Nutrition Information in Crisis Situations

United Nations
Standing Committee on Nutrition

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Highlights

Horn of Africa—drought

Much of the Horn of Africa continuous to face the largest humanitarian crisis in the world today, in terms of scale and severity, with more than 13 million people being severely affected and still in urgent need of humanitarian aid: in Somalia (4 million) , Kenya (4.3 million) , Ethiopia (4.8 million) and Djibouti (about 200 000) (OCHA, 11/12/11). More than 700 000 refugees from southern Somalia have crossed the boarders to Kenya, Ethiopia and Djibouti.

Somalia—Famine

Even if famine conditions no longer exist as of 3rd February 2012, still 31% of the population remain in crisis, unable to fully meet essential food and non-food needs. Food security conditions in southern Somalia remain the worst recorded in Somalia since the 1991/92 famine. A continued large-scale, multisectoral assistance is required to prevent additional deaths and suffering. Any significant interruption in relief efforts would result in a return to Famine.
In July 2011, the UN declared Famine in areas of Bay, Bakool, Lower Shabelle, and Middle Shabelle regions in southern Somalia, and among internally displaced persons (IDPs) in Mogadishu and the Afgooye corridor.

According to the Famine Early Warning System (FSNAU and FEWS, 19/07/11), global acute malnutrition rates exceeded 50% in areas of Bay, Bakool and Gedo. Crude death rates were elevated across the south of Somalia and death rates in children under five years were peaking at 13-20 per 10 000/day in areas of Lower Shabelle. Poor households in Lower Shabelle and Bakool agropastoral zone were largely unable to meet basic food needs due to low 2011 *deyr* season harvest, increased local cereal prices, a late onset of rains for the *gu* harvest, asset losses and reduced labor income.

The massive scale-up of emergency response since September 2011 and the improved outcomes of the 2012 *deyr* harvest have had a significant positive impact on food access, acute malnutrition and mortality levels. In February 2012 the situation was downgraded from 'Famine' to 'Humanitarian emergency'. All humanitarian actors are called upon for continuing their efforts in assisting the affected population (FSNAU and FEWS, 03/02/12). An estimated USD 2.4 billion for aid efforts are needed in the four most affected Horn countries in 2012 for stabilising the situation (OCHA, 12/11).

The Sahel—High risk of food insecurity. Rising levels of hunger and malnutrition caused by the combined effect of drought, high food prices, displacement and conflict are currently affecting the Sahel Region. Leaders of United Nations agencies, representatives of affected governments, and major donors call for a combination of relief to meet immediate food security and nutritional needs of affected people, with early recovery and longer term development actions (UN/joint, 15/02/12).

Chad— Due to erratic rainfall, the 2011 harvest was below average with alarming trends. The Action Committee for Food Security and Disaster Management has raised serious concerns about risks of famine, which threatens an estimated 1.5 million people (OCHA 11/12). The civilian and humanitarian nature of the refugee camps and IDP sites remains a concern. Results of the most recent nutrition and WASH surveys in 12 camps with Sudanese refugees in the east and 6 camps with Central African refugees in the southeast of the country are presented in this edition (UNHCR/joint, 2011) .

Pakistan—Over 90% of flood waters receded, but critical humanitarian needs remain unmet in Sindh and Balochistan Provinces. The Government of Pakistan and humanitarian partners are finalizing a framework to address early recovery needs in flood-affected areas. People remain at risk and further funding is needed to help them restore their livelihoods (OCHA, 01/12). UNICEF coordinated the elaboration of nutrition surveys in five flood affected districts. Results are presented here.

Risk Factors affecting Nutrition in Selected Situations

Situations in the table below are classed into five categories relating to prevalence and or risk of malnutrition (I—very high risk/prevalence, II—high risk/prevalence, III—moderate risk/prevalence, IV—not at elevated risk/prevalence, V-unknown risk/prevalence; for further explanation see section "Indicators and classification" at the end of the report).
The prevalence/risk is indirectly affected by both the underlying causes of malnutrition, relating to food security, public health environment and social environment, and the constraints limiting humanitarian response.
These categories are summations of the causes of malnutrition and the humanitarian response, but should not be used in isolation to prescribe the necessary response.

	Ethiopia Meda Welabu Woreda, Oromiya Region	**Kenya** Refugee camps, Dadaab	**Chad** Mao and Nokou District, Kanem Region	**Chad** Refugee camps, south and south east	**Pakistan** Sindh Province
Nutritional risk category	I	I	I	II/III	I
Food Security					
Households' livelihoods	☹	☹	☹	☹	☹
External assistance	😐	😐	☹	😐	😐
Public health environment					
Availability of water and access to potable drinking water	☹	😐	☹	☹	☺
Health care	☹	😐	☹	😐	?
Sanitation	☹	😐	☹	☹	☹
Social and care environment					
Social environment	?	☹	?	☹	?
Child feeding practices	?	😐	☹	☹	😐
Delivery of assistance					
Accessibility to population	☺	☺	☺	☺	😐
Resources for humanitarian intervention	?	😐	☹	?	?
Availability of information	😐	☺	☹	😐	😐

☺ Adequate 😐 Mixed ☹ Inadequate

Greater Horn of Africa

The Horn of Africa continues to experience the most severe food crisis in the world today. Over 13 million people in Djibouti, Ethiopia, Kenya and Somalia are severely affected and still in urgent need of humanitarian aid.

The 2011 *deyr* season harvests were less than 20% of average. Stocks of locally produced cereals began to run out already in April. This caused local cereal prices to rise substantially higher than average, to more than double the prices of 2010 in some areas. In 2011 the *gu* harvests had been delayed by one month due to the late onset of rains. Asset losses and reduced labor income indicate that poor households in Lower Shabelle and Bakool agropastoral zone, about 30% of the population, were largely unable to meet basic food needs.

July 2011 'Famine' was declared

On 20 July 2011 the UN officially declared famine in areas of Bay, Bakool, Lower Shabelle, and Middle Shabelle regions in southern Somalia and among internally displaced persons (IDPs) in Mogadishu and the Afgooye corridor.

> *Per the Integrated Phase Classification (IPC) continuum, a population is considered 'in Famine' when it meets all of the following criteria: (1) at least 20% of households face extreme food shortages with limited ability to cope; (2) the prevalence of GAM exceeds 30%; and (3) CRMs exceed 2 deaths per 10 000 people per day.*

Massive population movement from Somalia

While the famine declaration was limited to Somalia only, large parts of the population in Ethiopia, Kenya and Djibouti are also suffering from severe food insecurity as a result of drought and high food prices, and in addition are seeing significant inflows of refugees fleeing from Somalia. Because people were unable to receive assistance in the most affected areas, they were forced to walk long distances under difficult circumstances, and especially women

and children arrived in camps in Djibouti, Kenya and Ethiopia in appalling nutritional and health conditions.

Also within Somalia a massive population movement took place. Tens of thousands of people have been displaced to Mogadishu in search of help, due to the ongoing conflict in southern Somalia where access of humanitarian agencies was hindered.

February 2012 downgrading from 'Famine' to 'Humanitarian Emergency'

On 18 November 2011, the Somalia Food Security and Nutrition Analysis Unit (FSNAU) and FEWS Network announced that three areas of Somalia (Bay, Bakool and Lower Shabelle) have eased from 'famine' to 'emergency', and on 3 February 2012 they also confirmed that famine outcomes no longer existed in areas of Middle Shabelle region, as well as among IDPs in Mogadishu and Afgooye. According to the Integrated Phase Classification (IPC) the situation was downgraded from phase 5 ('famine') to phase 4 ('humanitarian emergency') (FSNAU and FEWS, 03/02/12) (see maps page 15 and 16).

The improvement was in large part due to substantial humanitarian aid and the start of the d*eyr* harvest. Both have mitigated the most extreme food deficits and reduced mortality rates. The number of people facing imminent starvation has been reduced. However, these

improvements will only be sustained if the current level of assistance continues. Areas may fall back into famine conditions if humanitarian actions are interrupted or reduced.

> *A population is downgraded from 'Famine' once evidence suggests that it no longer meets at least one of the three aforementioned criteria. Therefore, a population may continue to experience famine-level conditions but not be classified as 'in Famine'. For example, improved household food access could result in a downgrade from 'Famine' to Humanitarian Emergency', even if malnutrition and mortality conditions remain at famine-level.*

As of February 2012, still 31% of the population in Somalia remain in a humanitarian crisis situation, being unable to fully meet essential food and non-food needs. Food security conditions in southern Somalia remain the worst in the world and the worst recorded in Somalia since the 1991/92 famine. A large-scale, multi-sectoral assistance, required to prevent additional deaths must continue. Any significant interruption in relief efforts would result in a return to Famine.

Outlook for 2012

The early onset of the *deyr* rains (short rains) in both the pastoral and cropping areas of the eastern Horn has ended the protracted drought. Pastoral areas started recovering and the *deyr* cropping season began. Therefore farm labor opportunities increased as well. However, despite a favorable start of the season, food security in both pastoral and agro-pastoral livelihood zones is still precarious.

The areas of highest concern in the coming months are southern and central Somalia (see map page 15, 16), the south and south-east of Ethiopia, the north-east and south-east of Kenya, and the refugee camps in Djibouti, Kenya and Ethiopia.

The 2011 Consolidated Appeal for the four most-affected countries has only been fully revised at the end of July 2011 to the total of USD 1.9 billion. This has been funded by about 80%. The Horn of Africa appeals or comparable concerted action plans for 2012 require a total of USD 2.3 billion, including Somalia (USD 1.5billion), Kenya (USD 764 million) and Djibouti (USD 79 million). The funding requirements for Ethiopia were not yet been released by end of February (OCHA, 08/09/11 and 12/11).

Much of the Horn of Africa continues to face this largest humanitarian crisis. Even if operations continue to scale up, the crisis is expected to continue well into 2012. In the medium term, interventions that rebuild and support livelihoods will be critical. It is urgent to consider securing long-term food and nutrition security in the Horn of Africa. This requires focussing on a range of issues affecting the region, including: conflict, preservation of humanitarian access, food and nutrition insecurity, disaster risk reduction, provision of health and education services, and climate change adaptation.

Early warning —- but inadequate response

All actors need to change their approach to chronic drought situations by managing the risks, not the crisis (SC-UK/OXFAM, 18/01/12).

The crisis in the Horn of Africa is not a sudden-onset disaster. It unfolded as was predicted. Since August 2010, early warning systems (FEWS) indicated the impending drought and its consequences as changing weather conditions linked to the La Niña phenomenon were confirmed (FEWS 08/10). The Food Security and Nutrition Working Group for East Africa (FSNWG) set up a La Niña task force that stated in December 2010, that 'pre-emptive action is needed to protect livelihoods and avoid later costly lifesaving emergency interventions' and called on the humanitarian community to be prepared at country level. However, full scale-up of response only happened after the rains had failed for a second successive time and the famine declaration was released in July 2011.

Djibouti

In Djibouti, the 2011 drought far exceeded normal variation, and has forced many pastoral and rural households to migrate. Increased rural-urban migration has led to a concentration of the population in urban areas, including the capital city. Urban food insecurity is rising due to high levels of unemployment and an increase of food prices, aggravated by deteriorating terms of trade. The country is strongly exposed to international food price fluctuations, as most of the food is imported.

Food security situation remains critical for pastorals and urban households

In north-western and south-eastern pastoral areas of the country, the 2011 *karma/karan* rains (July-September) started late and were erratic, leading to poor rangeland conditions. Livestock body conditions were generally poor, with high mortality, low birth rates (especially for goats and camels) and low milk production. Rangeland conditions in coastal areas have been negatively affected by the poor start of the *heys/dada* rains (October-March).

Prices of main staple commodities stay generally well above the level of the previous year. In wholesale markets of Djibouti city, the average price of wheat flour showed an increase of 44% between November 2010 and November 2011. With about USD 730 per tonne, the price of wheat flour in November 2011 is close to the price peak reached in July 2008. This situation is driven by high international wheat prices, the Ethiopian cereal export ban and high local transportation costs due to high fuel prices (GIEWS, 10/01/12).

Some 210 000 people need humanitarian assistance

Food security is likely to deteriorate for pastoralists and poor urban households until March 2012. The total estimated population in need of humanitarian assistance is about 210 000 people. This includes 120 000 small-scale farmers and herders living in northwest and southeast areas, about 60 000 urban dwellers affected by high food prices, low remittances and reduced employment opportunities, and about 30 000 refugees and asylum-seekers (mainly from Somalia and Yemen) hosted in camps.

Of these, the World Food Programme (WFP) has so far reached some 90 000 beneficiaries in drought-affected rural areas and in the capital. The Government's programme is distributing food supplies to some 20 000 families in urban and rural areas (OCHA, 12/11).

Ethiopia

In Ethiopia, the prolonged *La Niña* conditions have affected two consecutive rainy seasons, causing rapidly deteriorating food security in the drought-affected lowlands of southern and south-eastern Ethiopia. Also affected are parts of the central and southern highlands, where households depend on short-cycle crops cultivated during the rainy season between February and May.

According to OCHA in February 2012, the general food security situation has stabilized. The situation is improving in most areas of the country due to a combination of factors: the arrival of crops from the *meher* (October-February) harvest, the impact of the overall good *deyr/hagaya* (October-December) rains on the availability of water and livestock conditions, and the continuing distribution of relief food and provision of humanitarian assistance.

In Ethiopia relief food is allocated by round. Each round consists of a one-month ration composed of cereals, vegetable oil and pulses per person. Moderately malnourished children under

five years of age and pregnant and breastfeeding women in areas covered by targeted supplementary feeding receive corn-soya blend for. It is etsimated that about 3.2 million people will require food assistance during the first half of 2012 (OCHA, 02/12).

GAM rates up to 25% in parts of Amhara Region

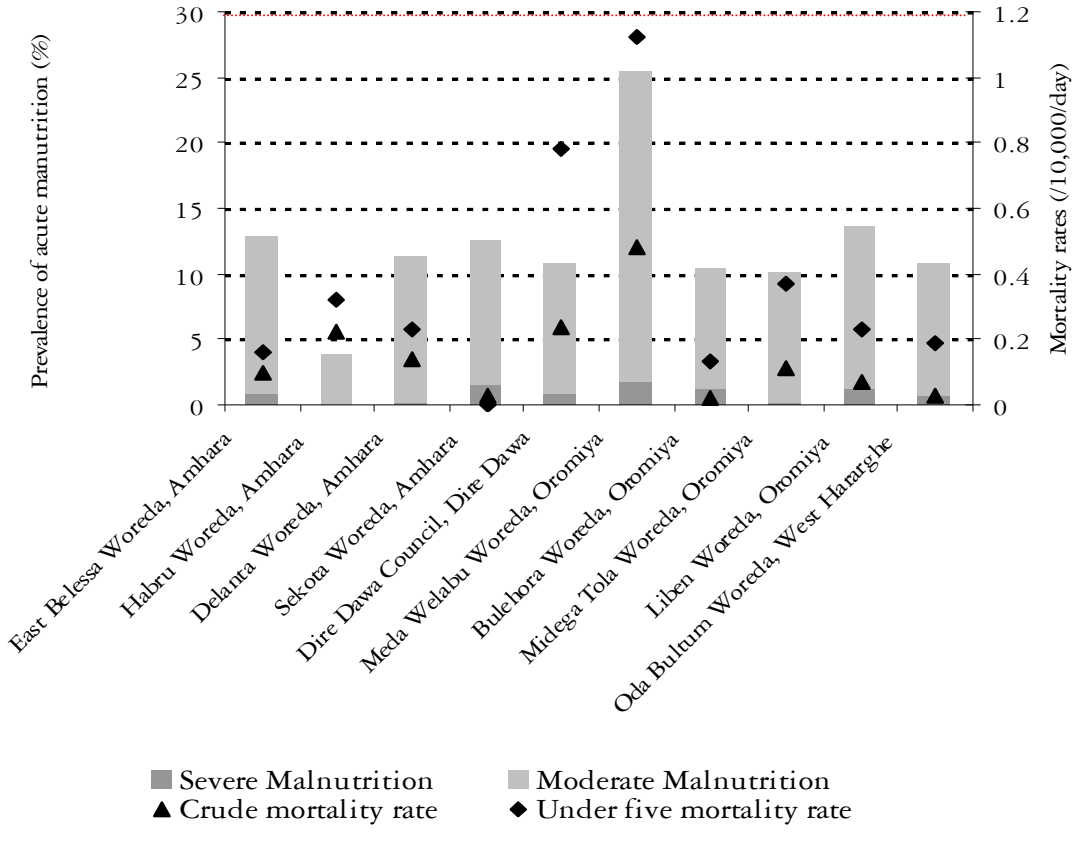
Based on the on-going monitoring by the Government and nutrition partners in ninety woredas (districts), the areas most affected by the crisis are in the Eastern and Southern Regions: Somali, Oromiya, and Southern Nations Nationalities and Peoples (SNNP) (IASC GNC, 22/07/11). As part of the monitoring, a series of standard nutrition surveys were conducted in crop producing and pastoral woredas in 2011.

Results indicated a serious situation in most areas, except in Habru Woreda. The show that global acute malnutrition rates range from 3.8% (CI: 2.4-6.0) in Habru Woredas in Amhara Region to 25.5% (CI: 21.1-30.6) in Medawelabu in Oromiya Region. In the latter one the under-five mortality rate exceeded 1 death per 10 000/day (figure 1).

Crude mortality rate and under-five mortality rate were found normal in all investigated areas compared to the national average and Sphere emergency cut-off thresholds (figure 1).

The report recommended to scale up programmes for the management of acute malnutrition especially in Somali, Oromiya and SNNPR in southern Ethiopia. The assessed woredas had a severe food insecurity crisis and a high number of people are in need of life saving interventions.

FIGURE 1: RESULTS OF SEVERAL NUTRITION AND MORTALITY SURVEYS IN THREE REGIONS, ETHIOPIA (GOAL 02/11- 06/11 AND CONCERN 02/11-05/11)



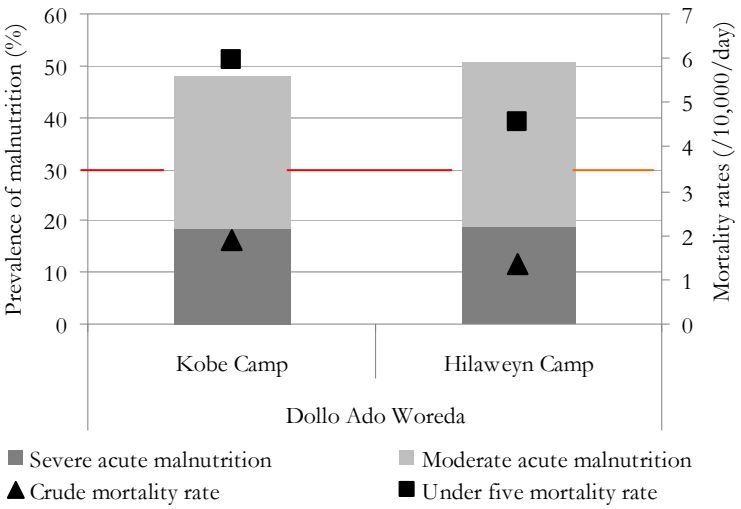
Dollo Ado refugee camps—nutrition crisis with GAM up to 50%

As of 7 February (UNHCR), more then 144 000 Somali refugees were hosted in the Dollo Ado refugee camps and transit centre in south-eastern Ehiopia. The two camps of Kobe and Hilaweyn were established in June/August 2011 as a result of continued influx of refugees from Somalia.

Nutrition indicators are much worse here than in the rest of the country. GAM rates were alarmingly high with 47% (CI: 44.1-51.6) in Kobe camp and 50% (CI: 46.5-54.7) in Hilaweyn camp including 18% of severe acute malnutrition in each of the camp as measured in October/November 2011. Under-five mortality rate in both camps was above the emergency threshold of 2 death/10 000/day (UNHCR/joint, 12/12/11) (figure 2).

The survey report recommends to urgently revise the composition of the general food ration and to strengthen and render more effective the ongoing nutrition and health community outreach programme. Partners working in the camps including UNHCR, responsible for the overall coordination in the camps, are in urgent need of additional support.

FIGURE 2: RESULTS OF NUTRITION AND MORTALITY SURVEY, KOBE AND HILAWEYN CAMPS, DOLLO ADO WOREDA,ETHIOPIA (UNHCR/JOINT, 12/11)



Kenya

Drought conditions in Kenya's northern and north-eastern districts, where most refugees are arriving from southern Somalia escaping famine due to drought and conflict, have worsened further in 2011. After the inadequate performance of the long rains from March to June food insecurity reached crisis levels in August and September 2011 in these areas.

Dadaab refugee camps

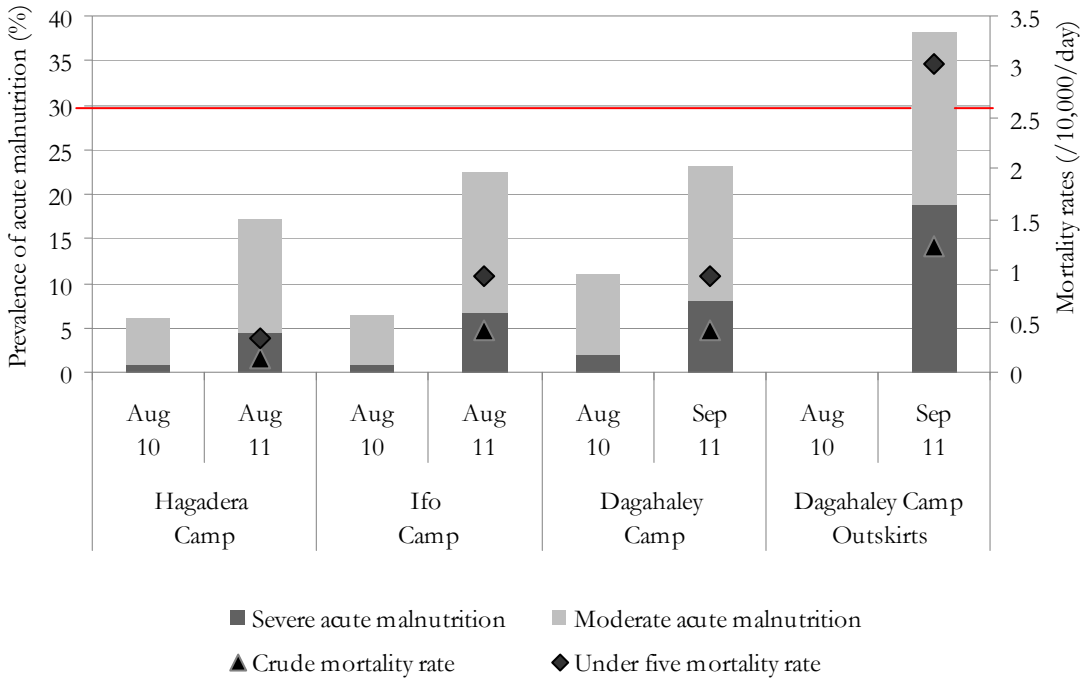
In Dadaab refugee camps, in north-eastern Kenya, up to 1 800 Somali refugees arrived every day in July and August 2011. They settled in the three main camps that exist already since 20 years, as well as in the three new settlements that were opened in September 2011. These are Ifo extension and Kambioos (see map1). Aid agencies faced challenges in registration and provision of basic services for the high number of new arrivals. In October 2011, agencies had scaled up their aid operations and the number of new arrivals was decreasing.

The nutrition situation in Dadaab camps has changed dramatically in 2011 compared to the previous year. Overall the situation in the three Dadaab main camps indicates the recent critical food insecurity coupled with high levels of diarrhoea and low levels of exclusive and prolonged breast feeding practices.
The prevalence of global acute malnutrition in children aged 6-59 months ranged between 17.2% (CI:13.2-22.1) in Hagadera Camp and 23.2% (CI:18.4-28.9) in Dagahaley Camp.

GAM rates of extremely high levels combined with high mortality.

Children of newly arriving refugees settled in Dagahaley outskirts show extremely high malnutrition rates. The overall GAM rate was at 38.3% (CI: 32.1-44.8) including 18.8% (CI:14.7-23.6) of severely affected children (figure 3).

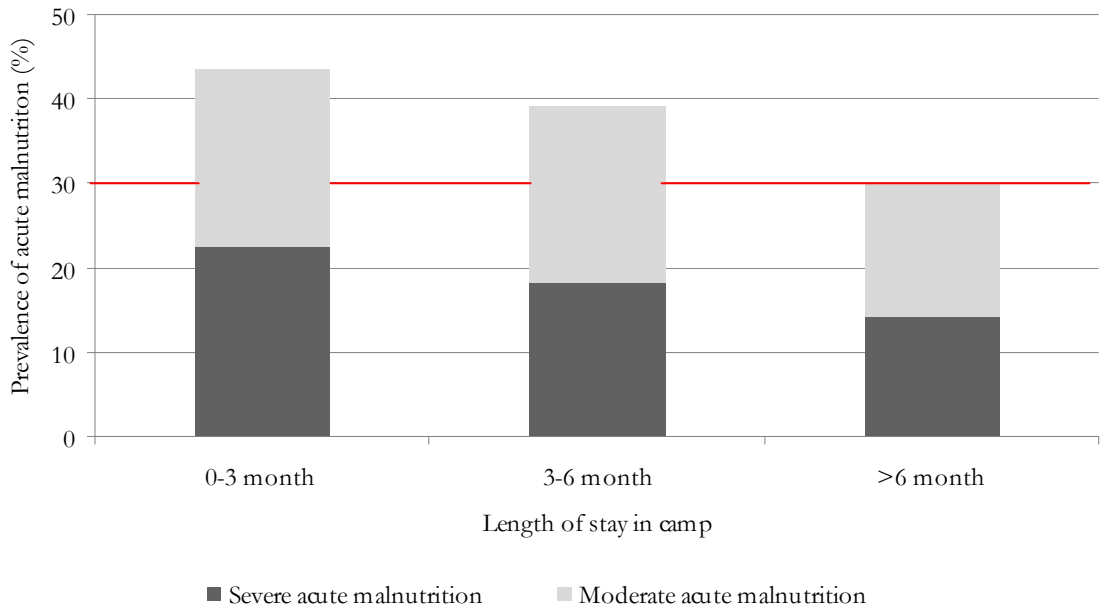
FIGURE 3: NUTRITION AND MORTALITY SURVEYS RESULTS, DADAAB REFUGEE CAMPS, KENYA (UNHCR/JOINT, 11/11)



An even much higher percentage of children tend to be undernourished in the first three months upon arrival in the camp, with GAM of 43.7% (CI: 35.9-51.8) and SAM of 22.5% (CI: 16.5-29.9). However, the GAM rate remains high in these children, even after six months of living in the camp, with GAM of 30.1% (CI: 19.2-43.7) and SAM of 14.3% (CI: 7.0-26.8) (figure 4) (UNHCR/joint, 11/11).

The mortality rates (both crude and under five) are within acceptable levels in the main camps, but they rise above emergency levels among the new arrivals in the settlements in Dagahaley outskirts. A crude mortality rate of 1.23 (CI:0.73-2.06) and under-five mortality rate of 3.02 (CI:1.72-5.24) was reported (UNHCR/joint, 11/11).

FIGURE 4: NUTRITION AND MORTALITY SURVEYS RESULTS, CAMP DAGAHALEY OUTSKIRTS, DADAAB, KENYA (UNHCR/JOINT, 11/11)

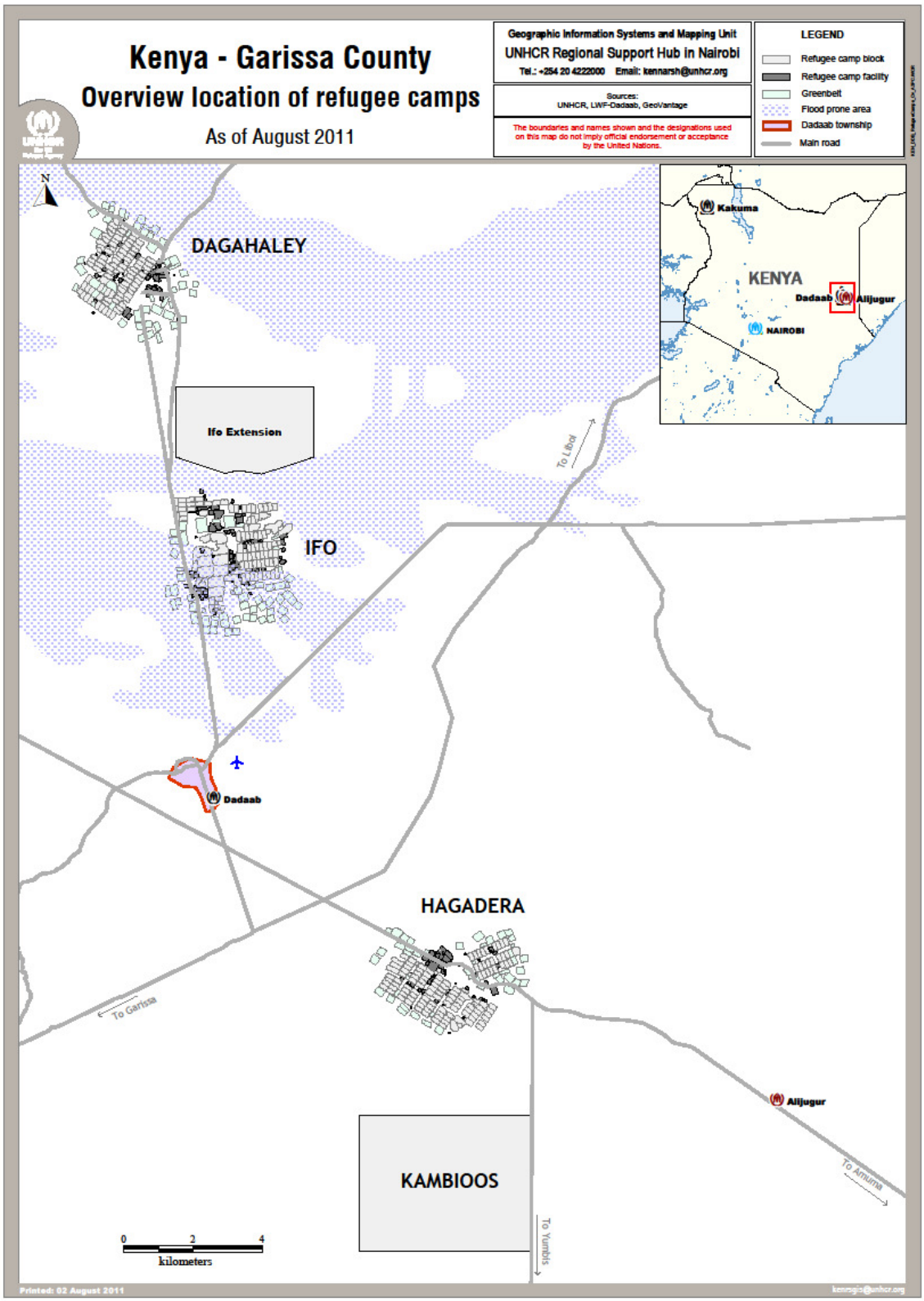


The assessment team (UNHCR/joint, 11/11) urges that nutrition programmes should be continued until the prevalence of GAM decreases to internationally acceptable levels. Programmes should include selective feeding for undernourished children and chronic medical cases , as well as blanket feeding for pregnant and lactating mothers. Furthermore it is recommended to increase coverage of the supplementary feeding programme and outpatient therapeutic care programme. Aid agencies supporting refugees should also be targeting older people as a specific vulnerable group.

WFP continuous with its support to blanket supplementary feeding for children 6-59 months of age and will emphasize increased awareness and sensitization for the proper use of the supplementary foods. WFP is also providing supplementary food to moderately malnourished children aged 5-9 years, whereas UNICEF/UNHCR are providing therapeutic food supplies.

New assessments are planned for March 2012.

MAP 1: REFUGEE CAMPS IN EASTERN KENYA (UNHCR/JOINT, 11/11)



Somalia

Civil insecurity and armed conflicts continue to be additional, serious threats to food insecurity in most areas of southern and central Somalia, and obstruct the delivery of humanitarian aid. As of February 2012 it is confirmed that Famine outcomes no longer exist in southern Somalia. Yet nearly a third of the population remain in crisis, they are unable to fully meet their essential food and non-food needs. GAM rates and death rates still remain well above the acceptable thresholds in parts of the country.

Famine declaration

In July 2011 famine has been declared in regions of Bakool and Lower Shabelle in southern Somalia as well as among the IDP population in Mogadishu and Afgooye where levels of acute malnutrition rates exceeded 30%. More than 2 people per 10 000 died per day and more than 20% of families had severely reduced access to food with very limited ability to cope.
Furthermore the situation was characterized by widespread destitution, large population displacement, disease outbreaks, and social collapse (FSNAU and FEWS, 07/11).

In southern Somalia, the crisis is driven by a combination of factors. On one side, the total failure of the 2010 October - December *deyr* rains (secondary season) and the poor performance of the 2011 April - June *gu* rains (primary season) have resulted in crop failure, reduced labor demand, poor livestock body conditions, and excess animal mortality. On the other side, local cereal prices across the south are far above average, more than 2 to 3 times 2010 prices in some areas, and continue to rise.

As a result, both livestock to cereal and wage to cereal terms of trade have deteriorated substantially. Across all livelihoods, poor households, that account for about 30% of the population, are unable to meet basic food and other non-food needs. They have limited ability to cope with the situation including the food deficits (FSNAU and FEWS, 07/11).

GAM rate exceeded 30% and in some areas were as high as 55%

During July 2011, a series of representative nutrition and mortality surveys across southern Somalia were conducted (FSNAU/joint). The prevalence of GAM exceeded 20% in all fifteen surveyed areas. It even exceeded 38%, with severe acute malnutrition higher than 14%, in ten of the fifteen survey areas.

The highest levels of GAM were recorded in Bay with 55.0% (CI: 45.8-64.0), Bakool with 55.9% (CI: 50.6-61.2) and Gedo agropastoral) zone with 51.9% (CI: 41.8-61.9).
SAM rates in these areas ranged from 29.8% (CI: 22.8-38.0) in Bay to 19.3% (CI: 13.9-26.3) in Gedo (figure 5).

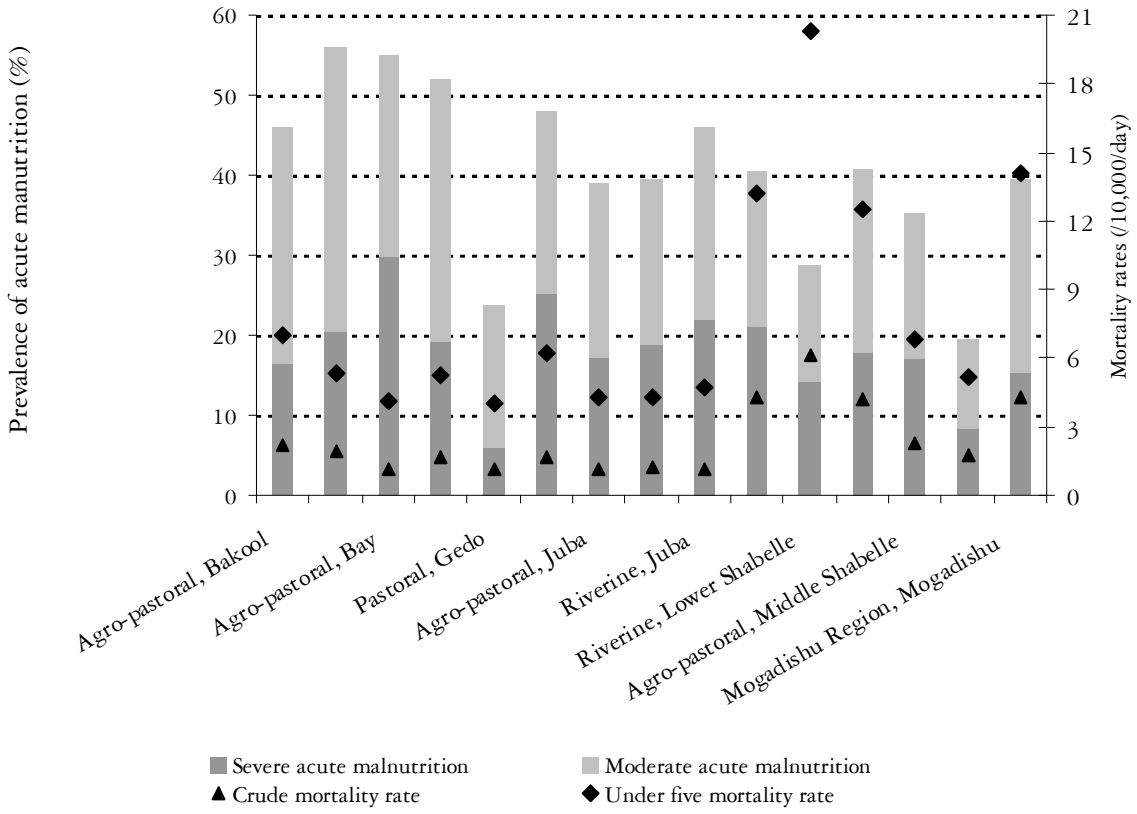
The U.S. Center for Disease Control (CDC) has verified and validated these findings.

Mortality rates above famine thresholds

Population wide mortality rates were estimated above the famine threshold in Bakool agropastoral zone (2.2 death per 10 000/day), and all areas of Lower Shabelle (4.2 and 6.1 death per 10 000/day). Furthermore, they were elevated across the south of the country.

Under-five mortality rates were higher than 4 per 10 000/day in all areas of the south where data were available. They peaked at 13 and 20 per 10 000/day in riverine and agropastoral areas of Lower Shabelle. It is reported that tens of thousands of people have died in April, May and June 2011 (FSNAU/joint, 11/11).

FIGURE 5: RESULTS OF NUTRITION AND MORTALITY SURVEYS IN JULY 2011, 7 REGIONS, SOMALIA (FSNAU/JOINT, 11/11)



In its call for action the IASC Global Nutrition Cluster recommended that blanket treatment should be provided and older children be included in the screening and admitted for treatment if severely malnourished, in the respective areas where global acute malnutrition rates exceeded the 50% prevalence (IASC GNC, 22/07/11).

Despite improvements, malnutrition rates remain at crisis level

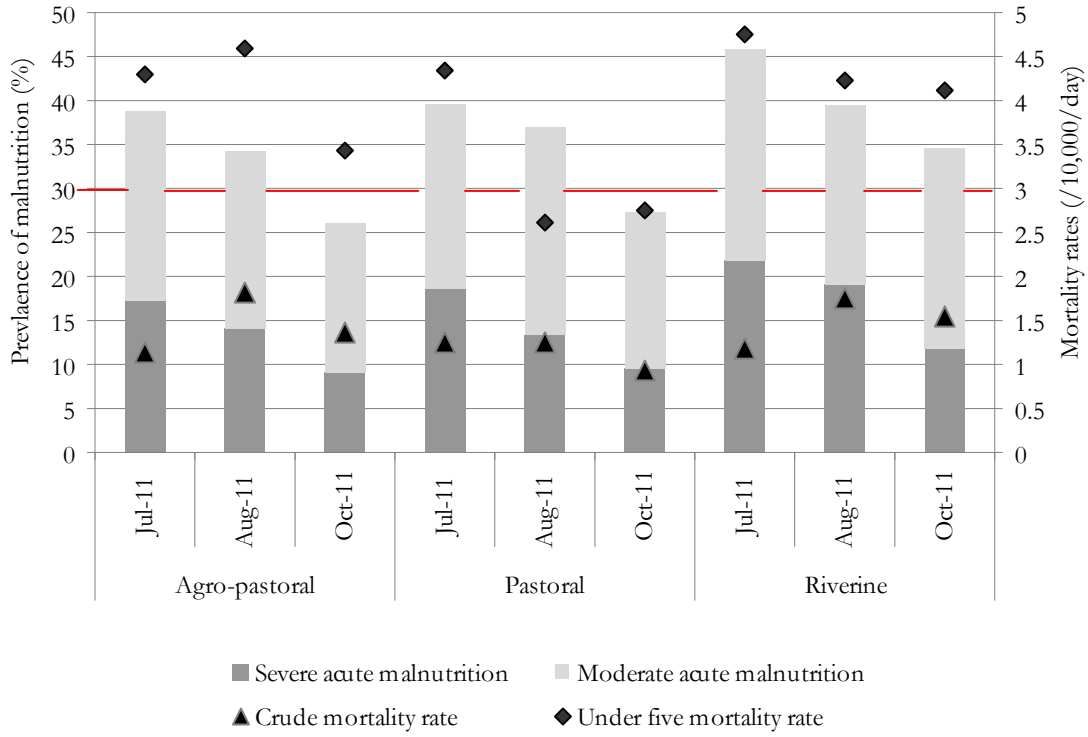
In Juba region the July 2011 GAM rates were close to and in some areas higher then 40%. They show a decrease by October 2011, with a range between 26.1% in the agro zone and 34.5% in the riverine zone (figure 6). SAM rates that ranged between 17.2% (CI: 14.0-20.9) in the ago livelihood zone and 21.9% (CI: 18.9-25.2) in the riverine zone in July 2011, had decreased to 9.1% (CI: 7.1-11.5) and 11.8% (CI: 9.4-14.8) in October 2011. Death rates did not decrease significantly.

Massive population movements

Large numbers of desperate Somalian people, mainly women and children, were heading to urban centers within the country and across the border in order to seek assistance. UNHCR estimates that close to 1 million Somali refugees are registered in neighboring countries.

The number of Somali Refugees is especially high in Kenya with 520 000 (UNHCR, 19/02/12) and Yemen with 206 000 (UNHCR, 13/02/12), Ethiopia 188 000 (UNHCR, 17/02/12) and in Djibouti 19 000 (UNHCR, 07/02/12).

FIGURE 6: RESULTS OF NUTRITION AND MORTALITY SURVEYS, JUBA REGION, SOMALIA (FSNAU/JOINT, 11/11)



Yet 31% of the population remain in crisis as of February 2012

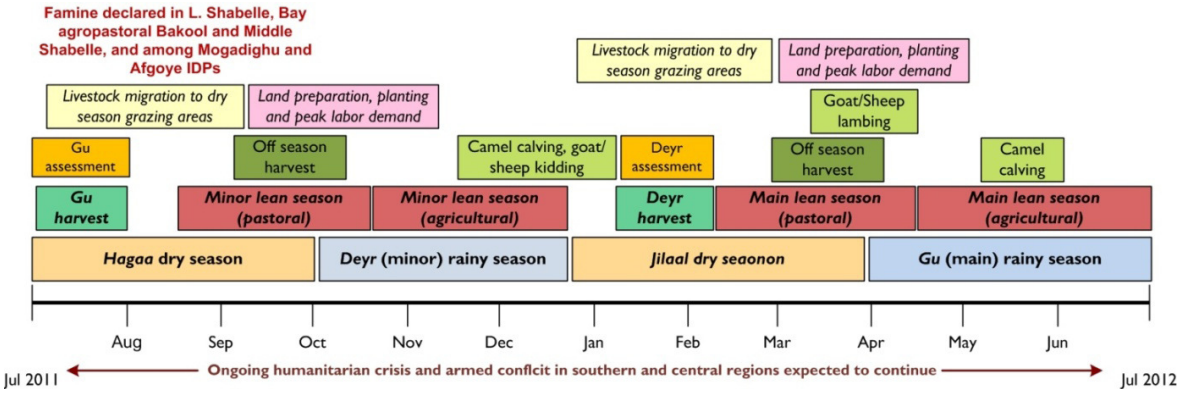
On 3 February 2012, FAO's FSNAU and FEWS NET confirm that Famine outcomes no longer exist in Southern Somalia. Based on the latest assessment findings, Mogadishu IDPs, Afgoye IDPs, and agropastoral households in Middle Shabelle (populations formerly classified as IPC Phase 5 – 'Famine') have now improved to Emergency-level food insecurity (IPC Phase 4 - 'Humanitarian Emergency').

The improvement is partly attributed to the substantial humanitarian assistance provided as well as the beginning of the *deyr* harvest. Both factors have mitigated the most extreme food deficits and reduced mortality levels. However, more than 2.3 million people remain in crisis and are unable to fully meet essential food and non-food needs. About 1.7 million of these people reside in the southern regions of the country, where humanitarian access remains very limited (FSNAU and FEWS NET, 03/02/12).

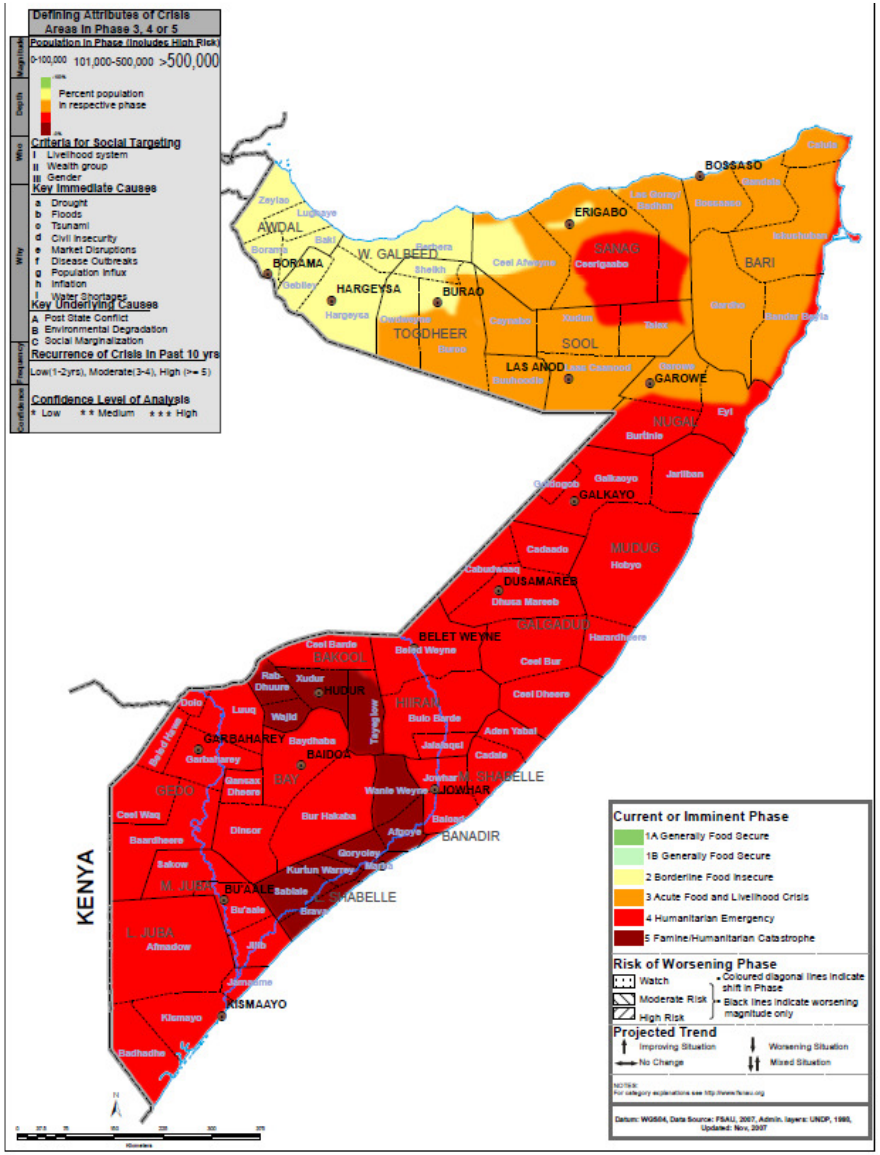
OVERALL

Despite some improvements, the situation is very precarious. Malnutrition and death rates are still at unacceptable high levels. Multi sectoral responses, at scale, are required for all those in crisis and any significant interruption to humanitarian assistance or trade could result in a reversal of the gains made.

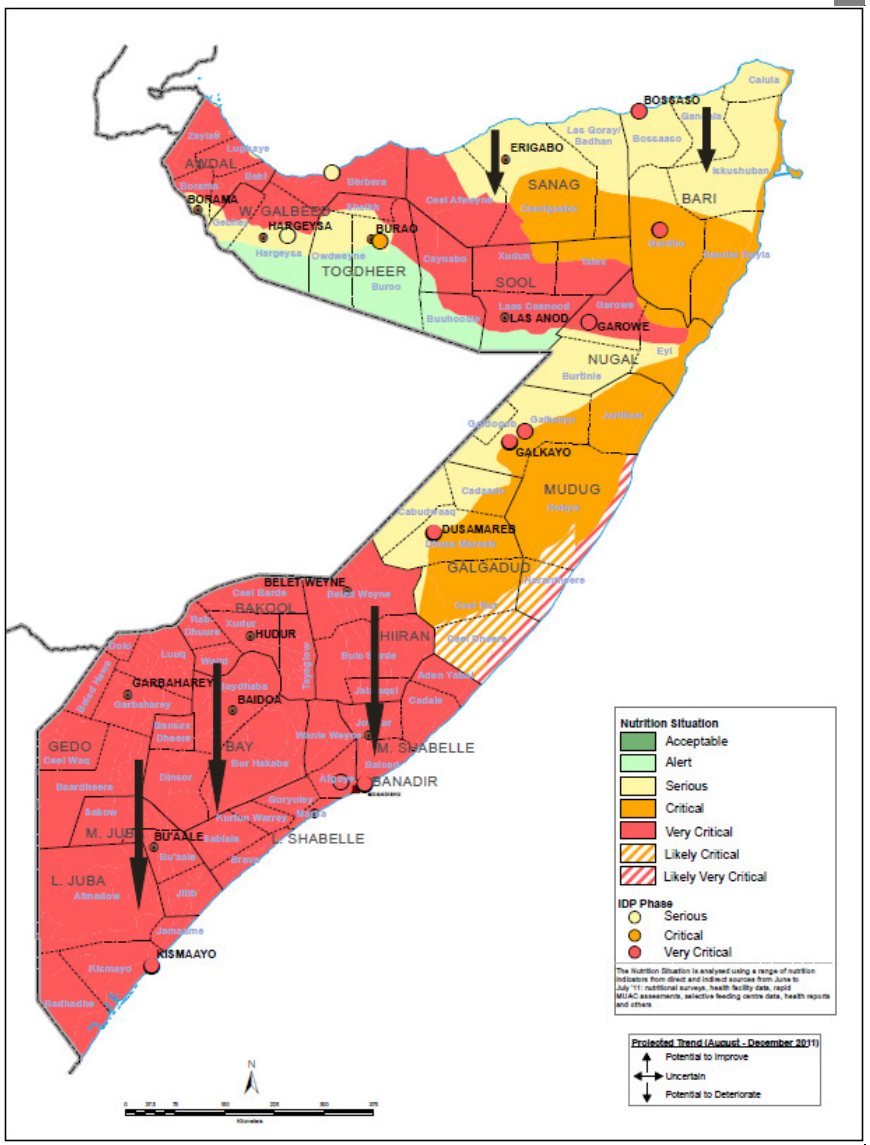
SEASONAL CALENDAR AND CRITICAL EVENTS, SOMALIA (FEWS, 01/12)



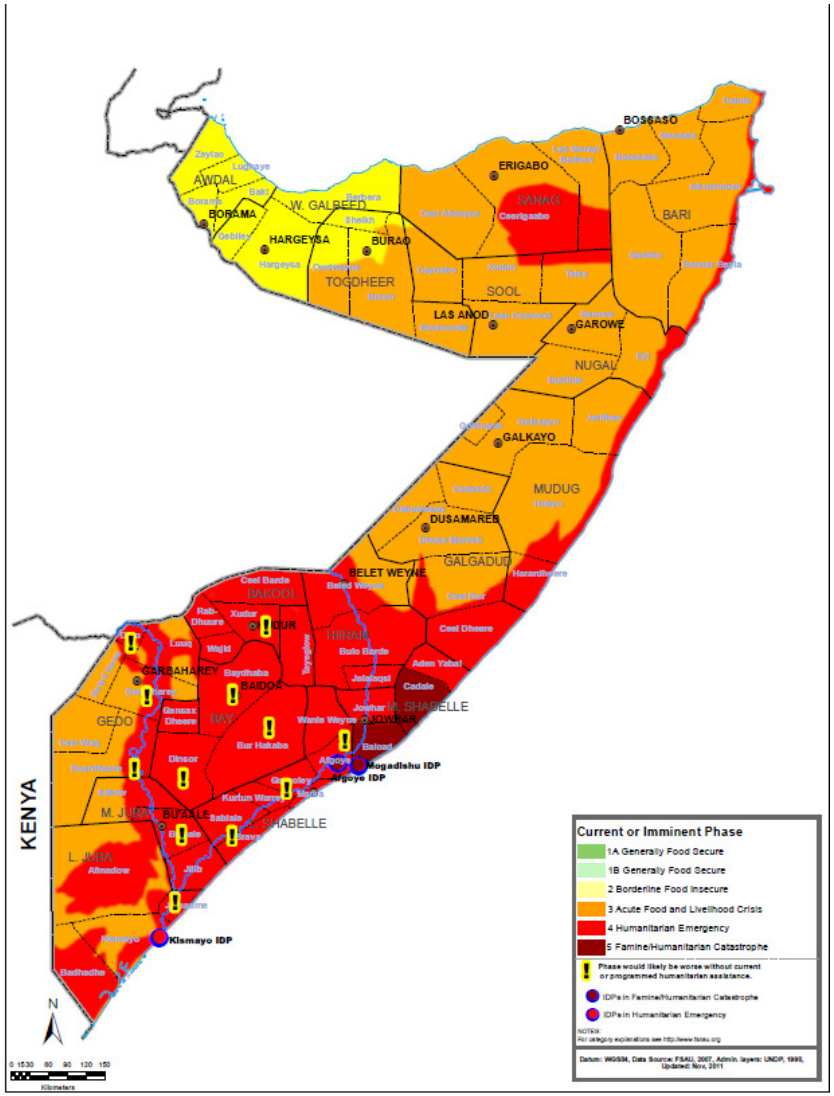
MAP 2: SOMALIA- INTEGRATED FOOD SECURITY PHASE CLASSIFICATION: JULY 2011 (FAO FSNAU, 07/11)



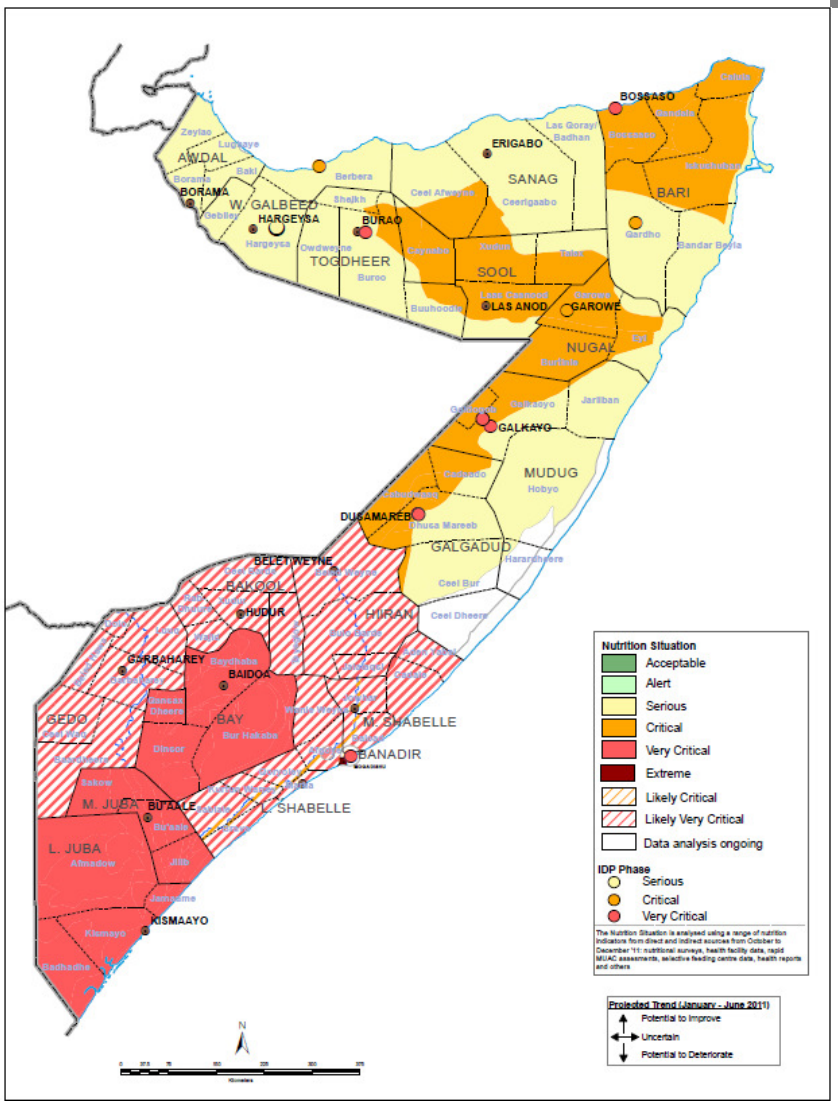
MAP 3: SOMALIA-ESTIMATED NUTRITION SITUATION - AUGUST 2011 (FAO FSNAU, 16/08/11)



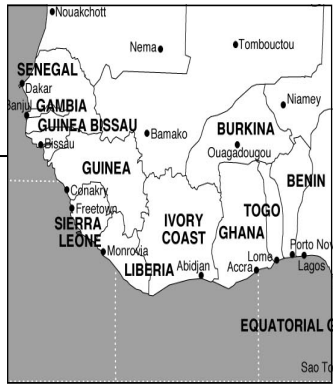
MAP 4: SOMALIA- INTEGRATED FOOD SECURITY PHASE CLASSIFICATION: NOVEMBER-DECEMBER 2011 (FAO FSNAU, 01/12)



MAP 5: SOMALIA-ESTIMATED NUTRITION SITUATION - NOVEMBER-DECEMBER 2011 (FAO FSNAU, 01/12)



West Africa



Several countries in the Sahel are again at high risk of food insecurity that will affect the region during the first half of 2012. Many parts of the region received late and poorly distributed rains in 2011, resulting in late and poor harvests in some areas. Households will run out of food stocks earlier than usual and be forced to rely on market supplies. The purchasing power of the most vulnerable populations is likely to deteriorate. In Chad, for example, the lean season started already in January 2012 which is two months in advance. The situation is aggravated by the combined effects of displacement and conflict. At particularly high risk is the population in affected areas in Niger, Chad, Mauretania, Mali and Burkina Faso (see map 6).

Several governments of these countries have already announced measures and Burkina Faso, Mauritania and Mali have also requested assistance from the humanitarian community (FEWS, 10/11; OCHA, 12/11).

Leaders of United Nations agencies, representatives of affected governments, and major donors called for an urgent scale up of humanitarian, rehabilitation and development assistance to address rising levels of hunger and malnutrition affecting the Sahel region of West Africa (UN/joint, 15/02/12).

Mauretania, Niger and Chad mainly affected

The joint market and food security evaluation report (CILSS/joint, 01/12) confirmed an overall cereal deficit in the Sahel of 2.6 million tons which means that the cereal production was 25% less compared to previous yeras in the nine Sahel countries. The Sahel states most effected by the deficit are Niger, Chad and Mauretania.

In Mauritania the rain fed agricultural zone and the pastoral transhumance zone in the southern part of the country are affected by the deficit of precipitation, aggravating the already vulnerable situation due to high food prices of imported food.

In Niger, the agro-pastoral zones in the west and pastoral zones of Tahoma in the south-east are effected by the rain deficit. The Government of Chad reported an uneven rain repartition and grasshopper invasion in the northern part of its rain fed agricultural zone and in the southern part of its pastoral transhumance zone, both located in the central areas of the country (ECHO, 11/11).

Problem of food accessibility

Returnees fleeing the crisis in Libya and Cote d'Ivoire, and rapidly rising food prices in 2012 are further increasing the problem of persistent food insecurity in the region.
The situation is aggravated by the poor resilience of the rural population because of the frequent shocks over the past years in these countries that are among the poorest in the world. Poor households spend already more than half of their daily revenue on food. If food prices continue to rise at the current level, by mid-2012, the caseload of severely food insecure people is expected to increase massively.

The most vulnerable groups are the poorest urban and rural households who do not own much productive assets and/or depend mainly on sale of labor or on precarious self-employment for their survival. Among them are pastoralist communities. Deficit in fodder production and a shortage of water are leading to an early transhumance, worsening the risk of conflict within agro-pastoralist communities.

Estimated 11.6 million people at risk

An estimated 11.6 million people are at risk of food insecurity as of February 2012. UNICEF estimates that over 1 million children in the region will be exposed to severe malnutrition during the coming months of the hungry season (ECHO, 01/02/12).

Early response strategy

Humanitarian partners, members of the regional Inter-Agency Standing Committee (IASC), have adopted a strategy to better respond to this new risk of a food and nutritional crisis.

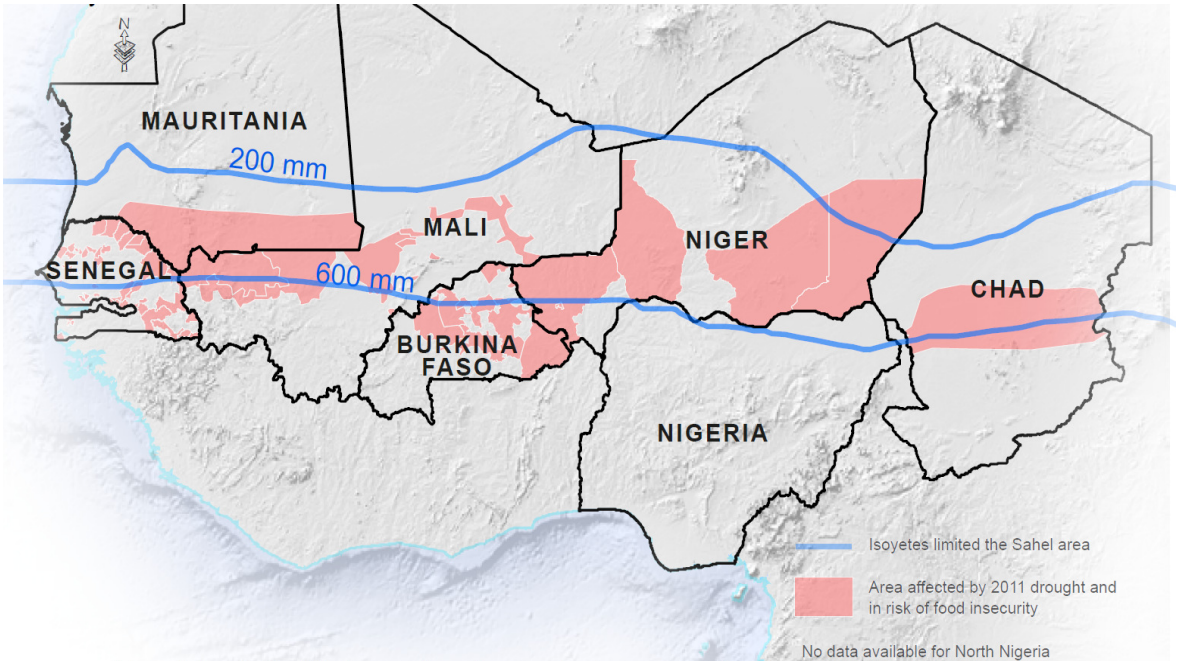
The objective is to ensure an early response by humanitarian partners to support and complement the measures taken by national governments (IASC FSNWG, 12/11). In the Sahel region, most governments have established a response plan and released international alerts to mobilize donors. In some countries such as Mali, free food distribution has already been put in place. The main challenge will be to move food from areas of surplus to areas of deficit.

ECHO agreed to a €10 million emergency response programme, with an emphasis on Niger (€4.2 million).

For its part, WFP is pre-positioning food assistance and is about to release Emergency Operations in response to this crisis (WFP, 30/01/12; ECHO, 11/11).

According to ECHO, a sustainable response to the crisis would require a phased approach and coordination between humanitarian and development aid agencies. Phase 1 (from late 2011 to early 2012) with a focus on prevention and mitigation measures; Phase 2 (from March to August 2012) with a focus on emergency response during the hungry period; Phase 3 (after the crisis) for building resilience and strengthening disaster risk reduction capacities.

MAP 6: THE SAHEL - VULNERABILITY TO FOOD INSECURITY (OCHA, RELIEFWEB, 08/12/11)



Chad

Chad continues to face multiple crises resulting from protracted conflict, structural challenges and climate change-related difficulties. There are still refugees from neighbouring Central African Republic (75 000) and Sudan (288 000 from Darfur) in the country. There are still 131 000 internally displaced people (IDPs) in eastern Chad. The civilian and humanitarian situation of the refugee camps and IDP sites remains a concern to the humanitarian community. Chad was also one of the worst-hit countries in the cholera epidemic that has swept through west and central Africa in 2011, with more than 16 000 cases including 444 reported deaths since the epidemic started in January 2011 (OCHA, 01/12).

Food insecurity in the Sahel belt

Growing conditions for cereal crops and pastures have been poor in several parts of the country in 2011, due to irregular rains at the beginning of the cropping season in May/June which delayed plantings, and subsequent erratic precipitation. According to the latest crop assessments, food production has been lower than usual in Chad's Sahelian zone. Poor households in areas relying on agricultural production and pasture production will need to get their food supply earlier than usual from markets which will push food prices further up. At the same time, seasonal declines in income-generating opportunities will lead to livelihood-protection deficits.

Both the southern Sudanian and the northern Sahelian zones have been affected by a sharp decline in pasture and cereal production. In addition also the Libya crisis has badly affected the local economy in northern and central parts of the country, leading to reduced income opportunities through trade; less food availability and price increase in markets (FEWS, 01/12).

WFP estimates that 2.5 million people are at risk of food insecurity. Updated survey data are expected soon. Interventions will target about 1.5 million mostly affected people (ECHO, 02/12; OCHA, 01/12).

Malnutrition in the Sahel belt

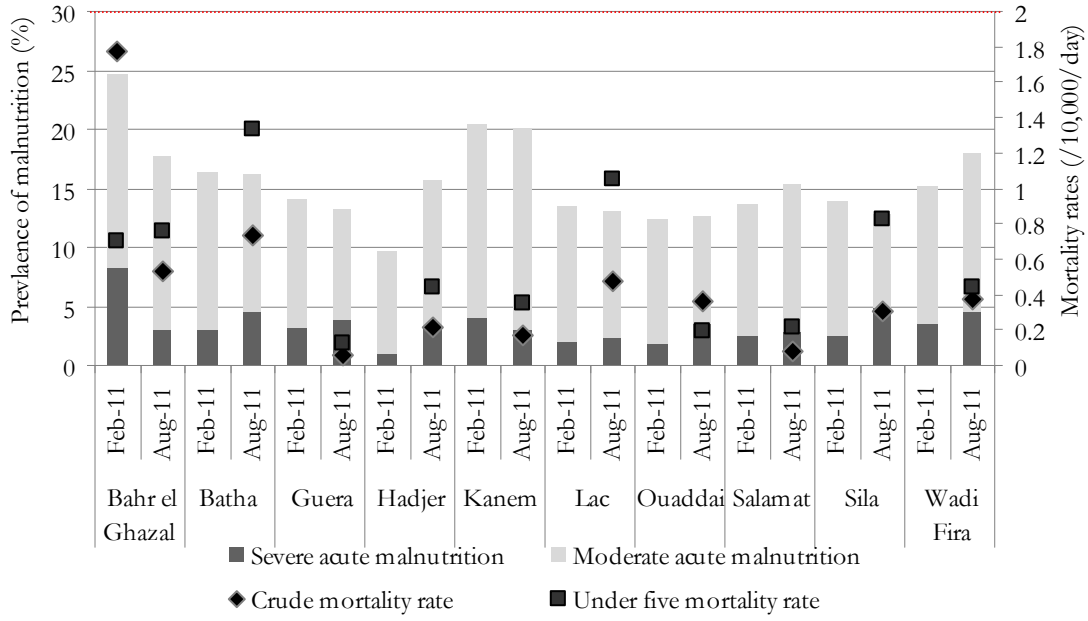
Acute malnutrition and micronutrient deficiencies remain the major problems and determinants of morbidity/mortality among children under five in the country. Latest national estimates of global acute malnutrition are at 16% and of chronic malnutrition at 39% (MICS, 2010) with malnutrition rates in the Sahel belt regions being significantly higher than national estimates.

The latest nutrition and mortality surveys conducted during the early 2011 post-harvest season as well as during the 2011 hunger season revealed alarming malnutrition rates, although they were consistently lower than in the previous year in August 2010 (hunger gap). Most affected regions are Barh El Gazel (17.8%; CI: 14.1-22.4) and Kanem (20.1%; CI: 15.9-25.0), but also Batha, Wadi Fira, Hadjer and Salamat show GAM rates clearly above the critical 15% threshold. And in Guera, Lac Quaddai and Sila Regions GAM rates were close to this threshold (ACF, 05/11; CNNTA/joint, 03/11; MoH/joint, 08/11) (figure 7).

Key caring practices are still poorly adopted in the Sahel belt. The latest national MICS survey (2010) revealed an extremely low rate of exclusive breastfeeding during the first six months (3.3%). Complementary feeding, continuation of breastfeeding are among other key practices with a great potential to improve children's health and nutritional status.

The Nutrition Cluster 2012 strategy is focused on the strengthening of the acute malnutrition programme through increased coverage and improved quality. Cluster member organizations are integrating preventing actions aimed at achieving long-term impact.

FIGURE 7: RESULTS OF SEVERAL NUTRITION AND MORTALITY SURVEYS IN TEN REGIONS, CHAD (ACF, 03/11; CNNTA/JOINT, 03/11; MOH/JOINT, 08/11)



The MoH with the support of UNICEF and other partners will open an additional 35 supplementary feeding centres and for April until June it is planned to distribute nutritional supplements to about 80 000 children 6-23 months old (OCHA, 01/12).

Eastern Chad is hosting refugees from neighbouring Darfur and Central African Republic in 12 refugee camps. Competition between IDPs, refugees and host populations for access to resources has resulted in poor levels of production, protracted food insecurity and weak resilience to shocks.

In the camps with Sudanese refugees the overall nutrition situation shows an overall moderately high prevalence of malnutrition with average GAM of 11.6% including 1.5% of severe cases. This amounts to a total of over 5 500 children suffering from acute malnutrition (UNHCR/joint, 09/11).

The more detailed analysis classifies the camps into three groups: camp that show a less alarming situation (Treguine, Farchana, Djabal and Goz-Amir); camps with an alarming situation (Iridimi, Touloum, Am-naback, Oure-cassoni, Kounoungou, Gaga and Bredjing); and one camp with a critical situation (Mile camp). In the latter two groups global acute malnutrition rates were above 10% . Highest estimates were found in Iridimi Camp (14.4%; CI: 11.1-18.5) and Mile Camp (16.0%; CI: 13.2-19.2) (table 1).

In addition, anaemia is a major health problem among children aged 6 to 59 months in all camps with Sudanese refugees, with a prevalence varying from 42.5% (CI: 35.5-49.5) in Mile and 63.6% (CI: 58.9-68.3) in Oure Cassoni. This results in an overall global prevalence of 51.9%, which is well above the critical threshold of 40 percent. Among women aged 15 to 49 years, the global prevalence of anaemia varies between 20% and 39% (UNHCR, 09/11).

TABLE 1 RESULTS OF NUTRITION AND ANAEMIA SURVEYS, SUDANESE REFUGEE CAMPS, EASTERN CHAD (UNHCR, 09/11)

Camps	Global Acute Malnutrition (%) (95% CI)	Severe Acute Malnutrition (%) (95% CI)	Anaemia[1] (6-59 months) (%) (95% CI)
Bredjing	11.5 (8.3-15.7)	1.1 (0.3-3.5)	59.7 (53.2-66.3)
Treguin	9.4 (6.9-12.6)	2.2 (1.3-3.8)	45.3 (40.6-49.9)
Farchana	9.6 (7.2-12.6)	1.3 (0.5-3.1)	42.8 (36.9-48.6]
Gaga	12.7 (9.5-16.7)	1.9 (0.7-4.7)	47.8 (41.9-53.6)
Kounoungou	11.2 (8.1-15.2)	1.2 (0.5-2.6)	44.7 (38.3-51.1]
Mile	16.0 (13.2-19.2)	2.0 (1.1-3.8)	42.5 (35.5-49.5)
Iridimi	14.4 (11.1-18.5)	1.3 (0.6-2.7)	58.1 (52.3-63.9]
Touloum	12.3 (9.8-15.3)	2.3 (1.3-4.1)	48.8 (42.5-55.1)
Am-Naback	13.8 (10.6-17.9)	1.2 (0.5-2.5)	46.8 (41.0-52.6]
Oure Cassoni	13.6 (11.0-16.8)	1.8 (0.8-3.8)	63.6 (58.9-68.3)
Goz Amir	6.5 (4.7-8.9)	0.7 (0.3-1.7)	54.2 (48.9-59.2]
Djabal	7.7 (5.9-10.0)	0.5 (0.2-1.6)	53.9 (48.2-59.5)

[1] Haemoglobin < 11g/dl

In the camps with Central African refugees along the border with the Central African Republic global acute malnutrition is of concern especially in the camp of Dosseye with 12.4% (CI: 9.7-15.6). The other 5 camps show GAM rates between 1.5% and 8.4% (UNHCR/joint, 10/11).

The average prevalence of anaemia among children aged 6 to 59 months in all camps was estimated at 65.9%. This is significantly less than the prevalence measured in the previous year of 2010 but it still remains above the critical threshold of 40 percent. Among women aged 15 to 49 years, the average prevalence of anaemia in all camps together is estimated at 36.9%. Dosseye camp shows the highest prevalence both for children (70.1%; CI: 65.5-74.8) and women (58.5%; CI: 51.4-65.5) (table 2).

The survey report recommends reinforcing measures against anaemia, especially interventions for de-worming, actions to fight and prevent malaria, intensify nutrition education, iron and micronutrient supplementation.

Table 2 Results of anaemia surveys, refugee camps, south and south east, Chad (UNHCR/joint, 10/11)

Camps	Anaemia[1] Children (6-59 months) (%)(95% CI)	Anaemia[2] Non pregnant women (15-49 years) (%)(95% CI)
Dosseye Camp	70.1 (65.5-74.8)	58.5 (51.4-65.5)
Haraze Camp	51.8 (46.5-57.1)	20.9 (15.5-26.3)
Amboko Camp	69.7 (64.7-74.9)	42.9 (36.6-49.3)
Yaroungou Camp	62.9 (58.4-67.4)	24.5 (19.6-29.2)
Gondje Camp	73.9 (69.6-78.3)	32.4 (26.8-37.9)
Moula Camp	61.8 (56.9-66.7)	35.7 (28.6-42.9)

[1] Haemoglobin < 11g/dl
[2] Haemoglobin < 12g/dl

Central Africa

Democratic Republic of the Congo

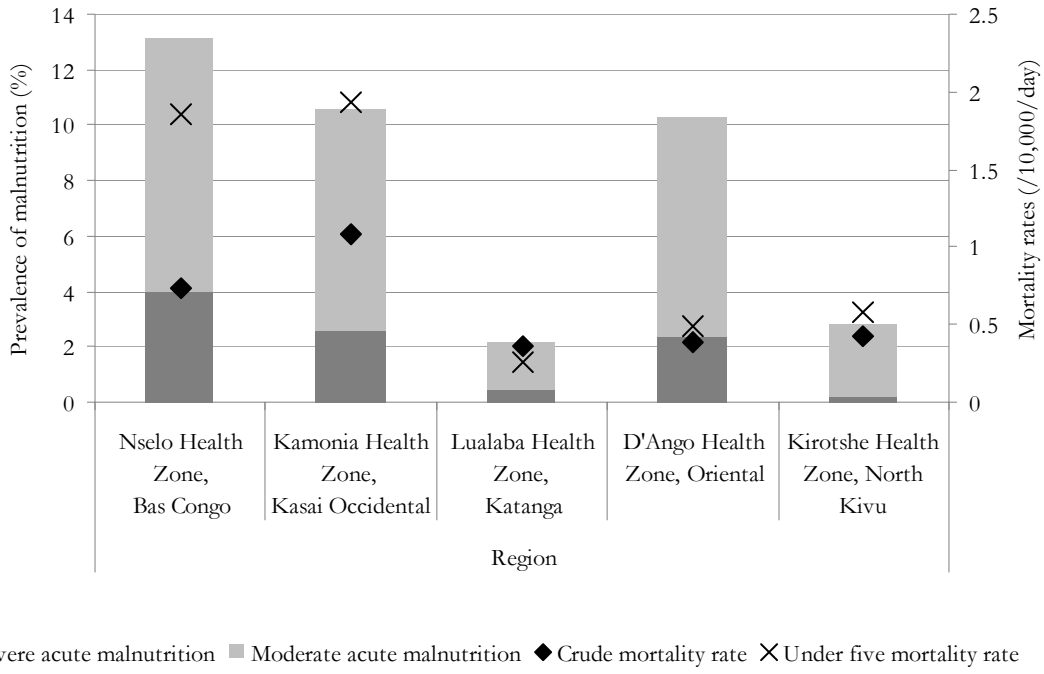
The Democratic Republic of the Congo continues to advance towards stabilization. After long years of war a large part of the population remains extremely vulnerable to different risks.

Overall poverty and instability

Attacks by armed groups, violations of International Human Rights, land and intercommunity conflicts, and natural disasters are the main factors of chronic and sudden crises that affect numerous parts of the county. These have contributed to the internal displacement of about 1.6 million people as of the end of September 2011. In 2011, the country was affected by several epidemics. A measles outbreak that affected the whole country and cholera, notably along the Congo River, were the most deadly ones.

Basic indicators remain alarming in all sectors including health, water, hygiene and sanitation, nutrition, food security, and education. State services are still insufficient to respond to the needs and the very poor conditions of road infrastructures do not enable access to some populations (OCHA, 11/11).

FIGURE 8: RESULTS OF NUTRITION AND MORTALITY SURVEYS IN FIVE REGIONS, DRC (ACF, 02/11 AND 03/11)



The combination of these elements increases the vulnerability of many Congolese. The 2012 Humanitarian Action Plan for the country is based on the thematic clusters approach, while ensuring the integration of different sectors in one operational plan (multi-clusters), including the nutrition cluster.

Planned Nutrition Interventions

According to national estimates about 2.4 million children under five years of age are affected by acute malnutrition in the country, including more then 600 000 severe cases that have an increased risk of mortality. In 2012 the Nutrition Cluster plans to reach 25% of these children (605 000 cases including 145 000 with severe acute malnutrition) with appropriate nutrition interventions.

Areas and health zones with a global acute malnutrition rate ≥ 10% and/or a severe acute malnutrition rate ≥2% will be targeted. Assistance to pregnant and lactating women will depend on the available resources. Furthermore, about 100 000 displaced persons will be supported with emergency food (OCHA, 11/11).

Survey results (ACF, 02/11 and 03/11) reveal high rates of acute malnutrition among under five year old children in the Provinces of Bas Congo, Kasai Occidental and Oriental Province. The highest GAM rate was measured in Bas Congo with 13.1% (CI:10.4-16.4) including 4.0% (CI:3.0-5.4) of severe cases. under-five mortality rates were high with estimates close to 2.0 in Bas Congo and Kasai Occidental. Crude mortality rates were estimated as 0.74 (CI: 0.35-1.53) and 1.08 (CI: 0.52-2.20) in these two provinces (figure 8).

Rwanda

In April 2011, Gisagara District located in the Southern Province of Rwanda experienced heavy rainstorms with strong winds and localized flooding. In May, Rwamagana District located in the Eastern Province, Musanze located in Northern Province and Nyabihu District in Western Province also experienced bad weather conditions. It is estimated that approximately 3 600 people were affected and about 1 900 people were displaced. Also crops like maize, beans, soybean, rice, cassava, fruits and vegetables were destroyed (IFRC, 31/10/11).

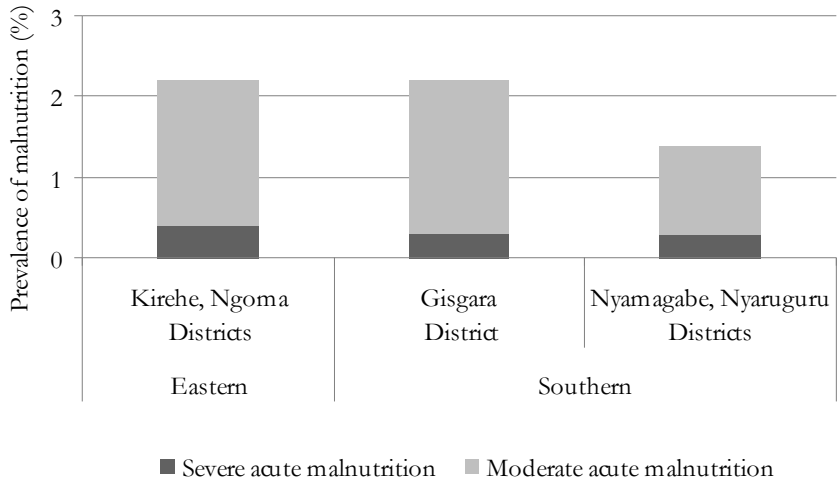
An emergency needs assessment was conducted in collaboration with local authorities and the IFRC's Disaster Relief Emergency Fund supported the national society in delivering assistance to the affected population.

With regard to food security and nutrition, about 400 affected households received supplementary food, seeds and agricultural tools (IFRC, 31/10/11).

Results from a series of nutrition surveys in six districts of the country, in Eastern and Southern Province between November 2010 and February 2011, revealed global acute malnutrition estimates between 1.4% (CI:0.5-2.3) in Nyamagabe and Nyaruguru Districts and 2.2% (CI:1.1-3.4) in Gisagara District (Concern/joint, 04/11) (figure 9).

In these areas, Concern Worldwide in partnerships with others and the Rwandan MoH strengthened community based integrated management of child illness (C-IMCI) through which the community based management of acute malnutrition (CMAM) program was implemented in 37 health centres.

FIGURE 9: NUTRITION SURVEY RESULTS, EASTERN AND SOUTHERN PROVINCE, RWANDA (CONCERN/JOINT, 04/11)



Asia

Afghanistan

Afghanistan continuously remains in a state of complex emergency which is exacerbated by protracted, intensive armed conflict and regularly recurring environmental hazards. Years of active conflict have made Afghan governance structures fragile, particularly at provincial and district level.

The government continues to struggle to deliver basic public services, implement the rule of law and guarantee internal security. Access to basic services such as medical assistance and education is still well below internationally accepted levels.

For example, the government offers health facilities in many parts of the country, though at woefully inadequate levels of presence and coverage (OCHA, 11/11).

Humanitarian access challenged

The humanitarian community focuses primarily on the conflict-affected, internally displaced, refugee populations, and those affected by natural disasters.

Regular and sustained access for humanitarian agencies remains a challenge and the humanitarian community is unable to effectively cover many conflict and disaster-prone areas of the country.

Given the multitude of constraints, humanitarian and development needs assessments are completed to the best of the ability of aid actors, as and when possible. Notable is the recent completion of the first Emergency Food Security and Nutrition Assessment (EFSA) in 2011 covering the 14 drought-affected provinces (WFP, 11/11).

Drought in 14 provinces

Limited snow and rainfall during the past winter and spring caused a slow-onset drought, which affects 14 provinces in the northern, north-eastern and western regions of the country. The drought is the eight in 11 years, and reflects the critical importance of implementing not just short-term humanitarian relief, but also longer-term resilience-building measures.

Although most of the cereal deficit may be covered through the private sector, vulnerable groups and the poorest will be acutely impacted by the resultant increased market prices.

The loss of pasture and the significant reduction in agricultural labour opportunities have further eroded coping capacities and increased the acute food insecurity of households who have no access to irrigated land and limited livestock assets.

Results from EFSA (WFP, 11/11) estimate that more than 2.8 million people are affected by food-insecurity, especially those that rely on agriculture for their livelihood. The affected households require assistance to cover the food gap until next harvest in June/September 2012. The size of the food ration and the length of assistance will vary according to location.

Households with moderate levels of food insecurity will benefit from targeted interventions preferably cash-based as food is available from production within the region.

Agricultural support includes among others the distribution of emergency animal feed, animal health surveillance system, improvement of water for livestock and if conditions are favourable, restocking once the winter is over (FEWS, 01/12).

Nutrition situation

During 2011, the number of cases admitted for both outpatient therapeutic programmes (OTP) and supplementary feeding programmes (SFP) increased across the provinces with the highest increase in drought and conflict-affected provinces.

From January to September 2011, more than 31 000 severely acutely malnourished children were admitted to the OTP, which is almost twice the total number of the previous year. The number of districts and sites implementing both OTP and SFP were increased. A total of 423 sites were serving outpatient therapeutic programs as of November 2011 (OCHA).

Besides offering therapeutic care for individuals, the nutrition cluster will also focus on the prevention of malnutrition and on the expansion of the nutrition surveillance system in the country. Malnutrition, remains a major challenge to child survival and development, notably the very high stunting rates (national average of 59% (MoH/joint, 2004).

Based on the most recent nutrition surveys conducted by ACF and Oxfam Novib in the country, the nutrition situation shows a varied picture. The situation was relatively stable in the non-drought and non-conflict-affected areas (OCHA, 11/11).

An assessment from October 2010 in Ashtarlay District, in Kundi Province in the Central Highlands Region had shown a global acute malnutrition rates of 3.2% (CI: 1.9-4.5). ACF (10/10) implements a food security programme in this district, which also has been affected by the latest drought. More recent data about the nutritional status are still to come.

Pakistan

Over 90% of flood waters receded, but critical humanitarian needs remain unmet in Sindh and Balochistan Provinces, where floods affected more than 5 million people in 2011. Some 10 000 families still live in temporary settlements in Sindh Province. Land remains under water in many areas, hindering the return of displaced families. The Government of Pakistan and humanitarian partners are finalizing a framework to address early recovery needs in flood-affected areas. People remain at risk and further funding is needed to help them restore their livelihoods (OCHA, 01/12).

Nutrition Cluster's response transition

Following the unprecedented magnitude of the floods and coordination needs, the nutrition cluster had been activated in July 2010 in the country. The cluster supported the government to coordinate the nutrition response at national level and at provincial level with five coordination hubs in Multan, Hyderabad, Sukkur, Quetta and Peshawar. The Nutrition Cluster transitioned together with Health Cluster from emergency response to Health and Nutrition Early Recovery, co-chaired by WHO and UNICEF in February 2011. Contingency plans, early recovery and capacity assessments were undertaken, and the recovery action officially extended until the end of 2011 (GNC, 11/11).

No National Nutrition Strategy

Malnutrition is a remaining challenge in the country. There was no national nutrition strategy at the time of the crisis and the lack of overarching nutrition policy has resulted in an absence of comprehensible coordination and strategic approach to nutrition programming among partner agencies, which weakened the Cluster partners efforts in reaching the most vulnerable population groups. Although national guidelines on the management of acute malnutrition had been elaborated in 2009, these had not officially been released in 2011.

During the crisis some 1.2 million children aged 6-59 months were screened for malnutrition, from which about 200 000 (15%) were identified as acutely malnourished and some 53 000 severely malnourished were admitted in stabilization centers (SC) and outpatient therapeutic feeding programs (OTP) (GNC, 11/11).

Need for up-to-date nutrition information

The lack of up-to-date nutrition information for assessing needs and planning interventions was one of the challenges experienced by the Cluster in 2010. Initial Rapid Assessments were not conducted due to access and security problems and lack of trained personnel on the ground. UNICEF as the Cluster Lead Agency coordinated the elaboration of the Flood Affected Nutrition Surveys (FANS), which took place in five districts in collaboration with cluster partners. Partner's felt that this move provided vital information on the nutrition situation to inform planning, program monitoring and evaluation and should be replicated in future emergencies (GNC, 11/11).

Available survey results from Sindh Province and Khyber Pakhtunkha Province indicated a critical nutrition situation in 2010. In Sindh Province estimated global acute malnutrition rates in children under five years were well above the emergency threshold. Highest rates were reported in northern Sindh with a GAM rate of 22.9% (CI: 19.0-27.4) including severe acute malnutrition of 6.1% (CI:3.9-9.3) (MoH/joint, 11/10) (figure 10).

The 18-29 months old children were most affected. The serious situation is also confirmed by results of a national nutrition survey that was conducted in 2011. Its results indicate a GAM rate of 19.4% in Sindh Province. Confidence intervals were not provided (AGA KHAN UNIVERSITY/joint, 2011).
In Khyber Pakhtunkha Province GAM rates were estimated between 6.3% (CI: 4.3-9.1) in the northern part and 8.6% (CI: 5.8-12.5) in the southern part of the province (MoH/joint, 12/10) (figure 10).

FIGURE 10: NUTRITION SURVEY RESULTS, KHYBER PAKHTUNKHWA AND SINDH PROVINCES, PAKISTAN (MOH/JOINT, 11/10; ACF/JOINT 12/10)

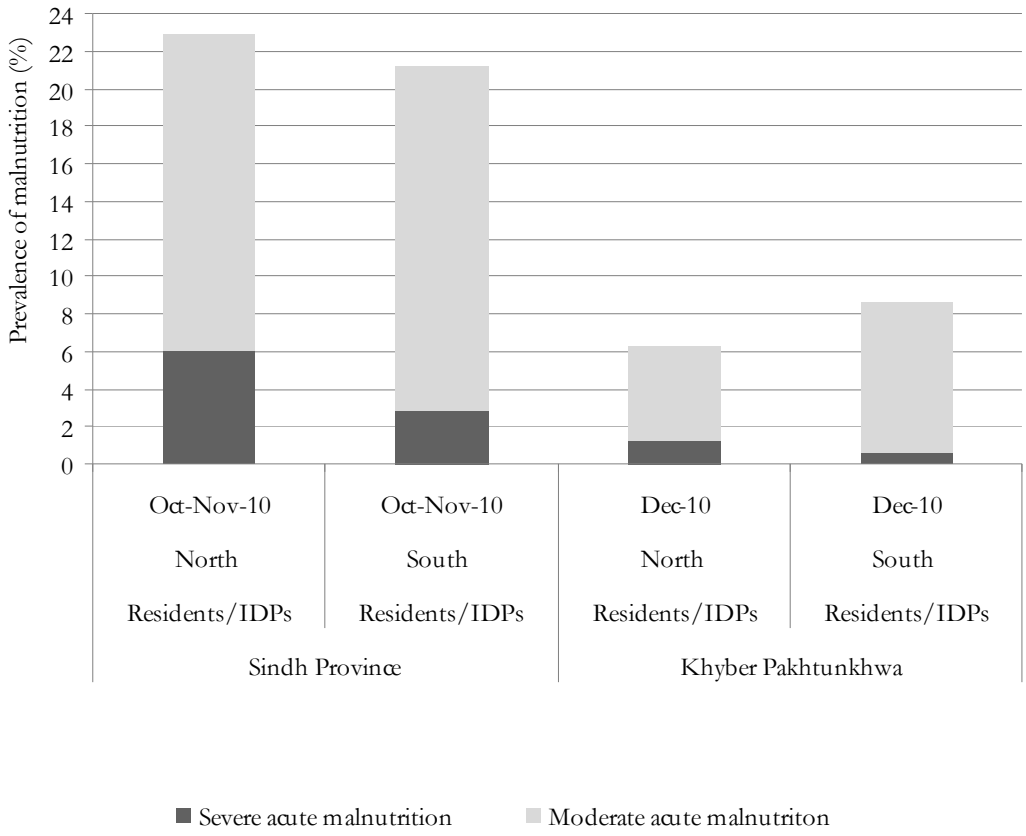
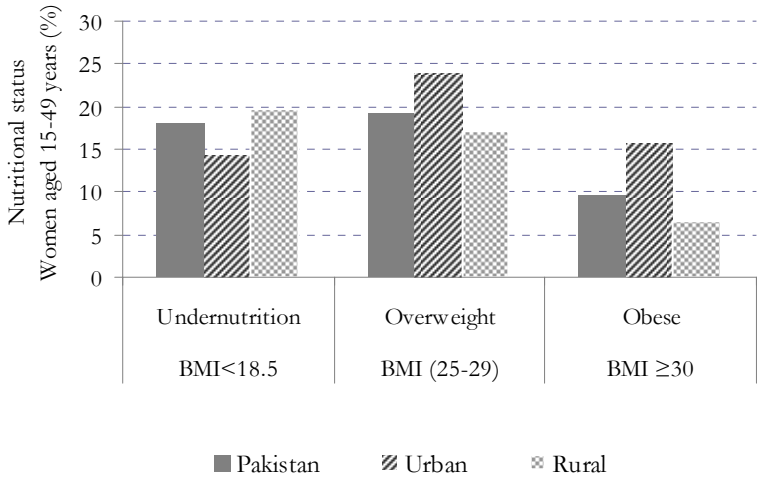


FIGURE 11: NATIONAL SURVEY RESULTS ON NUTRITIONAL STATUS IN WOMEN AGED 15-49 YEARS, PAKISTAN (AGA KHAN UNIVERSITY/JOINT, 2011)



Double burden of malnutrition

The national nutrition survey 2011 revealed that overall in the country, a total of 18% of women of reproductive age (15-49 years) had low BMI (<18.5kg/m2) and were classified as undernourished with 14.4% in urban and 19.7% in rural areas. About 28.8% of women were overnourished (BMI ≥25kg/m2) including 19.3% overweight and 9.5% obese cases (figure 11).

Both overweight and obesity were more prevalent in urban areas (23.9% and 15.7%) compared to rural areas (17.1% and 6.5%). Confidence intervals were not provided by the report (AGA KHAN UNIVERSITY/joint, 2011).

Philippines

The population of southern Philippine island of Mindanao are continuously affected by insecurity due to long lasting low-intensity conflict combined with repeatedly natural disasters and poverty. Recently heavy rains and severe weather conditions caused repeated flooding in central and southern Mindanao displacing populations. Tropical Storm Washi hit the 14 provinces of northern Mindanao from 16 to 18 December 2011 triggering flash floods and landslides and affecting more than 622 000 people in remote areas in Iligan, Lanao del Norte and Lanao del Sur and in Bukidnon who were already weakened by conflicts (OCHA, 01/12).

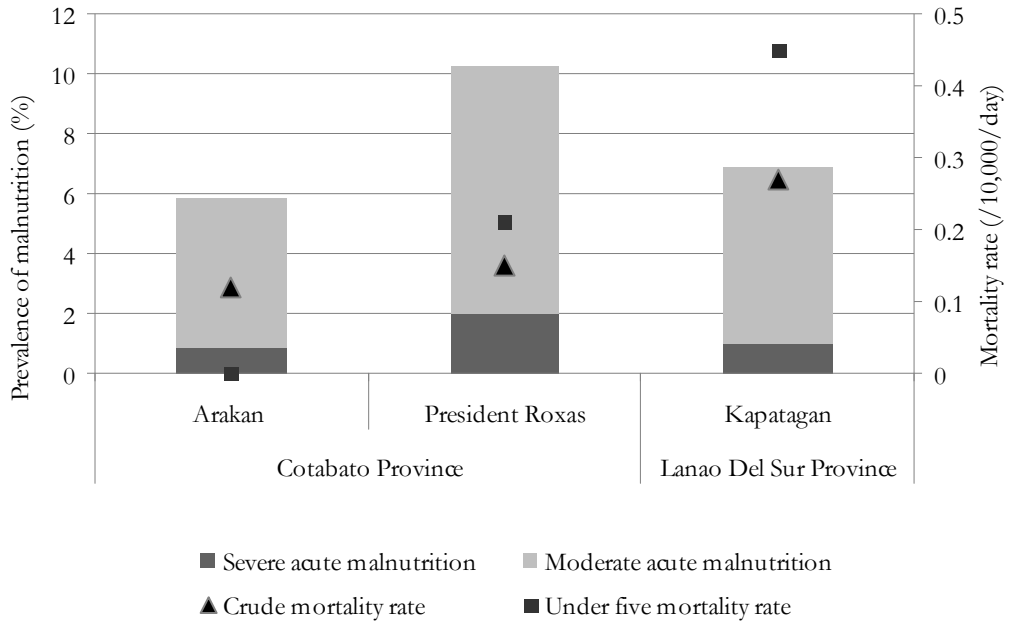
Blanket supplementary feeding has been provided for more than 11 000 children and the distribution of micronutrient powder has reached 6 000 children.

In specialized mother-baby friendly areas counselling on infant and young child feeding is provided together with psycho-social support to women (OCHA, 07/02/12).

In October/December 2010, ACH-S assessed the nutrition situation in three municipalities as a baseline survey for a four year integrated Food Security, Nutrition and Water and Sanitation programme. While global acute malnutrition rate in President Roxas was estimated at 10.3% (CI: 8.1 - 13.1) they were below 10% in Arakan and Kapatagan (figure 12).

Rates of stunting were very high between 51.3% (CI: 46.9 - 55.6) in Roxas and 61.1% (CI: 55.8 - 66.2) in Arakan. While mortality rates in Kapatagan were higher than those in the other two municipalities, all were under alert level. The reports recommends that substantial effort should be made in reducing stunting over the next years through the community based component of the programme.

FIGURE 12: NUTRITION SURVEY RESULTS, IN THREE MUNCIPALITIES, PHILIPPINES (ACH-S, 10-12/10))



Central America

Guatemala

Guatemala's location between the Caribbean Sea and Pacific Ocean makes it a target for various natural disasters such as hurricanes, floods and drought.

The nutritional situation in Guatemala is characterized by its high rate of stunting with 49.8% in children 6-59 months old, according to the last National Survey of Maternal and Child Health (ENSMI) in 2008/09 (MoH/joint). This rate corresponds with the challenge to increase women's empowerment and education for the rural population. There are significant gaps between the nutritional status of indigenous and non-indigenous population. The country is affected by the double burden of under and over nutrition, with 50.5% of non pregnant women aged 15-49 years having a BMI ≥25.0 kg/m^2 including 15.4% overweight with a BMI ≥30.0 kg/m^2 (MoH/joint, ENSMI 2008-2009). At the contrary, global acute malnutrition rates are very low, and even decreased over the past years from 3.8% in 1995 to 1.4% in 2009 (ENSMI, 2008-2009). Also national data from 2011 confirm very low GAM rates (MoH, 11/11) (figure 13).

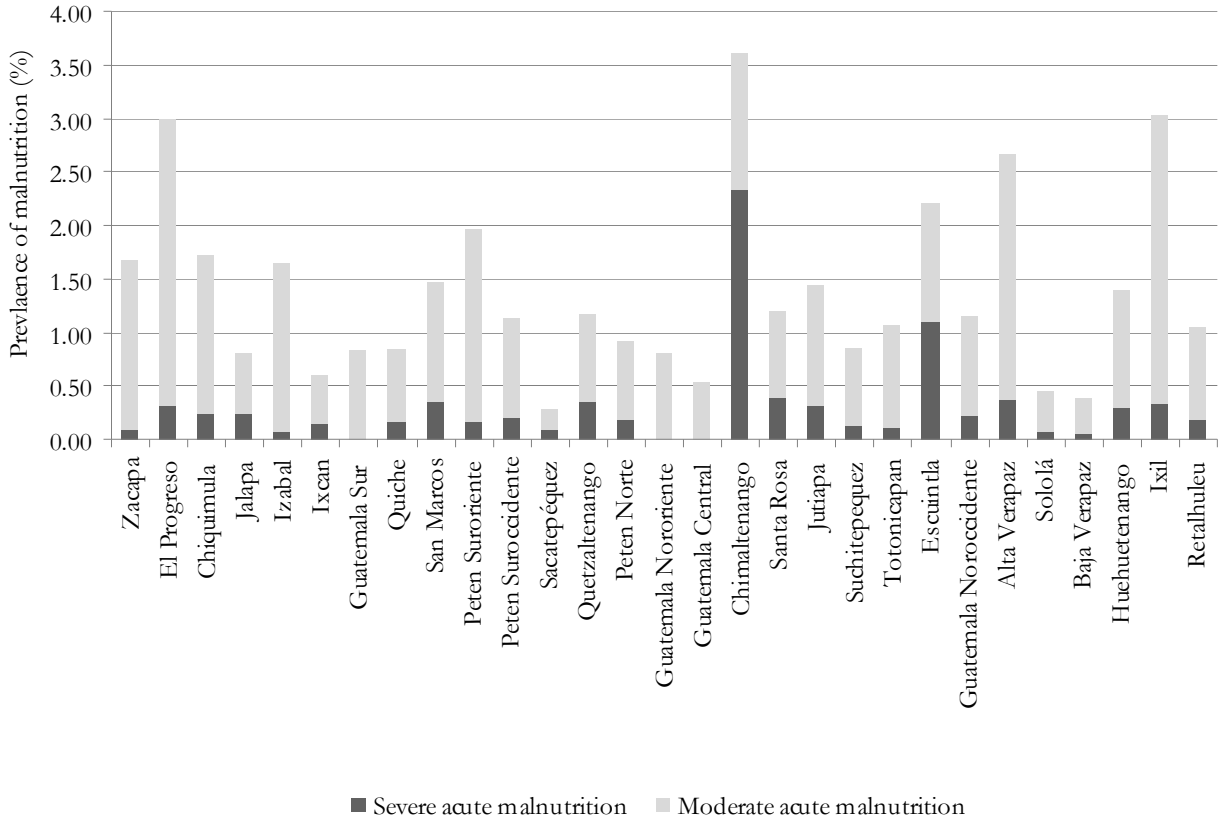
Guatemala is not a typical crisis country, but its high vulnerability to natural phenomena has triggered crisis in specific timelines. Excessive rainfall and drought periods have resulted in the loss of water resources and harvests, negatively impacting on the food security of the population in certain areas. In 2009, a food crisis was caused by a severe drought (EC, 03/11).

The agricultural cycle 2009-2010 was affected by drought conditions in 6 departments of the Dry Corridor in Guatemala. This drought was the worst in 30 years as a part of the effects of El Niño phenomenon. In order to assist the affected population, ACF-S, with support form the European Commission's Humanitarian Aid Office (ECHO) and others, started implementing the project 'Food and Nutrition Crisis Response and Livelihoods Recovery in the Dry Corridor of Guatemala'. About 60 communities of Jalapa, el Progreso and Chiquimula Departments were covered. More then 1200 farming families benefitted from inputs for the production of beans and maize, and others participated in cash for work programmes.

In the context of this project, a nutrition survey was conducted in October 2010, during the recovery period of local livelihoods. Survey results indicate that there is no critical nutrition situation with GAM rate of 0.4% (CI: 0.1-1.5) (MUAC <12.5cm). However, stunting rates were estimated to be very high and above the national average with 60.5% (CI: 52.3-68.1) including severe stunting of 26.4% (CI: 20.7-32.9) (ACH-S, 11/10).

The survey report recommends to intensify strategies for crisis mitigation, and development activities. It is also recommended to strengthen social protection networks in rural communities.

FIGURE 13: RESULTS FROM NATIONAL NUTRITION SURVEY, (MUAC <12.5cm), IN ALL DEPARTMENTS IN GUATEMALA (MOH, 11/11)



Results of surveys

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
GREATER HORN OF AFRICA										
ETHIOPIA										
AMHARA REGION										
North Gonder Zone										
East Belessa Woreda	May-11	Residents	104,639	GOAL	12.9	10.5-15.9	0.8	0.3-2.2	0	MUAC <11 cm: 0.8 MUAC <12.5 cm: 19.7
North Wollo Zone										
Habru Woreda	Feb-11	Residents	203,379	Concern	3.8	2.4-6.0	0.0	0	0	MUAC <11 cm: 0 MUAC <12.5 cm: 4.7
South Wollo Zone										
Delanta Woreda	Apr-11	Residents	119,807	Concern	11.3	8.7-14.5	0.2	0.0-1.2	0	MUAC <11 cm: 0.9 MUAC <12.5 cm: 20.4
Waghemra Zone										
Abergele Woreda	Jan-11	Residents	55,700	GOAL	10.1	7.7-13.2	0.4	0.1-1.5	0	MUAC <11 cm: 0.2 MUAC <12.5 cm: 13.3
Sekota Woreda	Apr-11	Residents	123,354	GOAL	12.6	10.2-15.6	1.5	0.8-2.7	0	MUAC <11 cm: 0.7 MUAC <12.5 cm: 17.7
DIRE DAWA REGION										
Dire Dawa Zone										
Dire Dawa Council	May-11	Refugees	368,539	GOAL	10.8	8.2-14.1	0.8	0.3-1.9	0	MUAC <11 cm: 0.8 MUAC <12.5 cm: 8.7
OROMIYA REGION										
Bale Zone										
Meda Welabu Woreda	May-11	Residents	109,065	Concern	25.5	21.1-30.6	1.7	1.0-3.0	0.3	MUAC <11 cm: 1.5 MUAC <12.5 cm: 34.6
Borena Zone										
Gelana Woreda	Jan-11	Residents	70,291	GOAL	4.5	2.7-7.4	0.3	0.1-1.4	0	MUAC <11 cm: 0.3 MUAC <12.5 cm: 8.1
Bulehora Woreda	Mar-11	Residents	276,653	GOAL	10.5	8.4-13.0	1.2	0.6-2.3	0.1	MUAC <11 cm: 1.4 MUAC <12.5 cm: 9.4

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
GREATER HORN OF AFRICA								
ETHIOPIA								
AMHARA REGION								
North Gonder Zone								
17.9	72.1	-	73.3	-	0.10	0.03-0.29	0.16	0.03-0.91
North Wollo Zone								
18.5	73.6	-	93.9	-	0.22	0.14-0.37	0.32	0.08-1.25
South Wollo Zone								
14.6	93.0	-	84.7	-	0.14	0.06-0.34	0.23	0.03-1.73
Waghemra Zone								
22.6	75.8	-	88.6	-	0.11	0.04-0.34	0.38	0.09-1.58
24.0	80.7	-	77.7	-	0.03	0.00-0.23	0.00	-
DIRE DAWA REGION								
Dire Dawa Zone								
21.8	57.4	-	-	-	0.24	0.11-0.52	0.78	0.30-1.99
OROMIYA REGION								
Bale Zone								
6.1	55.7	-	69.3	-	0.48	0.29-0.78	1.12	0.65-1.95
Borena Zone								
13.6	69.2	-	76.1	-	0.00	-	0.00	-
1.6	36.7	-	68.1	-	0.02	0.00-0.17	0.13	0.02-0.97

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
East Hararghe Zone										
Kurfachele Woreda	Feb-11	Residents	57,940	GOAL	7.3	5.2-10.2	0.8	0.3-2.1	0.6	MUAC <11 cm: 0.2 MUAC <12.5 cm: 6.9
Midega Tola Woreda	Feb-11	Residents	77,593	GOAL	10.1	7.5-13.5	0.2	0.0-1.4	0	MUAC <11 cm: 0.7 MUAC <12.5 cm: 10.6
Deder Woreda	Sep-Oct-11	Residents	256,635	GOAL	6.4	4.5-9.0	0.3	0.1-1.3	0	MUAC <11 cm: 0.6 MUAC <12.5 cm: 9.8
Guji Zone										
Liben Woreda	Jun-11	Residents	76,896	GOAL	13.6	11.5-16.0	1.2	0.7-2.0	0.1	MUAC <11 cm: 1.3 MUAC <12.5 cm: 10.6
West Hararghe Zone										
Boke Woreda	Jan-11	Residents	169,367	GOAL	5.4	3.9-7.4	0.2	0.0-1.2	0	MUAC <11 cm: 0.6 MUAC <12.5 cm: 6.6
Habroo Woreda	Mar-11	Residents	208,671	GOAL	8.5	6.2-11.5	0.2	0.0-1.6	0	MUAC <11 cm: 0.4 MUAC <12.5 cm: 12.4
Oda Bultum Woreda	Apr-11	Residents	172,909	GOAL	10.8	8.3-13.8	0.7	0.3-1.9	0	MUAC <11 cm: 0.4 MUAC <12.5 cm: 10.4
KENYA North Eastern Province										
Dagahaley Camp, Dadaab	Sep-11	Refugees	-	UNHCR/ joint[2]	20.7 *23.2*[1]	15.2-27.4 *18.4-28.9*	4.8 *8.2*[1]	2.5-9.0 *5.4-12.2*	0	MUAC <11.5 cm: 1.9 MUAC <12.5 cm: 7.1
Dagahaley Camp Outskirts Dadaab	Sep-11	Refugees	-	UNHCR/ joint[2]	33.4 *38.3*[1]	27.3-40.1 *32.1-44.8*	9.9 *18.8*[1]	7.2-13.6 *14.7-23.6*	0.2	MUAC <11.5 cm: 9.7 MUAC <12.5 cm: 24.4
Hagadera Camp, Dadaab	Aug-11	Refugees	-	UNHCR/ joint[2]	13.2 *17.2*[1]	10.0-17.3 *13.2-22.1*	2.3 *4.6*[1]	1.1-4.8 *2.7-7.6*	0.2	MUAC <11.5 cm: 1.8 MUAC <12.5 cm: 6.8
Ifo Camp, Dadaab	Aug-11	Refugees	-	UNHCR/ joint[2]	17.6 *22.4*[1]	13.1-23.2 *17.4-28.3*	3.9 *6.8*[1]	2.1-7.1 *4.2-11.0*	0	MUAC <11.5 cm: 1.3 MUAC <12.5 cm: 8.8

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
East Hararghe Zone								
10.7	79.6	-	96.4	-	0.13	0.05-0.35	0.43	0.10-1.76
9.2	56.7	-	92.2	-	0.11	0.03-0.33	0.37	0.09-1.52
12.6	81.5	-	87.1	-	0.06	0.02-0.26	0.16	0.02-1.22
Guji Zone								
10.7	78.3	-	86.2	-	0.07	0.02-0.20	0.23	0.06-0.82
West Hararghe Zone								
11.9	82.8	-	81.5	-	0.10	0.03-0.31	0.31	0.08-1.26
9.7	66.4	-	76.5	-	0.04	0.01-0.33	0.00	-
8.8	61.7	-	85.5	-	0.03	0.00-0.26	0.19	0.02-1.43
KENYA								
North Eastern Province								
28.4	84.3	Anemia 6-59 months: <11g/dl:47.6 non pregnant women <12g/dl: 50.9	78.8	MUAC <21cm Pregnant/lactating women: 0.0	0.41	0.21-0.80	0.94	0.45-1.98
12.1	83.9	-	72.8	MUAC <21cm Pregnant/lactating women: 6.0	1.23	0.73-2.06	3.02	1.72-5.24
42.7	89.2	Anemia 6-59 months: <11g/dl:45.3 non pregnant women <12g/dl: 43.3	86.8	MUAC <21cm Pregnant/lactating women: 2.5	0.14	0.04-0.46	0.33	0.08-1.36
28.5	89.1	Anemia 6-59 months: <11g/dl:54.4 non pregnant women <12g/dl: 49.8	85.5	MUAC <21cm Pregnant/lactating women: 4.3	0.41	0.21-0.80	0.94	0.45-1.98

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
SOMALIA										
BAKOOL REGION										
Agro-pastoral Livelihood Zone	Jul-11	Residents/ IDPs	244	FSNAU/ joint[4]	*45.9*[1]	*42.3-46.6*	*16.4*[1]	*12.9-20.6*	6.5	MUAC <11.5 cm: 7.3 MUAC <12.5 cm: 12.7
Pastoral Livelihood Zone	Jul-11	Residents/ IDPs	270	FSNAU/ joint[4]	*55.9*[1]	*50.6-61.2*	*20.4*[1]	*15.2-26.7*	7.4	MUAC <11.5 cm: 10.3 MUAC <12.5 cm: 18.1
BAY REGION										
Agro-pastoral Livelihood Zone	Jul-11	Residents/ IDPs	456	FSNAU/ joint[3]	*55.0*[1]	*45.8-64.0*	*29.8*[1]	*22.8-38.0*	-	-
Agro-pastoral Livelihood Zone	Aug-11	Residents/ IDPs	489	FSNAU/ joint[3]	*58.3*[1]	*52.1-64.2*	*22.1*[1]	*18.2-26.5*	-	-
GEDO REGION										
Agro-Pastoral Livelihood Zone	Jul-11	Residents/ IDPs	834	FNAU/ joint[3]	*51.9*[1]	*41.8-61.9*	*19.3*[1]	*13.9-26.3*	-	-
Pastoral Livelihood Zone	Jul-11	Residents/ IDPs	1093	FNAU/ joint[3]	*23.8*[1]	*20.1-28.0*	*5.9*[1]	*4.1-8.5*	-	-
Pastoral Livelihood Zone	Aug-11	Residents/ IDPs	593	FSNAU/ joint[4]	*32.9*[1]	*27.9-38.3*	*17.7*[1]	*14.4-21.6*	2.5	MUAC <11.5 cm: 8.4 MUAC <12.5 cm: 19.3
Riverine Livelihood Zone	Jul-11	Residents/ IDPs	642	FNAU/ joint[3]	*48.1*[1]	*38.7-57.7*	*25.2*[1]	*19.1-32.6*	-	-
Riverine Livelihood Zone	Aug-11	IDPs	1093	FNAU/ joint[3]	*39.4*[1]	*33.1-46.0*	*20.2*[1]	*16.4-24.7*	-	-

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
SOMALIA								
BAKOOL REGION								
-	-	-	-	-	2.20	1.7-2.7	7.0	5.2-8.8
-	-	-	-	-	1.94	1.40-2.43	5.30	4.02-6.59
BAY REGION								
-	-	-	-	MUAC <21cm Pregnant/lactating women: 8.80	1.10	0.17-2.03	4.12	2.47-5.77
-	-	-	-	-	2.15	1.5-2.80	6.16	3.91-8.40
GEDO REGION								
-	-	-	-	MUAC <21cm Pregnant/lactating women: 11.40	1.67	1.14-2.19	5.29	3.61-6.96
-	-	-	-	MUAC <21cm Pregnant/lactating women: 7.90	1.18	0.79-1.57	4.06	2.47-5.64
-	-	-	-	MUAC <21cm Pregnant/lactating women: 7.90	-	-	-	-
-	-	-	-	MUAC <21cm Pregnant/lactating women: 10.70	1.62	1.00-2.25	6.20	4.21-8.19
-	-	-	-	-	0.97	0.56-1.37	2.16	1.06-3.25

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
JUBA REGION										
Agro-pastoral Livelihood Zone	Jul-11	Residents/ IDPs	825	FSNAU/ joint[3]	*38.9*[1]	*34.8-43.1*	*17.2*[1]	*14.0-20.9*	-	-
Pastoral Livelihood Zone	Jul-11	Residents/ IDPs	866	FSNAU/ joint[3]	*39.5*[1]	*35.9-43.2*	*18.7*[1]	*15.8-21.9*	-	-
Riverine Livelihood Zone	Jul-11	Residents/ IDPs	868	FSNAU/ joint[3]	*45.9*[1]	*41.5-50.3*	*21.9*[1]	*18.9-25.2*	-	-
Agro-pastoral Livelihood Zone	Aug-11	Residents/ IDPs	561	FSNAU/ joint[3]	*34.4*[1]	*29.9-39.3*	*14.2*[1]	*11.5-17.4*	-	-
Pastoral Livelihood Zone	Aug-11	Residents/ IDPs	523	FSNAU/ joint[3]	*37.1*[1]	*27.9-35.9*	*13.4*[1]	*10.7-16.6*	-	-
Agro-pastoral Livelihood Zone	Oct-11	Residents/ IDPs	618	FSNAU/ joint[3]	*26.1*[1]	*22.4-30.1*	*9.1*[1]	*7.1-11.5*	-	-
Pastoral Livelihood Zone	Oct-11	Residents/ IDPs	545	FSNAU/ joint[3]	*27.3*[1]	*23.0-32.0*	*9.5*[1]	*7.1-12.8*	-	-
Riverine Livelihood Zone	Aug-11	Residents/ IDPs	591	FSNAU/ joint[3]	*39.6*[1]	*35.4-43.9*	*19.0*[1]	*15.7-22.7*	-	-
Riverine Livelihood Zone	Oct-11	Residents/ IDPs	601	FSNAU/ joint[3]	*34.5*[1]	*29.9-39.5*	*11.8*[1]	*9.4-14.8*	-	-
Kismayo City	Oct-11	Residents/ IDPs	648	FSNAU/ joint[3]	*26.7*[1]	*22.9-30.8*	*9.5*[1]	*7.5-12.1*	-	-

Continued...

Measles immunisation coverage (%)		Assessment of micronutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
JUBA REGION								
-	-	-	-	MUAC <21cm Pregnant/lactating women: 30.24	1.13	0.51-1.75	4.29	3.06-5.33
-	-	-	-	-	1.25	0.68-1.81	4.33	3.25-5.43
-	-	-	-	-	1.18	0.50-1.82	4.76	3.38-6.14
-	-	-	-	-	1.82	1.23-2.41	4.60	2.87-6.37
-	-	-	-	-	1.25	0.77-1.73	2.61	1.32-3.88
-	-	-	-	-	1.37	0.88-1.86	3.43	2.00-4.87
-	-	-	-	-	0.93	0.52-1.34	2.76	1.41-4.12
-	-	-	-	-	1.76	1.20-2.32	4.22	2.56-5.87
-	-	-	-	-	1.54	1.02-2.06	4.12	2.53-5.71
-	-	-	-	-	2.30	1.60-3.00	4.76	3.08-6.40

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
LOWER SHABELLE REGION										
Agro-pastoral Livelihood Zone	Jul-11	Residents/ IDPs	799	FSNAU/ joint[3]	*40.6*[1]	*34.6-46.8*	*20.9*[1]	*16.2-26.5*	-	-
Riverine Livelihood Zone	Jul-11	Residents/ IDPs	804	FSNAU/ joint[3]	*28.7*[1]	*24.4-33.5*	*14.2*[1]	*11.6-17.3*	-	-
Afgoye Town	Jul-11	IDPs	951	FSNAU/ joint[3]	*40.7*[1]	*34.5-47.2*	*17.7*[1]	*13.4-22.9*	-	-
Afgoye Town	Aug-11	Residents/ IDPs	530	FSNAU/ joint[3]	*46.0*[1]	*40.8-51.3*	*24.7*[1]	*20.2-29.8*	-	-
MIDDLE SHABELLE REGION										
Agro-pastoral Livelihood Zone	Jul-11	Residents/ IDPs	590	FSNAU/ joint[3]	*35.3*[1]	*24.9-47.3*	*17.1*[1]	*10.3-27.1*	-	-
Riverine Livelihood Zone	Jul-11	Residents/ IDPs	746	FSNAU/ joint[3]	*19.6*[1]	*16.4-23.2*	*8.2*[1]	*5.7-11.6*	-	-
MOGADISHU REGION										
Mogadishu Town	Apr-11	Residents/ IDPs	902	FSNAU/ joint[3]	*15.2*[1]	*10.9-20.7*	*1.7*[1]	*0.9-3.1*	-	-
Mogadishu Region	Jul-11	Residents/ IDPs	870	FSNAU/ joint[3]	*39.4*[1]	*32.4-46.9*	*15.3*[1]	*11.6-19.8*	-	-
Mogadishu Region	Aug-11	Residents/ IDPs	544	FSNAU/ joint[3]	*45.6*[1]	*40.5-50.8*	*23.0*[1]	*19.2-27.2*	-	-

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
LOWER SHABELLE REGION								
-	-	-	-	-	4.29	3.10-5.46	13.20	8.70-17.70
-	-	-	-	-	6.12	4.30-7.93	20.30	13.00-27.60
-	-	-	-	-	4.24	3.17-5.31	12.47	9.60-15.40
-	-	-	-	-	4.02	3.05-4.99	10.30	7.57-13.00
MIDDLE SHABELLE REGION								
-	-	-	-	-	2.28	1.71-2.86	6.84	4.91-8.76
-	-	-	-	-	1.71	1.11-3.20	5.19	2.96-7.41
MOGADISHU REGION								
-	-	-	-	-	1.81	1.38-2.37	2.20	1.41-3.48
-	-	-	-	MUAC <21cm Pregnant/lactating women: 5.30	4.29	3.22-5.36	14.09	10.60-17.5
-	-	-	-	-	5.68	4.48-6.88	15.43	11.4-19.5

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oedema (%)	MUAC# (%)
NORTH SUDAN										
BLUE NILE STATE										
Kurmuk Town	Feb-11	Residents	207,155	GOAL	9.7 *8.7[1]*	7.3-12.7 *6.6-11.5*	1.0 *2.0[1]*	0.3-3.6 *1.1-3.7*	0.6	MUAC <11.5 cm: 1.0 MUAC <12.5 cm: 4.8
NORTH DARFUR STATE										
Kutum Town	May-11	Residents	75,261	GOAL	12.6 *13.3[1]*	9.8-16.1 *10.4-16.7*	1.4 *2.9[1]*	0.7-2.9 *2.0-4.3*	0.2	MUAC <11.5 cm: 2.3 MUAC <12.5 cm: 5.4
SOUTH SUDAN										
BAHR EL GHAZAL REGION										
Twic County	Aug-11	Residents	188,681	GOAL	23.7 *24.9[1]*	20.1-27.7 *21.3-28.9*	3.4 *6.2[1]*	2.2-5.3 *4.4-8.5*	0	MUAC <11.5 cm: 3.6 MUAC <12.5 cm: 4.7
NUBA MOUNTAINS REGION										
Abyei County	Jun-11	Residents	28,905	GOAL	16.4 *16.5[1]*	13.1-20.4 *13.4-20.0*	1.4 *2.4[1]*	0.8-2.7 *1.2-4.4*	0.7	MUAC <11.5 cm: 1.2 MUAC <12.5 cm: 6.0
CENTRAL AFRICA										
CHAD										
BAHR EL GHAZAL REGION										
Bahr El Ghazel Region	Jul-Aug-10	Residents	260,865	ACF	25.9 *28.1[1]*	21.8-30.5 *23.8-32.8*	4.7 *10.4[1]*	3.3-6.6 *8.2-13.1*	1.1	MUAC <11 cm: 1.3 MUAC <12.5 cm: 14.9
Bahr El Ghazel Region	Feb-Mar-11	Residents	268,952	ACF	23.6 *24.7[1]*	20.2-27.4 *21.1-28.6*	5.3 *8.3[1]*	3.5-8.0 *5.9-11.5*	1.2	-
Zone du Grand Souliat	Apr-May-11	Residents/ Nomads	-	ACF	-	-		-	-	MUAC <11.5 cm: 2.1 MUAC <12.5 cm: 12.7
Bahr El Ghazal Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*17.8[1]*	*14.1-22.4*	*3.1[1]*	*1.8-5.3*	-	MUAC <12.5 cm: 4.9
BATHA REGION										
Batha Region	Feb-Mar-11	Residents	-	CNNTA/ joint[6]	*16.4[1]*	*12.2-21.6*	*3.1[1]*	*1.9-5.0*	-	MUAC <11.5 cm: 1.1 MUAC <12.5 cm: 8.0
Batha Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*16.2[1]*	*13.5-19.3*	*4.6[1]*	*3.1-6.7*	-	MUAC <12.5 cm: 6.1

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
NORTH SUDAN								
BLUE NILE STATE								
32.9	59.6	-	74.4	-	0.37	0.19-0.71	1.08	0.51-2.28
NORTH DARFUR STATE								
82.2	91.8	-	98.1	-	0.35	0.20-0.63	0.81	0.31-2.11
SOUTH SUDAN								
BAHR EL GHAZAL REGION								
19.5	50.3	-	42.1	-	0.35	0.20-0.61	1.32	0.54-3.15
NUBA MOUNTAINS REGION								
37.2	66.1	-	54.3	-	0.41	0.18-0.92	0.99	0.34-2.82
CENTRAL AFRICA								
CHAD								
BAHR EL GHAZAL REGION								
28.9	44.0	-	-	-	1.02	0.69-1.50	3.90	2.42-6.21
18.7	33.5	-	-	-	1.77	1.08-2.89	0.70	0.47-1.05
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.53	0.28-1.00	0.76	0.32-1.76
BATHA REGION								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.73	0.49-1.09	1.33	0.73-2.42

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
GUERA REGION										
Guera Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*14.0[1]*	*10.8-18.0*	*3.2[1]*	*2.0-5.2*	-	MUAC <11.5 cm: 1.9 MUAC <12.5 cm: 8.3
Guera Region	Aug-Sep-11	Residents	-	MoH / joint[5]	*13.3[1]*	*11.2-15.8*	*3.9[1]*	*2.7-5.7*	-	MUAC <12.5 cm: 13.7
HADJER REGION										
Hadjer Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*9.6[1]*	*6.9-13.2*	*1.0[1]*	*0.4-2.2*	-	MUAC <11.5 cm: 2.6 MUAC <12.5 cm: 7.1
Hadjer Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*15.7[1]*	*12.6-19.4*	*3.3[1]*	*2.0-5.5*	-	MUAC <12.5 cm: 8.5
KANEM REGION										
Kanem Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*20.5[1]*	*16.8-24.8*	*4.0[1]*	*2.6-6.1*	-	MUAC <11.5 cm: 4.7 MUAC <12.5 cm: 17.0
Mao District	Jul-Aug-11	Residents	273,430	ACF	19.4 *21.0[1]*	15.6-23.8 *17.3-25.2*	2.2 *4.7[1]*	1.1-4.7 *3.0-7.3*	1.4	MUAC <11 cm: 1.6 MUAC <12.5 cm: 18.3
Nokou District	Jul-Aug-11	Residents	98,916	ACF	27.7 *27.2[1]*	23.4-32.4 *22.8-32.0*	2.2 *6.4[1]*	1.1-4.5 *4.3-9.6*	0.2	MUAC <11 cm: 1.2 MUAC <12.5 cm: 18.9
Kanem Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*20.1[1]*	*15.9-25.0*	*3.0[1]*	*1.9-4.6*	-	MUAC <12.5 cm: 5.1
LAC REGION										
Lac Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*13.5[1]*	*10.1-17.8*	*2.1[1]*	*1.1-4.0*	-	MUAC <11.5 cm: 3.2 MUAC <12.5 cm: 12.6
Lac Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*13.1[1]*	*9.7-17.5*	*2.3[1]*	*1.1-5.0*	-	MUAC <12.5 cm: 5.4

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
GUERA REGION								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.06	0.02-0.24	0.12	0.02-1.89
HADJER REGION								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.22	0.07-0.7	0.44	0.14-1.33
KANEM REGION								
-	-	-	-	-	-	-	-	-
21.7	54.0	-	-	-	0.62	0.40-0.97	1.05	0.50-2.19
8.5	37.0	-	-	-	0.60	0.38-0.95	0.84	0.30-2.31
-	-	-	-	-	0.17	0.07-0.42	0.35	0.11-1.10
LAC REGION								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.48	0.25-0.90	1.05	0.48-2.27

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
MOYEN CHIARI REGION										
Yaroungou Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	4.8 *3.4*[1]	3.4-6.8 *2.1-5.4*	0.8 *0.0*[1]	0.2-2.6 *0*	0	MUAC <11.5 cm: 0.7 MUAC <12.5 cm: 3.6
Moula Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	1.7 *4.3*[1]	0.9-3.3 *2.5-7.2*	0.2 *0.4*[1]	0.0-1.3 *0.1-1.6*	0	MUAC <11.5 cm: 0.2 MUAC <12.5 cm: 1.9
N'DJAMENA REGION										
N'djamena	Aug-Sep-11	Residents	-	MoH/ joint[5]	*14.0*[1]	*11.5-17.0*	*3.1*[1]	*2.0-4.7*	-	MUAC <12.5 cm: 7.9
ORIENTALE LOGONE REGION										
Amboko Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	4.8 *4.3*[1]	3.4-6.8 *2.5-7.2*	0.8 *0.4*[1]	0.2-2.6 *0.1-1.6*	-	MUAC <11.5 cm: 1.2 MUAC <12.5 cm: 3.5
Dosseye Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	12.0 *12.4*[1]	9.5-14.9 *9.7-15.6*	0.8 *1.5*[1]	0.4-1.9 *0.8- 2.8*	-	MUAC <11.5 cm: 1.0 MUAC <12.5 cm: 5.6
Gondje Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	2.3 *2.5*[1]	1.2-4.3 *1.4-4.7*	0.4 *0.2*[1]	0.1-1.7 *0.0-1.6*	-	MUAC <11.5 cm: 0.6 MUAC <12.5 cm: 2.8
OUADDAI REGION										
Bredjing Camp	Sep-Nov-11	Refugees	-	UNHCR	8.7 *11. 5*[1]	5.5 - 13.5 *8.3 - 15.7*	0.8 *1.1*[1]	0.3 - 2.5 *0.3 - 3.5*	-	MUAC <11.5 cm: 0.8 MUAC <12.5 cm: 6.2
Farchana Camp	Sep-Nov-11	Refugees	-	UNHCR	8.3 *9.6*[1]	6.2 - 11.1 *7.2 - 12.6*[1]	0.4 *1.3*[1]	0.1 - 1.6 *0.5 - 3.1*[1]	-	MUAC <11.5 cm: 0.8 MUAC <12.5 cm: 6.7
Ouaddai Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*12.4*[1]	*9.0-16.9*	*1.9*[1]	*1.0-3.6*	-	MUAC <11.5 cm: 3.1 MUAC <12.5 cm: 7.5

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
MOYEN CHIARI REGION								
25.3	87.5	Anemia 6-59 months <11g/dl: 62.9 non pregnant women <12g/dl: 24.5	84.8	-	-	-	-	-
33.9	86.8	Anemia 6-59 months <11g/dl: 61.8 non pregnant women <12g/dl: 35.7	85	-	-	-	-	-
N'DJAMENA REGION								
-	-		-	-	0.30	0.24-0.38	0.53	0.39-0.71
ORIENTALE LOGONE REGION								
34.3	93.4	Anemia 6-59 months <11g/dl: 69.7 non pregnant women <12g/dl: 42.9	86.7	-	-	-	-	-
59.7	96.8	Anemia 6-59 months <11g/dl: 70.1 non pregnant women <12g/dl: 58.5	92.1	-	-	-	-	-
41.9	94.4	Anemia 6-59 months <11g/dl: 73.9 non pregnant women <12g/dl: 32.4	85.9	-	-	-	-	-
OUADDAI REGION								
76.6	97.7	Anemia 6-59 months <11g/dl: 59.7 non pregnant women <12g/dl: 33.2	98.4	-	-	-	-	-
78.4	98.7	Anemia 6-59 months <11g/dl: 42.8 non pregnant women <12g/dl: 25.2	98.5	-	-	-	-	-
-	-	-	-	-	-	-	-	-

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
Ouaddai Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*12.7[1]*	*9.9-16.1*	*3.5[1]*	*2.2-5.5*	-	MUAC <12.5 cm: 4.9
SALAMAT REGION										
Haraze Camp	Aug-Oct-11	Refugees	-	UNHCR/ joint[6]	7.9 *8.4[1]*	6.1-10.3 *6.5-10.9*	0.9 *1.5[1]*	0.4-2.2 *0.8-3.0*	-	MUAC <11.5 cm: 0.9 MUAC <12.5 cm: 3.6
Salamat	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*13.7[1]*	*10.3-18.0*	*2.5[1]*	*1.4-4.4*	-	MUAC <11.5 cm: 2.4 MUAC <12.5 cm: 12.2
Salamat	Aug-Sep-11	Residents	-	MoH/ joint[5]	*15.4[1]*	*13.2-17.9*	*2.8[1]*	*1.8-4.3*	-	MUAC <12.5 cm: 9.1
SILA REGION										
Sila	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*13.9[1]*	*10.4-18.3*	*2.6[1]*	*1.2-5.2*	-	MUAC <11.5 cm: 2.3 MUAC <12.5 cm: 7.1
Sila	Aug-Sep-11	Residents	-	MoH/ joint[5]	*12.8[1]*	*10.5-15.6*	*5.0[1]*	*3.3-7.3*	-	MUAC <12.5 cm: 9.9
WADI FIRA REGION										
Am-naback Camp	Sep-Nov-11	Refugees	-	UNHCR	11.9 *13.8[1]*	8.7-15.9 *10.6-17.9*	0.0 *1.2[1]*	0 *0.5-2.5*	-	MUAC <11.5 cm: 0.2 MUAC <12.5 cm: 5.2
Djabal Camp	Sep-Nov-11	Refugees	-	UNHCR	7.3 *7.7[1]*	5.6-9.6 *5.9-10.0*	0.5 *0.5[1]*	0.2-1.6 *0.2-1.6*	-	MUAC <11.5 cm: 1.4 MUAC <12.5 cm: 4.1
Gaga Camp	Sep-Nov-11	Refugees	-	UNHCR	10.7 *12.7[1]*	8.0-14.3 *9.5 - 16.7*	0.8 *1.9[1]*	0.3 - 2.8 *0.7 - 4.7*	-	MUAC <11.5 cm: 1.9 MUAC <12.5 cm: 10.7

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
-	-	-	-	-	0.36	0.15-0.83	0.19	0.02-1.47
SALAMAT REGION								
26.5	79.3	Anemia 6-59 months <11g/dl: 51.8 non pregnant women <12g/dl: 20.9	93.3	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.08	0.02-0.37	0.21	0.05-0.88
SILA REGION								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.31	0.15-0.63	0.83	0.37-1.86
WADI FIRA REGION								
59.5	95.8	Anemia 6-59 months <11g/dl: 46.8 non pregnant women <12g/dl: 20.9	-	-	-	-	-	-
63.7	94.1	Anemia 6-59 months <11g/dl: 53.9 non pregnant women <12g/dl: 21.9	-	-	-	-	-	-
76.8	98.6	Anemia 6-59 months <11g/dl: 47.8 non pregnant women <12g/dl: 22.7	96.9	-	-	-	-	-

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
Goz Amir Camp	Sep-Nov-11	Refugees	-	UNHCR	7.0 *6.5[1]*	5.5 - 8.8 *4.7 - 8.9*	0.2 *0.7[1]*	0.0 - 1.3 *0.3 - 1.7*	-	MUAC <11.5 cm: 0.7 MUAC <12.5 cm: 2.8
Iridimi Camp	Sep-Nov-11	Refugees	-	UNHCR	13.8 *14.4[1]*	10.9 - 17.2 *11.1 - 18.5*	0.2 *1.3[1]*	0.0 - 1.6 *0.6 - 2.7*	-	MUAC <12.5 cm: 5.2
Kounoungou Camp	Sep-Nov-11	Refugees	-	UNHCR	10.4 *11.2[1]*	7.6 - 13.9 *8.1 - 15.2*	0.8 *1. 2[1]*	0.3 - 1.9 *0.5 - 2.6*	-	MUAC <11.5 cm: 0.4 MUAC <12.5 cm: 4.3
Mile Camp	Sep-Nov-11	Refugees	-	UNHCR	14.2 *16.0[1]*	11.3 - 17.5 *13.2 - 19.2*	0.9 *2.0[1]*	0.3 - 2.4 *1.1 - 3.8*	-	MUAC <11.5 cm: 1.1 MUAC <12.5 cm: 6.6
Oure casson Campi	Sep-Nov-11	Refugees	-	UNHCR	12.6 *13.6[1]*	9.8 - 16.1 *11.0 - 16.8*	0.8 *1.8[1]*	0.3 - 1.9 *0.8 - 3.8*	-	MUAC <11.5 cm: 0.8 MUAC <12.5 cm: 5.2
Touloum Camp	Sep-Nov-11	Refugees	-	UNHCR	11.7 *12.3[1]*	9.4 - 14.3 *9.8 - 15.3*	0.2 *2.3[1]*	0.0 - 1.6 *1.3 - 4.1*	-	MUAC <11.5 cm: 0.2 MUAC <12.5 cm: 4.1
Treguin Camp	Sep-Nov-11	Refugees	-	UNHCR	9.0 *9.4[1]*	6.5 - 12.3 *6.9 - 12.6*	0.2 *2.2[1]*	0.0 - 1.5 *1.3 - 3.8*	-	MUAC <11.5 cm: 0.6 MUAC <12.5 cm: 6.7
Wadi Fira Region	Feb-Mar-11	Residents	-	CNNTA/ joint[7]	*15.3[1]*	*11.8-19.6*	*3.5[1]*	*2.0-6.1*	-	MUAC <11.5 cm: 1.7 MUAC <12.5 cm: 6.9
Wadi Fira Region	Aug-Sep-11	Residents	-	MoH/ joint[5]	*18.0[1]*	*13.9-23.0*	*4.6[1]*	*2.7-7.9*	-	MUAC <12.5 cm: 5.4

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
29.6	71.9	Anemia 6-59 months <11g/dl: 54.2 non pregnant women <12g/dl: 20.2	82.7	-	-	-	-	-
55.5	97.3	Anemia 6-59 months <11g/dl: 58.1 non pregnant women <12g/dl: 32.2	99.2	-	-	-	-	-
61.7	93.8	Anemia 6-59 months <11g/dl: 44.7 non pregnant women <12g/dl: 21.4	97.1	-	-	-	-	-
47.1	95.2	Anemia 6-59 months <11g/dl: 42.5 non pregnant women <12g/dl: 26.6	98.2	-	-	-	-	-
59.4	96.3	Anemia 6-59 months <11g/dl: 63.6 non pregnant women <12g/dl: 24.3	98.6	-	-	-	-	-
62.4	97.3	Anemia 6-59 months <11g/dl: 48.8 non pregnant women <12g/dl: 26.4	98.7	-	-	-	-	-
90.6	97.6	Anemia 6-59 months <11g/dl: 45.3 non pregnant women <12g/dl: 22.6	90.4	-	-	-	-	-
-	-	-	-	-	-	-	-	-
-	-	-	-	-	0.37	0.14-1.01	0.44	0.15-1.22

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
DEMOCRATIC REPUBLIC OF THE CONGO										
BAS CONGO PROVINCE										
Zone de Santé de Nselo	Feb-11	Residents	82,840	ACF	13.2 *13.1[1]*	10.4-16.7 *10.4-16.4*	2.1 *4.0[1]*	1.3-3.3 *3.0-5.4*	0.4	MUAC <11 cm: 0.4 MUAC <12.5 cm: 14.4
KASAI OCCIDENTAL PROVINCE										
Zone de Santé de Kamonia	Feb-11	Residents	339,065	ACF	11.0 *10.6[1]*	9.3-13.1 *8.8-12.6*	0.8 *2.6[1]*	0.4-1.5 *1.8-3.9*	0.5	MUAC <11 cm: 0.2 MUAC <12.5 cm: 13.0
KATANGA PROVINCE										
Zone de Santé de Lualaba	Nov-10	Residents	88,101	ACF	2.4 *2.2[1]*	1.4-4.0 *1.1-4.1*	0.4 *0.4[1]*	0.0-1.2 *0.1-1.2*	0.4	MUAC <11 cm: 0.5 MUAC <12.0 cm: 1.6
ORIENTAL PROVINCE										
Zone de Santé d' Ango	Mar-11	Residents	36,777	ACF	9.2 *10.3[1]*	7.4-11.3 *8.6-12.3*	0.8 *2.4[1]*	0.4-1.6 *1.7-3.4*	-	-
NORTH KIVU PROVINCE										
Zone de Santé de Kirotshe	Mar-11	Residents	337,558	ACF	2.6 *2.8[1]*	1.7-4.0 *1.9-4.2*	0.2 *0.2[1]*	0.0-0.7 *0.0-0.7*	0.2	MUAC <11 cm: 0 MUAC <12.5 cm: 3.6
RWANDA										
EASTERN PROVINCE										
8 Health Zones, Kirehe, Ngoma Districts	Feb-11	Residents	-	Concern	*2.2[1]*	*0.8-3.6*	*0.4[1]*	*0.0-0.8*	-	MUAC <11 cm: 0.3 MUAC <12.5 cm: 1.7
SOUTHERN PROVINCE										
5 Health Zones, Gisagara District	Dec-10	Residents	-	Concern	*2.2[1]*	*1.1-3.4*	*0.3[1]*	*0.1-0.7*	-	MUAC <11 cm: 0 MUAC <12.5 cm: 4.5
14 Health Zones, Nyamagabe, Nyaruguru Districts	Nov-10	Residents	-	Concern	*1.4[1]*	*0.5-2.3*	*0.3[1]*	*0.0-0.5*	-	MUAC <12.5 cm: 3.8

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
DEMOCRATIC REPUBLIC OF CONGO								
BAS CONGO PROVINCE								
31.6	62.0	-	92.0	-	0.74	0.35-1.53	1.86	0.82-4.19
KASAI OCCIDENTAL PROVINCE								
98.2	62.2	-	97.8	-	1.08	0.53-2.20	1.93	0.99-3.71
KATANGA PROVINCE								
0.9	83.6	-	85.4	-	0.36	0.19-0.67	0.26	0.06-1.09
ORIENTAL PROVINCE								
6.3	78.9	-	87.2	-	0.39	0.21-0.71	0.49	0.18-1.27
NORTH KIVU PROVINCE								
0.7	95.4	-	95.6	-	0.43	0.26-0.71	0.58	0.25-1.31
RWANDA								
REGION EASTERN PROVINCE								
54.0	96.0	-	-	-	-	-	-	-
SOUTHERN PROVINCE								
70.0	96.0	-	-	-	-	-	-	-
82.0	97.0	-	-	-	-	-	-	-

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
ASIA										
AFGHANISTAN										
KUNDI PROVINCE										
Ashtarlay District	Oct-10	Residents	3,655	ACF	3.4 *3.2[1]*	2.0-4.7 *1.9-4.5*	0.1 *0.3[1]*	0.0-0.4 *0.0-0.6*	0	MUAC <11.5 cm: 1.5 MUAC <12.5 cm: 6.5
PAKISTAN										
KHYBER PAKHTUNKHWA PROVINCE										
North Khyber Pakhtunkhwa Province	Dec-10	Residents, Returnees, IDPs	-	ACF/ joint[8]	*6.3[1]*	*4.3-9.1*	*1.3[1]*	*0.7-2.5*	0	MUAC <11.5 cm: 2.8 MUAC <12.5 cm: 9.9
South Khyber Pakhtunkhwa Province	Dec-10	Residents, Returnees, IDPs	-	ACF/ joint[8]	*8.6[1]*	*5.8-12.5*	*0.6[1]*	*0.2-1.8*	0	MUAC <11.5 cm: 3.4 MUAC <12.5 cm: 11.8
North and South Khyber Pakhtunkhwa Province	Dec-10	Residents, Returnees, IDPs	-	ACF/ joint[8]	*7.3[1]*	*5.6-9.5*	*1.0[1]*	*0.5-1.7*	0.1	MUAC <11.5 cm: 3.0 MUAC <12.5 cm: 10.7
SINDH PROVINCE										
Several Camps and Districts, North Sindh	Oct-Nov-10	Residents/ IDPs	1,595,998	MoH/ joint[9]	*22.9[1]*	*19.0-27.4*	*6.1[1]*	*3.9-9.3*	0	MUAC <11.5 cm: 5.4 MUAC <12.5 cm: 18.7
Several Camps and Districts, South Sindh	Oct-Nov-10	Residents/ IDPs	2,654,060	MoH/ joint[9]	*21.2[1]*	*17.3-25.6*	*2.9[1]*	*1.7-5.1*	0	MUAC <11.5 cm: 2.9 MUAC <12.5 cm: 12.5
Mirpur Batho-ro Thaluka, Thatta District	Dec-10	Residents	197,398	ACF	17.8 *19.6[1]*	14.9-21.0 *16.4-23.1*	1.5 *2.4[1]*	0.7-3.0 *1.3-4.3*	0	MUAC <11.5 cm: 3.9 MUAC <12.5 cm: 17.2

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
ASIA								
AFGHANISTAN								
KUNDI PROVINCE								
43.9	67.6	-	89.0	-	0.37	0.23-0.51	0.68	0.28-1.07
PAKISTAN								
KHYBER PAKHTUNKHWA PROVINCE								
-	71.4	-	68.8	-	-	-	-	-
-	50.4	-	78.4	-	-	-	-	-
-	61.9	-	72.9	-	-	-	-	-
SINDH PROVINCE								
8.9	56.3	-	26.1	MUAC <21cm Pregnant/lactating women: 13.0	-	-	-	-
9.5	60.0	-	80.4	MUAC <21cm Pregnant/lactating women: 10.0	-	-	-	-
5.6	43.6	-	22.5	-	0.44	0.29-0.68	0.80	0.36-1.77

Survey Area	Date	Population	Estimated Population Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI)§		Severe Acute Malnutrition** (%) (95% CI)§		Oe-dema (%)	MUAC# (%)
PHILIPPINES **MINDANAO ISLAND** Region XII										
Arakan Municipality, North Cotabato Province	Oct-Dec-11	Residents	42,430	ACH-S	5.9 *5.9[1]*	3.9-9.0 *3.9-9.0*	0.0 *0.9[1]*	0.0-1.1 *0.3-2.6*	0	MUAC <11.5 cm: 0.3 MUAC <13.5 cm: 9.1
President Roxas Municipality, North Cotabato Province	Dec-11	Residents	44,668	ACH-S	10.6 *10.3[1]*	8.4-13.3 *8.1-13.1*	1.6 *2.0[1]*	1.0-2.7 *1.2-3.2*	0	MUAC <11.5 cm: 0.2 MUAC <13.5 cm: 7.2
ARMM Region										
Kapatagan Municipality, Lanao Province	Dec-11	Residents	19,713	ACH-S	5.9 *6.9[1]*	4.4-7.9 *5.2-9.0*	0.4 *1.0[1]*	0.1-1.1 *0.5-2.0*	0	MUAC <11.5 cm: 0 MUAC <13.5 cm: 8.4
CENTRAL AMERICA **GUATEMALA**										
Dry Corridor	Nov-10	Residents	-	ACF-S	0.4	0.1-1.5	0.0	0	0	MUAC <11.5 cm: 0 MUAC <12.5 cm: 0.2
National	Nov-11	Residents	569,446	MoH	-	-	-	-	-	MUAC <11.5 cm: 0.2 MUAC <12.5 cm: 1.2

*Acute malnutrition (children aged 6-59 months): weight-height < - 2 Z-scores and/or oedema (NCHS/ *WHO* references)
** Severe acute malnutrition (children aged 6-59 months): weight-height < -3 Z-scores and/or oedema (NCHS/ *WHO* references)
§ 95% Confidence Interval; not mentioned if not available from the survey report
# Mid Upper Arm Circumference
[1] According to WHO 2006 Child Growth Standards (http://www.who.int/childgrowth/en/)

[2] Joint = UNHCR in collaboration with ENN, MSF, ADEO, WFP and UNICEF
[3] Joint = FSNAU Somalia in collaboration with FAO, EC, SIDA, UKAID, DFID, Italian Cooperation, SDC, UNICEF, UNHCR and CHF, 11/11
[4] Joint = FSNAU in collaboration with FEWSNET, FAO, UNHCR, UNICEF, USAID, SIDA, UKAID, European Commission, Swiss Agency for Development and Cooperation, Cooperazione Italiana allo Sviluppo, Common Humanitarian Fund Somalia, 01/12
[5] Joint = MoH in collaboration with WFP, UNICEF, ACF, French Red Cross and EC
[6] Joint = UNHCR in collaboration with WFP
[7] Joint = CNNTA in collaboration with UNICEF, MoH
[8] Joint = MoH in collaboration with UNICEF, ACF-C, CDC, WFP and WHO
[9] Joint = MoH in collaboration with UNICEF, ACF-C

Continued...

Measles immunisation coverage (%)		Assessment of micro-nutrient deficiencies	Vitamin A distribution coverage within the past 6 months	Women's anthropometric status	Crude Mortality (/10,000/day) (95% CI)§		Under 5 Mortality (/10,000/day) (95% CI)§	
Proved by card	Card + history	(%)	(%)	(%)				
PHILIPPINES MINDANAO ISLAND Region XII								
46.0	87.4	-	80.2	-	0.12	0.06-0.26	0.0	0.00-0.54
47.3	87.6	-	70.7	-	0.15	0.09-0.25	0.21	0.07-0.66
ARMM Region								
26.1	61.1	-	46.0	-	0.27	0.15-0.51	0.45	0.14-1.52
CENTRAL AMERICA GUATEMALA								
-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-

Survey methodology

GREATER HORN of AFRICA

Ethiopia

EAST BELESSA WOREDA, NORTH GONDER ZONE, AMHARA REGION
The nutrition and mortality survey was conducted by Goal in May 2011, using a two-stage 41x16 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 626 children aged 6 to 59 months were evaluated. Food security situation, health, prevalence of measles and BCG vaccination (9-59 months) and vitamin A supplementation coverage (6-59 months) were investigated, as well as programs' coverage (PSNP and GFD).

HABRU WOREDA, NORTH WOLLO ZONE, AMHARA REGION
The nutrition and mortality survey was conducted by Concern Worldwide in February 2011, using a two-stage 60x26 cluster design. The sample size was generated using ENA for SMART software, November 2008 version. A total of 716 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP, Risk Financing Programme, TFP and SFP) was also investigated.

DELANTA WOREDA, SOUTH WOLLO ZONE, AMHARA REGION
The nutrition and mortality survey was conducted by Concern Worldwide in April 2011, using a two-stage 53x24 cluster design. The sample size was generated using ENA for SMART software, November 2008 version. A total of 628 children aged 6 to 59 months were evaluated.

ABERGELE WOREDA, WAGHEMRA ZONE, AMHARA REGION
The nutrition and mortality survey was conducted by Goal in January 2011, using a two-stage 34x18 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 542 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

SEKOTA WOREDA, WAGHEMRA ZONE, AMHARA REGION
The nutrition and mortality survey was conducted by Goal in April 2011, using a two-stage 42x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 609 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

DIRE DAWA COUNCIL, DIRE DAWA ZONE, DIRE DAWA REGION
The nutrition and mortality survey was conducted by Goal in May 2011, using a two-stage 34x15 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 528 children aged 6 to 59 months were evaluated. Programs' coverage (GFD, PSNP, CMAM) was also investigated.

MEDA WELABU WOREDA, BALE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Concern Worldwide in May 2011, using a two-stage 40x18 cluster design. The sample size was generated using ENA for SMART software, November 2008 version. A total of 691 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and TFP) was also investigated.

GELANA WOREDA, BORENA ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in January 2011, using a two-stage 34x18 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 577 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

BULEHORA WOREDA, BORENA ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in March 2011, using a two-stage 42x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 756 children aged 6 to 59 months were evaluated. Program coverage (GFD) was also investigated.

KURFACHELE WOREDA, EAST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in February 2011, using a two-stage 36x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 506 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

MIDEGA TOLA WOREDA, EAST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in February 2011, using a two-stage 36x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 536 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

DEDER WOREDA, EAST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by

Goal in October 2011, using a two-stage 35x18 cluster design. The sample size was generated using ENA (beta) for SMART software, August 2011 version. A total of 641 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP, EGS, EOS and CMAM) was also investigated.

LIBEN WOREDA, GUJI ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in June 2011, using a two-stage 42x18 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 869 children aged 6 to 59 months were evaluated. Programs' coverage (EOS and CMAM) was also investigated.

BOKE WOREDA, WEST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in January 2011, using a two-stage 35x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 650 children aged 6 to 59 months were evaluated.

HABROO WOREDA, WEST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in March 2011, using a two-stage 35x13 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 460 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

ODA BULTUM WOREDA, WEST HARARGHE ZONE, OROMIYA REGION
The nutrition and mortality survey was conducted by Goal in April 2011, using a two-stage 35x17 cluster design. The sample size was generated using ENA (beta) for SMART software, November 2008 version. A total of 558 children aged 6 to 59 months were evaluated. Programs' coverage (PSNP and GFD) was also investigated.

Kenya

DAGAHALEY CAMP, DAGAHALEY CAMP (OUTSKIRTS), HAGADERA CAMP, IFO CAMP, NORTH EASTERN PROVINCE
The nutrition and mortality joint survey was conducted by UNHCR, ENN, MSF, ADEO, WFP and UNICEF in November 2011. A two-stage cluster survey was conducted. A total of 35 clusters were randomly selected in the three main camps using probability proportional to size (PPS). For the outskirt survey, 30 clusters were sampled. Second stage sampling was performed using an adapted version of the standard EPI (spin the pen) method to select the households. The sample size for both anthropometry and mortality surveys was generated using ENA for SMART software, June 2011 version. The total of children (aged 6 to 59 months) evaluated were 2 328: 595 in Dagahaley camp, 568 in Dagahaley camp (outskirts), 604 in Hagadera Camp, and 561 in Ifo camp. Infant and young children feeding practices, prevalence of measles vaccination, Nutributter® consumption and vitamin A supplementation coverage (9-23 months) were also investigated, as well as programs' coverage (OTP, SFP, ANC for pregnant women).

Somalia

AGRO-PASTORAL, PASTORAL, RIVERINE LIVELIHOOD ZONES, BAY, GEDO, JUBA, LOWER SHABELLE, MIDDLE SHABELLE, MOGADISHU REGIONS
The nutrition and mortality joint survey included in the early warning system published by FSNAU, FAO, EC, SIDA, UKAID, DFID, Italian Cooperation, SDC, UNICEF, UNHCR and CHF in November 2011, followed the SMART methodology: Two-stage cluster surveys, generation of sample size for both anthropometry and mortality surveys using ENA for SMART software, version 2.0.

North Sudan

KURMUK TOWN, BLUE NILE STATE
The nutrition and mortality survey was conducted by Goal in February 2011, using a two-stage 30x18 cluster design. The sample size was generated using SMART software, December 2010 version. A total of 507 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination and vitamin A supplementation coverage (9-23 months) were investigated, as well as water sources, water accessibility, sanitation and hygiene practices.

KUTUM TOWN, NORTH DARFUR STATE
The nutrition and mortality survey was conducted by Goal in May 2011, using a two-stage 30x23 cluster design. The sample size was generated using SMART software, March 2011 version. A total of 484 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination and vitamin A supplementation coverage (9-23 months) was investigated, as well as child feeding practices, water sources, water accessibility, sanitation and hygiene practices.

South Sudan

TWIC COUNTY, BAHR EL GHAZAL REGION
The multi-indicator nutrition, health, wash, livelihoods and mortality cluster survey was conducted by Goal in August 2011, using a two-stage 30x20 cluster design. The sample size was generated using SMART software, March 2011 version. A total of 445 children aged 6 to 59 months were evaluated.

Survey methodology

Child feeding practices, information on water sources, water accessibility, sanitation and hygiene practices, were investigated, as well as prevalence of measles vaccination (9-23 months) and vitamin A supplementation coverage (6-59 months).

ABYEI COUNTY, NUBA MOUNTAINS REGION
The multi-indicator cluster survey was conducted by Goal in June 2011, using a two-stage 30x18 cluster design. The sample size was generated using ENA for SMART software, October 2010 version. A total of 563 children aged 6 to 59 months were evaluated. Prevalence of measles and BCG, Pentavelant 3, OPV3 vaccination (9-59 months) and vitamin A supplementation coverage (6-59 months) were investigated, as well as household water and sanitation, and infant and young child feeding practices among children less than 24 months.

CENTRAL AFRICA

Chad

REGION DU BAHR EL GHAZEL
The nutrition and mortality survey was conducted by ACF in March 2011, using a two-stage 46x16 cluster design. The sample size for both anthropometry and mortality surveys was generated using ENA (Beta) for SMART software. A total of 757 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (children 9-59 months) coverage was also investigated.

ZONE DU GRAND SOULIAT DEPARTMENT BAHR EL GHAZAL NORD, BAHR EL GHAZEL REGION
The nutrition and mortality survey was conducted by ACF in June 2011, using a two- stage cluster design. For the first stage, random sampling was based on functional pastoral wells in 3 sub prefectures: Mandjoura, Salal and Dourougoulinga. A total of 863 children aged 6 to 59 months were evaluated in 183 camps around 63 pastoral wells. Prevalence of measles vaccination (9-59 months) coverage was also investigated.

BREDJING, TREGUIN, FARCHANA, GAGA, KOUNOUNGOU, MILE IRIDIMI, TOULOUM, AM-NABACK, OURE-CASSONI, GOZ-AMIR AND DJABAL REFUGEE CAMPS, EASTERN CHAD
The joint nutrition and mortality survey was conducted by UNHCR in November 2011, using a two-stage cluster design. Clusters were 35 for each camp. The number of households is between 15 and 18. The sample size for anthropometry surveys was generated using ENA for SMART software. A total of 6 064 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-23 months), haemoglobin level measurements (6-59 months and women 15-49 years) and vitamin A supplementation coverage (6-59 months) were also investigated.

DOSSEYE, HARAZE, AMBOKO, YAROUNGOU AND GONDJE, MOULA REFUGEE CAMPS, IN REGIONS OF Ouaddai, Sila, Wadi Fira and Ennedi, IN SOUTHERN CHAD
The nutrition and mortality joint survey was conducted by UNHCR and WFP on October 2011, using a two-stage cluster design. Clusters are between 30 and 35. The sample size was generated using ENA for SMART software, version Delta 2011. A total of 3 405 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-23 months), haemoglobin level measurements (6-59 months and women 15-49 years) and vitamin A supplementation coverage (6-59 months) were also investigated.

LAC, KANEM, HADJER LAMIS, BATHA, GUERA, WADI FIRA, OUADDAI, SILA, SALAMAT REGIONS, BANDE SAHÉLIENNE
The joint survey was conducted by CNNTA, UNICEF, WFP and the French Red Cross, in March 2011, using the SMART methodology two-stage cluster design. Nine regions in Bande Sahélienne were surveyed. The number of clusters per region range between 31 and 33. The sample size was generated using ENA for SMART software. A total of 4 682 children aged 6 to 59 months were evaluated.

LAC, KANEM, HADJER LAMIS, BATHA, BAHR EL GHAZEL, GUERA, WADI FIRA, OUADDAI, SILA, SALAMAT, N'DJAMENA REGIONS, BANDE SAHÉLIENNE
The joint nutrition and mortality survey was conducted by MoH, UNICEF, ACF, the French Red Cross, WFP in September 2011, using a two-stage cluster design. Clusters were between 30 and 50. The number of households is between 18 and 25. Eleven regions in Chad (Bande Sahélienne) were surveyed. The sample size was generated using ENA for SMART software. A total of 7 436 children aged 6 to 59 months were evaluated.

KANEM DISTRICT, NOKU REGION
The nutrition and mortality survey was conducted by ACF in August 2010, using a two-stage 37x15 cluster design. The sample size was generated using ENA for SMART software. A total of 408 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months) coverage was also investigated.

MAO DISTRICT, NOKU REGION
The nutrition and mortality survey was conducted by ACF in August 2010, using a two-stage 50x12 cluster design. The sample size for both anthropometry and mortality surveys was generated using ENA for SMART software. A total of 578 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months) coverage was also investigated.

Democratic Republic of the Congo

ZONE DE SANTÉ DE NSELO, PROVINCE DU BAS CONGO

The nutrition and mortality survey was conducted by ACF in February 2011, using a two-stage 31x30 cluster design. The sample size was generated using ENA for SMART software. A total of 951 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months), vitamin A supplementation (6-59 months) coverage was investigated.

ZONE DE SANTÉ DE KAMONIA, PROVINCE DU KASAI OCCIDENTAL

The nutrition and mortality survey was conducted by ACF in February 2011, using a two-stage 31x30 cluster design. The sample size was generated using ENA for SMART software. A total of 944 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months), vitamin A supplementation (6-59 months) coverage was investigated.

ZONE DE SANTÉ DE LUALABA, PROVINCE DE KATANAGA

The nutrition and mortality survey was conducted by ACF in November 2010, using a two-stage 28x28 cluster design. The sample size was generated using ENA for SMART software. A total of 784 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months), vitamin A supplementation (6-59 months) coverage was investigated.

ZONE DE SANTÉ D'ANGO, PROVINCE ORIENTALE.

The nutrition and mortality survey was conducted by ACF in March 2011, using a two-stage 30x28 cluster design. The sample size was generated using SMART software. A total of 856 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months), vitamin A supplementation and deworming programs' coverage was also investigated.

ZONE DE SANTÉ DE KIROTSHE, PROVINCE DU NORD KIVU

The nutrition and mortality survey was conducted by ACF in March 2011, using a two-stage 45x26 cluster design. The sample size was generated using ENA for SMART software. A total of 1 137 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months), vitamin A supplementation (6-59 months) coverage was also investigated.

Rwanda

8 HEALTH ZONES KIREHE AND NGOMA DISTRICTS, REGION EASTERN PROVINCE

The nutrition joint survey was conducted by Concern Worldwide in April 2011, using a two-stage 35x22 cluster design. The sample size was generated using ENA for SMART software. A total of 776 children aged 6 to 59 months were evaluated. Child feeding practices, health, prevalence of measles vaccination (9-59 months), health insurance and nutrition programs' coverage were investigated.

5 HEALTH ZONES GISAGARA DISTRICT, SOUTHERN PROVINCE

The nutrition joint survey was conducted by Concern Worldwide in April 2011, using a two-stage 35x17 cluster design. The sample size was generated using ENA for SMART software. A total of 625 children aged 6 to 59 months were evaluated. Child feeding practices, health, prevalence of measles vaccination (9-59 months), health insurance and nutrition programs' coverage were investigated.

14 HEALTH ZONES, NYAMAGABE AND NYARUGURU DISTRICTS, SOUTHERN PROVINCE

The nutrition joint survey was conducted by Concern Worldwide in April 2011, using a two-stage 35x22 cluster design. The sample size was generated using ENA (beta) for SMART software. A total of 789 children aged 6 to 59 months were evaluated. Child feeding practices, health, prevalence of measles vaccination (9-59 months), health insurance and nutrition programs' coverage were investigated.

ASIA

Afghanistan

ASHTARLAY DISTRICT, KUNDI PROVINCE

The nutrition and mortality survey was conducted by ACF in October 2010, using a multistage cluster design. A total of 40 villages, corresponding to 40 clusters were included. The sample size for both anthropometry and mortality surveys was generated using ENA software, October 2007 version. A total of 806 children aged 6 to 59 months were evaluated. Consumption of the different types of food for children (6-59 months), prevalence of measles & BCG vaccination (9-59 months), iron deficiency, vitamin A supplementation coverage (6-59 months) were also investigated.

Pakistan

KHYBER PAKHTUNKHWA PROVINCE

The flood affected nutrition survey was conducted jointly by the MOH, UNICEF, ACF-C, CDC, WFP and WHO in December 2010, using a two-stage 34x12 cluster design. The sample size was generated using ENA for SMART software. A total of 1 138 children aged 6 to 59 months were evaluated. Prevalence of measles vaccination (9-59 months) and vitamin A supplementation coverage (6-59 months) were investigated, as well as breast feeding practices, water and sanitation.

Survey methodology

SEVERAL CAMPS AND DISTRICTS, NORTH SINDH, SINDH PROVINCE
The flood affected nutrition survey was conducted jointly by the MoH, ACF-C, UNICEF and CDC in November 2010, using a two-stage 35x12 cluster design. The sample size for was generated using ENA for SMART software, November 2010 version. A total of 446 children aged 6 to 59 months were evaluated. Food security situation, prevalence of measles vaccination (9-59 months) and vitamin A supplementation coverage (6-59 months), and nutrition programs' coverage were investigated.

SEVERAL CAMPS AND DISTRICTS, SOUTH SINDH, SINDH PROVINCE
The flood affected nutrition survey was conducted jointly by the MoH, ACF-C, UNICEF and CDC in November 2010, using a two-stage 35x12 cluster design. The sample size was generated using ENA for SMART software, November 2010 version. A total of 391 children aged 6 to 59 months were evaluated. Food security situation, prevalence of measles vaccination (9-59 months), vitamin A supplementation coverage (6-59 months), and nutrition programs' coverage were also investigated.

MIRPUR BATHORO THALUKA, THATTA DISTRICT, SINDH PROVINCE
The nutrition and mortality survey was conducted by ACF in December 2010, using a two-stage 41x15 cluster design. The sample size was generated using ENA for SMART software. A total of 670 children aged 6 to 59 months were evaluated. Food security situation, prevalence of measles vaccination (9-59 months) and vitamin A supplementation coverage (6-59 months) were also investigated.

Philippines

ARAKAN MUNICIPALITY, MINDANAO ISLAND, NORTH COTABATO PROVINCE, REGION XII, MINDANAO ISLAND
The nutrition and mortality survey was conducted by ACF in September 2010, using a simple random sampling design. The sample size was generated using ENA (beta) for SMART software, September 2010 version. A total of 354 children aged 6 to 59 months were evaluated. Food security situation, health, prevalence of measles and BCG vaccination (9-59 months), and vitamin A supplementation coverage (6-59 months) were investigated.

PRESIDENT ROXAS MUNICIPALITY, NORTH COTABATO PROVINCE, REGION XII, MINDANAO ISLAND
The nutrition and mortality survey was conducted by ACF in September 2010. A simple random sampling survey was conducted. A total of 1 707 households (398 children) were visited. The sample size was generated using ENA (beta) for SMART software, September 2010 version. Food security situation, health, prevalence of measles and BCG vaccination (9-59 months), and vitamin A supplementation coverage (6-59 months) were investigated.

KAPATAGAN MUNICIPALITY, LANAO PROVINCE, ARMM REGION, MINDANAO ISLAND
The nutrition and mortality survey was conducted by ACF in September 2010, using a simple random sampling design. The sample size was generated using ENA (beta) for SMART software, September 2010 version. A total of 560 children aged 6 to 59 months were evaluated. Food security situation, health, prevalence of measles and BCG vaccination (9-59 months), and vitamin A supplementation coverage (6-59 months) were investigated.

CENTRAL AFRICA

Guatemala

CHIQUIMULA, JALAPA, ZACAPA, EL PROGRESO AND BAJA VERAPAZ DEPARTMENTS, DRY CORRIDOR, GUATEMALA
The nutrition and mortality joint survey was conducted by ACF-S in November 2010, using a two-stage 43x15 cluster design. The sample size was generated using ENA for SMART software. A total of 492 children aged 6 to 59 months were evaluated.

NATIONAL
The Ministry of Health and partners conducted a national joint nutrition survey in November 2011. Exhaustive sampling was done. Communities, in 29 health area regions, were prioritized according to the following criteria: high prevalence of acute malnutrition, respiratory infections, extreme poverty, limited access to health services and high vulnerability to natural disasters. MUAC was taken from 367 280 children aged 6-59 months.

Abbreviations and acronyms

ACF	Action Contre la Faim
ACF-C	Action Contra la Faim-Canada
ACH-S	Acción contra el Hambre - Spain
CI	Confidence Interval
CILSS	Comité permanent Inter-états de Lutte contre la Sécheresse dans le Sahel
CMAM	Community Based Management of Acute Malnutrition
CNNTA	National Nutrition and Food Technology Centre
DFID	Department for International Development
EC	European Comission
ECHO	Humanitarian Aid department of the European Commission
FAO	Food and Agriculture Organization
FEWS NET	Famine Early Warning System Network
FSNAU	Food Security and Nutrition Analysis Unit
FSNWG	Food Security & Nutrition Working Good / Groupe de Travail Re gional Sécurité Alimentaire et Nutrition
GAM	Global Acute Malnutrition
GIEWS	Global Information and Early Warning System on Food and Agri culture
IASC	Inter-Agency Standing Committee / Comité Permanent Inter-Agences
IDP	Internally Displaced Person
IFRC	International Federation of Red Cross and Red Crescent Societies
INRAN	National Institute for Research on Food and Nutrition (Italy)
MAM	Moderate Acute Malnutrition
MoH	Ministry of Health
MUAC	Mid-upper Arm Circumference
OCHA	Office for the Coordination of Humanitarian Assistance
OTP	Outpatient Therapeutic Programme
RPCA	Réunion du réseau de prévention des crises alimentaires
SAM	Severe Acute Malnutrition
SFP	Supplementary Feeding Programme
SMART	Standardized Monitoring & Assessment of Relief and Transitions
TFP	Targeted Feeding Programme
U5MR	Under-five Mortality Rate
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization
WHZ	Weight for Height Z score

References

Greater Horn of Africa

FSNAU and FEWS	07/11	Somalia Decadal Food security and Nutrition monito ring
FSNAU and FEWS	03/02/12	Famine ends, yet 31% of the population remain in crisis
FSNAU and FEWS	17/02/12	Food Security and nutrition. Special brief -Post Deyr analysis
OCHA	07/11	Humanitarian requirements for the Horn of Africa 2011
OCHA	11/12/11	Consolidated appeals 2012, overview
SC-UK and OXFAM	18/01/12	A Dangerous Delay. The cost of late response to early warnings in the 2011 drought in the Horn of Africa.
USAID	15/12/11	Fact sheet#11 Horn of Africa - drought
VERVERS M.	2011	The East African Food Crisis: Did Regional Early War ning Systems Function? The Journal of Nutrition.

Djibouti

GIEWS	10/01/12	Country brief Djibouti
OCHA	12/11	Overview of the 2012 Consolidated Appeals and similar concerted humanitarian action plans.

Ethiopia

Concern	02/11	Nutrition and Mortality Survey. Preliminary Report of Habru Woreda, North Wollo Zone, Amhara Region
Concern	04/11	Nutrition and Mortality Survey. Preliminary Report of Delanta Woreda South Wollo Zone, Amhara Region
Concern	05/11	Nutrition and Mortality Survey. Preliminary Report of Meda Welabu Woreda, Bale Zone, Oromia Region
GOAL	01/11	Standard Nutrition and Mortality Survey in Abergele Woreda of Waghemra Zona, Amhara Region
GOAL	01/11	Preliminary report on Nutrition Survey in Gelana Wore da of Borena Zone, Oromiya Region
GOAL Woreda	01/11	Standard Nutrition and Mortality Survey in Boke of West Hararghe Zone Oromiya Region
GOAL	02/11	Standard Nutrition and Mortality Survey in Kurfachele Woreda of East Harareghe Zone, Oromiya Region
GOAL in	02/11	Preliminary Report on Nutrition and Mortality Survey Midega Tola Woreda of East Hararge Zone, Oromiya
GOAL	03/11	Standard Nutrition and Mortality Survey in Habroo Woreda of West Harareghe Zone, Oromiya Region
GOAL	03/11	Preliminary Report Nutrition and Mortality Survey in Bulehora Woreda of Borena Zone, Oromiya Region
GOAL	04/11	Nutrition and Mortality Survey Report Oda Bultum Woreda of West Hararghe Zone, Oromiya Region
GOAL	04/11	Preliminary Report Nutrition and Mortality Survey in Sekota Woreda of Waghemra Zone, Amhara Region
GOAL	05/11	Nutrition and Mortality Survey Report East Belessa Woreda of North Gonder Zone, Amhara Region
GOAL	05/11	Final Report On Nutrition & Mortality Survey in Dire Dawa Administrative Council
GOAL	06/11	Final Report Nutrition and Mortality Survey in Liben Woreda of Guji Zone, Oromiya Region
GOAL	10/11	Final Report Nutrition and Mortality Survey in Deder Woreda
IASC GNC	22/07/11	Call for Action Horn of Africa Food Security and Nutri tion Crisis

UNHCR	12/11	Health and Nutrition Survey Report. Kobe and Hilaweyn Refugee Camps, Dollo Ado Woreda, Somali Regional State of Ethiopia. October/November 2011.

Kenya

UNHCR/joint[2]	11/11	Nutrition surveys. Dadaab refugee camps. Hagadera, Ifo, and Dagahaley camps & Dagahaley outskirts. Surveys conducted: August / September 2011.

Somalia

FEWS	01/12	Somalia food security outlook. January to June 2012.
FSNAU and FEWS	19/07/11	Famine in Southern Somalia. Evidence for a declaration.
FSNAU/FEWS	25/07/11	Somalia decadal food security and nutrition monitoring
FNAU/joint[3]	11/11	Nutrition Update. September-November 2011. Food Security and Nutrition Analysis Unit-Somalia.
FSNAU/joint[4]	01/12	Post Deyr 11/12 presentation. Integrated Nutrition Situation Analysis. Gedo, Bay & Bakool Regions.
FSNAU and FEWS NET	03/02/12	Technical release: Famine ends, yet 31% of the popula tion remain in crisis.
FSNAU	17/02/12	Food security and nutrition. Special brief - Post deyr 2011/12 Analysis.
IASC GNC	22/07/11	Call for Action Horn of Africa Food Security and Nutri tion Crisis.
UNHCR	20/02/12	Refugees in the Horn of Africa: Somali displacement crisis: http://data.unhcr.org/horn-of-africa/regional.php

North Sudan

GOAL	02/11	Multi-Indicator, Nutrition, Health, Wash and Mortality Cluster Survey. Kurmuk Locality, Blue Nile State
GOAL	05/11	Multiple Indicator Cluster Survey (MICS), Kutum North Sudan

South Sudan

GOAL	07/11	Multi Indicator Cluster Survey. December 2010. Abyei County. North Sudan
GOAL	08/11	Multi-Indicator Nutrition, Health, Wash, Livelihoods and Mortality Cluster Survey. Twic County, Warrap State, South Sudan. Survey date: 21-25 March 2011. Final report: 10 August 2011

West Africa

CILSS/joint	01/12	Market and food security evaluation report
ECHO	16/11/11	ECHO Crisis Report: Sahel, Sitrep no. 3
ECHO	01/02/12	ECHO Crisis Report: Sahel Sitrep no. 4
FEWS	10/11	Sahel and West Africa, Food Security Outlook for Octo ber 2011 through March 2012
IASC FSNWG	01/12	Document stratégique 2012: Préparation pour une crise alimentaire et nutritionnelle au Sahel et les pays limitro phes.
OCHA	08/12/11	The Sahel: Vulnerability to food insecurity
OCHA	15/12/11	UN launches a strategy to better respond to the risk of a new food and nutrition crisis in the Sahel in 2012. Press release.
RPCA	10/12/11	27ème Réunion du réseau de prévention des crises ali mentaires (RPCA) sur la situation agricole et les pers pectives alimentaires au Sahel et en Afrique de l'Ouest

UN/joint	15/02/12	Urgent call for united action in the Sahel Region of West Africa. Joint statement by United Nations agencies, the European Commission and USAID on the deteriorating situa tion in the Sahel.
WFP	30/01/12	Drought Affects Millions in the Sahel. www.wfp.org/ .

Chad

ACF	08/10	Enquêtes nutritionnelle anthropométrique et de mortalité rétrospective. Région du Bahr El Ghazal, Tchad.
ACF	08/10	Enquêtes nutritionnelle anthropométrique et de mortalité rétrospective. District de Mao, District de Nokou, Région du Kanem. Tchad.
ACF	03/11	Résultats préliminaires: Enquêtes nutritionnelle anthropométri que et de mortalité rétrospective. Région du Bahr El Ghazel-Tchad.
ACF	05/11	Enquête nutritionnelle en milieu pastoral Département du Bahr el Ghazal. Nord Région du Bahr El Ghazal.
CNNTA/joint[6]	03/11	Rapport préliminaire de la deuxième enquête nutritionnelle et de mortalité rétrospective dans la Bande Sahélienne du Tchad.
FEWS	01/12	Food Security Outlook. January through March 2012.
OCHA	11/11	CHAD 2012 Consolidated Appeal
OCHA	01/12	Tchad, Bulletin d'Information Humanitaire
UNHCR/joint	10/11	Enquêtes nutritionnelles anthropométriques et de mortalité rétrospective dans les camps des refugies centrafricains au sud et sud est.
UNHCR/joint	11/11	Enquêtes nutritionnelle, anémie et WASH dans les camps de refugies soudanais à l'est du Tchad.
MoH/joint[5]	08/11	Rapport préliminaire enquête nutritionnelle et de mortalité dans 11 Régions du Tchad.

Central Africa

Democratic Republic of the Congo

ACF	02/11	Enquête nutritionnelle anthropométrique. Zone de Santé de Nselo, Province du Bas Congo.
ACF	02/11	Enquête nutritionnelle anthropométrique. Zone de Santé de Kamonia. Province du Kasai Occidental.
ACF	03/11	Résumé exécutif enquete nutritionnelle anthropométrique. Zone de Santé d'Ango. Province Orientale.
ACF	03/11	Enquête nutritionnelle anthropométrique. Zone de Santé de Kirotshe. Province du Nord Kivu.
ACF	11/10	Enquête nutritionnelle anthropométrique. Zone de Santé de Lualaba. Province de Katanga.
OCHA	13/01/12	Humanitarian Action in the DRC, weekly bulletin.
OCHA	11/11	Plan d'action humanitaire 2012

Rwanda

Concern	04/11	Anthropometry nutrition survey. Report summary for the pro ject areas in the districts of Kirehe/Ngoma, Gisagara, Nyamaga be/Nyaruguru.

IFRC	24/05/11	DREF Operation. Rwanda: heavy rainstorms and floods.
IFRC	31/10/11	DREF final report. Rwanda: heavy rainstorms and floods

Asia

Afghanistan

ACF	10/10	Anthropometric and retrospective mortality survey. Children from 6 to 59 months. Final report: Ashtarlay district, Day Kun di Province.
FEWS	01/2012	Central Asia food security outlook update January 2012
MoH/joint	2004	Afghanistan National Nutrition Survey. MoH in collaboration with UNICEF, CDC, INRAN and Tufts University.
OCHA	11/11	Afghanistan 2012 Consolidated Appeal
WFP	09/11/11	Drought impact emergency food security assessment in fourteen affected provinces of Afghanistan. Second phase report.

Pakistan

ACF	12/10	Integrated Survey Mirpur Bathoro Thaluka. Thatta District, Sindh Province, Pakistan.
AGA KHAN UNIVERSITY/joint	2011	National Nutrition Survey Pakistan 2011
GNC	11/11	Nutrition Cluster evaluation Pakistan flood response.
MoH/joint[8]	11/10	Flood Affected Nutrition Surveys. Sindh, Pakistan. October -November 2010.
MoH/joint[7]	12/10	Flood Affected Nutrition survey of Khyber Pakhtunkhwa (KP) Province Pakistan. Implemented by Department of Health of Khyber Pakhtunkhwa (KP) Province.
OCHA	01/12	Humanitarian Bulletin Pakistan

Philippines

ACH-S	10-12/10	Anthropometric nutrition and mortality survey. Mindanao, Philippines. Municipalities of Arakan and President Roxas, North Cotabato and Municipality of Kapatagan, Lanao del Sur.
OCHA	14/01/12	Philippines. Tropical Storm Washi, Situation report no 14.
OCHA	07/02/12	Philippines. Tropical Storm Washi, Situation report no. 17.

Central America

Guatemala

ACF	11/10	Respuesta a la Crisis de Seguridad Alimentaria y Nutricional y Recuperación de los Medios de Vida en el Corredor Seco de Gua temala. Estudio realizado entre el 15 al 20 de noviembre de 2010.
MoH	11/11	Avances del Barrido Nutricional en las direcciones de Áreas de Salud. Hasta el Lunes 21 de Noviembre del 2011.
MoH/joint	2008/2009	Encuesta Nacional de Salud Materno Infantil (ENSMI). Guatemala reproductive health survey.

Indicators and risk categories

The methodology and analysis of nutrition and mortality surveys are checked for compliance with internationally agreed standards (SMART, 2002; MSF, 2002; ACF, 2002).
Most of the surveys included in the Reports on Nutrition Information in Crisis Situations are random sampled surveys, which are representative of the population of the targeted area. The Reports may also include results of rapid nutrition assessments, which are not representative of the target population but rather give a rough idea of the nutrition situation. In that case, the limitations of this type of assessments are mentioned.
Most of the nutrition survey results included in the Reports target children between 6-59 months but may also include information on other age groups, if available.
Detailed information on the methodology of the surveys which have been reported on in each issue, is to be found at the end of the publication.

Nutrition indicators in 6-59 month olds

Unless specified, the Reports on Nutrition Information in Crisis Situations use the following internationally agreed criteria:

. **Wasting**, defined as weigh-for-height index (w-h) < -2 Z-scores of the NCHS reference.
. **Severe wasting**, defined as weigh-for-height index < -3 Z-scores of the NCHS reference.
. **Oedematous malnutrition or kwashiorkor**, diagnosed as bilateral pitting oedema, usually on the upper surface of the feet. Oedematous malnutrition is always considered as severe malnutrition.
. **Acute malnutrition**, defined as the prevalence of wasting (w-h < -2 Z-scores) and/or oedema
. **Severe acute malnutrition**, defined as the prevalence of severe wasting (w-h < -3 Z-scores) and/or oedema.
. **Stunting** is usually not reported, but when it is, these definitions are used: stunting is defined as < - 2 Zscores height-for-age, severe stunting is defined < - 3 Zscores height-for-age.
. **Mid-Upper-Arm Circumference (MUAC)** As there is no international agreement on MUAC cut-offs, the results are reported according to the cut-offs used in the survey.
. **Micro-nutrient deficiencies**
Micro-nutrient deficiencies are reported when data are available.

Since the release of the WHO Growth Standards in 2006, results calculated using these standards are also reported, when available.

Nutrition indicators in adults

No international consensus on a definitive method or cut-off to assess adult under-nutrition has been reached (SCN, 2000). Different indicators, such as Body Mass Index (BMI, weight/height2), MUAC and oedema, as well as different cut-offs are used. When reporting on adult malnutrition, the Reports always mention indicators and cut-offs used by the agency providing the survey.

Mortality rates

In emergency situations, crude mortality rates and under-five mortality rates are usually expressed as number of deaths/10,000 people/day.

Interpretation of indicators

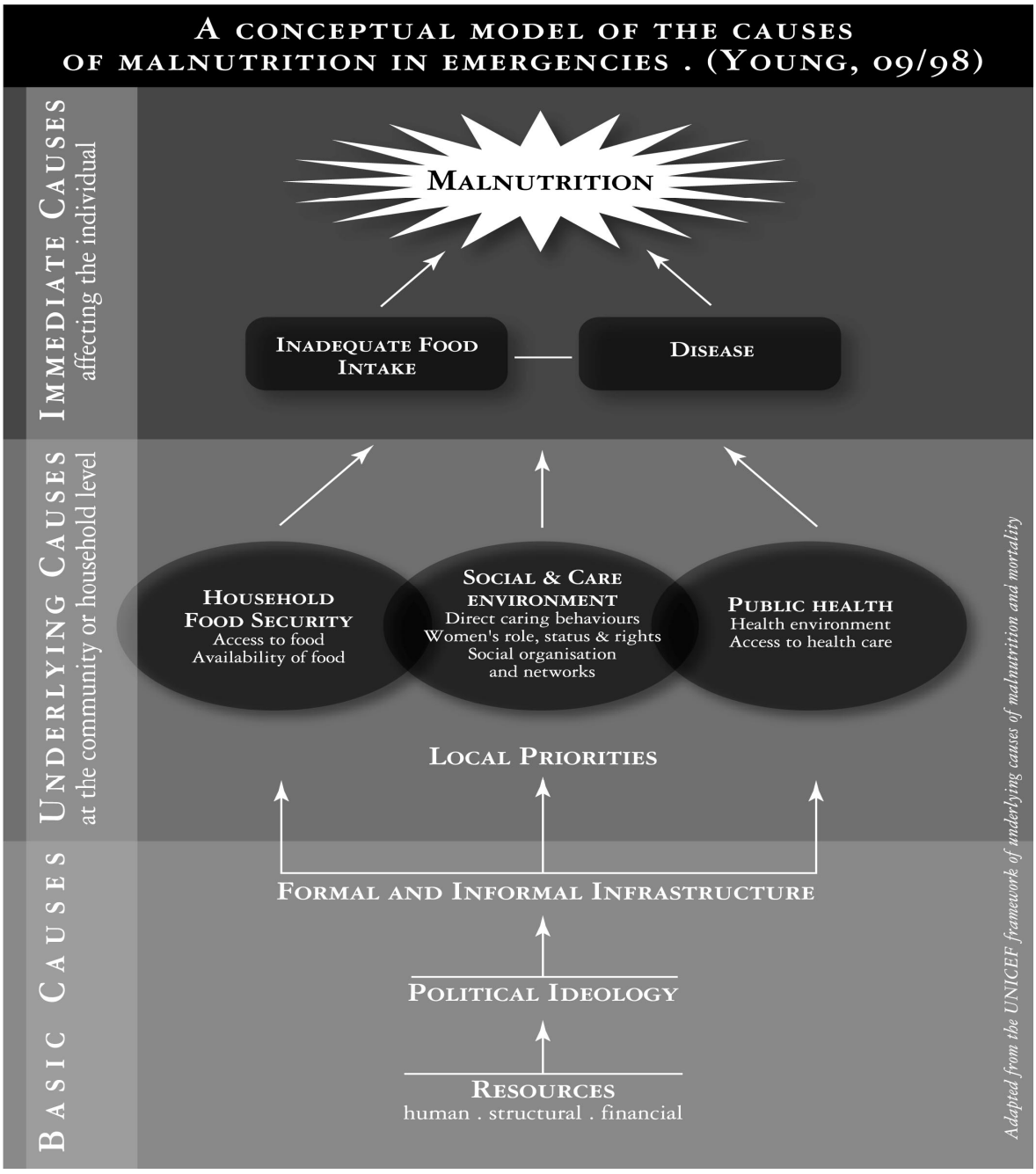
Prevalence of malnutrition and mortality rates are late indicators of a crisis. Low levels of malnutrition or mortality will not indicate if there is an impending crisis. Contextual analysis of health, hygiene, water availability, food security, and access to the populations, is key to interpret prevalence of malnutrition and mortality rates.
Thresholds have been proposed to guide interpretation of anthropometric and mortality results.
A prevalence of acute malnutrition between 5-8% indicates a worrying nutritional situation, and a prevalence greater than 10% corresponds to a serious nutrition situation (SCN, 1995). The crude mortality rate (CMR) and under-five mortality rate trigger levels for alert are set at 1/10,000/day and 2/10,000/day respectively. CMR and under-five mortality levels of 2/10,000/day and 4/10,000/day respectively indicate a severe situation (SCN, 1995).
Those thresholds have to be used with caution and in relation to contextual analysis. Trend analysis is also recommended to follow a situation: if nutrition and/or mortality indicators are deteriorating over time, even if not above threshold, this indicates a worsening situation.

Classification of situations

In the Reports, situations are classed into five categories relating to risk and/or prevalence of malnutrition. The prevalence/risk is indirectly affected by both the underlying causes of malnutrition, relating to food, health and care, and the constraints limiting humanitarian response. These categories are summations of the causes of malnutrition and the humanitarian response:
• Populations in *category I* – the population is currently in a critical situation; they either have a *very high risk* of malnutrition or surveys have reported a very high prevalence of malnutrition and/or elevated mortality rates.
• Populations in *category II* are currently at *high risk* of becoming malnourished or have a high prevalence of malnutrition.
• Populations in *category III* are at *moderate risk* of malnutrition or have a moderately high prevalence of malnutrition; there maybe pockets of high malnutrition in a given area.
• Populations in *category IV* are *not* at an elevated nutritional risk.
• The risk of malnutrition among populations in *category V* is *not known*.

Nutrition causal analysis

The Reports on Nutrition Information in Crisis Situations have a strong public nutrition focus, which assumes that nutritional status is a result of a variety of inter-related physiological, socio-economic and public health factors (see figure). As far as possible, nutrition situations are interpreted in line with potential underlying determinants of malnutrition.



References

Action contre la Faim (2002) *Assessment and treatment of malnutrition in emergency situation.* Paris : Action contre la Faim.

Médecins sans Frontières (2002) *Nutritional guidelines.*

SCN (2000) *Adults, assessment of nutritional status in emergency affected popu*lation.
Geneva: SCN.

University of Nairobi (1995) *Report of a workshop on the improvement of the nutrition of refugees and displaced people in Africa.* Geneva : SCN.

SMART (2002) www.smartindicators.org

Young (1998) Food security assessment in emergencies, theory and practice of a livelihoods approach.

NICS quarterly reports

The UN Standing Committee on Nutrition, which is the focal point for harmonizing nutrition policies in the UN system, issues these Reports on Nutrition Information in Crisis Situations with the intention of raising awareness and facilitating action. The Reports are designed to provide information over time on key outcome indicators from emergency- affected populations, play an advocacy role in bringing the plight of emergency affected populations to the attention of donors and humanitarian agencies, and to identify recurrent problems in international response capacity. The Reports on Nutrition Information in Crisis Situations are aimed to cover populations affected by a crisis, such as refugees, internally displaced populations and resident populations.

This system was started on the recommendation of the UNSCN's working group on Nutrition of Refugees and Displaced People, by the UNSCN in February 1993. Based on suggestions made by the working group and the results of a survey of the readers, the Reports on Nutrition Information in Crisis Situations are published regularly.

Information is obtained from a wide range of collaborating agencies, both UN and NGOs. The Reports on Nutrition Information in Crisis Situations are put together primarily from agency technical reports on nutrition, mortality rates, health and food security.

The Reports provide a brief summary on the background of a given situation, including who is involved, and what the general situation is. This is followed by details of the humanitarian situation, with a focus on public nutrition and mortality rates. The key point of the Reports is to interpret anthropometric data and to judge the various risks and threats to nutrition in both the long and short term.

This report was compiled by Dr Marzella Wüstefeld of the UNSCN Secretariat with assistance of Ana Lucia Mayen Chacon and Angeline Chatelan.
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The UNSCN Secretariat and the NICS Coordinator extend most sincere thanks to all those individuals and agencies who have provided information and time for this issue, and hope to continue to develop the excellent collaboration which has been forged over the years.

If you have information to contribute to forthcoming reports, or would like to request back issues of the report, please contact:

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