ACCELERATING NUTRITION IMPROVEMENTS IN SUB-SAHARAN AFRICA

SCALING UP NUTRITION INTERVENTIONS

FINAL REPORT 2012-2016

World Health Organization

Global Affairs Canada

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Contents

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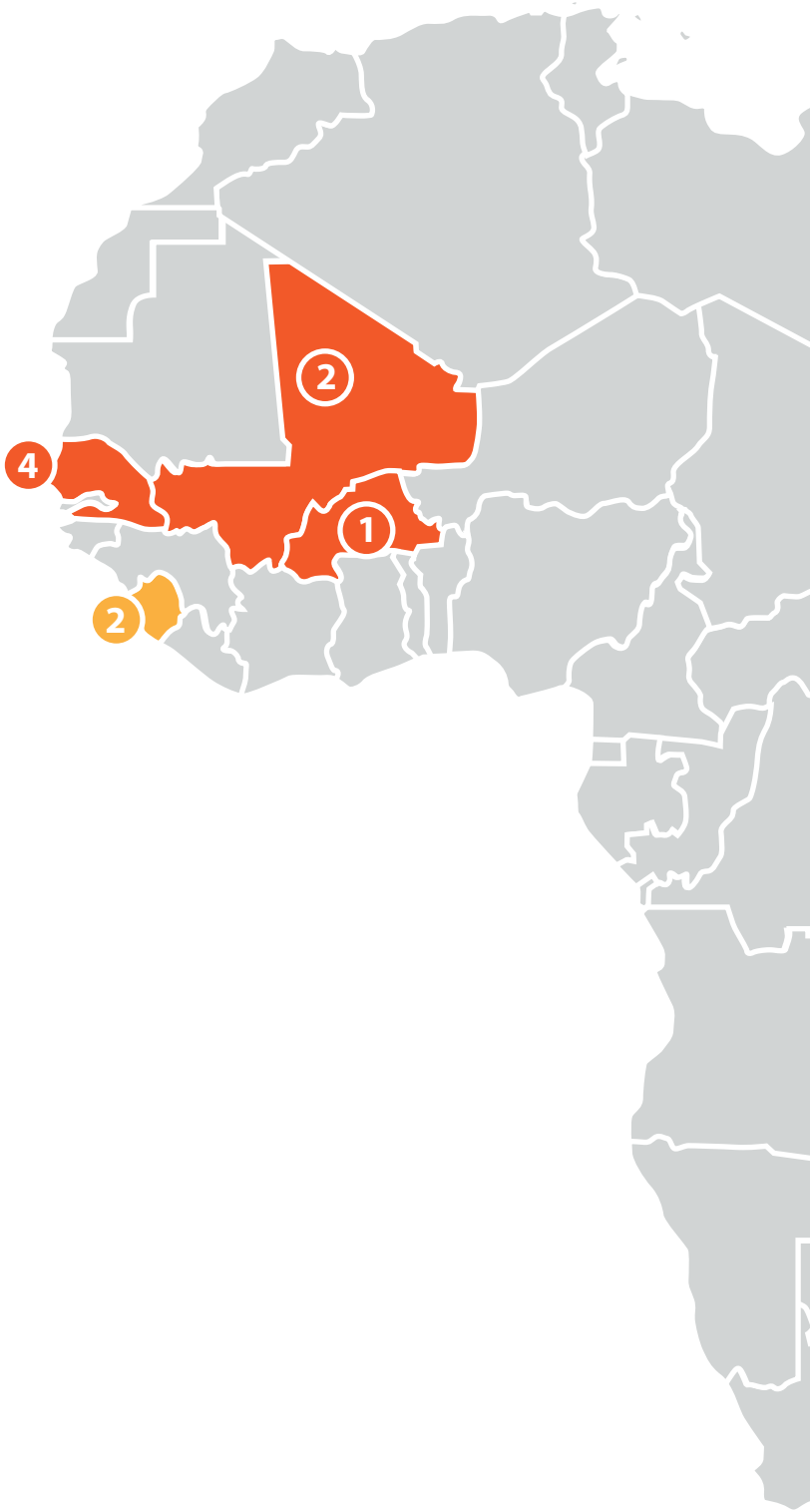
Submitted by:

Dr Francesco Branca

Director of Nutrition for Health and Development

World Health Organization

ANI Project Map



Surveillance

1. Burkina Faso
2. Mali
3. Mozambique
4. Senegal

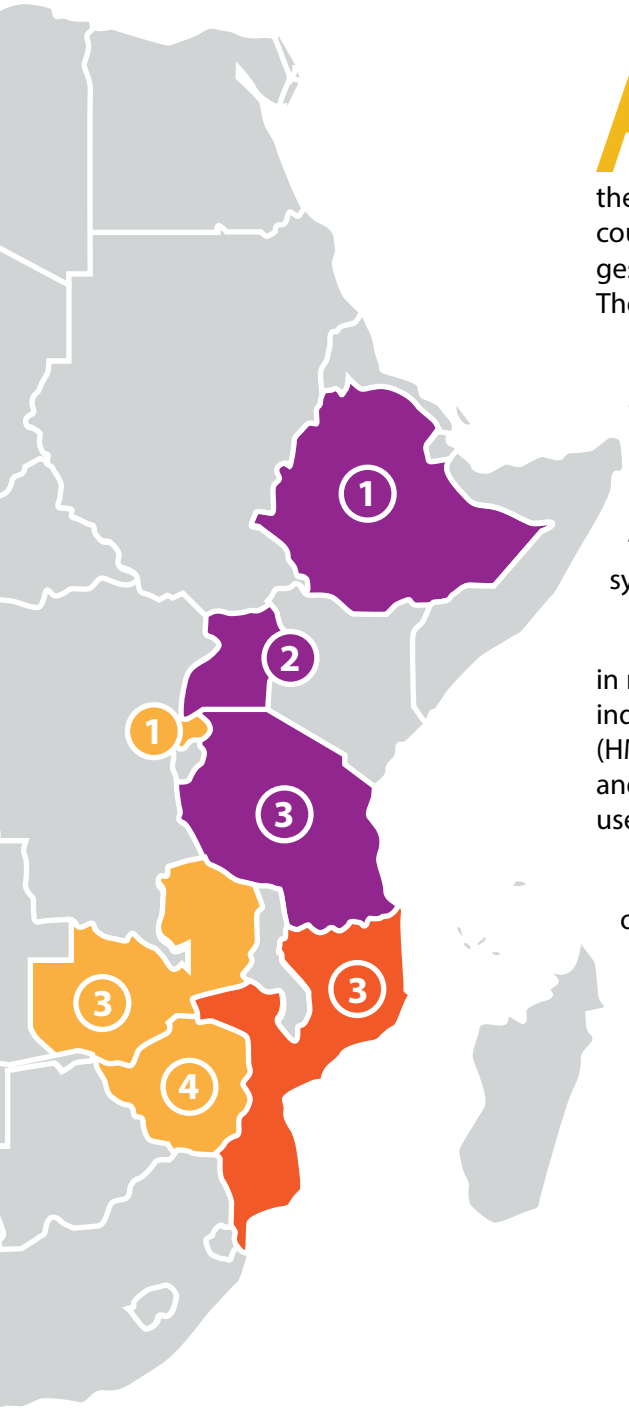
Surveillance + scale up

1. Ethiopia
2. Uganda
3. United Republic of Tanzania

Surveillance + surveys

1. Rwanda
2. Sierra Leone
3. Zambia
4. Zimbabwe

Executive Summary



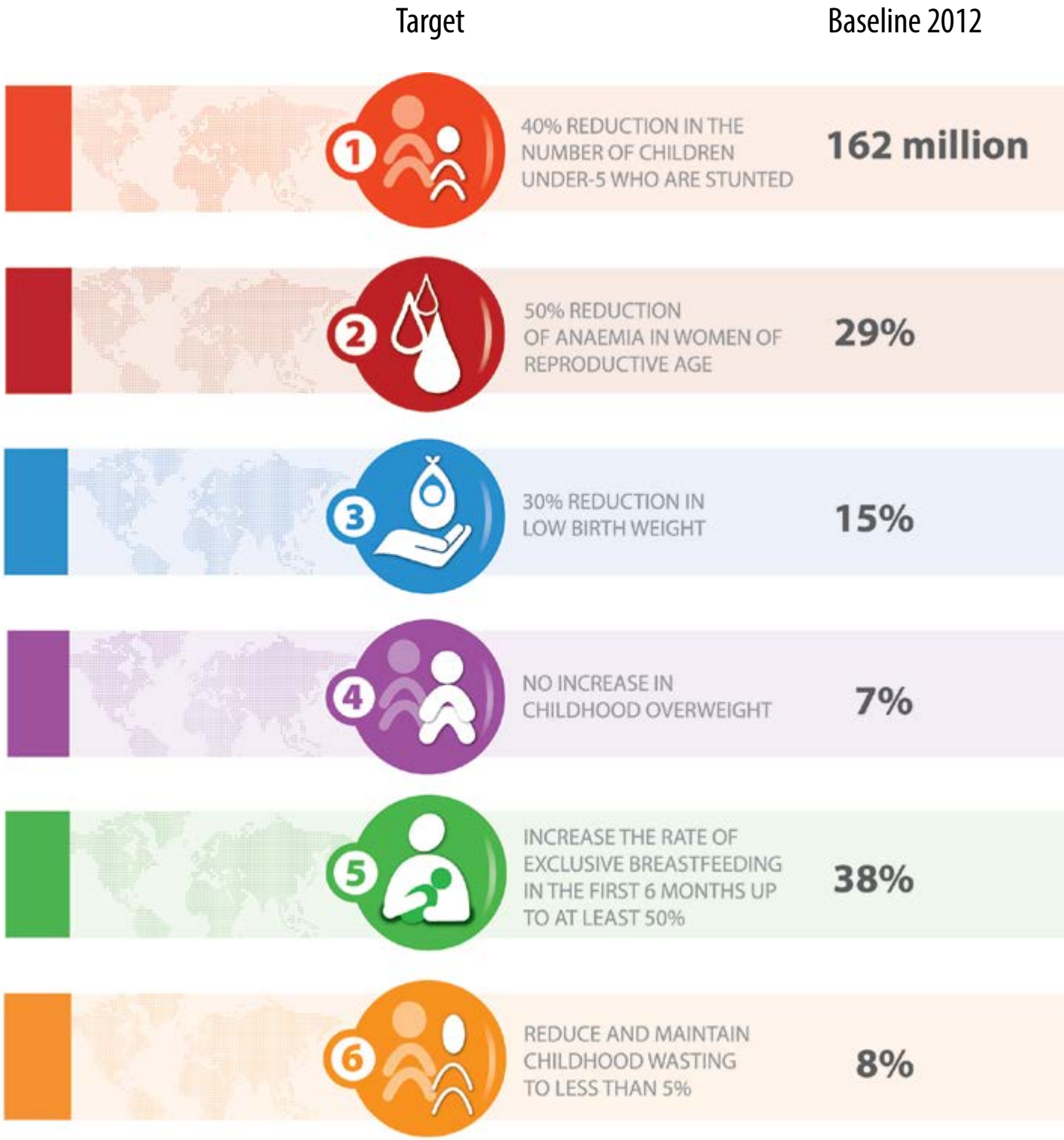
Africa is home to one third of the world's 156 million stunted children. Similarly, out of the 50 million children in the world who are wasted, 14.1 million live in Africa. Severely wasted children also encounter common infectious diseases, and they are on average 11 times more likely to die than their healthy counterparts. In Africa, the prevalence of babies born small for gestational age is the second highest in the world, at around 24%. There are also important issues of micronutrient deficiency diseases.

The high burden of malnutrition in Africa results in huge losses of human capital and economic productivity. Maternal, infant and young child nutrition needs to be improved drastically, with a focus on the critical 1000 days during pregnancy and the first two years of life. Results must be monitored and evaluated to track progress, thus the need for a robust nutrition surveillance system integral to programme implementation.

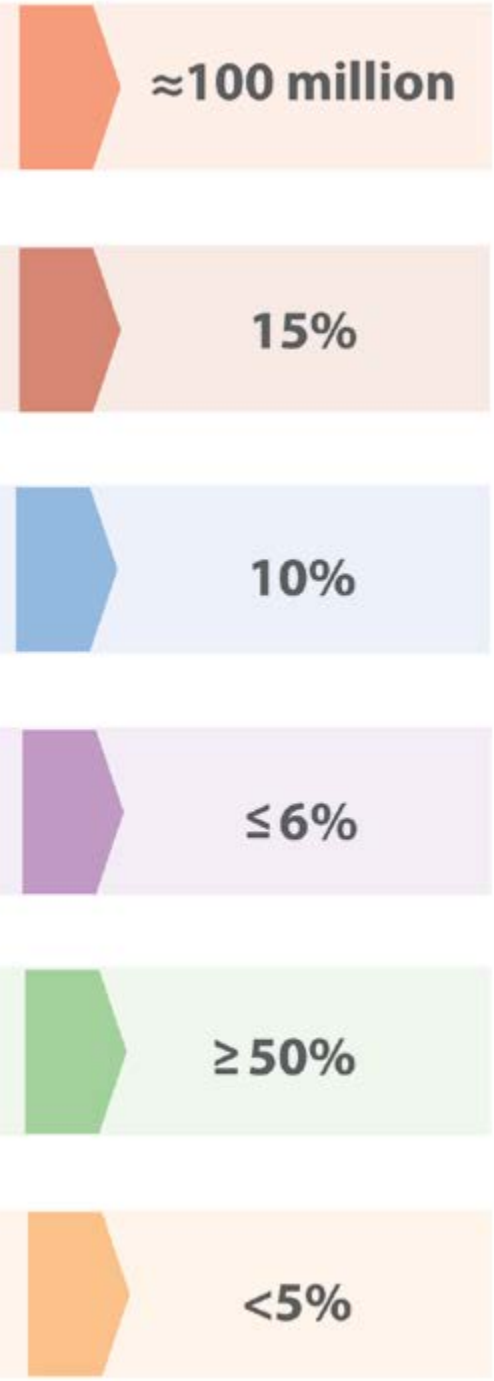
Baseline measurements revealed at least three essential gaps in nutrition surveillance, related to the relative absence of nutrition indicators in national health management information systems (HMIS), late submission of sub-national data to the national level, and little evidence of use of the data to influence local action, or the use was limited to a select few people.

Given these challenges, and considering the commitment of countries to report on the nutrition indicators agreed upon in World Health Assembly Resolution 65.6, the World Health Organization (WHO) was requested to provide guidance on how to strengthen routine HMIS systems to track key nutrition indicators.

Global Targets 2015



Target for 2025



The scale-up component of Accelerating Nutrition Improvements in sub-Saharan Africa (ANI), was implemented in three high-burden Scaling Up Nutrition (SUN) countries (Ethiopia, Uganda, and the United Republic of Tanzania) in collaboration between the ministry of health (MoH), the World Health Organization (WHO) and local partners. ANI also had a surveillance component implemented in 11 countries (Burkina Faso, Ethiopia, Mali, Mozambique, Rwanda, Senegal, Sierra Leone, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe). ANI was supported by Global Affairs Canada.

Scaling-up activities were implemented through country-led programmes and strategies and within existing systems to avoid duplication and ensure sustainability. ANI was also a platform for WHO's engagement with United Nations Renewed Efforts Against Child Hunger (REACH) and with the SUN Secretariat.

The scale-up component of the ANI project aimed to:

- disseminate intervention delivery guidelines for adoption and adaptation
- support capacity development for community health workers
- support the scale-up of evidence-based nutrition interventions
- update information in global databases on the implementation of nutrition actions.

The grant was managed jointly by the Director of Nutrition for Health and Development (NHD) in WHO headquarters, the Director of the Family and Reproductive Health Cluster in the WHO Regional Office for Africa and WHO Country Offices in respective ANI countries. The project was coordinated through routine technical interaction at the three levels of WHO: headquarters, region, and country.

The progress of the ANI project was assessed using a Performance monitoring framework (PMF), developed in the beginning of the project implementation period.

ANI used a non-experimental longitudinal analysis to compare baseline and end-line data from the PMF. The PMF includes quantitative and qualitative indicators to monitor and evaluate each country's progress on their individual country implementation plan (CIP) as well as the overall progress of the project. It was also used to assess the effectiveness of scaling up nutrition interventions in the three countries.

Global and regional activities

At global and regional level, activities focused on disseminating WHO guidance, identifying and disseminating best practices, mapping stakeholders, and ensuring collaboration with SUN and REACH.

Dissemination of WHO guidance: The WHO e-Library of Evidence for Nutrition Actions (eLENA) is an online library of evidence-informed guidance for nutrition interventions, that provides policy-makers, programme managers, health workers, partners, stakeholders and other interested actors access to the latest nutrition guidelines, recommendations and related information on effective nutrition actions. The eLENA titles are linked to information on implementation in countries contained in the WHO Global database on the Implementation of Nutrition Action (GINA).

Identification of best practices: A total of nine lessons, three from each country, were identified as having been particularly helpful for accelerating the scale-up of nutrition actions. These have been published in a set of briefs.

Stakeholder mapping: WHO organized two intercountry meetings on stakeholder mapping for the three country teams and partners, to review and discuss the ongoing work related to mapping of stakeholders and nutrition actions.

Coordination with SUN and REACH: WHO staff in ANI-supported countries, at the Regional Office for Africa and at headquarters have been involved in SUN activities at country, regional and global level. WHO also worked with REACH and SUN to increase awareness of the ANI project and tools developed.

Country activities and outcomes

The ANI project addressed priority issues and approaches articulated in the national nutrition strategies. The issues include infant and young child feeding (IYCF), vitamin and mineral deficiencies, maternal and child malnutrition and nutrition surveillance, surveys and information management. Approaches cover expanding access to quality high-impact interventions delivered at facility and community levels, improving the knowledge, skills and competencies of service providers at all levels to give adequate support in nutrition, improving the district and regional level management of nutrition services and creating demand for services through behaviour change communication.

The three scale-up countries showed significant common achievements:

Ethiopia

Training on management of severe acute malnutrition.

- **Increased attention to nutrition:** Working through formally established community networks and government institutions, ANI has helped strengthen government capacity to prioritize, finance and implement nutrition actions.
- **Enhanced capacity leading to improved quality and coverage of nutrition services:** Working in partnership with the ministry of health nutrition units and district health teams ensured that activities were implemented in a collaborative manner.
- **Reaching out through health and non-health channels:** Multiple communication channels were used to reach as many community-level target audiences as possible. Overall, the target audience felt the project was relevant towards addressing infant nutrition issues in their communities.
- **Improved nutrition services focusing on evidence informed actions:** The ANI project helped to strengthen health worker skills on IYCF and SAM management and provided equipment for health facilities. Health workers and government officials reported that availability of nutrition services resulted in reported improvements in coverage. 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.

A market in Makola, Ghana.
Courtesy of creativecommons.org

80% *or more of health facilities in ANI districts now have the necessary equipment and trained health workers to continue providing nutrition services*

- **Improved nutrition surveillance and programme monitoring to further inform nutrition services:** The HMIS/DHIS2 platform also showed an increase in the proportion of health facilities that reported on nutrition indicators, including the distribution of vitamin A and iron-folic acid supplements, timely initiation of breastfeeding, low birth weight, acute malnutrition, and stunting. More than 80% of health facilities in ANI districts now have the necessary equipment and trained health workers to continue providing nutrition services.
- **Increased nutrition outreach to women and children:** Ethiopia increased from 0% to 73% coverage, while Uganda increased from 0% to 52%.
- **Increased health worker capacity:** The project also aimed to increase the proportion of health workers with the knowledge and skills to deliver nutrition interventions to 75%. Ethiopia met this target, increasing from 83% to 90%.
- **National Nutrition Action Plan:** All three countries developed and adopted a national nutrition action plan with at least four of six requirements.

Lessons learned

A number of lessons came to light based on the country experiences.

- Scaling up nutrition actions must engage a multi-sectoral partnership to address the direct and underlying causes of malnutrition.
- Implementing scaled-up activities requires adequate time.
- The resources required to scale up nutrition must be mobilized from within the existing sectoral budgets.
- Implementing a project through a joint venture between the government and a partner NGO requires a shared implementation plan that is clear on respective mandates.

Women kneading millet to prepare food, Kaya, Burkina Faso. Courtesy of creativecommons.org

- Consultation meetings should be conducted at different levels in order to increase buy-in of the communities into the project.
- Joint planning, implementation, and monitoring of nutrition interventions with the public sector improved ownership and sustainability, and boosted implementation of the project.
- Involvement of administrative structures and other actors in nutrition intervention smooths implementation and strengthens monitoring and mentoring practices.
- The integration of project interventions into existing health systems is likely to increase the sustainability of such interventions at low marginal cost.
- Training of all health workers in the targeted health centres increases the likelihood of continuation of the nutrition interventions even when the project comes to an end.
- Working with established volunteer groups and associations such as women's groups has the potential to promote continuity of the interventions beyond the project life.
- Use of adolescents as nutrition key message promoters has the double advantage of improving their own nutrition and spreading messages to their families and communities.

Courtesy of Evelyn Hockstein

Part I: Overview

Project description, rationale and context

Based on 2015 estimates, Africa is home to one third of the world's 156 million stunted children.[1] Similarly, out of the 50 million children in the world who are wasted, 14.1 million live in Africa. When severely wasted, children encounter commonly also infectious diseases, and they are on average 11 times more likely to die than their healthy counterparts.[2]

Correspondingly, in Africa the prevalence of babies born small for gestational age is the second highest in the world, at around 24%.[3] Children born with small gestational weight are two to four times more likely to be stunted compared to those born with appropriate weight for gestational age. At the same time, the number of the overweight children is also growing in Africa, and has risen from 6.8 million children in 2000 to 10.5 million children in 2015.[4]

The WHO African region is also the one most affected by one by micronutrient deficiency diseases, compared to other regions. The prevalence of vitamin A, iodine, zinc and iron deficiencies for children are 41.6%, 40%, 23.9%, 20.2% and 20.3% respectively.

The high burden of malnutrition in Africa results in huge losses of human capital and economic productivity. Maternal, infant and young child nutrition needs to be improved drastically, with a focus on the critical 1000 days during pregnancy and the first two years of life. Interventions need to address young women prior to conception and early in pregnancy, and to use a multisectoral approach. Results must be monitored and evaluated to track progress, thus the need for a robust nutrition surveillance system integral to programme implementation.

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[1] UNICEF, WHO, The World Bank. Joint Child Malnutrition Estimates - UNICEF, New York; WHO, Geneva; the World Bank, Washington, DC; 2016.

[2] McDonald CM, Olofin I, Flaxman S, Fawzi WW, Spiegelman D, Caulfield LE et al.; Nutrition Impact Model Study. The effect of multiple anthropometric deficits on child mortality: meta-analysis of individual data in 10 prospective studies from developing countries. Am J Clin Nutr. 2013;97(4): 896–901. doi:10.3945/ajcn.112.047639.

[3] Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M et al.; Maternal and Child Nutrition Study Group. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet. 2013;382(9890): 427–51. doi:10.1016/S0140-6736(13)60937-X.

[4] UNICEF, WHO, The World Bank. Joint Child Malnutrition Estimates - UNICEF, New York; WHO, Geneva; the World Bank, Washington, DC; 2016

Courtesy of John Snow, Inc.

Baseline measurements revealed at least three essential gaps in nutrition surveillance. First, it was observed that few nutrition indicators were being collected in the national Health management information systems (HMIS) of the 11 project countries. Those indicators that were being collected were often not aligned with the indicators agreed by the World Health Assembly for tracking progress on the Global Nutrition Targets for 2025. For example, the ten key nutrition-specific interventions[5] that have been identified as crucial for reducing undernutrition were not tracked. Second, it was recognized that the HMIS in many countries collected data on individual children, such as sex, weight, age, date of birth, immunization, vitamin A supplementation and deworming. These data are tallied once a month and submitted to districts for transmission to national level, however timeliness was often poor. Third, the data were frequently collected for transmission to higher levels of management without being used to influence local action, or the use was limited to a select few people.

Given these challenges, and considering the commitment of countries to report on the nutrition indicators agreed upon in World Health Assembly Resolution 65.6, the World Health Organization (WHO) was requested to provide guidance on how to strengthen routine HMIS systems to track key nutrition indicators. This would also provide information to governments for the day-to-day management of nutrition programmes during the average five-to-seven year intervals between national surveys.

The resulting 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 between the ministry of health (MoH), the World Health Organization (WHO) and local partners. ANI was supported by Global Affairs Canada. Three high-burden Scaling Up Nutrition (SUN) countries, Ethiopia,

[5] Adolescent health and preconception nutrition • Maternal dietary supplementation • Micronutrient supplementation or fortification • Breastfeeding and complementary feeding • Dietary supplementation for children • Dietary diversification • Feeding behaviours and stimulation • Treatment of severe acute malnutrition • Disease prevention and management • Nutrition interventions in emergencies. Source: www.thelancet.com Maternal and Child Nutrition Executive Summary of The Lancet Maternal and Child Nutrition Series 2013.

Courtesy of Marie Renaux.

Uganda, and the United Republic of Tanzania, received additional support for scaling up nutrition interventions; those achievements are presented here. Achievements in improving nutrition surveillance in all 11 countries are presented in a separate report.

Scaling-up activities were implemented through country-led programmes and strategies and within existing systems to avoid duplication and ensure sustainability. ANI was also a platform for WHO's engagement with United Nations Renewed Efforts Against Child Hunger (REACH) and with the SUN Secretariat.

Objectives

The scale-up component of the ANI project aims to:

- disseminate intervention delivery guidelines for adoption and adaptation;
- support capacity development for community health workers;
- support the scale-up of direct evidence-based nutrition interventions;
- update information in global databases on the implementation of nutrition actions.

Expected deliverables

- Provision of nutrition services to a minimum of 150 000 children under 5 years of age and 200 000 women of reproductive age. This is measured by four indicators: the proportion of children under 6 months exclusively breastfed, the proportion of children between 6 and 23 months receiving a minimum acceptable diet, the proportion of children with severe acute malnutrition receiving appropriate treatment, and the proportion of pregnant women taking iron and folic acid supplements.
- Training of health workers on essential nutrition actions. This is measured by the proportion of health workers with the knowledge and skills to deliver nutrition interventions to women and children, the proportion of health workers delivering these interventions, and the number of health workers trained in the programme.
- Maintenance and expansion of the WHO e-Library for Nutrition Actions (eLENA) and the Global database on the Implementation of Nutrition Action (GINA).

Grant coordination and supervision

The grant was managed jointly by the Director of Nutrition for Health and Development (NHD) in WHO headquarters, the Director of the Family and Reproductive Health Cluster in the WHO Regional Office for Africa and WHO Country Offices in respective ANI countries. The project was coordinated through routine technical interaction at the three levels of WHO: headquarters, region, and country. The Regional Office for Africa is based in Brazzaville and has three intercountry support teams. One nutrition officer based in Harare provided technical support and oversight for the seven ANI countries in Eastern and Southern Africa and another based in Ouagadougou supported the four West African countries. The Regional Adviser for nutrition in the WHO Regional Office for Africa contributed to country technical support and oversaw administration of the grant.

The ANI project involved more than 25 people in WHO country offices, inter-country support teams, the Regional Office for Africa, and headquarters. Standard operating procedures were developed to ensure and facilitate coordination, communication, and complementarity of all offices concerned.

Monthly coordination teleconferences were carried out with the involvement of WHO staff at all levels, and routine communication was done as needed.

Risks and their mitigation

The principal challenges faced by the scale-up arm of the ANI project included the El Niño crisis (Ethiopia, Uganda and the United Republic of Tanzania), staff turnover (Ethiopia), administrative hurdles affecting contracts and financial management arrangements (Ethiopia and Uganda), and competing priorities for government partners in all countries. The most obvious consequence was the delay in completing planned activities.

Performance monitoring framework

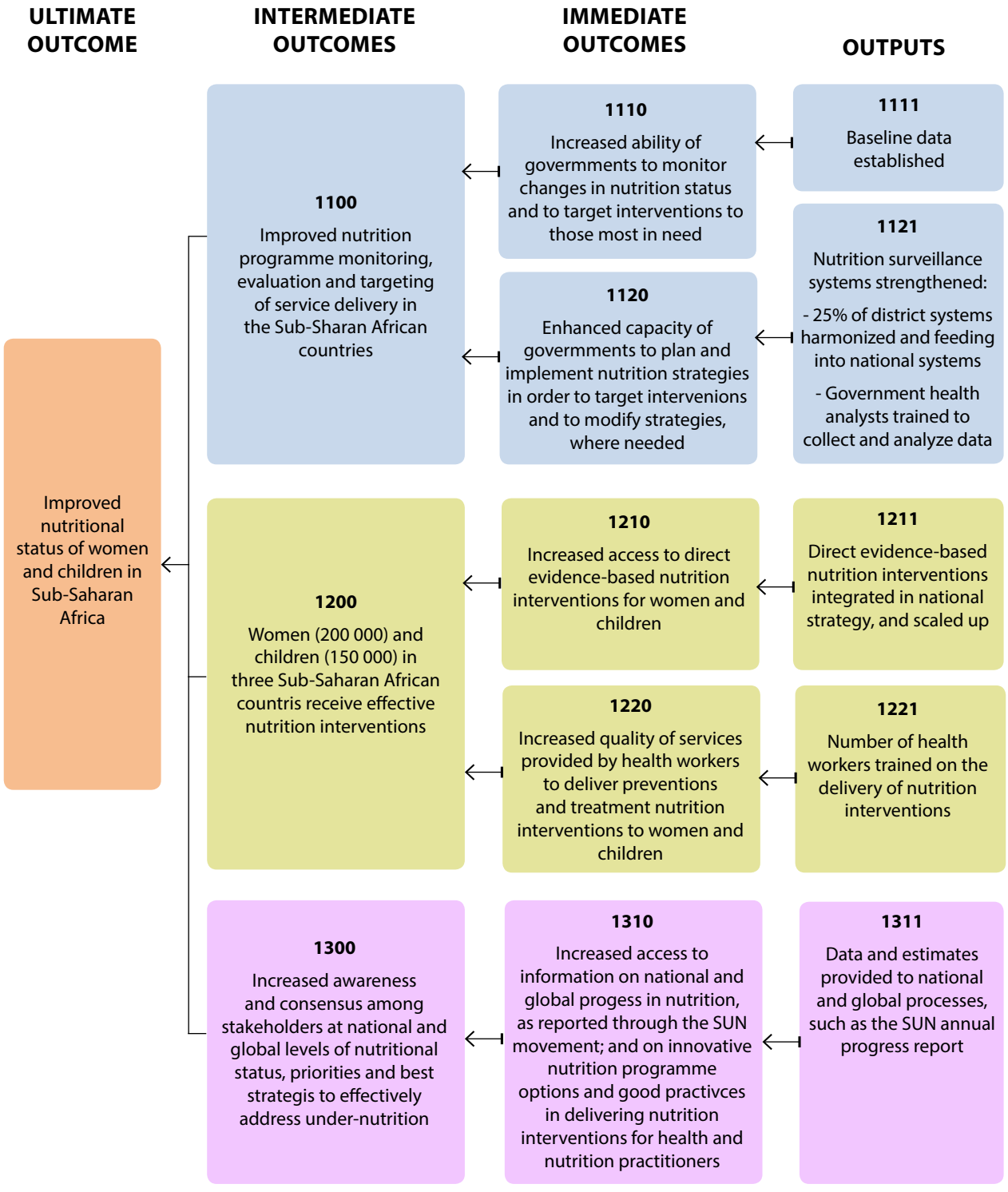
The progress of the ANI project was assessed using a Performance monitoring framework (PMF), developed in the beginning of the project implementation period. The PMF consists of three levels of outcomes (immediate, intermediate and ultimate), each with its indicators, as shown in Figure 1.

ANI used a non-experimental longitudinal analysis to compare baseline and end-line data from the PMF. The PMF includes quantitative and qualitative indicators to monitor and evaluate each country's progress on their individual country implementation plan (CIP) as well as the overall progress of the project. It was also used to assess the effectiveness of scaling up nutrition interventions in the three countries.

Gender equality

Pregnant and lactating women, infants and young children, and adolescent girls are disproportionately affected by malnutrition. The design of ANI took into account the differences in vulnerability to malnutrition between women and men, and between girls and boys, and prioritized interventions to reach these vulnerable groups.

Figure 1: Performance monitoring framework



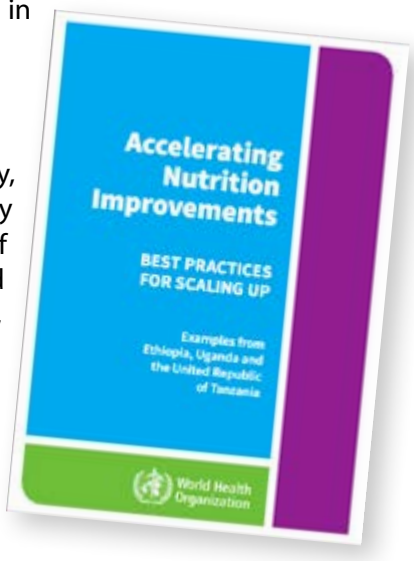
Part II: Global and regional activities

Dissemination of WHO guidance

The WHO e-Library of Evidence for Nutrition Actions (eLENA) is an online library of evidence-informed guidance for nutrition interventions, providing policy-makers, programme managers, health workers, partners, stakeholders and other interested actors access to the latest nutrition guidelines, recommendations and related information on effective nutrition actions. In doing so, eLENA aims to help countries successfully implement and scale-up nutrition interventions by informing as well as guiding policy development and programme design. eLENA is updated on a regular basis and currently contains 118 nutrition action titles covering a wide range of nutrition topics including maternal, infant and young child nutrition as well as obesity and diet-related noncommunicable diseases, with the majority of content offered in all six official WHO languages (Arabic, Chinese, English, French, Russian and Spanish). Nutrition interventions featured in eLENA are linked to actions being implemented in countries that are available in the Global database on the Implementation of Nutrition Action (GINA), which is a nutrition policy and action database focusing on all forms of malnutrition. GINA contains more than 4500 data on national nutrition-related policies and actions, including information on commitments made by countries and who is doing what, where, when, why and how, in each country, as well as lessons learned in implementing various interventions.

Identification of best practices

A total of nine lessons, three from each country, were identified as having been particularly helpful for accelerating the scale-up of nutrition actions. These lessons were selected because either they led to sustainable results, or they exemplified important values in the processes of planning and implementation. Defined as best practices and summarized in a set of briefs, they were compiled into an attractive folder package.[1]



[1] http://www.who.int/nutrition/publications/ANI-bestpractices-scalingup/en/

The best practices are:

1. Making the case for addressing anaemia among adolescent girls in Ethiopia

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

3. Community outreach strategies reinforced health sector delivery of essential nutrition actions in Ethiopia

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

5. Adopting and adapting international guidelines ensured an evidence-informed approach to preventing and controlling malnutrition in all its forms in Uganda

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

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

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

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

WHO /Pierre Albouy

One thousand copies of the folder package were printed in December 2016 and disseminated in the three countries as well as to the regional and sub-regional WHO offices. In addition, more than 200 sets were disseminated to participants at the FAO/WHO International symposium on sustainable food systems for healthy diets and improved nutrition held in Rome, Italy.

The best practices and experiences in implementing the overall ANI project were shared with the Japan International Cooperation Agency (JICA), which is planning to launch the Initiative for Food and Nutrition Security in Africa (IFNA) in ten countries, as well as with the members of the IFNA Steering Committee.[1]

Stakeholder mapping

WHO organized two intercountry meetings on stakeholder mapping for the three country teams and partners. Representatives of the REACH secretariat also participated. These meetings aimed to review and discuss the ongoing work related to mapping of stakeholders and nutrition actions, including the coverage of those actions, in each country.

WHO /Christopher Black

[1] African Development Bank, FAO, IFAD, NEPAD, UNICEF, World Bank, WFP and WHO

TABLE 1: Agreed priority elements to include in a stakeholder mapping for nutrition

Priority element	Obligatory?
Who is doing …	Partner information is crucial. Each country established selection criteria according to country needs.
… what …	These are based on national plans, but a minimum set of interventions included those in the WHO Essential Nutrition Actions and the Lancet 2013 series on Maternal and Child Nutrition.
… for whom, where and when (estimation of coverage) …	Yes for the following minimum set of interventions: • promotion of breastfeeding; • complementary feeding education; • vitamin A supplementation for children aged 6–59 months; • treatment of severe acute malnutrition (SAM); • iron-folic acid supplementation during pregnancy; and • salt iodization.
…how (delivery mechanisms)…	Yes, but technical and functional capabilities are out of scope.
…at what cost….	Yes, where possible, the budget of specific interventions by year (otherwise, budget for the programme by year), and expenditures.
… how well they are being implemented and how effective they are (monitoring and evaluation framework, lessons learned)	No. Lessons learned would be helpful to inform programme implementation, however the information was considered optional for stakeholder mapping.

The meeting documents including reports, scope and agenda, are available at http://who.int/nutrition/ANI_project/en/

At the second meeting, updates were provided on each country's progress in stakeholder mapping and on the status of implementing previously agreed steps. Uganda and the United Republic of Tanzania had progressed on stakeholder mapping at district level, supported by the ANI project and REACH. Ethiopia had focused on integrating nutrition stakeholder mapping into regular monitoring and resource tracking within the Federal Ministry of Health.

Coordination with SUN and REACH

WHO staff in ANI-supported countries, at the Regional Office for Africa and at headquarters have been involved in SUN activities at country, regional and global level, including participating in the SUN Global Gatherings in Rome, Italy in 2014 and in Milan, Italy in 2015, as well as in the African countries' workshop on nutrition planning and costing (Nairobi, Kenya in 2016). WHO also worked with REACH and SUN to increase awareness of the ANI project and tools developed.

Part III: Country activities and outcomes

Overall achievements

The ANI project addressed priority issues and approaches articulated in the national nutrition strategies. The issues include IYCF, vitamin and mineral deficiencies, maternal and child malnutrition and nutrition surveillance, surveys and information management. Approaches cover expanding access to quality high-impact interventions delivered at facility and community levels, improving the knowledge, skills and competencies of service providers at all levels to give adequate support in nutrition, improving the district and regional-level management of nutrition services and creating demand for services through behaviour change communication.

OVERALL, THE THREE SCALE-UP COUNTRIES SHOWED SIGNIFICANT COMMON ACHIEVEMENTS:

- **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 multi-sectoral planning and budgeting.

- **Enhanced capacity leading to improved quality and coverage of nutrition services:** Working in partnership with the ministry of health nutrition units and district health teams ensured that activities were implemented in a collaborative manner. 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 (SBCC) 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 enhanced to develop local-food-based recommendations for complementary feeding in Uganda. In the three countries, a total

Field supervision and training on surveillance.

The trained health workers were able to educate community members and refer children who needed services

of 9973 district health managers and health workers at national and sub-national levels were trained on strengthening nutrition services. Capacity building activities were complemented by post-training follow-up supervisory visits and performance review meetings, which helped maintain the quality of services provided. Implementing activities through district structures helped to build the capacity necessary for sustaining interventions beyond the life of the project. The trained health workers were able to educate community members and refer children who needed services. They remain a key resource for disseminating IYCF information and promoting proper complementary feeding practices within the districts, as demonstrated in the observed changes in practices in Ethiopia and Uganda.

- **Reaching out through health and non-health channels:** Multiple communication channels were used 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 SBCC 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

Field supervision and training on surveillance.

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. The SBCC strategy developed was also effective in informing the design of messages and the implementation of community-based activities. The messages disseminated were relevant to the knowledge needs of the target audiences, and the materials developed were simple and easy to understand. Overall, the target audience felt the project was relevant towards addressing infant nutrition issues in their communities.

A health worker measures an infant's growth.

- **Improved nutrition services focusing on evidence informed actions:** The ANI project helped to strengthen health worker skills on IYCF and SAM management and provided equipment for health facilities. Support was also provided to institutionalize updated protocols and guidelines to improve the quality of nutrition services. Documents developed include guidelines for integrated management of acute malnutrition (IMAM), for growth monitoring and promotion (GMP) and for IYCF, food based dietary guidelines on complementary feeding, and training manuals for the inpatient management of SAM and for adolescent health. They also covered developing an SBCC strategy and materials. Health workers and government officials reported that availability of nutrition services resulted in reported improvements in coverage. 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.

Participants in a TIPs demonstration in Namutumba district, Uganda.

Ethiopia trained 3327, Uganda trained 2441 and the United Republic of Tanzania trained health workers and community health workers

- **Improved nutrition surveillance and programme monitoring to further inform nutrition services:** The HMIS/DHIS2 platform also showed an increase in the proportion of health facilities that reported on nutrition indicators, including the distribution of vitamin A and iron-folic acid supplements, timely initiation of breastfeeding, low birth weight, acute malnutrition, and stunting. More than 80% of health facilities in ANI districts now have the necessary equipment and trained health workers to continue providing nutrition services. Almost all children who come to health facilities are assessed and provided with appropriate nutrition services while the mothers and caregivers of those children are counselled on optimum maternal, infant and young child nutrition.

  The national integrated supportive supervision checklists have also included indicator for monitoring and mentoring key nutrition alongside other health services and indicators. This will ensure the sustainability of services to be supported and regularly monitored and supervised.

- **Increased nutrition outreach to women and children:** The scale-up interventions in Ethiopia, Uganda, and the United Republic of Tanzania aimed to reach 75% of the women and children in the project areas. No country reached this target but Ethiopia increased from 0% to 73%, while Uganda increased from 0% to 52%, both of which are substantial improvements.

- **Increased health worker capacity:** The project also aimed to increase the proportion of health workers with the knowledge and skills to deliver nutrition interventions to 75%. Ethiopia met this target, increasing from 83% to 90%. Uganda had 70% at baseline but did not collect data at end-line. An additional goal was to increase the proportion of health workers implementing nutrition interventions in the community. Ethiopia, Uganda, and the United Republic of Tanzania all improved with Ethiopia increasing from 13% to 100%, Uganda increasing from 0% to 85%, and the United Republic of Tanzania increased from 0% to 88%. All three countries trained health workers and community health workers in the targeted districts. Ethiopia trained 3327, Uganda trained 2441 and the United Republic of Tanzania trained 4205.

Lindi Regional Commissioner, Mr. Ludovick Mwananzila, making a speech at the occasion of Lindi Inception Meeting, held 3 July 2014.

- **National Nutrition Action Plan:** Each country was to develop and adopt a national nutrition action plan with at least four of six requirements: is evidence-based, has allocated responsibilities, has set targets and indicators to monitor progress, is officially adopted, has budgeting, and is implemented. All three countries met this target; the action plans of Ethiopia and the United Republic of Tanzania have all six requirements.

Courtesy of Rachel Unkovic/IRC

The project interventions were successfully implemented as planned. The project increased the knowledge and practices of optimal IYCF practices among the target groups and improved the skills of health workers on the promotion of IYCF/adolescent, maternal, infant and young child nutrition (AMIYCN) and management of SAM. Caregivers learned recipes and methods for preparing nutritious foods for their children; if the practices continue, they will go a long way in reducing stunting among children 6-23 months.

The ANI project achieved its expected outputs to varying degrees. For example, in the United Republic of Tanzania, the biggest achievement was raising the profile of nutrition and enhancing the capacity to plan and budget for nutrition at sub-national levels. The district councils developed multi-sectoral nutrition scale-up plans and there was evidence of increased allocation of funds for nutrition interventions in the sectoral budgets. Through the various training supported by the project in all three countries, the technical capacity of service providers at the regional and district levels markedly improved. In Ethiopia and Uganda, some outputs were achieved as a result of SBCC activities, in particular the observed positive changes in behaviours and practices.

Country-specific activities and outcomes

Ethiopia

Accelerated nutrition improvement (ANI)
Intervention area in Ethiopia

- ANI Intervention woreda
- ANI Intervention zone

In Ethiopia, ANI activities aimed to reduce stunting among children under 5 years of age through improving IYCF practices, improving dietary habits of pregnant women, and reducing iron-deficiency anaemia among adolescent girls. The project was implemented in six districts in the regions of Amhara, Oromia, and Southern Nations, Nationalities, and Peoples' Region (SNNPR), in partnership with John Snow, Incorporated and under the overall coordination of the Federal Ministry of Heath (FMoH). A series of activities ranging from national level to project area-specific activities were implemented to increase awareness of nutrition problems. These activities included high-level advocacy led by the First Lady. Activities reached an estimated population of 1.5 million, covering 61 health centres and 254 health posts.

The project focused on three main elements:

1. building the capacity of health workers to undertake advocacy, interpersonal communication and community mobilization,
2. mass communication and
3. promoting supportive supervision. It also promoted the strategic use of data for system strengthening in relation to AMIYCN and SAM.

Live demonstration of complementary food preparation.

At least 3327 health workers (2089 women) were trained on AMIYCN and SAM. Results indicate significant improvements in the knowledge and practices of health workers, a stronger focus on nutrition interventions, and greater priority given to growth monitoring and promotion. Details of effects of this training on the quality and coverage of nutrition services are described in the relevant ANI Best Practices brief.

In addition, as part of mentoring and coaching, follow-up visits were carried out to motivate and empower trained health workers to integrate nutrition messages into their day-to-day work and to ensure the proper management of SAM. Visits were made to 42 woreda health offices, 180 health centres, 399 health posts and 1281 households to mentor and observe progress at each level. Woredas were also supported to organize post-training progress review meetings (PRM) with more than 770 participants to assess and strengthen the performance of each level of the health system within primary health care units. The PRM platform created an opportunity for staff to share experiences and learn from each other.

To promote relevant disease prevention and health promotion activities, a total of 221 571 materials for behaviour change communication (BCC) were distributed using opportunities such as training courses, sensitization, review meetings, and follow-up visits. Moreover, 264 sessions of nutrition-based message promotion were conducted using mobile vans reaching a total of 492 449 people. The use of outreach strategies reinforced the health sector delivery of essential nutrition actions, and local leaders now reinforce key nutrition messages to communities and families. The 1000 students who have learned about nutrition in the school curricula and in nutrition clubs also 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 will continue much beyond the life of the ANI project. The ANI Best Practices brief provides further detail on these activities.

The ANI project also supported making a case for addressing anaemia among adolescent girls in Ethiopia, through conducting a 'needs and means' survey and disseminating the results to UN agencies, donors and international nongovernmental organizations.

Activities reached an estimated population of 1.5 million, covering 180 health centres and 399 health posts

Ethiopia
AMIYCN training

PERFORMANCE MONITORING FRAMEWORK RESULTS

INTERMEDIATE OUTCOME 1200:

Overall, significant improvements were observed in nutrition practices at household level. Early initiation of breastfeeding (within the first hour after birth) increased from 78.7% to 91%. Colostrum feeding increased from 81.6% to 94%, exclusive breastfeeding from 79.7% to 85%, and timely initiation of complementary feeding (6-9 months) from 79.5 to 89. The proportion of children 12 to 23 months of age who ate semisolid foods three to four times daily remained almost the same between 2013 (75.7%) and 2016 (74.7%).

IMMEDIATE OUTCOME1210:

The proportion of women and children reached by IYCF and SAM interventions increased from 0% to 73%, for a total of 527 836 people (344 103 women of childbearing age and 183 733 children under 5 years of age). This fell just short of the target of 75%, but was a substantial improvement.

IMMEDIATE OUTCOME 1220:

The knowledge and skills of health workers to deliver nutrition interventions to women and children increased by 7% to reach 90%. This indicator met the target at both baseline and end-line. There were 0.35 community health workers implementing nutrition interventions per 1000 population. There was no overall project target.

OUTPUT 1211:

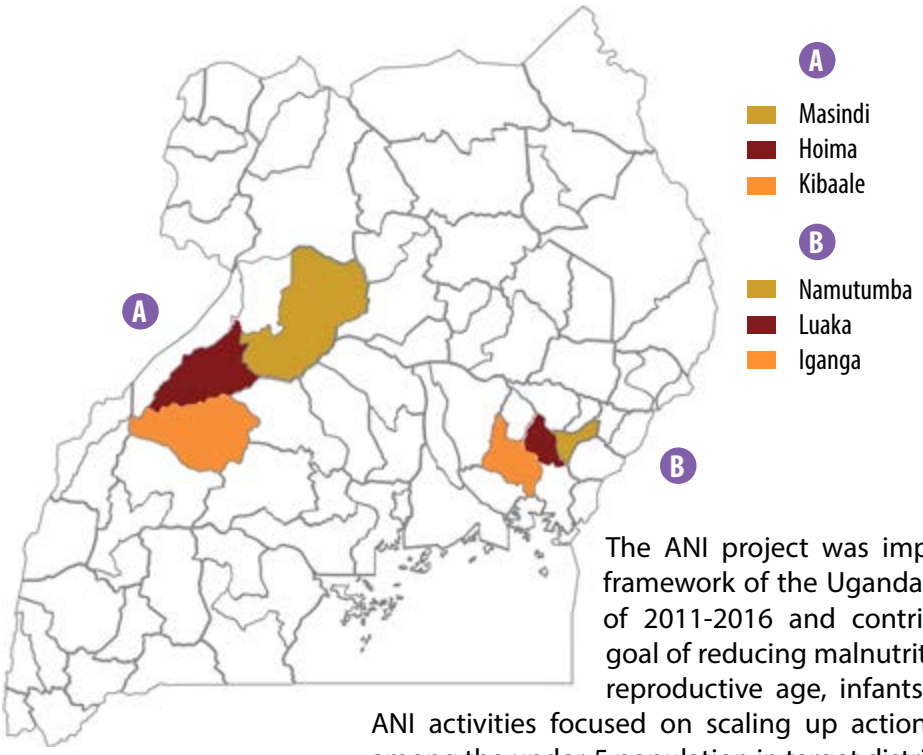
The national nutrition implementation plan 2016 – 2020 integrated nutrition-specific and nutrition-sensitive interventions. It was based on evidence, had allocated responsibilities, had a budget, set targets and indicators to monitor progress, was officially adopted, and was implemented.

OUTPUT 1221:

Before the ANI project began, 721 health workers had been trained. An additional 3327 health workers from 180 health centres and 520 health extension workers from 399 health posts were trained over the course of the ANI project.

Courtesy of © 2014 Devon Krainer. MEDA.org

Uganda



The ANI project was implemented within the framework of the Uganda Nutrition Action Plan of 2011-2016 and contributed to the overall goal of reducing malnutrition among women of reproductive age, infants and young children. ANI activities focused on scaling up actions to reduce stunting among the under-5 population in target districts through improved complementary feeding practices. The project was implemented in six districts in the Western and Eastern Regions of the country with a high burden of stunting, sub-optimum infant feeding practices and a high level of acute malnutrition. Implementation was under the leadership of the MoH, through a partnership with Service for Generations and the Communication for Development Foundation Uganda. Activities included mapping of complementary feeding programmes, planning and implementing interventions at district level, applying the food-based dietary approach ProPAN/Optifood[1] , developing SBCC activities and promoting appropriate care.

Participatory district assessments were conducted in all six project districts. A total of 216 interviews were carried out with nutrition managers in government and partner agencies and with

[1] ProPan is a tool to design, implement, and evaluate interventions and programs to improve infant and young child diet and feeding. Optifood is a linear programming software application that allows public health professionals to identify the nutrients people obtain from their local diets, and to formulate and test population-specific food-based recommendations to meet their nutritional needs.

ACF-CAR, B. Cichon

Live demonstration of complementary food preparation.

health facility personnel at national, district, and community levels. The assessments were followed by capacity development on district planning, and brought stakeholders together around evidence-informed nutrition actions; more details about this process can be found in the corresponding ANI Best Practices brief. 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 MoH, 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.

The findings of the district assessments and mapping of complementary feeding programmes conducted at the outset of the project were used to prioritize gaps and develop scale-up plans. The findings indicated that capacity to implement nutrition interventions was limited, mainly due to a lack of adequately trained, skilled and motivated human resources, as well as limited funding for and insufficient coordination of nutrition activities. Moreover, a survey was carried out to determine the nutritional status, dietary patterns, feeding practices and dietary (nutrient) adequacy among children less than two years of age. Based on the results, support was provided for the development of recommendations for complementary feeding using Optifood. Optifood calculates the least costly combination of local foods that will meet or come as close as possible to meeting the nutrient needs of specific target groups. The food based recommendations were then translated into region-specific recipes for the age groups 6-8 months, 9-11 months, 12-23 months breastfeeding and 12-23 months non-breastfeeding.

The feasibility and acceptability of the recipes were assessed in all districts using the trials of improved practices method. The materials were then reviewed and revised as necessary and printed for training facility and community health workers. Materials included counselling cards for village health teams (VHTs), complementary feeding recipes and growth monitoring and promotion registers. Based on the outcome of this work, a strategy for SBCC was developed with messages tailored to the specific needs of targeted population groups. The implementation of the strategy and development

of a monitoring and evaluation framework for SBCC were done in collaboration with the MoH.

Using these tools, IYCF training was done for 100% of the health facilities in the project districts, covering 433 health workers (256 women) and 1365 community health workers (members of the VHTs, 444 women). This was complemented by 56 radio talk shows on IYCF broadcast in four main languages, and 2040 radio spots. It is estimated that radio messages reached 780 000 people across all six districts. In addition, 181 cooking demonstrations/community dialogues on IYCF were conducted across 18 sub-counties, at an average of two per district, reaching 4760 caregivers, and counselling sessions on IYCF were conducted at 133 health facilities for 6098 caregivers.

Food demonstrations were carried out to help mothers learn the different food types to prepare for children aged between 6 and 23 months, as well as the appropriate amounts and feeding frequency. Mothers testified how ANI project interventions had positively affected the way they fed their babies, and the resulting health of the children. In addition to building capacity, the ANI project distributed printed copies of localized IYCF recipes and counselling cards to all health facilities. These recipes were also distributed to all mothers of children who received heath care at these facilities during the implementation period.

The above process describes a thorough approach to generating evidence and using systematic methods to tailor nutrition interventions, and was featured in the ANI Best Practice brief series as well as at the SUN 2015 Global Gathering.

As part of promoting appropriate care at facility and community levels, national guidelines on IMAM were revised to align with the 2013 updated WHO recommendations. An Inpatient Therapeutic Care training package was also adapted, containing an introduction, seven training modules, guides for the clinical instructor, facilitator and course director, photo and answer booklets, and a training video. The five-day training course is designed for senior nurses/midwives, clinicians and nutritionists; it equips learners with knowledge and skills for the facility based management of severe acute malnutrition with medical complications. The training approach is participant-led.

Cooking demonstration in Ryamiyonga, Uganda.

A health worker uses the flip chart to educate a mother at Nsiinze health center IV – Namutumba district, Uganda.

The number of health workers trained on managing SAM (including those who received orientation and mentorship) totalled 949 (638 women)

Manuals were also developed on Outpatient Therapeutic Care, Supplementary Feeding Programmes and Community participation. Overall, the number of health workers trained on managing SAM (including those who received orientation and mentorship) totalled 949 (638 women). Participants also included academic staff from institutions that teach medicine, nursing and nutrition to provide a basis on which to integrate key aspects of care into their different curricula and build basic capacity. The total number of health workers and members of academia trained on IYCF and SAM is 2441 (1133 women).

Adopting and adapting international guidelines constitutes another aspect of taking an evidence-informed approach to improving nutrition and was featured in the ANI Best Practices briefs. As described in that document, 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 within one hour after birth. These improvements may be attributable to the improved skills of health workers.

PERFORMANCE MONITORING FRAMEWORK RESULTS

INTERMEDIATE OUTCOME 1200:

Through a series of capacity building and counselling services at the household level, significant improvements in IYCF practices were observed in the sampled population of caregivers of children under 2 years of age. The proportion who know the recommended time to initiate breastfeeding increased from 55.9% to 81.9%. The proportion who have the knowledge of the recommended duration of exclusive breastfeeding changed from 65% to 89.0%, while the proportion who are aware of the recommended time to start giving complementary foods went from 48% to 65.1%. The proportion

A woman breastfeeds her baby in Uganda.
Courtesy of James Pursey/EGPAF

Live demonstration of complementary food preparation.

who are aware of the recommendation to continue breastfeeding up to two years of age rose from nil to 70.3%, and the proportion who reported that they fed their child four or more different foods increased from 11.9% to 59%.

IMMEDIATE OUTCOME1210:

the proportion of women and children reached by the supported IYCF and SAM nutrition interventions increased from 0% to 52% for a total of 1 193 789 people (631199 women of childbearing age and 562 590 children under 5 years). This did not meet the target of 75%, but showed substantial improvement.

IMMEDIATE OUTCOME 1220:

The knowledge and skills of health workers to deliver nutrition interventions was 70% at baseline, under the target of 75%. No data were collected at end-line so it is not possible to ascertain whether this improved. The proportion of community health workers implementing nutrition interventions increased from 0% to 85%, a significant improvement.

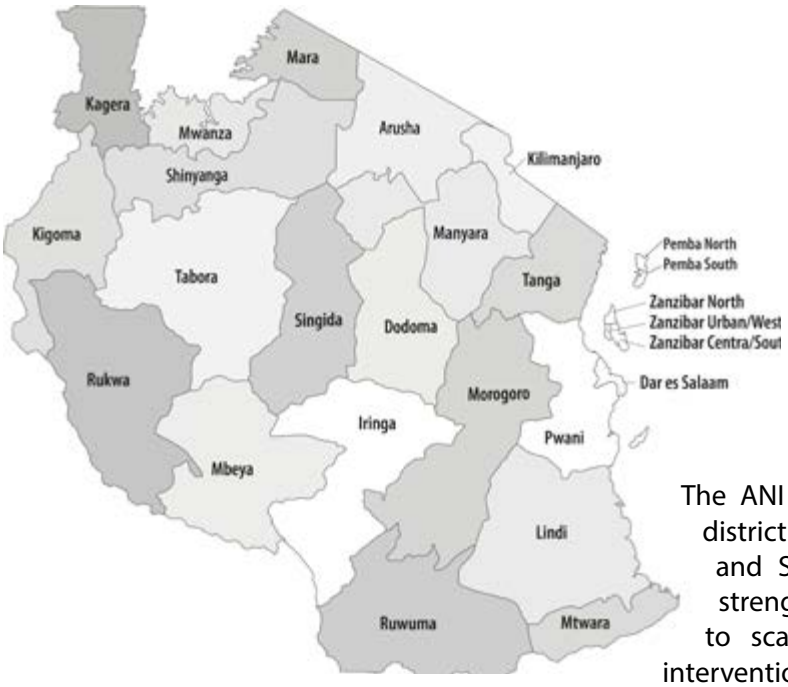
OUTPUT 1211:

The national nutrition implementation plan (originally 2011 to 2016, now extended to 2017) includes the list of nutrition-specific and nutrition-sensitive interventions that guided the scale-up plans in the six ANI districts. It also includes four of the six requirements: has evidence-based strategies, allocates responsibilities, sets targets and gives indicators for monitoring progress, is officially adopted, is budgeted, and is implemented. This met the target at both baseline and end-line.

OUTPUT 1221:

Prior to the ANI project, 885 health workers had been trained; 2441additional health workers were trained over the course of the ANI project.

United Republic of Tanzania



The ANI project was implemented in 12 district councils of the regions of Lindi and Shinyanga, and was designed to strengthen the government's ability to scale up evidence-based nutrition interventions. Save the Children Fund was the implementing partner, under the overall coordination of the Tanzania Food and Nutrition Center (TFNC) and the Prime Minister's Office.

Community campaigns on breastfeeding, adequate complementary feeding and micronutrient supplementation.

Implementation had two specific objectives:

1. to (re-) establish and strengthen the national nutrition surveillance and information system and;
2. to scale up the implementation of nutrition interventions based on district nutrition plans.

A wide variety of stakeholders were consulted during the design and implementation of the project. The preliminary meeting, led by WHO, brought together relevant government departments including Ministry of Health and Social Welfare (MoHSW), the TFNC, the Prime Minister's Office, Regional Administration and Local Government, REACH, UNICEF, FAO, nongovernmental organizations such as Save the Children and the Centre for Counselling, Nutrition and Health Care.

A Village Health Team conducts a Health Education session at Kitanyata HC II, Pakanyi sub-county, Masindi district, Uganda.

A key strength of the project was the contextualisation of approaches to reflect the unique needs and circumstances of the different district councils. Each district council was supported to identify its specific gaps and priorities and develop a multi-sectoral nutrition scale-up plan based on district assessments and the baseline survey. As a result of the capacity development for multisectoral planning and budgeting, district-level investments for nutrition increased dramatically. The corresponding ANI Best Practices brief describes in greater detail how the districts developed costed, multi-sectoral nutrition activity plans and increased the planned budgets for nutrition.

Existing training manuals on IYCF, integrated management of acute malnutrition (IMAM) and micronutrient supplementation were revised and aligned to current WHO. Training was provided to health workers in every hospital, health centre and dispensary in the two focus regions. Twenty-five health workers were trained from each hospital, 16 from each health centre and two from each dispensary. Overall, 3389 health workers (1766 women) were trained on maternal, infant and young child nutrition (MIYCN). Further to the training, the WHO country office distributed nutrition commodities and equipment to all 413 hospitals, health centres and dispensaries in Lindi and Shinyanga.

The project also trained 816 health workers (518 women) to identify and treat severe acute malnutrition. Commodities for the management of acute malnutrition (F-75, F-100, ReSoMal and Plumpy'Nut) distributed to the two regions, and anthropometric equipment (MUAC tapes, weighing scales and height boards) distributed to all health facilities increased the proportion of equipped centres to more than 80%. Nearly 70% confirmed they had started using them for to collect nutrition data.

In 2016, 634 SAM children were identified in Shinyanga region, and 608 (96%) were treated. In Lindi region, 1317 SAM children were identified and 1027 were treated, representing cure rate of 78%. The total number of health workers trained during the life of the project in IYCF, SAM and planning and budgeting reached 3555 (1480 women). The ANI Best Practices brief provides greater detail on how stronger nutrition surveillance within the health system ensured better detection and management of child undernutrition. The HMIS platform showed an increase in the proportion of health

Photo by Niall Carson/PA Wire

facilities reporting on nutrition indicators, including the distribution of vitamin A and iron-folic acid supplements. Trained health workers are able to collect and report data on wasting, stunting and underweight. Within six months after training, 1635 cases of SAM were treated, while the mothers and caregivers of those children were counselled on optimal maternal, infant and young child nutrition.

As part of SBCC interventions, printed training materials for facility health workers were developed and/or revised. The materials include a flipchart (3300 copies), a facility orientation package on IYCF and SAM (3000 copies), a trainer manual on IYCF and SAM (60 copies), a participants manual (60 copies), a counselling trainers' book on IYCF (350 copies), a counselling participant's book (350 copies), 518 800 copies of maternal, infant and young child feeding brochures (129 700 copies each of: Adequate complementary feeding for 6-23 months, How to successfully breastfeed your child, How to express breast milk, and Maternal nutrition during pregnancy and lactation); Face Caps (3400), T-shirts (3400), Kanga (3400); outdoor banners (22 units) and roll-up banners (22 units). To help create awareness of the Global Nutrition Targets, 620 copies of an advocacy brief were developed and distributed to ANI regions and districts. Scaling up SBCC at the community level increased the visibility of nutrition among decision makers; further details on this are available in the relevant ANI Best Practices brief. With the high number of beneficiaries reached within a short time frame, 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

The end-of-project evaluation indicated that the prospect of sustainability was positive thanks to adequate capacity built within various government departments and institutions, particularly in the TFNC and the regions

campaigns. Similarly, the SBCC materials and tools developed for the ANI districts can be extended to other areas of the country, and trainers can be deployed to ensure a rapid expansion.

A comprehensive nutrition work plan and budget, covering MIYCN, management of SAM, micronutrient supplementation, coordination, multi-sectoral actions (WASH, food security, agriculture, nutrition monitoring and information management) was prepared for the 12 focus districts and incorporated into the Council Comprehensive Health Plan for the 2016/2017 fiscal year. As a follow-up to the planning and budgeting at district level, the High-level Steering Committee for Nutrition advocated to the Office of the President to increase budgetary allocations to nutrition at district level. This resulted in a presidential directive for districts to provide TZS 500 per child for the 2016-2017 fiscal year, for a total of TZS 1.2 million (US$ 598 000) for Lindi and nearly TZS 2 million (US$ 984 000) for Shinyanga. These allocations will be used to continue supporting the work previously funded under ANI.

The project helped establish a strong advocacy system to ensure that government funds are released and used to implement district plans. A revised supportive monitoring and supervisory visit tool that incorporates nutrition indicators was developed and is being used in the two regions. The end-of-project evaluation indicated that the prospect of sustainability was positive thanks to adequate capacity built within various government departments and institutions, particularly in the TFNC and the regions.

PERFORMANCE MONITORING FRAMEWORK RESULTS

INTERMEDIATE OUTCOME 1200:

The proportion of children under the age of six months who were exclusively breastfed increased by 9.2% to reach 59%, very close to the target of 60%. The proportion of children 6 to 23 months receiving a minimum acceptable diet decreased by 13.3% down to 8%. The proportion of children with severe acute malnutrition receiving appropriate treatment was not collected at baseline or at end-line. The proportion of pregnant women receiving iron and folic acid supplements increased by 9.2% to reach 12.7%, which was an improvement but fell short of the target of 30%.

IMMEDIATE OUTCOME1210:

the proportion of women and children reached by the supported nutrition interventions was 0% at baseline. At end-line, interventions reached a total of 1 642 240 people (1 234112 women of childbearing age and 408 828 children under 5 years of age).

IMMEDIATE OUTCOME 1220:

The knowledge and skills of health workers to deliver nutrition interventions was 63% at baseline, which did not meet the target of 75%. No data was collected at end-line so it is not possible to ascertain whether this improved. The proportion of community health workers implementing nutrition interventions increased from 0% to 88%. There was no overall project target but this was a significant improvement.

OUTPUT 1211:

The national nutrition implementation plan 2015/16 – 2025/26 integrated nutrition-specific and nutrition-sensitive interventions, and included four of the six requirements: has evidence-based strategies, allocates responsibilities, sets targets and gives indicators for monitoring progress, is officially adopted, is budgeted, and is implemented. This met the target at both baseline and end-line.

OUTPUT 1221:

Before the project began, 5210 health workers had been trained, and an additional 4205 workers were trained by ANI over the course of the project.

The Ag Managing Director of Tanzania Food and Nutrition Centre (TFNC), Dr Joyceline Kaganda, facilitating a training session.

Part IV: Analysis of project performance

RELEVANCE

The scale-up component of ANI was relevant in all three countries. It was designed to address the high burden of malnutrition that remains a priority public health problem in the countries, and it was in line with national nutrition and poverty reduction plans and strategies that reflect nutrition as a national priority. The project was seen as part of a national push to scale up nutrition under the auspices of the global SUN movement targeting high-burden countries, including Ethiopia, Uganda and the United Republic of Tanzania.

PROJECT DESIGN

The project design was guided by a participatory approach that led to strong country ownership and a focus on each country's specific needs. The country implementation plans needed readjustment in some countries based on changing and evolving requirements.

SUSTAINABILITY

There are strong prospects that the achievements made will be sustainable. First, there is a strong political commitment to scale up nutrition and this is likely to translate to increased investment. Second, there is adequate technical capacity within the MoH that is increasingly being decentralised to regional and district levels. Third, the district nutrition scale-up plans, increased budget allocation and initiatives such as establishment of multi-sectoral nutrition steering committees and appointment of nutrition focal points will enhance the continuity of the interventions supported by this project.

PARTNERSHIP

Under government leadership, the ANI project was implemented in partnership with REACH and the SUN movement. At the same time, WHO was fully engaged with other partners including UN joint platforms, national coordinating committees and regional technical and economic bodies to secure collaboration and buy-in from the respective partners.

Courtesy of SUN movement

Part V: Lessons Learned and Next Steps

LESSONS LEARNED:

- Scaling up nutrition actions must engage a multi-sectoral partnership to address the direct and underlying causes of malnutrition. The involvement of multiple stakeholders calls for effective coordination and strategic leadership at national and sub-national levels. The principle of "three ones" (one plan, one coordinating mechanism and one monitoring and evaluation framework) is key to effective coordination efforts to scale up nutrition. The project needs to be aligned with country programmes to avoid top down directives. It also requires adequate staffing at WHO, implementing partners and governments.
- Implementing such a project requires adequate time.
- The resources required to scale up nutrition must be mobilized from within the existing sectoral budgets. This requires the buy-in and support of various nutrition related sectors. Political will from the highest level and a steering role of the Prime Minister's Office are crucial to inciting investments in nutrition.
- Implementing a project through a joint venture between government and a partner NGO requires a shared implementation plan that is clear on respective mandates. The division of roles should be based on each partner's technical strength.
- Consultation meetings should be conducted at different levels in order to increase buy-in of the communities into the project: with increased buy-in comes greater acceptance of the project and uptake of the interventions. This improves the chances of sustaining the project interventions beyond the life of the project
- Joint planning, implementation, and monitoring of nutrition interventions with the public sector improved ownership and sustainability, and boosted implementation of the project.
- Involvement of administrative structures and other actors in nutrition intervention smooths implementation and strengthens monitoring and mentoring practices.
- The integration of project interventions into existing health systems such as district health team supervision, health facility outreach

and growth monitoring in Young Child Clinics is likely to increase the sustainability of such interventions at low marginal cost.

- Training of all health workers in the targeted health centres increases the likelihood of continuation of the nutrition interventions even when the project comes to an end.
- Working with established volunteer groups and associations such as women's groups has the potential to promote continuity of the interventions beyond the project life. In contrast, groups or associations formed by the project often close or become dormant once the project ends.
- Use of both in-school and out-of-school adolescents as nutrition key message promoters has the double advantage of improving their own nutrition and spreading messages to their families and communities.

NEXT STEPS:

- There is a need to support pre-service training, particularly the management of children with SAM, so that institutions that teach nursing, medicine and nutrition can incorporate aspects of care into their curricula. This is a way of building a critical mass of people with adequate skills.
- Continued health-facility-based mentorship and supportive supervision are needed to ensure that the necessary quality of care is maintained.

Measuring mid-upper arm circumference (MUAC) of child with severe acute malnutrition.

Part VI: Financial management report

SCALING UP MANAGEMENT FINANCIAL REPORT: BUDGET IMPLEMENTATION

all figures in Can$

	Approved budget after reprogramming of August 2013	Expenditures as at 31 December 2013	Expenditures 1 Jan-31 Dec 2014	Expenditures 1 Jan- 31 Dec 2015	Expenditures 1 Jan- 30 Sept 2016	Total expenditures	Balance
Direct project activities	7 872 798	475 100	2 139 283	3 897 271	1 253 758	7 765 413	107 385
Regional and global activities	968 750	232 585	286 053	291 777	88 711	899 127	69 623
Monitoring and evaluation	185 000			200 082		200 082	(15 082)
Project administration	1 173 452	91 999	315 294	570 586	177 219	1 155 098	18 354
TOTAL	**10 200 000**	**799 685**	**2 740 630**	**4 959 716**	**1 519 688**	**10 019 719**	**180 281**

Direct project activities

	Approved budget after reprogramming of August 2013	Expenditures as at 31 December 2013	Expenditures 1 Jan -31 Dec 2014	Expenditures 1 Jan - 31 Dec 2015	Expenditures 1 Jan- 30 Sept 2016	Total expenditures	Balance
Ethiopia	2 150 137	50 362	476 970	1 329 431	293 324	2 150 087	50
Uganda	2 150 137	82 540	573 384	765 011	494 600	1 915 534	234 603
United Republic of Tanzania	2 150 137	16 652	518 684	1 353 470	151 175	2 039 982	110 155
Country staff (3 P3)	1 422 387	325 546	570 245	449 359	314 659	1 659 810	(237 423)
TOTAL	**7 872 798**	**475 100**	**2 139 283**	**3 897 271**	**1 253 758**	**7 765 413**	**107 385**

Regional and global activities

	Approved budget after reprogramming of August 2013	Expenditures as at 31 December 2013	Expenditures 1 Jan -31 Dec 2014	Expenditures 1 Jan - 31 Dec 2015	Expenditures 1 Jan- 30 Sept 2016	Total expenditures	Balance
Activities	375 867	88 893	65 304	82 606	88 711	325 514	50 353
HQ staff (1 P3)	592 883	143 693	220 750	209 171	-	573 613	19 270
TOTAL	**968 750**	**232 585**	**286 053**	**291 777**	**88 711**	**899 127**	**69 623**

Breakdown of regional and global activities

	Total budget	2012-13	2014	2015	Expenditures as at 31 December 2013	Expenditures 1 Jan -31 Dec 2014	Expenditures 1 Jan - 31 Dec 2015	Expenditures 1 Jan- 30 Sept 2016	Total Expenditures	Balance
Dissemination of WHO guidance (IT application for eLENA)	40 000		30 000	10 000		24 968	7 956	8 494	41 418	(1 418)
Dissemination of WHO guidance (translations)	30 000	10 000	10 000	10 000	9 885	2 343	29 948		42 176	(12 176)
Coverage maps in Ethiopia, Uganda, the United Republic of Tanzania	30 000		30 000			18 476		880	19 357	10 643
Good programmatic practices (report)	30 000			30 000			20 189	6 281	26 470	3 530
Travel for staff coordination meetings and technical support to countries	170 867	55 000	60 867	55 000	52 174	17 132	22 648	57 437	149 391	21 476
Project dissemination (web site, reports, video)	75 000	15 000	35 000	25 000	26 833	2 385	1 865	15 618	46 701	28 299
GRAND TOTAL	**375 867**	**80 000**	**165 867**	**130 000**	**88 893**	**65 304**	**82 606**	**88 711**	**325 515**	**50 352**

Annex A: Activities and sub-activities by country 2013-2016

Ethiopia	Activities	Sub-activities	Status
	1. Preparatory activities		Done
	Hold project inception meetings including advocacy for regional, zonal and woreda authorities		
	Ensure the inclusion of planned nutrition activities in the annual work plans and the continued involvement of authorities		
	Conduct baseline in-depth assessment to identify the situations in the proposed nutrition areas as well as the current capacity and ongoing efforts operated in target zones and woredas, and develop and implement monitoring and evaluation plan		
	Recruit local zonal focal points for selected zones		
	2. Nutrition capacity building among health workers (SAM and AMIYCN: selected regions, zones and woredas)		
	Finalize and print the SAM management training modules, including materials for target areas	Review existing materials, determine materials to be used	Done
		MIYCF materials printing and distribution	
	Train trainers on SAM management from each target region, and support the cascade training from regions to target woredas	Provide MIYCN technical training for health managers (key government officials, regional head and chief of MCH, woreda head)	
	Scale up the existing training materials, and provide nutrition workshops to local authorities and health workers with particular focus on IYCF, adolescent/maternal nutrition, and micronutrient nutrition	Provide MIYCN for health workers	
		Support MIYCN post-training review meetings for HEWs, supervisors and others trained	

Ethiopia	Activities	Sub-activities	Status
	3. IYCF practices in selected woredas		
	Promote IYCF practices using locally available means of communication Conduct nutrition education and cooking demonstration to promote appropriate complementary feeding with locally available food	Identify influential persons/civil society groups in the selected woredas, and occasions in which people gather, then develop advocacy strategies Print behaviour change communication material, and implement	Done
	4. Anaemia prevention in adolescent girls: selected woredas		
	Advocate the use of IFA and consumption of iron and other micronutrient rich foods using local means of communication Work with local governments and distribute iron-folic acid supplements for young girls (and other micronutrient supplements where necessary) Provide orientation workshop for school teachers and influential community personnel, such as HDA, on IFA supplementation and consumption of iron and other micronutrient rich food by young girls	Assess the needs and means of IFA supplementation and If necessary, procure IFA supplements and support distribution Identify communicate with schools and influential institutions/persons Provide orientation workshops for school teachers and influential community personnel Conduct school-based nutrition trainings	Done
	5. Support regular monitoring and on-the-job training for health extension workers conducted by Woreda Health Office		Done
	6. Documentation on lessons learned, and dissemination workshop		Done

Uganda	Activities	Sub-activities	Status
	1. Mapping of complementary feeding programmes	Design/ adapt tools Conduct the mapping / capacity need assessment Analyze data Disseminate report	Done
	2. Planning and Implementation of activities at district level	Develop the annual workplan and budget Conduct the District Orientation meetings Build capacity of national and district team managers on planning and managing implementations of nutrition activities Adapt the WHO generic materials to include nutrition interventions Print training materials and tools Organize the National training workshop Support the planning and budgeting process at district level Provide financial support to districts to manage implementation of nutrition interventions Monitoring and review	Done
	3. Application of the food-based dietary approach	Conduct the baseline survey Conduct trials of improved practices Develop and disseminate recommendations Build capacity and follow up	Done
	4. Development of the SBCC component	Conduct formative research in the target districts Develop and disseminate the SBCC plan Develop and print SBCC tools Implement activities	Done

Uganda	Activities	Sub-activities	Status
	5. Promotion of appropriate care at facility and community level	Update technical guidelines in line with WHO recommendations	Done
		Develop plan to build capacity of health workers and village health teams to conduct nutrition activities	
		Train and supervise health workers on Essential Nutrition Actions throughout the life course	
		Procure and distribute equipment and supplies for health facilities	
		Strengthen GMP services	
		Support implementation of community based nutrition interventions	
		Support organization of festival/ nutrition events to mobilize community	
	6. Document and disseminate experiences and lessons learned	Build capacity and follow up	Done

United Republic of Tanzania	Activities	Sub-activities	Status
	1. Preparatory activities		
	Hold project inception meetings including advocacy to regional and district authorities		Done
	Hold project inception meeting with national partners		
	Introductory visit and meeting with two regional policy-makers (Commissioners, District Executive Directors), and Technical Officers (Nutrition Officers), and sign MOUs on working modalities		
	District level Inter-sectoral project introductory meeting with participation of civil society organizations		
	2. Planning and budgeting guideline adoption for capacity building of district staff on planning, budgeting and implementing nutrition interventions		
	Organize technical working sessions at regional level, to adopt guidelines for district planning and budgeting	Review existing materials, determine materials to be used	Done
		MIYCF materials printing and distribution	
		Provide MIYCN technical training for health managers (key government officials, regional head and chief of MCH, woreda head)	
		Provide MIYCN for health workers	
		Support MIYCN post-training review meetings for HEWs, supervisors and others trained	
	3. Support capacity building on planning, budgeting and supervision of nutrition interventions		
	Hold district level workshops (nutrition steering committee and nutrition officer) in supported districts	Identify influential persons/civil society groups in the selected woredas, and occasions in which people gather, then develop advocacy strategies	Done
		Print behaviour change communication material, and implement	

United Republic of Tanzania	Activities	Sub-activities	Status
	4. Follow up workshops at district level to ensure inclusion of prioritized scale up plan activities in sectoral annual plans		
	High level advocacy meeting at regional level to ensure inclusion of prioritized scale up plan activities in sectoral annual plans	Regional and district level training workshops (district nutrition steering committee members) in supported districts on planning and budgeting	Done
	5. Actual financial support for district nutrition interventions (as identified in the district scale up plans) in supported districts		
	Support system structures (strengthen steering committee and coordination, develop human resources plans, map partners and develop resource mobilization strategies)		Done
	6. Development of the BCC component		
	Design, produce and distribute BCC materials, job aids and training materials on key interventions (IYCF, micronutrient and IMAM)	District assessments (and production of tools)	Done
		Develop BCC Plan for ANI from existing BCC Strategy	
	Train health workers and HEWs on BCC and key interventions	Organize technical sessions to collate and review existing materials	
	Implement BCC interventions (advocacy at ward and district level, community dialogue sessions, town announcements, World Breastfeeding Week)	Organize workshop to adapt/design BCC materials	
		Produce/print BCC materials	
	Implement health service interventions	Distribute/deploy BCC campaign materials	
	Develop and implement monitoring and evaluation plan linked with nutrition surveillance with defined multi-sectoral indicators according to district scale up plans	Organize ToT training and orientation of health workers, extension workers and civil society organizations on BCC	
		Conduct TOT training on nutrition packages, and follow up providers (on IYCF, complementary feeding, micronutrient supplementation, management of severe acute malnutrition, growth monitoring using new growth standards)	

United Republic of Tanzania	Activities	Sub-activities	Status
		Implement IYFC interventions, support HEWs to form nutrition working groups at community level, at least each district to have active community nutrition group of 15 members (women, men and a representative from children's council)	
		Support community groups to have nutrition dialogues on quarterly basis and participate in radio programmes; develop radio spots	
		Support conduct of quarterly child health days to distribute vitamin A supplements, IFA, deworming, growth monitoring and promotion, and carry out behavioural change communication activities	
		Follow up monitoring of health service provisions at facility and community levels by district health officers	
	7. Document and disseminate experiences and lessons learned (through stakeholders 'meeting, media workshop, press briefing, mass media, etc.)		Done

Annex B: Outputs and outcomes by country

Ethiopia	Outputs	Outcomes
	1. Report on mapping of stakeholders 2. District assessment reports 3. AMIYCN training tools 4. Adolescent nutrition training manual 5. Updated severe acute malnutrition training tool 6. BCC tools 7. Integrated supportive supervision tools 8. Capacity building at health facilities and districts	IYCF practices: • Early initiation of breastfeeding within one hour of birth increased from 78.7% to 91% • Colostrum feeding increased from 81.6% to 94% exclusive breastfeeding from 79.7% to 85% • Timely initiation of complementary feeding (6-9 months) from 79.5 to 89% • Proportion of children 12 – 23 months who ate semisolid foods 3 – 4 times /day remained almost the same: 75.7% in 2013 and 74.7% in 2016.
Uganda	1. Report on stakeholder mapping 2. District assessment reports 3. Updated IMAM guidelines 4. Adapted training manual on inpatient management of SAM 5. Report of food consumption survey for children age 6 – 24 months 6. KAP survey report on IYCF 7. SBCC strategy 8. Local-food based recipes for complementary feeding 9. SBCC tools 10. Adapted GMP and IYCF training manual 11. Capacity building at health facilities and districts	IYCF Practices • The proportion of caregivers of children under 2 years of age who know the recommended time to initiate breastfeeding changed from 55.9% to 81.9% • The proportion of households with children under 2 years who know the recommended duration of exclusive breastfeeding increased from 65% t0 89.0% • The proportion of caregivers of children under 2 years who are aware of the recommended time to start giving complementary foods changed from 48% to 65.1% • The proportion of caregivers of children under 2 years who are aware of the recommendation to continue breastfeeding up to 2 years of age went from nil to 70.3% • The proportion of mothers who reported that they fed their child four or more different foods increased from 11.9% to 59%
United Republic of Tanzania	1. Report on mapping of stakeholders 2. District assessment reports 3. SBCC tools 4. District nutrition plans with budgets 5. Capacity building at health facilities and districts	Increased nutrition budget During the implementation phase all the districts demonstrated increased prioritization of nutrition in their sectoral plans and budgets. This was accompanied by regional budget increments of 99% in Shinyanga and 372% in Lindi. The government policy requiring a specific, protected allocation to nutrition in all district budgets will contribute to sustained financing of nutrition interventions

Annex C: Staff trained by country

Country	Training conducted	Persons trained	Geographic coverage	Numbers trained		
				Male	Female	TOTAL
Ethiopia	Adolescent, maternal, infant and young child nutrition	Health extension workers	ANI districts	831	1352	2183
	Management of severe acute malnutrition	Health workers and health extension workers	ANI district	407	737	1144
Total Ethiopia				**1238**	**2089**	**3327**
Uganda	Development of food- based recommendations using Optifood	National stakeholders	National	16	10	26
	Community-level growth monitoring and promotion and infant and young child feeding	District trainers: Health workers and district focal persons	ANI districts	177	256	433
	Community-level growth monitoring and promotion and infant and young child feeding	Village heath team	ANI districts	921	444	1365
	Management of severe acute malnutrition	Health workers and nutritionists from regional referral hospitals	Regional	38	23	61
	Management of severe acute malnutrition	Health workers and nutritionists from districts	ANI districts	156	400	556
Total Uganda				**1308**	**1133**	**2441**
United Republic of Tanzania	Infant and young child feeding	Trainers of counsellors	ANI districts	100	322	422
	Infant and young child feeding	Counsellors	ANI districts	1523	1444	2967
	Integrated management of acute malnutrition	Regional and district hospital staff		13	30	43
	Integrated management of acute malnutrition	Health workers		285	488	773
Total United Republic of Tanzania				1921	2284	4205
GRAND TOTAL				**4467**	**5506**	**9973**

Annex D: Partners by country, in addition to implementing partner

Ethiopia

- Nutrition case unit at MoH
- Planning and health information department, MoH
- UNICEF
- Ethiopian School of Public Health
- Regional Health Bureau

Uganda

- Nutrition division, MoH
- Resource Centre, MoH
- Provincial Heath Offices
- WFP
- UNICEF
- World Vision
- ACF International
- FANTA III
- Makerere University

United Republic of Tanzania

- Nutrition division, MoH
- HMIS department, MoH
- Tanzania Food and Nutrition Center
- Office of Prime Minster Nutrition section
- Provincial Heath Offices
- WFP
- UNICEF
- Save the Children

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3. JSI Ethiopia: Nefasilk Lafto Subcity- Kebele 05 Haji Kelfa Sabit Building AA; Tel: +251113203501

4. SC Tanzania: Save the children International, Tanzania; Plot 257 Kiko Avenue Dar Es Salaam 25522; Tel : 255222701725