Vutrition Information in Crisis Situations

Standing Committee on Nutrition United Nations System

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Highlights

LTHIOPIA—Worsening situation in SOMALI REGION— The situation has been causing concern in part of Somali region since the intensification in counter-insurgency operations in April 2007. Since June, a strict control on border crossing with Somalia has also been established. These have resulted in a decrease in livestock and livestock products sales, on which people from the Somali region rely heavily to procure cereals and other imported items. Prices of these products have also increased dramatically because of the reduced flow. A UN mission conducted at the end of August 2007 reported that coping strategies seem to get exhausted rapidly, access to remittance was more difficult, there were problems with food distributions and feeding patterns were disrupted. There is a fear that the situation is deteriorating rapidly. Among the recommendations of the UN mission is the need for urgent food aid to 600,000 people, relaxation of trade and commercial restrictions, and an independent investigation

into the allegations of human rights abuses.

SOMALIA—INCREASED NUMBER OF PEO-PLE REQUIRING HUMANITARIAN AID— Post-Gu assessment has found that 1.5 M people are in need of humanitarian assistance, an increase from the estimated 1 M after post-Deyr assessment. They represent 400,000 people displaced before April 2007, 325,000 people displaced from April 2007, and 785,000 of the rural population facing a humanitarian emergency or an acute food and livelihood crisis. Lower and Middle Shabelle regions are the most affected and represent 85% of those identified in a humanitarian emergency and 31% of those identified in acute food and livelihood crisis. Although this area is the "bread-basket" of Somalia and generally the most resilient, it has experienced its lowest cereal production in a decade (44% post-war average), sharp rates of inflation in food and non-food items in the last months, continued civil insecurity, and a high concentration of displaced people. FSAU recommends an integrated and focused response in the Shabelle regions, including assistance focused on immediate needs, but also activities to support livelihoods and protect livelihood assets.

SUDAN—DETERIORATING HUMANITAR-IAN SITUATION IN DARFUR— The humanitarian situation has deteriorated, especially because of renewed displacement. It is estimated that about 240,000 people have been newly-displaced or re-displaced during 2007. In addition 30,000 Chadians are estimated to have sought refuge in Darfur this year. They are mainly scattered along the border with only approximately 6,000 registered in refugee camps. Moreover, heavy rains have further worsened the situation. Insecurity is also still raging with an increase in attacks against relief workers in 2007.

CHAD—GRIM SITUATION IN DISPLACED CAMPS— There has been a relative decrease in violence over the past months in Eastern Chad. Assistance has been provided to the estimated 230,000 refugees from Sudan and around 150,000 displaced people. The situation was critical among the displaced populations according to a survey conducted in Gourougoun, Koubigou, Gassire and Koloma camps in May 2007. Both the prevalence of acute malnutrition, and mortality rates were high.

UGANDA—RETURNS IN THE NORTH-Following an improved security situation and on-going peace talks between the Ugandan government and the Lord's Resistance Army, displaced people in Northern Uganda have begun to return to their homes. Out of the estimated 1,842,000 IDPs scattered in 242 camps in 2005, 539,550 have returned to their homes and 381,000 have moved to new sites closer to their homes. About 916,000 have remained in camps. However, the proportion of returnees varies depending on the location. While an estimated 92% of the people displaced in 2005 have returned to Lango region, only 37% have returned to Acholi. Nutrition surveys conducted in the IDP camps and in the areas of returns showed nutrition situations under control or average, but mortality rates in Pader and Northern Lira districts were of concern.

Nutrition Information in Crisis Situations

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, III—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.

	Kenya Wajir district	SOMALIA Riverine & agro-pastoral livelihood zones, Lower & Middle Shabelle	SUDAN Khorfulus & Atar areas, Jongley state	CHAD IDP camps, Eastern Chad	UGANDA IDP camps, Pader District, Northern Uganda	
Nutritional risk category	I/II	I	I	I/II	III	
	FOOD SE	CURITY				
Households' livelihoods	$\stackrel{ ext{ }}{\Box}$	(*)	\odot	\odot	⊕	
External assistance	\odot	☺	<u> </u>	<u> </u>	⊕	
Public	Public health environment					
Availability of water and access to potable drinking water	<u></u>	8	(3)	<u>:</u>	(2)	
Health care		8	\odot		☺	
Sanitation	8	8	(3)	<u>:</u>	(1)	
SOCIAL A	ND CARE	ENVIRON	MENT			
Social environment	?	8	\odot	<u> </u>	=	
Child feeding practices	?	8	☺	\odot	☺	
Deli	Delivery of assistance					
Accessibility to population	:	8	(1)	<u></u>	(2)	
Resources for humanitarian Intervention	(2)	(1)	(1)	<u></u>	©	
Availability of information		=			⊕	

Greater Horn of Africa

Ethiopia

Food security has improved overall following a very good *Meher* (June to September) rainy season (Fews, 09/07). However, the low lands of Oromiya did not benefit from this generally good rain and the provision of food aid will be needed until the end of 2007.

The number of people requiring assistance in Ethiopia towards the end of 2007 was revised in August and is estimated to be 263,700 in districts not included in the Productive Safety

Net Programme. As the amount of emergency food required can be covered through

existing DPPA stock, no appeal has been issued this year.

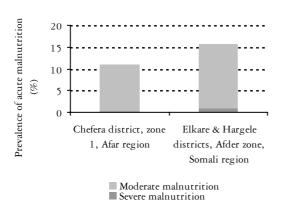
Floods have been reported throughout Somalia, and Acute Watery Diarrhoea has continued to be reported in Amhara, SNNPP, Oromiya, Tigray, Afar and Somali (OCHA, 24/09/07).



Table 1 Prevalence of Acute Malnutrition, Ethiopia, 2007 (ENCU, 30/06/07)

Survey Area	Date	(9	Acute Ialnutrition %) (95% CI) NPR	Ma	vere Acute Inutrition) (95% CI)	Oedema (%)
Bona district, Sidama zone	May-07	16.4	(12.3-20.6)	3.2	(1.3-5.1)	1.1
Coffee livelihood zones, Dale & Aleta Wondo districts, Sidama zone	Jun-07	9.1	(6.6-11.6)	0.9	(0.1-1.8)	0.2
Silti district, Silti zone	Mar-07	8.9	(6.1-11.8)	0.7	(0.1-1.2)	0.1
		Oromi	A REGION			
Melka Bello district, East Haraghe zone	Mar-07	6.2	(4.3-8.0)	0.6	(0.0-1.1)	0
Meta Robi & Ada Berga dis- tricts, West Shewa zone	May-07	6.8	(5.0-8.7)	0.5	(0.0-1.1)	0.0
Abuna Gindberet district, West Shewa zone	May-07	5.1	(3.7-6.5)	0.3	(0.0-0.6)	0.0
		Tigra	Y REGION			
Atsbi wemberta highland livelihood zone, Eastern zone	Apr-07	6.8	(5.0-8.6)	1.1	(0.4-1.8)	0.2
Eastern plateau livelihood zone, Eastern zone	Apr-07	6.3	(4.6-8.0)	0.1	(0.0-0.4)	0.1
Enderta dry midland liveli- hood zone, Central & South- ern zones	Apr-07	6.8	(5.0-8.5)	0.2	(0.0-0.4)	0.2
Raya valley livelihood zone, Southern zone	Apr-07	5.1	(3.5-6.8)	0.2	(0.0-0.4)	0.2
Central mixed crop livelihood zone, Eastern & Central zones	Apr-07	9.9	(7.5-12.2)	0.1	(0.0-0.4)	0.0
Werie Catchment livelihood zone, Central & Southern zone	Apr-07	9.1	(6.5-11.6)	0.4	(0.0-0.9)	0.0
Middle Tekeze livelihood zone, North Western, Central & Southern zones	Apr-07	8.0	(6.1-9.9)	0.5	(0.0-1.1)	0.0
West Central Teff livelihood zone, North Western & Cen- tral zones	Apr-07	8.2	(6.3-10.0)	0.5	(0.0-1.0)	0.3

FIGURE 1 RESULTS OF NUTRITION SURVEYS, AFAR AND SOMALI REGIONS, 2007 (ENCU, 30/06/07)



The situation has been causing concern in part of Somali region since the intensification in counter-insurgency operations by the Ethiopian National Defence Force, following the attack on Chinese and Ethiopian oil workers and security personnel, in April 2007 (UN, 09/07). Since June, a strict control on border crossing with Somalia has also been established. These have resulted in a decrease in livestock and livestock products sales, on which people from the Somali region rely heavily to procure cereals and other imported items. Prices of these products have also increased dramatically because of the reduced flow. A UN mission conducted at the end of August 2007 reported that coping strategies seem to get exhausted rapidly, access to remittance was more difficult, there were problems

with food distributions and feeding patterns were disrupted. There is a fear that the situation is deteriorating rapidly. Among the recommendations of the UN mission is the need for urgent food aid to 600,000 people, relaxation of trade and commercial restrictions, and an independent investigation into the allegations of human rights abuses. In response, the government of Ethiopia made commitments to ensure the improvement of the humanitarian situation in collaboration with UN and humanitarian partners (GoE, 19/09/07). MSF has claimed that they had been denied access to Somali region (MSF, 04/09/07), but this was refuted by the government of Ethiopia (IRIN, 04/09/07).

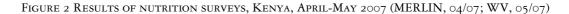
The nutrition situation was average in the predominantly cropping areas of Oromiya, SNNPR and Tigray regions, according to the surveys conducted between April and June 2007 (table 1), except in Bona district, Sidama zone (ENCU, 30/06/07). The food security situation was reported to have deteriorated and this district had not benefited from the Productive Safety Net or from food distributions in 2007. As a result of the survey, communitybased management of severe acute malnutrition was implemented and it was recommended that supplementary feeding programmes be strengthened. Two surveys conducted in Afar and Somali regions also showed worrying situations (figure 1).

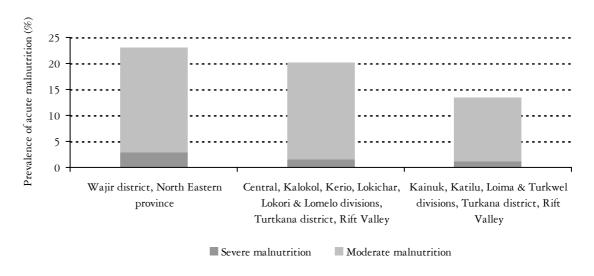
Kenya

Overall, national cereal availability has been favourable (Fews, 08/07). However, some of the districts previously affected by drought, i.e. Isiolo, Wajir, Garissa and Tana river, have remained highly food-insecure. Evolution of the food security situation will be determined by the forthcoming short rains between October and December.

According to nutrition data, the nutrition situation seems to have improved in Mandera, Marsabit, Wajir and Turkana districts in 2007 compared to 2006, although the prevalence of acute malnutrition has remained high (Fews, 08/07).

Three random-sampled nutrition surveys conducted in April-May 2007 in Wajir and Turkana districts showed critical nutrition situations in Wajir district and central and southeast parts of Turkana district (figure 2) (Merlin, 04/07; WV, 05/07). The situation was better, although still of concern in south-west of Turkana district. In both districts, food distribution and selective feeding centres were implemented. Both surveys recommended that current programmes be continued and strengthened when necessary and that long-term strategies to address food insecurity be implemented.





Somalia

The security situation has remained volatile in Somalia (OCHA, 31/08/07). A new wave of 63,000 people were displaced from Mogadishu to other areas in Mogadishu, Lower and Middle Shabelle, Galgadud and Mudug regions, between June and August 2007. This is in addition to the estimated 400,000 who moved be-

TABLE 2 ESTIMATED RURAL RESIDENT POPULATION BY REGION IN ACUTE FOOD AND LIVELIHOOD CRISIS AND HUMANITARIAN EMERGENCY (FSAU, 21/09/07)

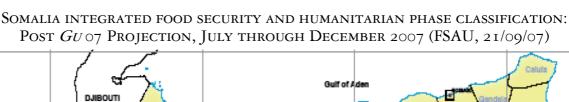
Lat

		Number of			
	Number of	people in	Total in		
	people in	Acute Food	AFLC or		
Affected regions	Humanitarian	and	HE as % of		
	Emergency	Livelihood	region		
	(HE)	Crisis	population		
		(AFLC)			
	Norti	H			
	0	0	0		
Central					
	0	0	0		
	South	I			
Bakool	0	80,000	26		
Bay	0	5,000	1		
Gedo	30,000	80,000	33		
Hiran	15,000	30,000	14		
Middle Juba	0	65,000	27		
Lower Juba	0	80,000	21		
Middle Shabelle	85,000	60,000	28		
Lower Shabelle	165,000	90,000	30		
Total	295,000	490,000	10		

tween February and May 2007, of whom 125,000 have been reported to have moved back to Mogadishu, following a lull in the fighting between April and June 2007.

Post-*Gu* assessment has found that 1.5 M people are in need of humanitarian assistance, an increase from the estimated 1 M after post-*Deyr* assessment (FSAU, 21/09/07) (see map). They represent 400,000 people displaced before April 2007, 325,000 people displaced from April 2007, and 785,000 of the rural population facing a humanitarian emergency or an acute food and livelihood crisis (table 2).

Lower and Middle Shabelle regions are the most affected and represent 85% of those identified in a humanitarian emergency and 31% of those identified in acute food and livelihood crisis. Although this area is the "bread-basket" of Somalia and generally the most resilient, it has experienced its lowest cereal production in a decade (44% post-war average), sharp rates of inflation in food and non-food items in the last months, continued civil insecurity, and a high concentration of displaced people. FSAU recommends an integrated and focused response in the Shabelle regions, including assistance focused on immediate needs, but also activities to support livelihoods and protect livelihood assets. Nutrition surveys conducted in May in the two regions showed a critical situation,



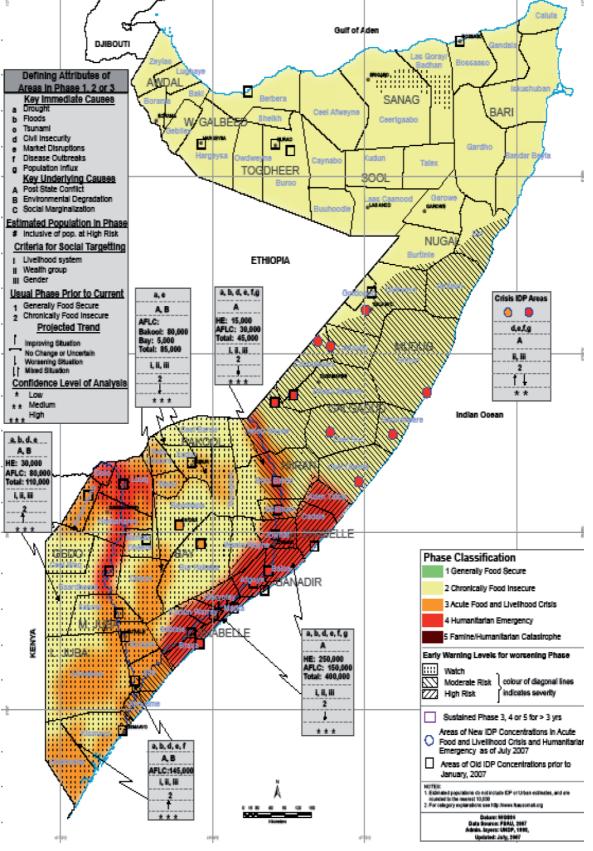


Table 3 Results of nutrition and mortality surveys, Somalia, May 2007 (FSAU, 05/07)

Survey Area		Acute Alnutrition (95% CI)	Severe Acute Malnutrition (%) (95% CI)		Crude Mortality (/10,000/day) (95% CI)	Under 5 Mortality (/10,000/day) (95% CI)
Riverine livelihood zone, Lower & Middle Shabelle	17.0	(13.4-20.5)	4.8	(3.0-6.7)	1.31 (0.8-1.83)	2.02 (1.0-3.04)
Agro-pastoral livelihood zone, Lower & Middle Shabelle	17.3	(13.3-21.3)	4.5	(2.5-6.6)	1.07 (0.69-1.45)	1.38 (0.61-2.15)
IDP camp, Galkaio town, Mudug region	21.9		2.2		1.54	3.30
Coastal-Deeh livelihood zone, Bari, Nugal & Mudug regions	14.9	(12.1-17.7)	1.1	(0.2-1.9)	0.62 (0.3-0.93)	1.52 (0.64-2.4)

with a high prevalence of severe acute malnutrition and mortality rates above alert thresholds (table 3) (FSAU, 05/07). No comparison with previous assessments was possible. A MUAC assessment conducted among recently displaced populations in Afgoye town in July 2007 showed that 21.5% of the children had a MUAC below 12.5% (FSAU, 07/07).

On the other hand, Lower and Middle Juba have seen improvement in food security (table 2) as well as in nutrition (FSAU, 06/07). However, nutrition surveys conducted in June 2007 revealed a situation that was still precarious (figure 3), especially among the riverine livelihood households, where both the prevalence of acute malnutrition and mortality rates were of concern.

In Burhakaba district, Bay region, the nutrition situation was also of concern as well as the mortality rates as of May 2007 (figure 3). According to the post-*Gu* assessment, the livestock sector has improved and the exceptional sorghum harvest of the last *Deyr* ensures adequate access to food and income for most households, despite a very poor *Gu* season, which primarily affected crop production.

In Gedo, despite some improvement, the situa-

tion has remained precarious (table 2). In Hiran, the food and livelihood situation has continued to deteriorate in the riverine and agropastoral populations.

In Central and North Somalia, there are no residents facing acute livelihood crisis or a humanitarian emergency. However, Central Somalia and especially Galgadud and Mudug regions have a high concentration of IDPs, 110,000 and 40,000, respectively, who are in need of humanitarian assistance. A nutrition survey conducted in the IDP camp of Galkaio town, Mudug region, showed a dire situation with a high prevalence of acute malnutrition, and mortality rates above alert threshold (table 3). The camp lacked adequate sanitation facilities and provision of safe drinking water. IDPs do not have good access to health facilities. Furthermore, income opportunities seem very limited

In the North, the nutrition situation of the Coastal-Deeh livelihood zone was precarious in May 2007 (table 3).

Following the release of the post-*Gu* assessment, WFP increased the number of beneficiaries of food aid from 1 M to 1.2 M and food was distributed in the Shabelle regions (OCHA, 31/08/07). In Mogadishu, WFP had

to halt its food distribution because of insecurity at distribution sites. They will try to establish a "wet feeding" programme where cooked food will be distributed through national NGOs. Admissions to therapeutic feeding centres are reported to have increased in Mogadishu (FSAU, 07/07).

Overall

Despite an improvement in the food

security situation in most of the drought and flood affected regions, the overall number of people in need of assistance has increased due to the significant deterioration in the humanitarian situation in the Shabelle regions caused by poor Gu season and renewed conflict.

Sudan

Small-scale fighting over livestock and land has continued to cause localised displacement in rural areas (OCHA, 31/08/07). Severe floods have especially affected Unity and Upper Nile State but also Western Bahr el Ghazal, Lakes, Central and Western Equatoria and more recently Southern Kordofan (OCHA, 31/08/07; UNNews, 24/09/07). Around 500,000 people have been affected. Food and non-food assistance has been established. It is expected that the hunger-gap period might be extended in the flood-affected areas. However, when floods recede in December-February, food security should improve due to increase availability of fish, water plants and good pasture.

A nutrition survey conducted in Kurmuk

county, Blue Nile state, showed an average nutrition situation: 9.4% (5.9-12.9) of the children surveyed were acutely malnourished, which was comparable to that in early 2005 (GOAL, 04/07). Child-feeding practices were poor with only 4.9% of the children exclusively breastfed and 15.7% being introduced to complementary food between 6-9 months. Less than 50% of the households had access to potable drinking water.

Nutrition surveys conducted in South Sudan showed critical situations (table 4). In Sobat corridor, Upper Nile state and Twic county, Warap state, information on child-feeding practices revealed low proportions of exclusive breast feeding and timely introduction of complementary feeding (GOAL, 03/07; GOAL, 07/07). In Sobat corridor, almost none of the

Table 4 Results of Nutrition Surveys, South Sudan (GOAL, 04/07-08/07; AAH-US, 06/07)

Survey Area	Date	Acute Malnutrition (%) (95% CI)	Maln	rere Acute utrition (%) 95% CI)	Oedema (%)	Crude Mortality (/10,000/day) (95% CI)	Under 5 Mortality (/10,000/day) (95% CI)
			Ui	PPER NILE ST	ГАТЕ		
Sobat corridor	Jul-07	20.8 (16.9-24.7)	2.8	1.5-4.1	0	1.75 (0.08-2.70)	3.48 (0.08-6.88)
	Warap state						
Twic county	Mar-07	25.4 (21.1-29.8)	1.9	(0.8-3.1)	0	1.71 (1.17-2.26)	2.45 (0.17-4.73)
	•		J	ONGLEY STA	TE		
Athooc district, South Bor county	Jun-07	27.7 (23.4-32.1)	4.1	(2.6-5.6)	0.1	0.45 (0.18-0.72)	0.51 (0.00-1.06)
Khorfulus & Atar areas	Jun-07	31.6 (27.0-36.2)	6.1	(4.2-8.0)	2.0	0.67 (0.32-1.01)	1.74 (0.72-2.76)

households had access to a protected source of water, while 58.4% of the households in Twic county used potable water. Diet diversity was poor in both survey areas with less than 10% of the households having consumed food from three different food groups the day prior to the survey.

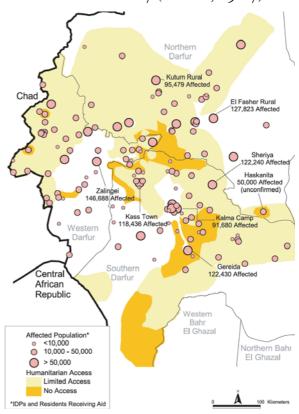
In Athooc districts, although still critical, the situation had improved compared to the same season in 2005. The area has experienced food insecurity due to different factors such as floods in 2006, livestock diseases, persistent cattle raids and inadequate fishing and farming equipment (AAH-US, 06/07). Public health was also poor. None of the households surveyed had received food assistance in the three months prior to the survey. However, food distributions were being implemented for returnees at the time of the survey. There was no selective feeding programme in the area.

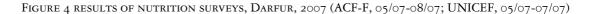
In Khorfulus and Atar areas, the nutrition situation was appalling during the hunger-gap season (table 4). The last harvest had been poor due to insecurity and pests (AAH-US, 06/07). The population also had poor access to health services, and water and sanitation were reported to be largely inadequate. There had been a large number of returnees in the area.

Darfur

The humanitarian situation has deteriorated, especially because of renewed displacement (OCHA, 31/08/07). It is estimated that about 240,000 people have been newly-displaced or re-displaced during 2007 (see map).

MAJOR DISPLACEMENTS, JANUARY-SEPTEMBER 2007 (OCHA, 09/07)





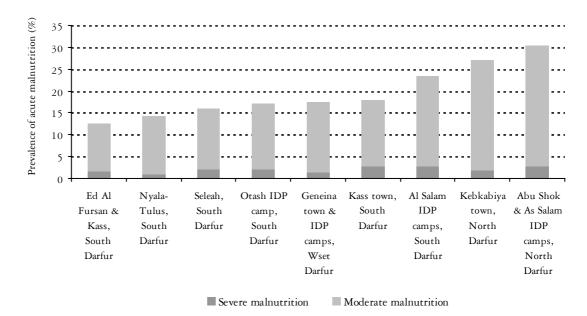
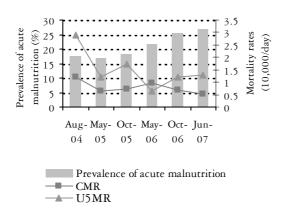


Figure 5 Trends in prevalence of acute malnutrition and mortality rates, Kebkabiya town,

North Darfur



In addition 30,000 Chadians are estimated to have sought refuge in Darfur this year. They are mainly scattered along the border with only approximately 6,000 registered in refugee camps (UNHCR, 09/07). Moreover, heavy rains have further worsened the situation. Insecurity is also still raging with an increase in attacks against relief workers in 2007 (UNNews, 27/09/07). In July, food was delivered to approximately 3.1 M beneficiaries, an increase from previous months explained by the inclusion of vulnerable rural residents during the hunger-gap season in the beneficiaries of food distribution.

The UN Security Council has authorised the deployment of an hybrid United Nations-African Union peace keeping force of 26,000 troops, which was accepted by the government of Sudan (UNNews, 31/07/07; UNHCR, 09/07).

Nutrition surveys continue to show precarious to critical nutrition situations (figure 4), which have remained stable compared to last year where data are available. In Kebkabiya town, the situation has even deteriorated compared to the same season in 2005 and 2006 (figure 5).

A food security assessment conducted in Otash camp revealed that the main sources of food for the displaced people were the general food distribution and purchasing from markets (ACF-F, 02/07). People were entitled to a 75% food ration. Most of the food ration was consumed (90%), while the rest was sold to buy vegetables or to cover non-food needs. Most of the IDPs did not have a regular source of income. The most common sources of income were urban casual labour, selling of firewood, trading and NGO assistance. Access to potable water and sanitation was reported to be below international standards.

Overall

The situation in Darfur and South Sudan was still precarious due to several factors including insecurity, movement of people such as displacement in Darfur and returns in South Sudan and floods.

West Africa

Niger

As of mid-2007, the food security situation in Niger was considered average and the nutrition situation still precarious (Fews, 07/07). About 400,000 people were identified to be at high risk of food insecurity but it was considered that no free food distribution was necessary. Cash for work and distribution of seeds for production during off-cropping season were recommended.

A nutrition survey conducted in April 2007, before the hunger-gap, in Ma-

yahi department, Maradi region, showed a nutrition situation of concern, with a prevalence of acute malnutrition of 13.6% (11.7-15.6), including 1.0% (0.1-1.9) severe acute malnutrition (AAH, 04/07). Mortality rates seemed under control.



Central Africa

Chad

There has been a relative decrease in violence over the past months in Eastern Chad (ICRC, 26/09/07). Assistance has been provided to the estimated 230,000 refugees from Sudan and around 150,000 displaced people. Regular food distributions have been conducted for the refugees and IDPs (Fews, 07/07; Fews, 09/07). Access to potable drinking water and adequate sanitation seems a major constraint in the camps. Moreover, floods in some of the camps have worsened the situation (IRIN, 04/09/07). An outbreak of hepatitis E has spread in Eastern Chad (WHO, 06/07).

The Security Council has authorised the establishment of a

"multidimensional

presence" in Chad and Central African Republic. That presence would consist of 300 police and 50 military liaison officers of the new United Nations Mission, and troops deployed by the European Union to protect and support it (UNSC, 25/09/07).

The situation was critical among the displaced populations according to a survey conducted in Gourougoun, Koubigou, Gassire and Koloma

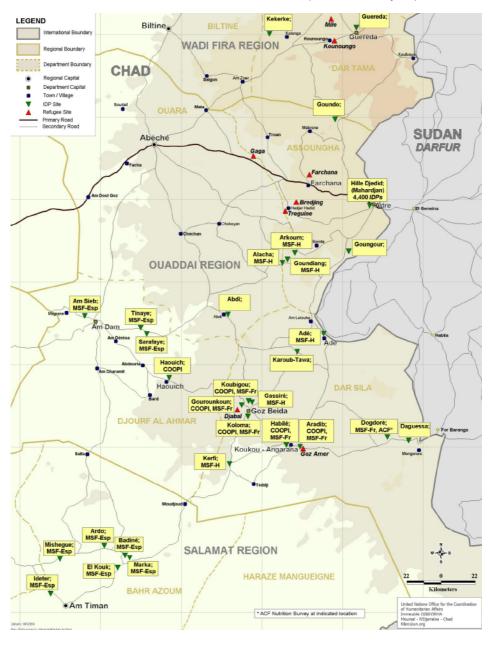


Table 5 Prevalence of acute malnutrition and mortality rates, Gouroukoun, Koubigou, Gassire & Koloma IDP camps, Chad, May 2007 (Epicentre/MSF-F, 05/07)

Acute Malnutrition (%) (95% CI)	Severe Acute Malnutrition (%) (95% CI)	Crude Mortality (/10,000/day) (95% CI)	Under 5 Mortality (/10,000/day) (95% CI)
19.5 (16.5-22.5)	3.2 (2.0-4.4)	1.79 (1.15-2.78)	4.07 (2.13-7.69)

camps in May 2007 (MSF-F/Epicentre, 05/07). Most of the families (76.5%) had arrived in the camps between 1 month and 1 year before the survey took place and 21.3% arrived more than one year before the survey. Both the prevalence of acute malnutrition, and mortality rates were high (table 5). An assessment conducted among displaced camps in May/June also showed a critical situation with a prevalence of acute malnutrition above 20% (MSP/joint, 09/07). Nutrition interventions have been implemented in most of the camps (see map).

NUTRITION CLUSTER, WHO DOES WHAT WHERE, IDP SITES IN EASTERN CHAD AS OF AUGUST 2007 (OCHA, 09/07)



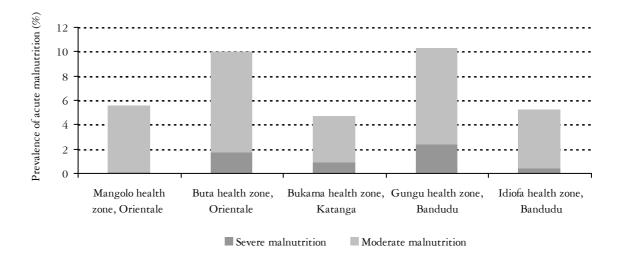
Democratic Republic of Congo

An upsurge in violence in North Kivu in September 2007 has displaced thousands of new people (UNHCR, 29/09/07). Although some humanitarian assistance has been organised, it seems that acute malnutrition is highly prevalent (OCHA, 28/09/07; WFP, 13/09/07).

An outbreak of Ebola haemorrhagic fever has been reported in the Province of Kasai Occidental (WHO, 27/09/07).

Nutrition surveys conducted in Orientale, Katanga and Bandudu provinces showed under control to average nutrition situations, except in Gungu health zone where 2.3% of the children surveyed had oedema (figure 6). On the other hand, a nutrition survey conducted in Rwanguba health zone in North Kivu showed a very high prevalence of kwashiorkor, with 4.9% of oedematous children (WV/Joint, 03/07). The overall prevalence of acute malnutrition was 12.5%.

FIGURE 6 RESULTS OF NUTRITION SURVEYS, DRC, 2007 (AAH-US, 05/07-07/07; WV/JOINT, 03/07)



Uganda

Karamoja region has three livelihood groups but pastoralists are predominant. The region has experienced cyclic drought, the last one being in 2006, and has also been prone to civil unrest. A nutrition survey conducted in three districts of the region: Abim, Kaabong and Kotido during the dry season, showed a critical nutrition situation (figure 7) (WFP/DHO, 03/07). The prevalence of acute malnutrition had increased compared to that in November 2006, after the harvest season.

Food security has recently improved following early minor harvests (Fews, 09/07). However, it was anticipated that, because of the below average rains experienced this year (despite being better than last year), a resumption of

food assistance would be needed by the end of 2007 or beginning of 2008.

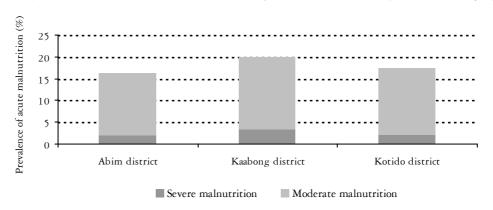
Following an improved security situation and on-going peace talks between the Ugandan government and the Lord's Resistance Army, displaced people in Northern Uganda have begun to return to their homes (UNHCR, 11/09/07). Out of the estimated 1,842,000 IDPs scattered in 242 camps in 2005, 539,550 have returned to their homes and 381,000 have moved to new sites closer to their homes. About 916,000 have remained in camps. However, the proportion of returnees varies depending on the location. While an estimated 92% of the people displaced in 2005 have returned to Lango region, only 37% have returned to Acholi region.

Nutrition Information in Crisis Situations

Table 5 Results of nutrition surveys, Northern Uganda (MoH/Joint, 08/07; AAH-US, 04/07)

Survey Area	Date	Acute Malnutrition (%) (95% CI)	Severe Acute Malnutrition (%) (95% CI)	Oedema (%)	Crude Mortality (/10,000/day) (95% CI)	Under 5 Mortality (/10,000/day) (95% CI)
IDP camps, Pader district	Aug-07	4.9 (4.0-5.7)	-	1.5	1.20 (0.99-1.40)	1.82 (1.32-2.32)
IDP camps & resettlement areas, Northern Lira district	Apr-07	7.1 (4.5-9.7)	0.8 (0.1-1.4)	0.6	1.15 (0.72-1.58)	1.63 (0.61-2.65)
IDP camps & resettlement areas, Gulu & Amuru districts	Apr-07	3.1 (1.8-4.5)	0.4 (0.0-0.8)	0	0.30 (0.11-0.48)	0.20 (0.00-0.43)
IDP camps & resettlements areas, Apac & Oyam districts	Apr-07	4.6 (3.0-6.3)	0.9 (0.0-1.9)	0.9	0.56 (0.29-0.83)	0.35 (0.0-0.78)

Figure 7 Result of a nutrition survey, Karamoja region, March 2007 (WFP/DHO, 03/07)



Nutrition surveys conducted in the IDP camps and in the areas of returns showed nutrition situations under control or average, but mortality rates in Pader and Northern Lira districts are of concern (table 5).

Heavy rains since July this year have caused flooding in Teso, Karamoja, Elgon, Lango and

Acholi sub-regions, affecting an estimated 300,000 people (UNICEF, 28/09/07). Although assistance has been organised, more funds are needed to continue providing food and non-food aid to the affected population.

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North Darfur, Sudan

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Nutrition Information in Crisis Situations

West Africa

Niger ACH

ACH 04/07 Enquête nutritionelle et de mortalité rétrospective

Fews 07/07 Perspectives sur la sécurité alimentaire

Central Africa

C	h	2	А
L		а	u

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PRONANU'	Т	

Uganda

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UNICEF		of Gulu and Amuru districts, Northern Uganda
AAH-US/	05/07	Nutritional anthropometric survey, final report, IDP camps and resettlement areas
UNICEF		of Apac and Oyam districts, Northern Uganda
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		Pader district, preliminary report

Results of surveys

Survey Area	Date	Popula- tion	Estimated Popula- tion Number	Survey Conducted by	Malnutrition* Malnu		ere Acute utrition** (95% CI) [§]	Oedema (%)	MUAC" (%)		
	Greater Horn of Africa										
				Етню							
	ı		ı	SNN	PR		ı				
Bona district, Sidama zone	May-07	Residents	11,495	ENCU/ Joint ¹	16.4	12.3-20.6	3.2	1.3-5.1	1.1	-	
Coffee livelihood zones, Dale & Aleta Wondo districts, Sidama zone	Jun-07	Residents	774,390	ACF-F ¹	9.1	6.6-11.6	0.9	0.1-1.8	0.2	-	
Silti district, Silti zone	Mar-07	Residents	162,805	GOAL ¹	8.9	6.1-11.8	0.7	0.1-1.2	0.1	-	
			•	Oromia	REGIC	N					
Melka Bello dis- trict, East Haraghe zone	Mar-07	Residents	146,050	SC-UK ¹	6.2	4.3-8.0	0.6	0.0-1.1	0	-	
Meta Robi & Ada Berga districts, West Shewa zone	May-07	Residents	262,175	SC-UK ¹	6.8	5.0-8.7	0.5	0.0-1.1	0.0	-	
Abuna Gindberet district, West Shewa zone	May-07	Residents	200,520	SC-UK ¹	5.1	3.7-6.5	0.3	0.0-0.6	0.0	-	
A . 1 1	İ		ı	Tigray i	REGIO	Ŋ	ı		1		
Atsbi wemberta highland liveli- hood zone, Eastern zone	Apr-07	Residents	104,745	ENCU/ DPPB ¹	6.8	5.0-8.6	1.1	0.4-1.8	0.2	-	
Eastern plateau livelihood zone, Eastern zone	Apr-07	Residents	422,555	ENCU/ DPPB¹	6.3	4.6-8.0	0.1	0.0-0.4	0.1	-	
Enderta dry mid- land livelihood zone, Central & Southern zones	Apr-07	Residents	400,295	ENCU/ DPPB¹	6.8	5.0-8.5	0.2	0.0-0.4	0.2	-	
Raya valley liveli- hood zone, South- ern zone	Apr-07	Residents	204,545	ENCU/ DPPB¹	5.1	3.5-6.8	0.2	0.0-0.4	0.2	-	
Central mixed crop livelihood zone, Eastern & Central zones	Apr-07	Residents	342,290	ENCU/ DPPB¹	9.9	7.5-12.2	0.1	0.0-0.4	0.0	-	
Werie Catchment livelihood zone, Central & South- ern zone	Apr-07	Residents	199,675	ENCU/ DPPB¹	9.1	6.5-11.6	0.4	0.0-0.9	0.0	-	
Middle Tekeze livelihood zone, North Western, Central & South- ern zones	Apr-07	Residents	384,561	ENCU/ DPPB ¹	8.0	6.1-9.9	0.5	0.0-1.1	0.0	-	
West Central Teff livelihood zone, North Western & Central zones	Apr-07	Residents	199,673	ENCU/ DPPB¹	8.2	6.3-10.0	0.5	0.0-1.0	0.3	-	

^{*}Acute malnutrition (children aged 6-59 months): weight-height < - 2 Z-scores and/or oedema

** Severe acute malnutrition (children aged 6-59 months): weight-height < - 3 Z-scores and/or oedema

*95% Confidence Interval; not mentioned if not available from the survey report

^{*} Mid Upper Arm Circumference

From ENCU quarterly bulletin (ENCU, 30/06/06). The methodology is in accordance with the ENCU specifications for nutritional surveys, which are in line with international standards.

		Assessment of micro- nutrient deficiencies	Vitamin A distribution coverage, within the past 6 months	Women's anthropometric status (%)	(/10,	Mortality 000/day) 5% CI) [§]	Under 5 Mortality (/10,000/day) (95% CI) [§]		
4.0	73.0	-	58.9	-	0.43	0.18-0.67	1.12	0.38-1.85	
-	-	-	-	-	0.05	0.0-0.15	0.23	0.0-1.06	
5.1	75.1	-	95.0	-	0.11	0.0-0.23	0.16	0.0-0.44	
12.0	55.8	-	68.6	-	0.07	0.0-0.16	0.14	0.0-0.38	
5.6	64.2	-	76.6	-	0.08	0.0-0.18	0.24	0.0-0.71	
1.2	69.5	-	68.6	-	0.07	0.00-0.16	0.14	0.0-0.38	
60.3	92.9	-	-	-	0.29	0.02-0.56	0.86	0.0-2.66	
69.7	93.4	-	_	-	0.33	0.13-0.53	0.26	0.0-0.98	
39.2	88.2	-	-	-	0.07	0.0-0.14	0.14	0.0-0.3	
18.7	91.0	-	-	-	0.25	0.05-0.46	0.32	0.0-0.62	
43.6	94.5	-	-	-	0.08	0.02-0.14	0.19	0.0-0.4	
56.4	94.6	-	-	-	0.04	0.0-0.14	0.20	0.0-0.77	
54.6	94.6	-	-	-	0.16	0.03-0.28	0.33	0.0-0.83	
61.5	92.1	-	-	-	0.17	0.0-0.49	0.21	0.0-0.74	

^{*} Measles vaccination coverage for children aged 9-59 months

Continued...

Survey Area	Date	Popula- tion	Estimated Popula- tion Number	Survey Conducted by	Acute Malnutrition* (%) (95% CI) ⁸	Severe Acute Malnutrition** (%) (95% CI) [§]	Oedema (%)	MUAC* (%)
				Afar r	EGION			
Chefera district, Zone 1	Jun-07	Residents	89,505	SC-UK ¹	11.1 8.2-14.0	0.3 0.0-0.7	0.0	MUAC < 11 cm: 1.6%
				Somali 1	REGION			
Elkare & Hargele districts, Afder zone	Apr-07	Residents	114,375	IR/SC- UK¹	15.7 11.6-19.8	0.9 0.0-1.9	0.0	-
	,			Ken	IYA			
Wajir district, North Eastern province	Apr-07	Residents	505,675	MERLIN	23.0 20.1-25.8	2.8 1.7-4.0	-	-
Central, Kalokol, Kerio, Lokichar, Lokori & Lomelo divisions, Turkana district, Rift Val- ley	May-07	Residents	-	wv	21.1	1.6	-	-
Kainuk, Katilu, Loima & Turkwel divisions, Turkana district	May-07	Residents	-	wv	13.4	1.1	-	-
	l.		1	Som	ALIA		'	
Riverine liveli- hood zone, Lower & Middle Shabelle	May-07	Residents/ Displaced	-	FSAU/ joint	17.0 13.4-20.5	4.8 3.0-6.7	1.3	-
Agro-pastoral livelihood zone, Lower & Middle Shabelle	May-07	Residents/ Displaced	-	FSAU/ joint	17.3 13.3-21.3	4.5 2.5-6.6	0.5	-
Agro-pastoral livelihood zone, Burhakaba dis- trict, Bay region	May-07	Residents	-	FSAU/ joint	15.6 12.2-19.0	3.3 1.7-4.9	0.3	-
Pastoral livelihood zone, Burhakaba district, Bay re- gion	May-07	Residents	-	FSAU/ joint	16.2 12.1-20.2	3.9 2.4-5.3	0.2	-
IDP camp, Gal- kaio town, Mudug region	May-07	Displaced	-	FSAU/ joint	21.9	2.2	0.7	
Coastal-Deeh livelihood zone, Bari, Nugal & Mudug regions	M ay-07	Residents	-	FSAU/ joint	14.9 12.1-17.7	1.1 0.2-1.9	0	-
Riverine liveli- hood zone, Middle & Lower Juba	Jun-07	Residents	-	FSAU/ joint	15.4 13.4-17.4	3.2 2.3-4.2	0.6	-
Pastoral livelihood zone, Middle & Lower Juba	Jun-07	Residents	-	FSAU/ joint	13.4 11.0-15.8	1.3 0.5-2.1	0.2	-
Agro-pastoral livelihood zone, Middle & Lower Juba	Jun-07	Residents	-	FSAU/ joint	10.2 8.0-12.4	1.3 0.4-2.2	0	-

^{*}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

From ENCU quarterly bulletin (ENCU, 30/06/06). The methodology is in accordance with the ENCU specifications for nutritional surveys,

sation c	a coverage of micro- nutrient coverage, d Card + deficiencies within the		Vitamin A distribution coverage, within the past 6 months	Women's anthropometric status (%)	Crude Mortal (/10,000/da (95% CI) [§]	y) (/	Under 5 Mortality (/10,000/day) (95% CI) [§]	
0.0	47.1	-	54.1	-	0.41 0.12-	0.69 0.9	3 0.14-1.72	
0.2	38.3	-	19.0	-	0.57 0.24-	0.91 2.2	3 0.0-4.5	
32.5	83.2	-	-	-	0.5	1.0	6	
-	91.0	-	-	-	-	-		
-	92.4	-	-	-	-	-		
-	26.4	-	25.0	-	1.31 0.80-	1.83 2.0	2 1.0-3.04	
-	30.9	-	32.2	-	1.07 0.69-	1.45 1.3	8 0.61-2.15	
-	48.8	-	25.1	-	1.31 0.86-	1.77 1.8	0.56-3.13	
-	35.1	-	17.4	-	1.88 0.9-2	2.86 2.8	1.39-4.24	
-	9.3	-	4.6	-	1.54	3.3	0	
-	50.1	-	26.5	-	0.62 0.3-0).93 1.5	2 0.64-2.4	
-	75.9	-	60.8	-	1.98 1.29-	2.67 3.0	1.72-4.29	
-	26.5	-	21.5	-	0.85 0.47-	1.23 2.5	2 1.00-4.04	
-	49.0	-	22.2	-	1.1 0.79-	1.41 2.4	7 1.27-3.68	

^{*} Measles vaccination coverage for children aged 9-59 months

Continued...

Survey Area	Date	Popula- tion	Estimated Popula- tion Number	Survey Conducted by	Maln	Acute utrition* (95% CI) [§]	Malnu	re Acute atrition** 05% CI) [§]	Oedema (%)	MUAC [#] (%)
		l		Sui	DAN					
	,			South	Darfu	JR				
Ed Al Fursan & Kass localities	Mar-07	Residents/ Displaced	-	ACT/ Caritas/ NCA ¹	12.5	8.9-16.1	1.7	0.7-2.8	-	-
Nyala-Tulus locality	Apr-07	Residents/ Displaced	-	ARC ¹	14.1	12.0-16.5	1.0	0.5-1.9	0	-
Al Salam IDP camp	May-07	Displaced	13,090	ACF-F	23.3	19.2-27.9	2.8	1.5-5.2	0.2	-
Otash IDP camp	May-07	Displaced	-	ACF-F ¹	17.2	14.0-21.1	2.1	1.0-4.0	-	-
Kass town	Jun-07	Displaced	119,595	ACF-F	17.8	14.4-21.6	2.8	1.6-4.9	0.4	-
Seleah	Aug-07	Displaced/ Residents	15,120	ACF-F		12.5-20.0	2.0	0.9-4.0	0.2	-
	,	ı		WEST	Darfu	R				
Geneina town & IDP camps	Jun-07	Displaced	-	Concern ¹	17.4	14.1-20.6	1.4	0.8-2.1	-	-
1D1 camps	ļ	ļ	Į.	North	Darfu	ıR				
Kebkabiya town	Jun-07	Residents/ Displaced	69,140	ACF-F	27.0	23.0-31.3	1.9	0.9-3.7	0.1	MUAC < 11 cm: 0.5 MUAC<12.5 cm: 7.9
Abu Shok & As Salam IDP camps	Jun-07	Displaced	102,565	ACF-F	30.4	26.3-34.9	2.8	1.6-4.9	0.3	MUAC < 11 cm: 1.2 MUAC<12.5 cm: 14.3
		'	•	Upper N	ILE STA	TE				
Sobat corridor	Jul-07	Residents/ Returnees	23,086	GOAL	20.8	16.9-24.7	2.8	1.5-4.1	0	-
				WARA	P STATE	3				
Twic county	Mar-07	Residents	454,750	GOAL		21.1-29.8	1.9	0,8-3,1	0	-
	,	1	,	Blue N	ILE STA	TE				
Kurmuk county	Apr-07	Residents/ Returnees	104,450	GOAL	9.4	5.9-12.9	1.1	0,3-1,9	0.4	-
	,	ı	,	Jongli	EI STAT	Е			1	
Athooc (Baidit and Jalle) dis- tricts, South Bor county	Jun-07	Residents	21,418	AAH-US		23.4-32.1 24.9-33.5	4.1 7.6°	2.6-5.6 5.2-9.9	0.1	MUAC < 11 cm: 2.3 MUAC < 12.5 cm: 16.7
Khorfulus & Atar areas	Jun-07	Residents/ Displaced/ Returnees	68,718	AAH-US		27.0-36.2 <i>25.5-35.0</i>	6.1 11.5 ²	4.2-8.0 8.3-14.6	2.0	-
	West Africa									
Niger										
Mayahi depart- ment, Maradi region	Apr-07	Residents	484,985	ACH/Joint	13.6	11.7-15.6	1.0	0.1-1.9	0.2	MUAC < 11 cm: 0.2 MUAC < 12 cm: 3.8
				CENTRA		RICA				
C 1	ı	l	l	CF	HAD					
Gorounkoun, Koubigou, Gassire & Koloma IDP camps	May-07	Displaced	43,900	Epicentre/ MSF-F	19.5	16.5-22.5	3.2	2.0-4.4	0	-

^{*}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

From UNICEF Darfur Nutrition Update

²According to WHO 2006 Child Growth Standards (http://www.who.int/childgrowth/en/)

sation o (% Proved	immuni- coverage %) [#] Card +	Assessment of micro- nutrient deficiencies	Vitamin A distribution coverage, within the	Women's anthropometric status (%)	Crude Mortality (/10,000/day) (95% CI) [§]	Under 5 Mortality (/10,000/day) (95% CI) [§]
by card	history		past 6 months			
-	69.2	-	-	-	0.44	0.81
-	48.2	-	-	-	1.07	1.02
8.9	66.6	-	-	-	0.87	1.60
-	70.9	-	-	-	_	-
18.1	67.0	-	-	_	_	-
25.6	65.5	-	-	-	0.74	1.40
-	-	-	-	-	-	-
24.9	81.4	-	-	-	0.51	1.28
32.7	86.0	-	-	-	0.65	1.15
33.7	74.1		52.5		1.75 0.08-2.70	3.48 0.08-6.88
27.9	56.5		61.3		1.71 1.17-2.26	2.45 0,17-4.73
	1					
32.6	62.2		71.7		1.04 0.65-1.43	2.79 1,51-4.07
24.4	69.4				0.45 0.18-0.72	0.51 0.0-1.06
6.4	19.5				0.67 0.32-1.01	1.74 0.72-2.76
7.5	55.7	-	-	-	0.24 0.11-0.36	0.69 0.23-1.16
71.0	76.2	-	-	-	1.79 1.15-2.78	4.07 2.13-7.69

^{*} Measles vaccination coverage for children aged 9-59 months

Continued...

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Survey Area	Date	Popula- tion	Estimated Popula- tion Number	Survey Conducted by	Malı	Acute nutrition* (95% CI) [§]	Malnu	e Acute trition** 95% CI) [§]	Oedema (%)	MUAC" (%)
	ļ.		<u>l</u>	DF	RC		ļ		ļ.	
				North	Kivu	J				
Rwanguba health zone	Mar-07	Residents	189,095	WV/joint	12.5		7.2		4.9	-
	1	I	1	ORIEN	i				1	
Mangobo health zone	Jul-07	Residents	147,915	AAH-US/ UNICEF	5.5 <i>5.4</i>	3.9-7.1 <i>3.8-7.0</i>	0.1 0.6	0.0-0.3 <i>0.1-1.2</i>	-	-
Buta health zone	Jul-07	Residents	147,185	AAH-US/ UNICEF	8.3 <i>6.9</i>	6.0-10.5 <i>4.9-8.9</i>	1.7 1.9	0.9-2.4 <i>1.1-2.7</i>	-	-
		1	,	KATA	NGA		,			
Bukama health zone	Jun-07	Residents	274,250	AAH-US/ UNICEF	3.8 5.2	2.5-5.1 3.6-6.7	0.9 1.2	0.3-1.6 <i>0.5-1.8</i>	0.8	MUAC < 11 cm: 0.3 MUAC<12.5 cm: 3.3
				Bane	UDU					
Gungu health zone	May-07	Residents	189,900	AAH-US/ UNICEF	7.9 8.4	4.2-11.7 5.1-11.6	2.4 3.0	0.7-4.1 1.0-5.0	2.3	MUAC < 11 cm: 1.4 MUAC<12.5 cm: 11.7
Idiofa health zone	May-07	Residents	221,080	AAH-US/ UNICEF	4.9 5.3 ¹	3.5-6.3 3.7-6.9	0.4 0.5	0.0-0.8 <i>0.1-1.0</i>	0.4	MUAC < 11 cm: 0.4 MUAC<12.5 cm: 7.5
				Uga						
IDD D	ı	I	ı	Northern	PROV	INCE	ı		ı	
IDP camps, Pader district	Aug-07	Displaced	-	WFP/DHO	4.9	4.0-5.7	-		1.5	-
IDP camps & resettlement areas, Northern Lira district	Apr-07	Displaced/ Returnees	-	AAH-US	7.1 <i>9.5</i> ^t	4.5-9.7 <i>6.7-12.4</i>	0.8 1.8	0.1-1.4 <i>0.9-2.8</i>	0.6	MUAC < 11 cm: 0.5 MUAC<12.5 cm: 11.6
IDP camps & resettlement areas, Gulu & Amuru districts	Apr-07	Displaced/ Returnees	688,470	AAH-US	3.1 3.5	1.8-4.5 2.1-5.0	0.4 0.8	0.0-0.8 0.2-1.4	0	MUAC < 11 cm: 0.5 MUAC<12.5 cm: 6.2
IDP camps & resettlements areas, Apac & Oyam districts	Apr-07	Displaced/ returnees	-	AAH-US	4.6 5.4	3.0-6.3 3.6-7.2	0.9 1.0	0.0-1.9 <i>0.1-2.0</i>	0.9	MUAC < 11 cm: 0.5 MUAC<12.5 cm: 13.4
				Karamojah	PROV	INCE			•	
Dry agro- ecological zones, Abim, Kaabong & Kotido districts	Mar-07	Residents	123,375	WFP/Joint	18.6		2.6		-	-

^{*}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

According to WHO 2006 Child Growth Standards (http://www.who.int/childgrowth/en/)

sation c	immuni- coverage %) [#] Card + history	Assessment of micro- nutrient deficiencies	Vitamin A distribution coverage, within the past 6 months	Women's anthropometric status (%)	status (/10,000/day)	
-	78.6 ¹	-	-	-	0.46	1.77
0.8	70.0	-	89.7	-	0.29 0.1-0.47	0.87 0.07-1.67
27.9	61.5	-	81.9	-	0.50 0.30-0.71	0.79 0.32-1.26
49.0	85.0	-	87.0	-	0.77 0.41-1.13	2.03 0.90-3.16
34.1	94.9	-	90.9	-	0.35 0.15-0.54	0.54 0.09-0.99
49.1	93.9	-	87.7	-	0.28 0.12-0.44	0.55 0.12-0.98
46	96.0	-	94.0	-	1.20 0.99-1.40	1.82 1.32-2.32
45.9	86.4	-	-	-	1.15 0.72-1.58	1.63 0.61-2.65
44.9	95.5	-	-	-	0.30 0.11-0.48	0.20 0.00-0.43
31.6	90.0	-	-	-	0.56 0.29-0.83	0.35 0.0-0.78
				BMI < 16: 4.4% ¹		
-	-	-	-	BMI < 18.5: 27.3% ¹	-	-

 $^{^{&}quot;}$ Measles vaccination coverage for children aged 9-59 months 1 Among 15 to 49 years old women

Survey methodology

The Greater Horn regionKenya

WAJIR DISTRICT

The survey was conducted by MERLIN in April 2007. A two-stage cluster sampling survey of 30 clusters was conducted to measure 884 children. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

TURKANA DISTRICT

Two surveys were conducted by WV in May 2007. Two-stage cluster sampling surveys of 30 clusters of 30 households in Central, Kolokol, Kerio, Lokichar, Lokori & Lomelo divisions on one hand and in Kainuk, Katilu, Loima and Turkwell divisions on the other hand, were conducted. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

Somalia

LOWER & MIDDLE SHABELLE REGIONS

Two two-stage 30-by-30 cluster-sampled nutrition surveys were conducted by FSAU/joint in riverine areas, agro-pastoral areas in May 2007. The surveys also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

BURHAKABA DISTRICT, BAY REGION

Two two-stage 30-by-30 cluster-sampled nutrition surveys were conducted by FSAU/joint in pastoral and agro-pastoral areas in May 2007. The surveys also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

IDPs, GALCAYO TOWN, MUDUG REGION

An exhaustive assessment was conducted by FSAU/joint in May 2007. 762 children were measured. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

COASTAL DEEH, BARI, NUGAL & MUDUG REGIONS

A two-stage 30-by-30 cluster-sampled nutrition surveys was conducted by FSAU/joint in May 2007. The survey also estimated measles vaccination and vitamin A distribution coverage, crude

and under-five mortality rates and various food security and public health indicators.

LOWER & MIDDLE JUBA REGIONS

Three two-stage 30-by-30 cluster-sampled nutrition surveys were conducted by FSAU/joint in riverine areas, agro-pastoral and pastoral areas in June 2007. The surveys also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

Sudan

AL SALAM IDP CAMP, SOUTH DARFUR

A random-sampled nutrition survey was conducted by ACF-F in May 2007. A two-stage 30-by-26 cluster sampling methodology was used to measure 808 children. The survey also estimated measles vaccination coverage and crude and under-five mortality rates.

KASS TOWN, SOUTH DARFUR

A random-sampled nutrition survey was conducted by ACF-F in June 2007. A two-stage 30-by-30 cluster sampling methodology was used to measure 957 children. The survey also estimated measles vaccination coverage and crude and under-five mortality rates.

SELEAH, SOUTH DARFUR

A random-sampled nutrition survey was conducted by ACF-F in August 2007. A two-stage 30-by-26 cluster sampling methodology was used to measure 809 children. The survey also estimated measles vaccination coverage and crude and under-five mortality rates.

KEBKABIYA TOWN, NORTH DARFUR

A random-sampled nutrition survey was conducted by ACF-F in June 2007. A two-stage 30-by-30 cluster sampling methodology was used to measure 960 children. The survey also estimated measles vaccination coverage and crude and under-five mortality rates.

ABU SHOK AND AS SALAAM IDP CAMPS, NORTH DARFUR

A random-sampled nutrition survey was conducted by ACF-F in June 2007. A two-stage 30-by-30 cluster sampling methodology was used to measure 960 children. The survey also estimated measles vaccination coverage and crude and under-five mortality rates.

CENTRAL, NORTHERN AND SOUTHERN PAYAMS, MALAKAL COUNTY, UPPER NILE

The survey was conducted by AAH-US in March-April 2007. A two-stage cluster sampling methodology of 34 clusters was used to measure 759 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rates over three months prior to the survey.

SOBTA CORRIDOR, UPPER NILE STATE

A random-sampled nutrition survey was conducted by GOAL in July 2007. A two-stage 30-by-23 cluster sampling methodology was used to measure 707 children. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

TWIC COUNTY, WARAP STATE

A random-sampled nutrition survey was conducted by GOAL in March 2007. A two-stage 30-by-24 cluster sampling methodology was used to measure 727 children. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

KURMUK COUNTY, BLUE NILE STATE

A random-sampled nutrition survey was conducted by GOAL in April 2007. A two-stage 30-by-18 cluster sampling methodology was used to measure 555 children. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

Athooc (Baidit and Jalle) districts, South Bor county, Jonglei state

The survey was conducted by AAH-US in June 2007. A two-stage cluster sampling methodology of 38 clusters was used to measure 829 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate over three months prior to the survey.

KHORFULUS AND ATAR AREAS, JONGLEY STATE

The survey was conducted by AAH-US in June 2007. A two-stage cluster sampling methodology of 34 clusters was used to measure 741 children between 6-59 months. The survey also estimated measles vaccination coverage and retro-

spective mortality rate over three months prior to the survey.

West Africa

Niger

MAYAHI DEPARTMENT, MARADI REGION

The survey was conducted by ACH-S in April 2007. A two-stage cluster sampling methodology of 30 clusters of 18 households was used to measure 927 children between 6-59 months. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

Central Africa

Chad

Gourounkoun, Koubigou, Gassire & Koloma IDP camps

The survey was conducted by Epicentre/MSF-F in May 2007. A two-stage cluster sampling methodology of 30 clusters was used to measure 911 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rates over 2 months prior to the survey.

Democratic Republic of Congo

RWANGUBA HEALTH ZONE, NORTH KIVU

The survey was conducted by WV and PRONA-NUT in March 2007. A two-stage 30 cluster sampling methodology was used to measure 957 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

MANGOBO HEALTH ZONE, ORIENTALE

The survey was conducted by AAH-US in July 2007. A two-stage 30 cluster sampling methodology was used to measure 962 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

BUTA HEALTH ZONE, ORIENTALE

The survey was conducted by AAH-US in July 2007. A two-stage 30 cluster sampling methodology was used to measure 896 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

BUKAMA HEALTH ZONE, KATANGA

The survey was conducted by AAH-US in June 2007. A two-stage 30 cluster sampling method-

ology was used to measure 949 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

IDIOFA HEALTH ZONE, BANDUDU

The survey was conducted by AAH-US in May 2007. A two-stage 30 cluster sampling methodology was used to measure 938 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

GUNGU HEALTH ZONE, BANDUDU PROVINCE

The survey was conducted by AAH-US in May 2007. A two-stage 30 cluster sampling methodology was used to measure 966 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate

Uganda

IDP CAMPS, PADER DISTRICT, NORTHERN UGANDA

The survey was conducted by WFP/DHO in August 2007. A random sampling methodology was used to measure 2474 children between 6-59 months. The survey also estimated measles vaccination and vitamin A distribution coverage, crude and under-five mortality rates and various food security and public health indicators.

IDP camps and Resettlement areas, Apac & Oyam districts, Northern Uganda

The survey was conducted by AAH-US in May 2007. A two-stage cluster sampling methodology of 32 clusters was used to measure 669 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

IDP CAMPS AND RESETTLEMENT AREAS, GULU & AMURU DISTRICTS, NORTHERN UGANDA

The survey was conducted by AAH-US in May 2007. A two-stage cluster sampling methodology of 32 clusters was used to measure 763 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

IDP CAMPS AND RESETTLEMENT AREAS, LIRA DISTRICT, NORTHERN UGANDA

The survey was conducted by AAH-US in May 2007. A two-stage cluster sampling methodology of 32 clusters was used to measure 651 children between 6-59 months. The survey also estimated measles vaccination coverage and retrospective mortality rate.

Nutrition Information in Crisis Situations

Abbreviations and acronyms

AAH-US Action Against Hunger USA
ACF-F Action Contre la Faim France
ACH-S Action Contra El Hambre Spain

BMI Body Mass Index
CMR Crude Mortality Rate
< 5 MR Under-five Mortality Rate

ENCU Emergency Nutrition Coordination Unit

FEWS Famine Early Warning System

FSAU Food Security Analysis Unit for Somalia

GoE Government of Ethiopia

ICRC International Committee of the Red Cross

IDP Internally Displaced Person

IRIN International Regional Information Network

MOH Ministry of Health MSF Médecins Sans Frontières

OCHA Office for the Co-ordination of Humanitarian Assistance

PRONANUT Programme National de Nutrition- DRC
UNHCR United Nations High Commission on Refugees

UNICEF United Nations International Children's Emergency Fund

UNSC United Nations Security Council

WFP World Food Programme
WHO World Health Organization

WV World Vision

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.

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

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 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

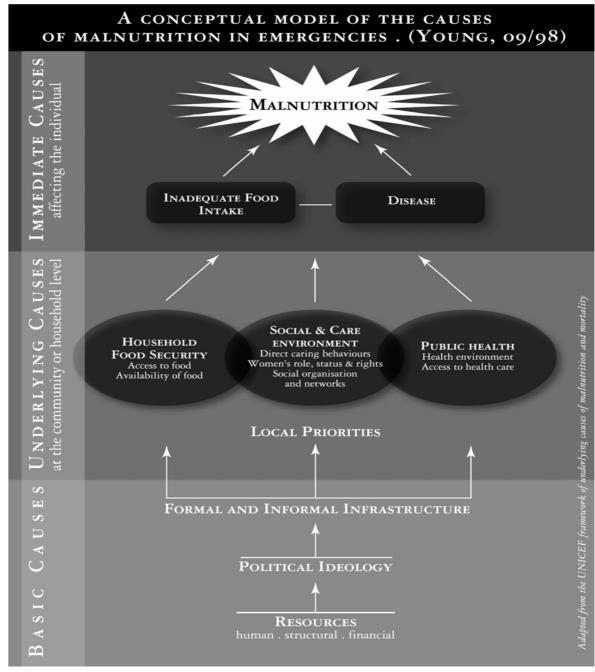
Classification of situations

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:

- ullet 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 *cate-gory 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.



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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 SCN's working group on Nutrition of Refugees and Displaced People, by the SCN 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 every three months.

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 is issued on the general responsibility of the Secretariat of the UN System/Standing Committee on Nutrition; the material it contains should not be regarded as necessarily endorsed by, or reflecting the official positions of the UNS/SCN and its UN member agencies. The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the UNS/SCN or its UN member agencies, concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.

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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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