



## Comprehensive Africa Agriculture Development Programme (CAADP)

### *East and Central Africa Regional CAADP Nutrition Program Development Workshop*

### **Nutrition Country Paper – South-Sudan**

**DRAFT**

**February 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 Dar-es-Salaam, Tanzania, from the 25<sup>th</sup> to the 1<sup>st</sup> March 2013.*

*The purpose of this Nutrition Country Paper is to provide a framework for synthesizing 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 in-country nutritional situation, the main achievements and challenges faced both at operational and policy levels.*

***This work document will be further updated by the country team during the workshop.***

## General sources used to produce this document

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

Sources	Information	Lien internet
<b>CAADP</b>	Signed Compact / Investment plans / Stocktaking documents / Technical Review reports if available	<a href="http://www.nepad-caadp.net/library-country-status-updates.php">http://www.nepad-caadp.net/library-country-status-updates.php</a>
<b>DHS</b>	DHS Indicators	<a href="http://www.measuredhs.com/Where-We-Work/Country-List.cfm">http://www.measuredhs.com/Where-We-Work/Country-List.cfm</a>
<b>FANTA</b>	Food and Nutrition technical assistance / select focus countries	<a href="http://www.fantaproject.org/">http://www.fantaproject.org/</a>
<b>FAO</b>	Nutrition Country Profiles	<a href="http://www.fao.org/ag/agn/nutrition/profiles_by_country_en.stm">http://www.fao.org/ag/agn/nutrition/profiles_by_country_en.stm</a>
	FAO Country profiles	<a href="http://www.fao.org/countries/">http://www.fao.org/countries/</a>
	FAO STAT country profiles	<a href="http://faostat.fao.org/site/666/default.aspx">http://faostat.fao.org/site/666/default.aspx</a>
	FAPDA – Food and Agriculture Policy Decision Analysis Tool	<a href="http://www.fao.org/tc/fapda-tool/Main.html">http://www.fao.org/tc/fapda-tool/Main.html</a>
	MAFAP – Monitoring African Food and Agricultural Policies	<a href="http://www.fao.org/mafap/mafap-partner-countries/en/">http://www.fao.org/mafap/mafap-partner-countries/en/</a>
<b>OMS</b>	Nutrition Landscape information system (NILS)	<a href="http://apps.who.int/nutrition/landscape/report.aspx">http://apps.who.int/nutrition/landscape/report.aspx</a>
<b>REACH</b>	REACH multi-sectoral review of existing data on the nutrition situation, programmes and policies	<i>When available</i>
<b>ReSAKKS</b>	Regional Strategic Analysis and Knowledge Support System	<a href="http://www.resakss.org/">http://www.resakss.org/</a>
<b>UNICEF</b>	Nutrition Country Profiles	<a href="http://www.childinfo.org/profiles_974.htm">http://www.childinfo.org/profiles_974.htm</a>
	MICS: Multiple Indicators Cluster Surveys	<a href="http://www.childinfo.org/mics_available.html">http://www.childinfo.org/mics_available.html</a>
<b>WFP</b>	Food security reports	<a href="http://www.wfp.org/food-security/reports/search">http://www.wfp.org/food-security/reports/search</a>
<b>Others</b>		
<b>National Sources</b>		

## I. Context – food and nutrition situation

General Indicators		Sources / Year <sup>i</sup>
Population below international poverty line of US\$1.25 per day		
Under-five mortality rate (per 1,000 live births)		
Infant mortality rate (per 1,000 live births)		
Primary cause of under-five deaths ⇒ Rate of death due to .....		
Maternal mortality rate /100 000 lively births		
Primary school net enrolment or attendance ratio		
Primary school net enrolment -ratio of females/males		
Agro-nutrition indicators		Sources/Year <sup>i</sup>
Cultivable land area		
Access to improved drinking water in rural areas		
Access to improved sanitation in rural areas		
Food Availability		
Average dietary energy requirement (ADER)	N/A	
Dietary energy supply (DES)	N/A	
Total protein share in DES	N/A	
Fat share in DES	N/A	
Food Consumption		
Average daily consumption of calories per person	N/A	
Calories from protein	N/A	
Calories from fat	N/A	
Average daily fruit consumption (excluding wine) (g)	N/A	
Average daily vegetable consumption (g)	N/A	

### Economic Development

#### Including specific focus on agriculture

South Sudan has a large potential for primary industries: agriculture, livestock, fisheries and forestry spread over the 7 livelihood zones (Figure 1). In terms of agriculture, South Sudan has at least 40 million hectares of land suitable for agricultural production of which only 4.5% of this arable land is presently cultivated.

South Sudan comprises six main ecological/livelihoods zones (i) “Greenbelt”, where people predominantly practice agriculture; (ii) “Arid”, where people predominantly practice pastoralism; (iii) “Hills and mountains”, where people rely mainly on agro-pastoralism; (iv) “Western and eastern flood plains”, where people practice agro-pastoralism supplemented by fishing; (v) “Ironstone plateau”, where people mix

agriculture with game hunting and apiculture and; (vi) “Nile and Sobat rivers zone”, where people combine agro-pastoralism with fishing and wild food collection.

About 68 percent of households grow sorghum, maize (44%) mainly concentrated in Western Equatoria, Unity and Upper Nile, groundnut (33%) and cassava (13%) mainly concentrated in Western Equatoria. Equally the livestock and fish production potential is huge. The nearly 100,000 hectares of sudd swamp and vast river network provide a potential of nearly 300,000-400,000 t/year of fish. However, the current level of fish production is approximately 10% of the total potential. About 22 percent of households are engaged in fishing.

Livestock production is a dominant livelihood activity. Some 72 percent of households own one or more types of livestock or poultry. About 63 percent of households own cattle, goats (69%) and poultry (57%) and sheep (38%). Livestock ownership, especially cattle are primarily for socio—cultural reasons and therefore the full value of livestock as a source of food and income is yet to be realized.

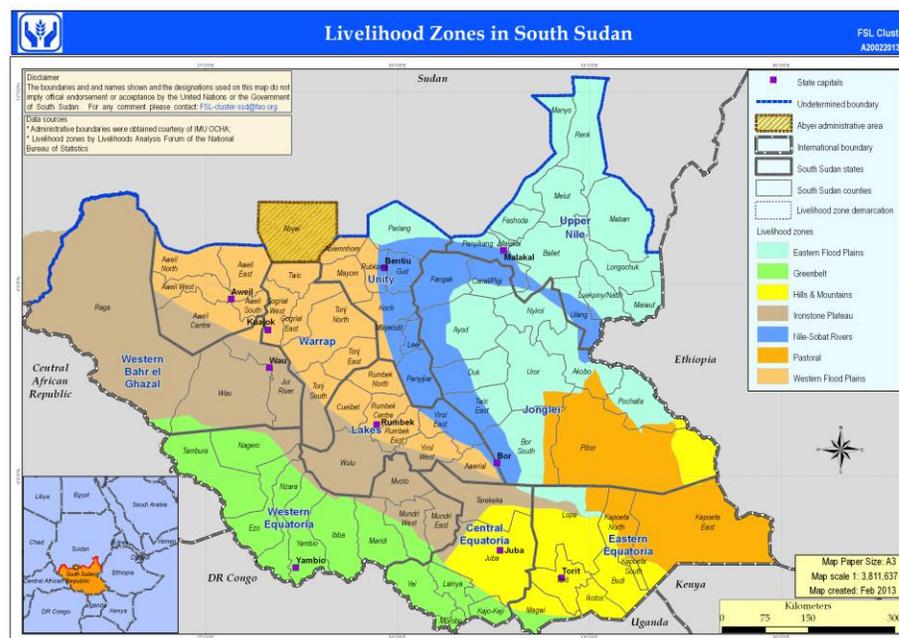


Figure 1: South Sudan Livelihood Zones

## **Geography, population & human development**

*Illustration of HDI, including key statements about the sanitation and educational situation*

South Sudan is a young nation with over 4 million children (below the age of 18) in 2008. In 2010 it was estimated that there were over 2 million children of primary school-going age but only 900,000 were actually attending school. Only 40% of the population between 15-24 is literate. The literacy rate for males in this age group is 55% compared with 28% for females. The net primary school enrolment rate in 2010 was 44%, the fourth lowest in the world. Moreover, there is significant variation between genders with the enrolment rate for males being 51% compared to 37% for females. Only 37% of the population above the age of six has ever attended school in South Sudan. Amongst these, 68% are attending school now, reflecting the near absence of formal education in earlier years (SS Development Plan, 2011-13).

In terms of access to health, only 17% of children aged 12-23 months were fully immunized in 2006. Currently only 55% of the population has access to improved sources of drinking water according to World Health Organization (WHO) definitions. Sanitation remains a challenge with 80% of the population not having access to any toilet facilities (SS Development Plan, 2011-13).

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

*Main indicators of the food insecurity situation, food accessibility (quality and quantity), diversity, food access, utilization*

**Food Availability:** South Sudan is a structurally cereal deficit country. In the last decade, the aggregate net cereal production has varied between 400,000 tons to slightly over one million tons. During this period, South Sudan has managed to produce sufficient aggregate quantities of cereal in two years: in 2004/5 and 2008/9. Overall growth in agricultural production has not kept with the population growth due to the influx of returnees and refugees especially in the post-CPA period. In 2012 the cereal deficit of 475,000 Mt was recorded. The productivity gap is high with yield varying between 0.5t/ha to 1.2t/ha. Apart from the climatic hazards, food production is hindered by insecurity, poor road infrastructure, high post harvest losses, lack of certified seeds and hand tools, limited agricultural skills and knowledge, lack of diversification of agricultural production as well as limited social services which affect the supply and labor productivity.

The total livestock population in South Sudan is estimated at 36.5 million, consisting of nearly 12 million heads of cattle, 14 million goats and over 12.5 million sheep. This positions South Sudan as the 6th livestock producer in Africa. However, the contribution of livestock to food security is not well understood because of the strong sentimental cultural values attached to cattle. Current livestock production is less than 20 percent of its potential and the local market can currently absorb 35% of the current supply. These gaps present the opportunity to exploit the high potential of livestock and livestock products for export market.

Fishing is a seasonally important source of food in many parts of the country but somewhat underutilized. Due to lack of fish handling and preservation facilities, there are high post-harvest losses estimated at 40 percent. In addition to marketing, also lack of credit, poor physical access and limited technical knowledge, as well as lack of electricity are challenges to be overcome so as to increase fish production.

**Food Access:** Ninety percent of South Sudanese households depend on crop farming, animal husbandry, fishing or forestry for their livelihoods but the combination of the different livelihoods varies from state to state. In Western Equatoria, Lakes, Jonglei and Upper Nile agriculture is the principal livelihood in terms of share of income for roughly a quarter of the population. Pastoralism, the third most practiced livelihood overall, is most common in Eastern Equatoria, Lakes and Warrap. Almost 19% of households rely on the collection and sale of natural resources (charcoal making, collecting of fire wood, grass, water, wild foods etc.) for the major part of their household income, which were considered as coping strategies.

50.6% of the population lives below the national poverty line of SDG 73 per month, which equates to approximately US\$1.00 per person per day using current exchange rates. Poverty is so persistent that even those in the comparatively wealthier quintiles cannot always afford to buy enough food and essential non-food items such as clothing and shelter. Productivity across all these sectors is minimal. Agricultural yields remain low due to limited irrigation, scant use of certified seeds and fertilizers, limited use of modern farming tools and practices, and small plots of land.

**Food Utilization:** Nationally, 37% of households have poor or borderline food consumption. Of these, 16% have poor food consumption, mainly surviving on cereals and consuming no or very few proteins, vegetables and dairy products (less than once a week). There are also clear disparities regionally as well as between urban and rural areas. Food diversity decreases on a south-north gradient from the Equatorias to the northern border states (Table 3). Warrap, Northern Bahr El Ghazal and Lakes have the highest incidence of poor food consumption, these results clearly indicate the need to diversify food base. Similarly, the prevalence of poor food consumption tends to be higher in the rural (19%) area than urban areas (4%). This is similar for food diversity: 18% in urban areas compared with 58% in rural areas.

The consumption patterns reflect the low diversification of production and given the strong link between household nutritional adequacy and own food production, it is critical to diversify agricultural and livestock production to enhance the dietary diversity.

**Coping Strategies:** Households in South Sudan face multiple and unpredictable shocks which include floods and droughts, insecurity and displacement and most recently from high food prices associated with the shutdown of oil production and ensuing austerity measures. Households smooth their consumption by adopting mostly low level coping strategies, which comprise switching to less preferred or low quality foods or adjusting meal portions and frequency. In October 2012, 97 percent of households are applying low level coping strategies in 2012 compared to 93 percent in 2011.

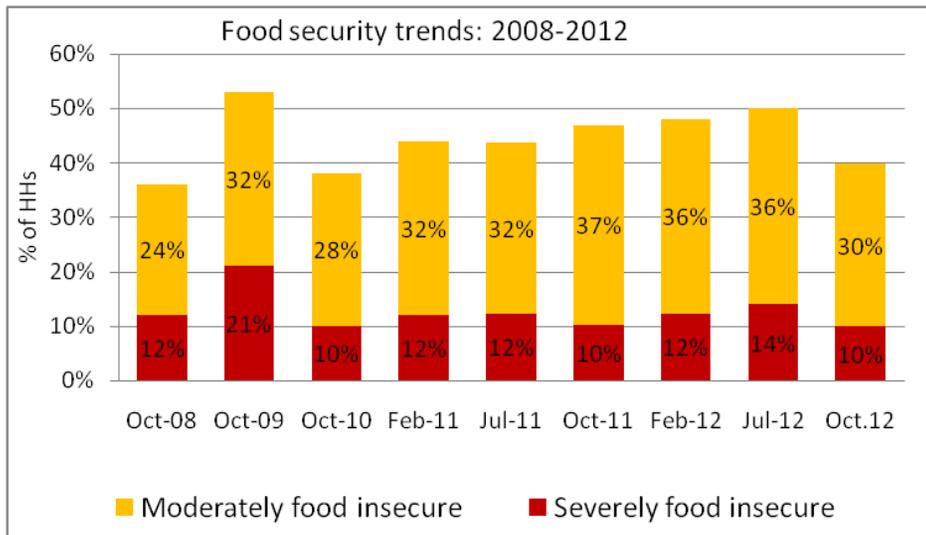


Figure 2: Food security trends 2008-2011. Source: WFP Food Security Monitoring System (FSMS)

Agro-Nutrition Indicators (continued)		Sources/Year <sup>i</sup>
<i>Nutritional Anthropometry (WHO Child Growth Standards)</i>		
Prevalence of stunting in children < 5 years of age	48.2%	SHHS II/2010
Prevalence of wasting in children < 5 years of age	22.7%	SHHS II/2010
Prevalence of underweight children < 5 years of age	39.8%	SHHS II/2010
% Women (15-49 years) with a BMI < 18.5 kg/m <sup>2</sup>	N/A	
Prevalence of obesity BMI > 30 kg/m <sup>2</sup> <sup>i</sup> Children under 5 years old - Adults	N/A	

### Nutritional Situation<sup>ii</sup>

#### Nutritional Anthropometry

Including how seasonal patterns impact rates of acute malnutrition

Including particular geographic areas (incl. urban/rural contexts) / population groups more vulnerable to malnutrition

Comprehensive data on nutrition in South Sudan are not available. Results of most assessments are limited in coverage and are not representative and maybe an underestimate of the extent of the problems. Nevertheless, the prevailing high infant and maternal mortality are indications that malnutrition is widespread in Southern Sudan.

Average prevalence of acute malnutrition (from the year 2005 to 2008) among children under five years of age was about 19 percent of which about 3 percent were severe. These levels of acute malnutrition surpassed the WHO emergency threshold of a 15 percent. Also most of the localized surveys conducted in 2009 and 2012 were above the emergency threshold. The prevalence varied some with season and more substantially across regions. There is no indication of decreased prevalence of acute malnutrition since the 2005 CPA. Unfortunately, children with acute malnutrition are vulnerable to disease, food stress or care practices problems and are at increased risk of death. Data on chronic malnutrition were scarce. The Sudan Household Health Survey (SHHS, 2006) had reported stunting levels among children under five around 19 percent, which was low relative to that for neighbouring countries while the SHHS II conducted in 2010 reported stunting rates of 48.2 %. Data on the prevalence of malnutrition among adults e.g., women, the elderly, and people living with HIV (PLHIV), are not available. Though there are no data on the prevalence of deficiencies in vitamins and minerals, the dire situation with undernourishment and the eating patterns in South Sudan, micronutrient deficiencies are almost certainly widespread and severe. The possible high malnutrition is likely to be associated with increased maternal and infant mortality, burden of disease, reduced cognitive growth in children, wage earning and physical production capacity of unskilled adult population in Southern Sudan. Moreover, overweight and its effects on health are increasingly going to be a burden on the health system in South Sudan.

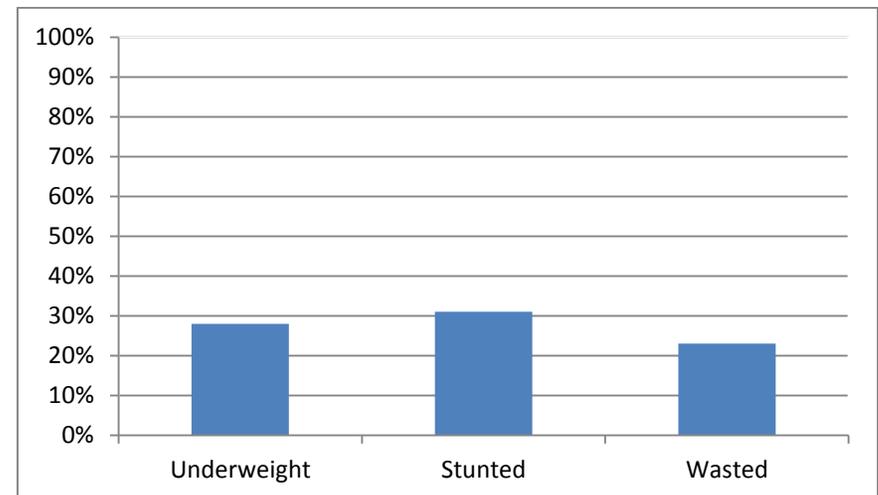


Chart 1: Prevalence of stunting among children under 5 years old, including trends

<i>Agro-nutrition indicators (continued)</i>		<i>Sources/Year<sup>1</sup></i>
<i>Infant feeding by age</i>		
Children (0-6 months) who are exclusively breastfed	45.1%	SHHS II/2010
Children (6-9 months) who are breastfed with complementary food	72.9%	SHHS II/2010
Children (9-11 months) who are using a bottle with a nipple	5.5%	SHHS II/2010
Children (20-23 months) who are still breastfeeding	38.0%	SHHS II/2010
<i>Coverage rates for micronutrient supplements</i>		
% Households consuming adequately iodized salt ( $\geq 15$ ppm)	54.0%	SHHS II/2010
Vitamin A supplementation coverage rate (6-59 months)	4.1	SHHS II/2010
Vitamin A supplementation coverage rate ( $\leq 2$ months postpartum)	N/A	
Prevalence of anemia among pre-school children	N/A	
Prevalence of anemia among pregnant women	N/A	

### **Infant feeding**

*Infant and young child feeding / Maternal nutrition health*

### **Micronutrients**

*Micronutrient deficiencies*

### **Causes of Malnutrition in South Sudan:**

Malnutrition in South Sudan is caused by different factors that change seasonally for different population groups; coping mechanisms may not always be effective enough to prevent seasonal malnutrition. Food insecurity in all its forms, e.g. lack of food availability, access and utilization, is a problem for most communities in Southern Sudan. People affected by physical insecurity and/or natural disasters are at high risk of food insecurity. Internally displaced persons (IDPs), returnees, groups that depend heavily on casual labor, and female-headed households also experience conditions that expose them to food insecurity. However, general lack of dietary diversity is a substantial contributing factor to reduced food utilization in South Sudan.

Repeated illnesses and inadequate infant and young childcare and feeding also have negative effects on childhood growth and nutritional status. The majority of infants are introduced to food or water before the age of six months, which, if coupled with inadequate water, sanitation and hygiene conditions, expose young children to pathogens that affect their health and nutritional status. Poor water quality, sanitation and hygiene practices are widespread and major causes of morbidity. Because most children reach clinics only when diseases or malnutrition have progressed to severe stages, many children present with advanced forms of acute malnutrition.

The workload of women coupled with traditional beliefs also plays a major role in childcare and health seeking behavior. Long separation of women from their children during the daytime compromise childcare practices and traditional beliefs about food overshadow nutritionally sound diets. Strong traditional beliefs and attitudes also often determine where and when to seek health services.

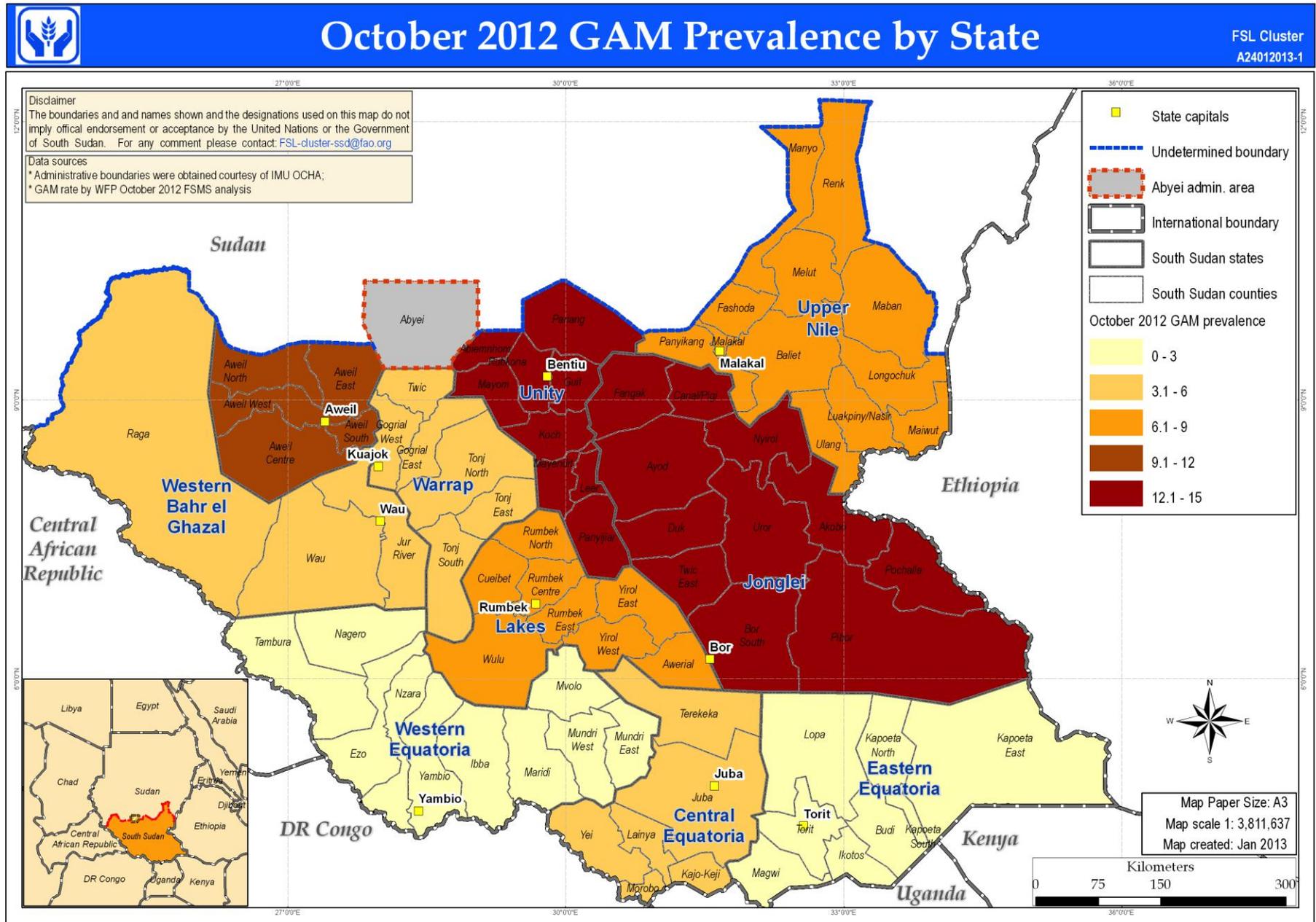


Figure 3: Map of South Sudan Indicating GAM prevalence in October 2012

Table 2: Key consumption statistics in South Sudan (Source: NBHS 2009)

	Western Equatoria	Eastern Equatoria	Central Equatoria	Jonglei	Northern Bahr Al Ghazal	Lakes	Warrap	Upper Nile	Western Bahr Al Ghazal	Unity
<b>DEC (kcal/p/d)</b>	2490	2400	2070	1960	1830	1810	1520	1520	1440	1430
<b>MDER (kcal/p/d)</b>	1730	1701	1744	1730	1686	1724	1745	1705	1711	1652
<b>CV (x) - %</b>	40.6	44.4	41.0	47.2	29.9	48.9	37.9	40.9	37.7	37.4
<b>Prevalence of Undernourishment (%)</b>	<b>23</b>	<b>27</b>	<b>41</b>	<b>48</b>	<b>45</b>	<b>55</b>	<b>71</b>	<b>69</b>	<b>74</b>	<b>72</b>
<b>Unit Calories cost (SDG /1000 kcal)</b>	0.96	1.07	1.10	0.98	0.76	1.16	0.87	1.69	1.51	0.96
<b>Average Total Consumption (SDG)</b>	2.97	3.14	3.92	2.25	1.73	2.71	1.63	3.95	2.99	1.92

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

### **Specific strategies, policies and programs currently in place in the food and agriculture sector to improve nutrition**

What are the most relevant policy documents and strategic plans (i.e. policies, strategies and action plans related to nutrition, food security, agricultural development, sustainability, etc.) related to food and nutrition security? How is food and nutrition security addressed in these plans? Are they operational?

Objectives and main activities: What main nutrition sensitive activities are mainstreamed in the different strategies and policies?

Budget: What budget allocations have been made? Any specific line dedicated for food and nutrition security?

Key points: Is nutrition included as an objective of agricultural policies and/or national development plans? If there is a separate Nutrition Policy or Programme, what involvement is there from agriculture? For each policy, illustrate the level of importance, the level of mainstreaming of the nutrition component, the linkages between nutrition and agriculture, the implementation or not of activities and recommendations, the impacts.

South Sudan is still in its infancy as it has just gotten independent a year ago. Efforts are underway to develop policy frame-works to guide recovery and development of the country. Below is a summary of the key policy frameworks in place:

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
<b>STRATEGIC FRAMEWORK</b>						
<b>AGRICULTURE &amp; FOOD SECURITY</b>						
<b>Agriculture Sector Policy Framework (ASPF)</b>	2012-2017	<p>The policy focus</p> <ul style="list-style-type: none"> <li>Increase farm productivity, conserve post-harvested stocks, diversify household income and permit access to marketed stocks so as to ensure food security for all households all year round</li> <li>Facilitating the use of acceptable methods in food handling and diet planning to enhance the nutritional value and balanced food intake by the population.</li> </ul> <p><b>Food Security Objectives</b></p> <ul style="list-style-type: none"> <li>Contribute to food security through improving food availability, enhancing food access throughout the year, and promoting better food utilization</li> <li>Ensure that farming households are able to achieve adequate level of productivity and income to meet their food and nutrition needs</li> <li>Establish infrastructural network sufficient to motivate market forces to optimise</li> </ul>		Ministry of Agriculture Forestry, Cooperatives and Rural Development	<p><b>The policy was recently passed and implementation to follow after development of strategic plan.</b></p> <p><b>Food Security: Implementation Strategy</b></p> <ul style="list-style-type: none"> <li>Contribute to the revision of the National Food Security Action Plan (NAFSAP)</li> <li>Establish guidelines to ensure that all investment in agriculture and agribusinesses generate sufficient employment for the local community</li> <li>Support and promote employment in value addition and non-farm activities by facilitating access to rural labour market information systems, skill development centres and</li> </ul>	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
		<p>business opportunities by taking food stocks from surplus areas to food deficit areas without hindrance</p> <ul style="list-style-type: none"> <li>Ensure that food is accessed by low income households at affordable prices throughout the year</li> <li>Ensure policies are in place that motivate producers and industrial operators to produce surplus food stocks and process/package for the domestic and export markets</li> </ul> <p><b>Nutrition Security</b></p> <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>Contribute to food and nutrition security through promoting better storage, processing methods, handling, preparation and utilization so as to improve nutritional status of the population</li> <li>Contribute to public knowledge on balanced diet planning through well informed and healthy food consumption patterns and practices</li> <li>Ensure that all animal feeds produced, are nutritionally wholesome, and are safely handled, stored and distributed for animal consumption</li> </ul>			<p>enterprise development services.</p> <ul style="list-style-type: none"> <li>Contribute to school feeding programs as a means to create markets for local produce</li> <li>Enter into an Memorandum of Understanding with International Food Relief Agencies to ensure that their operations promote long term goals for national food self sufficiency</li> <li>Establish a rural infrastructure fund for investment in high potential agricultural zones of each state to encourage investments in production and agro-processing</li> <li>Establish a National grain Strategic Reserve Fund which will go hand in hand with increased production, availability, access and markets</li> </ul> <p><b>Nutrition Security:</b></p> <p><b>Implementation Strategy</b></p> <ul style="list-style-type: none"> <li>Contribute to the revision of the National Food Security Action Plan (NAFSAP)</li> <li>Develop a strategy to ensure that foods and feeds produced, handled, stored, processed and distributed are safe, wholesome and fit for consumption</li> <li>Establish a specialised agency to monitor the adherence to acceptable standards on safety of foods and feeds for human beings and livestock and poultry</li> <li>Develop programmes for fortification with essential minerals and vitamins processed staple foods consumed by low income groups who cannot afford regular balanced diets</li> </ul>	
<b>NUTRITION</b>						
<b>Draft Nutrition Health Policy</b>		<p><b>Policy Objectives</b></p> <ol style="list-style-type: none"> <li>Promote <u>core set of nutrition areas</u> that support adequate nutrition through community-based initiatives for wide coverage, creating awareness of evidence based nutrition actions and screening of malnutrition at community and facility levels.</li> <li>Layout quality interventions to <u>promote</u></li> </ol>	Budget not yet developed as policy is in draft form.	Ministry of Health	<ol style="list-style-type: none"> <li>Both community- and facility-based approaches should be used to provide the core nutritional activities in order to reach wide coverage of nutrition services. Central to all nutrition activities should be, community mobilization to promote the adoption of healthy nutrition behaviours; active case finding for acute malnutrition; community-based growth monitoring and promotion, and; two-way</li> </ol>	

Strategy / Policy	Reference Period	Objectives and main components	Budget / Donor	Stakeholders	Key points	Integration of Nutrition
		<p><u>nutrition</u> among vulnerable groups to reduce morbidity, increase micronutrient intake and improve appropriate maternal and infant feeding behaviors' for optimal growth.</p> <p>3. Propose strategies to improve nutrition wellbeing as part of the management of infections and of obesity and diet related diseases and in treating illnesses associated with nutrition deficiencies.</p> <p>4. Layout the framework to establish organizational support structures needed to implement quality nutrition care and support through the health sector.</p> <p>5. Layout the institutional framework and systems to maximize efficient use of resources for nutrition care through development of key guidelines, tools and legislation, establishment of a nutrition information system and research agenda, leadership and coordination and creation of strategic partnerships.</p>			<p>referral of malnourished cases for care at either community or facility levels.</p> <p>2. Promotion of <u>key maternal, infant and young child feeding and nutrition actions</u> to improve awareness and increase demand in targeted healthy feeding behaviours (like breastfeeding, appropriate complementary feeding) and dietary diversification, promoting hygiene, sanitation and food/water safety, and in increasing coverage of essential micronutrient supplementation programs.</p> <p>3. Provide care and support to <u>individuals with severe acute malnutrition, obesity, and non-communicable diseases that require nutritional support</u>. PLHIV and TB clients also need nutrition care and support including nutritional support for prevention of mother-to-child-transmission of HIV.</p> <p>4. <u>Provide technical assistance and support to other RoSS /Central departments</u> (e.g. other directorates within MOH and in other sectors like gender, agriculture, office of the president, etc) to integrate nutrition in appropriate areas/services to reduce vulnerability, cyclic food insecurity and/or acute malnutrition. This is with understands that there are multiple factors affecting malnutrition in Southern Sudan.</p>	
<b>HEALTH &amp; SOCIAL PROTECTION</b>						

### ***Institutional execution framework linked to food security and nutrition***

*Which are the institutions responsible for, and participating in the design and implementation of FNS policies and programmes?*

The upcoming Nutrition Health policy framework was based on the understanding that the Policy is a commitment and has to have a responsible body or ministry to account for its implementation. It was agreed that under the Ministry of Health, Division of Nutrition we shall have a Nutrition Health Policy and **not a Food and Nutrition Policy**. Meanwhile, it was recommended that other Ministries such as Agriculture, Education, Gender and Child Welfare need to elaborate a clear action plan or strategy in their respective policies to address Nutrition as demonstrated by Ministry of Agriculture. It was also recommended to have Nutrition advisors in those ministries.

The Nutrition Health Policy Framework thus, included an annexed matrix capturing key areas of collaboration between the Ministry of Health and other relevant Ministries. This section of the Policy is intended to define the roles of the various ministries and how linkages can therefore be made possible.

The MOH Directorate of Nutrition has defined a set of coordination mechanisms which make it possible for cross-sector collaboration.

- Nutrition Health Policy Working Group
- Monthly Sector Coordination which invites all nutrition stakeholders. It still calls for great improvements and capacity building.
- Periodic consultation forums bringing forth all relevant ministries to discuss Nutrition matters.

### ***Main entities in charge of implementing the food and nutrition policy framework***

*What types of support structures, institutions, programmes, initiatives exist at central and community levels to strengthen household FNS (formal, non-formal, traditional etc.)? Anchorage, Main ministries involved, role and responsibilities, coordination mechanisms (task force, core group, cluster...)*

In south Sudan, the Nutrition mandate mainly lies within the Ministry of health. There was a fully established Directorate of nutrition in the Ministry being established in 2008 and it has worked to establish a Nutrition Policy Forum (Called the Nutrition Health Policy Working Group) involving key partners and relevant ministries such as : The Ministry of Agriculture, Ministry of Animal Resources and Fisheries, Ministry of Gender and Child Welfare, Ministry of Education, Ministry of Finance and Economic as well as special Commissions such as the South Sudan Relief and Rehabilitation commission and the South Sudan Aids Commission.

It is envisaged that these forum may extend to more ministries as the need becomes more apparent. In 2008 the Directorate of Nutrition undertook many consultative processes at the state level working in collaboration with the above Policy Forum towards a Nutrition Health Policy and the first draft was ready by 2009. Due to continued restructuring in the MOH, the Policy still awaits a stable environment for its launching and dissemination.

### ***Main technical and financial partners***

*Role, responsibilities, coordination...*

### ***Disaster prevention/management structures***

*What are the disaster prevention/management structures in place at central and local levels? Do these operate effectively? What more can be done?*

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

*What global/regional initiatives is the country adhering to in order to promote food and nutrition security? Is it of any value to IP implementation?*

*What institutions exist at regional level that promote FNS and could be of value to IP implementation?*

### **Analysis of on-going process within nutrition-linked regional and international initiatives**

*(Ex: Reach, SUN, CAADP...)*

- ...
- ...

### III. Analysis of current and future country nutritional actions & perspectives

#### Institutional framework & funding

*Main evolutions in terms of institutional framework, linked with nutrition and main trends in terms of financing mechanisms*

The ROSS/Central level is committed to financing health care, including nutrition, at the highest level compatible with its revenues, taking into consideration competing priorities. The Public Health Care Bill provides for free primary health care (PHC) and emergency services for all citizens. Nutrition services will continue to be free of charge at the point of delivery. The MOH will aim to raise enough resources to provide quality nutritional services, particularly to pay for salaries, materials and supplies, training, for monitoring and evaluation, and for mobilization and advocacy. MOH commits to:

- Continue to allocate GOSS resources directly for nutrition and strive to progressively increase the share of its budget apportioned to nutrition. The MOH will also continue to mobilize supplementary financing nutrition from partners, e.g. NGOs, the UN agencies and donors in consistent with Government policies.
- Include nutrition in state level annual health plans and earmark finances from their general health budget specifically for nutrition.
- Where NGOs allocate resources for services within state level, the states will sign Memoranda of Understanding (MOU) defining the nature of partnership, the level of resources and the performance indicators of each partner. MOUs will also be signed whenever financial/resource partnerships are made at the MOH level.
- Promote and sensitize the private sector on the benefits of investing in nutrition, in line to this policy, e.g. in food fortification, skills building, awareness-raising, demand creation, food/nutrients and other related material donations.

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

*Analysis of the Mainstreaming Nutrition in different sectors, and at the institutional level*

The Agriculture policy framework addresses nutrition from food security dimensions of: food availability, accessibility, stability and utilization, which can be understood to mean meeting nutritional requirements. It highlights the importance of integrating food security and nutrition within the overall policy framework and within sector

policies. The general approach to food security combines short and longer-term action to enhance productive potential and incomes with programmes and policies that respond to the immediate needs of the poor and hungry. It also pays attention to both supply- and demand-side of production and consumption.

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

*Description and analysis of these main activities (mainly the ones mentioned above in the institutional framework) Emphasize multisectoral initiatives, Classify according to main levels and axis to address malnutrition*

Currently, the MoH Nutrition program and its partner are undertaking various health programs in most of the States of South Sudan. Mainly in the management of acute malnutrition.

#### Main population groups targeted & localisation

*Analysis of the targeting mechanism / What is the scale in which those programmes and interventions are being implemented at national level, provincial or district level?*

## Monitoring & Evaluation mechanisms

Description of the monitoring & evaluation mechanisms, main indicators collected and used (multi-sectoral approach)

## Coordination mechanisms (public-public, public-private, technical and financial partners)

Analysis of these mechanisms, and suggestions of improvements

## Main management and technical capacities at the institutional level

Managerial capacities of line ministry staff at national, provincial and district levels?  
Technical capacities of Ministry staff and agriculture service providers and R&D sector?

### 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

Success factors, challenges, main priorities

- ...

To support the core nutrition areas listed above, key structural functions will need strengthening at ROSS/central level, State and County (programmatic) levels, including among NGOs and pre-service training institution. The functions include:

1. Effective and sustainable structures to support nutrition programming at State and ROSS/central levels will be needed, including decentralizing the DN to State level including staffing and financing nutrition activities at County and Payam levels as provided for in the ROSS Health Policy.
2. Systems for strengthening the capacity of staff and institutions to provide quality nutrition services. This would include establishment of in-service and pre-service training of health workers but also quality assurance of nutritional services including supervision and mentorship.
3. Effectiveness of communication and reporting, for advocacy and decision making at all levels, including strengthened links between the different levels for appropriate/informed decisions.
4. Availing appropriate materials and tools to collect and use of information; IEC materials and nutrition education materials that facilitate behaviour change.
5. Conducting operational research to develop locally relevant nutrition messages, strategies for nutrition BCC, locally appropriate complementary foods, and in documenting lessons in the implementation of planned nutrition interventions.

## 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.	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.
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.	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.
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).	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.
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>	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.
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.	Underweight	Measured by comparing the weight-for-age of a child with a reference population of well-nourished and healthy children. Reflects a recent and severe process that has led to substantial weight loss, usually associated with starvation and/or disease.
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.	Wasting	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>
Iron 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>		

## Acronyms

ASARECA	Association for Strengthening Agricultural Research in Eastern and Central Africa
AUC	African Union Commission
BMI	Body Mass Index
CAADP	Comprehensive Africa Agriculture Development Program
CILSS	West Africa Regional Food Security Network
CIP	Country Investment Plan
COMESA	Common Market for Eastern and Southern Africa
CORAF	Conference of African and French Leaders of Agricultural Research Institutes
DHS	Demographic and Health Survey
EAC	East African Community
ECOWAS	Economic Community of West African States
FAFS	Framework for African Food Security
FAO	Food and Agriculture Organization
IFAD	International Fund for Agricultural Development
IFPRI	International Food Policy Research Institute
JAG	Joint Action Group
MICS	Multiple Indicator Cluster Survey
NAFSIP	National Agriculture and Food Security Investment Planning
NCD	Non-communicable Disease
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
SGD	Strategic Guidelines Development
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

<sup>i</sup> Refer to the year of data applicability

<sup>ii</sup>In 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.