FANTA III
FOOD AND NUTRITION TECHNICAL ASSISTANCE

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STRENGTHENING NUTRITION IN MOZAMBIQUE: A Report on FANTA Activities from 2012 to 2018

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Abbreviations and Acronyms

CDC	U.S. Centers for Disease Control and Prevention
CSB+	corn-soy blend+
FANTA	Food and Nutrition Technical Assistance III Project
FTF	Feed the Future
IYCF	infant and young child feeding
MAM	moderate acute malnutrition
MOH	Ministry of Health (Ministério da Saúde [MISAU])
PAMRDC	The Multisectoral Action Plan to Reduce Chronic Undernutrition in Mozambique (Plano de Acção Multissectorial Para a Redução da Desnutrição Crónica em Moçambique)
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
PHFS	Partnership for HIV-Free Survival
PMTCT	prevention of mother-to-child transmission of HIV
PRN	Nutrition Rehabilitation Program (Programa de Reabilitação Nutricional)
PSVN	National Nutrition Surveillance System (Postos Sentinelas de Vigilância Nutricional)
RUSF	ready-to-use supplementary food
RUTF	ready-to-use therapeutic food
QI	quality improvement
SAM	severe acute malnutrition
SBCC	social and behavior change communication
SETSAN	Technical Secretariat for Food Security and Nutrition (Secretariado Técnico de Segurança Alimentar e Nutricional)
SISVAN	Food and Nutrition Surveillance System (Sistema de Vigilância Alimentar e Nutricional)
SUN	Scaling Up Nutrition
TB	tuberculosis
USAID	U.S. Agency for International Development
WHO	World Health Organization

COVER PHOTO: Sandra Remancus, FANTA/FHI 360

Overview

Fighting malnutrition is a key priority of the Government of Mozambique. Despite 2 decades of impressive economic growth, the country has an alarmingly high prevalence of malnutrition that surpasses the World Health Organization (WHO) thresholds for "very high" public health significance: 43 percent of children suffer from stunting, a measure of chronic malnutrition, and 6 percent suffer from wasting, a measure of acute malnutrition.[1] It is estimated that malnutrition globally is the underlying cause of 45 percent of deaths in children under 5 years of age.[2] Malnutrition also takes an economic toll: Children with malnutrition face reduced cognitive capacity, which leads to poorer school performance and lower economic productivity throughout their lifetimes. Moreover, malnutrition in Mozambique results in annual losses of US$1.6 million—nearly 11 percent of the country's gross domestic product.[3]

In response, the Government of Mozambique has taken a multifaceted approach: joining the Scaling Up Nutrition (SUN) movement, ratifying high-level global commitments to reduce malnutrition, developing strategies to ensure nutrition support for people with HIV and/or tuberculosis (TB), implementing a multisectoral action plan that engages different ministries, and launching a nationwide nutrition program to address malnutrition at the local level.

Between 2012 and 2018, the Food and Nutrition Technical Assistance III Project (FANTA) partnered with the Government of Mozambique in its fight against malnutrition, with funding from the U.S. Agency for International Development (USAID)/Mozambique, the U.S. President's Emergency Plan for AIDS Relief (PEPFAR)/Mozambique, and Feed the Future (FTF)/Mozambique. Through technical support at the national and sub-national levels, FANTA focused on strengthening the capacity of the Government of Mozambique and its partners to establish, lead, and deliver high-quality nutrition services. At the national level, FANTA supported the development of policies, strategies, programs, technical materials, and data management systems, resulting in stronger programming, improved systems, and staff that were better equipped to manage and deliver services. At the provincial, district, and health facility levels, FANTA provided hands-on, intensive support to help the government strengthen nutrition coordination and Nutrition Rehabilitation Program (Programa de Reabilitação Nutricional [PRN]) service delivery, leading to better-managed and more effective services.

This report describes FANTA's activities and achievements from 2012 to 2018, along with challenges, lessons learned, and recommendations.

1 Ministério da Saúde (MISAU), Instituto Nacional de Estatística (INE), and ICF International (ICFI). *Moçambique Inquérito Demográfico e de Saúde 2011.* Calverton, Maryland: MISAU, INE, and ICFI.

2 Black, R.E. et al. 2013. "Maternal and ChildUndernutrition and Overweight in Low-Income and Middle-Income Countries." *The Lancet.* Volume 382, Issue 9890, pp. 427–451

3 World Food Programme. 2017. *Cost of Hunger in Africa: Mozambique Infographic.*

Major Accomplishments

- 14 national-level policies and strategies strengthened with nutrition content
- 1,600 people trained in nutrition-related topics and processes, including national-level decision makers, provincial and district officials, and health and community workers
- Key programmatic materials developed for nationwide nutrition service provision, including training materials, job aids, quality improvement tools, supervision tools, and data management systems

Key FANTA-Supported Guidance, Strategies, and Tools

- *PRN Manual for the Treatment and Rehabilitation of Malnutrition, Volume I* for children and adolescents 0–14 years of age
- *PRN Manual for the Treatment and Rehabilitation of Malnutrition, Volume II* for adolescents and adults over 15 years of age
- PRN I and II training materials, job aids, register books, monthly reports, databases, stock management forms, and quality performance standards
- Body mass index wheel in Portuguese
- Training materials for a pilot implementation of a community-based model of PRN by community-based health workers
- *Nutrition Care for People Living with HIV: Training for Community-Based Health Workers*
- Nutrition counseling materials for people living with HIV and/or TB: flip chart booklet, guidance booklet on conducting counseling, posters, desk calendars, and pamphlets
- *National Strategy for Social and Behavior Change Communication for the Prevention of Malnutrition in Mozambique 2015–2019*
- *National Infant and Young Child Feeding Policy*
- *National Infant and Young Child Feeding Strategy*
- Job aid on infant feeding in the context of HIV
- Reference booklet for growth curves for children 0 to 18 years of age
- Reference booklet for growth tables for children 0 to 18 years of age

PART 1

Strengthening Nutrition at the National Level

Equipping the Ministry of Health to Improve and Expand the National Nutrition Program

As part of its commitment to improve nutrition among all Mozambicans, the Government of Mozambique, with FANTA's support, established the Nutrition Rehabilitation Program I (Programa de Reabilicação Nutricional I, or PRN I) to address acute malnutrition among children and adolescents 0–14 years of age and PRN II for people age 15 years and older. PRN has five pillars: community engagement, inpatient treatment for severe acute malnutrition (SAM) with medical complications, outpatient treatment for SAM without medical complications, outpatient treatment for moderate acute malnutrition (MAM), and nutrition counseling and education. The program includes a special focus on groups at higher risk of malnutrition, such as people with HIV and/or TB, pregnant and lactating women, and the elderly. PRN services are also part of the government's efforts to reduce HIV-related mortality, achieve an AIDS-free generation, and address TB-related mortality, as outlined in the *Mozambique HIV and AIDS Response—Strategic Acceleration Plan 2013–2015* and the *Strategic and Operational Plan of the National Program for TB Control 2014–2018*, respectively. With the scope of these guidelines and materials, Mozambique became one of the first countries to develop a comprehensive program to manage malnutrition among all age groups and across a spectrum of needs.

FANTA's technical support at the national, provincial, district, and health facility levels to establish and strengthen PRN has been a cornerstone of the project's work in Mozambique. This section focuses on national-level technical assistance; the sub-national work is described in Part 2.

Mozambique is one of the first countries to develop a comprehensive program to manage malnutrition among all age groups and across a spectrum of needs.

At the national level, working closely with the MOH and other partners on the national PRN technical working group, FANTA led the development of the manuals, protocols, tools (including job aids; training materials; register books; monthly reports; databases; stock management forms; and resources for supervision, quality improvement, and counseling), and systems that form the foundation of PRN service delivery. FANTA created the materials by consulting global technical documents and key nutrition and dietetics resources, conferring with other countries' ministries to learn about their guidelines and experience, and leading technical discussions through the PRN technical working group. The MOH launched PRN I countrywide in 2011 and PRN II in 2016. Over the course of its PRN work, FANTA co-facilitated PRN trainings for more than 1,600 health staff nationwide, resulting in a stronger cadre of front-line health workers, managers, pharmacists, and data managers to effectively combat malnutrition.

PRN I and II have proven invaluable in the fight against malnutrition, especially for vulnerable populations. The PRN protocols have "promoted the adequate nutritional treatment of chronically ill patients, [such as] patients with HIV and/or tuberculosis, as well as pregnant women and women up to 6 months postpartum," said Dr. Katia Mangujo, a senior nutrition technician and

the MOH's PRN focal point. In addition, the PRN II tools are helping to strengthen data collection as well as the quality of health services for adolescents and adults. "With the PRN register books, it is possible to maintain good records and have consistent follow-up of the patients," said Edgar Arthur Caetano, senior nutrition technician and nutrition manager of Nicoadala Health Center in Zambézia Province. "All of this contributes to proper follow-up [and] good outcomes," he added.

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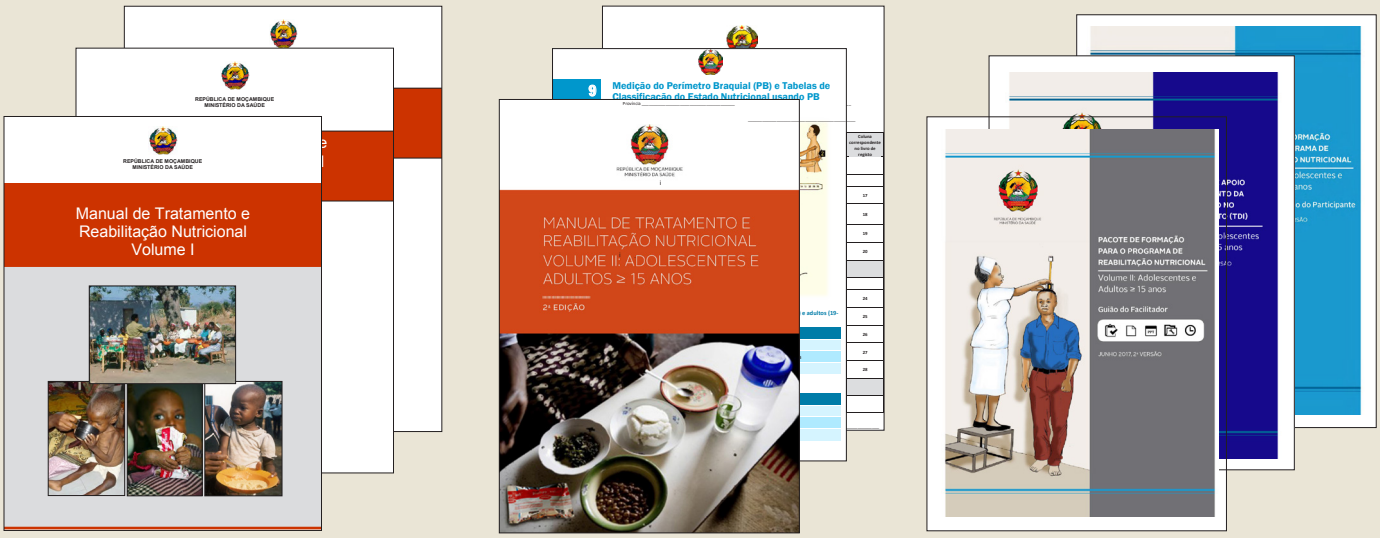
—Dr. Katia Mangujo, PRN focal point for the MOH

Major Accomplishments in PRN at the National Level

- Established all materials and systems that form the foundation of PRN service delivery—including protocols; manuals; job aids; training materials; tools for counseling, supervision and quality improvement; and data management systems—resulting in comprehensive systems and resources for addressing malnutrition among all Mozambicans
- Through trainings and on-the-job technical support, strengthened the capacity of more than 1,400 health staff nationwide to deliver PRN services
- Strengthened the capacity of more than 200 health staff at the central, provincial, and district levels to oversee and manage PRN services



The PRN I and PRN II materials are *available online*.

Improving Infant and Young Child Feeding

The 2003 Lancet Child Survival Series estimated that breastfeeding and adequate complementary feeding together could prevent nearly one-fifth of the deaths of children under 5 in developing countries, representing the most powerful set of interventions to prevent child mortality.[4] In addition, breastfeeding interventions embedded in institutional maternity care have been shown to increase breastfeeding initiation and duration rates.[5] Recognizing the potential impact of improved infant and young child feeding (IYCF) on its national health and development objectives, the Government of Mozambique worked to improve IYCF through strategic actions such as developing national-level guidance and tools and establishing "baby-friendly" policies and practices in maternity wards (discussed later in this section).

Photo credit: Celeste Bila, FANTA/Mozambique

Dr. Marla Amaro, chief of the MOH's Nutrition Department.

Establishing National Guidance for Infant and Young Child Feeding

FANTA, the MOH, and other partners developed the *National Infant and Young Child Feeding Policy* to provide normative guidance for promoting, protecting, and supporting optimal IYCF practices for Mozambican children 0–24 months of age, in line with global recommendations. The policy provides special consideration for children at high risk of malnutrition and mortality (e.g., those born to mothers with HIV) and for infant feeding during emergencies. FANTA, the MOH, and partners also developed the companion *National Infant and Young Child Feeding Strategy* to guide, facilitate, and ensure the implementation of specific activities to carry out the policy. FANTA also supported the development and/or implementation of resources and activities to promote optimal IYCF practices, including Mozambique's social and behavior change communication strategy (discussed later in this report), a job aid for counseling mothers with HIV on feeding their infants, and a mapping of community IYCF counseling materials to gauge the status of implementation. These resources are contributing to stronger IYCF programming. For example, Dr. Marla Amaro, chief of the MOH's Nutrition Department, called the IYCF strategy "an important guide for action, support, and promotion of infant and young child feeding practices." She noted that the strategy "defines the commitments and responsibilities of the different stakeholders in infant feeding so that, synergistically, optimal feeding practices can be achieved" for children age 0–24 months. In

4 Jones, G. et al. 2003. "How Many Child Deaths Can We Prevent This Year?" *The Lancet.* Child Survival Series. Vol. 362.; No. 9377: 65–71.

5 Fairbank, L. et al. 2000. "A Systematic Review to Evaluate the Effectiveness of Interventions to Promote the Initiation of Breastfeeding." *Health Technology Assessment.* 4 (25): 1–171.

addition, health workers found resources such as the job aid very helpful for optimizing IYCF in the context of HIV. The job aid "is very welcomed given the relevance to our health facilities and communities," said Bernadette Gelo, a nurse and chief of maternal and child health services of Alto Molócuè District in Zambézia Province. "It will help greatly with the prevention of the transmission of HIV and even more with the growth and development of the children."

Helping Hospitals Adopt Baby-Friendly Policies

The Baby-Friendly Hospital Initiative was launched by WHO and UNICEF in 1991 to encourage hospitals to implement the "10 Steps to Successful Breastfeeding" in maternity wards and link with community support, with the goal of being certified as "baby friendly" using internationally recognized criteria. The initiative was introduced in 13 hospitals throughout Mozambique between 2010 and 2018. In collaboration with the MOH's Nutrition Department, UNICEF, and other partners, FANTA helped update the initiative's materials for the Mozambican context; trained staff and provided technical assistance at the provincial hospitals in Gaza, Manica, and Tete provinces to gain certification; and developed a plan with the MOH for training additional hospitals. As a result, the hospitals have strengthened baby-friendly policies and are closer to being certified, and the MOH Nutrition Department staff have stronger capacity to oversee the initiative and the hospitals' certifications, contributing to improved child health in Mozambique.

Major Accomplishments in Infant and Young Child Feeding

- Established the IYCF policy, strategy, and tools, providing Mozambique with clear, evidence-based guidance and helping health workers convey accurate information to caregivers
- Strengthened capacity of health staff to promote optimal breastfeeding practices in maternity wards
- Strengthened baby-friendly policies in maternity wards in Gaza, Manica, and Tete provincial hospitals

Partnership for HIV-Free Survival in Mozambique: Opportunity and Obstacles

Recognizing the importance of eliminating mother-to-child transmission of HIV and ensuring HIV-free survival, from 2012 to 2015, Mozambique participated in the Partnership for HIV-Free Survival (PHFS), a multi-country initiative established by WHO and PEPFAR to help countries improve maternal and infant care and support in the postnatal period by implementing WHO's 2010 guidelines on the prevention of mother-to-child transmission (PMTCT) of HIV and on infant feeding in the context of HIV.

FANTA coordinated the national-level PHFS steering committee, which included the PMTCT Sector of the MOH's Department of Maternal and Child Health (as chair), the MOH's Nutrition Department and Department of Medical Assistance (as co-chairs), USAID/Mozambique, U.S. Centers for Disease Control and Prevention/Mozambique, and eight PEPFAR partners. Using a quality improvement (QI) approach, the partnership focused on four areas for mothers and their infants: identification and retention in HIV care and treatment services; nutrition assessment, counseling, and support; monitoring of HIV status; and ensuring antiretroviral coverage. Health centers in Gaza, Sofala, and Zambézia provinces were selected to use QI to identify small changes that had the potential to improve the quality of health care services for mothers and infants and that could be expanded to other health centers. Provincial, district, health center, and community partners were trained in QI methods and provincial-level partners were supported in prioritizing areas for improvement, identifying causes of any issues, and developing action plans to address the issues.

It was envisioned that government and nongovernmental partners would implement the action plans, expand PHFS activities to other areas, and introduce successful methods in other health facilities. However, the steering committee found that the PHFS efforts were hampered by challenges stemming from, for example, a misunderstanding of the initiative and how it differed from ongoing activities (e.g., Mozambique's *National Quality Improvement Strategy* and partner QI activities) and from a lack of consensus on reporting and sharing information. The steering committee worked diligently to address the issues, but ultimately the PHFS activities were not implemented as fully as planned in the health facilities and communities. Still, the effort helped improve PMTCT and QI capacity in the targeted facilities, and the steering committee called for the continued use of QI to strengthen infant feeding, nutrition, and PMTCT services to eliminate mother-to-child transmission of HIV. In addition, the steering committee agreed that the initiative should be included in the *National Quality Improvement Strategy*.

The experience also prompted the steering committee to make these recommendations for future collaborative efforts:

- Ensure strong leadership and dedicated focal points at the national and sub-national levels.
- Ensure that similar collaborative efforts build consensus among all partners on aims and objectives.
- Establish an operational or strategic plan that clearly defines the overall purpose, objectives, strategies, activities, timeline, and performance monitoring plan, as well as the communication protocol and roles, responsibilities, and relationships of the partners.
- Ensure that partners understand their roles and responsibilities and are accountable for achieving the agreed-upon objectives, e.g., by establishing indicators and benchmarks.
- Establish a strong communication system among the partners.

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Strengthening Social and Behavior Change Communication for Nutrition

Establishing National Guidance for Social and Behavior Change Communication

Carefully designed social and behavior change communication (SBCC) can maximize the effectiveness of interventions to improve nutritional status. The Government of Mozambique has several policies, strategies, plans, and protocols that directly or indirectly include nutrition-related SBCC, such as the draft *Advocacy and Communications Strategy* for the *Multisectoral Action Plan to Reduce Chronic Undernutrition in Mozambique* (*Plano de Acção Multissectorial Para a Redução da Desnutrição Crónica em Moçambique [PAMRDC]*) and the *Communication and Social Mobilization Plan for Promoting, Protecting, and Assisting Breastfeeding*. To complement these documents, the government saw that a national strategy was needed to better coordinate nutrition-related SBCC in nutrition, health, and relevant sector programming, help harmonize implementing partners' strategies and messages, and guide the development of program-specific strategies.

FANTA led the MOH Nutrition Department's Task Force on SBCC to develop the *National Strategy for Social and Behavior Change Communication for the Prevention of Malnutrition in Mozambique 2015–2019*, which follows a harmonized approach and global best practices in nutrition and social and behavior change. The strategy was greeted with enthusiasm among top health and nutrition officials, who quickly approved it and created a companion implementation plan, with FANTA's support, to help ensure the strategy would be carried out effectively. The strategy and the implementation plan lay a foundation for more effective nutrition-related SBCC by national- and provincial-level stakeholders that can strengthen and amplify interventions.

The SBCC strategy is *available online*.

Improving Nutrition Counseling for People with HIV and/or TB

Nutrition services are critical to people with HIV and/or TB and must include a strong counseling component. Recognizing that nutrition services in health facilities were focused on nutrition *education* and not nutrition *counseling*, FANTA worked with the MOH and a creative firm to develop materials to help the health staff select the counseling topic and three to four targeted messages most relevant to the client's needs. The approach is designed to help clients take practical steps and not overwhelm them with a lot of information.

The materials had to be carefully planned and tested to ensure they would be technically accurate, easy to use for staff, and accessible

to clients. As a first step, FANTA conducted a survey among health and nutrition professionals in Mozambique and in the international nutrition and infectious diseases community to prioritize nutrition counseling messages for people with HIV and/or TB. FANTA categorized the messages into four themes, each with specific topics, and developed "creative briefs" for each topic that provided specific guidance on the audience, content, and design considerations for the materials. FANTA then interviewed facility- and community-based health care providers in Maputo and Nampula provinces to identify preferences for materials and job aids for group education and one-on-one counseling; determine the feasibility of the messages; identify additional messages relevant in the Mozambican context; and learn ways to make the messages easier to understand. The findings were incorporated into the materials, which include a flip chart and guidance on how to use it during counseling, pamphlets for patients to take home, and posters and desk calendars to display in the facilities to reinforce the messages. The materials were pretested with health workers and patients in five health facilities in Maputo, Nampula, and Zambézia provinces and then finalized.

The counseling materials allow health workers to "pass on important elements and aspects on the various [counseling] themes in a standardized way . . . and to monitor the evolution of the patient's understanding," said Euclides Osias Sitoe, staff member of the MOH's Department of Health Promotion. Targeting the most relevant issues and using a standardized process also can help save time for busy health workers, he noted. In addition, the materials are helping make counseling sessions more effective, health workers said. "The patient can see and interact more effectively with me, by showing that she understands something and that she will implement the suggested actions in her house with her family," said Mahando Rafique, a nurse in the leprosy and TB sector at the Marracuene Hospital in Maputo Province.

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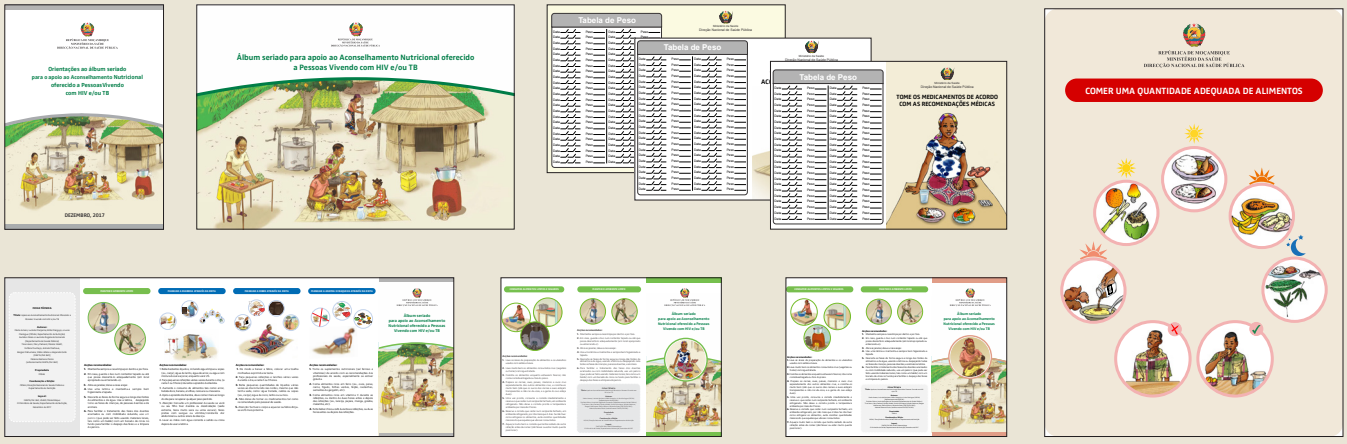


Fostering the Multisectoral Approach to Nutrition

As noted in USAID's Multi-Sectoral Nutrition Strategy, engaging multiple sectors helps address the many determinants of malnutrition and can enhance the impact of nutrition interventions. The *Multisectoral Action Plan to Reduce Chronic Undernutrition in Mozambique (Plano de Acção Multissectorial Para a Redução da Desnutrição Crónica em Moçambique [PAMRDC]*) is the foundation of the country's inter-ministerial effort to prevent chronic undernutrition. Partnering with the MOH and the Ministry of Agriculture's Technical Secretariat for Food Security and Nutrition (Secretariado Técnico de Segurança Alimentar e Nutricional [SETSAN]), FANTA supported implementation of the PAMRDC by strengthening the nutrition components of food security policy at the national and provincial levels. As a member of the Scaling Up Nutrition—Civil Society Platform in Mozambique, FANTA also supported the multisectoral approach by promoting funding for multisectoral nutrition efforts and helping to map different sectors' nutrition-related activities to facilitate coordination.

Optimizing Nutrition Advocacy Efforts

Nutrition advocacy is an important tool for creating movement toward greater political and social commitment for nutrition. FANTA's work included providing technical input for the Nutrition Generation (Geracão Nutrição) advocacy and communication campaign to encourage decision makers to fund nutrition-specific and nutrition-sensitive interventions across sectors and for a journalism workshop designed to help promote and sustain nutrition advocacy by strengthening national and local reporting on nutrition.

Supporting Nutrition Surveillance

Timely, reliable data are crucial to enable routine monitoring of a population's nutrition situation and help detect negative trends. The Mozambique National Nutrition Surveillance System (Postos Sentinelas de Vigilância Nutricional [PSVN]) was established in 2009 to obtain timely information on the nutrition situation in the country. In 2013, the MOH began renovating the system to address weaknesses, expand its scope, and introduce new software. FANTA helped the MOH develop a concept note for the new system—called the Food and Nutrition Surveillance System (Sistema de Vigilância Alimentar e Nutricional [SISVAN])—and, in collaboration with the MOH and WHO, assessed the PSVN to inform the new system's design. The assessment report may offer useful insights to countries that want to develop surveillance systems and is *available online*.

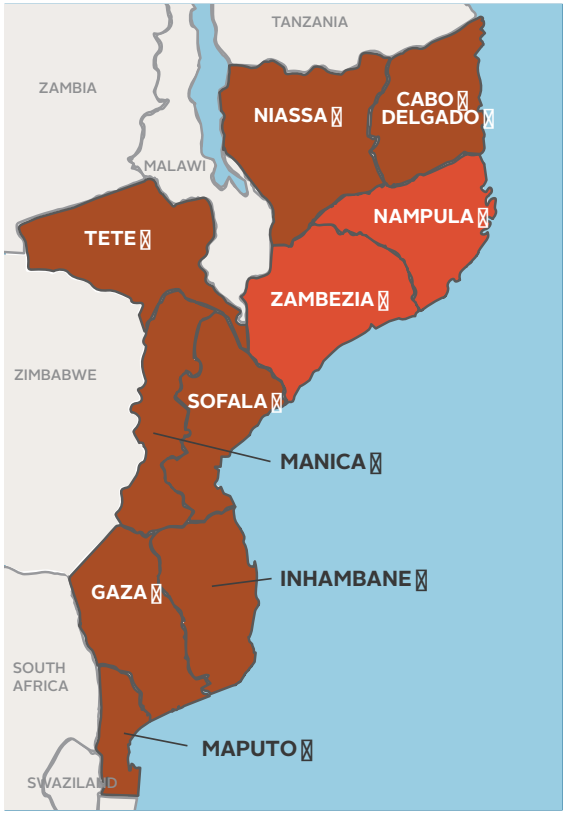
PART 2

Strengthening Nutrition at the Sub-National Level

Supporting PRN Implementation in Nampula and Zambézia Provinces

After PRN I and II were introduced nationwide in 2011 and 2016, respectively, the program confronted many challenges, including problems with consistent and effective implementation of the PRN protocols, specifically on nutrition screening, assessment, diagnosis, counseling, treatment, and discharge; supply-related issues such as regular stock-outs of nutrition products, restocking requests based on inaccurate data, and delayed product deliveries; data management problems including inaccurate recording of information in the PRN register books, inconsistent submission of aggregated monthly reporting forms, and inadequate processing and analysis of data; and lack of PRN supplies and equipment, such as register books, scales, mid-upper arm circumference tapes, and height boards. These challenges were seen nationwide.

To establish a model of technical support that would optimize PRN performance, FANTA, USAID/Mozambique, and the Government of Mozambique designed a "proof of concept" activity in two priority provinces with a very high burden of malnutrition: Nampula and Zambézia. The activity aimed to deliver targeted technical assistance to improve the management and service delivery of PRN and capture its progress through program data, in collaboration with other U.S. Government partners. From 2015 to 2018, FANTA supported the provincial health offices in each province, the district health offices in four focus districts (Mecuburi and Angoche in Nampula Province and Nicoadala and Alto Molócuè in Zambézia Province), and selected health facilities in the districts. FANTA supported four health facilities in the first year, eight in the second year, and 26 in the third year, reaching a total of 30 facilities (with some facilities overlapping years).



30 facilities receiving PRN support in 2015–2018

154 on-the-job trainings

304 technical assistance visits

Based on PRN's main challenges, three priority areas were targeted for improvement: PRN management and service delivery; supply chain management of nutrition products; and the quality, reporting, and analysis of PRN data. FANTA used a multipronged approach to tailor the technical assistance to each challenge that the health facilities, districts, and provinces faced. This included health facility assessments and gap analyses; on-the-job and in-service training; and technical assistance to provincial

and district health staff to conduct supportive supervision. FANTA helped establish provincial nutrition technical working groups to strengthen collaboration among nutrition partners; participated in the provincial PAMRDC technical working groups to improve nutrition-related activities; conducted data quality reviews with the health facility, district, and provincial health staff to encourage the use of more accurate data for programmatic decisions; and supported health staff to improve monitoring of nutrition products and reporting of stock-outs. FANTA introduced methods to increase the reach of the technical assistance and the motivation of health staff to continue delivering high-quality services even after the technical assistance phases out. These included learning exchange visits between higher-functioning and lower-functioning health facilities, the inclusion of well-performing health staff in the teams conducting trainings and technical assistance visits, and merit certificates for staff with strong performance.

In every activity, FANTA worked side by side with the government staff. For example, at health facilities, FANTA coached and mentored health staff in the provision of routine care and additional services such as testing malnourished patients for HIV. At the district level, FANTA's close collaboration included collecting and analyzing data alongside district staff. This hands-on approach allowed FANTA to provide on-the-spot guidance in real time and helped create a network of staff at all levels who are well-trained in PRN and can continue the work even after FANTA's support has phased out. Reflecting on PRN services in areas where FANTA provided support, Assane Namicano, the provincial nutrition focal point in Zambézia Province said, "You can see a big difference in the FANTA districts. Previously, we did not have data to know what was happening in the program. Now, we know if the children are dropping out; we know the number of admissions and discharges. There is a notable difference in the areas where FANTA has been."

Photo credit: Faizal Motte, FANTA/Mozambique

Dr. Dionisio Cabral, Alto Molócuè district health director, presents a merit certificate to Edna Efraime Chichava, maternal and child health nurse of the Nauela Health Center.

Improved PRN Performance at FANTA-Supported Health Facilities

All 30 health facilities where FANTA provided support showed improvements in PRN performance. The results that follow are from the first four health facilities—Angoche Rural Hospital and Mecuburi Health Center in Nampula Province and Alto Molócuè Health Center and Nicoadala Health Center in Zambézia Province—because these facilities have data from both a baseline period and a 24-month period of FANTA's intervention. Health facilities added in the second and third years have shorter implementation periods and/or do not have baseline data. However, the results in the other health facilities were comparable to those of the first four health facilities.

Figure 1. Percentage of Children Screened for Malnutrition at the At-Risk-Child Clinic at Four Facilities

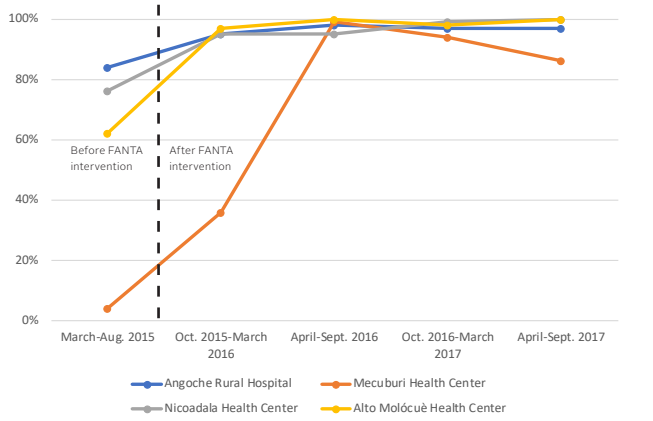


Figure 2. Number of Children Screened for Malnutrition at the At-Risk-Child Clinic at Four Facilities

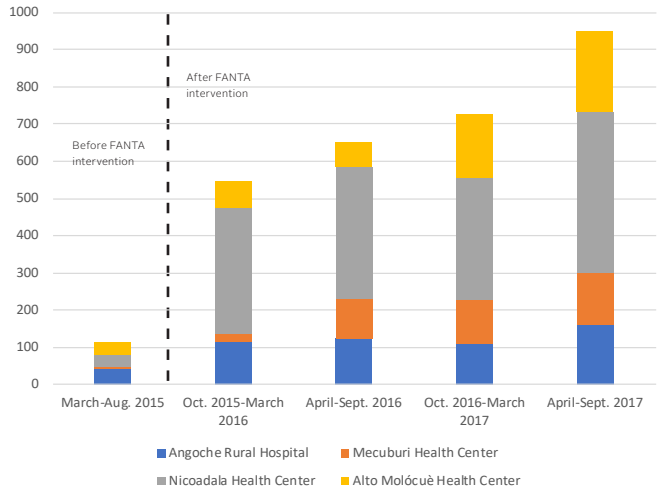
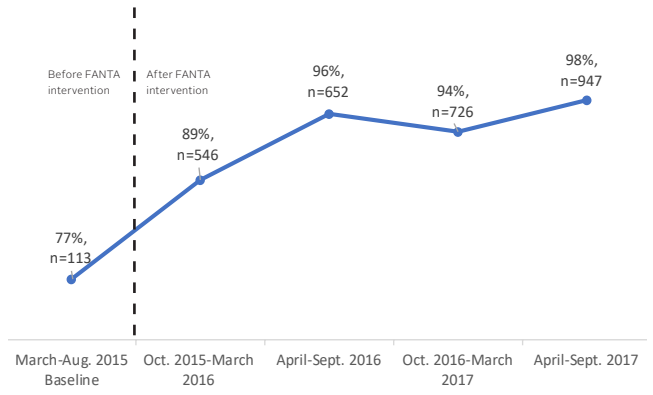


Figure 3. Percentage of Children under 5 Whose Nutritional Status Was Correctly Classified in the At-Risk-Child Clinic at Four Facilities



Note: n = number of children screened

Consistent Screening for Malnutrition

In the first 6 months of FANTA's support (October 2015–March 2016), the percentage of children under 5 screened jumped to at least 95 percent at all facilities except Mecuburi Health Center, compared to a range of 4 to 86 percent in the 6-month baseline period (March–August 2015) before FANTA's technical assistance began (Figure 1). (At the Mecuburi center, the percentage of children screened rose from 4 percent to 36 percent in the first 6 months of FANTA's support and later increased to levels similar to the other facilities' results.) At all four health facilities, the absolute number of children screened rose considerably, with the total increasing from 113 children in the 6 months before FANTA's intervention to 947 children after FANTA's intervention (Figure 2).

Increased Accuracy of Nutritional Status Classification

From the baseline period of March–August 2015 to the April–September 2017 period, the proportion of patients whose nutritional status was correctly classified jumped 21 percentage points, from 77 percent to 98 percent (Figure 3) at the four facilities. Moreover, accuracy improved even with a more than eight-fold increase in the number of patients seen at the four facilities (Table 1).

Table 1. Percentage of Children Whose Nutritional Status Was Correctly Classified in the At-Risk Clinic out of All Children Screened, by Health Facility

Health facility	March Aug. 2015 (baseline)	Oct. 2015 March 2016	April Sept. 2016	Oct. 2016 March 2017	April Sept. 2017
Angoche Rural Hospital	86% (42)	86% (116)	96% (122)	94% (112)	98% (163)
Mecuburi Health Center	100% (2)	70% (20)	98% (110)	97% (116)	98% (137)
Nicoadala Health Center	89% (38)	91% (339)	96% (354)	97% (327)	98% (434)
Alto Molócuè Health Center	48% (31)	87% (71)	94% (66)	88% (171)	98% (213)
TOTAL	**77% (113)**	**89% (546)**	**96% (652)**	**94% (726)**	**98% (947)**

More Children with Malnutrition Identified and Treated

FANTA's assistance resulted in a dramatic increase in the number of children with MAM and SAM identified and treated for malnutrition. At the four health facilities, the number of children identified with MAM and SAM rose nearly seven-fold on average after FANTA's intervention compared to the baseline period: Only two and six children were identified with MAM and SAM, respectively, in the March–August 2015 baseline period, versus an average of 32 and 21 children, respectively, in the 6-month periods between October 2015 and September 2017 (Table 2). The higher number of children with MAM compared to those with SAM indicates that children were identified earlier, when they could be treated before their condition worsened, preventing the most serious consequences of acute malnutrition.

Of the children identified with acute malnutrition and treated as outpatients, an average of 84 percent received supplementary food for MAM (382 out of 455 children) and 82 percent received therapeutic food for SAM (231 out of 281 children) (Table 3).[6] Stock-outs were the main reason children did not receive nutrition products (discussed further below).

Table 2. Number of Children 0–59 Months Identified with MAM or SAM at Four Facilities

Health Facility	Baseline	FANTA Intervention				
	March–Aug. 2015	Oct. 2015–March 2016	April Sept. 2016	Oct. 2016–March 2017	April Sept. 2017	Average
Angoche Rural Hospital						
MAM	1	35	24	22	26	27
SAM	4	17	29	18	25	22
Total screened	42	116	122	112	163	128
Mecuburi Health Center						
MAM	0	5	24	48	85	41
SAM	1	3	26	29	27	21
Total screened	2	20	110	116	137	96
Nicoadala Health Center						
MAM	1	26	37	38	52	38
SAM	0	23	37	22	31	28
Total screened	38	339	354	327	434	364
Alto Molócuè Health Center						
MAM	0	3	1	36	48	22
SAM	1	5	1	11	30	12
Total screened	31	71	66	171	213	130

6 Treatment for MAM includes ready-to-use supplementary food (RUSF) or, if RUSF is unavailable, ready-to-use therapeutic food (RUTF). Treatment for SAM without complications includes RUTF.

Table 3. Number and Percentage of Children 6–59 Months with MAM or SAM Who Received Supplementary or Therapeutic Food at Four Facilities[7]

Health Facility	Baseline		FANTA Intervention								Total (#)/ Average (%)	
	March–Aug. 2015		Oct. 2015–March 2016		April Sept. 2016		Oct. 2016–March 2017		April Sept. 2017			
	#	%	#	%	#	%	#	%	#	%	#	%
Angoche Rural Hospital												
MAM	1		32		15		20		24		91	
Received suppl. food	1	100%	30	94%	11	73%	17	85%	23	96%	81	89%
SAM	4		16		20		11		23		70	
Received ther. food	4	100%	14	88%	18	90%	11	100%	22	96%	65	93%
Mecuburi Health Center												
MAM	0		5		23		46		83		157	
Received suppl. food	0	N/A	4	80%	14	61%	45	98%	79	95%	142	90%
SAM	1		5		23		28		26		82	
Received ther. food	1	100%	3	60%	15	65%	25	89%	26	100%	69	84%
Nicoadala Health Center												
MAM	0		12		35		32		50		129	
Received suppl. food	0	N/A	7	58%	28	80%	10	31%	48	96%	93	72%
SAM	0		17		24		20		29		90	
Received ther. food	0	N/A	12	71%	19	79%	7	35%	26	90%	64	71%
Alto Molócuè Health Center												
MAM	0		3		0		27		48		78	
Received suppl. food	0	N/A	3	100%	0	N/A	16	59%	47	98%	66	85%
SAM	1		2		1		8		28		39	
Received ther. food	1	100%	2	100%	1	100%	3	38%	27	96%	33	85%
								TOTAL				
								MAM			455	
								Received suppl. food			382	84%
								SAM			281	
								Received ther. food			231	82%

7 The number of SAM cases reported in this table includes those with and without medical complications, although the number that received therapeutic food only includes outpatients. Since only SAM cases without medical complications should be outpatients receiving take-home therapeutic food, this difference accounts for some of the variation between the number of SAM cases and the number that received therapeutic food.

Progress in Supply Chain Management

Health staff at the four facilities consistently completed all PRN-related sections of the stock-control cards used to track supplies of nutrition products, with the percentage of cards filled out correctly doubling from the March–August 2015 baseline period to 100 percent during the April–September 2017 period. In addition, all district warehouses in the facilities' districts developed supply chain forecasts based on the facilities' data, up from 50 percent before FANTA's technical assistance. However, stock-outs continue to be a serious challenge: The facilities lacked corn-soy blend+ (CSB+) 47 percent of the time from October 2015 to September 2017 and RUTF 31 percent of the time in the same 24-month period. Sustained progress in recording and using facilities' stock data can help address the issue. (The stock-out problem is discussed further in the "Challenges, Lessons, and Recommendations" section.)

Percentage of stock cards completed correctly at the 4 facilities:

Baseline: **50%**

After FANTA support: **100%**

Gains in Data Timeliness, Quality, and Use

Nearly all health facilities in the targeted districts—not just the four health facilities that first received FANTA's support—submitted PRN monthly reports on time, from 65 percent of facilities in the March–August 2015 baseline period to a high of 93 percent during the April–September 2017 period. District and provincial staff, including the provincial nutrition technical working groups, used the data to assess how well facilities were implementing PRN and determine any gaps. FANTA also trained the health facilities on "data cleaning" techniques—the removal and/or correction of inaccurate or incomplete information—to help improve the quality of their data. One notable example was Nicoadala Health Center. After "cleaning" its PRN register books, the center found that of the 298 patients classified as active, only 145 (49 percent) were truly active PRN patients, while 153 were defaulters. This allowed for more accurate estimates of the center's actual caseload and better forecasts of its need for nutrition products. It also raised awareness of the problem of defaulter patients and led the provincial nutrition technical working groups to brainstorm ways to address the problem .

Percentage of all health facilities that submitted PRN monthly reports on time:

Baseline: **65%**

Peak: **93%**

FANTA's Technical Assistance for PRN Draws on Quality Improvement Approach

The quality improvement (QI) approach enables service providers to systematically improve the quality of health care delivery through a cycle of identifying weaknesses in current practices, analyzing the reasons for the weaknesses, developing solutions, monitoring progress over time, studying the results, and making adjustments in the next cycle. FANTA incorporated QI methods into its work strengthening PRN in Nampula and Zambézia provinces. "Knowledge alone is not sufficient," explained Dr. Paula Cuco, a FANTA senior technical officer in Mozambique. "Ensuring effective health services requires health staff to continually review problem areas and test ways to improve them in order to provide more quality health care services for nutrition."

One case in point is Mecuburi Health Center in Nampula Province. FANTA provided intensive, one-on-one technical support to help health staff apply QI methods to improve the monitoring of patients from admission to discharge to better understand patients' progress. As a result, PRN admissions more than tripled (Figure A) and discharges were being registered accurately, from an average of six discharges per month—all of which were classified as "cured"—to an average of 17 discharges per month with the accurate reason for discharge recorded (Figure B). In addition, more children with malnutrition were identified sooner: Cases of MAM nearly doubled from 36 percent to 68 percent, indicating that more malnourished children were being identified before their malnutrition had progressed to a severe state.

"PRN services in Mecuburi are now better able to address the challenges of identifying and treating malnutrition, which will result in better patient outcomes," said Dr. Shamir Carimo, also a FANTA senior technical officer in Mozambique. Moreover, he added, "the health staff can continue applying the QI processes to any area that they want to improve. This is a very positive step in the right direction."

Figure A. Number of PRN Admissions in Mecuburi Health Center

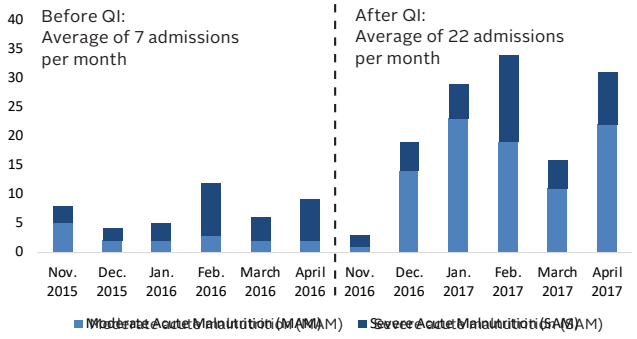
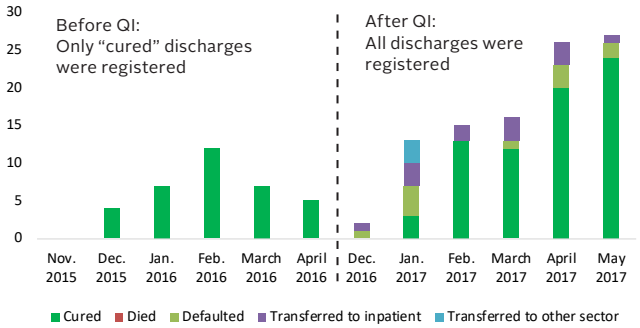


Figure B. Number of PRN Discharges in Mecuburi Health Center, by Reason for Discharge



Simple Tools Bolster Nutrition Services for Children

Photo by Baraca Muchanga, FANTA/FHI 360

Ms. Lemos and her daughter Naira.

As part of its PRN support in Nampula and Zambézia provinces, FANTA developed easy-to-use forms to help busy health staff more accurately capture patient information needed to make effective care and treatment decisions. For example, simple Excel-based data collection forms that FANTA created contributed to the sharp improvements in nutritional screening and classification of children at four health facilities in the two provinces (noted earlier in this section).

One simple resource helped address another challenge that many health facilities face. During technical assistance visits in Zambézia Province, FANTA observed that children found to be malnourished at well-child visits were not being appropriately registered or referred for evaluation for possible acute malnutrition in the at-risk-child clinic. "We saw that the staff needed a way to help keep malnourished children from falling through the cracks," said Baraca João Muchanga, a FANTA senior technical officer for nutrition. Moreover, the solution had to be simple and easy to use so as not to overburden the health workers, he noted. In consultation with health staff, FANTA developed a daily registry form to register and refer malnourished children from the well-child clinic to the at-risk-child clinic. Health staff also established a system to escort the child and caregiver from the well-child clinic to the at-risk-child clinic so that they do not get lost in the facility. The form is "very useful for following up patients from one sector to another," said Claudia Alfredo Jose, the Nicoadala Health Center well-child sector focal point. For example, at the Nauela Heath Center, the health staff referred an average of 22 children per month from March to June 2017, and the form helped the staff track the referrals.

The registry form's impact was personal to Ninicha Andale Lemos. Her 14-month-old daughter, Naira, was ill and had swollen feet, so she brought her to the well-child clinic at the Nicoadala center. "I was desperate," said Ms. Lemos, who had walked 7 kilometers to the center. Using the registry form, a nurse referred Ms. Lemos to the center's at-risk-child clinic and walked with her to the clinic. Naira was diagnosed with malnutrition, began treatment right away, and steadily improved. "Now she is better," Ms. Lemos said. Naira was discharged after receiving proper treatment over seven weekly visits to the at-risk-child clinic.

The form also enables well-child staff to more easily check on the treatment outcomes of the children they referred, which provides staff with helpful feedback on their referral decisions. "This is good because now we know what is the outcome of the patients identified with undernutrition," said Edgar Arthur Caetano, senior nutrition technician at the Nicoadala center. In addition, using the form can help health workers see whether cases of acute malnutrition are increasing in the community, said Mr. Muchanga.

Drawing on the experience in Zambézia Province, FANTA-supported health facilities in Nampula Province adopted the tool. "We are very happy that the referral mechanism may be expanded throughout the country," said Mr. Muchanga. "This is a very simple thing that can save the lives of many children."

Learn more about FANTA's work in Nampula and Zambézia provinces.

Equipping Drought-Stricken Provinces to Tackle Malnutrition through PRN and QI

In 2015 and 2016, Mozambique experienced its worst drought in 35 years, with food insecurity, water shortages, and loss of income affecting 1.5 million people in the central and southern parts of the country.[8] In response, the Government of Mozambique asked FANTA to train health workers to identify and treat malnutrition in 14 drought-affected districts in Sofala, Manica, Tete, Gaza, and Inhambane provinces. FANTA used a two-pronged approach: combining training in PRN, which the project was already supporting, with training in QI.

FANTA provided financial support for and co-facilitated 10 PRN trainings with the Provincial Health Directorates using the PRN materials that FANTA helped develop. The 302 participants in the five provinces included nutritionists, maternal and child health nurses, medical technicians and other health staff, as well as nongovernment partners. Participants learned how to assess nutritional status; treat malnutrition and related medical conditions; deliver key messages to patients and caregivers; work with communities to screen, refer, and follow up cases of malnutrition; monitor stocks of nutrition products; and fill out the register books and reporting forms.

FANTA also developed and conducted training in each province on using QI to strengthen implementation of PRN services. In the QI training, 94 participants were introduced to the overall approach and worked in groups on practical exercises to apply the QI steps known as the "plan-do-study-act" (PDSA) cycle to learn to identify a problem area, implement changes to address the problem, study the results after a short period, and then either adopt the changes if they worked or adjust the changes and test them in another round of the cycle.

As a result of the [PRN and QI] trainings, improvements are being seen.

— Carla Saveca, head of provincial nutrition at the Provincial Health Directorate in Manica Province

The trainings on PRN and QI, conducted from March to July 2017, better equipped health workers to address the drought's impact on nutrition and to improve the quality of nutrition services, which can lead to a more responsive health system in the face of severe droughts and food insecurity. Antonieta Inácio Nhantumbo, a nutrition technician at the Chicuque Rural Hospital in Inhambane Province, said the PRN training helped her better understand the importance of screening at the community level to identify malnutrition as early as possible, accurate recordkeeping, and providing quality services that focus on all aspects of treatment and not just on dispensing nutrition products. "Since the training, we managed to retain malnourished patients in the program. Compared to before, we have a higher cure rate and lower defaulter rate," she said. Carla Saveca, head of provincial nutrition at the Provincial Health Directorate in Manica Province, also observed progress. "As a result of the [PRN and QI] trainings, improvements are being seen, such as correct [entries in] the registry book, follow-up of patients, and correct management of nutrition products," she said. Moreover, "health providers perform more accurate diagnoses for malnutrition," which leads to improved treatment, she added.

8 U.N. Office for the Coordination of Humanitarian Affairs. 2016. *2016 Strategic Response Plan*.

Challenges, Lessons, and Recommendations

FANTA's work in Mozambique from 2012 to 2018 yielded key lessons and recommendations that can inform nutrition programming in the country.

- **Staff shortages and frequent staff rotation hinder program quality at all levels, from the central MOH to the health facilities.** To address this challenge, FANTA advocated with decision makers to maintain qualified staff in their positions, and if they moved, to replace them with qualified people, e.g., placing a nutritionist in a nutrition position instead of a generalist nurse. FANTA also conducted on-the-job and in-service trainings, worked hand in hand with the government staff to deliver PRN services, facilitated exchange visits among seasoned and less-experienced health staff, and ensured that health facilities had enough job aids so all staff, including new staff, would have the materials needed to support PRN service delivery. FANTA also advocated with the MOH to integrate nutrition and PRN services in pre-service training curricula for all cadres of health staff, including nurses and physicians. It is recommended that these activities continue, including ongoing efforts to integrate nutrition in pre-service training curricula.
- **Stock-outs of nutrition products are a major challenge that greatly undermines the effectiveness of PRN services.** Stock-outs compromise PRN services; increase the chances that the patient's condition will deteriorate, which is especially dangerous for those with SAM and a higher risk of mortality; and can discourage patients from returning for follow-up appointments, thus contributing to the problem of defaulters. In addition, stock-outs are common in all provinces. Moreover, with the introduction of PRN II for adolescents and adults, the stock situation could worsen. The problem is related to many factors, including periodic product shortages at the national level; product requisitions at the provincial level that are based on district demographic data rather than consumption data; poor reporting of PRN data and late or incomplete restocking requests; transportation issues; insufficient coordination between the MOH's Nutrition Department and its Central Medical Stores; and heavy reliance on donor funds to procure the products.

Photo credit: Sandra Remancus, FANTA/FHI 360

FANTA and Nauela Health Center staff reviewing a PRN register book.

The MOH and the central PRN technical working group members are aware of the issues and have been seeking solutions for some time. In Nampula and Zambézia provinces, FANTA worked with the health staff to improve PRN reporting and other processes that affect nutrition product stocks, conducted on-the-job trainings for health facility and district-level staff on developing restocking requests based on health facility consumption data, and worked with the Nampula and Zambézia provincial staff to develop distribution plans based on district data and adjust restocking plans based on health facilities' needs and

available stock. At the national level, FANTA offered the MOH technical input as it explored options for addressing the issues. The MOH has also conducted specific studies to determine ways to address the problem.[9] Renewed efforts and commitments are needed among all PRN stakeholders to enact short-, medium-, and long-term solutions. Given that stock-outs will continue in the short term, it is recommended that health facilities follow the guidance in the PRN II manual on prioritization of groups to receive existing stock.

- **Equipment and supplies must be in place for nutrition services to function.** Many health facilities cannot deliver nutrition services because they lack the full set of anthropometric equipment (e.g., scales and height boards) and supplies such as PRN job aids. Having adequate equipment and supplies—as well as the nutrition products noted above—is a prerequisite for delivering nutrition services. To address this challenge, FANTA worked with the PEPFAR clinical partners and partners on the provincial nutrition technical working groups to map existing equipment and supplies and buy replacements. However, despite these efforts, many gaps remain. It is recommended that the government and its partners prioritize the mapping of equipment and supplies as well as resources for their replacements. The PRN Quality Performance Standards,[10] which list the PRN equipment and supplies, can help partners with the mapping. It is also recommended that projects providing technical assistance in nutrition include the provision of equipment and supplies, which the government views as central to effective technical assistance.

- **The lack of accurate data hinders decision-making and the effectiveness of service delivery.** In many health facilities, nutrition data are not recorded completely or consistently. This hampers decision-making at higher levels and makes nutrition services less effective. To address these challenges, FANTA worked closely with health facility, district, and provincial staff to improve the accuracy and timeliness of reporting and conduct data quality checks. FANTA also encouraged the provincial nutrition working groups to use the data in their decision-making, which led to higher demand for monthly data. It is highly recommended that an electronic patient tracking system be used for PRN and other nutrition data. Until an electronic system can be installed, it is recommended that supportive supervision focus on the use of data for decision-making and the benefits of having good data, such as being able to track and report on patients' progress more clearly. The government and its partners should also ensure that staff at all levels have the PRN register books, monthly reporting forms, and other data collection tools they need.

Photo by Baraca Muchanga, FANTA/Mozambique

Edgar Arturo Caetano, senior nutrition technician at the Nicoadala Health Center.

9 For example, the studies include Jille-Trass, I.; Muatecalene, V.; Vreeke, E.; and Jille, L. 2015. *Supply Chain Assessment of Nutrition Products in Mozambique*; and Somá, D. 2013. *Evaluation of the Planning, Distribution, and Management of Supplies for the Nutrition Rehabilitation Program (PRN).*

10 The PRN Quality Performance Standards are available at https://www.fantaproject.org/countries/mozambique/nutrition-rehabilitation-program-prn.

- **Striking a balance between coverage and intensity of technical assistance.** In its work in Nampula and Zambézia provinces, FANTA provided technical assistance to one health facility per district in year 1 and expanded to two health facilities per district in year 2. This limited coverage enabled FANTA to provide intensive support—working side by side with health staff in each facility for about a week every month—that yielded considerable improvements. It was an effective way to establish the technical assistance model and systems for this "proof of concept" pilot project. In year 3, the pilot project switched to focusing on all health facilities within two "model" districts. The technical assistance was less intensive but had greater coverage, which the provincial and district health offices welcomed. FANTA mitigated the risk of having lower impact by working alongside provincial and district health staff in all activities—from planning to delivering technical assistance—and facilitating exchange visits, where experienced staff visited less-experienced staff at other health facilities and attended trainings to share their lessons and successes, and teams from other districts visited the "model" districts. Another important mitigating factor was the fact that FANTA's primary focus was nutrition, which enabled FANTA to provide intensive support on a single topic. It is recommended that the coverage-intensity balance be a key design consideration for new technical assistance projects, particularly those establishing a "proof of concept" or new technical assistance model. Starting out small can lay a strong foundation for gradual expansion. This balance between coverage and intensity also can contribute to sustainability, which is discussed next.
- **Working toward sustainability.** Sustainability is at the heart of FANTA's approach to technical assistance. In Mozambique, FANTA focused on strengthening systems and capacity to not only improve PRN service delivery but to also foster sustainability. FANTA, collaborating closely with national, provincial, district, and facility staff, built a network of staff skilled and experienced in PRN through trainings, on-the-job coaching, and application of QI approaches; worked to ensure that health facilities had PRN equipment and job aids; established merit certificates for mastering PRN service delivery to help motivate staff; and facilitated learning exchange visits for individual health staff and teams. To help sustain this progress, it is recommended that the government and its partners ensure that resources are available for trainings and supervision, including transport to ensure supportive supervision can happen. It is also recommended that efforts to motivate staff continue, such as having experienced staff members mentor less-experienced ones and conducting exchange visits among the staff to observe well-functioning PRN services. Moreover, it is recommended that the provincial nutrition technical working groups continue, as these are a key forum for decision-making and coordination that can help maintain and build on Mozambique's progress in improving nutrition.

Key Partners

FANTA's achievements in Mozambique could not have been accomplished without the input, insight, and support of many nutrition stakeholders, such as the Government of Mozambique, USAID/Mozambique, U.S. Centers for Disease and Control and Prevention (CDC)/Mozambique, implementing partners, and international organizations working in the country. FANTA's partners include:

Government of Mozambique partners

- The Ministry of Health and the following MOH agencies:
  - Nutrition Department (Departamento de Nutrição)
  - Provincial Health Directorates (Direcção Provincial de Saúde [DPS])
  - District Health Directorates (Serviços Distritais da Saúde, Mulher, e Acção Social [SDSMAS])
- The Technical Secretariat for Food Security and Nutrition (Secretariado Técnico de Segurança Alimentar e Nutricional [SETSAN])

USAID/Mozambique and other implementing partners, including the following:

- Clinical and Community HIV/AIDS Services Strengthening Project (CHASS)
- Friends in Global Health (FGH)
- International Center for AIDS Care and Treatment Programs (ICAP)
- Elizabeth Glaser Pediatric AIDS Foundation (EGPAF)
- Maternal and Child Survival Project (MCSP)
- HEALTHQUAL
- University Research Co., LLC (URC)

United Nations and other nongovernmental agencies

- The Nutrition and Food Security Association (Associação de Nutrição e Segurança Alimentar [ANSA])
- UNICEF
- World Food Programme (WFP)

Photo credit: Sandra Remancus, FANTA/FHI 360

FANTA and FGH teams in Alto Molócuè.

Materials for Mozambique Developed by FANTA

PRN

- PRN I manual, job aids, training materials, register books, monthly reports, and database
- PRN II manual, job aids, training materials, register books, monthly reports, and database
- PRN quality standards to assess PRN performance (Word and Excel versions)
- Body mass index wheel in Portuguese

SBCC

- National Strategy for Social and Behavior Change Communication for the Prevention of Malnutrition in Mozambique 2015–2019
- Report on the results of the survey to prioritize nutrition counseling messages for people living with HIV and/or TB
- Nutrition counseling materials for people living with HIV and/or TB: flip chart booklet, guidance booklet on conducting counseling, posters, desk calendars, and pamphlets

Other Materials

- National Infant and Young Child Policy
- National Infant and Young Child Strategy
- Job aid on infant feeding in the context of HIV
- Training materials on nutrition care for people living with HIV for community-based health workers
- Reference booklet for growth curves for children 0 to 18 years of age
- Reference booklet for growth tables for children 0 to 18 years of age
- Report on the analysis of the sentinel site nutrition surveillance system in Mozambique
- Report of phases zero and one of the Partnership for HIV-Free Survival in Mozambique

Many of the publications, resources, and other information in this report can be found at *http://www.fantaproject.org/countries/mozambique*.

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