



Comprehensive Africa Agriculture Development Programme (CAADP)

CAADP Nutrition Capacity Development Workshop for the Southern Africa Region

Nutrition Country Paper – MOZAMBIQUE

DRAFT - ENGLISH VERSION

September 2013

This synthesis has been elaborated in preparation for the CAADP workshop on the integration of nutrition in National Agricultural and Food Security Investment Plan, to be held in Gaborone, Botswana, from the 9th to the 13th September 2013.

<u>The purpose of this Nutrition Country</u> Paper is to provide a framework for synthetizing all key data and information required to improve nutrition in participating countries and scale up nutrition in agricultural strategies and programs. It presents key elements on the current nutritional situation as well as the role of nutrition within the country context of food security and agriculture, including strategy, policies and main programs. The NCPs should help country teams to have a shared and up-to-date vision of the current incountry nutritional situation, the main achievements and challenges faced both at operational and policy levels.

General sources used to produce this document

The tableau below suggests a list of sources to consult when completing the NCP. This list needs to be completed with all country-specific documents (e.g. national policies, strategic plans) that are available in your country.

Sources	Information	Lien internet
CAADP	Signed Compact / Investment plans / Stocktaking documents / Technical Review reports if available	http://www.nepad-caadp.net/library-country-status-updates.php
DHS	DHS Indicators	http://www.measuredhs.com/Where-We-Work/Country-List.cfm
FANTA	Food and Nutrition technical assistance / select focus countries	http://www.fantaproject.org/
	Nutrition Country Profiles	http://www.fao.org/ag/agn/nutrition/profiles by country en.stm
	FAO Country profiles	http://www.fao.org/countries/
FAO	FAO STAT country profiles	http://faostat.fao.org/site/666/default.aspx
	FAPDA – Food and Agriculture Policy Decision Analysis Tool	http://www.fao.org/tc/fapda-tool/Main.html
	MAFAP – Monitoring African Food and Agricultural Policies	http://www.fao.org/mafap/mafap-partner-countries/en/
OMS	Nutrition Landscape information system (NILS)	http://apps.who.int/nutrition/landscape/report.aspx
REACH	REACH multi-sectoral review of existing data on the nutrition situation, programmes and policies (dashboard)	http://www.reachpartnership.org
ReSAKKS	Regional Strategic Analysis and Knowledge Support System	http://www.resakss.org/
SUN	Progress Report from countries and their partners in the Movement to Scale Up Nutrition (SUN)	http://scalingupnutrition.org/resources-archive/progress-in-the-sun-movement
	Nutrition Country Profiles	http://www.childinfo.org/profiles 974.htm
UNICEF	MICS: Multiple Indicators Cluster Surveys	http://www.childinfo.org/mics_available.html
WFP	Food security reports	http://www.wfp.org/food-security/reports/search
World Bank	Economic reports	http://data.worldbank.org/indicator
UNDP	Development report	http://hdr.undp.org/en/data/profiles/
Other Sources	FAO Country Nutrition Profile (2011)	
National Sources	Food and Nutrition Strategy Security II (ESAN) (2008-2015) National Multisectoral Action Plan to reduce Chronic Undernutrition (PAMRDC) (2011-2015(20)) National Agricultural Investment Plan (PNISA)	
HKI&CIP	Situational Analysis and Needs Assessment Report on Orange Flashed Sweet Potato in Mozambique	http://sweetpotatoknowledge.org/projects-initiatives/reaching-agents-of-change- rac/Mozambique%20Updates%20/A%20Situation%20Analysis%20Report%20of%2 00FSP%20in%20Mozambique.pdf
нкі	Agricultural Based Approach to Fighting Undernutrition	http://www.fao.org/fileadmin/user_upload/wa_workshop/PPT/PPT-Agriculture- based_Strategies.pdf

I. Context -Food and nutrition situation

General Indicators		Sources/Year			
Population below national poverty line	54.7%	IOF (2008-09)			
Under-five mortality rate (per 1,000 live births)	\ 97	DHS (2011)			
Infant mortality rate (per 1,000 live births)	≌64	DHS (2011)			
under-five deaths due to HIV/AIDS	9.8%	National Child Mortality Study 2009			
Maternal mortality rate /100 000 lively births	550	UNICEF (2008)			
Primary school net enrolment or attendance ratio	90%	UNESCO 2012			
Primary school net enrolment -ratio of females/males	.91	UNESCO 2012			
HIV/AIDs prevalence between adults 15-49 years	11.3%	UNAIDS, WHO 2011			
Percentage of population living in rural areas	69.0%	INE 2011			
Access to improved drinking water in rural areas	37.1 %	DHS (2011)			
Access to improved sanitation in rural areas	12.3 %	DHS (2011)			
Agro-nutrition indicators		Sources/Year			
Land area (1000 ha)	78638	FAOSTAT 2011			
Agricultural area (1000 ha)	49400	FAOSTAT 2011			
Food Availability and consumption					
Average dietary energy requirement (ADER)	2230	FAO 2006-08			
Dietary energy supply (DES)	2070	FAO 2006-08			
Total protein share in DES	7%	FAO 2006-08			
Fat share in DES	17%	FAO 2006-08			
Average daily fruit consumption (excluding wine) (g)	Average daily fruit consumption (excluding wine) (g) N/A				
Average daily vegetable consumption (g)	Average daily vegetable consumption (g) N/A				

Geography, population & human development

Mozambique, located on the southeast coast of Africa, is a tropical to subtropical county rich in resources; fertile land, mineral resources, marine products, hydroelectric power dam, water, tourism, etc. Successful economic reforms have led to a high growth rate, yet Mozambique only ranks 185 out of 187 countries on the United Nations Development Program 2012 HDI (Human Development Report, UNDP 2013). The household budget survey 2008-2009 found that 55% of Mozambique's population of 21.5 million lives on less than 18.3 meticais a day (approximately 0.6 USD. The country targets to reduce the poverty rate to 40% by 2015. The rate of chronic child malnutrition continues to reduce, however, and is currently estimated at 43%. Meeting the target of reducing chronic malnutrition to 30% by 2015 will require a well coordinated effort.

Access to improved drinking water and sanitation in rural settings remains low, at 37.1% and 12.3%, respectively. (DHS 2011) HIV is at 1.4% amongst children between 0 and 11 years, and at 11.5% for the population between 15 and 49 years. Primary school enrolment is at 95%, but the completion rates decrease sharply from 76% for grades from 1 to 5, to 31% in urban areas and just 7% in rural areas for the second level. The average national net completion rate¹ for primary school is 15%, and as low as 7% in rural areas². The level of literacy is estimated in 47.8% (INE 2010). Among other obstacles that contribute to ongoing poverty is the deep-rooted lack of equality between women and men.

Economic Development

Over the past 15 years, Mozambique has experienced stable economic growth. In 2010, Mozambique's gross domestic product (GDP) grew by 8.1%; and the agricultural, construction, and financial service sectors grew by more than 10% each. While Mozambique has vast and untapped natural resources that can support the development of agriculture, forestry, mining, fishing, energy, and tourism, it is Mozambique's agricultural sector (accounting for 22 % of the GDP) which is the primary engine of overall growth. Approximately 81% of the labor force is employed in the agricultural sector, the majority through small-scale subsistence farming (99%) (INE 2012). Mozambique is seeking to diversify agricultural exports. The government recently made food production a priority and developed an action plan to achieve this goal. Given the large proportion of subsistence agriculture, there is still a need for the country to invest in policies that ensure a sustainable increase in agricultural productivity and rural income.

Agriculture (cultivable area, main cash and food crops, livestock production)

49,400,000 ha out of 78,638,000 ha (country's land area) were agricultural in 2011. Only 5.89% of the land is arable and 0.23% under permanent crops (FAOSTAT 2011). The agriculture sector comprises two categories of producers: **the smallholder "family" sub-sector** and **the commercial sub-sector**:

The smallholder sub-sector accounts for about 95 percent of the area under production and produces almost all the food crops, such as maize, cassava, rice and beans. It is characterized by small areas (1.8 ha each on average) (AQUASTAT, 2005), low inputs, inadequate equipment and low yields and returns; almost all production is rainfed, as the farmers cannot afford to install irrigation systems. Within this sector a small group of emergent commercial farmers exists who use some agricultural inputs and sell their products in local markets. This group believes that one of their prime needs is the establishment or improvement of irrigation systems.

¹ The net completion rate defines the percentage of children of primary school completion age (12 years old) that attend the last grade of primary education and should be distinguished from the gross completion ratio which includes children of any age attending the last grade of primary school (MICS 2009).

²Mined, Education Statistics 2010

 Small and medium private companies represent the commercial sub-sector. These companies have some technological know-how, use agricultural inputs, generally have access to credit and, particularly in the south of the country, have access to irrigation. They are an important source of employment and notably contribute to technology dissemination and transfer. Their production is directed to supplying national markets, the agro-industries and for exportation. The main export crops are cotton, cashew nuts, sugar cane, tobacco and tea.

Mozambique's fishing sector is subdivided into 3 categories:

- Industrial fishing with large ships: Mozambique works together with fishing companies from other countries like Japan and Spain. A lot of the fish that these boats catch is shipped out of Mozambique for people to eat in other countries.
- Semi-industrial fishing with medium sized boats (between 10m and 20m long): Many of these boats are for catching shrimp by trawling, or they are catching fish with lines. The fishing companies that catch fish for people in Mozambique usually don't have new boats and equipment so it's more difficult to have a fishing business.
- Artisanal fishing with small boats: There are many communities in Mozambique where people are fishing in small groups or by themselves. Some of the fish they catch is for their own food, and some of it is for sale. Some of the boats have a motor on their boat and some don't. Many people fishing by themselves or in small groups don't have very much money.

Food Security (food availability, access, utilization, diet and food habits, and coping mechanisms)

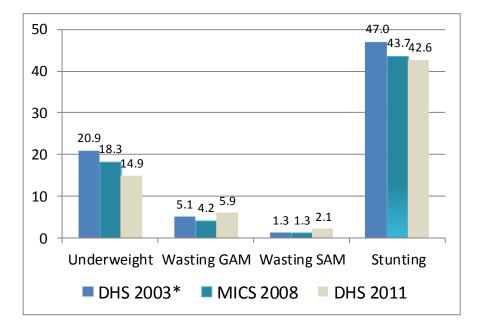
Dietary diversity is low in Mozambique, where diets are largely based on the consumption of cereal-based foods (cassava in the north part of the country and maize in the central and south part). The consumption of micronutrients – rich foods, vegetables (with the exception of green leafy vegetables which often accompany the staples), fruit, and food animal origin is also very low. The share of both protein and fat in the dietary energy supply is lower than the ones recommended by WHO (15-20% and 30-35%, respectively). The main food crops produced in Mozambigue include maize, beans, and sorghum. Cassava, sweet potatoes and potatoes are also grown. There are two growing seasons which contribute to food availability and retail food prices. Reoccurring floods and droughts affect parts of Mozambigue and contribute to food insecurity in areas around the country. It is estimated that 34% of households live with chronic food insecurity (SETSAN, 2009). The food insecure population mostly consists of poorer households, primarily farmers with small cultivated plots and little or no livestock, with no source of income, with limited or no food reserves and few or no assets. Coping strategies employed in times of food shortages include selling productive assets and natural products, informal labor, and hunting. Food aid is also targeted to households vulnerable to food insecurity.

Main causes of malnutrition in your country related to economic vulnerability and food security

- High levels of infection and teenage pregnancy
- Poor performance from agricultural sector.
- Widespread poverty
- Frequent droughts and flooding.
- Low content and density of vitamins and minerals in staple food
- Lack of access to adequate health care services, clean water and good sanitation

Agro-Nutrition Indicators (continued)	Sources/Year	
Nutritional Anthropometry (WHO Child Growth Standards)		
Prevalence of stunting in children < 5 years of age	7 42.6%	DHS 2011
Prevalence of wasting in children < 5 years of age	5.9%	DHS 2011
Prevalence of underweight children < 5 years of age	≥14.9%	DHS 2011
% of underweight Women (15-49 years) (BMI < 18.5 kg/m²)	8.6%	DHS 2011
% of overweight Women (15-49 years) (BMI ≥ 25. kg/m²)	16.4%	DHS 2011
Prevalence of obesity		
⁻ Children under 5 years old	N/A	
- Women of reproductive age (BMI > 30 kg/m ²)	4.2	DHS 2011

Prevalence of undernutrition in children under 5



Indicator												
(DHS 2011)		Gender		Residenc	Residence			Wealth quintile				
	Male	Female	Ratio	Urban	Rural	Ratio	1	2	3	4	5	Ratio
			m/f			u/r	Poor				Rich	r/p
Stunting prevalence	44.7	40.5	1.1	35.0	45.5	0.8	51.1	48.0	46.4	37.4	24.1	0.5
Underweight prevalence	16.6	13.3	1.3	9.8	16.9	0.6	23.0	17.2	15.2	9.7	6.4	0.3

Nutritional Situationⁱ

Children under 5 years old in Mozambique have a high risk of suffering from malnutrition. The MICS 2008 (UNICEF) found 44% of children were too short for their age, or stunted. More recent data put the rate of stunting for children under 5 years old at 42.6% (DHS 2011). The more years a mother has been in school the less likely her child will be stunted. In Mozambigue, the time between 2 months and 35 months of age is a vulnerable period (DHS 2011). Stunting peaks at 24-35 months to 49.3% of children in that age group (DHS, 2011). Wasting rates among children under 5 years old were reported to be around 5.9% (DHS 2011), up from 4% (MICS 2008). Children in drought-affected areas are more at risk of being malnourished. Wasting is also strongly associated with HIV/AIDS. There is a big difference in the prevalence of wasting between Maputo Province, Maputo City, Gaza and Inhambane (1-2%) and Nampula, Sofala, Zambezia and Manica(6-9%). Overall, malnutrition contributes to 36% of all deaths that occur before age five in Mozambique. In Mozambigue, most women are considered to have a normal BMI. Only 8.6% of women between 15-49 years old were found to be undernourished or "thin", whereas 16.4% were overweight and 4.2% obese (DHS 2011).

Agro-nutrition indicators (continued)	Sources/Year					
Infant feeding by age						
Children (0-5 months) who are exclusively breastfed	42.8%	DHS 2011				
Children (6-9 months) who are breastfed with complementary food	70.1%	DHS 2011				
Children (9-11 months) who are using a bottle with a nipple	77.1%	DHS 2011				
Children (20-23 months) who are still breastfeeding	49.3 %	DHS 2011				
Prevalence of micronutrient deficiencies						
Prevalence of vitamin A deficiency among pre-school children (serum retinol < 0.70 μmol/l)	68.8%	MISAU 2002				
Prevalence of vitamin A deficiency among pregnant women (serum retinol < 0.70 μmol/l)	14.3%	MISAU 2002				
Prevalence of anemia among pre-school children (Hb<110 g/l)	68.7 %	DHS 2011				
Prevalence of anemia among pregnant women (Hb<120 g/l)	50.9 %	DHS 2011				
Prevalence of iodine deficiency among school-aged children (urinary iodine < 100 μ g/L)	60.3 μg/L	MISAU 2004				
Coverage rates for micronutrient-rich foods and supplements intal	ke					
% Households consuming adequately iodized salt (> 15ppm)	7 25.1	MICS 2008				
Vitamin A supplementation coverage rate (6-59 months)	74.6%	DHS 2011				
Vitamin A supplementation coverage rate (<2 months postpartum)	67.6%	DHS 2011				
Pregnant women who consumed iron folate supplements for 90+ days	25.9 %	DHS 2011				

* No year of survey found. The data is from "WHO. 2008. Worldwide prevalence of anemia 1993-2005."

Infant feeding

Exclusive breastfeeding rate in Mozambique is 42.8% (Table above). While the majority of children are breastfed, they commonly receive other foods and liquids earlier than the recommended age of six months, including water, traditional medicines and porridges (Arts *et al*, 2011). At six months, it is recommended that children start to consume solid foods (of quality, quantity and frequency) in addition to breast milk. The 2011 DHS reported that 70.1% of infants between 6-9 months old were fed solid foods in addition to breast milk. Infants 6-8 months who are still breastfed, only 16.3% are receiving four or more food groups while 61.4% receive at least two meals per day. (DHS 2011) in addition to providing complementary foods, 49.3% of mothers continue to breastfeed their children up to 23 months.(DHS 2011) Lack of information, family and peer pressure, and cultural habits and taboos affect mothers' dietary choices for themselves and their infants and young children (Arts *et al*, 2011).

Micronutrients

The 2011 DHS found 44.8% of the households tested used salt that contained some level of iodine although there was no indication if the levels of iodine were adequate or not. The use of adequately iodized salt is not widespread in Mozambique and the latest available data show 15% of children between the ages of 6 and 12 have goiter (MISAU 2004). Vitamin A deficiency, which affects 69% of Mozambican children under 5 and 11% of mothers, (MISAU 2002) weakens immunity against infections. Vitamin A supplements were distributed to 67.6% of post-partum mothers (DHS 2011). Only 41.8% of mothers in the province of Zambézia received vitamin A, compared with 82.3% in Maputo City and 86.6% in the province of Manica (DHS 2011). Vitamin A distribution for children has greatly improved with 74.6% of children under 5 years old receiving vitamin A supplementation. (DHS2011). Iron deficiency, or anemia, affects 68.7% of children and 54.0% of women 15-49.(DHS 2011)

Care practices and sociocultural issues (incl. gender issues; cultural habits/norms)

Feeding practices of children are still far from ideal.

Only 13% of children are feed according to all 3 IYCP practices (receiving breast milk or other milk products, 4+ food groups a day and at least 3 meals) (DHS 2011)

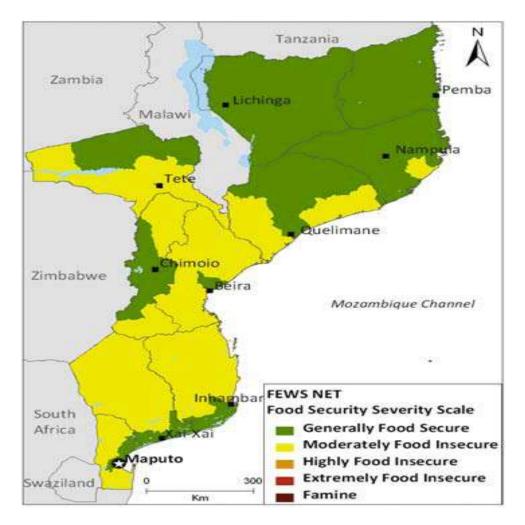
National food security and nutrition information system

Main linkages between malnutrition and disease (incl. HIV/AIDS)

Main causes of malnutrition related to care and infant feeding practices, sociocultural barriers (incl. gender issues)

- -Exclusive breastfeeding not optimal
- -Complementary feeding not optimal
- Poor dietary diversity and consumption of MN rich foods
- -Low literary and low levels of education especially among women
- Cultural taboos
- Early pregnancy

Malnutrition and Food insecurity levels by region



Estimated food security conditions, April-June 2010 (Source FEWS NET)

II. Current strategy and policy framework for improving food security and nutrition

Specific strategies, policies and programs currently in place to improve nutrition

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
STRATEGIC FRAMEWORI	(
Five Year Government Plan	2010-2014	The action plan states two main objectives: 1) reduction of absolute poverty and 2) fast sustainable economic growth.		Government of Mozambique Private sector Development Partners Civil society Donors Agencies	 Establishes food and nutrition security as one of the key objectives in the fight against poverty, the improvement of the wellbeing of the population and the promotion of the socio- economic development of the country. Commitment to reduce the high rates of chronic undernutrition. Sets as a priority the development of the Law on the Human Right to Adequate Food. 	
National Poverty Reduction Strategy (PARPA) III	2009-2014			Government of Mozambique Private sector Development Partners Civil society Donors Agencies	Apart from human development, the PARPA III focuses on agricultural output and productivity and on the creation of jobs in small and medium-sized enterprises (SMEs).	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
AGRICULTURE						
Comprehensive Africa Agricultural Development Programme (CAADP).	On-going		10% of National Budget	Government of Mozambique, Ministry of Agriculture, Development Partners NGO's Private Sector Donors Agencies		
PROAGRI II	2013- 2015	The objective of PROAGRI is to contribute to poverty reduction and improved food security by: supporting farmers in accessing seeds, fertilizers, tools, and markets to sell their products; stimulating the development of agro-industries for domestic and export markets; and promoting sustainable natural resources management and conservation. CIDA's support contributes to: connecting women and men to technology and information; improving farmers' access to market information and to agricultural markets; constructing and rehabilitating irrigation systems; capacity building within provincial and district agriculture departments to manage their human and financial resources effectively; and helping the provincial and district agriculture departments address gender inequality and HIV/AIDS.		Government of Mozambique Ministry of Agriculture and rural Development Donor Agencies		
Strategic Plan for the Development of Agriculture Sector (PEDSA)	2011-2020	PEDSA is the operational tool for CAADP. It emerges as a guiding framework, synergies driver and harmonizing tool to promote agriculture development whose target is to achieve an average annual agriculture growth of 7%.				

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
FOOD SECURITY						
Enhancing food Security and increasing Incomes in Northern Mozambique	2010-2016	This project aims to improve the quality of life for women and men living in Cabo Delgado province by improving their food security and livelihoods. The Aga Khan Foundation works to increase agricultural production capacity, to improve access to financial services, and to broaden market opportunities for individual farmers and households. This project addresses the root causes of food insecurity and poverty by making interventions in the areas of agriculture, enterprise development, savings and credit, and community mobilization.		Ministry of Agriculture Local government CIDA Aga Khan Foundation	Over the lifespan of this project, the Aga Khan Foundation expects to improve agricultural productivity, to increase food security, to improve the nutritional status of beneficiaries, and to broaden market opportunities for up to 35,000 households in seven districts of the province.	
NUTRITION						
Promotion of Basic Nutrition Package in Health Facilities	On- going	The goal is to bring the Basic Nutrition Package to more than 1,200 health units in all provinces. The nutrition package includes activities on infant and young child feeding, maternal nutrition, micronutrient supplementation, de- worming and growth monitoring.		Ministry of Health	A Basic Nutrition Package to prevent children from becoming malnourished at different stages of their life cycle is implemented in health facilities across the country.	
Multisectoral Action Plan for the reduction of Chronic Undernutrition		Overall objective is to reduce stunting in under fives from 44% in 2008 to 30% in 2015 and 20% in 2020.		SETSAN, Ministries of Health, Agriculture, Education, Industry&Commerc e, Social Protection, Planning &Development, Finance, civil society, UN agencies, donors	7 strategic objectives focusing on adolescents, pregnant women and children under 2. Objectives also consider human resource development, advocacy, coordination and information systems/surveillance.	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
HEALTH & SOCIAL PROTE	CTION					
Health Policy (Child Survival)	2011(draft)	Improved nutritional and health status through targeted health programmes Micronutrient supplementation and deworming tablets for children for children under five years. Promotion of exclusive breastfeeding. Revival of Baby friendly hospital initiative. Growth monitoring and promotion.		GOL,UN, Implementing partners		
High Impact Intervention for Maternal Newborn and Child Health	2012-2015		WHO UNICEF ONGs			•
Health Sector Strategic Plan	2009-2014			Government of Mozambique Ministry of Health		
Prevention of Mother- to-Child Transmission of HIV Prevention and Treatment of HIV and Under nutrition in Infants and Young Children		Malnourished children living with HIV and AIDS are being treated with ready-to-use therapeutic food, also called plumpy-nut. The goal is to scale up to 150 sites for therapeutic feeding and to 150 sites for supplementary feeding.	UNICEF WHO			

III. Country nutritional programs & initiatives currently implemented and/or planned

Main programmes and interventions being implemented to improve nutrition in the different sectors (health, agriculture, food security...)

In line with the priority interventions identified in the PAMRDC, the Nutrition Department in the Ministry of Health is implementing large scale supplementation programs including vitamin A supplementation for 6-59 months old children (along with deworming) and iron/folic acid supplementation for pregnant and postpartum women. The Ministry of Health oversees the Nutrition Rehabilitation Programme, which covers the treatment of severe and moderate acute malnutrition of children under the age of fifteen and is integrated in the health services (in-patient and outpatient) as part of the Health Sector Plan and Plan to achieve MDG 4 and MDG 5. Guidelines and training material for treatment of adolescents and adults suffering from acute malnutrition are currently being finalized. Provision of supplementary foods for malnourished pregnant women is implemented in several provinces. The promotion, protection and support of breastfeeding is ongoing. Two new initiatives in nutrition supplementation are under development, including an operational study on lipid-based nutrition supplements and the drafting of a national strategy on the promotion of multi-micronutrient powders.

Under the leadership of the Ministry of Industry and Commerce, Mozambique is moving forward with the large scale fortification of wheat flour and edible oils. Iodization of salt is ongoing.

The Ministry of Agriculture launched on August 2013 the European Union funded programme so called "Accelerate progress towards MDG 1c in Mozambique". The initiative, which from the UN side will count on the support of the three Rome-based Agencies for its implementation, namely the Food and Agriculture Organization of the United Nations (FAO), the World Food Program (WFP) and the International Fund for Agriculture Development (IFAD), is a joint effort programme aimed at strengthening and expanding on-going interventions in order to support to accelerate the attainment of the Millennium Development Goal 1 in Mozambigue, which is about reducing by halve the proportion of people who suffer from hunger, by 2015. The programme will seek to support the Government of Mozambigue, through strategic partnerships and complemented direct interventions, to improve the livelihoods, food security and nutritional status of people in the intervention areas and will address the three dimensions of food security (access, availability and utilization) in the country. Enhanced agricultural and fisheries production, increased access to food and improved nutrition form the three pillars of the programme, which will be implemented in 5 provinces: Manica, Sofala, Tete, Zambézia and Nampula. The programme implementation will be coordinated by the Technical Secretariat for Food Security and Nutrition (SETSAN) and participating governmental institutions include the Ministry of Agriculture (MINAG), Ministry of State Administration (MAE), Ministry of Fisheries (MP), Ministry of Health (MISAU), Ministry of Industry and Commerce (MIC), Ministry of Education (MINED) and Ministry of Planning and Development (MPD).

Consideration of nutritional goals into programs / activities related to agriculture and food

Main population groups targeted & localisation

Funding opportunities

The seven PAMRDC strategic objectives for the period 2011-2015 have been costed. Nutrition funding in Mozambique is currently channeled through sector-specific budgets and vertical funding arrangements. However, for the future a common fund for nutrition is envisaged under the Ministry of Finance. Donor partners such as Danish International Development Agency have already committed to contribute to this common fund. The number of donors keen to support nutrition in the country-and the funds committed - is on the increase.

Given this, the Ministry of Health developed a strategy to fight micronutrients deficiency, which encompasses three different approaches, namely supplementation**1**. of certain micronutrients such as Vitamin A and Iron, for the more vulnerable groups, the promotion of food production and diversified diet and the fortification of the more commonly consumed food items, with specific micronutrients.

Biofortification can be adopted as a new intervention that to help fight micronutrient malnutrition by improving the micronutrient content of staple foods that poor people already eat. It provides, a comparatively inexpensive, cost effective, sustainable, long term means of delivering more micronutrients to the poor (Bouis et al. 2010). Interventions using the biofortification strategy through OFSP to reduce the high rates on the VAD were firstly introduced in 2000 when the southern region of Mozambique was severally affected by floods.

Most recently, results from a study on Reaching End Users (REU) Project impact in Zambezia province, indicated that OFSP intake, total Vitamin A intake, and serum**2**. retinol concentrations were significantly increased among children less than five years of age in the intervention communities compared to controls (Low et al. 207). The proceeding information provides great confidence that attaining reasonable levels of provitamin A caretenoids in OFSP will indeed result in a measurable impact on vitamin A status among vulnerable population (REU 2010). Additionally, Seventy percent of REU project households adopted the OFSP (compared to 9 percent of in**3**. the control group) and the share of sweet potato cultivated area devoted to OFSP increased from 9 percent to 56 percent in the project targeted area.

World foras spearheaded by HaverstPlus and other global players in health and nutrition, including in the Copenhagen conventions recommended biofortification as an top priority intervention to address malnutrition in the development wold.

The Strategic Plan for Agricultural Development (PEDSA) 2011-2020 systematizes a wide range of strategic guidelines for agriculture, to transform the agriculture sector from a predominantly subsistence to more competitive in the international market and increase the attractiveness for investors. Its general objective is to 'contribute towards the food security and income of agricultural producers in a competitive and sustainable way, guaranteeing social and gender equity'. It presents a medium/long term vision based on national directives for agriculture and the priorities set out in Africa's common guiding framework for improving agricultural sector performance – the Comprehensive African Agriculture Development Programme (CAADP). The

CAADP pillars (sustainable development of natural resources; markets and infrastructures; food production; and agricultural research) are to a great extent reflected in PEDSA's objectives and activities. The National Agrarian Investment Plan (PNISA) 2013- 2017 has been developed based on priorities established in PEDSA. The goals for PNISA are: i) To reach an average growth of 7% per year in the next 10 years; ii) To reduce chronic malnutrition in children under 5 years of age from 44% in 2008 to 30% in 2015, and 20% in 2020; iii) To halve the proportion of people suffering from hunger until 2015.

Donor Agencies

The European Commission (EC) is currently elaborating a massive investment program for nutrition under the bilateral agreement with the Mozambican Government. USAID, through OFDA project, has recently funded interventions, implemented by CIP, to mitigate disaster effects and fight Vitamin A deficiency with new drought –tolerant, orange fleshed sweet potato.

Irish AID has recently committed resources to the new RAC project site in Tete Province with a focus on nutrition education through the Social Behavior Change (SBC) approach. Irish AID is notable as key donor agency in development of Mozambique, especially in the health and education sectors. As that, it is considered to be a potential donor for future investment in OFSP.

Non Governmental Organization

The NGOs listed in the table above are currently involved in the nutrition agricultural programs, and willing partners in OFSP. Among these NGOs, World Vision, ADRA and Food for the Hungry are already involved in OFSP promotion and dissemination. OFSP is as also an integral part of their nutritional behavior change program.

Private Sector

The Mozambican Government is in the process of formulating a policy for the enforcement of Corporate Social Responsibility (CSR), for mining and gas companies operating in the country. RAC will take advantage of this enabling environment to assist the community-based organizations accessing funds from the companies to promote the OFSP. Currently Rio Tinto and Vale are the major coal mine companies with operations in Mozambique, with a number of companies starting operations in natural gas and oil research and exploration.

Prior ity	Opportunity for Investment in FSN	Current Situation	Potential Partner/Donor						
Food F	Food Production and Availability								
1	ESAN II and PAMRDC, advocate for the increased production and promotion of OFSP as a rich source of Vitamins and energy calories and others nutritious food	Low productivity and consumption of nutritious food. lack of food availability at the HH levels, especially in the semi-arid areas	Provincial, Governments MINAG/SETSAN NGOS: TNS, ANSA, SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC) Private Sector: CTA, Rio Tinto, Riversdale); Producer Associations (IKURO, ROSA, ATAP and UNAC); United Nation Organization (UNICEF and UNDP)						
2	Assistance to MINAG in effort for technology transference (specially the release of improved varieties,)	Weakness in the institutional capacity of agronomic research and in the Public Extension service to effectively use the School Farm program to disseminate new agricultural practices	Provincial, Governments MINAG/SETSAN NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, HKI, and others						
3	Work with partners to facilitate the financial linkages through the grants for vulnerable groups and micro credit for nutritious food production and processing	Weak financial access and lack of grants for nutrition food food production	Provincial, Governments, FIL, MINAG/SETSAN NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, and AFRICARE, SC, HKI and others						

Prior ity	Opportunity for Investment in FSN	Current Situation	Potential Partner/Donor
Food a	nd Seeds Access		
1	Through the provincial extension services (SDAE) build capacity for better access to free pest materials and quality seeds by households	Currently there is an OFSP clean vine dissemination program implemented by the CIP and SDAE. It has not yet been adopted on a large scale. Extension service could be enabled to disseminate quality seeds and vines using the same model	Provincial, Governments MINAG/SADE, NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC) and PRODEZAII
Food L	se and Utilization		
1	Increased use of micronutrients rich food (eg supplementation of foods rich in zinc, iron and Vitamin A)	Already in Government priority on public health and still to be consolidated and expanded	Provincial, Governments: MISAU MINAG/SADE, NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, HKI and PRODEZAII and others
2	Support awareness raising public initiative to households	Isolated initiatives ran by some NGOs in limited area and local community radios	Provincial, Governments: MEC, MISAU MINAG/SADE, NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, HKI, ICS and PRODEZAII

Prior ity	Opportunity for Investment in FSN	Current Situation	Potential Partner/Donor
Food A	Adequation		
1	Support MINAG and MISAU in the efforts to raise awareness in food diversification (fruits, meats, vegetables etc)	Food consumption is often affected by the local tradition of prioritizing men instead of children and women in food distribution within HHs	Provincial, Governments MINAG/SETSAN NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, HKI, FH, Hunger Project atc.
2	Institutionalization of the Human Right to Food's law and regulation (DHAA) by the Mozambican Government	DHAA in the final stage of elaboration	MINAG, ROSA, UNAC, Consumers Associations, FAO, and Implementing agencies.
3	Inclusion of OFSP in FSN strategies, policies, in DHAA's Action Plan and primary education curriculum	Efforts are put in place but more still needed	FAO, UNICEF, European Union, DANIDA, Irish AID, CIDA and USAID
Nutriti	ous Food Stability (Storag	ge and Processing)	
1	Support MINAG in its effort to ensure the food stability among HHs through adoption of technology for nutrition food processing and storage, especially for the HHs with low income.	High variation on food stability depending on areas	Provincial, Governments MINAG/SETSAN NGOs: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, GAIN, FAO, WFP and others

Prior ity	Opportunity for Investment in FSN	Current Situation	Potential Partner/Donor			
Institu	Institutional Capacity Building					
1	Assist Government in the training and advocacy initiative to reinforce the institutional capacity in the Nutrition	MINAG SETSAN is represented in all the provinces.	FAO, UNICEF, European Union, DANIDA, Irish AID, CIDA and USAID			
Monitoring and Evaluation						
2	Strengthen the coordination mechanism with SETSAN for food security assessment to track the high nutrition food consumption and Vit A intake in the targeted areas.	Currently SETSAN conducts baseline studies to assess the nutritional status of HHs.	FAO, WFP, HKI and UNICEF			
Food and Gender						
1	Ensure and expand the access by women of nutritious food inputs and commercialization for income generation	The OFSP vine and other nutritious food agricultural inputs remain very low in country, especially in the farm owned by women.	Provincial, Governments MINAG/SETSAN NGOS: SNV, BAGC, European Union and (MAYAPS: ADRA, WVI, Food for Hungry, SANA Project, AFRICARE, SC, GAIN, FAO, WFP and others			

Monitoring & Evaluation mechanisms

IV. Stakeholders, coordination mechanisms and national capacities for implementing food and nutrition security framework

Main national entities in charge of designing and implementing the food and nutrition policy framework

The design and implementation of FNS policies and programmes is usually led by the Ministry of Agriculture and the Ministry of Health in a consultative process with other Ministries, civil society and development partners. The **Technical Secretariat for Food and Nutrition Security (SETSAN)**, an institution operating under the tutelage of the Ministry of Agriculture, is the convening body for nutrition.

A number of support structures exist at community level. The Ministry of Health and NGOs use mother groups, model mothers, support groups and animators to reach mothers with young children with key messages on the basic principles of nutrition (food security and nutrition education) and hygiene promotion. A Community Counseling Package on IYCF was adopted in 2012 and there are 47 trainers in the country. More than 20 infant feeding support groups have been formed and IEC materials developed and disseminated.

The Ministry of Agriculture is implanting the Rural Extension Program in order to educate small scale farmers on growing crops including those with high nutritional value. Social workers from the Ministry of Women and Social Action reach vulnerable households with food subsidies and cash transfers.

Main management and technical capacities at the institutional level

There is insufficient capacity, both managerial and technical, at all levels, including in terms of numbers of staff dedicated to nutrition interventions. Furthermore, there is a lack of clarity around roles and confusion between food and nutrition security.

Disaster prevention/management structures

The disaster relief institution of Mozambique coordinating intervention on disaster prevention, disaster preparedness, disaster mitigation is the National Institute for Disaster Management, INGC, (Decree No. 37/99). The INGC prepares for and responds to both natural disasters and man-made disasters . INGC is responsible for conducting mitigation efforts (such as collection and analysis of data) undertake preparedness measures (eg. awareness campaigns) and coordinating disaster response (including distribution of food, tents, and other supplies).. Since 2008, INGC is also responsible through the Reconstruction Coordination Office (GACOR) for the resettlement of displaced people by natural disasters. In 2006, Mozambique government approved the National Master Plan for Prevention and Mitigation of Natural Calamities. Institutions related to disaster management in Mozambique are

many. The database comprises Governmental, Non-governmental Organizations (NGO's) and other intervenient such as the UN organizations working at various sectors (e.g., drought, floods, cyclones, famine and hunger), and geographic scales (provincial, district and community). For example for a drought- and flood-risk assessment at the national scale, Jayanthi and Bachu (2009) highlighted four institutions playing a key role including as data providers, namely, the National Directorate of Water (DNA), the Mozambique Institute of Agrarian Research (IIAM), the National Institute of Meteorology (INAM) and the National Institute of Statistics (INE). CVM – Moçambique (Red Cross), World Food Programme provide assitence to vulnerable groups in collaboration with governmental institutions (MINAG, MISAU, and INGC).

Monitoring and Evaluation capacities

Main technical and financial partners

The **Development Partner Group** (DPG) focuses on general political developments. The group consists of heads of mission of bilateral donors in Mozambique, the UNDP, and the international financial institutions. The group is led by UN and World Bank.

The **Overseas Development Assistance to Mozambique** (ODAMOZ) database contains information about development interventions of 36 multi- and bilateral donors and global funds and more than 1.200 projects in Mozambique. It was initiated by the EU, later joined by the UN agencies and gradually grows as more donors join.

Development partners will support and respond to strategies outlined by the government. They will provide financial and technical support for projects and programs.

Multilateral development partners

The African Union, COMESA, European Union, IFAD, AFDB (financial support), WORLD BANK(technical assistance and financial support), FAO (technical assistance and financial support), UNDP(technical assistance and financial support), UNICEF(technical assistance and financial support), WHO (technical assistance and financial support), WFO (food aid).

Bilateral development partners

Austrian Development Cooperation (ADC), the United States Agency for International Development (USAID), the EC, United Kingdom (DFID), Canadian International Development Agency (CIDA), The Netherlands, Sweden (SIDA), Norway, Japan (JICA), Denmark (DANIDA) and Ireland, Belgium, Spain, France, Italy, The People's Democratic Republic of China, India, Brazil.

Local & International NGOs

- World Vision International
- Save the Children International
- Helen Keller International
- Clinton Foundation
- Jhpiego
- Concern
- Population Services International
- Africare

- CARE International
- Family Health International (FHI)
- ADRA
- ANSA
- FDC
- other private and civil society organizations
- Higher Education and Research Institutions

Main coordination mechanisms (Task force, core group, cluster...)

SETSAN facilitates the monthly technical group **(GT-PAMRDC)** on PAMRDC (multi sectoral action plan on nutrition), including government sectors, UN agencies, donors and civil society. To date. 9 out of 11 provinces have established provincial GT-PAMRDC. Working groups on FSN planning and budgeting and advocacy and communications have also been established at central level and meet under SETSAN leadership on a monthly basis. The vulnerability analysis technical working group (VAC) is responsible for the collection, analysis and dissemination of data with regards to vulnerability and food insecurity.

The **Nutrition Partners Forum (NPF)** is a coordination mechanism for donors and partners providing support to the implementation of the PAMRDC. The Forum is hosted by SUN Donor Conveners, UNICEF and Danish International Development Agency, and meets on a monthly basis.

The **Civil Society Platform on Nutrition** is in the process of being established. Host organization ANSA is a member of both afore-mentioned platforms.

A private sector platform is to be established with GAIN support. Currently, the private sector is engaged in salt iodization and large-scale fortification of wheat flour and edible oils as members of the National Food Fortification Committee of Mozambique (CONFAM) under the chairmanship of the Ministry of Industry & Commerce and Ministry of Health and the National Program for Salt Iodization (PRONIS).

Adherence to global / regional initiatives linked to nutrition (e.g. SUN, REACH, CAADP...)

Mozambique joined the SUN Movement in August 2011 to reiterate its commitment to the reduction of chronic undernutrition. The President of Mozambique, H.E. Armando Guebuza, became a member of the **SUN Lead Group** in April 2012. The SUN focal point is the SETSAN Coordinator. Key stakeholders of the SUN Movement in Mozambique include government, development partners, civil society and the private sector.

UN REACH began activities in Mozambique in July 2012 and the international and national REACH facilitators are housed within SETSAN. Amongst others, REACH's objective is to support SETSAN to effectively assume its role of multi-sector and multi-stakeholder coordination.

Baby Friendly Hospital Initiative BFHI: BFHI has been introduced in all Hospitals (3 Central, 10 Provincial and 3 General). There are currently 66 trainers in the country and 21 health staff have been trained as external evaluators. Training of health staff is ongoing.

Community-based Management of Acute Malnutrition: In Mozambique, CMAM is known as the Nutrition Rehabilitation Programme (PRN). In many countries, the treatment of Severe Acute Malnutrition (SAM) takes place in dedicated feeding centres. In Mozambique the treatment of SAM has always been integrated within the regular health system, making it a unique example.

The Volume I for the PRN (for children 0-15) was approved by the MoH in 2010. This marked the expansion to the whole country with a series of regional trainings of trainers that reached district level. The Volume II for the PRN (for adolescents and adults from 15 years and older) was approved by the MoH in 2013. The transition to the new protocols for PRN is still taking place but monitoring of the new protocol has not yet reached all the health units running PRN.

The main aim of the PRN is to reduce the number of deaths due to SAM as well as to reduce the incidence of SAM by improving early detection, referral and treatment of children with MAM through five components: (1) active case finding and referral at the community level, (2) inpatient treatment for SAM with medical complications, (3) outpatient treatment for SAM without medical complications, (4) outpatient treatment for MAM, (5) Nutrition education at the community and health centre levels.

<u>International Code of Marketing of Breast-milk Substitutes</u>: The National Code of Marketing of Breastmilk Substitutes is in place since 2007, but enforcement remains very much a challenge. The scope of the code 0-36 months.

CAADP: Mozambique signed the CAADP Compact in December 2011.

In Mozambique, CAADP will be implemented through the Strategic Plan for the Development of Agriculture Sector (PEDSA) 2011-2020. In April 2013, Mozambique launched the CAADP National Investment Plan for Agriculture and Food Security (referred to in Mozambique as the Plano Nacional de Investimento do Sector Agrário - PNISA).

New Alliance for Food Security and Nutrition: In April 2013, Mozambique also launched its New Alliance for Food Security and Nutrition. This initiative of the G8 group of the most industrialized countries in the world, plans to invest 380 million US dollars in agriculture in Mozambique and lift three million people out of poverty by 2015. The main partners in the alliance in Mozambique will include United States Agency for International Development (USAID) and the Japan International Cooperation Agency (JICA).

Millennium Development Goals

Main issues at stake to improve the mainstreaming and scaling-up of nutrition at the country level and regional / international level, taking into account sustainability

18

Definitions

Acute hunger	Acute hunger is when the lack of food is short term, and is often caused when shocks such as drought or war affect vulnerable populations.
Chronic hunger	Chronic hunger is a constant or recurrent lack of food and results in underweight and stunted children, and high infant mortality. "Hidden hunger" is a lack of essential micronutrients in diets.
Direct nutrition interventions and nutrition- sensitive strategies	Pursuing multi-sectoral strategies that combine direct nutrition interventions and nutrition-sensitive strategies. Direct interventions include those which empower households (especially women) for nutritional security, improve year-round access to nutritious diets, and contribute to improved nutritional status of those most at risk (women, young children, disabled people, and those who are chronically ill).
Food Diversification	Maximize the number of foods or food groups consumed by an individual, especially above and beyond starchy grains and cereals, considered to be staple foods typically found in the diet. The more diverse the diet, the greater the likelihood of consuming both macro and micronutrients in the diet. <i>Source : FAO</i>
Food security	When all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.
Hunger	Hunger is often used to refer in general terms to MDG1 and food insecurity. Hunger is the body's way of signaling that it is running short of food and needs to eat something. Hunger can lead to malnutrition.
lron deficiency anemia	A condition in which the blood lacks adequate healthy red blood cells that carry oxygen to the body's tissues. Without iron, the body can't produce enough hemoglobin, found in red blood cells, to carry oxygen. It has negative effects on work capacity and motor and mental development. In newborns and pregnant women it might cause low birth weight and preterm deliveries.
Malnutrition	An abnormal physiological condition caused by inadequate, excessive, or imbalanced absorption of macronutrients (carbohydrates, protein, fats) water, and micronutrients.
Millennium Development Goal 1 (MDG 1)	Eradicate extreme poverty and hunger, which has two associated indicators: 1) Prevalence of underweight among children under five years of age, which measures under-nutrition at an individual level; and, 2-Proportion of the population below a minimum level of dietary energy consumption, that measures hunger and food security, and it is measured only at a national level (not an individual level). <i>Source : SUN Progress report 2011</i>

Multi-stakeholder approaches	Working together, stakeholders can draw upon their comparative advantages, catalyze effective country-led actions and harmonize collective support for national efforts to reduce hunger and under-nutrition. Stakeholders come from national authorities, donor agencies, the UN system including the World Bank, civil society and NGOs, the private sector, and research institutions.
Nutritional Security	Achieved when secure access to an appropriately nutritious diet is coupled with a sanitary environment, adequate health services and care, to ensure a healthy and active life for all household members.
Severe Acute Malnutrition (SAM)	A weight-for-height measurement of 70% or less below the median, or three standard deviations (3 SD) or more below the mean international reference values, the presence of bilateral pitting edema, or a mid-upper arm circumference of less than 115 mm in children 6-60 months old.
Stunting (Chronic malnutrition)	Reflects shortness-for-age; an indicator of chronic malnutrition and it is calculated by comparing the height-for-age of a child with a reference population of well-nourished and healthy children.
Underweight	Measured by comparing the weight-for-age of a child with a reference population of well-nourished and healthy children.
Wasting	Reflects a recent and severe process that has led to substantial weight loss, usually associated with starvation and/or disease. Wasting is calculated by comparing weight-for-height of a child with a reference population of well-nourished and healthy children. Often used to assess the severity of emergencies because it is strongly related to mortality. <i>Source : SUN Progress report 2011</i>

Acronyms

AUC	African Union Commission	
BMI	Body Mass Index	
CAADP	Comprehensive Africa Agriculture Development Program	
CIP	Country Investment Plan	
CFSAM	Crop and Food Security Assessment Mission	
CFSVA	Comprehensive Food Security and Vulnerability Analysis	
COMESA	Common Market for Eastern and Southern Africa	
DHS	Demographic and Health Survey	
ECCAS	Economic Community of Central African States	
EFSA	Emergency Food Security Assessment	
FAFS	Framework for African Food Security	
FAO	Food and Agriculture Organization	
FNS	Food and Nutrition Security	
FSMS	Food Security Monitoring System	
GAM	Global Acute Malnutrition	
IFAD	International Fund for Agricultural Development	
IFPRI	International Food Policy Research Institute	
MDG	Millennium Development Goal	
MICS	Multiple Indicator Cluster Survey	
NAFSIP	National Agriculture and Food Security Investment Planning	
NCHS	National Center for Health Statistics, Centers for Disease Control & Prevention	
NEPAD	New Partnership for Africa's Development	
NPCA	National Planning and Coordinating Agency	
PRS	Poverty Reduction Strategy	
REACH	Renewed Efforts Against Child Hunger	
REC	Regional Economic Community	
SADC	Southern African Development Community	
SAM	Severe Acute Malnutrition	
SUN	Scaling-Up Nutrition	

UNDP	United Nations Development Program	
UNICEF	United Nations International Children's Emergency Fund	
USAID	United States Agency for International Development	
WFP	World Food Program	
WHO	World Health Organization	

ⁱIn 2006, reference norms for anthropometric measures have been modified: from NCHS references to WHO references. To compare data measured before and after 2006, we usually use NCHS references.