



REFUGEES AND EMERGENCY THRESHOLDS IN 2005

A data review of field surveys in 2005 from
Complex Emergency Database (CE-DAT)

Brussels, March 2006

CE-DAT : The Complex Emergency Database

CE-DAT is a global, shared, searchable database on complex humanitarian emergencies. The main objectives are:

- 1) To provide key nutritional, health and mortality indicators for rational humanitarian aid decision making.
- 2) To promote effectiveness of international policy on response and prevention through evidence-based trend analysis and impact briefings.
- 3) To support decision making by constructing an internet-accessible, multi-source database on the human impact of complex emergencies.

Indicators included in the database come from more than 1100 survey undertaken by UN Agencies, NGOs and academic institutions in conflict and post-conflict situations.

CE-DAT collects three categories of data:

- 1) Mortality Rates (Crude Mortality, Under 5 Mortality, Infant Mortality)
- 2) Malnutrition (Acute Malnutrition, Chronic Malnutrition, Underweight, Oedema and MUAC)
- 3) Vaccination coverage (Measles, Polio, DTP, Tuberculosis) and Vitamin A coverage

All indicators in the database specify the legal status of the population measured (IDP, resident or refugee) and identify their exact location up to the smallest administrative level boundary. Moreover, CE-DAT is committed to improving the quality of data from conflict settings and hence provides methodological details (sampling methods, recall periods...) as well as states all sources of data.

For further information, please go to <http://www.cred.be/cedat/index.htm>

A data review of field surveys in refugee settings in 2005

- This report presents the results of 41 site-surveys reporting mortality and nutrition data in refugee settings over 2005 and contained in the CEDAT database. Tables 2 – 4 provide details of these results.
- Nearly half (49%) of the 2005 surveys in refugee settings available in CE-DAT displayed acute malnutrition levels above the emergency threshold¹. Of these, 90% displayed critical situations with GAM above 15%.

TABLE 1: MALNUTRITION SITUATION AMONG REFUGEES ACCORDING TO WHO DEFINITIONS

Severity of the nutrition situation	Prevalence of GAM	Number of surveys	
		Number of surveys	Percentage
Acceptable	< 5%	13	32%
Poor	5-9%	8	20%
Serious	10-14%	2	5%
Critical	>= 15%	18	44%

- In contrast to the nutritional status, mortality was under control (lower than the emergency threshold) in most sites reporting data in 2005. The only exception is a survey among Sudanese refugees in Chad where Crude Mortality Rate was slightly above the emergency threshold of 1 death per 10,000/day (Table 3).
However, the critical nutritional condition in some of the camps may well lead to an increase in mortality levels if the situation does not improve in the short term.
- According to the field surveys in 2005 gathered by the CE-DAT team, the worst refugee scenarios in terms of malnutrition were located in Kenya, Ethiopia, Bangladesh and Chad. In those countries, refugees are facing precarious situations with more than 15% of the children between 6 to 59 months being wasted.
- In Ethiopia, the worrying nutritional state of Sudanese refugees was largely a consequence of the reduction in general food distribution. Several other factors also played a role such as the inability of the refugees to supplement rations with their own crops, problems related to registration and ration cards, and inadequate water and sanitary conditions.

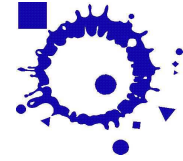
¹ According to WHO, there is an emergency situation when Global Acute Malnutrition prevalence is above 10% of children between 6 to 59 months

- In Kenya, where 72% of Somalia refugees rely on the general food rations distributed by WFP, the high prevalence of GAM may be explained by two main factors. First of all, a high burden of morbidity among children (mainly diarrhoea and malaria) as a consequence of the effects of April and May rains and flood. In a second instance, surveys in May displayed a food insecurity situation caused by inadequate food rations in terms of proteins and micronutrients, absence of pulses in the last general food distribution and the sale of part of the rations in order to obtain traditional Somali ingredients such as wheat flour.

- At the end of 2005, Myanmar refugees in Bangladesh showed alarming malnutrition rates (ranging from 16.4% to 22.1%). They are substantially higher than those displayed by the surveys in 2003 (12.8%) and 2004 (9.9%). Nevertheless, this rise might be explained by a seasonal effect, as the rates are similar to those observed in November 2001 when a survey was conducted at the same time of the year. On the other hand, mortality seems to be under control with an under five mortality of 0.5 per 10,000/day, far below the emergency threshold.

- Sudanese refugees from Darfur hosted in Chad seem to have undergone a steady improvement of their situation over 2005. Unlike 2004, mortality rates in 2005 were under control in the 4 camps surveyed. Global acute malnutrition, on the contrary, remained high in Am Nabak, Mille, Oure Cassoni and Treguine camps, where all the rates were above the thresholds. In addition, an exhaustive screening of the Cairari Settlement showed extremely high rates of malnutrition (GAM of 43.9%).

Looking carefully at the data, we note that almost all camp surveys indicate an improving trend over the year. Thus, we notice that camps with more than one survey during the year, experienced a steady reduction in the prevalence of wasting (eg. Am Nabak camp from 24.6% to 18,1% ; Djabal from 15.6% to 4.8 or Oure Cassoni from 26% to 15.7%).



**TABLE 2: GLOBAL ACUTE MALNUTRITION IN REFUGEE SITUATIONS
BASED ON FIELD SURVEYS (Using Z-score)**

Asylum Country	Province	Camp Name	Country of Origin	Value (%)	95% C.I.	Date
ALGERIA	Tindouf	Dakhla-&El-Aaiun & Aousserd& Smara	Western sahara	7,7	4,1-11,2	mrt-05
BANGLADESH	Chittagong	Kutupalong	Myanmar	16,4	12,3-20,6	nov-05
	Chittagong	Nayapara	Myanmar	22,1	15,4-28,7	nov-05
	Chittagong	Nayapara & Kutupalong	Myanmar	19,6	15,3-23,8	nov-05
CHAD	Wadi Fira	Am Nabak	Sudan	24,6	20,8-28,9	apr-05
	Wadi Fira	Am Nabak	Sudan	18,1	14,7-22,0	nov-05
	Wadi Fira	Cariari Settlement	Sudan	43,9	n.a.	mei-05
	Wadi Fira	Djabal	Sudan	15,6	12,5-19,3	feb-05
	Wadi Fira	Djabal	Sudan	4,8	3,1-7,3	nov-05
	Wadi Fira	Farchana & Bredjing	Sudan	8	5,8 - 10,3	jan-05
	Wadi Fira	Goz Amir	Sudan	10,1	7,6-3,2	feb-05
	Wadi Fira	Mile	Sudan	15,6	n.a.	jan-05
	Wadi Fira	Oure Cassoni	Sudan	20,5	16,9-24,5	jan-05
	Wadi Fira	Oure Cassoni	Sudan	26	n.a.	mei-05
	Wadi Fira	Oure Cassoni	Sudan	15,7	12,6-19,4	nov-05
Wadi Fira	Treguine	Sudan	11,3	8,6-14,6	jan-05	
ETHIOPIA	Gambella	Pgnido/Anyuak settlement	Sudan	21,9	n.a.	mei-05
	Gambella	Bonga	Sudan	19,3	16,8-22,1	mrt-05
	Gambella	Fugnido	Sudan	20,7	18,1-23,5	mei-05
GHANA		Buduburam	Liberia	7,7	6,1-9,6	mei-05
KENYA	North Eastern	Daghaley	Somalia	25,5	21,3-30,2	jun-05
	North Eastern	Hagadera	Somalia	16,6	13,3-20,4	jun-05
	North Eastern	Ifo	Somalia	34,5	30,2-39,1	jun-05
	North Eastern	Ifo - Daghaley- Hagadera	Somalia	26,3	24,0-28,8	jun-05
NEPAL	Eastern	Goldhap - Beldangi & Sanischare & Khundunabari & Timai	Bhutan	8,8	n.a.	jul-05
TANZANIA	Kigoma	*all refugee camps*	Burundi- DRC	2,8	2,4-3,3	sep-05
	Kigoma	Kanembwa	Burundi	2,6	1,4-4,6	sep-05
	Kigoma	Lugufu I	DRC	1,1	0,4-2,6	sep-05
	Kigoma	Lugufu II	DRC	1,1	0,4-2,7	sep-05
	Kagera	Lukole A	Burundi	4,4	2,8-6,9	sep-05
	Kagera	Lukole B	Burundi	5,7	3,8-8,4	sep-05
	Kigoma	Mkugwa	Burundi	3	0,7-9,1	sep-05
	Kigoma	Moyovosi	Burundi	2,2	1,1-4,1	sep-05
	Kigoma	Mtabila 1	Burundi	4	2,5-6,6	sep-05
	Kigoma	Mtabila 2	Burundi	2,1	1,1-4,1	sep-05
	Kigoma	Mtendeli	Burundi	3,8	2,3-6,1	sep-05
	Kigoma	Nduta	Burundi	2,3	1,2-4,3	sep-05
	Kigoma	Nyarugusu	DRC	1,6	0,7-3,3	sep-05
UGANDA	Adjumani	Adjumani A	Sudan	9,7	n.a.	sep-05
	Arua	Imvepi	Sudan	7,9	n.a.	nov-05
	Arua	Rhinocamp	Sudan	7,9	n.a.	nov-05

Source: CE-DAT database

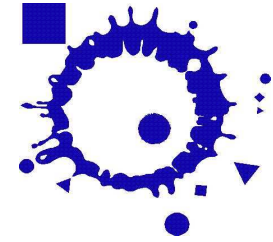
■ Above the emergency threshold of 10%

n.a. = not available

(**) Preliminary results


TABLE 3: CRUDE MORTALITY RATES IN REFUGEE SITUATIONS BASED ON FIELD SURVEYS

(deaths per 10,000 /day)



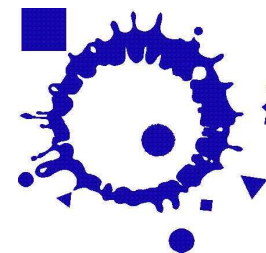
Asylum Country	Province	Camp Name	Country of Origin	Value	95% C.I.	Date
CHAD	Wadi Fira	Am Nabak	Sudan	1,06	n.a.	apr-05
	Wadi Fira	Am Nabak	Sudan	0,27	0,08-0,46	nov-05
	Wadi Fira	Djabal	Sudan	0,89	n.a.	feb-05
	Wadi Fira	Djabal	Sudan	0,35	0,12-0,57	nov-05
	Wadi Fira	Goz Amir	Sudan	0,93	n.a.	feb-05
	Wadi Fira	Oure Cassoni	Sudan	0,14	0,0-0,28	nov-05
GHANA		Buduburam	Liberia	0,35	n.a.	mei-05
KENYA	North Eastern	Ifo - Daghaley- Hagadera	Somalia	0,5	n.a.	jun-05

Source: CE-DAT database

 Above the emergency threshold of 1 death per 10,000 /day

n.a. = not available


TABLE 4: UNDER FIVE MORTALITY RATES IN REFUGEE SITUATIONS BASED ON FIELD SURVEYS



(deaths per 10,000 /day)

Asylum Country	Province	Camp Name	Country of Origin	Value	95% C.I.	Date
BANGLADESH	Chittagong	Nayapara & Kutupalong	Myanmar	0,5	n.a.	nov-05 ^(**)
CHAD	Wadi Fira	Goz Amir	Sudan	0,98	n.a.	feb-05
	Wadi Fira	Djabal	Sudan	1,19	n.a.	feb-05
	Wadi Fira	Treguine	Sudan	0,8	n.a.	jan-05
	Wadi Fira	Oure Cassoni	Sudan	0,8	n.a.	jan-05
	Wadi Fira	Djabal	Sudan	0,23	0,0-0,55	nov-05
	Wadi Fira	Am Nabak	Sudan	0,59	0,07-1,10	nov-05
	Wadi Fira	Oure Cassoni	Sudan	0,22	0,0-0,53	nov-05
GHANA		Buduburam	Liberia	0,34	n.a.	mei-05
KENYA	North Eastern	Ifo - Daghaley- Hagadera	Somalia	1,6	n.a.	jun-05

Source: CE-DAT database

 Above the emergency threshold of 2 deaths per 10,000 /day

n.a. = not available

(**) Preliminary results

LIST OF SOURCES

- Action Against Hunger - USA
- Administration for Refugees and Returnees Affairs - Ethiopia (ARRA)
- African Humanitarian Action (AHA)
- District Director of Health Services Arua (DDHS Arua)
- German Technical Cooperation (GTZ)
- International Rescue Committee (IRC)
- INRAN (National Institute of Research for Food and Nutrition)
- Médecins Sans Frontières - Holland
- National Catholic Service - Ghana
- Standing Committee on Nutrition (SCN)
- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Children's Fund (UNICEF)
- World Food Program (WFP)