care pathway and 24-hour food intake charts.

In addition to an improvement in nutritional status of children over a two-year period, data from the 2016 Demographic and Health Survey showed an increase in the numbers of women who: received nutrition counselling, attended antenatal care, took up iron-folic acid supplementation and initiated breastfeeding earlier. These improvements may be attributable to the improved skills of health workers.

A mini-endline survey indicated improvements in infant and young child feeding practices as compared to baseline.

References


Comprehensive information allowed Uganda to develop nutritious, locally available and affordable recipes for complementary feeding

The Uganda Nutrition Action Plan (UNAP) 2011–2016 identified poor complementary feeding practices as a major contributing factor to high rates of stunting. In a process entailing four steps, Uganda used a thoroughly evidence-informed approach to improve these practices. The data collected also allowed messages and dissemination strategies to be adapted to the local context.

**Step 1. Generating comprehensive local information on nutrition status, dietary patterns and food availability**

The Ministry of Health, supported by WHO, conducted a series of surveys based on the ProPAN\(^1\) methodology:

- A household survey of more than 2000 children under 2 years of age, including 24-hour dietary recall, anthropometric measurements and anaemia assessment;
- Surveys and focus group discussions with caregivers on relevant knowledge, attitudes and practices;
- An observational study of infant and young child feeding practices;
- A market survey of costs and seasonality of foods.

Undernutrition was found to be rife: 29% of children were stunted, 13% were wasted and 81% suffered from anaemia. Breastfeeding and complementary feeding practices were inadequate. Less than one third of children consumed enough calories and fewer than 10% met the daily requirements for intake of key nutrients. There were low amounts of animal-source foods in the diets. Parents had limited exposure to health and nutrition messages.

Furthermore, district assessments and mapping of complementary feeding programmes had found that although most facilities did counsel on complementary feeding, the content of this counselling needed improvement especially in terms of continued breastfeeding, safe preparation of complementary foods, adequate meal frequency and use of fortified foods.

**Step 2. Developing improved recipes for complementary feeding**

The Uganda team generated locally available, affordable and acceptable recipes for complementary food through use of the OptiFood software. This free software identifies the lowest-cost combination of local foods that will meet or come as close as possible to meeting the globally defined nutrient needs of specific target groups. In Uganda, appropriate foods available throughout the year included sweet potato, fruit, green leafy vegetables, beans, groundnuts, millet, soy flour, mukene (a local fish), eggs and milk. The analysis highlighted that locally available and affordable diets would still not provide sufficient iron and zinc, therefore fortification strategies were planned.

Preliminary results of promoting the new recipes indicated improvements in infant and young child feeding practices.

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\(^1\) ProPAN (Process for the promotion of child feeding) was developed jointly by the WHO Regional Office for the Americas and UNICEF with contributions from the U.S. Centers for Disease Control and Prevention (CDC), Emory University, and the FANTA Project. Materials are available in English, French and Spanish and may be accessed for free at [www.paho.org/propan](http://www.paho.org/propan).
Step 3. Testing for feasibility through TIPs

Trials of improved practices (TIPs) were carried out to test the recipes generated. These trials explored the feasibility of putting the food-based dietary recommendations into practice, in terms of access, cost, seasonality and preparation methods. They also looked at factors such as taste, food taboos and compatibility with current beliefs and practices. The exercise, involving 120 households, showed that although most recipes were acceptable, the frequency of preparation needed per week was an important limiting factor.

Step 4. Developing and rolling out social and behaviour change communication (SBCC)

Based on the knowledge-attitude-practice survey, social and behaviour change communication materials were developed to promote and support the use of the complementary food recipes. Materials included flip charts, posters, radio spots and counselling cards. The recipes were promoted through multiple channels and events aimed at mothers, their spouses and other caregivers of children less than 2 years of age, and included community dialogues, cooking demonstrations, discussions at health centres. They were also promoted through community leaders and village health teams, as well as media.

Results of the process

Recipes for improved, locally available complementary foods were developed for the Eastern and Western regions in Uganda. A mini-endline survey conducted after having promoted the recipes and rolled out SBCC indicated improvements in infant and young child feeding practices as compared to baseline.

This process also built the capacity of Ministry of Health staff, national academic institutions and nongovernmental organizations to gather and utilize local data to design effective, targeted interventions. Training methods included classroom learning, practice in the field and hands-on technical assistance. The process also used software and tools that are widely available and free of charge. Given the success of the recipes and the level of capacity built in improving complementary feeding practices, it is expected that the process will be extended to other regions and districts of the country without further need for technical assistance.

Examples of a food-based recommendation and related messages

The TIPs revealed that mukene was available and accessible in the target communities, but that mothers did not commonly give it to small children. Some of the reasons reported for this were lack of knowledge of the nutritional value of this small fish, the opinion that the flavour was too strong for young children and the perception of mukene as a food for poor people. The TIPs also found that child growth and prevention of childhood illnesses were common concerns among mothers.

The following table, extracted from the list of food-based recommendations, shows one example of a recommended recipe and the corresponding messages to promote it.

<table>
<thead>
<tr>
<th>Recommendation 4:</th>
<th>Key messages to assist promotion:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stir a spoonful of dried mukene powder through your child's porridge every day</td>
<td>Mukene is rich in vitamins and minerals that help your child grow well and stay healthy</td>
</tr>
<tr>
<td>If your child is not used to eating mukene, start with small amounts first and gradually build up to a full spoonful</td>
<td>If your child is not used to eating mukene, start with small amounts first and gradually build up to a full spoonful</td>
</tr>
<tr>
<td>Mukene is an affordable, easy food to give and is good for your child</td>
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</tr>
</tbody>
</table>

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District-level investments for nutrition increased in the United Republic of Tanzania when capacity was developed for multisectoral planning and budgeting

Introduction
The National Nutrition Strategy 2011/12–2015/16 outlined key nutrition interventions to be scaled up throughout the country. Implementation was managed by a decentralized and participatory planning and budgeting process that gave each village, ward, and district the voice to define their specific needs, opportunities, and obstacles. In the context of the ANI project, the country team followed four main steps to develop and support district capacity for assessing, planning, and budgeting nutrition activities. The increased capacity and the continued advocacy led to a Presidential directive on district-level funds for nutrition activities.

Step 1. Developing a methodology for participatory district assessments
The district assessment methodology was based on a District Gap Analysis tool for nutrition, developed following the Landscape Analysis in 2012. The methodology focused on multisectoral coordination and partnership, financing, information systems, human resources, and nutrition interventions.

Sixteen national-level facilitators were trained to lead the participatory workshops. These facilitators subsequently trained the members of district and council Health Management Teams who supported workshops in the districts. To further enhance capacity, 72 regional and district officials from all sectors were trained in nutrition planning and budgeting by the Tanzania Food and Nutrition Center (TFNC) with support from Save the Children.

Step 2. Conducting participatory district assessments
Participatory district assessments were conducted in all ANI districts. The assessments involved interviews with district partners and health facility staff, plus a week-long workshop with stakeholders including district officials from various sectors (health, agriculture, community development, education, and environment), local nongovernmental and faith-based organizations, as well as private sector employers in the districts. In total, 236 stakeholders were engaged in the assessments. Participants learned about the causes and consequences of undernutrition. They identified the causes in their districts, nutrition actions needed to address those causes, potential bottlenecks in scaling up those actions, and possible activities to overcome the bottlenecks. These actions were prioritized and costed, and responsibilities were agreed.

Step 3. Ensuring incorporation of nutrition into annual district plans and budgets
Officials in the ANI districts used the list of prioritized and costed actions as a basis for developing comprehensive nutrition action plans and budgets. Information on the causes of undernutrition and bottlenecks for implementation was incorporated into PowerPoint presentations and used to advocate for investments in nutrition at district planning and budgeting meetings. This information, accompanied by advocacy efforts at the regional level, helped ensure the inclusion of prioritized nutrition activities in sectoral annual plans and the allocation of district funds to nutrition within different sectors.
Step 4: Advocacy to influence policy for nutrition budget appropriation and release

High-level advocacy meetings were also held at national level to ensure that the nutrition budgets submitted by the district/regional governments were passed by the parliament. A High-level Steering Committee for Nutrition, with WHO as a member, advocated to the Office of the President for district budgetary allocations to nutrition. This led to a Presidential directive for districts to provide TZS 500 per child per year for fiscal years 2016–2017 and 2017–2018, which in turn resulted in an annual allocation of TZS 1.2 million (US$ 598 000) for Lindi, an increase of 372%, and TZS 2 million (US$ 984 000) for Shinyanga, an increase of 99%. These allocations will be used to sustainably support the work previously funded under ANI.

Results of the process

National and district-level health workers and staff of nongovernmental organizations reported that the training had greatly contributed to raising the profile of nutrition in the region and districts. Concretely, it had served to convince decision-makers to integrate priority nutrition interventions into their sectoral plans and budgets. Nutrition steering committees at national and district levels took on a greater role in advocating to prioritize nutrition. As a result, all ANI districts developed costed, multi-sectoral nutrition activity plans, and in all districts the planned budget for nutrition increased dramatically.

In ANI districts, partnerships and joint programmes were built among and between government partners and local nongovernmental or civil society organizations. District-level stakeholders reported that initial conflict and blaming between partners were resolved by joint planning and by the creation of a project steering committee.

At the national level, the ANI project influenced the High-level Steering Committee for Nutrition to advocate with the President’s Office for district nutrition budgets.

References


Tanzania Food and Nutrition Center 2013. Guideline: Conducting a District Gap Analysis to develop a District Scale Up Plan for Nutrition

More information about ANI can be found at http://who.int/nutrition/ANI_project

Accelerating Nutrition Improvements in sub-Saharan Africa (ANI) was implemented in 11 countries (Burkina Faso, Ethiopia, Mali, Mozambique, Rwanda, Senegal, Sierra Leone, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe) in collaboration with the World Health Organization and local partners, and was supported by Global Affairs Canada (formerly the Canadian Department of Foreign Affairs, Trade and Development). ANI supported countries to improve nutrition surveillance activities through strengthening health information systems, and to scale up nutrition interventions. In the United Republic of Tanzania, the ANI project was implemented in 12 districts in two regions under the leadership of the Tanzania Food and Nutrition Centre and the Ministry of Health and Social Welfare in partnership with Save the Children.

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Scaling up social and behaviour change communication at the community level improved maternal, infant and young child feeding practices in the United Republic of Tanzania

The National Nutrition Strategy 2011/12–2015/16 highlighted social and behaviour change communication (SBCC) as a means to improve nutrition in the 1000 days spanning conception to the child’s second birthday. A comprehensive SBCC strategy was developed in 2013. The ANI project supported the implementation of SBCC activities intended to reach a broad audience, covering decision-makers at national, regional and district levels, communities, mothers and women of reproductive age. The process, which capitalized on earlier efforts, entailed four steps.

**Step 1. Conducting an inventory of SBCC materials for nutrition**

The Tanzania Food and Nutrition Center (TFNC) and its partners had developed numerous SBCC materials on nutrition over previous decades. The ANI project brought together a multisectoral working group consisting of government, UN agencies and nongovernmental organizations to oversee an inventory of those materials and develop a SBCC implementation plan.

**Step 2. Adapting SBCC materials to different target groups**

Based on the inventory, the ANI project developed materials and messages on essential nutrition actions towards achieving the Global Nutrition Targets.¹ For decision-makers, local leaders and the media, fact sheets and nutrition profiles were developed to highlight undernutrition including inadequate feeding practices. Policy briefs showcased key interventions for infant and young child feeding as well as gaps in current public expenditure on nutrition. Media materials included a video on stunting, radio spots, jingles and TV advertisements. For community outreach, flipcharts, brochures and posters were produced to be used at events, gatherings and in health centres. Training materials were developed to strengthen SBCC-related capacity among district managers and local leaders.

**Step 3. Developing capacity to conduct SBCC campaigns**

Across the two ANI-supported regions of Lindi and Shinyanga, 70 trainers were trained to plan, implement and evaluate SBCC campaigns. These trainers subsequently trained district representatives from the sectors of community development, social welfare, education, water and sanitation, agriculture and livestock development, health and nutrition. Follow-up training was also carried out with two creative Tanzanian cultural groups.

In addition, 279 health workers were trained to be infant and young child feeding counsellors covering subjects such as exclusive breastfeeding, complementary feeding, maternal nutrition, hygiene and sanitation, balanced diet, growth monitoring, family planning and infant feeding in the context of HIV/AIDS.

**Step 4. Rolling out SBCC at national, regional, district and community levels**

The trained district representatives conducted SBCC for their respective constituencies and target groups, through community campaigns, community

¹ The Global Nutrition Targets 2025 adopted by the World Health Assembly (WHA 65.6) in 2012, together with the comprehensive implementation plan on maternal, infant and young child nutrition, include stunting, wasting and overweight for children under 5 years of age, anaemia in women of reproductive age, low birth weight and exclusive breastfeeding ([http://www.who.int/nutrition/global-target-2025/en/)](http://www.who.int/nutrition/global-target-2025/en/)
dialogue meetings and public service announcements. Advocacy events at the national, regional and district levels also included road shows, community theatre and local folklore. Local leaders and other influential community members such as traditional dance groups, comedians and tribe leaders were engaged in a variety of activities, ranging from cooking demonstrations of complementary foods to community dialogues on essential nutrition actions. During the World Breastfeeding Week in 2016, more than 40 000 mothers and caregivers were counselled on infant and young child feeding, while community health workers advised more than 87 000 mothers and caregivers on maternal, infant and young child feeding during routine antenatal and postnatal care visits. Community dialogue sessions reached more than 37 000 individuals, while radio spots and text (SMS) messages were estimated to have reached more than 800 000 people in 2015 and 2016 combined.

In total, more than 500 000 brochures on maternal, infant and young child feeding were produced and distributed in communities. Supporting materials included booklets, banners, flip charts, t-shirts and caps.

Results of the process

Nutrition gained significant visibility among decision-makers in the ANI districts as result of the SBCC campaigns. With the high number of beneficiaries reached within a short time frame (see table), community awareness and skills to adopt appropriate infant and young child feeding practices also increased substantially.

The SBCC inventory constitutes a resource that can be adapted for future campaigns. Likewise, the SBCC materials and tools developed for the ANI districts can be extended to other areas of the country. The trainers can be deployed to ensure a rapid roll out in other regions and districts.

<table>
<thead>
<tr>
<th>Event</th>
<th>Number of beneficiaries reached</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooking demonstrations</td>
<td>3797 lactating mothers</td>
</tr>
<tr>
<td>World Breastfeeding Week</td>
<td>40 766 mothers and caregivers</td>
</tr>
<tr>
<td>Community dialogues</td>
<td>37 460 adults</td>
</tr>
<tr>
<td>Radio spots and SMS messaging</td>
<td>831 665 people</td>
</tr>
</tbody>
</table>

References

Stronger nutrition surveillance within the health system ensured better detection and management of child undernutrition in the United Republic of Tanzania

The National Nutrition Strategy 2011/12–2015/16 called for strengthening nutrition surveillance through routine monitoring and surveys. Under the ANI project, child growth monitoring was strengthened as part of routine surveillance within the health system in a process that entailed four main steps.

**Step 1. Assessing gaps and opportunities in nutrition surveillance within the health system**

Reviews of nutrition surveillance in the country had reported a series of gaps in available data. Whereas nutrition prevalence data existed for the national level, few or no indicators were available at regional and district levels. Indications of wide geographical disparities, found through routine growth monitoring, suggested that this information would be important for planning.

Health management information systems (HMIS) provide an opportunity for the routine collection of nutrition data to trigger rapid response. A review of the HMIS data collection tool by the Ministry of Health and Social Welfare, supported by WHO and other partners, found that seven out of 15 registers used in health facilities collected nutrition indicators. These registers were: outpatient, inpatient, antenatal care, labour and delivery, postnatal care, child health and community information.

**Step 2. Redesigning nutrition indicators within HMIS**

The nutrition indicators from the seven registers were consolidated into a single nutrition register. Those indicators found to be incomplete, outdated or inconsistent with World Health Assembly global indicators were updated or revised to align with those included the Global Nutrition Monitoring Framework. For example, indicators for kwashiorkor, marasmus and marasmus-kwashiorkor were replaced by indicators for moderate acute malnutrition, severe acute malnutrition without oedema and severe acute malnutrition with oedema. Other indicators were added, such as overweight and obesity for school-aged children and women of reproductive age.

**Step 3. Strengthening capacity for nutrition surveillance within HMIS**

Nutrition surveillance training modules were developed and rolled out by cascade training to staff in all 413 health facilities, including hospitals, health centers and dispensaries, in the ANI-supported districts. In total, 435 health workers were trained on anthropometric measurement, on growth monitoring and promotion, and on the updated WHO Child Growth

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1 Development of the Global Nutrition Monitoring Framework was requested by the World Health Assembly (WHA67(9)) in 2014 in order to monitor the progress in achieving the six Global Nutrition Targets 2025 adopted by the World Health Assembly (WHA65.6) in 2012. In addition to the seven core indicators, World Health Assembly subsequently endorsed 14 indicators covering intermediate outcomes, processes and policy environment factors (http://www.who.int/nutrition/global-target-2025/en/)
Standards. In addition, anthropometric measuring equipment (mid-upper arm circumference (MUAC) tapes, height/length boards, weighing scales and age calculators) was procured for all health facilities.

The HMIS training manual was revised to reflect the updated nutrition indicators. In total, 957 health workers and members of Regional and Council Health Management Teams were trained. The HMIS desks at regional and district levels were provided the necessary hardware and software.

**Step 4. Linking nutrition surveillance to improved nutrition services**

Strengthening skills and ensuring the availability of equipment enabled health workers to tailor counselling sessions and interventions to the needs of each child. Through the ANI project, the training on surveillance was linked to other training such as counselling on infant and young child feeding and management of severe acute malnutrition. Communication tools, job aids and supplies needed to manage micronutrient deficiencies and severe acute malnutrition were provided to further help health workers carry out their tasks.

**Results of the process**

The ANI project helped strengthen health worker skills on nutrition monitoring, provided equipment for health facilities, institutionalized nutrition surveillance within HMIS, and linked surveillance activities to capacity building on essential nutrition actions.

Health workers and government officials reported improvements in both the quantity and quality of nutrition data. Responses to the ANI perception surveys indicate that health workers gained an increased level of confidence in performing anthropometric measurements, plotting and interpreting growth charts and analysing nutrition data.

In addition, the HMIS platform showed an increase in the proportion of health facilities reporting on nutrition indicators, including the distribution of vitamin A and iron-folic acid supplements. More than 80% of health facilities now have the necessary equipment, and nearly all of them have confirmed their use. Trained health workers are able to collect and report data on wasting, stunting and underweight. Within six months, 1635 cases of severe acute malnutrition were treated, while the mothers and caregivers of those children were also counselled on optimum maternal, infant and young child nutrition.

The monitoring and supervisory tools in use by the regions were also revised to incorporate nutrition indicators. After having been pilot-tested, the revised tools are now being used in the ANI-supported areas.

A quarterly scorecard was developed as a means for the districts to have regular and updated nutrition information from their communities. The scorecards helped to institutionalize and create demand for nutrition data; they are being used to draw attention to the nutrition situation and to advocate for increased investments.

**References**


More information about ANI can be found at [http://who.int/nutrition/ANI_project](http://who.int/nutrition/ANI_project)