# MCSP Mozambique Program Brief
## Nutrition

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### Goal

A mother with her two children attends a nutritional cooking demonstration. Photo: Kate Holt/MCSP.

Globally, undernutrition is the underlying cause of 45% of deaths among children under 5.[1] Studies indicate that 43% of children under 5 in Mozambique are chronically malnourished or stunted.[2] Inadequate nutrition and frequent and recurrent illness during the first 1,000 days of life—from conception to 24 months of age—are major causes of chronic malnutrition and stunting,[3] which lead to life-long consequences including delayed mental and psychomotor development, reduced productivity, and increased mortality rates. While food and nutrition insecurity and lack of access to health services are underlying causes of stunting, in Mozambican households and communities, a poor understanding of nutrition combined with food-related cultural beliefs, traditions, and taboos negatively affect infant and young child feeding (IYCF) and nutrition among women during adolescence, pregnancy, and lactation. The nutrition component of USAID's flagship Maternal and Child Survival Program (MCSP) in Mozambique works with the Ministry of Health (MOH) to improve the nutritional status of pregnant and lactating women and children under 5 at the national level and in Nampula and Sofala provinces.

### Program Approaches

MCSP used the following approaches to address maternal and child nutrition in Mozambique:

- **Strengthened MOH nutrition program leadership and management capacity:** MCSP supported MOH leadership and capacity to plan and coordinate nutrition activities at central, provincial, and district levels. At the central level, MCSP actively contributed to the MOH Department of Nutrition's annual economic and social plans (*Plano Económico e Social* [PES]) and participated in the nutrition technical working groups (TWGs) assisting with plan implementation. Similarly, at the provincial and district levels, MCSP facilitated the development of provincial and district nutrition PESs and worked with the provincial and district health directorates and their partners to create an enabling environment for improved and coordinated implementation of nutrition activities through co-leadership of nutrition TWGs.
- **Improved the capacity of health workers to provide evidence-based, high-impact nutrition interventions:** Through supportive supervision, mentoring, on-the-job training tailored to needs, job aids, and social and behavior change communication (SBCC) materials, MCSP built the capacity of health workers at the health facility (HF) and community levels (community health workers or

[1] The Lancet, Maternal and Child Undernutrition Series, 2013. https://www.thelancet.com/series/maternal-and-child-nutrition.
[2] Mozambique Demographic and Health Survey, 2011. https://dhsprogram.com/publications/publication-FR266-DHS-Final-Reports.cfm.
[3] Stunting occurs when a child is too short for his/her age in relation to 2006 World Health Organization (WHO) global growth standards.

"polyvalent elementary agents" [APEs], activists, and volunteers) to provide quality nutrition services to pregnant and lactating women, and children 0 to 2 years of age. All of these efforts were in accordance with Mozambique's Multisectoral Action Plan for the Reduction of Chronic Malnutrition 2010-2020.

MCSP implemented its nutrition component using either an intensive or an integrated approach. Under the intensive approach, MCSP's Nampula provincial nutrition officers provided monthly supervision visits to districts, HFs, and community health workers in 11 Nampula districts (out of 23 total), selected because of their high rates of food insecurity and acute malnutrition (wasting)[4], and district nutrition officers provided intensive, weekly support to HF providers and community-based activists and nutrition volunteers. Under the integrated approach, MCSP made quarterly supervision visits to the remaining 11 districts in Nampula and 11 districts (out of 13 total) in Sofala.

To ensure sufficient stocks of nutrition commodities, the lack of which is often the Achilles's heel of nutrition programs, MCSP also supported the development of annual nutrition commodities forecasts with the MOH. MCSP co-led a nutrition logistics task force in Nampula to monitor provincial stocks and plan their distribution according to district level needs. These efforts saw the number of stock outs of lifesaving commodities reduce over the life of the project. The Program also provided supportive supervision and mentoring to health personnel at facility and district levels to request commodities on a timely basis, according to previous consumption, and mentored district and HF personnel on proper stock management procedures to protect the products while in storage in warehouses.

- **Supported the MOH in implementing the SBCC Strategy for the Prevention of Undernutrition in Mozambique 2015-2019:** MCSP trained HF staff and community health workers to carry out cooking demonstrations and nutrition education sessions for parents and caregivers of infants and young children. MCSP applied the trials of improved practices (TIPs) methodology[5] to assess cultural beliefs and practices that influence maternal and IYCF in Nampula, such as the practice of introducing semi-solid foods before 6 months of age and stopping breastfeeding when the mother becomes pregnant. Based on the results of the TIPs assessment, MCSP developed the Counseling Guide for Infant and Young Child Feeding in Mozambique, which provides counseling messages on maternal and IYCF practices adapted for the local context. MCSP also developed a recipe book to support cooking demonstrations in Nampula, which provides illustrated recipes using locally available foods and conservation techniques to stretch the shelf life of foods and alleviate food insecurity. In addition, the recipe book includes key nutrition and water, sanitation and hygiene (WASH) messages. Finally, MCSP's baseline Knowledge, Attitudes, Practice, and Coverage (KAPC) study results revealed that only 8% of women in Nampula and 44% in Sofala reported taking at least 90 iron and folic acid (IFA) supplements during their last pregnancy. In addition, the TIPs assessment results showed that pregnant women receive IFA supplements at antenatal care (ANC) visits, yet are not aware of the "*what and why*" of IFA and report forgetting to take IFA daily. Field experience reveals that nurses generally do not provide counseling on IFA supplementation during ANC visits. In order to address these gaps in counseling and service delivery, MCSP worked closely with the MOH Department of Nutrition-led SBCC TWG to develop a package of job aids that support interpersonal counseling sessions on maternal anemia, which was not previously available in Mozambique. The MOH recently approved the national maternal anemia package for use throughout the country. The package includes key messages for anemia prevention during adolescence, pregnancy, and lactation; a flipchart for group counseling sessions; and a poster and algorithm to support individual counseling sessions. MCSP printed and distributed the anemia counseling package for 81 health facilities in Nampula.

- **Improved nutrition data quality and use of data for informed decision making:** MCSP supported the MOH in compiling the daily and monthly tally sheets used for reporting growth monitoring, vitamin A supplementation, and deworming data in child health services in a single booklet to prevent loss of data. MCSP mentored health professionals at HF, district, and provincial levels to develop graphs of data trends to inform decision-making. The Program supported the Nampula Provincial Health Directorate (DPS) to develop data collection tools for reporting on the number of children screened in

[4] Wasting occurs when a child's weight is too low for his/her height in relation to 2006 WHO growth standards.

[5] Trials of Improved Practices consists of three home visits to mothers of children 6-23 months of age. The first visit is to understanding current feeding practices and ascertain challenges, visit #2 is to counsel the mother on the feasible IYCF practices to try in a 7-day period, and visit #3 is to discuss their experiences with the trial period.

well-child consultations, as these data were not previously available, and provided supportive supervision for data entry, reporting, and analysis in both maternal health and child health sectors. MCSP also ensured that the results of interventions implemented in nutrition-intensive communities, which were captured through simple data collection tools (adapted by MCSP from the World Bank-funded Health Service Delivery Program), were submitted by activists to the HFs through monthly meetings so that they could be aggregated into the results of the health area (HF and communities in their jurisdiction). In addition, MCSP supported the MOH to develop and pilot new child health registers that integrate indicators for nutrition surveillance, breastfeeding, and micronutrient deficiency prevention and reduction strategies. With support from MCSP and UNICEF, the MOH will roll out these registers starting in December 2018. Finally, MCSP worked with the Nampula and Sofala DPS to pioneer child death audit review meetings, which enabled health professionals to identify issues in the quality of care provided to patients admitted to health facilities, including children with acute malnutrition, and propose actions to resolve those issues.

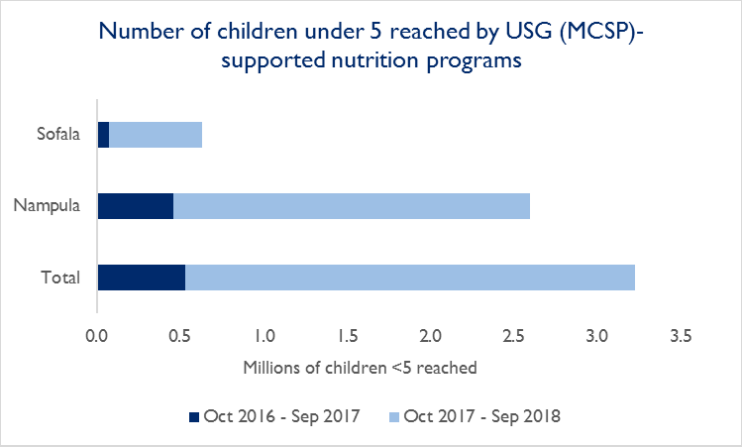
- **Strengthened the nutrition continuum of care by linking health facility and community nutrition services:** MCSP supported improved linkages between HF and community nutrition services to prevent new acute malnutrition cases through early identification, referral and counter-referral, return of defaulters to treatment, and by integrating mothers with malnourished children into mothers groups. MCSP was a pioneer in the use of WASH demonstration centers, which were constructed with local materials to combine promotion of key behaviors around diarrhea prevention, adequate complementary feeding, early child stimulation, and creation of clean and safe spaces for children to play.

## Key Results

- **MOH nutrition program leadership grew stronger:** MCSP supported the development, review, and evaluation of national norms, strategies, program guidelines, and associated support materials, including the National IYCF Strategy; the Guide to Strengthen Vitamin A Supplementation and Deworming in Routine Services; the Nutrition Rehabilitation Program manuals, associated training materials, and job aids; and the Well-Child/At-Risk Child Consultation Norms. With technically sound, up-to-date guidelines and materials, the MOH Nutrition Department was able to put forward unified guidance for national implementation of nutrition interventions.

- **Health facilities and communities reached over 3 million children under 5 with evidence-based nutrition interventions:** Through MCSP's support to nutrition programming, children received screening, referral, and treatment of acute malnutrition; vitamin A supplementation; home fortification with micronutrient powders (MNP); and SBCC activities including nutrition education sessions and cooking demonstrations. See Figure 1.

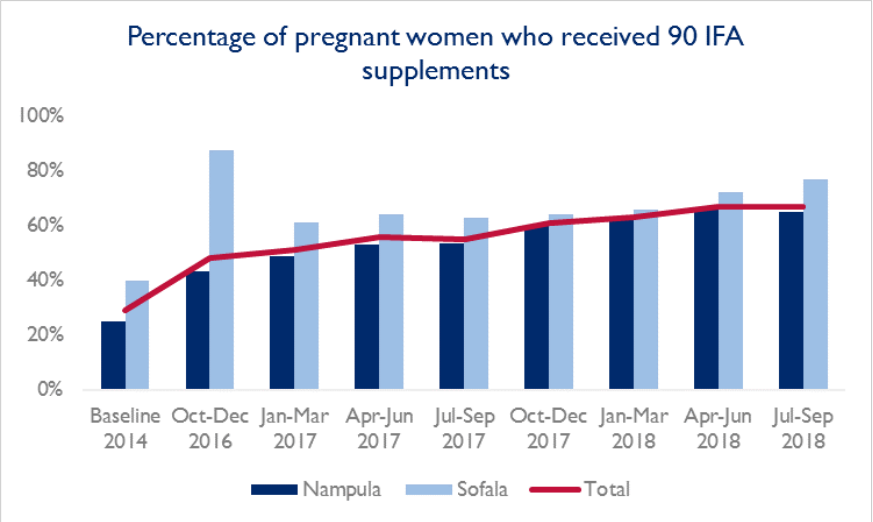
**Figure 1.**




- **Health workers learned to provide high-impact nutrition interventions:** MCSP's capacity building efforts resulted in the training of 11,595 HF and community health workers and volunteers, who received frequent supportive supervision and mentoring visits to ensure adequate capacity to deliver quality nutrition services to women and children. In MCSP-supported sites, 253,717 pregnant women received 90 IFA supplements, which are essential to support adequate fetal development and

prevent childbirth complications, which was more than double the percentage of women receiving IFA at the beginning of MCSP in 2014. See Figure 2.

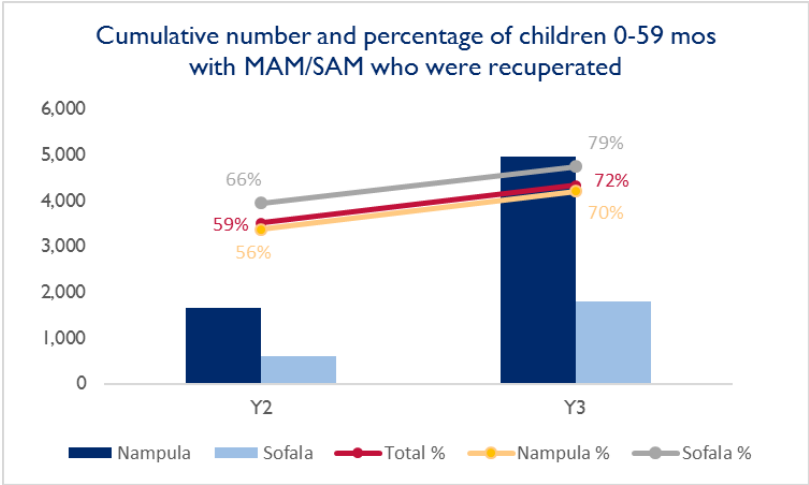
**Figure 2.**




- **Health workers at the HF and community levels improved their nutrition counseling abilities through the development and rollout of SBCC materials:** MCSP printed and distributed MOH nutrition job aids to all relevant maternal and child health entry points in MCSP-supported health facilities and to 212 community nutrition activists and 900 volunteers in the 11 intensive districts, to improve IYCF counseling, including MNP provision for home food fortification. Furthermore, MCSP supported 758 community health committees with job aids that integrated key IYCF messages for nutrition counseling.

- **Use of nutrition data for decision-making improved:** Before the rollout of the new child health registers, MCSP supported the Nampula DPS to develop and implement a screening reporting tool in health facilities in MCSP catchment areas on the number of children screened for acute malnutrition in well-child visits. The new tool laid the foundation for the implementation of the national registers, as providers gained experience implementing universal nutrition screening for all children attending child health services. Previously, only the number of children screened in at-risk child visits was available. This data was biased because children seen during these visits are at an increased risk of malnutrition. With the rollout of the new monitoring tools, MCSP was able to report the actual number of children screened for acute malnutrition in program-supported health facilities. The number of children screened increased from 22,228 in Year 2 (October 2016-September 2017) to 1,731,199 in Year 3 (October 2017-September 2018), and children identified with acute malnutrition decreased from 39% to 12% in the same period, which reflected not only an improvement in data accuracy but also intensive efforts to prevent malnutrition in Nampula.

**Figure 3.**




- **Referral systems led to better results for malnourished children:** To ensure adequate treatment at the community level and prevent relapse, MCSP helped strengthen referral and counter-referral systems that enabled community volunteers to conduct household visits and support group sessions with caregivers of children suffering from moderate or severe acute malnutrition. The strengthened continuum of care enabled community health activists to find defaulting cases and ensure their return to treatment. As a result, the percentage of children with acute malnutrition who recuperated increased from 59% in Year 2 to 72% in Year 3. See Figure 3.

## Recommendations

- Government and implementing partners should continue to roll out SBCC context-specific materials and approaches developed by MCSP for the MOH in Nampula and Sofala to build on improvements to maternal, infant, and young child nutrition practices. The MOH Nutrition Department and Nutrition Sections within DPSs should include printing and distribution of these materials, and training and supportive supervision in their use in annual PESs.
- Expanding use of SBCC materials beyond Nampula, such as the IYCF counseling guide and complementary feeding recipe book, requires local adaptation before implementation to reflect local cultural beliefs and practices, food production, and consumption patterns. Local adaptation requires implementing partners to conduct formative assessments through methodologies such as TIPs, in line with the SBCC Strategy for the Prevention of Undernutrition 2015-2019.
- More investment is needed from the Government, donors, and the civil society in quality pre- and in-service training of young cadres of nutritionists. Funding is also needed to enable the MOH to disseminate the terms of reference for nutrition cadres at the district and HF levels for appropriate integration of nutrition within existing health services.
- District governments should consider making reforms to guidelines on the management of human resources for nutrition (i.e., nutritionists) and health, to prevent frequent HF staff rotation and achieve sustained improvement in the quality of nutrition services offered in HFs through supportive supervision, mentoring and OJT.
- Implementing partners should build the capacity and ownership of communities to conduct cooking and WASH demonstrations through the transitioning of donor-funded activities to communities at the end of a project. Communities need to understand how to integrate these efforts within existing community structures and plan their resources to continue these activities, such as through the Community Health Committees with HF and APE support. In MCSP's experience, this involves conducting a joint meeting with the DPS and community health authorities to review activities, take stock of existing materials, and devise an action plan of 3 to 6 months for continued activities.
- The Nutrition Rehabilitation Program (*Programa de Reabilitação Nutricional* [PRN]), which operationalizes community-based management of acute malnutrition protocols in the country, has faced several constraints (including low capacity to implement protocols with appropriate quality, manage the supply chain of nutrition commodities, and monitor performance) since the approval of the revised treatment protocol for children 0-14 years in 2010. The MOH and partners should focus efforts on addressing these constraints through the implementation of a quality improvement process using the PRN Quality Standards in high-density health facilities, before expansion of PRN to other target groups such as adolescents and adults (15 years and older), new health facilities, and via community cadres. The process will require close collaboration between the Nutrition and Child Health sectors of the MOH.
- District governments should leverage Co-Management and Humanization Committees to link HFs to communities to collaboratively identify, address, and prevent cases of acute malnutrition. With support of these committees, HF staff can visit communities that have high caseloads of malnutrition or high levels of recidivism to reinforce critical nutrition messages for pregnant and lactating women, infants and young children.
- Implementing partners should actively support the DPS in chairing TWGs and assisting the DPS to set dates for monthly meetings, and circulate reminders and agendas before the meetings, and should also ensure the DPS appoints a focal point to oversee matters discussed by the TWGs. The TWGs provide opportunities to coordinate activities and plans and identify solutions to remove bottlenecks.

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