# Health in Complex Emergencies



# TRENDS IN 8 AFRICAN COUNTRIES



#### Legend

- IDP
- Resident
- Refugee
- △ IDP-resident
- Resident-returnee
- IDP−resident−returnee
- Confidence interval

#### **Definitions**

#### **Global Acute Malnutrition (GAM)**

Percentage of 6-59 months children that are malnourished, calculated with the Z-score defined as a weight-for-height index less than -2 standard deviations from the mean weight of a reference population of children of the same height and/or having oedema.

#### **Crude mortality rate (CMR)**

It estimates the rate at which members of a population have died over a defined period of time, calculated as the number of deaths per 10,000 people per day.

#### **Under 5 mortality rate (U5MR)**

It estimates the rate at which children below the age of 5 have died over a defined period of time, calculated as the number of deaths per 10,000 under 5 children per day

#### Measles-containing Vaccine (MCV) coverage

Percentage of children aged 9 to 59 months who have received at least one dose of measles vaccine

#### **Emergency thresholds**

**GAM: 10%** 

CMR: 1/10,000/day U5MR: 2/10,000/day

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| Democratic Republic of Congo | 26   |
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| Niger                        | 56   |
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| Somalia                      | 76   |
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# **FOREWORD**

In June 2003, representatives of government and multilateral donors, UN institutions, the International Red Cross and Red Crescent Movement and other organizations involved in humanitarian action gathered at an international meeting in Stockholm, Sweden. The meeting's objectives were to review the humanitarian community's past achievements and to define a new paradigm for Good Humanitarian Donorship.

One of the general principles endorsed at the Stockholm meeting was that allocation of humanitarian funding would be done in proportion to needs, and on the basis of needs assessments. As a consequence, several initiatives were launched to assist donors in this endeavor, by providing them with information on existing humanitarian gaps. This was the context for starting the Complex Emergency Database (CE-DAT) in 2003, as a data repository of mortality and nutrition surveys conducted in conflict situations, or complex emergencies, as they are often called.

Seven years after the project's launch, enough data has been collected to allow us to look at long-term trends in mortality, nutrition and vaccination coverage among conflict-affected populations. This report describes the picture in eight African countries that show progress over the last decade. Although the trends suggest a positive evolution, there is still a long way to go; malnutrition, in particular, remains a serious problem among affected populations in many countries. Furthermore, the CE-DAT data shows how important differences exist between various areas of the same country. We therefore believe further efforts must be directed at ensuring the availability and dissemination of high-resolution health data from conflict-affected populations, so that decisions are not based on nationwide data alone.

Finally, I wish to express my gratitude to all those who have contributed in one way or another to the CE-DAT project over the last seven years.

Professor Debarati Guha-Sapir, Director, Centre for Research on the Epidemiology of Disasters (CRED)

January 2011 - Brussels, Belgium

# COMPLEX EMERGENCY DATABASE

The Complex Emergency Database (CE-DAT), developed and run by the Centre for Research on the Epidemiology of Disasters (CRED) at the Catholic University of Louvain in Belgium, is an international initiative to monitor and evaluate the health status of populations affected by complex emergencies. The aim was to develop a database of mortality and acute malnutrition rates - the most commonly used public health indicators of the severity of a humanitarian crisis. CE-DAT currently compiles more than 2,400 epidemiological surveys from 51 countries.

Field agencies use mortality and nutrition indicators to identify and measure the severity of needs in order to prioritize human and financial resources. These indicators have been shown to be useful in monitoring the extent to which the relief system is meeting the needs of vulnerable populations and thus the overall impact and effectiveness of the relief system. Therefore, the main objectives of CE-DAT are to:

- Provide key mortality, nutritional and health indicators for rational humanitarian aid decision-making
- Promote the effectiveness of international policies on conflict prevention and response through evidence-based trend analyses and impact briefings
- Strengthen the capacity of national and international field operators in data collection and analysis
- Improve standardization and help establish norms to enable the comparability of complex emergency data across time and space

The project works closely with the Standardized Monitoring and Assessment of Relief and Transitions (SMART) initiative, which provides support with the methodology of conducting such surveys, and with the SPHERE project, providing humanitarian charter and minimum standards in disaster response.

#### **Sources of public health indicators**

In the absence of reliable health information and crucial registration systems, nutrition and mortality surveys have been adopted as a way of ascertaining the direct impact of a crisis on human populations. These surveys are fertile data sources and are producing increasingly better quality of data on the epidemiological profile of conflict-affected populations. Together, they can provide invaluable insight and help to guide policy.

Data on internally displaced persons (IDPs) and local residents is provided mainly by non-governmental organizations (NGOs), which often have access to insecure areas that academics and UN organizations cannot reach, whereas data on the health status of refugees comes primarily from the UN Office of the High Commissioner for Refugees (UNHCR). Surveys undertaken by NGOs cover geographical units at lower resolutions than those undertaken by the UN, governments or academic groups. Whilst the UN provides surveys that are nationwide or cover very large regions, NGOs are the main source of information at sub-national levels about IDPs and affected residents. Data on refugees in camps, on the other hand is collected primarily through UNHCR's *Standards and Indicators Report* system, which draws on a combination of NGO reports and its own civil registration system.

These surveys are typically structured around two main components: a cross-sectional nutrition and health survey, and a retrospective mortality survey.

#### **Nutrition and Health**

The nutrition and health component of surveys provides valuable information on the welfare of the populations affected by conflict. In contrast with mortality, which is the ultimate indicator, nutrition and health data constitute the starting point for prevention and health programming. The data selection process in CE-DAT indicates that survey quality and use of standard methodology is more advanced for the nutrition sector than for mortality or morbidity. There is consensus on many aspects, such as the use of nutritional survey information to confirm the severity of a crisis and on procedures for gathering and analyzing anthropometric data. In almost all nutritional surveys the results are triangulated with morbidity and mortality rates, seasonal fluctuations, pre-emergency

# HOW ARE NUTRITION AND MORTALITY SURVEYS CONDUCTED?

Nutrition and mortality surveys are typically conducted using a cluster sampling method. First, a list of population figures is generated. It can enumerate sectors, villages, cities or administrative units in the studied area, with the population in each of them. All these entities are then regrouped in geographical areas, called clusters. Depending on the magnitude of the study, these clusters can vary from a set of sectors to entire districts.

Next, a predetermined number of clusters is selected from the total list of clusters. This selection is made randomly, but proportionately to the population size. This means that a cluster with few people will have less chance of being selected than a cluster with many individuals. The number of clusters selected can vary. Typically, it consists of at least 30, but the more there are, the better.

After identifying the clusters, the first household of each cluster is chosen randomly and the remainder will be selected by their proximity, usually by picking the household closest to the one just surveyed. Surveyors repeat this procedure until the necessary number of households has been collected. Typically, they number at least 30, but it can be more. Using this method, one assumes that a representative sample of the total population is selected.

In each selected household, all children aged between six months and 59 months are weighed and measured. All observations are subsequently compared to a reference population of normally fed children, which allows for the identification of those who are wasted (acutely malnourished), stunted (chronically malnourished) and underweight (both acutely and chronically malnourished). In addition, each child is examined for the presence of bilateral pitting oedema, which is a sign of kwashiorkor, a form of acute malnutrition. The percentage of malnourished children in the sample is then presented as "Global Acute Malnutrition" (GAM), "Global Chronic Malnutrition" (GCM) or "Global Underweight".

For surveys including a mortality component, one person in each household is questioned about demographic changes, regardless of the presence in the household of children under the age of five. Two lists are generated: one counting people living in the household at that time and another one with the people living there a predetermined period of time ago (typically three to six months). Further inquiries are then made into the discrepancies, categorizing these as births or arrivals on the one hand and deaths or departures on the other hand. The whole procedure is repeated for every household. In this way the surveyors determine the number of deaths and the average population size. Based on these two figures and the recall period, a mortality rate is calculated, which represents the number of deaths per population unit per time unit. It is typically expressed in "number of deaths per 10,000 individuals per day".

levels of malnutrition, and the underlying causes of malnutrition. The UN Children's Fund (UNICEF) conceptual framework on the causes of malnutrition has been widely adopted as a guide in analyzing nutrition problems in populations. Agencies agree on the indicators for monitoring the quality and performance of selective feeding programmes given in the SPHERE Project's Humanitarian Charter and Minimum Standards in Disaster Response. Much of this work on standardization and consensus has been spearheaded by NGOs which frequently sit on various UN Expert Committees.

#### **Malnutrition**

In emergencies, malnutrition among children aged six months to 59 months is used as a proxy indicator for the general health and welfare of a community (SMART 2009). Humanitarian NGOs record age, weight, height, and the presence of oedema in order to compose the following indicators of malnutrition:

- Failure to grow leads to height stunting, reflecting chronic malnutrition (height-for-age)
- Loss of body tissue results in wasting, reflecting acute malnutrition (weight-for-height)
- A combination of acute and chronic malnutrition, underweight (weight-for-age)
- Accumulation of fluid results in nutritional oedema

Acute malnutrition is used to reflect the recent nutritional situation of a population. It is therefore the main indicator for assessing nutritional status in emergencies.

GAM rates below 5% are usually considered acceptable, while levels above 10% are taken to indicate an emergency. Rates above 15% are treated as critical. Chronic malnutrition is less useful for deciding when to intervene in a crisis situation but can contribute to long-term planning and development policies.

#### Limitations

Nutrition indicators can also be subject to different limitations. A first and very common source of bias relates to age reporting and digit preference. In contexts where birth certificates are not routinely issued, identifying the exact age of a child is not always straightforward. As a result, indicators based on age might be seriously affected by systematically inaccurate reporting. A second source of bias is often called "survival bias". It means that since only children that have survived the humanitarian crisis can be surveyed, results might underestimate the true severity of a nutritional situation.

#### **Disease and Vaccination**

Health indicators such as vaccination coverage or the number of reported cases of disease are also used to assess the severity of crises, and are commonly collected by humanitarian NGOs. They report the prevalence of diarrhoea and acute respiratory infections during the two weeks before the survey and provide a morbidity profile of the population surveyed. In emergencies, vaccinations are often delivered either in routine clinic visits as part of primary health care or through campaigns which aim to provide speedy maximum protection to the population.

In most emergencies, the vaccine-preventable disease of most concern is measles. Measles outbreaks during a humanitarian crisis can have a very high case-fatality rate - as high as 10-20% - in malnourished populations of children.

The UN World Health Organization (WHO) recommends that 80% of children should be vaccinated against measles in order to achieve what is called herd immunity, when enough individuals are vaccinated for everyone to be reasonably protected against a disease. This percentage - of measles-containing vaccine coverage - is known as MCV. SPHERE goes even further, and recommends that MCV should be 90-95%, especially in areas of high population density, such as camps.

#### **Mortality Component**

Retrospective mortality surveys collect information to calculate a mortality rate. A mortality rate is the number of deaths in a given time period divided by the amount of time lived by the population exposed to the risk during the time period. Two main indicators, generally expressed in deaths/10,000/day over a specific recall period in emergency situations, are:

- Under-five mortality rate (U5MR), assessing the number of deaths amongst children under five years of age.
- Crude mortality rate (CMR), assessing the number of deaths in the entire population

#### Limitations

Mortality estimation is a complex process, subject to many sources of bias which can lead to over-or under-estimation of deaths and therefore to raging debates around estimated death tolls.

• First, transient populations or conflict-related fertility and mortality patterns can make

the task more difficult. This is compounded by the fact that family size can change substantially in a very short period in the context of a conflict.

- Second, mortality rates are calculated on the basis of reported deaths, which is subject to a recall bias - unreliable memory - especially if the recall period is long. The recommended recall period in these circumstances is no more than six months and preferably restricted to three.
- Thirdly, it is only possible to interview people who are alive. This survival bias means that mortality might be underestimated, since it does not account for households that have disappeared, or those from which everyone has died.
- Fourth, some households may inflate their numbers if they perceive it giving them a chance of more relief and aid. This, in turn, will lead to an exaggerated mortality rate. (Checchi and Roberts 2007; Ratnayake et al. 2008).

### **Challenges**

#### Agreement on definitions

Inconsistencies in definitions both for civil conflict and for health indicators are a major barrier to the best use of available data. Concentrated efforts are needed to agree on conventions on these issues which would improve the quality of international humanitarian and post-conflict programs.

#### Improvement of the quality of surveys

Past reviews of survey quality have shown varying levels of comparability of results, sometimes because of variations in reporting and methodologies, and sometimes because of insufficient rigor in collecting or processing data (Prudhon and Spiegel 2007). The weaknesses identified in all of the surveys for both components include over-large confidence intervals, selection bias due to insecurity, interview bias in politically tense contexts, or incorrect coeffecients used for extrapolation.

# **CE-DAT's survey checklist**

To improve the quality of surveys, the first requirement is to evaluate whether the survey reports are complete, as they may not cover all the information contained in the raw data and vice-versa. In order to assess the completeness of reports, the CE-DAT team has developed guidelines for consistent reporting and put them in a practical format for field agencies by providing a checklist of the key elements that should be included in a survey report.

Once a report's completeness has been appraised, we can assess the quality of its survey results. The checklist is separated into the four sections usually found in survey reports, namely:

- 1. Pre-survey preparation and planning,
- 2. Methods,
- 3. Results, and
- 4. Discussion.

For a survey report to be deemed complete, a list of criteria within each of the four sections must be met. Knowing that every important aspect of the survey has been explained - mostly from a methodological point of view - provides the information for others to judge whether the indicators in it stand up to scrutiny. These CE-DAT guidelines should be viewed as a step in an ongoing process of creating tools to improve the quality of reporting and conducting emergency surveys.

# **RECENT TRENDS**

## An increasing number of surveys conducted every year

CE-DAT data shows there has been an overall increase in the number of health and nutrition surveys conducted in humanitarian contexts during the last decade. For the year 2000 - year of the oldest surveys included in the database - 207 surveys were entered. In the following years, the number of surveys available increased to almost 300, and has remained at that level ever since, with the exception of 2008.

In analyzing data on malnutrition, mortality and vaccination coverage over the last decade, most comparisons are made between surveys undertaken in 2006-2007 and others in 2008-2010. The time interval was increased to two years for the second period because there are fewer surveys available then.

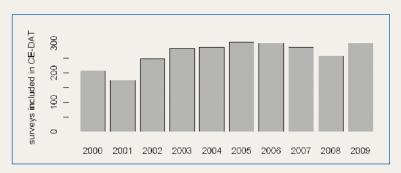


Figure 1: Surveys conducted per year (source:CE-DAT)

In this report, we focus on eight African countries that represent 68% of all the data included in the CE-DAT database. The countries are shown in Figure 2.



Figure 2: Countries included in this report

# **RECENT TRENDS**

# Improving the health and nutrition status of affected populations

Surveys included in the CE-DAT database show that the health and nutrition status of the populations affected by complex emergencies in the analyzed countries, has improved during the last ten years. Indeed, figure 3 shows how the number of surveys reporting high levels of acute malnutrition was consistently lower during 2005-2009 compared to 2000-2004. However, this does not mean that those situations are under control, as it is merely an improvement from a very bad situation to a bad situation. In fact, the figure also shows that for the second period, in 6 of the 8 countries included in this analysis, more than half of the surveys still reported levels that were above the emergency threshold of 10%. This is only one country less than for the period 2000-2004.

As far as crude mortality is concerned, we note a more positive evolution. For the period covering 2005-2009, the eight countries included in the analysis had a majority of surveys reporting mortality levels below the threshold of 1 death per 10,000 people per day. In addition, compared to 2000-2004, all countries showed an improvement of at least 25%. For child mortality, on the other hand, we see a less optimistic situation. Notwithstanding a decrease in the number of surveys reporting mortality levels above the emergency threshold of 2 under five deaths/10,000/day, there were still 5 of the 8 countries that had a majority of surveys with values exceeding that threshold. DR Congo and Somalia in particular, remained at worrisome child mortality levels.

Finally, with regard to measles vaccination, 4 of the 8 countries had more than half of the surveys conducted between 2005 and 2009, reporting coverage levels below the threshold of 80% of all children aged 9 to 59 months. All countries, except Niger, showed an improvement of the situation compared to the period 2000-2004. Nevertheless, immunization coverage remains bad among affected populations living in Ethiopia, Niger, Somalia and Sudan.

These trends suggest that steps in the right direction have been taken, but that more needs to be done. Nutrition and vaccination coverage in particular are areas where major gaps remain. For 2009, there were still 201 of the 282 (71%) surveys that reported levels of acute malnutrition above 10% GAM, and 61 of the 138 (49%) surveys with MCV coverage below 80%.

Also, the relatively poorer progress for malnutrition, vaccination coverage and, to a lesser extent, child mortality, in comparison to crude mortality, stresses the importance of targetting young children in intervention programs.

# **RECENT TRENDS**

In the following section, we provide in-depth trend analyses of the prevalence of global acute malnutrition, crude mortality rate, under five mortality rate and measles vaccination coverage for conflict affected populations living in these eight African countries.

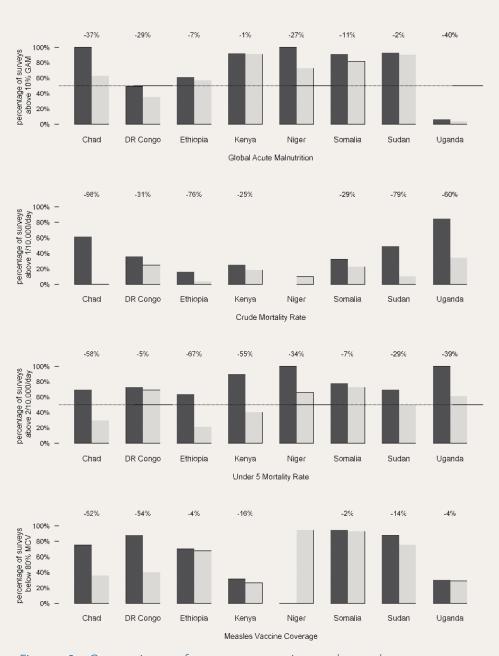


Figure 3: Comparison of surveys reporting values above emergency thresholds during 2000-2004 (dark) and 2005-2009 (light)

# **COUNTRY PROFILES**

# The following countries are included in the profiles:

- Chad
- Democratic Republic of Congo
- Ethiopia
- Kenya
- Niger
- Somalia
- Sudan
- Uganda

# Chad

The central African country of Chad is one of the poorest nations in the world. Life is hard for most of the population, exacerbated by widespread corruption. Violence has marked the country's history since independence from France in 1960. Mismanagement of the state and an autocratic system of one-party rule under the first post-independence president, François Tombalbaye, aggravated tensions between the Christian south of the country - Tombalbaye's home territory - and the Muslim north.

Violent revolts by Muslim rebels eventually evolved into full-scale civil war in 1965 between the government and rebels, led by the Chadian National Liberation Front (FROLINAT). Opposition to Tombalbaye's rule was based in southern Chad for the next decade, until Tombalbaye was killed during a coup in 1975. He was replaced by Felix Malloum, a southern Christian who put the country under military rule.

Sporadic rebel insurgencies by numerous emerging Chadian factions continued until 1979, when a Transitional Government of National Unity was created under Muslim northerner Goukouni Ouddei. By this time, Libya had intervened and occupied the Aozou strip of northern Chad. However, the coalition government was weak, and Hissène Habré, leader of the Army of the North, seized power in 1982.

Chadian forces cooperated with FROLINAT, as well as the United States and France, to expel Libyan forces from the Aozou strip in 1987, marking the end of Libyan occupation. Habré's authoritarian rule was marked by the ethnic cleansing and massacre of an estimated 40,000 people. Later referred to as "Africa's Pinochet," more than 200,000 others were tortured under his rule. Habré was arrested in 2005 for crimes against humanity.

In 1990, Idriss Déby overthrew Habré and became president. Political parties were legalized in 1992, but government forces clashed with a number of rebel forces throughout the early 1990s. Déby was elected president in Chad's first multiparty elections in 1996 and again in 2001. Oil exploitation began in 2000 with the Chad-Cameroon Petroleum Development Project. Chadian rebel forces, especially those in the east, continued to oppose the government.

As violence erupted in the neighboring country of Sudan's western region of Darfur from 2003 onwards, more than 200,000 refugees fled across the border into eastern Chad. Ethnic violence in this part of Chad has increased since 2006, especially between Sudanese and Chadian militias. Tensions between the two countries have heightened as the Chadian government claims the Sudanese government is behind rebel attacks near their mutual border.

Two rebel attempts to overthrow Déby in 2006 and 2008 were unsuccessful. Given its location in the semi-arid Sahelian belt, Chad suffers from droughts and erratic rains which compromise crop production and increase food insecurity. The last drought, in 2009, affected 2 million people and reduced crop production by 35%.



#### **Summary**

#### **Nutrition**

- GAM = 12% (CE-DAT)
- GAM among residents in central region above 20%; Improvement elsewhere but still above threshold

#### **Crude Mortality**

- CMR = 0.4/10,000/day (CE-DAT)
- Improvement

#### **Child Mortality**

- U5MR = 0.9/10,000/day (CE-DAT)
- Improvement

#### **Measles Vaccination**

- MCV = 65% (CE-DAT)
- Volatile among residents; stable among refugees

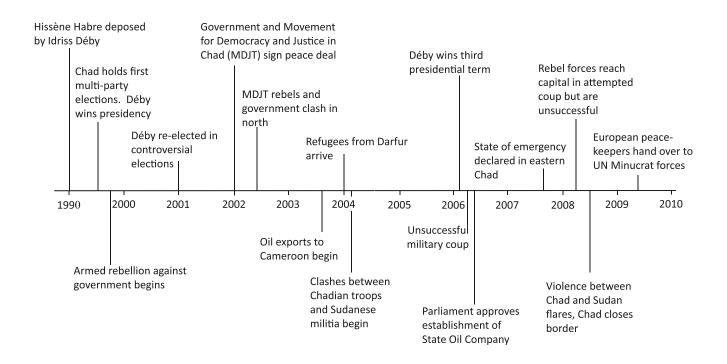
#### **Displacement**

- IDPs = 170,000 (IDMC, July 2010)
- Refugees residing in Chad = 338,495 (UNHCR, Jan. 2010)
- Chadian refugees abroad = 55,014 (UNHCR, Jan. 2010)

#### **Humanitarian Funding**

- Paid: \$342.4 million (FTS, November 2010)
- Committed \$67.9 million (FTS, November 2010)
- Increase in committed and paid funding

#### **Timeline**

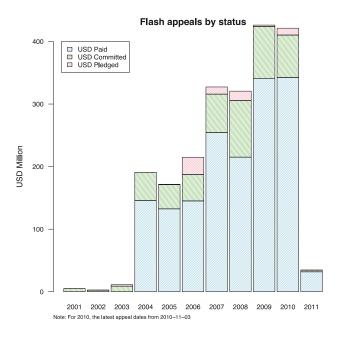


# Displacement and humanitarian funding



# Spugges originating from Refugees residing in 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

#### (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

#### **Nutrition**

Out of five locations for which a comparison was possible between surveys from 2006-2007 and 2008-2010, three surveys from displaced camps and host populations in Sila showed a significant improvement, particularly in Gouroukoun and Gassire camps, where malnutrition reached 20% on average in 2006-2007 and has now dropped to 5% and 10% respectively. In the camps of Assongha, 150 km north of Sila, malnutrition is now above the emergency level of 10%.

Looking at long-term trends (2000-2010), we find that the majority of the surveys cover the eastern and southern regions of Chad and mainly reflect the humanitarian situations of refugees from Sudan and Central African Republic. In fact, only 16 out of 49 surveys have examined residents or IDPs.

In southern Chad - Logone Oriental and Moyen Chari - surveys of refugees from Central African Republic in 2008 indicate malnutrition below emergency levels.

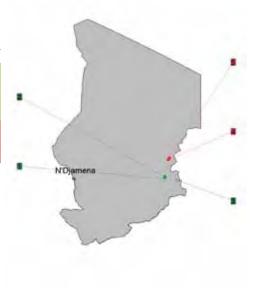
In the east, after a 2004 peak following the outbreak of the Darfur conflict and a major influx of Sudanese refugees, malnutrition has decreased towards the emergency level, but remains above it. The Assongha region, which includes the camps of Farchana and Bredjing, is the only eastern region where the situation is deteriorating.

Data from the Kanem region has reported increasing GAM among residents since 2000, reaching 27% in mid-2002. More recent data (from July 2010) confirmed that 27% of children suffer GAM, indicating a very serious situation that requires assistance.

# Trends in malnutrition over the last five years

#### Average global acute malnutrition (%)

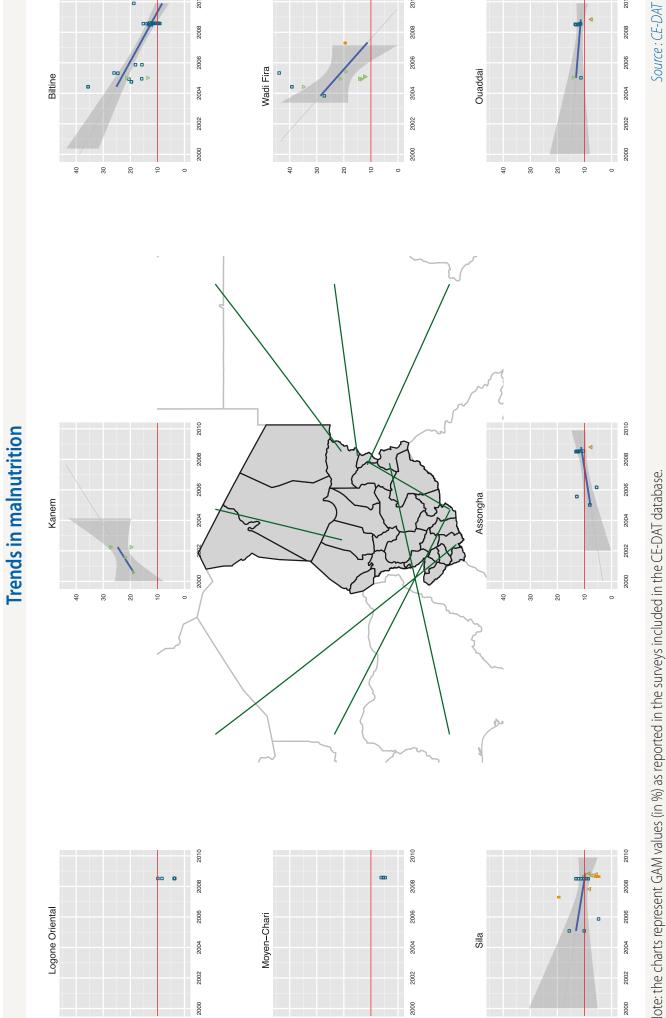
| Location                    | 2008 2010 surveys | 2006 2007 surveys |
|-----------------------------|-------------------|-------------------|
| Improvement                 | ,                 |                   |
| 1. Gourounkoun camp (Sila)  | 4.7               | 20.0              |
| 2. Gassire camp (Sila)      | 10.1              | 20.0              |
| 3. Dogdore camp (Sila)      | 5.8               | 8.1               |
| <u>Deterioration</u>        |                   |                   |
| 4. Bredjing camp (Assongha) | 12.1              | 5.7               |
| 5. Farchana camp (Assongha) | 12.6              | 5.7               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

## **Crude mortality**

Since 2008, crude mortality in Chad has reached acceptable levels in all regions, with surveys reporting rates below the emergency threshold of 1/10,000/day.

All three locations for which a comparison is possible between surveys from 2006-2007 and 2008-2010 showed an improvement over time.

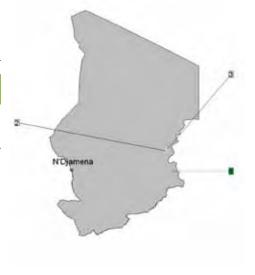
The long-term trend shows a decrease in crude mortality rates in all regions from which data is available. After a peak in 2004-2005 in Bilitine and Wadi Fira regions, where mortality rates reached between 1 and 2.5/10,000/day, corresponding to the exacerbation of violence between Chadian troops and Sudanese militia, the situation has improved and most recent surveys indicate CMR back at a normal level (0.3-0.4/10,000/day) as of the end of 2009.

In Sila and Assongha, mortality has remained below the emergency threshold and shows a slight decrease compared to 2004.

# Trends in crude mortality over the last five years

#### Average Crude Mortality Rates (/10,000/day)

| Location                    | 2008 2010 surveys | 2006 2007 surveys |
|-----------------------------|-------------------|-------------------|
| Improvement                 |                   |                   |
| 1. Dogdore camp (Sila)      | 0.5               | 0.9               |
| Status quo                  |                   |                   |
| 2. Bredjing camp (Assongha) | 0.4               | 0.4               |
| 3. Farchana camp (Assongha) | 0.4               | 0.4               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Vote:

Squares represent CMR above threshold; Circles represent CMR below threshold.

Source: CE-DAT

Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

## **Child Mortality**

The majority of surveys report values from the eastern and southern regions and mainly reflect conditions for refugees from Sudan and CAR living in camps. Overall, there are two important points: first, child mortality has decreased over the decade in all regions for which data is available, except for Sila. Secondly, only three surveys in the last decade have reported under-five mortality rates above the emergency threshold of 2/10,000/day. One survey, in 2004, found U5MR reaching 2.2/10,000/day in the Iridimi and Touloum camps. The situation has significantly improved since then, with more recent values of 0.69/10,000/day in Iridimi and 0.87/10,000/day in Touloum (August 2008).

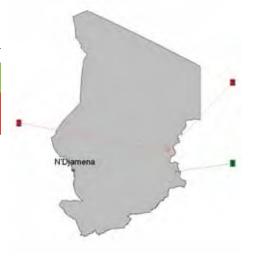
The other two surveys which identified very high U5MR values were conducted in two IDP camps in the Sila region (Dogdoré and Gourounkou) and reported respectively 2.04 (October 2007) and 2.07 (September 2008). As mentioned above, there has been a deterioration in conditions in Sila region, particularly in the last two years. Furthermore, violence towards both the civilian population and humanitarian aid workers peaked in 2008, resulting in a reduction in the assistance provided to the population. Simultaneously, Dogdoré camp in Sila has reported a clear improvement from 2006-2007 values (a 50% reduction), confirming the importance of detailed data for better targeting.

Although child mortality follows a generally decreasing trend in the Assongha region, direct comparison in Farchana and Breidjin camps between 2006-2007 and 2008-2010 values has highlighted a deterioration in the under-five mortality rate.

# Trends in under 5 mortality over the last five years

#### Average Under 5 Mortality Rates (/10,000/day)

| Location   | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement  I. Dogdore camp (Sila)  | 1.1               | 2.0               |
| <ul><li><u>Deterioration</u></li><li>2. Bredjing camp (Assongha)</li><li>3. Farchana camp (Assongha)</li></ul> | 0.9<br>0.9        | 0.6<br>0.6        |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.

Source: CE-DAT

Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

## Measles vaccination coverage

The majority of surveys reporting vaccination coverage in Chad come from refugee camps. It is worth noting that 86% of the surveys undertaken among refugees from Sudan and CAR since 2004 register measles vaccination coverage above the WHO-recommended threshold of 80%. This threshold, however, is debatable in the context of camps, where population density is high and outbreaks more frequent. SPHERE therefore recommends mass measles vaccination of children in conflict-affected communities and a goal of vaccinating 95% of under-fives. Just one-third of the surveys undertaken among refugees - 34% - reported vaccination levels above 95%.

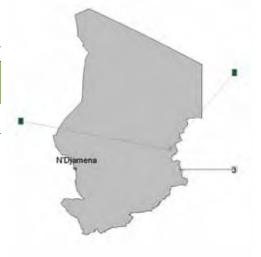
From three camps where a comparison is possible between surveys from 2006-2007 and 2008-2010, two showed an improvement over time. Measles vaccination coverage increased from 62.8% to above 90% in both camps, located in Assongha. In Sila, vaccination coverage remained around 90%.

This positive trend contrasts with data on Chadian residents, for whom a much more volatile picture is reported. First, where mortality and nutrition are concerned, there is much less information on residents' health status compared to refugees. Second, all but two surveys report measles vaccination coverage below the 80% WHO threshold. More alarmingly, measles vaccination is reported well below 80%, with coverage ranging from 2.6% to 47.2%.

# Trends in measles vaccination coverage over the last five years

#### **Average Measles Vaccination Coverage (%)**

| Location                    | 2008 2010 surveys | 2006 2007 surveys |
|-----------------------------|-------------------|-------------------|
| Improvement                 |                   |                   |
| 1. Bredjing camp (Assongha) | 93.5              | 68.2              |
| 2. Farchana camp (Assongha) | 91.8              | 68.2              |
| Status quo                  |                   |                   |
| 3. Dogdore camp (Sila)      | 87.5              | 90.8              |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.

Source: CE-DAT

Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

2002

# **Democratic Republic of Congo**

Since its independence in 1960, the Democratic Republic of Congo (DRC) has been wracked by civil conflicts. The country was ruled from 1965 onwards by Joseph Désiré Mobutu - who called himself Mobuto Sese Seko - and although living conditions were desperate during his years in power, it was a time of relative peace and stability compared to the previous years of civil unrest.

When Rwanda was torn apart by genocide in 1994, tensions from neighboring countries spilled over into the east of what was then Zaire. The emergence of anti-Mobutu rebels contributed to ending the First Congo War (November 1996 to May 1997), Mobutu's overthrow, and the start of Laurent Kabila's rule. The Second Congo War began in August 1998, involving Angolan, Zimbabwean and Namibian troops on Kabila's side, as well as Mayi-Mayi militias, opposing rebels from the Movement for the Liberation of Congo (MLC) and the Rally for Congolese Democracy (RCD), backed by Uganda and Rwanda respectively. The latter took control of eastern DRC.

The July 1999 Lusaka Ceasefire agreement was a first attempt to end the war. Signed by all parties, it included the deployment of a UN peacekeeping force in DRC, known as MONUC. The following month, however, violent attacks escalated not only between rebels and government forces, but also between Rwandan and Ugandan forces. In January 2001, Joseph Kabila took leadership of the country after his father was assassinated. There was a concerted effort for peace during 2002, followed by the withdrawal of Ugandan and Rwandan troops from eastern DRC.

The Second Congo war ended in July 2003 when a transitional government took power. MONUC became a stabilization mission in June 2010, withdrawing 2,000 troops from the west of the country while continuing its work in the east.

The conflict continues in the eastern provinces of North and South Kivu, the scene of fighting between the Hutu Democratic Forces for the Liberation of Rwanda (FDLR), the rebel Tutsi forces of Laurent Nkunda's National Congress for the Defence of the People (CNDP), Ugandan rebels from the Lord's Resistance Army (LRA) and the government armed forces (FARDC). In both the Kivus and the neighboring province of Katanga, the Mayi-Mayi militias who once supported Kabila now exploit the war for their own advantage by attacking civilians.

In late 2009, a fight between local communities over fishing rights in Equateur province in the west of the country spiraled into conflict. More than 100,000 people have fled to neighboring Republic of Congo, which does not have adequate emergency food supplies. In Ituri, in the east, violence between pastoralists and agriculturalists fighting over abundant natural resources has escalated since March 2010.

The number of internally displaced in the country has decreased from 3.4 million in August 2003 to 1.9 million as of November 2009. Most are concentrated in the Kivus, Ituri, and the provinces of Haut- and Bas-Uele, on the country's northeastern border with Sudan and Central African Republic. In 2009, there were still 450,000 Congolese refugees in other countries, most of them in Republic of Congo, Uganda, Tanzania and Rwanda.



#### **Summary**

#### **Nutrition**

- GAM = 9% (CE-DAT)
- Improvement

#### **Crude Mortality**

- CMR = 0.5/10,000/day (CE-DAT)
- Unstable

#### **Child Mortality**

- U5MR = 0.8/10,000/day (CE-DAT)
- Unstable

#### **Measles Vaccination**

- MCV = 80% (CE-DAT)
- Improving, reached recommended threshold

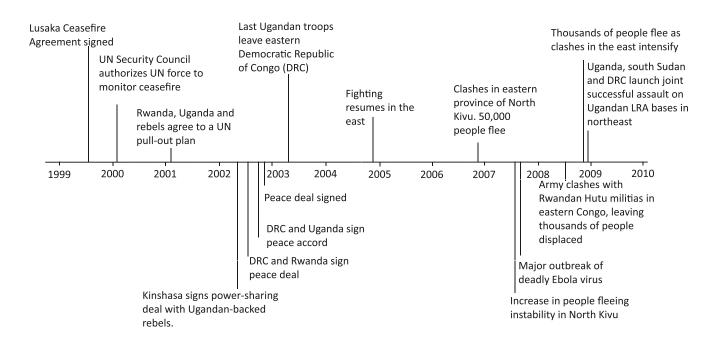
#### Displacement

- IDPs = 1.9 million (IDMC, Nov. 2009)
- Refugees residing in DRC = 185,809 (UNHCR, Jan. 2010)
- DRC refugees abroad = 455,852 (UNHCR, Jan. 2010)
- Recent increase in Congolese refugees abroad and Rwandan refugees in DRC
- Recent increase in IDPs in the east

#### **Humanitarian Funding**

- Paid: \$362.1 million (FTS, November 2010)
- Committed \$180.5 million (FTS, November 2010)
- Increase in committed funding

#### **Timeline**

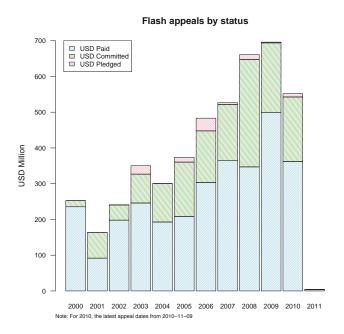


# Displacement and humanitarian funding

#### (a) Displacement

# Displacement by status Legend IDPs A Refugees originating from Refugees residing in 1000

#### (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

#### **Nutrition**

The majority of surveys conducted in the Democratic Republic of Congo (DRC) looked at the nutritional status of resident populations. Only 14% of surveys were conducted among other groups, such as displaced persons. In general, the nutritional status of displaced populations was worse than that of those who were not displaced, and therefore deserves more attention.

The majority of nutrition surveys conducted in DRC show levels of GAM below the emergency threshold of 10%. Five surveys over the last decade, however, reported values above 20%. Three of those were conducted in 2003 among Angolan refugees living near the town of Kahemba, in the southwestern province of Bandundu. The remaining two surveys from 2003 and 2006 cover areas in southern Kasai Oriental, in the centre of the country. In Bandundu, excluding the surveys conducted among refugees in early 2003, malnutrition has been increasing among residents over the last five years. The highest reported GAM in this province was 22.5% in Kwilu in October 2009.

Considering the 18 locations for which a comparison between the period 2006-2007 and 2008-2010 can be made, the nutritional situation has improved in the majority of regions. While nine out of 16 surveyed areas had GAM values above 10% during 2006-2007, only three remained just above that threshold for the period 2008-2010. Two of these are in Katanga in the southeast, namely the Manono and Kiambia health zones, where GAM almost doubled during that period (from 6% to 11% in both). Long-term trends for Katanga show stable conditions, with average GAM values just below the emergency threshold. The two surveys among IDPs reported higher malnutrition rates than among residents and indicated a serious situation. However, those surveys date from 2006, and no recent surveys have assessed the current situation.

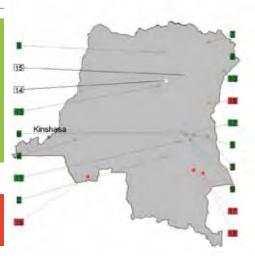
In the eastern Kivu provinces, an estimated 1.5 million people are internally displaced. Malnutrition in this region has been decreasing in the last decade and all the latest surveys report GAM values below the alert level. Some surveys have been carried out among mixed populations in North Kivu, and generally indicate a better situation for residents. Still, data on IDPs from South Kivu is clearly lacking.

The majority of the surveys undertaken in Maniema and Kasai Oriental reported malnutrition rates between 10 and 15% at the end of 2009 and an unstable nutritional status over the last decade. In the north, the provinces of Orientale and Equateur appear stable, with GAM on or just below the 10% threshold. Not much data is available from western DRC, but a survey in late 2009 indicated that the situation in Bas-Congo required attention, with malnutrition in this province above 10% on average.

## Trends in malnutrition over the last five years

#### Average global acute malnutrition (%)

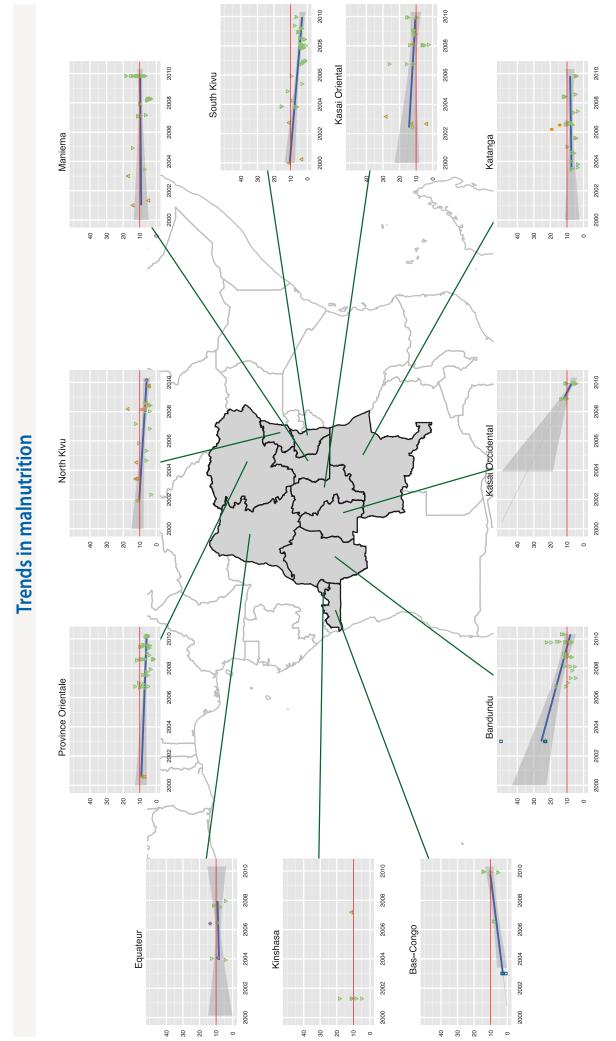
| T  | 2000 2010         | 2007 2007         |
|--|-------------------|-------------------|
| Location   | 2006 2010 surveys | 2006 2007 surveys |
| Improvement  |                   |                   |
| Buta Health Zone area (Province Orientale)           | 2.0               | 8.3               |
| 2. Kamana Health Zone area (Kasai Oriental)          | 6.5               | 26.0              |
| 3. Fizzi Health Zone area (South Kivu)               | 0.9               | 2.9               |
| 4. Mosango Health Zone area (Bandundu)               | 5.4               | 16.7              |
| 5. Saramabila Health Zone area (Maniema)             | 3.6               | 11.0              |
| 6. Kunda Health Zone area (Maniema)                  | 4.0               | 10.0              |
| 7. Dungu Health Zone area (Province Orientale)       | 1.7               | 4.0               |
| 8. Mahagi area (Province Orientale)                  | 4.4               | 10.0              |
| 9. Lusangi area (Maniema)                            | 5.3               | 11.0              |
| 10. Irumu area (Province Orientale)                  | 6.0               | 11.0              |
| 11. Samba Health Zone area (Maniema)                 | 4.0               | 6.5               |
| 12. Kasongo Health Zone area (Maniema)               | 4.0               | 6.5               |
| 13. Yaleko Health Zone area (Province Orientale)     | 8.7               | 13.0              |
| Status quo   | 0.7               | 13.0              |
|  | 10.1              | 10.2              |
| 14. Lubunga Health Zone area (Province Orientale)    |                   |                   |
| 15. Bafwasende Health Zone area (Province Orientale) | 8.5               | 8.0               |
| <u>Deterioration</u>                                 |                   | 4.0               |
| 16. Masisi Health Zone area (North Kivu)             | 7.1               | 4.2               |
| 17. Manono Health Zone area (Katanga)                | 11.0              | 6.0               |
| 18. Kiambi Health Zone area (Katanga)                | 11.0              | 6.0               |
| 19. Kajiji Health Zone area (Bandundu)               | 16.0              | 7.0               |
|  |                   |                   |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

## **Crude mortality**

The majority of recent mortality surveys conducted in the Democratic Republic of Congo show crude mortality rates below the emergency threshold of 1 death per 10,000 people per day.

Few surveys have looked at mortality among IDPs in eastern DRC. In general, the crude mortality rates of these populations was higher than that of the non-displaced, with rates as high as 4.3/10,000/day among IDPs in Dubie in 2006 and 4.1/10,000/day in Ituri in 2005.

Looking at the long-term trends, crude mortality has decreased or remained stable in all of DRC's provinces over the last decade. This positive trend is particularly clear in the eastern provinces of North and South Kivu, Katanga and Maniema.

Crude mortality rates in DRC remain volatile. In the areas for which a comparison between the period 2006-2007 and 2008-2010 can be made, there were four districts where rates had improved, three where they remained almost unchanged, and five where the situation had worsened. The latter were mainly located in eastern DRC, but no clear geographical pattern can be identified, since several sites showing an improvement are neighboring areas where rates have deteriorated.

Trends in the Kasai provinces indicate a stable or improving situation, with mortality below the emergency threshold for the majority of surveys. However, in Bandundu, surveys from May-August 2010 indicate a deterioration, with mortality reaching 1.3/10,000/day in Popokabaka health zone in May 2010.

The situation in the north of the country is worrying. Although the general mortality trend in Equateur is downward, it remains volatile there. Moreover, the latest available survey dates back to December 2007, and recent fighting in the area has reportedly forced 100,000 people to flee to neighboring Republic of Congo. The latest surveys (March 2010) in Orientale province indicate crude mortality of 0.87/10,000/day in Haut-Huele and 1.19/10,000/day in Bas-Huele.

Crude mortality in western DRC has remained below the emergency threshold and been stable for years.

# Trends in crude mortality over the last five years

#### Average Crude Mortality Rates (/10,000/day)

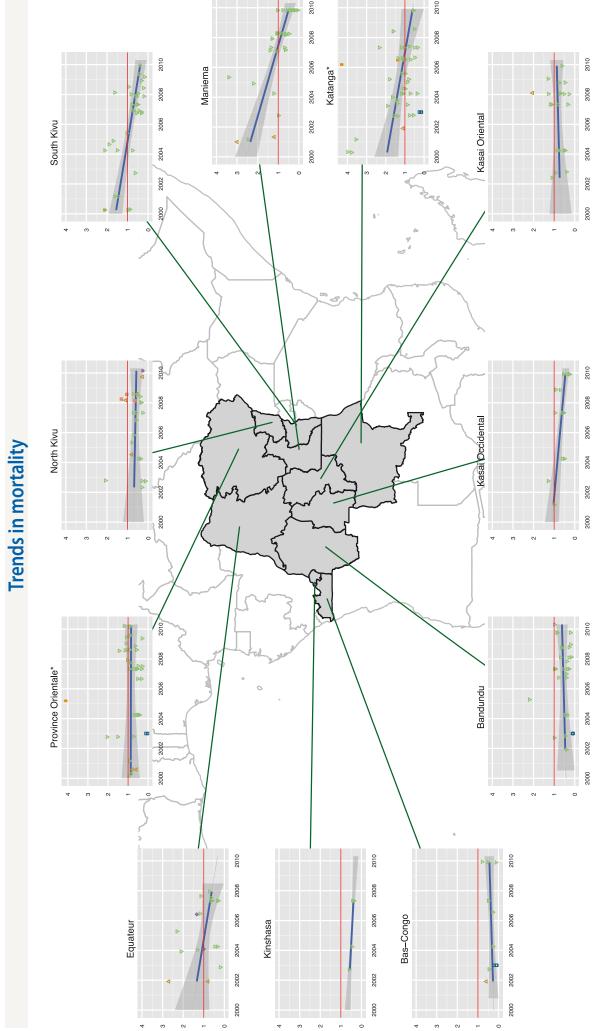
| Location  | 2008 2010 surveys | 2006 2007 surveys |
|---|-------------------|-------------------|
| Improvement                                       |                   |                   |
| 1. Ankoro Health Zone area (Katanga)              | 0.6               | 2.0               |
| 2. Mosango Health Zone area (Bandundu)            | 0.3               | 0.8               |
| 3. Dungu Health Zone area (Province Orientale)    | 0.6               | 1.0               |
| 4. Saramabila Health Zone area (Maniema)          | 0.7               | 1.0               |
| Status quo  |                   |                   |
| 5. Lusangi area (Maniema)                         | 0.9               | 1.0               |
| 6. Kunda Health Zone area (Maniema)               | 1.0               | 1.0               |
| 7. Masisi Health Zone area (North Kivu)           | 0.7               | 0.6               |
| Deterioration                                     |                   |                   |
| 8. Samba Health Zone area (Maniema)               | 1.0               | 0.6               |
| 9. Kasongo Health Zone area (Maniema)             | 1.0               | 0.6               |
| 10. Lubunga Health Zone area (Province Orientale) | 1.1               | 0.6               |
| 11. Fizzi Health Zone area (South Kivu)           | 0.8               | 0.4               |
| 12. Buta Health Zone area (Province Orientale)    | 1.0               | 0.5               |
| 13. Kajiji Health Zone area (Bandundu)            | 1.0               | 0.4               |
|   | ·                 |                   |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Vote:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

## **Child Mortality**

The majority of mortality surveys conducted in the Democratic Republic of Congo have found under-five mortality rates below the emergency threshold of 2 deaths/10,000 children under five/day.

Few surveys have focused on IDPs in eastern DRC. The under-five mortality rates among these populations were often higher than those of the non-displaced, but the difference is less obvious than for malnutrition and crude mortality. The highest U5MR was indeed found among IDPs in Dubie (Katanga) in 2006 (12.4/10,000/day), but many of the other highest U5MRs were reported among mainly non-displaced populations.

Similarly to CMR, under-five mortality rates in DRC are still volatile. In the areas for which comparison between the period 2006-2007 and 2008-2010 is possible, there where four districts were rates had improved, four where they remained almost unchanged, and four where the situation had worsened. The districts where mortality increased by at least 20% between 2006-2007 and 2008-2010 are located in the conflict-affected east of DRC. The long-term trend for these regions nevertheless shows a positive evolution, with overall mortality decreasing steadily since 2000 in the Kivus, Katanga and Maniema.

As for crude mortality, child mortality in Equateur has been decreasing but the situation has fluctuated over the last decade. The latest data available, from December 2007, indicates that data collection in the province needs to be improved.

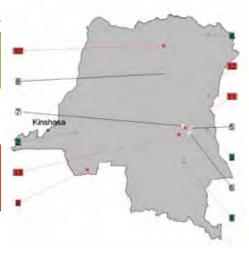
CMR has remained stable in Kasai Oriental, and it even decreased substantially in Kasai Occidental. In neighboring Bandundu, mortality has decreased since 2002 but more recent surveys have identified a deteriorating trend since late 2009. This recent rise in child mortality may be associated with a recent increase in malnutrition in this area.

In western DRC, crude mortality has remained stable over the years in Bas-Congo and Kinshasa. One recent survey, however, reported child mortality at 2.2/10,000/day in Ngidinga health zone, Bas-Congo. This assessment, undertaken in December 2009, also reported GAM of 14,7% and found malnutrition was the second-largest cause of death after malaria.

# Trends in under 5 mortality over the last five years

#### Average Under 5 Mortality Rates (/10,000/day)

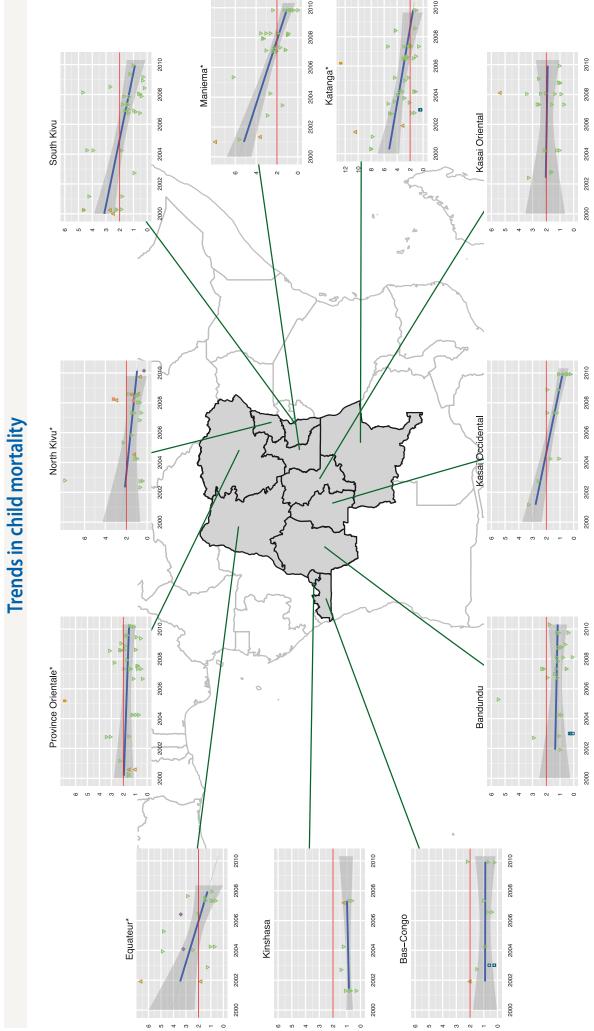
| Location   | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement                                      |                   |                   |
| 1. Ankoro Health Zone area (Katanga)             | 1.3               | 6.0               |
| 2. Mosango Health Zone area (Bandundu)           | 0.8               | 1.9               |
| 3. Fizzi Health Zone area (South Kivu)           | 0.5               | 1.0               |
| 4. Dungu Health Zone area (Province Orientale)   | 1.0               | 2.0               |
| Status quo                                       |                   |                   |
| 5. Saramabila Health Zone area (Maniema)         | 1.9               | 2.0               |
| 6. Lusangi area (Maniema)                        | 2.0               | 2.0               |
| 7. Kunda Health Zone area (Maniema)              | 3.0               | 3.0               |
| 8. Lubunga Health Zone area (Province Orientale) | 1.6               | 1.4               |
| <u>Deterioration</u>                             |                   |                   |
| 9. Kajiji Health Zone area (Bandundu)            | 2.0               | 1.2               |
| 10. Buta Health Zone area (Province Orientale)   | 2.0               | 0.8               |
| 11. Kasongo Health Zone area (Maniema)           | 3.0               | 1.2               |
| 12. Masisi Health Zone area (North Kivu)         | 1.8               | 0.7               |
| 13. Samba Health Zone area (Maniema)             | 4.0               | 1.2               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

lote:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

## Measles vaccination coverage

In the last two years, the majority of surveys conducted in Democratic Republic of Congo showed measles vaccination coverage reaching the 80% threshold recommended by the WHO. However, one-fourth of the surveys conducted in 2009-2010 found coverage below 80%. These surveys related to regions in eastern Congo.

As for other indicators, few surveys assessed the health status of IDPs in DRC, although vaccination coverage reported among the displaced population is systematically lower than for the residents.

Overall, vaccination coverage has improved in the country in the last decade, except in Kasai Oriental, North Kivu and Orientale province, where the trend is stable, at around the 80% threshold.

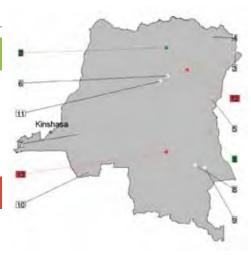
Looking at the 13 locations for which a comparison between 2006-2007 and 2008-2010 is possible, nine health zones have remained virtually unchanged. However, in Fizzi health zone, South Kivu and Buta health zone in Orientale province, MCV coverage has improved by 23 and 12.5 percentage points respectively. But coverage needs to continue along this trend in order to reach the 80% coverage recommended by the WHO. It is worth noting that child mortality has decreased in Fizzi by 50%.

In Bafwasende and Kamana health zones, however, vaccination coverage was on average satisfactory in 2006-2007, but has decreased by more than 10 percentage points in the last five years, down to 73.7% and 68.6% respectively.

# Trends in measles vaccination coverage over the last five years

#### Average Measles Vaccination Coverage (%)

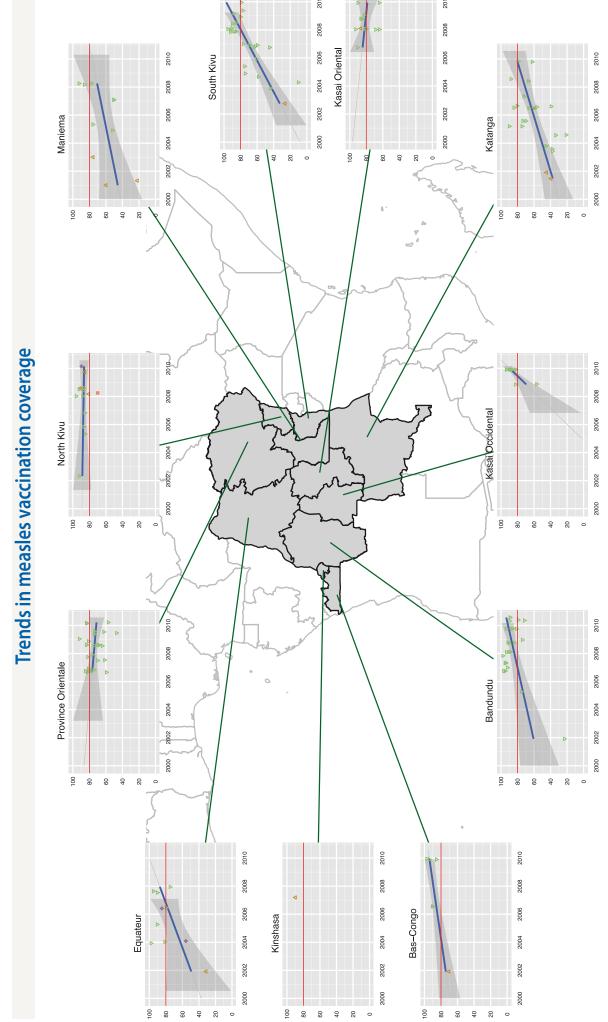
| Location   | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement  |                   |                   |
| 1. Fizzi Health Zone area (South Kivu)                           | 92.1              | 69.1              |
| 2. Buta Health Zone area (Province Orientale)                    | 74.0              | 61.5              |
| Status quo   |                   |                   |
| 3. Mahagi area (Province Orientale)                              | 81.2              | 74.0              |
| 4. Dungu Health Zone area (Province Orientale)                   | 83.3              | 77.0              |
| 5. Masisi Health Zone area (North Kivu)                          | 86.6              | 85.4              |
| 6. Lubunga Health Zone area (Province Orientale)                 | 57.6              | 59.4              |
| 7. Mosango Health Zone area (Bandundu)                           | 93.3              | 96.7              |
| 8. Manono Health Zone area (Katanga)                             | 67.0              | 72.0              |
| 9. Kiambi Health Zone area (Katanga)                             | 67.0              | 72.0              |
| 10. Kajiji Health Zone area (Bandundu)                           | 89.0              | 97.7              |
| <ol> <li>Yaleko Health Zone area (Province Orientale)</li> </ol> | 70.0              | 78.0              |
| <u>Deterioration</u>   |                   |                   |
| 12. Bafwasende Health Zone area (Province Orientale)             | 73.7              | 85.0              |
| 13. Kamana Health Zone area (Kasai Oriental)                     | 68.6              | 90.0              |
|  |                   |                   |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

# **Ethiopia**

Ethiopia is the longest continuously-independent country in Africa. A totalitarian one-party Communist state led by the military was established in 1974 when reigning emperor Haile Selassie was deposed by Mengistu Haile Mariam. The period that followed was marked by coups, uprisings, forced deportations and a campaign of "Red Terror", during which hundreds of thousands of people were killed. In addition, Somalia invaded the Ogaden region of eastern Ethiopia in 1977 but was successfully pushed back within a year with assistance from Cuba and the Soviet Union.

The Derg was weakened during the 1980s by a series of famines that left over 1 million people dead, several revolts by the Ethiopian Peoples' Revolutionary Democratic Front (EPRDF), and the collapse of the Soviet Union.

In May 1991, EPRDF captured Addis Ababa and Mengistu fled to Zimbabwe. The Transitional Government of Ethiopia was set up in July, and the country was divided into 12 ethnic regions. Although a few groups withdrew from the government over the next two years, a new constitution establishing legislative and judicial systems was adopted in 1994, and democratic multi-party elections were held in 1995.

Meanwhile, the Eritrean People's Liberation Front (EPLF) took control of Eritrea - the northernmost province in Ethiopia at the time - and set up a provisional government in 1991. There was a referendum on Eritrean independence in 1993, with Eritreans voting overwhelmingly in favor. Ethiopia recognized Eritrea's independence in a matter of days, but within two years a series of border disputes between the two countries had erupted into war. By late 2000, when the war ended and Ethiopia withdrew its troops from Eritrea, more than 80,000 people had been killed. Although Eritrea and Ethiopia largely accepted the borders demarcated by an independent commission, rulings regarding the frontier town of Badme remained disputed.

Ethiopia's recent history has been marked by recurring drought, food crises and violence. After a food crisis in 2003, more than two million people moved from the parched highlands to more fertile grounds under a resettlement program intended to address the population's chronic food shortages. However, many people settled in areas where malaria was endemic, malaria transmission rocketed, and an epidemic ensued. Additionally, disputed elections in 2005 led to months of violent protests, during which almost 200 people were killed by the police, many more injured, and over 10,000 imprisoned. Ethiopia also became embroiled in the problems of its neighbor, Somalia, sending troops across the border to support the interim government there after Islamist forces took control of Somalia's capital, Mogadishu, in 2006. They were eventually successful in pushing the Islamists out of Mogadishu, and Ethiopian forces formally withdrew in early 2009, when Somalia's transitional government signed a power-sharing deal with the Islamists.



#### **Summary**

#### **Nutrition**

- GAM = 10% (CE-DAT)
- Stable to decreasing

#### **Crude Mortality**

- CMR = 0.2/10,000/day (CE-DAT)
- Improvement

#### **Child Mortality**

- U5MR = 0.4/10,000/day (CE-DAT)
- Improvement

#### **Measles Vaccination**

- MCV = 65% (CE-DAT)
- Variable across regions

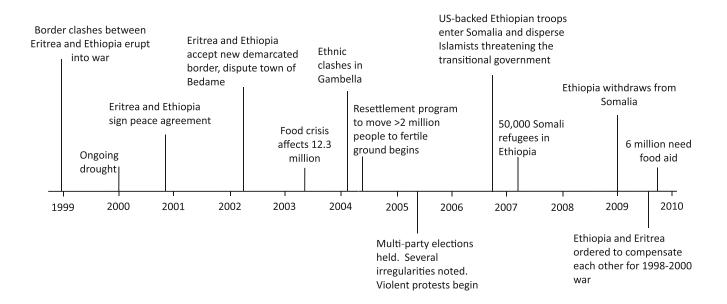
#### Displacement

- IDPs = 300,000-350,000 (IDMC, 2009)
- Refugees residing in Ethiopia = 121,886 (UNHCR, Jan. 2010)
- Ethiopian refugees abroad = 62,889 (UNHCR, Jan. 2010)
- Recent increase in IDPs in Oromiya, Gambella and Somali Regions

#### **Humanitarian Funding**

- Paid: \$242.2 million (FTS, November 2010)
- Committed \$45.2 million (FTS, November 2010)
- Great variablity in pledged funding and response
- 77% of 2008 pledges dedicated to food aid

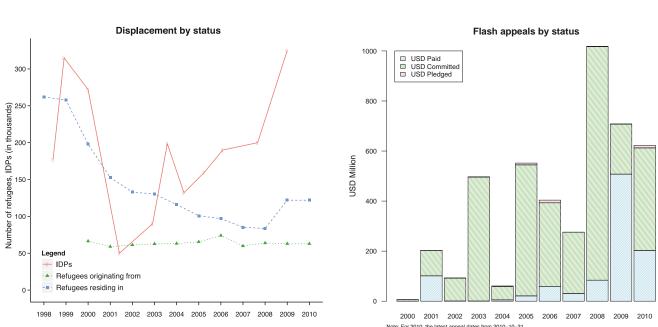
# **Timeline**



# Displacement and humanitarian funding



# (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

# **Nutrition**

Looking at locations for which a comparison from 2006-2007 to 2008-2010 is possible, two regions are of concern: Oromia and Southern Nations, Nationalities, and People's Region (SNNP). Malnutrition in these southwestern regions has increased significantly from 2006-2007 to 2008-2010. The two regions have had stable GAM for the last 10 years, fluctuating around the emergency threshold. The situation is critical in the Boricha area, where GAM has almost doubled and reached 15.2% on average for the period 2008-2010, up from 8.2% in 2006-2007. It is possible to identify certain trends within these two regions. In SNNP, malnutrition levels vary between woredas. In Sidama, to which Boricha belongs, GAM has been increasing in recent years in comparison to Wolayita, where nutrition is clearly improving. In Oromia, recent data from East Hareghe shows GAM rising once again above the emergency threshold in mid-2009 after a decrease from critical levels in 2001 to a stable GAM of around 7% in the 2004-2007 period. The same U-shaped trend occurs in West Hareghe and Borena.

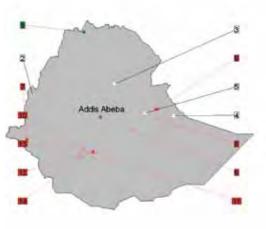
Malnutrition in the north of the country, although stable, still registers 12% in Amhara. Surveys in Tigray reflect the situation of Eritrean refugees, among whom nutrition has been improving in recent years and is now below the emergency level.

In Benishangul-Gumuz and Gambella camps, which host Sudanese refugees, malnutrition has been stable at around 10% since 2001, although in Gambella it is still above the emergency threshold and has reached critical levels in the past.

# Trends in malnutrition over the last five years

### Average global acute malnutrition (%)

| Location                                     | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement                                  |                   |                   |
| 1. Shimelba camp (Tigray)                    | 10.2              | 13.9              |
| Status quo                                   |                   |                   |
| 2. Sherkole camp (Benishangul Gumuz)         | 7.9               | 8.6               |
| <ol><li>Dessie Zuria area (Amhara)</li></ol> | 12.5              | 13.2              |
| 4. Kebribeyah camp (Somali)                  | 10.2              | 10.5              |
| 5. Deder area (Oromia)                       | 10.6              | 9.4               |
| Deterioration                                |                   |                   |
| 6. Darolebu area (Oromia)                    | 8.8               | 7.3               |
| 7. Pugnido camp (Gambella)                   | 11.6              | 9.0               |
| 8. Fedis area (Oromia)                       | 9.2               | 6.9               |
| 9. Kombolcha area (Oromia)                   | 10.8              | 7.5               |
| 10. Bolosso Sorie area (SNNP)                | 4.5               | 3.0               |
| 11. Boricha area (SNNP)                      | 15.2              | 8.2               |
| 12. Offa area (SNNP)                         | 7.5               | 2.4               |
| 13. Damot Woyde area (SNNP)                  | 9.4               | 3.0               |
| 14. Dugna Fango area (SNNP)                  | 9.4               | 2.2               |

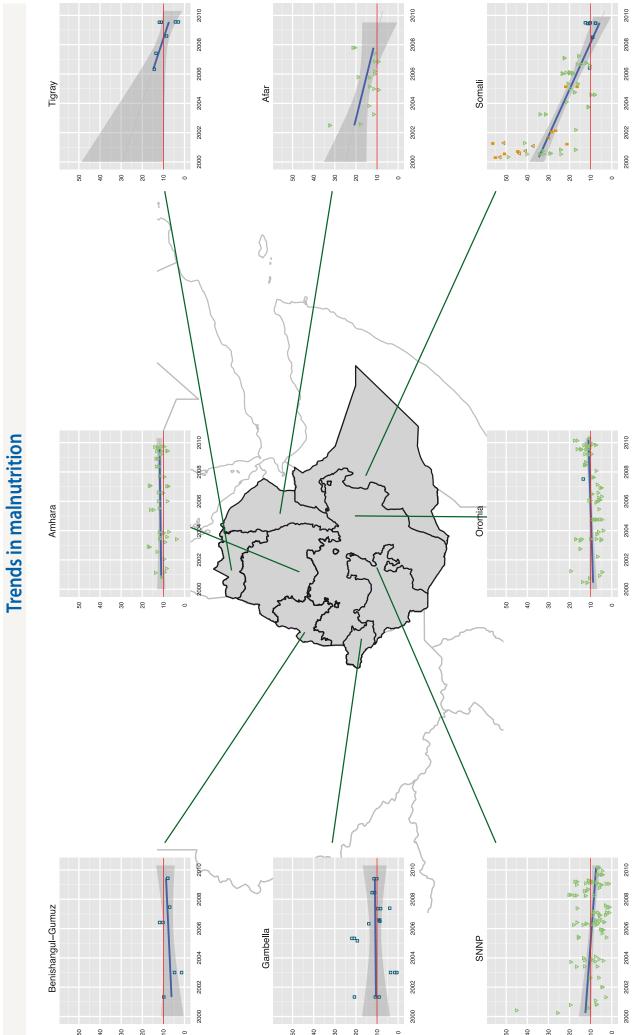


Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.

Source: CE-DAT



Complex Emergency Database Report

Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

# **Crude mortality**

Although crude mortality has remained below the threshold of 1/10,000/day for the last five years in all states, half of the 14 surveys for which a comparison between 2006-2007 and 2008-2010 can be made reported a 20% deterioration in mortality.

As for malnutrition, the two regions of most concern are Somali and Afar, on the border with Somalia. Crude mortality there has registered high levels in the past but has now decreased to below the emergency level. Mortality among Somali refugees never reached 1/10,000/day, whereas rates for IDPs in that region were reported at about 8/10,000/day in two surveys in 2000. The situation has improved significantly since then. Unfortunately, there is no data available for the resident population in these regions since 2008, preventing confirmation of this positive trend.

In the north of the country, crude mortality is stable and below the emergency threshold, both among Eritrean refugees in Tigray and in Amhara among residents. The latest surveys reported 0.1/10,000/day among refugees in Tigray (July 2009) and on average 0.24/10,000/day among residents in Amhara (North and South Wollo) (June-September 2009).

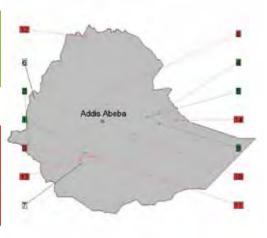
In the southwest, crude mortality has been slightly decreasing in Oromia and SNNP and is today below 0.5 deaths per 10,000 per day. In some areas, however, it has been increasing between 2006-2007 and 2008-2010.

Long-term crude mortality trends in Gambella and Benishangul-Gumuz camps show a slight increase among Sudanese refugees, although still below the alert level.

# Trends in crude mortality over the last five years

# Average Crude Mortality Rates (/10,000/day)

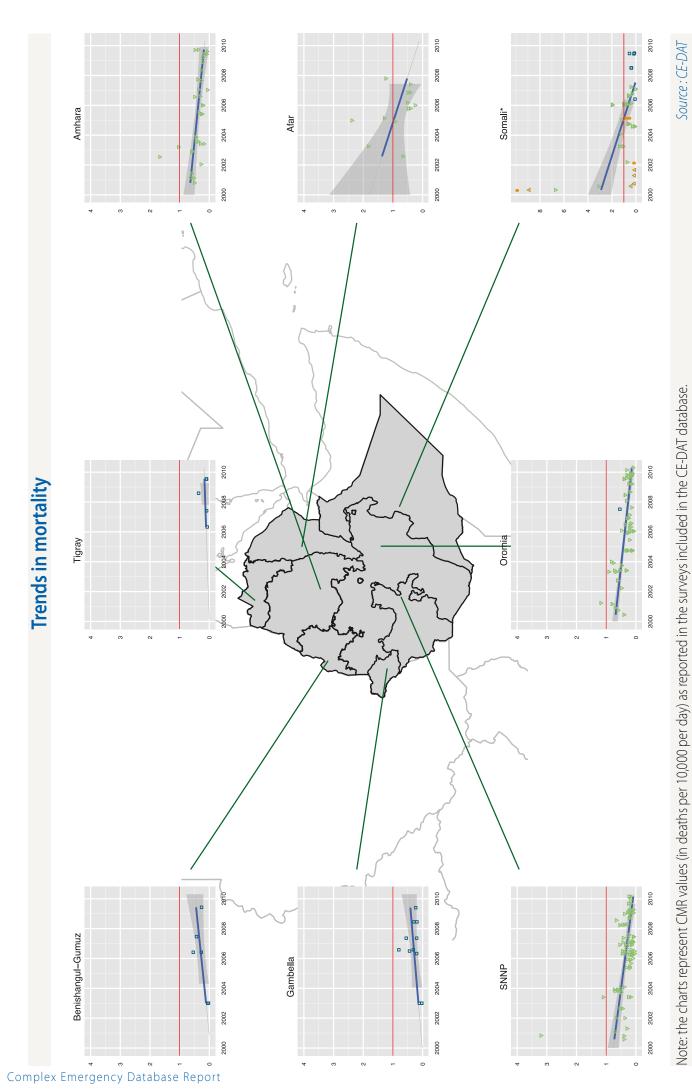
| Location                             | 2008 2010 surveys | 2006 2007 surveys |
|--------------------------------------|-------------------|-------------------|
| Improvement                          |                   |                   |
| 1. Bolosso Sorie area (SNNP)         | 0.2               | 0.5               |
| 2. Pugnido camp (Gambella)           | 0.2               | 0.5               |
| 3. Fedis area (Oromia)               | 0.1               | 0.2               |
| 4. Kombolcha area (Oromia)           | 0.2               | 0.3               |
| 5. Deder area (Oromia)               | 0.3               | 0.4               |
| Status quo                           |                   |                   |
| 6. Sherkole camp (Benishangul Gumuz) | 0.3               | 0.3               |
| 7. Dugna Fango area (SNNP)           | 0.3               | 0.3               |
| <u>Deterioration</u>                 |                   |                   |
| 8. Dessie Zuria area (Amhara)        | 0.4               | 0.3               |
| 9. Damot Woyde area (SNNP)           | 0.3               | 0.2               |
| 10. Darolebu area (Oromia)           | 0.2               | 0.1               |
| 11. Boricha area (SNNP)              | 0.2               | 0.1               |
| 12. Shimelba camp (Tigray)           | 0.2               | 0.1               |
| 13. Offa area (SNNP)                 | 0.3               | 0.1               |
| 14. Kebribeyah camp (Somali)         | 0.3               | 0.1               |
| ·                                    | ·                 | ·                 |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



# **Child Mortality**

Trends in crude mortality and child mortality are similar. In the areas where comparisons can be made between 2006-2007 and 2008-2010, half of the surveys reported a deterioration in child mortality. Among these, Dugna Fango, Offa, Damot Woyde and Boricha areas, all located in SNNP, also reported a deterioration in crude mortality and malnutrition. Although the majority of surveys in SNNP during the last five years reported U5MR below the emergency threshold of 2/10,000/day, their results vary widely.

In Oromia, child mortality has also been decreasing in the last decade. Looking at areas where comparison is possible between 2006-2007 and 2008-2010, the trend is towards maintaining the status quo or an improvement for all but one survey. The exception is Kombolcha area, where child mortality increased from 0.4 to 0.6/10,000 per day. This might be associated with increasing malnutrition among children, which rose from 7.5% to 10.8%.

In the western regions, child mortality has been decreasing from alarming values before 2005 - particularly in the region of Somali and among IDPs - to rates below the emergency threshold in the last five years. Mortality among Somali refugees in the Somali region of Ethiopia has remained below the alert level in recent years. However, yet again, there has not been any new data on mortality among IDPs and residents in these province since 2008.

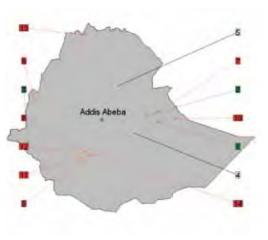
In the north, child mortality among Eritrean refugees is stable and below the emergency threshold in Tigray (around 0.5/10,000/day). In Amhara, child mortality has decreased in the last 10 years and only one survey reported U5MR above the alert level (2.96/10,000/day) in West Belessa, back in July 2002. This survey indicates that malaria was an important health issue in the region.

As for crude mortality, the long-term trend in under-five mortality among Sudanese refugees in Gambella and Benishangul-Gumuz camps shows a slight increase, but remains below the emergency threshold.

# Trends in under 5 mortality over the last five years

# Average Under 5 Mortality Rates (/10,000/day)

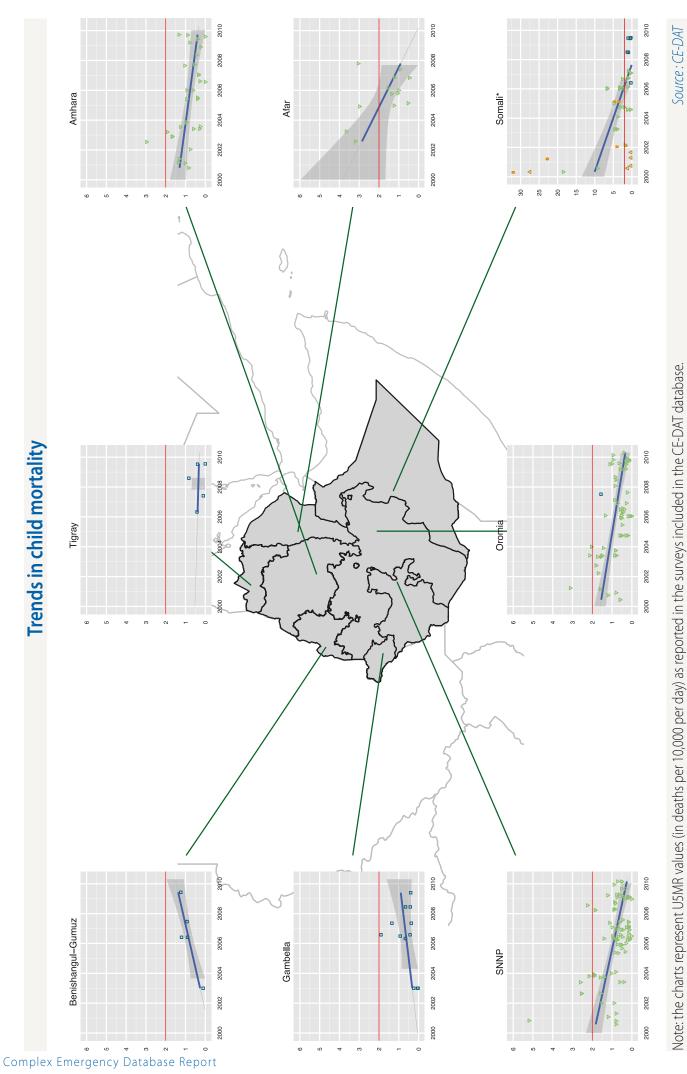
| Location                                     | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement                                  |                   |                   |
| 1. Fedis area (Oromia)                       | 0.2               | 0.9               |
| 2. Deder area (Oromia)                       | 0.2               | 0.6               |
| 3. Pugnido camp (Gambella)                   | 0.4               | 1.0               |
| Status quo                                   |                   |                   |
| 4. Darolebu area (Oromia)                    | 0.4               | 0.4               |
| <ol><li>Dessie Zuria area (Amhara)</li></ol> | 0.6               | 0.5               |
| <u>Deterioration</u>                         |                   |                   |
| 6. Sherkole camp (Benishangul Gumuz)         | 1.2               | 0.9               |
| 7. Kombolcha area (Oromia)                   | 0.6               | 0.4               |
| 8. Bolosso Sorie area (SNNP)                 | 0.9               | 0.6               |
| 9. Dugna Fango area (SNNP)                   | 1.1               | 0.6               |
| 10. Kebribeyah camp (Somali)                 | 0.7               | 0.3               |
| 11. Offa area (SNNP)                         | 0.8               | 0.3               |
| 12. Damot Woyde area (SNNP)                  | 1.1               | 0.4               |
| 13. Shimelba camp (Tigray)                   | 0.6               | 0.2               |
| 14. Boricha area (SNNP)                      | 0.7               | 0.2               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# Measles vaccination coverage

Vaccination coverage in Ethiopia over the last decade displays wide variation across regions and population types. While surveys undertaken among refugees from Somalia (in the east), Sudan (in the west) or Eritrea (in the north) report measles vaccination coverage above 80% in almost all the camps that have been surveyed, coverage is much lower among residents.

Looking at each region, we can identify some trends. There is indeed variation not only within the country, but also within the regions. In fact, there is no apparent trend if we look at coverage in SNNP. However, if we disaggregate data and look at the woredas for which trends can be drawn, we see that vaccination coverage has improved significantly in Wolayita and Hadiya since 2000, whereas it is slightly decreasing in Gurahe. A large number of the surveys undertaken in SNNP refer to Wolayita (27 out of 72).

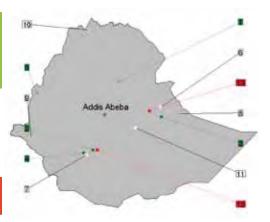
In Oromia, where the variation is also high but the overall trend consistent, coverage is going down in West Harergue, and particularly in Darolebu, where vaccination coverage decreased from 86% in mid-2003 to 41.9% in October 2009. In Eastern Harergue, however, measles vaccination coverage improved in the last decade. In Amhara, 25 out of 30 surveys were undertaken in South Wollo, particularly in Dessie Zuria and Kalu, where MCV was reaching around 80% in most surveys. In Somali region, where surveys were carried out among both refugees and residents, we first observe that coverage among refugees is higher than among residents. The second observation is that coverage is extremely patchy. Closer examination identifies some improvement in Shinilie and Fik since mid-2003.

Looking at the locations for which a comparison between 2006-2007 and 2008-2010 is possible, five out of 13 surveys showed an improvement, and six showed little change. Measles vaccination coverage deteriorated in Boricha and Deder. After a measles outbreak in Boricha in 2008, there have been vaccination campaigns and MCV coverage has already slightly improved from 65.1% in April 2008 to 68.1% April 2009, but this is still too low to prevent future outbreaks.

# Trends in measles vaccination coverage over the last five years

# Average Measles Vaccination Coverage (%)

| Location                             | 2008 2010 surveys | 2006 2007 surveys |
|--------------------------------------|-------------------|-------------------|
| Improvement                          |                   |                   |
| 1. Dessie Zuria area (Amhara)        | 80.7              | 43.2              |
| 2. Damot Woyde area (SNNP)           | 74.2              | 40.3              |
| 3. Fedis area (Oromia)               | 73.5              | 48.2              |
| 4. Offa area (SNNP)                  | 60.9              | 45.8              |
| 5. Sherkole camp (Benishangul Gumuz) | 97.9              | 86.3              |
| Status quo                           |                   |                   |
| 6. Kombolcha area (Oromia)           | 72.2              | 62.8              |
| 7. Dugna Fango area (SNNP)           | 74.2              | 65.8              |
| 8. Kebribeyah camp (Somali)          | 98.4              | 91.2              |
| 9. Pugnido camp (Gambella)           | 87.5              | 81.8              |
| 10. Shimelba camp (Tigray)           | 94.5              | 93.0              |
| 11. Darolebu area (Oromia)           | 43.3              | 49.5              |
| <u>Deterioration</u>                 |                   |                   |
| 12. Boricha area (SNNP)              | 66.6              | 80.4              |
| 13. Deder area (Oromia)              | 54.7              | 75.0              |

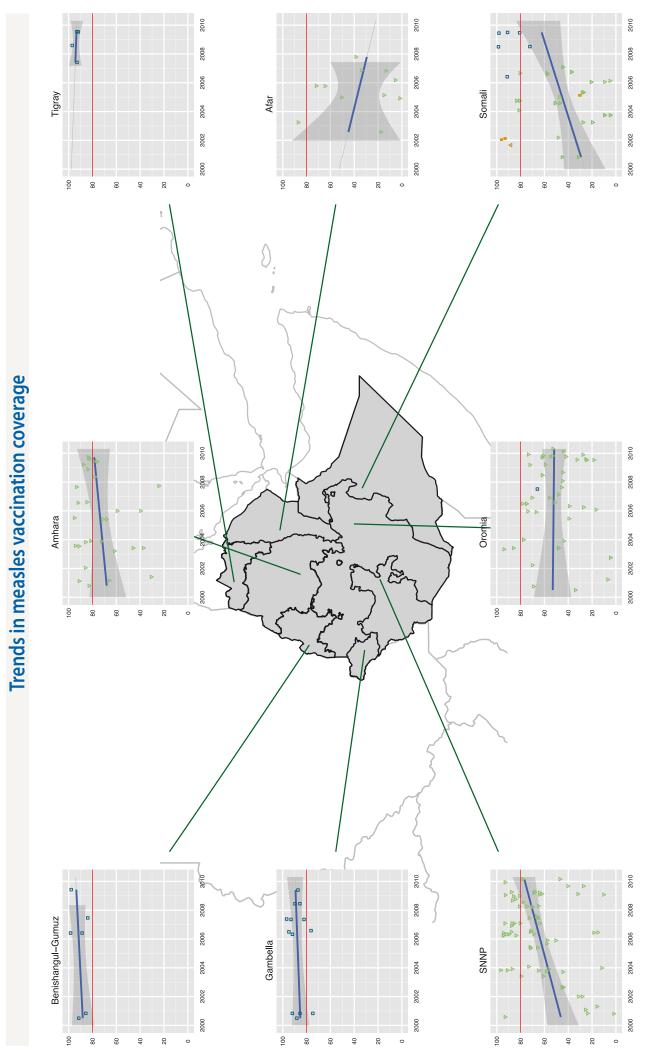


Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.

Source: CE-DAT



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

# Kenya

Although Kenya has not experienced any intrastate armed conflicts since a failed coup in 1982, the country has at times been struck by internal conflicts, mainly between tribes and clans engaged in cattle-rustling activities in Kenya's vast rural areas or otherwise imposed on the lands of other tribes. In fact, competition for scarce natural resources is widely understood to be a primary cause of conflict in the region.

Kenya, with 80% of its land arid and semi-arid, is prone to extreme hydrological events such as floods and droughts. However, their frequency has dramatically and steadily increased over the last 40 years. While it was considered normal in the 1960s for drought to strike every 10 years, Kenya now suffers a drought every two to three years. Four severe droughts and several dry spells have occurred since 2000, mainly hitting the northeastern regions, while floods have become an annual event.

Cattle raids have become more and more common in some border regions, where animal-herding is the main source of income. This type of violence can be interpreted as a response to unresolved disputes over land rights and use, and has caused hundreds of casualties - as well as significant displacement - over the past decade.

After the 2007 presidential election, fighting broke out between supporters of the incumbent president Mwai Kibaki's Party of National Unity - which has strong backing from the Kikuyu tribe - and supporters of Raila Odinga's Orange Democratic Movement Party - mainly from the Luo and the Kalenjin tribes. Post-election violence in Nairobi and Rift Valley Province forced 650,000 Kenyans to abandon their homes in search of shelter in camps or host communities, and left 1,300 people dead. A unity government was established in April 2008, with Kibaki as president and Odinga as prime minister. A new constitution was adopted in August 2010, but around 3,000 households are still living in camps in the Rift Valley. As long as the issues around land - its ownership, usage and legacy of displacement from various areas - remain unresolved, the country's stability remains under threat.

Kenya is also host to some 340,000 refugees, mostly from Somalia, Ethiopia and southern Sudan. Dadaab camp in the northeast of the country is the world's largest refugee camp, with a population of 278,000. It was set up in 1991 to house Somali refugees fleeing civil war. Its size has risen steadily (by 30% since 2007) due to dramatic deteriorations in Somalia in recent years, making it necessary to create new camps beyond the original site. In March 2010, the Kenyan government gave additional land to UNHCR to expand the camp, and some 50,000 more refugees are expected to arrive in the Dadaab camps by the end of 2010.



#### **Summary**

#### **Nutrition**

- GAM = 16% (CE-DAT)
- General decrease of malnutrition; still above threshold

#### **Crude Mortality**

- CMR = 0.7/10,000/day (CE-DAT)
- Improvement

#### **Child Mortality**

- U5MR = 0.9/10,000/day (CE-DAT)
- Improvement

#### **Measles Vaccination**

- MCV = 85% (CE-DAT)
- Stable

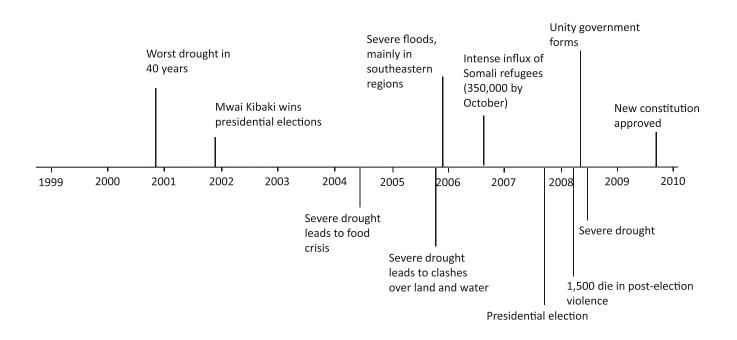
#### Displacement

- IDPs = 650,000 (IDMC, 2008)
- Refugees in Kenya = 358,928 (UNHCR, Jan. 2010)
- Kenyan refugees abroad = 9,620 (UNHCR, Jan. 2010)
- Increase in IDP after 2007 post-electoral violence

#### **Humanitarian Funding**

- Paid: \$664.8 million (FTS, November 2010)
- Committed \$136.2 million (FTS, November 2010)
- Limited funding available until 2005

# **Timeline**



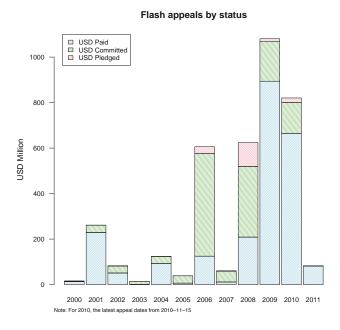
# Displacement and humanitarian funding



# Displacement by status Legend IDPs Refugees originating from Refugees residing in

1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

#### (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

# **Nutrition**

Anthropometric surveys have mainly been conducted in the north and northeastern regions of the country and tend to show very high prevalence of global acute malnutrition, with values in the Rift Valley and the northeast ranging between 10% and 30%. Eighty-six percent of the surveys report values above the emergency threshold of 10% and 48% of the surveys report values above 20%.

Long-term trends appear to indicate a slight improvement in the Rift Valley and in the eastern region, but a deterioration in the northeastern region and the coast, where GAM is increasing and has registered values above 40% in 2009. However, the trend is not clearly defined. Data shows that refugees are usually better off than resident populations. In fact, global acute malnutrition among Sudanese refugees in the Rift valley has decreased by 60% since 2003 and is now around the threshold level. Similarly, malnutrition among Somali refugees in Dadaab camps showed very high rates in 2005-2006 (above 25%) followed by a general improvement (most recent surveys indicate GAM at around 13% - August 2009). Although still above the emergency threshold, it is a significant improvement on conditions five years earlier.

There is a wide spectrum of results for the resident population: in the Rift Valley, GAM has slowly improved, with malnutrition values that were between 18 and 35% in 2004 now registering between 10 and 28%; in the northeastern regions, however, it is difficult to identify any clear trend, since surveys conducted in 2009 report results ranging from 12 to 40.9%, indicating a somewhat unstable situation. Very high values - of 40.9% - in Mandera may be explained by the severe drought that hit the east of the country in 2009.

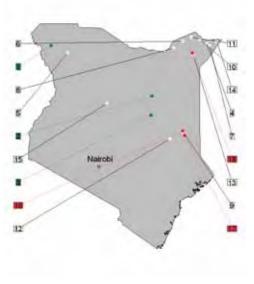
Malnutrition is also increasing in the coastal province, rising from 5% in mid-2004 to 11.5 % in 2009. This may be explained by the severe droughts that hit the regions in 2006 and 2008, as well as by the 2006 floods, which caused high displacement rates. This region may need close monitoring.

When we compare the 2006-2007 period and 2008-2010, the situation in two refugee camps (Kakuma and Ifo camps) has registered an improvement, with GAM decreasing respectively from 16.7% to 10% and from 21.6% to 13%. In addition, the Merti and Sericho areas in the eastern regions have experienced a reduction in GAM (from 20.4% to 14.5%). Direct comparison confirms the severity of the situation in the Mandera region, where the nutritional status of children under five is steadily worsening: GAM was estimated at 23.4% in 2006-2007 and is now recorded at 31% in 2008-2010.

# Trends in malnutrition over the last five years

# Average global acute malnutrition (%)

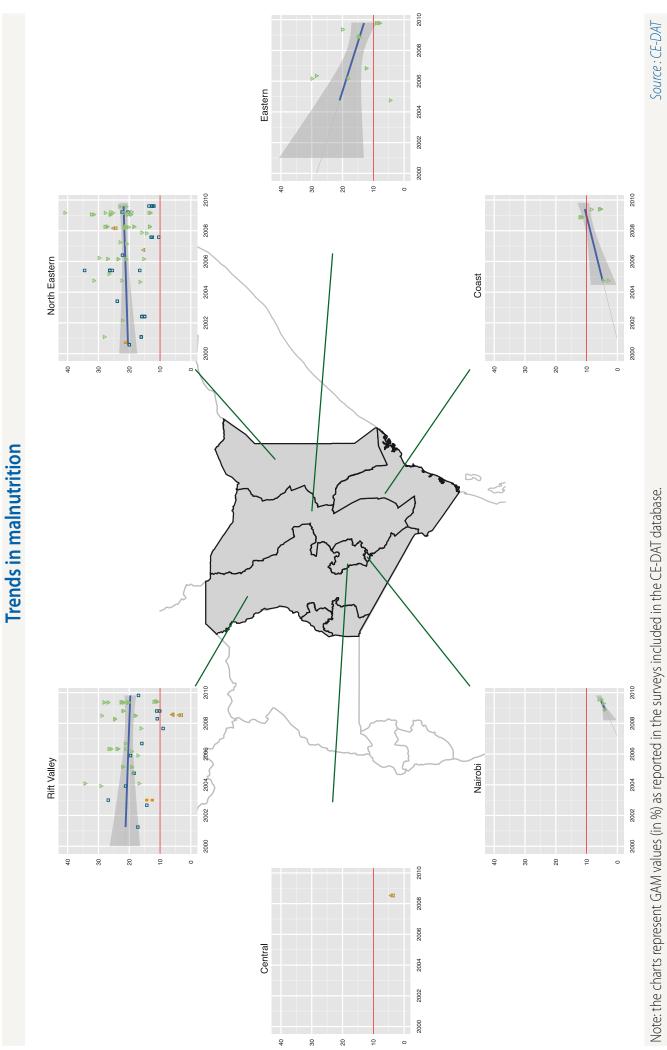
| Location                                     | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement                                  |                   |                   |
| 1. Kakuma camp (Rift Valley)                 | 10.0              | 16.0              |
| 2. Merti area (Eastern)                      | 14.5              | 20.4              |
| 3. Sericho area (Eastern)                    | 14.7              | 20.4              |
| Status quo                                   |                   |                   |
| 4. Hareri area (North Eastern)               | 19.5              | 23.6              |
| <ol><li>Turkana area (Rift Valley)</li></ol> | 22.0              | 25.0              |
| 6. Banisa area (North Eastern)               | 23.8              | 27.0              |
| 7. Libehia area (North Eastern)              | 19.5              | 21.0              |
| 8. Dandu area (North Eastern)                | 25.9              | 27.0              |
| 9. Ifo camp (North Eastern)                  | 13.0              | 13.0              |
| 10. Rhamu Dimtu area (North Eastern)         | 23.8              | 23.6              |
| 11. Malkamari area (North Eastern)           | 23.8              | 23.6              |
| 12. Garissa area (North Eastern)             | 16.0              | 15.0              |
| 13. Central Mandera area (North Eastern)     | 22.8              | 20.9              |
| 14. Khalalio area (North Eastern)            | 23.7              | 20.9              |
| 15. Samburu area (Rift Valley)               | 22.0              | 19.0              |
| <u>Deterioration</u>                         |                   |                   |
| 16. Daghaley camp (North Eastern)            | 17.2              | 12.5              |
| 17. Hagadera camp (North Eastern)            | 14.0              | 10.0              |
| 18. Mandera area (North Eastern)             | 31.0              | 20.0              |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



# **Crude mortality**

Sixty-nine surveys have been conducted in Kenya, most of them in the north and east. A clear decreasing trend can be identified in the Northeastern and Eastern regions, while the Rift Valley and the Coast region show unstable and inconsistent results.

In fact, very high values were registered in the Rift Valley in 2004-2006 (ranging from 1.5 to 2/10,000/day) among the resident population, and lower, normal values among IDPs in 2002-2003 (CMR was registered between 0.2 to 0.4/10,000/day). In 2008-2009, high CMR were registered again among the resident population (values between 1.2-2.7/10,000/day) and lower values among IDPs (0.24/10,000/day). This last high mortality rate among the resident population can probably be explained by the violence that took place after the 2007 presidential election. This means it is impossible to identify any regionwide trend, although there is a clear pattern within different population groups, indicating the need for targeted interventions.

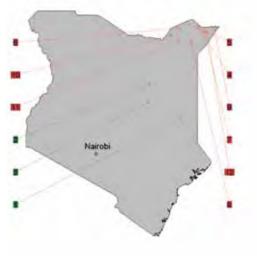
Both resident and refugee populations in the northeast have experienced lower mortality rates than those in the Rift Valley for the entire decade. In fact, CMR has generally been below the emergency threshold, and along a decreasing trend; however, most recent surveys have reported a worrying increase in CMR since 2008 among the resident population, with values at 0.8/10,000/day, approaching the emergency threshold. This recent deterioration is confirmed by looking at the locations for which a comparison between the 2006-2007 period and 2008-2010 is possible. Nine locations in the northeast reported a 20% increase (or more). These values all refer to the resident population.

Although values are still below the emergency threshold, this severe deterioration could continue unless there is humanitarian assistance to interrupt the downward spiral. Few surveys are available for the Coast region, but those that exist report rates well below the emergency threshold, although they displayed an increasing trend as of May 2009 (reaching 0.6/10,000/day).

# Trends in crude mortality over the last five years

# Average Crude Mortality Rates (/10,000/day)

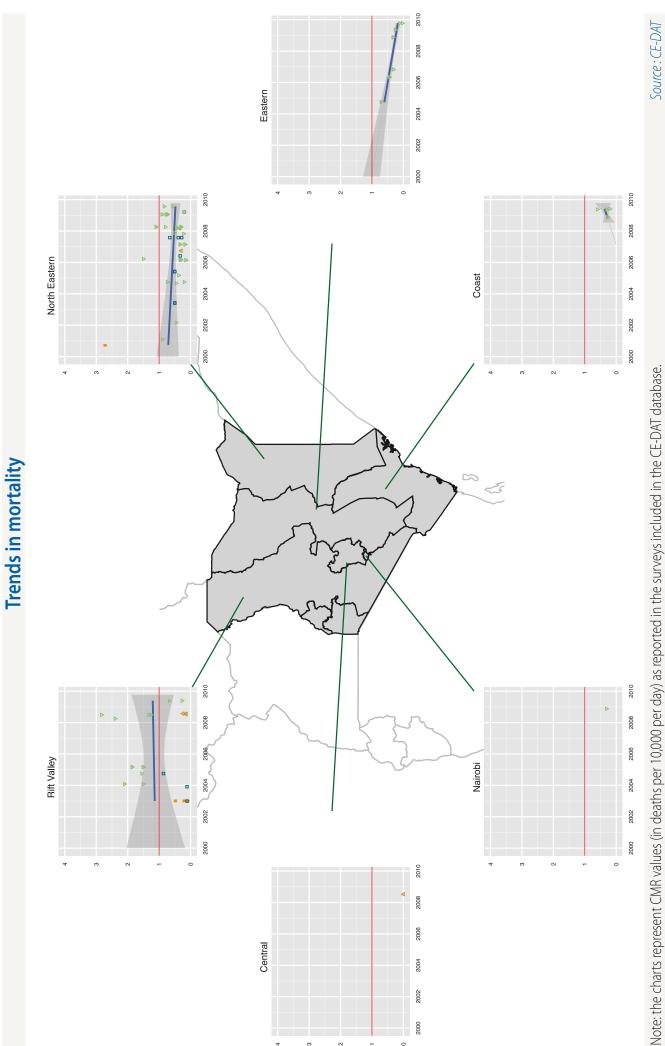
| Location                                | 2008 2010 surveys | 2006 2007 surveys |
|---|-------------------|-------------------|
| Improvement                             |                   | •                 |
| 1. Daghaley camp (North Eastern)        | 0.2               | 0.7               |
| 2. Merti area (Eastern)                 | 0.3               | 0.4               |
| 3. Sericho area (Eastern)               | 0.3               | 0.4               |
| Deterioration                           |                   |                   |
| 4. Rhamu Dimtu area (North Eastern)     | 0.6               | 0.3               |
| 5. Malkamari area (North Eastern)       | 0.6               | 0.3               |
| 6. Banisa area (North Eastern)          | 0.6               | 0.3               |
| 7. Hareri area (North Eastern)          | 0.7               | 0.3               |
| 8. Central Mandera area (North Eastern) | 0.5               | 0.2               |
| 9. Khalalio area (North Eastern)        | 0.5               | 0.2               |
| 10. Dandu area (North Eastern)          | 0.6               | 0.2               |
| 11. Takaba area (North Eastern)         | 0.6               | 0.2               |
| 12. Libehia area (North Eastern)        | 0.7               | 0.2               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# **Child Mortality**

The majority of mortality surveys in Kenya have been conducted in the Rift Valley and North Eastern regions and date from 2004 onwards. Generally speaking, child mortality has significantly decreased during the past 10 years, and is now below the emergency threshold in all regions.

In the Rift Valley, child mortality registered very high values (around 2.5/10,000/day) in 2004- 2005 among both the refugee and resident populations. Since then, child mortality has clearly decreased and now ranges between 0.22 and 0.96/10,000/day (May 2009).

A decreasing trend is also clear in the North Eastern region, where child mortality registered very high values at the beginning of the decade (between 2 and 7/10,000/day). From 2006 onwards, only one survey has reported child mortality rate above the emergency level, while all other surveys reported under-five mortality rates of around 1/10,000/day, indicating levels within the bounds of normality.

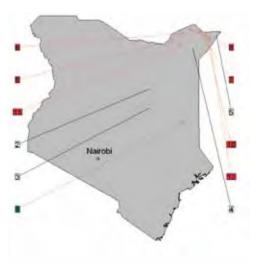
However, looking at locations where it is possible to compare values from surveys dated 2006-2007 with surveys dated 2008-2010, it is clear that several locations in the Eastern region have experienced deteriorating child mortality in the last four years. In fact, seven areas have experienced an increase of 20% (or more) in child mortality rate among the resident population. On the other hand, the child mortality rate in Daghaley camp has improved, decreasing from 1.4/10,000/day to 0.6/10,000/day.

Child mortality is also dropping in the Eastern region, with most recent surveys reporting an under-five mortality rate of 0.29/10,000/day among the resident population. Only three surveys have been carried out in the Coast region, making it difficult to identify any long-term trends. However, this region may deserve close monitoring, since a survey in May 2009 reported a child mortality rate of 1.99/10,000/day, while in the previous year U5MR was much lower (around 0.5/10,000/day). This increase in child mortality appears to correspond to the increase in malnutrition discussed earlier.

# Trends in under 5 mortality over the last five years

# Average Under 5 Mortality Rates (/10,000/day)

| Location                                | 2008 2010 surveys | 2006 2007 surveys |
|---|-------------------|-------------------|
| Improvement                             |                   |                   |
| 1. Daghaley camp (North Eastern)        | 0.6               | 1.3               |
| Status quo                              |                   |                   |
| 2. Merti area (Eastern)                 | 0.5               | 0.6               |
| 3. Sericho area (Eastern)               | 0.5               | 0.6               |
| 4. Central Mandera area (North Eastern) | 0.6               | 0.5               |
| 5. Khalalio area (North Eastern)        | 0.6               | 0.5               |
| <u>Deterioration</u>                    |                   |                   |
| 6. Banisa area (North Eastern)          | 1.6               | 1.0               |
| 7. Rhamu Dimtu area (North Eastern)     | 1.6               | 0.8               |
| 8. Malkamari area (North Eastern)       | 1.6               | 8.0               |
| 9. Dandu area (North Eastern)           | 1.0               | 0.4               |
| 10. Hareri area (North Eastern)         | 0.8               | 0.3               |
| 11. Takaba area (North Eastern)         | 1.0               | 0.3               |
| 12. Libehia area (North Eastern)        | 0.8               | 0.2               |
|   |                   |                   |

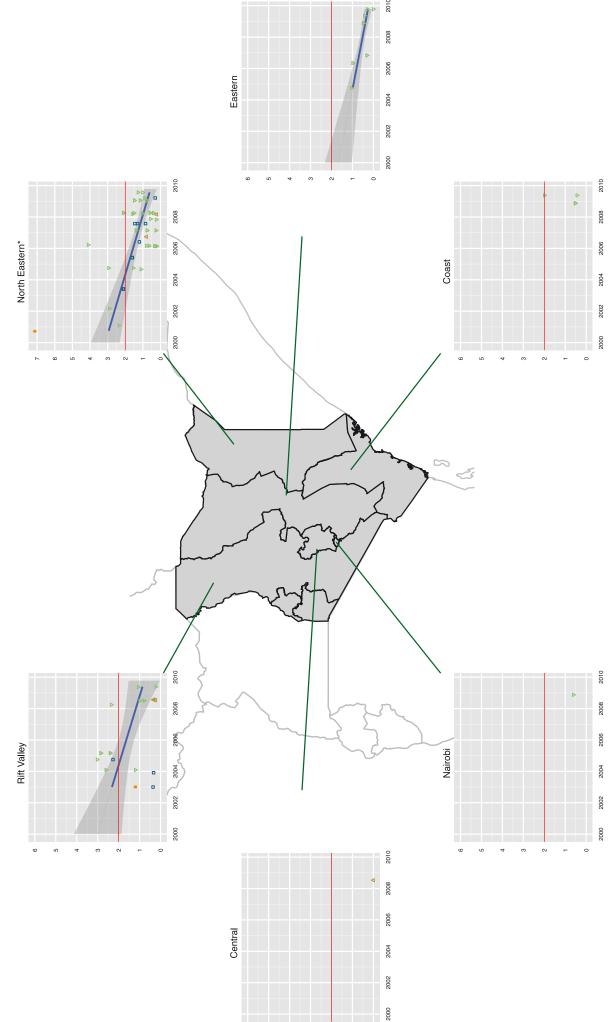


Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.

Source: CE-DAT



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

Trends in child mortality

# Measles vaccination coverage

The majority of surveys on vaccination coverage in Kenya come from the Rift Valley, North Eastern and Eastern provinces, and cover both resident and refugee populations. MCV rates in these provinces have remained stable or improved since 2002 and have always been high compared to other conflict-affected countries. Indeed, no surveys report MCV below 50% and a vast majority are above the WHO threshold of 80%.

It is worth noting that not much vaccination coverage information is available from the other provinces, as is the case for mortality and nutrition.

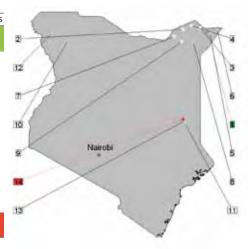
In the Rift Valley and North Eastern Kenya, measles vaccination trends among residents indicate an overall improvement in the situation. Only one surveyed area - located at the east of the Turkana Lake, on the border with Sudan - shows a deterioration, with MCV coverage at 71.8% in October 2009 compared to coverage above 80% in 2004-2005. Measles vaccination coverage among refugees in the Rift Valley and North Eastern provinces has been stable in recent years, and remained above the 80% threshold.

In Eastern Kenya, MCV is stable at around 90% coverage since 2004. In the Coast province, the latest survey reported measles vaccination coverage above 90% in three districts (May 2009). In Taita Taveta, for which a comparison is possible over time, MCV has increased from 88.6% in 2004 to 95.4% in 2009, reaching the SPHERE threshold.

# Trends in measles vaccination coverage over the last five years

# **Average Measles Vaccination Coverage (%)**

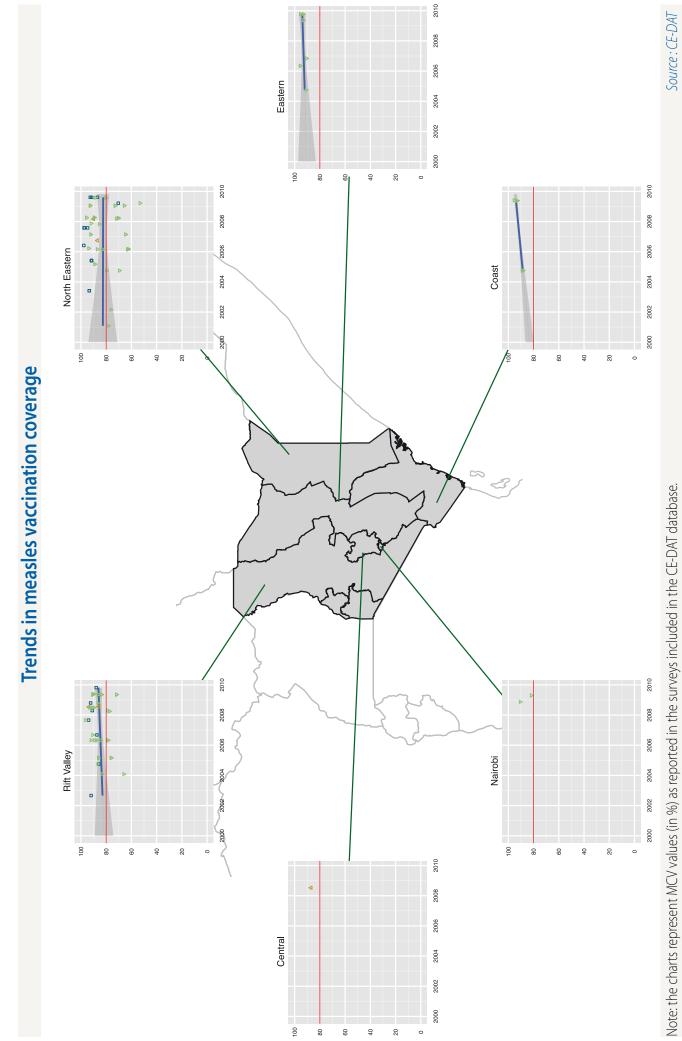
| Location  | 2008 2010 surveys | 2006 2007 surveys |
|---|-------------------|-------------------|
| Improvement                                       |                   |                   |
| 1. Hareri area (North Eastern)                    | 92.6              | 62.9              |
| Status quo  |                   |                   |
| 2. Banisa area (North Eastern)                    | 72.2              | 62.2              |
| 3. Rhamu Dimtu area (North Eastern)               | 72.2              | 62.9              |
| 4. Malkamari area (North Eastern)                 | 72.2              | 62.9              |
| 5. Libehia area (North Eastern)                   | 92.6              | 82.9              |
| 6. Khalalio area (North Eastern)                  | 94.0              | 87.5              |
| 7. Dandu area (North Eastern)                     | 67.8              | 63.4              |
| 8. Central Mandera area (North Eastern)           | 92.7              | 87.5              |
| 9. Takaba area (North Eastern)                    | 67.8              | 64.5              |
| 10. Turkana area (Rift Valley)                    | 88.0              | 85.0              |
| <ol> <li>Hagadera camp (North Eastern)</li> </ol> | 93.0              | 94.7              |
| 12. Kakuma camp (Rift Valley)                     | 90.0              | 92.0              |
| 13. Ifo camp (North Eastern)                      | 92.0              | 97.2              |
| <u>Deterioration</u>                              |                   |                   |
| 14. Daghaley camp (North Eastern)                 | 70.1              | 97.5              |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.



# Niger

Between independence in 1960 and 1991, Niger suffered from austere military rule and a long-running Tuareg insurgency. Following regional famine in the 1980s and a period of political repression, large numbers of Tuareg nomads fled to Algeria and Libya, where a number of militants formed the Popular Front for the Liberation of Niger (FPLN). This was the precursor of the current rebel groups. It was further fragmented along ethnic lines - Tuareg against Toubou - as well as caste and clan. During the first half of the 1990s, various Tuareg uprisings demanding greater autonomy were motivated by political and economic grievances.

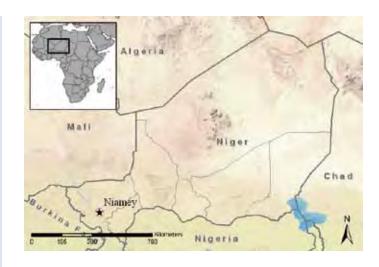
Pressure from civil society led to a first national peace conference in the early 1990s, which resulted in a transitional government and a new constitution. It was followed by the Third Republic in April 1993 - the country's first democratically elected government - but it was overthrown three years later and replaced by a Fourth Republic, under the military rule of Colonel Ibrahim Baré.

In 1995, the government and Niger's two main rebel groups signed the Ouagadougou Accords, but fighting continued. Baré was killed in a 1999 coup led by Major Daouda Malam, who drafted a constitution for a Fifth Republic. This consisted of a semi-presidential system, with Mamadou Tandja as elected president.

By 2000, the government and rebels had made peace after some easy compromises, such as allowing schooling in Tamachek, the Tuareg language. However, the Tuaregs' main economic grievances remained unresolved, and violence flared up again in 2004, with a second insurgency beginning in February 2007. These violent episodes were contained predominantly in Niger's Agadez Region. A new Niger Movement for Justice (MNJ) demanded wide-ranging political reforms, greater inclusion in the military, increased economic development, education in Tamachek, and, most controversially, a share of the country's mineral resource wealth.

The MNJ split in March 2009, and the newly formed Nigerien Patriotic Front - composed of former MNJ leaders - announced its desire to start peace talks. This led to a ceasefire in May 2009.

In February 2010, in response to Tandja's attempt to extend his term in office through manipulation, a new coup d'état put a military junta in power. It was led by the Supreme Council for the Restoration of Democracy (CSRD), headed by Salou Djibo. Many of the 11,000 people who were internally displaced by the 2007-2009 conflict have started to go home. However, the country is now experiencing a food security crisis in the Sahel, where an estimated 10 million people - 70% of them in Niger - are food insecure.



#### **Summary**

#### **Nutrition**

- GAM = 16.7% (CE-DAT)
- Deteriorating, above emergency level

#### **Crude Mortality**

- CMR = 0.5/10,000/day (CE-DAT)
- Stable to improvement; below alert level

#### **Child Mortality**

- U5MR = 1.2/10,000/day (CE-DAT)
- Stable to improvement; below alert level

#### **Measles Vaccination**

- MCV = 65% (CE-DAT)
- Variable; below recommended threshold

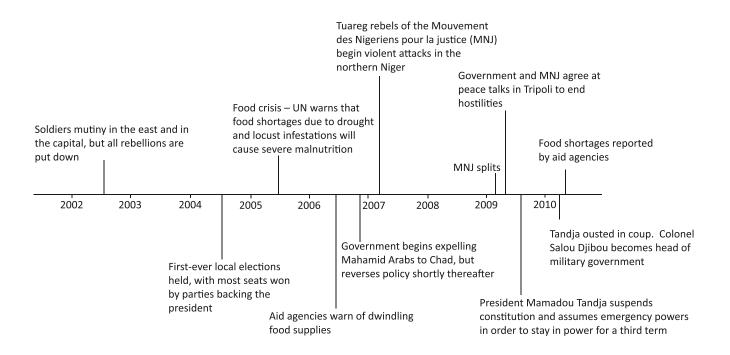
#### Displacement

- IDPs = 6,500 (IDMC, Dec. 2009)
- Refugees residing in Niger = 325 (UNHCR, Jan. 2010)
- Nigerien refugees abroad = 822 (UNHCR, Jan. 2010)
- IDPs increased in 2007 following renewed fighting; one third returned since end 2008.

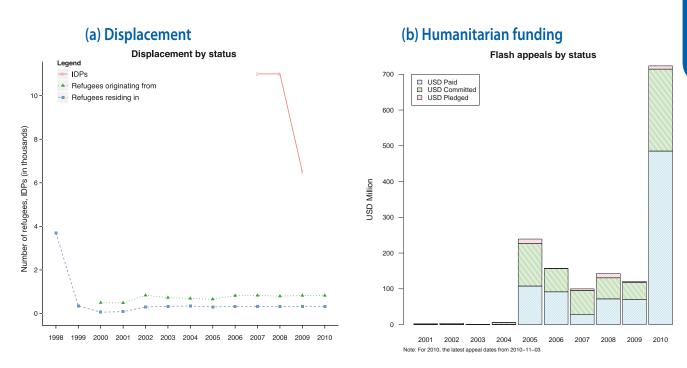
#### **Humanitarian Funding**

- Paid: \$485.2 million (FTS, November 2010)
- Committed \$229.2 million (FTS, November 2010)
- Increase in paid funding following 2005 and 2010 food crisis

# **Timeline**



# Displacement and humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

# **Nutrition**

Malnutrition is a critical problem in Niger, where there have been recurrent food crises during the last three decades. The region is currently experiencing another food crisis, affecting 10 million people across the Sahel, of whom 7 million live in Niger. As of August 2010, 83% of the money raised under the UN Consolidated Appeals Process (CAP) for West Africa has been allocated and paid to Niger, and 67% of this has been committed to specific agencies or departments to spend on tackling the crisis.

A survey conducted in June 2010 reported that the national malnutrition level was 16.7%, exceeding the critical emergency threshold of 15%. None of the country's eight administrative regions had GAM values below 10%, which indicates a serious situation. The worst affected regions are Diffa, Zinder and Maradi, all in southeastern Niger.

Malnutrition has increased by 36% compared to a national survey just one year earlier. This deterioration can be partly explained by poor harvests during the 2008-2009 season and a consequential rise in food prices. Over the last five years, out of 13 locations for which a comparison was possible between surveys from 2006-2007 and 2008-2010, the majority showed little change over time. However, Maradi and Tahoua regions registered an improvement of more than 20% between the two periods. On the other hand, data from four areas - mainly located in Tahoua region - indicated the situation was worse during the last three years than in 2006-2007. In addition, an overview of the last three years shows that malnutrition in all 13 locations reached average rates above 10%.

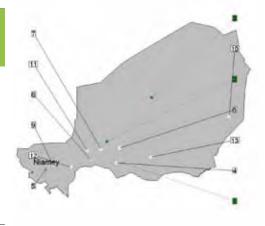
However, long-term time trends show that after a peak in 2005, when as many as 25% of infants and children aged six months to 59 months suffered from acute malnutrition, the situation improved greatly between 2006 and 2008. Indeed, with the exception of Diffa and Zinder, surveys conducted in 2008 reported GAM values around 10%. Unfortunately, this positive trend did not continue and recent GAM values are well above the levels that could have been expected if the decrease had carried on.

In Diffa and Zinder regions, GAM values have remained above 10% since 2006 and show a steady increase since then. In June 2010, GAM reached 22.1% in Diffa and 17.8% in Zinder. A similar trend is visible in the Dosso region, with GAM above the emergency threshold and reaching 14.3%, according to the June 2010 survey.

# Trends in malnutrition over the last five years

# Average global acute malnutrition (%)

| Location                 | 2008 2010 00000   | 2004 2007 surveye |
|--------------------------|-------------------|-------------------|
| _                        | 2008 2010 surveys | 2006 2007 surveys |
| Improvement              |                   |                   |
| 1. Mayahi area (Maradi)  | 9.1               | 14.2              |
| 2. Abalak area (Tahoua)  | 10.0              | 14.3              |
| 3. Agadez region         | 10.3              | 13.6              |
| Status quo               |                   |                   |
| 4. Maradi region         | 10.3              | 12.2              |
| 5. Niamey region         | 8.3               | 9.7               |
| 6. Illela area (Tahoua)  | 8.9               | 10.2              |
| 7. Tahoua region         | 10.4              | 11.8              |
| 8. Dakoro area (Maradi)  | 11.6              | 13.1              |
| 9. Tillabéry region      | 8.4               | 9.1               |
| 10. Diffa region         | 14.7              | 15.4              |
| 11. Tahoua area (Tahoua) | 10.4              | 10.4              |
| 12. Dosso region         | 11.3              | 10.5              |
| 13. Zinder region        | 15.3              | 12.9              |
|                          |                   |                   |



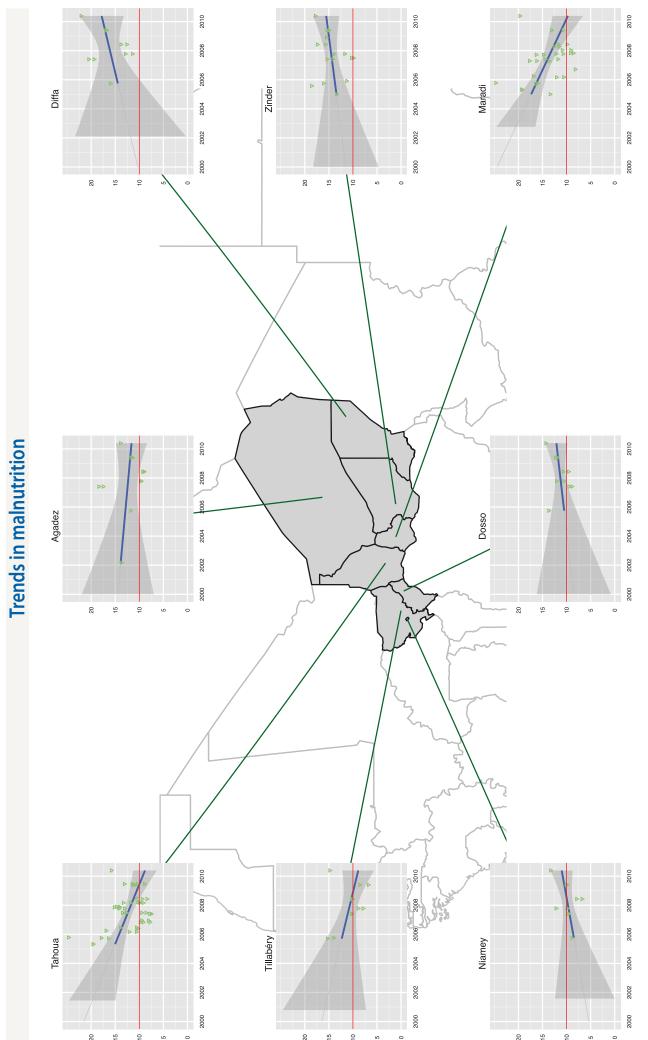
Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.

Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

Source: CE-DAT



Complex Emergency Database Report

# **Crude mortality**

Crude mortality in Niger generally remains at acceptable levels, with the vast majority of surveys reporting figures below the emergency threshold of 1/10,000/day.

Out of 14 locations for which a comparison was possible between surveys from 2006-2007 and surveys from 2008-2010, the majority showed an improvement over time. This is particularly the case for surveys from the central region of Tahoua and neighboring Maradi. They identify a positive trend for those two provinces, where mortality was recorded at or above the threshold (Tahoua) in 2005-2006, following a food crisis. At that time, malnutrition was registered at 25% and child mortality was above the threshold for both provinces, sometimes reaching 3/10,000/day. After these high levels of mortality in 2006, CMR has dropped in the last four years and is currently at, or below, 0.5/10,000/day.

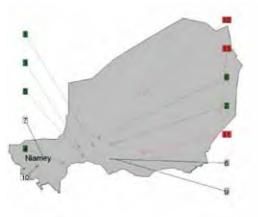
However, mortality rates for the eastern regions (Zinder, Diffa, Agadez) in the last three years were on average higher than during 2006-2007. Crude mortality has been increasing slightly in Agadez and Diffa over the last five years but remains below the emergency threshold. It is estimated at approximately 0.4/10,000/day. The long-term trend is less clear for Zinder. Although the above findings show higher mortality rates in 2008-2010 compared to 2006-2007, mortality has decreased from 2.1 to 0.7 /10,000/day from November 2008 to a more recent national survey in June 2010. Zinder nevertheless remains the region with the highest mortality.

In the west of the country, mortality is stable at around 0.5/10,1000/day in Dosso, Niamey and Tillabéry.

# Trends in crude mortality over the last five years

# Average Crude Mortality Rates (/10,000/day)

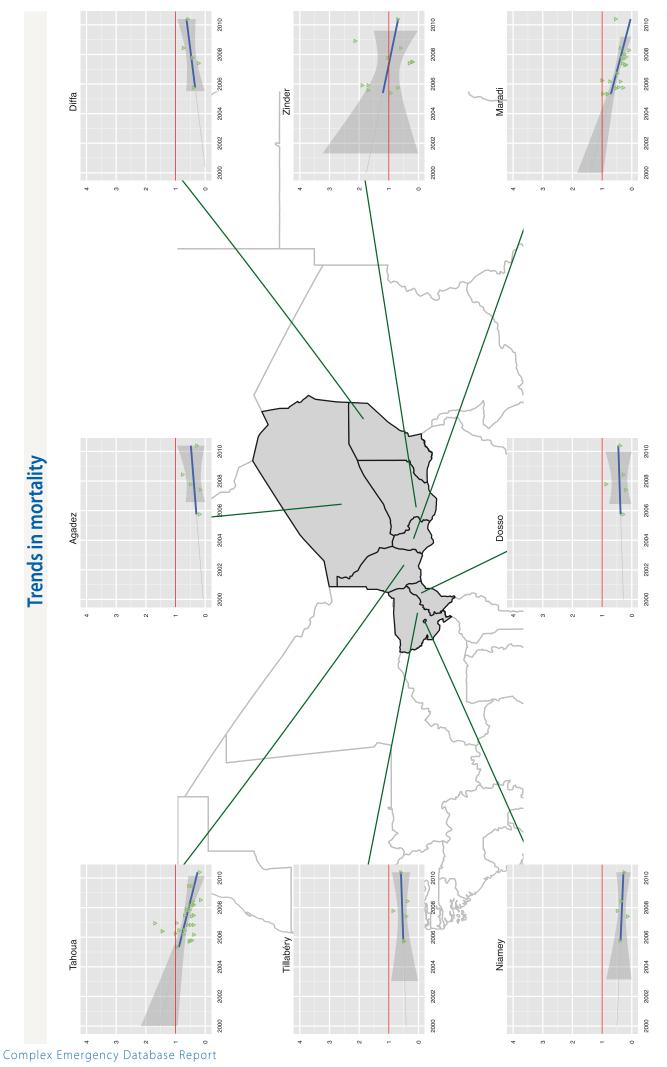
| Location                          | 2008 2010 surveys | 2006 2007 surveys |
|-----------------------------------|-------------------|-------------------|
| Improvement                       |                   |                   |
| 1. Tahoua region                  | 0.2               | 0.6               |
| 2. Dakoro area (Maradi)           | 0.1               | 0.2               |
| 3. Tahoua area (Tahoua)           | 0.6               | 1.0               |
| 4. Dosso region                   | 0.3               | 0.5               |
| 5. Illela area (Tahoua)           | 0.5               | 0.8               |
| 6. Abalak area (Tahoua)           | 0.4               | 0.5               |
| Status quo                        |                   |                   |
| 7. Tillabéry region               | 0.5               | 0.6               |
| 8. Maradi region                  | 0.5               | 0.5               |
| 9. Mayahi area (Maradi)           | 0.3               | 0.3               |
| 10. Niamey region                 | 0.3               | 0.3               |
| <u>Deterioration</u>              |                   |                   |
| <ol> <li>Zinder region</li> </ol> | 1.0               | 0.7               |
| 12. Agadez region                 | 0.6               | 0.3               |
| 13. Diffa region                  | 0.6               | 0.3               |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

Source: CE-DAT

# **Child Mortality**

Child mortality in Niger has dropped dramatically over the last five years, and is currently at acceptable levels, with the vast majority of surveys reporting figures below the emergency threshold (2/10,000/day).

Out of the 14 locations for which comparison was possible between surveys from 2006-2007 and surveys from 2008-2010, the majority showed an improvement over time. This is the case for several locations in the western part of the country.

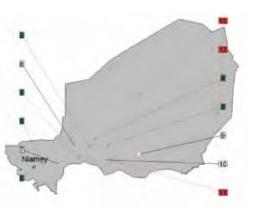
In Diffa and Agadez, mortality rates in the last three years were on average 20% higher than during 2006-2007, yet remained below the emergency level. However, long-term trends (2000-2010) show an improvement in both Agadez and Diffa.

In fact, long-term trends confirm a positive development in most regions. However, all surveys in Zinder in 2005 found rates above the emergency threshold, with several reaching almost 6/10,000/day. In Tahoua and Maradi, the situation was also critical. This corresponds to a period of high food insecurity and high levels of malnutrition, which probably explain the high levels of child mortality. Since then, however, the situation has improved, although U5MR in Zinder remains at emergency levels.

# Trends in under 5 mortality over the last five years

# Average Under 5 Mortality Rates (/10,000/day)

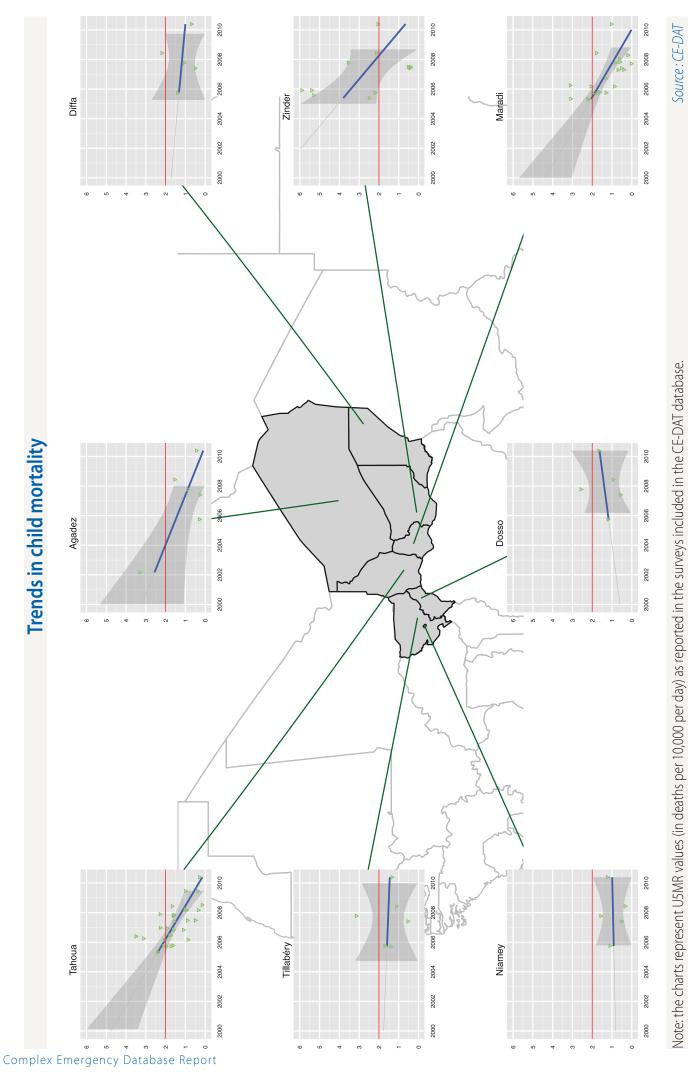
| Location                 | 2008 2010 surveys | 2006 2007 surveys |
|--------------------------|-------------------|-------------------|
| Improvement              |                   |                   |
| 1. Illela area (Tahoua)  | 0.4               | 1.4               |
| 2. Tahoua region         | 0.6               | 1.6               |
| 3. Dakoro area (Maradi)  | 0.2               | 0.5               |
| 4. Abalak area (Tahoua)  | 1.0               | 1.6               |
| 5. Tillabéry region      | 1.2               | 1.8               |
| 6. Niamey region         | 0.8               | 1.0               |
| Status quo               |                   |                   |
| 7. Dosso region          | 1.3               | 1.6               |
| 8. Tahoua area (Tahoua)  | 1.0               | 1.2               |
| 9. Zinder region `       | 2.0               | 2.0               |
| 10. Maradi region        | 1.4               | 1.4               |
| <u>Deterioration</u>     |                   |                   |
| 11. Mayahi area (Maradi) | 0.6               | 0.4               |
| 12. Agadez region        | 0.9               | 0.6               |
| 13. Diffa region         | 1.4               | 0.8               |
|                          |                   | <u> </u>          |



Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# Measles vaccination coverage

Most of the data on measles vaccination has been collected in Tahoua and Maradi. In both provinces, coverage varies from survey to survey, making it difficult to observe any trends. On closer examination, however, we would conclude that within Tahoua, the districts of Illela and Tahoua have maintained consistent vaccine coverage over the last five years at around 70%, below the threshold.

From the five locations from which a comparison between 2006-2007 and 2008-2010 is possible, two areas in Maradi showed an improvement, with measles vaccination coverage improving from 33.8% to 82.8% in Mayahi and from 45.9% to 75.9% in Dakoro. In the remaining three locations, coverage shows no change in Illela (Tahoua) and Tahoua (Tahoua), as indicated by the longer-term trends.

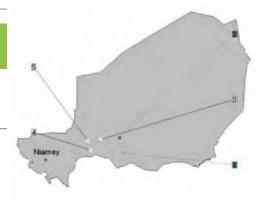
Overall, the surveys report that measles vaccination coverage is not high enough, with only three out of 43 locations recording rates above 80%.

A national survey in 2007 indicated that vaccination coverage was three times higher in urban areas compared to rural regions. Surveys also discuss the poor health and sanitation knowledge in rural communities in Niger, which goes some way to explaining the low coverage.

# Trends in measles vaccination coverage over the last five years

# **Average Measles Vaccination Coverage (%)**

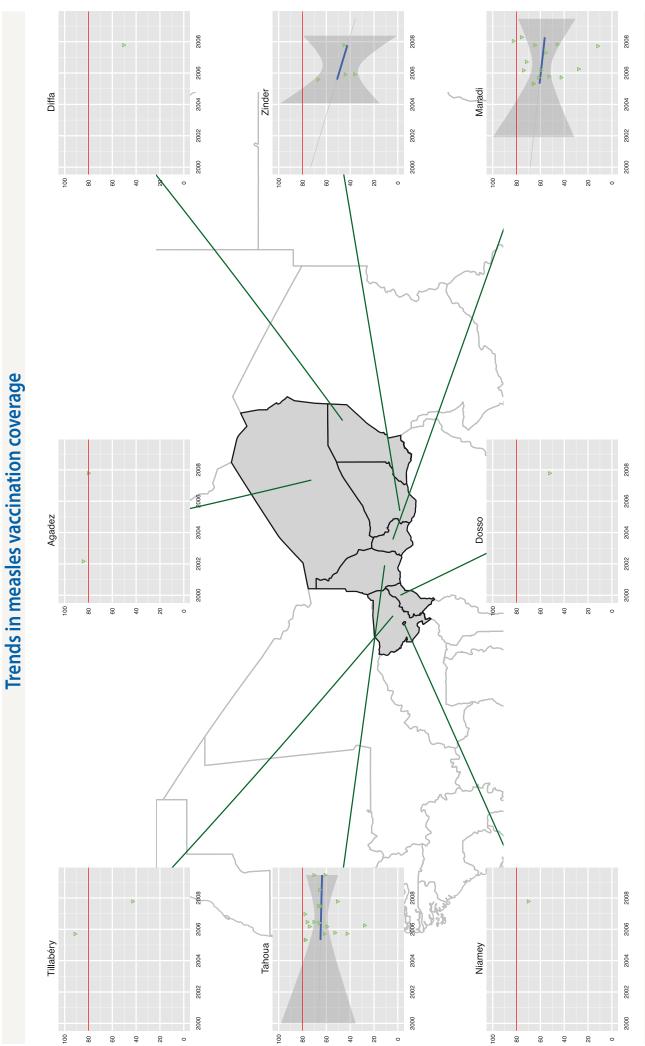
| 2008 2010 surveys | 2006 2007 surveys            |
|-------------------|------------------------------|
|                   |                              |
| 82.8              | 33.8                         |
| 75.9              | 45.9                         |
|                   |                              |
| 65.7              | 59.0                         |
| 70.4              | 69.4                         |
| 61.1              | 66.4                         |
|                   | 82.8<br>75.9<br>65.7<br>70.4 |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

Source: CE-DAT

# Somalia

Somalia was colonized by Britain and Italy until both Italian Somaliland and British Somaliland were granted independence in 1960. The two merged to become the United Republic of Somalia. During the following years, divisions surfaced between the north and south and there were border disputes between the newly formed country and its neighbors, Ethiopia and Kenya. After the president's assassination and a coup d'état in 1969, a military government was established by the Supreme Revolutionary Council (SRC) and General Mohamed Siad Barre became president. Political parties were outlawed, the constitution was suspended, and the National Assembly was dissolved. Barre also announced that the country would be governed under principles of scientific socialism. The late 1970s were marked by drought, as well as war after Somalia laid claim to the Ogaden region of eastern Ethiopia and invaded it.

Ultimately, Somalia failed to gain control of the territory and signed a peace treaty with Ethiopia in 1988. The population of Somalia became increasingly disillusioned with the government as life in the country became more repressive.

Civil war has blighted Somalia's more recent history - with most of the various conflicts around the country related to clan allegiances and competition over resources - and Barre's government was overthrown in 1991. Somaliland, formerly a British protectorate in the north of the country, declared independence the same year, but is not internationally recognized as a nation.

As conflict deepened during the early 1990s, and the country remained without a central government, the international community decided humanitarian relief was needed. US armed forces and UN peacekeepers arrived in Somalia between 1992 and 1994, but both groups suffered losses and pulled out without accomplishing their mission.

The country remained in turmoil, and by 1998 the north-eastern region of Puntland had announced its autonomy. There were multiple attempts between 2002 and 2004 to restore Somalia's central government. A Transitional Federal Government (TFG) was established in 2004. In late 2006, the TFG received backing from Ethiopia and the United States to reclaim Mogadishu from the Islamist Courts Union (ICU), a militant group that had captured it. Heavy fighting between the TFG and armed insurgents continued throughout the following year.

African Union peacekeepers were dispatched to the region in 2007, but the humanitarian situation in Somalia worsened with the increased fighting. By November 2007, the UN reported that more than a million Somali refugees had fled the country. Piracy off Somalia's coast is a growing problem for international shipping, and has hampered aid deliveries.

Ethiopia withdrew its forces in early 2009, and the TFG's mandate was extended for an additional two years as it attempted to take firm control of Somalia. However, Islamist insurgents have seized Baidoa, the former seat of parliament, and the government is hemmed into a small part of Mogadishu. The situation in the country remains chaotic.



#### **Summary**

#### **Nutrition**

- GAM = 10% (CE-DAT)
- Unstable, above alert level

#### **Crude Mortality**

- CMR = 0.2/10,000/day (CE-DAT)
- Stable to improvement in the North, below alert level; Deteriorating, above alert level in the South

#### **Child Mortality**

- U5MR = 0.4/10,000/day (CE-DAT)
- Stable to improvement in the North, below alert level; Unstable, above alert level in the South

#### **Measles Vaccination**

- MCV = 60% (CE-DAT)
- Deteriorating in Central and North-East Somalia

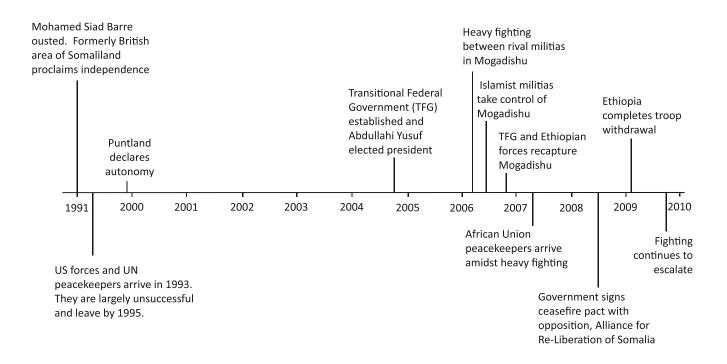
#### **Displacement**

- IDPs = 1.55 million (IDMC, Sept. 2009)
- Refugees residing in Somalia = 1,815 (UNHCR, Jan. 2010)
- Somali refugees abroad = 678,309 (UNHCR, Jan. 2010)
- Recent increase in IDPs due to fighting in Mogadishu and Somaliland

#### **Humanitarian Funding**

- Paid: \$765.21 million (FTS, November 2010)
- Committed \$185.1 million (FTS, November 2010)
- Increase in committed and paid funding
- Pledges have been entirely committed or paid

# **Timeline**

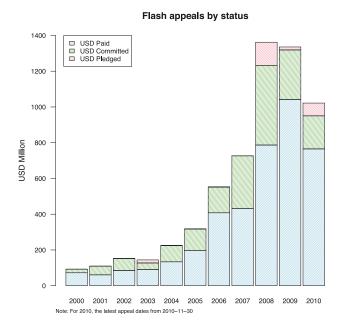


# Displacement and humanitarian funding

#### (a) Displacement

# | Segond | IDPs | Refugees originating from | Refugees residing in | 1400 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 1200 | 120

#### (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

# **Nutrition**

A wealth of data has been collected in Somalia over the past decade. Information from 330 surveys is available, covering almost all of the country's provinces. A glance at the data provides an initial understanding of the severity of the nutritional status among under-five-year-old children over the entire decade: 87% of the surveys indicate global acute malnutrition above the emergency level of 10%, and 23% of the surveys indicate global acute malnutrition higher than 20%. Levels above 30% were registered in Gedo (37.1%) at the end of 2001, most likely as a result of drought and erratic rains that have affected the region since late 1999; in Sanaaq, Somaliland (33.4%) in 2004 and in Bakool (30%) in 2000.

The violence, as well as numerous droughts and recurring floods, did not allow for any improvement: in fact, almost all regions have experienced either a deterioration or a stagnation of the nutritional status of the population, and have maintained very high malnutrition rates. The central and southern provinces have been most affected by the fighting and are showing a steady deterioration, exacerbated by the fact that the starting point was already very serious.

In Bakool, 12% GAM was reported among the resident population in 2000, while it has now reached 25%. Similarly in the Bay, Middle and Lower Juba provinces, malnutrition increased from 16% to 23% among residents. Humanitarian agencies' limited access to IDPs in these areas is likely to make the situation even worse.

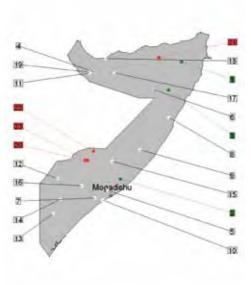
The relatively higher stability and increased accessibility of IDPs in the northern regions have not yet proved sufficient to reduce malnutrition, although some positive signs can be seen: Awdal shows a clear decreasing trend, with most recent surveys reporting GAM at 8.7%. Sanaag has reported GAM at around 6% after the harvest (November 2009) preceded, however, by higher rates of malnutrition after the short rainy season, indicating the precariousness of the situation. In the Sool region, GAM is no longer at double-digit levels, but remains at around 8%-9%. In Bari province, malnutrition is slowly decreasing among residents, but remains above the threshold among IDPs.

# Trends in malnutrition over the last five years

# Average global acute malnutrition (%)

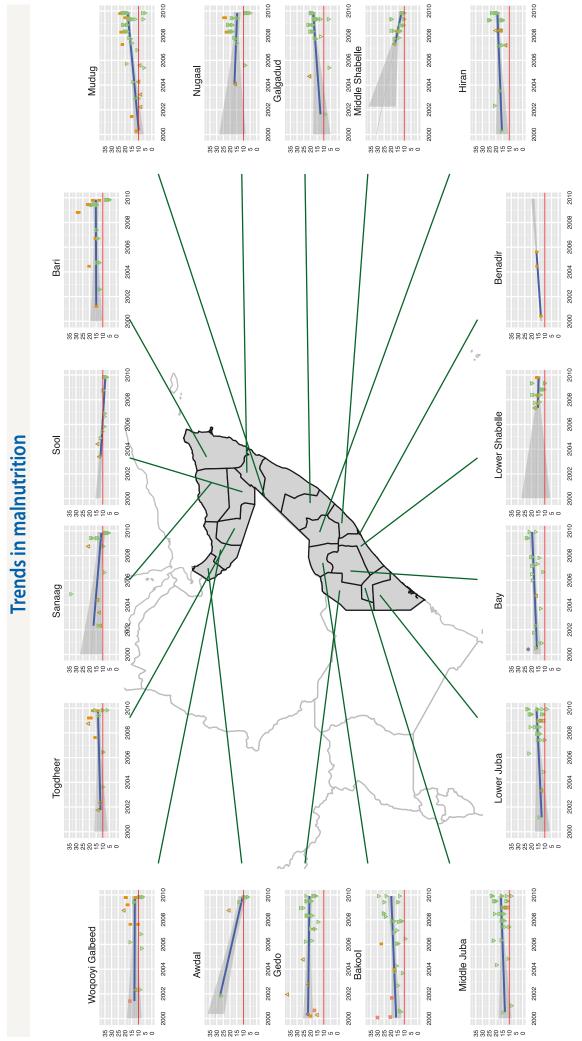
| Location   | 2008 2010 surveys | 2006 2007 surveys |
|--|-------------------|-------------------|
| Improvement                                      |                   |                   |
| 1. Bari region                                   | 10.4              | 14.9              |
| 2. Middle Shabelle region                        | 12.0              | 16.0              |
| 3. Nugaal region                                 | 12.3              | 16.0              |
| Status quo                                       |                   |                   |
| 4. Hargeisa area (Wogooyi Galbeed)               | 7.0               | 8.0               |
| 5. Afgoye area (Lower Shabelle)                  | 13.3              | 15.0              |
| 6. Sool region                                   | 8.0               | 9.0               |
| 7. Lower Shabelle region                         | 14.5              | 16.0              |
| 8. Muduq region                                  | 14.7              | 16.0              |
| 9. Galgadud region                               | 15.3              | 16.6              |
| 10. Merka area (Lower Shabelle)                  | 14.1              | 15.0              |
| 11. Galcayo city (Mudug)                         | 20.7              | 22.0              |
| 12. Gedo region                                  | 19.9              | 20.5              |
| 13. Lower Juba region                            | 15.0              | 14.0              |
| 14. Middle Juba region                           | 15.0              | 14.0              |
| 15. Hiran region                                 | 18.2              | 16.9              |
| 16. Bay region                                   | 18.4              | 16.8              |
| <ol><li>17. Burao town camp (Togdheer)</li></ol> | 18.1              | 16.0              |
| 18. Berbera camp (Woqooyi Galbeed)               | 18.8              | 16.0              |
| 19. Hargeisa camp (Woqooyi Galbeed)              | 12.0              | 10.0              |
| <u>Deterioration</u>                             |                   |                   |
| 20. Bakool region                                | 22.5              | 17.0              |
| 21. Sanaag region                                | 12.0              | 9.0               |
| 22. Elberde area (Bakool)                        | 24.1              | 17.7              |
| 23. Huddur area (Bakool)                         | 24.1              | 10.6              |

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.



#### Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

# **Crude mortality**

There are 151 mortality surveys available for the decade under discussion, of which 130 date from later than 2005, corresponding to the period in which the conflict has been fiercest. Values above the emergency level of 1/10,000/day are reported by 24% of the surveys, most of which were carried out in 2007-2008.

The northern regions of Somaliland and Puntland indicate a positive trend, with mortality rates generally decreasing. In recent years, surveys there have found rates below the emergency threshold. A direct comparison between the period 2006-2007 and 2008-2010 is possible for the Bari region, which confirms a reduction in the crude mortality rate (from 0.6/10,000/day to 0.3/10,000/day). However, Nugaal and Mudug regions registered increasing mortality rates, with the most recent data (November 2009) approaching the emergency threshold (0.85-0.93/10,000/day).

Crude mortality rates in the central regions have been slowly decreasing since 2007 and now lie below the emergency level: in Middle Shabelle, CMR was between 0.61 and 0.93/10,000/day as of November 2009, while in Galgadud it was between 0.78 and 0.93/10,000/day.

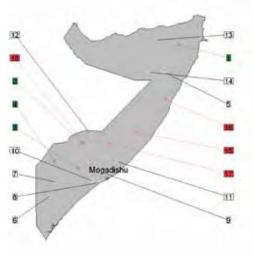
The country's southern regions register the most severe situation. Crude mortality rates in Lower Shabelle have remained consistently above the emergency threshold since 2007. Lower and Middle Juba have registered CMR at or above the emergency threshold since 2004, as well as most of the country's highest crude mortality rates. A December 2009 survey indicated CMR at 2.2/10,000/day among residents, a situation which UNHCR defined as "out of control". In other southern regions, however, there are more positive trends. In Gedo and Bay regions, CMR has constantly decreased since 2007 and has now dropped below the threshold level; the Bakool region has registered CMR below the threshold level since 2004 and as a whole has experienced an improvement since 2006-2007: surveys from this period record CMR at 1/10,000/day, while surveys from the period 2008-2010 show CMR at 0.6/10,000/day. However, looking more closely at smaller administrative units, the situation in the regional capital, Huddur, has deteriorated since 2006-2007, when CMR was estimated at 0.4/10,000/day, while it now stands at 0.7/10,000/day.

# Trends in crude mortality over the last five years

# Average Crude Mortality Rates (/10,000/day)

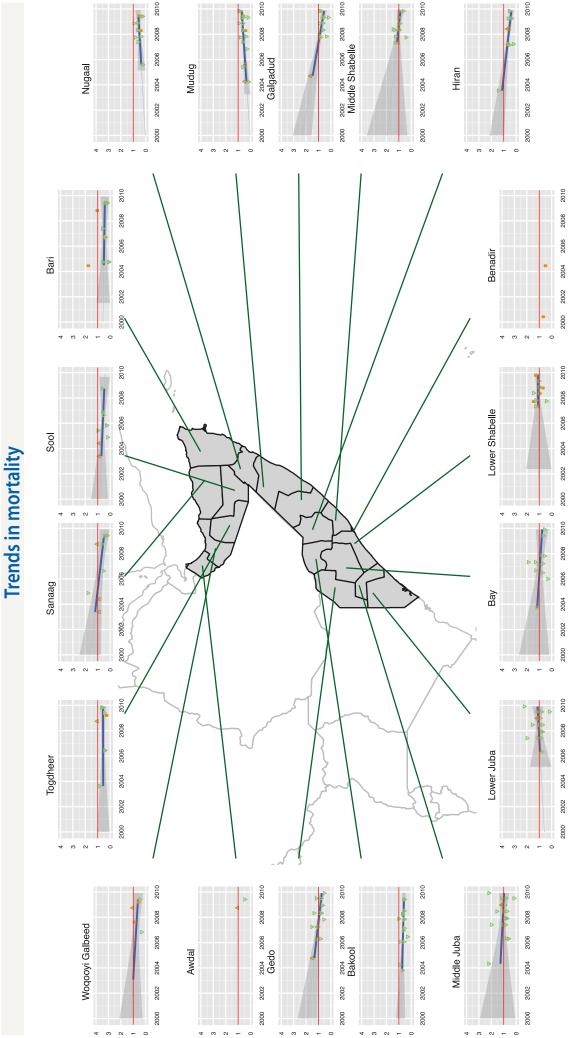
| Improvement         1. Bari region       0.3       0.6         2. Bakool region       0.6       1.0         3. Bay region       0.6       0.8         4. Gedo region       0.8       1.0         Status quo |
|---|
| 2. Bakool region       0.6       1.0         3. Bay region       0.6       0.8         4. Gedo region       0.8       1.0   |
| 3. Bay region       0.6       0.8         4. Gedo region       0.8       1.0  |
| 4. Gedo region 0.8 1.0  |
| 5   |
| Status quo  |
|   |
| 5. Nugaal region 0.5 0.6  |
| 6. Lower Juba region 1.0 1.0  |
| 7. Middle Juba region 1.0 1.0   |
| 8. Merka area (Lower Shabelle) 1.0 1.0  |
| 9. Afgoye area (Lower Shabelle) 1.0 1.0   |
| 10. Lower Shabelle region 1.0 1.0   |
| 11. Middle Shabelle region 1.0 1.0  |
| 12. Elberde area (Bakool) 0.7 0.6   |
| 13. Sanaag region 0.6 0.5   |
| 14. Sool region 0.6 0.5   |
| <u>Deterioration</u>  |
| 15. Galgadud region 0.8 0.6   |
| 16. Mudug region 0.8 0.6  |
| 17. Hiran region 0.6 0.4  |
| 18. Huddur area (Bakool) 0.7 0.4  |

 $Improvement = a 20\% \ or \ more \ decrease \ in \ 2008-2010 \ compared \ to \ 2006-2007;$   $Deterioration = a \ 20\% \ or \ more \ increase \ in \ 2008-2010 \ compared \ to \ 2006-2007.$ 



#### Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# **Child Mortality**

Child mortality in Somalia has registered very high values throughout the entire decade. Out of the 154 surveys available, 73 (47% of surveys) report values above the emergency threshold of 2/10,000/day and five surveys report values above 5/10,000/day, a level which UNHCR defines as a "major catastrophe". These values date back to 2000 and 2004. Since then, U5MR has decreased significantly, but remains at appalling levels across the country.

The long-term trend is generally positive in the northern and central regions, where U5MR is steadily decreasing. Comparison of surveys from the period 2006-2007 and 2008-2010 shows that the Bari region - in the north of the country - has registered an improvement as a whole, going from 1.5/10,000/day to 0.9/10,000/day. However, on closer examination, the long-term trend is not always confirmed at the lower administrative levels. In fact, recent surveys in Nugaal and Mudug have found values above normal (1.33/10,000/day) or at the emergency threshold (2/10,000/day in Mudug). In the Galgadud region, U5MR in November 2009 registered at 2/10,000/day, although the overall trend is decreasing.

Generally speaking, child mortality in the southern regions is deteriorating: not only is the long-term trend for child mortality increasing, but the most recent surveys also reported very high values of U5MR in Lower Shabelle (2.32/10,000/day) and in Lower Juba (3.01/10,000/day). U5MR in Middle Juba is moving down towards the threshold, but a survey from December 2009 indicated U5MR at 3.01/10,000/day. Gedo and Bay regions are more stable, with values around the threshold level, while the Bakool region is generally experiencing decreasing child mortality.

However, looking at the locations for which a comparison (2006-2007 vs 2008-2010) is possible, the trend is not always confirmed. Child mortality in Middle Shabelle registered an increase in May 2009 (2.43/10,000/day) yet was followed in later surveys by values below the threshold. Furthermore, two areas in the Lower Shabelle region (Merka and Afgoye) have experienced an improvement, with child mortality decreasing from 3/10,000/day to 2/10,000/day; in addition, the Bakool region as a whole - if considering only the area around the capital - has experienced a deterioration, with U5MR increasing from 1/10,000/day to 1.3/10,000/day. In the capital, it has increased from 0.6/10,000/day to 1.1/10,000/day.

# Trends in under 5 mortality over the last five years

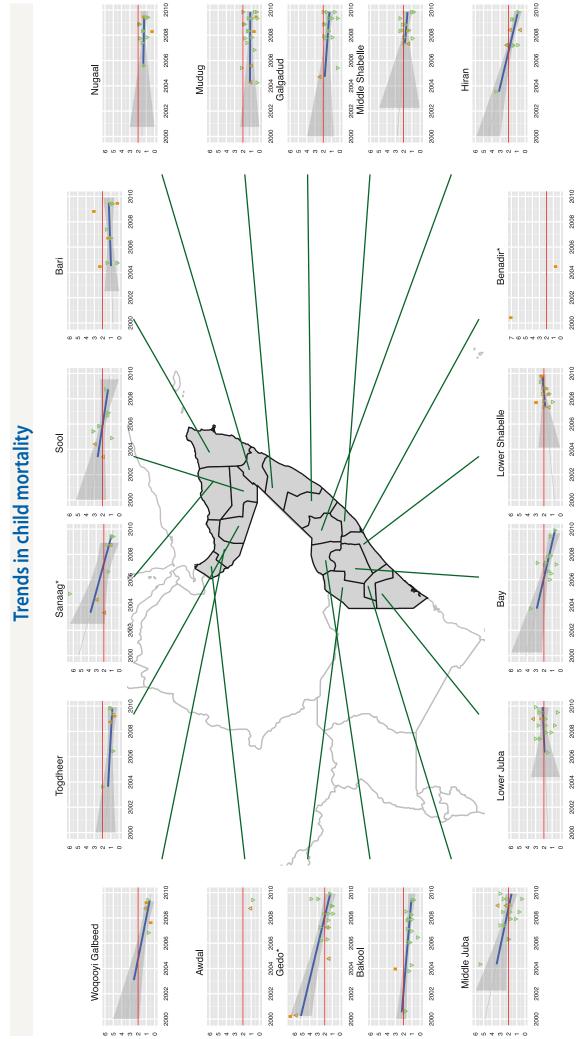
## Average Under 5 Mortality Rates (/10,000/day)

| Location                        | 2008 2010 surveys | 2006 2007 surveys |
|---------------------------------|-------------------|-------------------|
| Improvement                     |                   |                   |
| 1. Afgoye area (Lower Shabelle) | 1.8               | 3.0               |
| 2. Bari region                  | 0.9               | 1.5               |
| 3. Bay region                   | 0.9               | 1.4               |
| 4. Merka area (Lower Shabelle)  | 2.0               | 3.0               |
| 5. Sanaag region                | 1.1               | 1.4               |
| 6. Middle Shabelle region       | 1.6               | 2.0               |
| Status quo                      |                   |                   |
| 7. Nugaal region                | 1.2               | 1.4               |
| 8. Lower Juba region            | 2.0               | 2.0               |
| 9. Middle Juba region           | 2.0               | 2.0               |
| 10. Gedo region                 | 2.0               | 2.0               |
| 11. Hiran region                | 1.2               | 1.2               |
| 12. Lower Shabelle region       | 2.0               | 2.0               |
| 13. Mudug region                | 1.4               | 1.4               |
| 14. Elberde area (Bakool)       | 1.1               | 1.0               |
| 15. Sool region                 | 1.6               | 1.4               |
| 16. Galgadud region             | 1.5               | 1.3               |
| <u>Deterioration</u>            |                   |                   |
| 17. Bakool region               | 1.3               | 1.0               |
| 18. Huddur area (Bakool)        | 1.1               | 0.6               |

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.



Note: the charts represent USMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

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# Measles vaccination coverage

The majority of surveys on measles vaccination show coverage below the WHO-recommended threshold of 80%. Not even 1% of the 144 surveys undertaken in the last 10 years show coverage above that level. Moreover, in 10 of Somalia's 18 provinces, coverage has been decreasing over the last decade. This is particularly the case for central Somalia, in which there is a clear decreasing trend from 2003-2005 to 2008-2010. Coverage among IDPs in Somalia seems to follow the same pattern as for resident and mixed population groups.

Looking at more recent trends in the locations where it is possible to make a comparison between 2006-2007 and 2008-2010 data, there has been a great improvement in Lower and Middle Shabelle (in southern Somalia), where coverage in both increased by 75%. Four out of 11 locations reported no change (Lower and Middle Juba, Hiran and Gedo) and coverage in five areas decreased significantly. In Mudug, Nugaal and Bakool, vaccination coverage has decreased by 50%. These low coverage rates are of particular concern in settings where measles is a frequent cause of death among children.

Examined over a longer period, there is an overall improvement in coverage in Woqooyi Galbeed (next to Djibouti). However, there is some variation within the province, as MCV in Hargeisa improved from 22.3% in May 2002 to 58.3% in September 2007. Whilst in Berbera, MCV was 89% in March 2006 but decreased to 78.6% in September 2009.

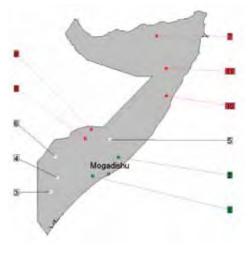
In Bakool, there was a deterioration in vaccination coverage in all areas (Elberde, Huddur, Wajid and Rabdure) where more than 70% of children were vaccinated in 2006 but less than 50% in 2007-2008. Improvement in the neighboring province of Bay was largely due to an increase in coverage in Dinsor and Burhakaba. Further east, in Benadir, where there is only data for Mogadishu, MCV deteriorated, decreasing by 53% between 2000 and 2005. There is no data on MCV since then.

The overall trend for coverage in the region of Bari is downward, but this comes from a decrease in MCV in Alula residents from 66.7% (August 2002) to 29.3% (September 2006). In all other areas, coverage is generally constant. In Mudug (south of Bari), average MCV rates are decreasing. Gaalkacyo shows MCV decreasing from 69.3% (March 2003) to 49% (September 2004) among combined IDP-resident communities and 31% among IDPs in May 2005. In Nugaal, measles vaccination again confirms the decreasing trend observed in the north, with all areas showing a deterioration and very low coverage in late 2008. Just 31.5% of children were vaccinated among residents and only 2% of displaced children in Garowe.

# Trends in measles vaccination coverage over the last five years

## Average Measles Vaccination Coverage (%)

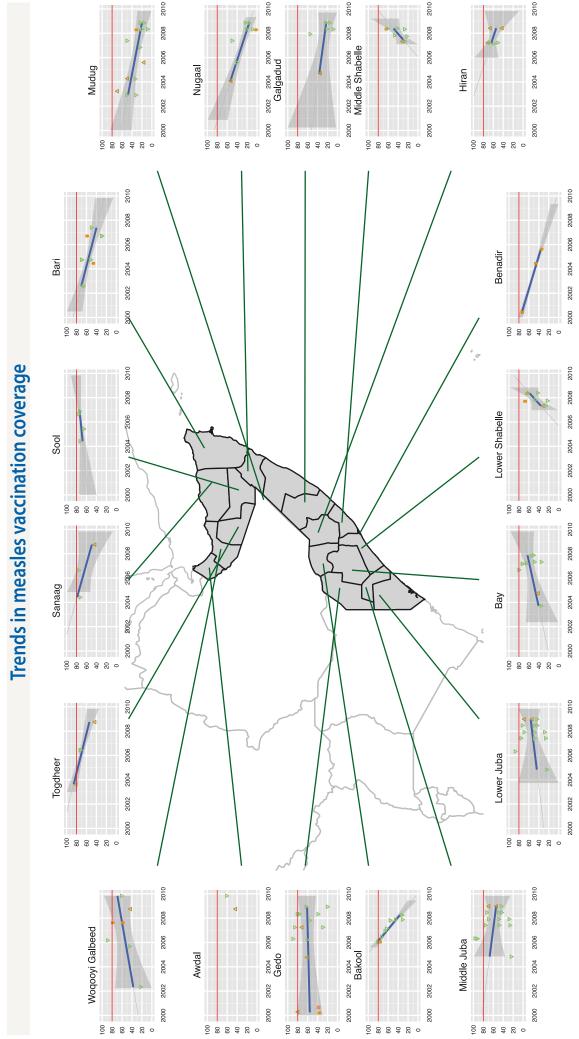
| Location                 | 2008 2010 surveys | 2006 2007 surveys |
|--------------------------|-------------------|-------------------|
| Improvement              | <u> </u>          |                   |
| 1. Lower Shabelle        | 56.0              | 32.0              |
| 2. Middle Shabelle       | 55.8              | 32.0              |
| Status quo               |                   |                   |
| 3. Lower Juba            | 55.0              | 50.0              |
| 4. Middle Juba           | 55.0              | 50.0              |
| 5. Hiran                 | 54.0              | 55.0              |
| 6. Gedo                  | 56.2              | 61.0              |
| <u>Deterioration</u>     |                   |                   |
| 7. Sanaag                | 43.0              | 75.7              |
| 8. Huddur area (Bakool)  | 32.6              | 59.2              |
| 9. Elberde area (Bakool) | 32.6              | 66.6              |
| 10. Mudug                | 17.3              | 50.1              |
| 11. Nugaal               | 17.3              | 50.1              |
|                          |                   |                   |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

# Sudan

Sudan has been affected by intra-state and non-state conflicts since its independence from Britain and Egypt in 1956. Sudan is roughly divided between the predominantly Arab and Muslim north, and the mainly Christian or animist African south. However, this simplistic dichotomy conceals the fact that the country is home to a wide variety of languages, religions and ethnicities.

Throughout Sudan's history, various elite groups from the north of the country have held sway over the marginalized peripheries. Although less than 2% of the population comes from the north, this region totally dominates the country's politics and economy. However, since different elites vie for power, the country has been ruled by a series of unstable parliamentary governments and military regimes. Three main conflicts have plagued Sudan: a 20-year civil war between the north and the south; a decade-long low intensity conflict in the east of the country; and the internal conflict in Darfur, on the western border with Chad.

Rebel groups from the south have been fighting the government for independence since 1963. This conflict escalated in the early 1980s, when the Sudan People's Liberation Movement (SPLM) emerged as the main player on the rebel scene until early 2000, when peace talks began, leading eventually to a comprehensive peace agreement (CPA) in January 2005. However, this resulted in a reduction in violence rather than a complete halt, only for it to escalate again in 2006 and early 2008.

Implementation of the peace agreements is stalled due to the fragmentation of rebel groups and increased tension since the International Criminal Court issue arrest warrants for President Omar al-Bashir. The relative peace of the past four years is threatened by a referendum on secession for the south, scheduled for 2011.

The conflict in eastern Sudan between the national army and an insurgent coalition known as the Eastern Front lasted from 1997 to 2006, when the Eastern Sudan Peace Agreement was signed. Progress in implementing the Agreement has been slow, and the region remains among the poorest in Sudan.

New violence broke out in Darfur in 2003, when two armed groups - the Sudan Liberation Army (SLA) and the Justice and Equality Movement (JEM) - rose up against the government, accusing it of neglecting the region, oppressing black Africans and favoring Arabs. The government's retaliation against the rebels hit the civilian population hard, due in a large part to the government's practice of arming militias in response to armed rebellion. These militias are renowned for gross violations of human rights and the most infamous is the feared Janjaweed militia of Darfur. The conflict in Darfur claimed an estimated 300,000 lives between 2003 and 2008. Futhermore, 4.8 million people were still displaced at the start of 2010 as a result of the conflict.



#### **Summary**

#### **Nutrition**

- GAM = 20% (CE-DAT)
- Nutritional situation critical

#### **Crude Mortality**

- CMR = 0.5/10,000/day (CE-DAT)
- Improvement ; below alert level

#### **Child Mortality**

- U5MR = 1.2/10,000/day (CE-DAT)
- Improvement ; below alert level

#### **Measles Vaccination**

- MCV = 45% (CE-DAT)
- Improving

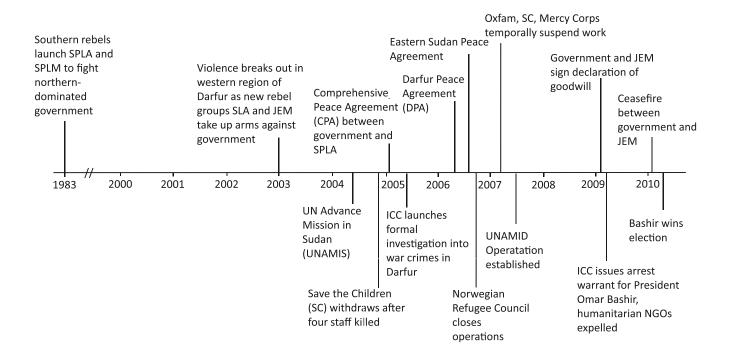
#### Displacement

- IDPs = 4,900,000 (IDMC, Jan. 2010)
- Refugees in Sudan = 186,292 (UNHCR, Jan. 2010)
- Sudanese refugees abroad = 368,195 (UNHCR, Jan. 2010)
- Increase in both IDP and Sudanese refugees escaping since 2003, decrease from 2007 onwards

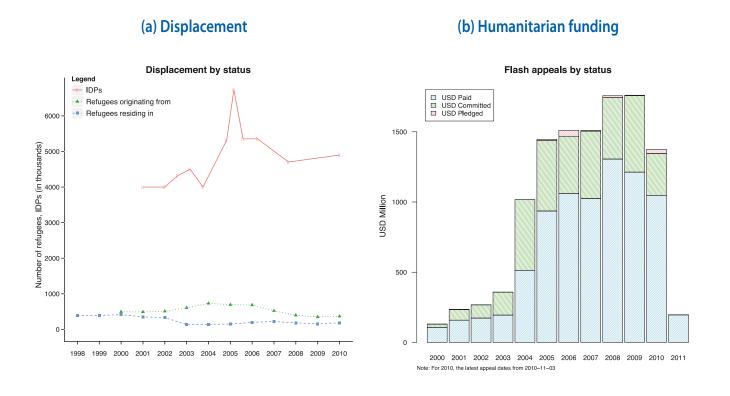
#### **Humanitarian Funding**

- Paid: \$1,047.7 million (FTS, November 2010)
- Committed \$297.8 million (FTS, November 2010)
- Significant increase after 2003 (exacerbation of the violence)

## **Timeline**



# Displacement and humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

## **Nutrition**

More than 450 anthropometric surveys have been conducted in Sudan over the past decade, mainly in the eastern, western and southern states, with little data available from the north.

The nutritional situation in Sudan is very precarious: in almost all states, GAM has remained above the emergency threshold of 10% for the entire decade, often reaching 20% to 30%. Overall, the humanitarian situation remains critical as GAM continues to increase in almost all states.

In the west, surveys from North Darfur in June 2009 reported GAM at 25.1% among IDPs and residents combined, and as high as 34.5% among IDPs alone. In West Darfur, GAM was reported at 14.3% (July 2009). However, when looking at areas where it is possible to make a comparison between 2006-2007 surveys and ones from 2008-2010, we find that three out of four locations where an improvement was recorded are in South and North Darfur (two IDP camps and one city). The situation in the Aweil East area is of particular concern, as GAM has been increasing, up from 16% in 2006-2007 to 29.1% in 2008-2010.

In the central regions, a slightly positive trend is found in Unity state, where malnutrition rates have steadily decreased since 2001 and are now below 20%. In contrast, Warab and Kordofan states have registered GAM values at or above 20%.

In the southern state of Jonglei, one of the regions most affected by violence, global acute malnutrition has ranged between 15% and 40% over the entire decade and does not seem to be falling. A survey from February 2010 reported GAM at 45.7% among the resident population in the Akobo district (on the border with Ethiopia) and GAM at 22.4% in the Wuror distric (central Jonglei).

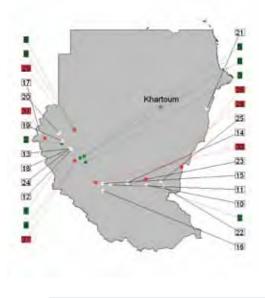
On the other hand, the Khorfulus area has registered a clear improvement when comparing values from 2006-2007 to 2008-2010; GAM there actually decreased, from 31.6 to 23.9%. In Central Equatoria, global acute malnutrition tends to stay below the emergency threshold; in East Equatoria, GAM has been falling since 2003 but remains at 13.3%.

# Trends in malnutrition over the last five years

## Average global acute malnutrition (%)

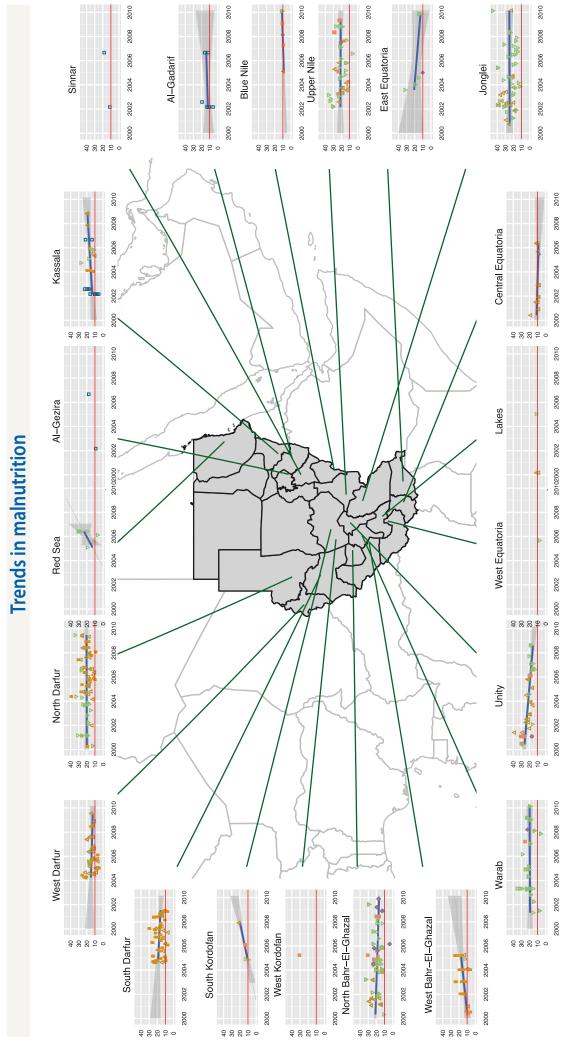
| Location                                    | 2008 2010 surveys      | 2006 2007 surveys |
|---|------------------------|-------------------|
| Improvement                                 | , in the second second |                   |
| 1. Al Salam camp (South Darfur)             | 7.4                    | 23.3              |
| 2. Kass city (South Darfur)                 | 13.2                   | 18.0              |
| 3. Abu Matariq camp (South Darfur)          | 18.1                   | 24.1              |
| 4. El Firdous camp (South Darfur)           | 18.1                   | 24.1              |
| 5. El Neem camp (South Darfur)              | 18.1                   | 24.1              |
| 6. Khor Omer camp (South Darfur)            | 18.1                   | 24.1              |
| 7. Khorfulus area (Jonglei)                 | 23.9                   | 31.6              |
| 8. Abu Shok camp (North Darfur)             | 17.7                   | 22.6              |
| 9. As Salam camp (North Darfur)             | 17.7                   | 22.6              |
| Status quo                                  |                        |                   |
| 10. Atar area (Jonglei)                     | 23.9                   | 29.3              |
| II. Twic area (Warab)                       | 22.7                   | 27.1              |
| 12. Kalma camp (South Darfur)               | 12.6                   | 15.0              |
| 13. Otash camp (South Darfur)               | 14.7                   | 16.0              |
| 14. Rubkoana city (Unity)                   | 18.8                   | 19.8              |
| 15. Aweil West area (North Bahr El Ghazal)  | 16.8                   | 17.4              |
| 16. Aweil North area (North Bahr El Ghazal) | 16.8                   | 17.4              |
| 17. Geneina camp (West Darfur)              | 12.0                   | 12.3              |
| 18. Dereig camp (South Darfur)              | 14.0                   | 14.3              |
| 19. Mosey camp (South Darfur)               | 14.0                   | 14.3              |
| 20. Kabkabiya city (North Darfur)           | 24.9                   | 25.2              |
| 21. Kassala camp (Kassala)                  | 18.5                   | 18.5              |
| 22. Ulang area (Upper Nile)                 | 21.2                   | 21.0              |
| 23. Bentiu city (Unity)                     | 18.8                   | 18.3              |
| 24. Nyala city (South Darfur)               | 14.0                   | 13.1              |
| 25. Balliet area (Upper Nile)               | 25.1                   | 21.0              |
| Deterioration                               |                        |                   |
| 26. Kurmuk area (Blue Nile)                 | 10.9                   | 9.0               |
| 27. Gereida camp (South Darfur)             | 14.0                   | 10.9              |
| 28. Panyikang area (Upper Nile)             | 29.1                   | 21.0              |
| 29. El Fasher city (North Darfur)           | 16.9                   | 11.9              |
| 30. Aweil East area (North Bahr El Ghazal)  | 29.1                   | 16.0              |
| 31. Murnei camp (West Darfur)               | 14.9                   | 6.4               |
|   |                        | ·                 |

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.



#### Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

# **Crude mortality**

Mortality surveys conducted in Sudan since 2000 report steadily decreasing crude mortality rates which have recently reached acceptable levels across the country. Even in Jonglei, Upper Nile and Darfur, the states most affected by violence, the situation appears to be returning to normality. The most recent surveys estimated CMR at 0.43/10,000/day among the resident population and 0.54/10,000/day among the combined IDP-resident population in Jonglei state; 0.55/10,000/day in Upper Nile (May 2009, for IDPs, residents and returnees), 0.3/10,000/day in North Darfur (June 2009, resident) and 0.5/10,000/day in West Darfur (July 2009, IDPs and residents).

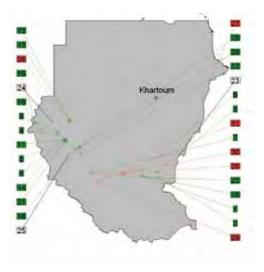
For the 31 areas where it is possible to compare mortality values from 2006-2007 with values from 2008-2010, there are 23 locations where an improvement corresponding to a 20% (or more) reduction in crude mortality rate is reported. Average values for the period 2008-2010 are all below the emergency level. However, the crude mortality rate has deteriorated in six locations in North Bahr-El Ghazal, Darfur, Kassala and Unity states. In these places, CMR remains below the emergency threshold of 1/10,000/day, but is getting closer to it in three of them (0.7/10,000/day in North Darfur and in Unity).

# Trends in crude mortality over the last five years

## Average Crude Mortality Rates (/10,000/day)

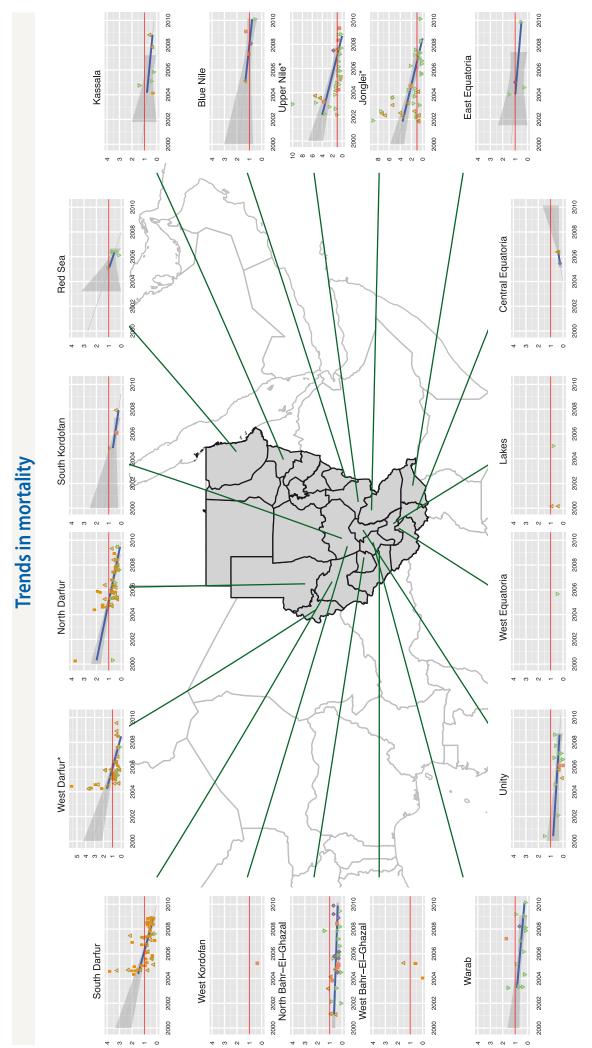
| _   | •                 | •                 |
|---|-------------------|-------------------|
| Location                                    | 2008 2010 surveys | 2006 2007 surveys |
| Improvement                                 |                   |                   |
| 1. Atar area (Jonglei)                      | 0.4               | 1.4               |
| 2. Ulang area (Upper Nile)                  | 0.6               | 2.0               |
| 3. Balliet area (Upper Nile)                | 0.7               | 2.0               |
| 4. Kass city (South Darfur)                 | 0.8               | 2.0               |
| 5. Panyikang area (Upper Nile)              | 0.8               | 2.0               |
| 6. Nyala city (South Darfur)                | 0.4               | 0.9               |
| 7. Aweil East area (North Bahr El Ghazal)   | 0.2               | 0.4               |
| 8. Dereig camp (South Darfur)               | 0.4               | 0.8               |
| 9. Mosey camp (South Darfur)                | 0.4               | 0.8               |
| 10. Khorfulus area (Jonglei)                | 0.4               | 0.7               |
| 11. Otash camp (South Darfur)               | 0.6               | 1.0               |
| 12. Abu Shok camp (North Darfur)            | 0.4               | 0.6               |
| 13. As Salam camp (North Darfur)            | 0.4               | 0.6               |
| 14. Kalma camp (South Darfur)               | 0.7               | 1.0               |
| 15. Geneina camp (West Darfur)              | 0.5               | 0.7               |
| 16. Murnei camp (West Darfur)               | 0.3               | 0.4               |
| 17. Abu Matarig camp (South Darfur)         | 0.3               | 0.4               |
| 18. El Firdous camp (South Darfur)          | 0.3               | 0.4               |
| 19. El Neem camp (South Darfur)             | 0.3               | 0.4               |
| 20. Khor Omer camp (South Darfur)           | 0.3               | 0.4               |
| 21. Al Salam camp (South Darfur)            | 0.7               | 0.9               |
| 22. Twic area (Warab)                       | 0.8               | 1.0               |
| Status quo                                  |                   |                   |
| 23. Kurmuk area (Blue Nile)                 | 0.9               | 1.0               |
| 24. Kabkabiya city (North Darfur)           | 0.6               | 0.6               |
| 25. Gereida camp (South Darfur)             | 0.5               | 0.5               |
| Deterioration                               | 0.5               | 3.3               |
| 26. El Fasher city (North Darfur)           | 0.7               | 0.4               |
| 27. Kassala camp (Kassala)                  | 0.6               | 0.3               |
| 28. Aweil West area (North Bahr El Ghazal)  | 0.4               | 0.2               |
| 29. Aweil North area (North Bahr El Ghazal) | 0.4               | 0.2               |
| 30. Bentiu city (Unity)                     | 0.7               | 0.3               |
| 31. Rubkoana city (Unity)                   | 0.7               | 0.3               |
|   |                   |                   |

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.



#### Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# **Child Mortality**

Child mortality data from surveys carried out in Sudan since 2000 show an overall positive trend, with decreasing underfive mortality rates in all states. The country has registered extremely high values in the states most affected by the violence: Jonglei and Upper Nile in the southeast and in Darfur and Bahr-El-Ghazal in the west of the country. Jonglei and Upper Nile states reported catastrophic values in 2002-2003, when child mortality was estimated at around 25/10,000/day. Very high values were reported in Darfur in 2004-2005 (11.7/10,000/day in South Darfur in 2004, 6.7/10,000/day in North Darfur in 2004, 14.1/10,000/day in West Darfur in 2004). Since then, child mortality has steadily decreased and is now below the emergency threshold of 2/10,000/day.

This positive trend is confirmed by the locations where comparison is possible between the 2006-2007 and 2008-2010 periods. In fact, 25 out of 31 locations under scrutiny have experienced an improvement corresponding to a 20% (or more) reduction in child mortality. In contrast, values for three locations in the central states of Unity and Warab have worsened, with U5MR reaching emergency levels again in Unity.

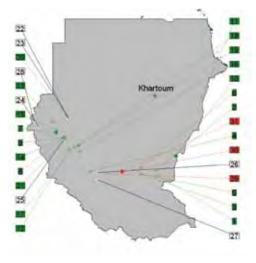
During the periods of most violence, child mortality was reported to be higher among the displaced population in Darfur, while in the eastern states the highest U5MR has been recorded among the resident population.

# Trends in under 5 mortality over the last five years

## Average Under 5 Mortality Rates (/10,000/day)

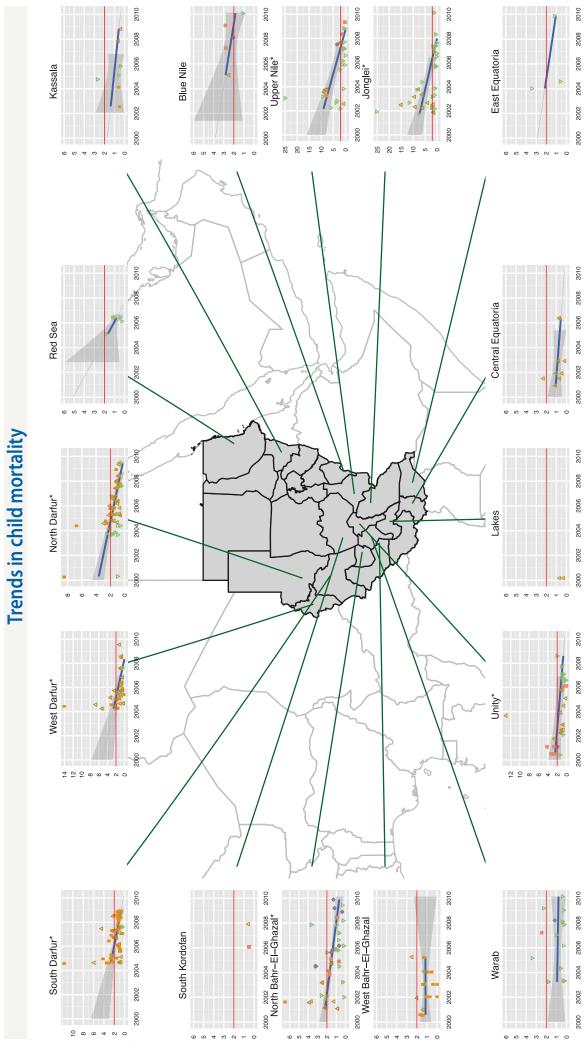
| Location                                    | 2008 2010 surveys | 2006 2007 surveys |
|---|-------------------|-------------------|
| Improvement                                 |                   |                   |
| 1. Ulang area (Upper Nile)                  | 0.3               | 4.0               |
| 2. Balliet area (Upper Nile)                | 0.9               | 4.0               |
| 3. Khorfulus area (Jonglei)                 | 0.5               | 1.7               |
| 4. Aweil East area (North Bahr El Ghazal)   | 0.3               | 1.0               |
| 5. Atar area (Jonglei)                      | 0.5               | 1.4               |
| 6. Panyikang area (Úpper Nile)              | 1.5               | 4.0               |
| 7. Kass city (South Darfur)                 | 2.2               | 4.0               |
| 8. Nyala city (South Darfur)                | 1.0               | 1.8               |
| 9. Otash camp (South Darfur)                | 1.2               | 2.0               |
| 10. Kurmuk area (Blue Nile)                 | 2.0               | 3.0               |
| 11. Kassala camp (Kassala)                  | 0.4               | 0.6               |
| 12. Gereida camp (South Darfur)             | 1.3               | 1.9               |
| 13. Kabkabiya city (North Darfur)           | 0.9               | 1.2               |
| 14. Dereig camp (South Darfur)              | 1.0               | 1.3               |
| 15. Mosey camp (South Darfur)               | 1.0               | 1.3               |
| 16. Abu Matariq camp (South Darfur)         | 0.7               | 0.9               |
| 17. El Firdous camp (South Darfur)          | 0.7               | 0.9               |
| 18. El Neem camp (South Darfur)             | 0.7               | 0.9               |
| 19. Khor Omer camp (South Darfur)           | 0.7               | 0.9               |
| 20. El Fasher city (North Darfur)           | 0.8               | 1.0               |
| 21. Kalma camp (South Darfur)               | 1.6               | 2.0               |
| Status quo                                  |                   |                   |
| 22. Abu Shok camp (North Darfur)            | 1.0               | 1.2               |
| 23. As Salam camp (North Darfur)            | 1.0               | 1.2               |
| 24. Murnei camp (West Darfur)               | 0.7               | 0.8               |
| 25. Al Salam camp (South Darfur)            | 1.4               | 1.6               |
| 26. Aweil West area (North Bahr El Ghazal)  | 0.8               | 0.8               |
| 27. Aweil North area (North Bahr El Ghazal) | 0.8               | 0.8               |
| 28. Geneina camp (West Darfur)              | 0.7               | 0.6               |
| Deterioration                               |                   |                   |
| 29. Twic area (Warab)                       | 1.8               | 1.4               |
| 30. Bentiu city (Unity)                     | 2.0               | 0.7               |
| 31. Rubkoana city (Unity)                   | 2.0               | 0.7               |
|   |                   | 1                 |

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.



#### Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# Measles vaccination coverage

Measles vaccination has generally improved in Sudan over the last decade. Nonetheless, there are still differences in coverage between IDPs and residents, and some regions continue to report vaccination levels below the recommended 80% benchmark.

The only province in which we observe an overall deterioration in MCV coverage is West Bahr-El-Gazal, where surveys have assessed the health status of IDPs and mixed populations of IDPs and residents. Measles vaccination coverage among the latter category is stable and slightly increasing since 2000. However, the latest survey report dates from 2006, some time ago. Among IDPs in the Wau region of West Bahr-El-Gazal, vaccination coverage decreased substantially between 2000 and 2005. The situation for displaced people in West Bahr-El-Gazal is not an exception. Surveys reporting on communities where the displaced have settled almost systematically report lower coverage compared to residents or refugees, because the latter groups are more accessible and experiencing less change in their lives. Low coverage can also be explained by the fact that departures and arrivals among displaced communities are so frequent that vaccination coverage is not maintained.

In the three Darfur states, vaccination coverage has improved among all population types and has even reached the WHO recommended threshold of 80% in all states, except for IDPs in South Darfur, where the latest survey report found 71.5% coverage in Otash camp in December 2008.

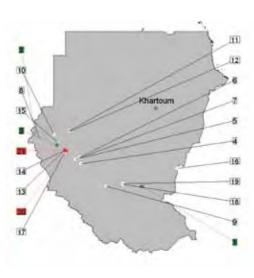
Looking at the locations for which it is possible to compare 2006-2007 and 2008-2010 data, three showed an improvement. There was a particularly spectacular improvement in Atar area (Jonglei), where MCV doubled over the last five years. The majority of locations, however, showed no change. In two camps in South Darfur, measles vaccination coverage has decreased from 92 to 78% in Kalma and from 81.5 to 63.2% in Otash. It is worth noting that the majority of the surveys in our comparison come from camp settings, which are surveyed at regular intervals.

Although the data show an overall improvement in the health status of conflict-affected communities in Sudan, there are still some regions, particularly in southern Sudan, were there is very little data.

# Trends in measles vaccination coverage over the last five years

## **Average Measles Vaccination Coverage (%)**

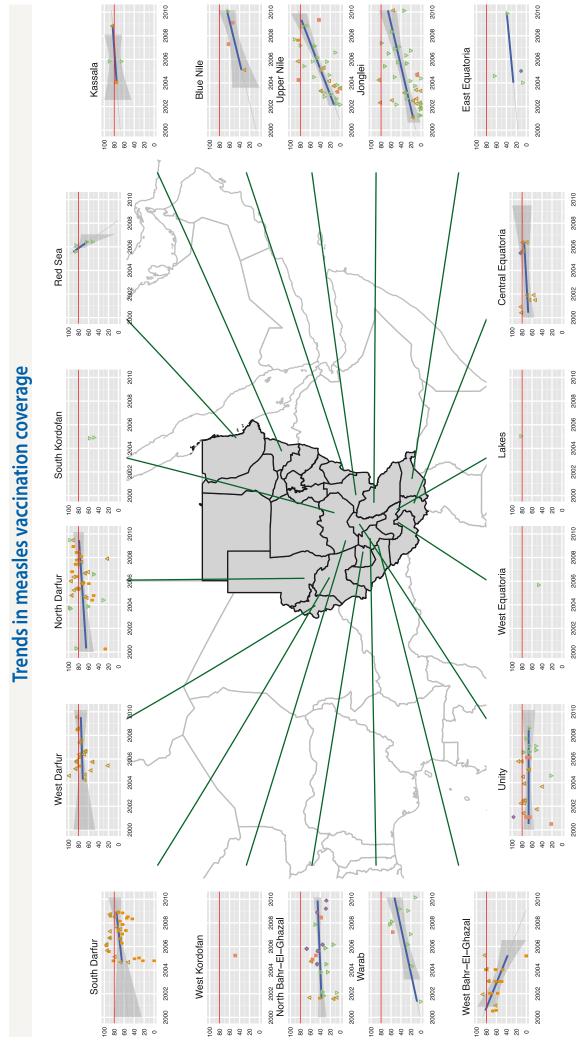
| 1                                  | 0000 0010         | 2007 2007         |
|------------------------------------|-------------------|-------------------|
| Location                           | 2008 2010 surveys | 2006 2007 surveys |
| Improvement                        |                   |                   |
| 1. Atar area (Jonglei)             | 59.2              | 30.1              |
| 2. Geneina camp (West Darfur)      | 80.5              | 68.4              |
| 3. Kass city (South Darfur)        | 78.1              | 67.0              |
| Status quo                         |                   |                   |
| 4. Abu Matariq camp (South Darfur) | 72.0              | 64.2              |
| 5. El Firdous camp (South Darfur)  | 72.0              | 64.2              |
| 6. El Neem camp (South Darfur)     | 72.0              | 64.2              |
| 7. Khor Omer camp (South Darfur)   | 72.0              | 64.2              |
| 8. Murnei camp (West Darfur)       | 82.4              | 78.3              |
| 9. Twic area (Warab)               | 43.1              | 41.5              |
| 10. Kabkabiya city (North Darfur)  | 79.3              | 78.1              |
| 11. Abu Shok camp (North Darfur)   | 87.2              | 86.4              |
| 12. As Salam camp (North Darfur)   | 87.2              | 86.4              |
| 13. Nyala city (South Darfur)      | 88.2              | 89.8              |
| 14. Dereig camp (South Darfur)     | 88.2              | 91.7              |
| 15. Mosey camp (South Darfur)      | 88.2              | 91.7              |
| 16. Kurmuk area (Blue Nile)        | 58.6              | 62.0              |
| 17. Al Salam camp (South Darfur)   | 53.5              | 56.6              |
|                                    | 66.2              | 71.8              |
| 18. Bentiu city (Unity)            |                   |                   |
| 19. Rubkoana city (Unity)          | 66.2              | 71.8              |
| <u>Deterioration</u>               | 70.0              | 00.0              |
| 20. Kalma camp (South Darfur)      | 78.0              | 92.0              |
| 21. Otash camp (South Darfur)      | 63.2              | 81.5              |
|                                    |                   |                   |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note

Squares represent MCV above threshold; Circles represent MCV below threshold.



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

# Uganda

Violence has plagued Uganda since independence, with almost continuous warfare since 1978 as rebel groups in various parts of the country fought against successive regimes. In many of these conflicts, political elites have manipulated ethnic and regional differences in order to legitimate their claims to power. After widespread fighting during the 1980s and 1990s, the main group left still opposing President Yoweri Museveni's government is the Lord's Resistance Army (LRA), led by Joseph Kony.

In 2000, Uganda was gripped by rebel attacks on civilians, tribal warfare, and fighting between government forces and rebel groups. By September that year, more than 150 people had been killed by the fighting. This, however, was a drop from 1999, when the estimated death toll for the year was 1,000. In March 2002, the Ugandan army launched a military offensive against the LRA, sending troops into southern Sudan. In response, the LRA stepped up attacks against civilians in northern Uganda. By October 2002, more than a thousand civilians were reported killed in the fighting. Hundreds more were abducted by the LRA for use as fighters, slaves or concubines. This campaign of terror continued throughout 2003 and 2004.

The conflict took a dramatic turn in 2005, when the International Criminal Court (ICC) issued arrest warrants for Kony and top LRA commanders on charges including war crimes. The rebels began pulling out of Uganda to new bases in neighboring Democratic Republic of Congo, and peace talks began the following year. In 2007 both parties signed an "Agreement on Comprehensive Solutions", which committed them to working towards a lasting resolution to the underlying causes of the conflict. Despite some positive steps, the peace process has not been concluded because Kony has refused to sign a final agreement unless the International Criminal Court drops its indictments against the LRA leadership. After months of ultimatums, in December 2008 the armies of Uganda, southern Sudan and the Democratic Republic of Congo commenced joint operations against the LRA.

As the LRA fled north into the Central African Republic during late 2008 and early 2009, reports suggest that hundreds of people were raped, abducted or killed. The LRA has since called for a truce and renewed peace talks in a neutral setting under UN mediation. Nonetheless, in mid-2009 the LRA began another massive abduction campaign - kidnapping more than 350 people - which is still ongoing.

The constant fighting has displaced a large number of people (about 1.8 million in 2005). However, this number has steadily decreased since 2007 as IDPs have returned home. More than 70% of the country's IDPs are now back in their places of origin, though at the end of 2009 there were still 446,000 IDPs in camps or transit sites. Uganda also continued to host around 127,000 refugees, most of them from Democratic Republic of Congo, Sudan and Rwanda.



#### **Summary**

#### **Nutrition**

- GAM = 4% (CE-DAT)
- Unstable ; below alert level

#### **Crude Mortality**

- CMR = 0.7/10,000/day (CE-DAT)
- Improvement

#### **Child Mortality**

- U5MR = 1.4/10,000/day (CE-DAT)
- Improvement

#### **Measles Vaccination**

- MCV = 90% (CE-DAT)
- Stable

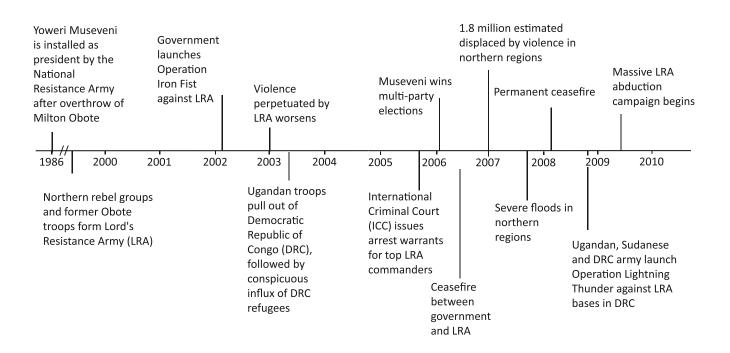
#### Displacement

- IDPs = 295,000 (IDMC, June 2010)
- Refugees in Uganda = 127,345 (UNHCR, Jan. 2010)
- Ugandan refugees abroad = 7,554 (UNHCR, Jan. 2010)
- Internal displacement is constantly decreasing

#### **Humanitarian Funding**

- Paid: \$82.4 million (FTS, November 2010)
- Committed \$20.2 million (FTS, November 2010)
- Increase in pledged and committed funding from 2003 to 2007 following the exacerbation of the violence; decrease in 2009 due to fair degree of political stability

## **Timeline**

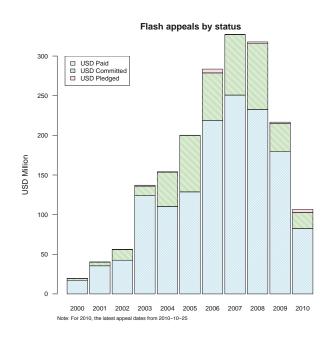


# Displacement and humanitarian funding

#### (a) Displacement

# 

#### (b) Humanitarian funding



Sources: IDMC, UNHCR, Reliefweb/FTS

The majority of anthropometric surveys have been conducted in two northern regions, Acholiland (which includes the counties of Kaabong, Kotido, Abim, Moroto, Nakapiripirit) and Karamoja (Pader, Gulu and Ktgum). These regions have been the most severely affected by violence and are the sites where the humanitarian situation is severe.

GAM values for the Karamoja region show a general reduction in malnutrition among the resident population; however, GAM values are still above the threshold in two districts, Nakapiripirit and Moroto (around 15%).

There are two different trends in the Acholi region; malnutrition among IDPs in Pader is decreasing, with the most recent surveys reporting GAM at 5%; in Gulu, the most recent survey indicated malnutrition at 8.7 %. Although this value is still below the emergency level, it could easily worsen, given the unstable security situation.

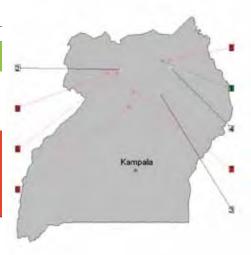
Close to the border, several camps hosting Sudanese refugees in the regions of Arua and Adjumani register slightly increasing GAM values which were approaching the emergency threshold towards the end of 2005.

An examination of the regions for which comparison between 2006-2007 and 2008-2009 is possible confirms deteriorating conditions in the Acholi regions (both Pader and Guku), and in Apac and Amuru (also in the centre-north of the country).

# Trends in malnutrition over the last five years

## Average global acute malnutrition (%)

| Location                  | 2008 2010 surveys  | 2006 2007 surveys  |
|---------------------------|--|--|
| Improvement               | , and the second se | , and the second |
| 1. Wol area (Pader)       | 5.0  | 6.7  |
| Status quo                |  |  |
| 2. Parabongo area (Pader) | 5.0  | 6.2  |
| 3. Lira region            | 5.9  | 6.5  |
| 4. Lapono area (Pader)    | 5.0  | 4.7  |
| <b>Deterioration</b>      |  |  |
| 5. Paimol area (Pader)    | 5.0  | 4.0  |
| 6. Apac region            | 5.9  | 4.6  |
| 7. Oyam area (Apac)       | 5.9  | 4.6  |
| 8. Gulu region            | 9.0  | 3.7  |
| 9. Amuru region           | 9.0  | 3.1  |

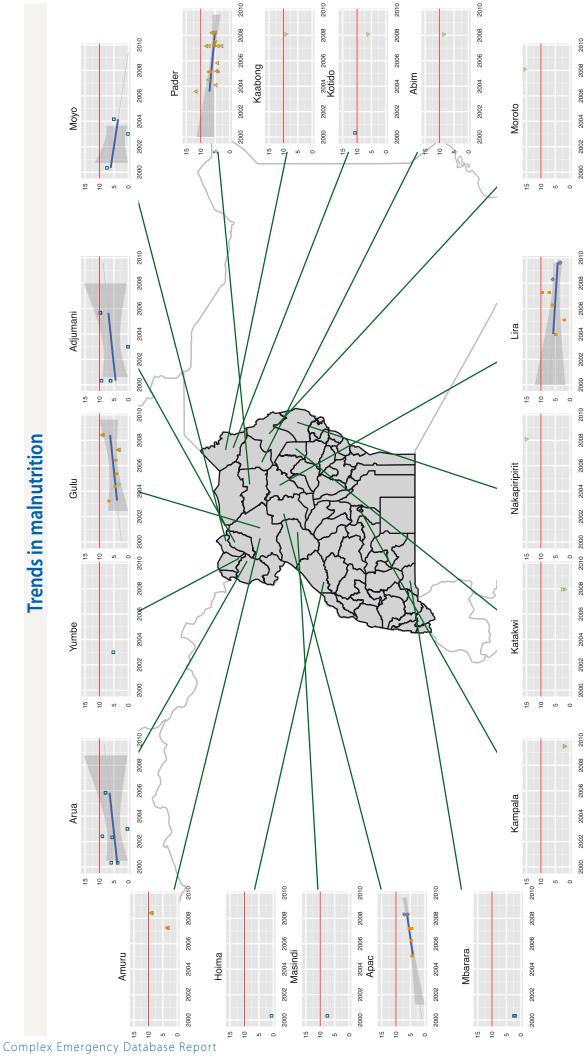


Impro Deter

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

#### Note:

Squares represent GAM above threshold; Circles represent GAM below threshold.



Note: the charts represent GAM values (in %) as reported in the surveys included in the CE-DAT database.

# **Crude mortality**

The majority of mortality surveys in northern Ugandan regions show a decreasing crude mortality rate, with the most recent data reporting values below the emergency threshold of 1/10,000/day.

Long-term trends are only identifiable for the four regions where enough data is available - Lira, Apac, Gulu and Pader. In these regions, high values were reported around 2005, corresponding to a peak in the violence. Since then, CMR has decreased overall and has most recently registered values close to or below the emergency level (1.26/10,000/day in Gulu as of June 2008, 0.23/10,000/day in Lira as of August 2009, 1/10,000/day in Pader as of March 2008, 0.71/10,000/day in Apac as of April 2004).

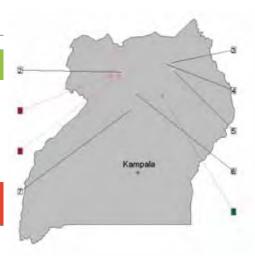
However, short-term comparison of values from 2006-2007 with values from 2008-2010 indicates a deteriorating situation in Gulu, where CMR increased from 0.8 to 1/10,000/day. An even more severe deterioration is found in the Amuru region, where CMR increased by 70% (from 0.3/10,000/day to 1/10,000/day).

One survey conducted in 2008 in the Karamoja region reported CMR just above the emergency level (1.12/10,000/day).

# Trends in crude mortality over the last five years

## Average Crude Mortality Rates (/10,000/day)

| Location                  | 2008 2010 surveys | 2006 2007 surveys |
|---------------------------|-------------------|-------------------|
| Improvement               |                   |                   |
| 1. Lira region            | 0.4               | 0.8               |
| Status quo                |                   |                   |
| 2. Parabongo area (Pader) | 1.0               | 0.9               |
| 3. Paimol area (Pader)    | 1.0               | 0.9               |
| 4. Wol area (Pader)       | 1.0               | 0.9               |
| 5. Lapono area (Pader)    | 1.0               | 0.9               |
| 6. Oyam area (Apac)       | 0.7               | 0.6               |
| 7. Apac region            | 0.7               | 0.6               |
| <u>Deterioration</u>      |                   |                   |
| 8. Gulu region            | 1.0               | 0.6               |
| 9. Amuru region           | 1.0               | 0.3               |

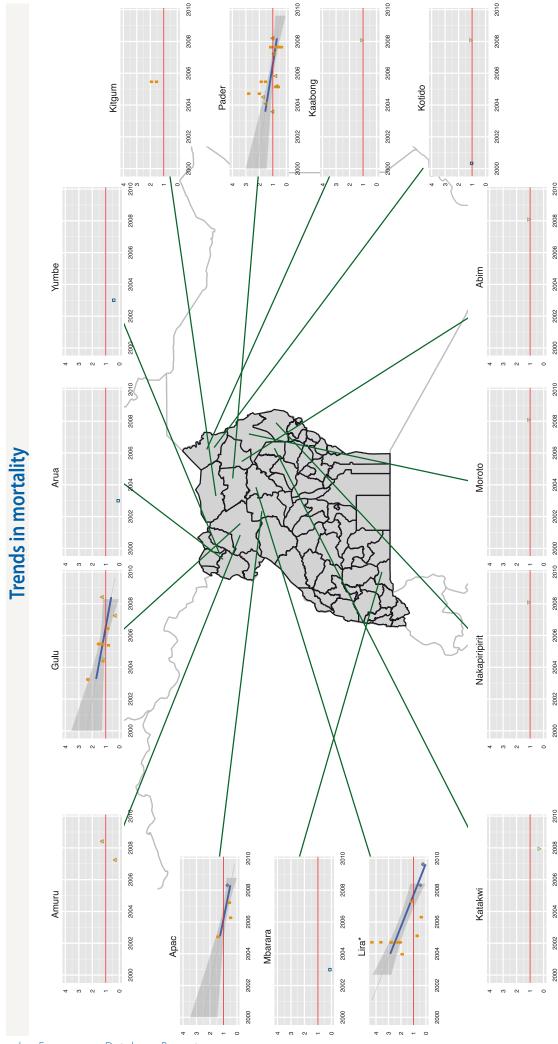


Jganda

Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent CMR above threshold; Circles represent CMR below threshold.



Note: the charts represent CMR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

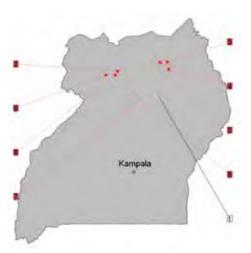
Child mortality rates seem to be decreasing in the majority of the north and northeastern regions, after particularly high mortality rates during 2005 and 2007 as the violence escalated. The only place where the trend is clearly negative is the Apac region, where the most recent under-five mortality rate among the population combining residents and returnees registered 1.7/10,000/day.

However, on closer examination the situation appears less positive. In fact, the most recent survey from Gulu reported an under-five mortality rate of 1.92 in 2008, dangerously close to the emergency threshold. Moreover, the situation has deteriorated in Pader in the regions where comparison between 2006-2007 and 2008-2009 is possible, with average values for the period 2008-2009 reaching the threshold. Mid-2008 data from the Amuru region showed an under-five mortality rate of 1.94/10,000/day.

# Trends in under 5 mortality over the last five years

## Average Under 5 Mortality Rates (/10,000/day)

| Location                  | 2008 2010 surveys | 2006 2007 surveys |
|---------------------------|-------------------|-------------------|
| Status quo                |                   |                   |
| 1. Lira region            | 0.8               | 0.9               |
| <u>Deterioration</u>      |                   |                   |
| 2. Parabongo area (Pader) | 2.0               | 0.8               |
| 3. Paimol area (Pader)    | 2.0               | 0.8               |
| 4. Wol area (Pader)       | 2.0               | 0.8               |
| 5. Lapono area (Pader)    | 2.0               | 0.8               |
| 6. Gulu region            | 2.0               | 0.7               |
| 7. Apac region            | 1.8               | 0.4               |
| 8. Oyam area (Apac)       | 1.8               | 0.4               |
| 9. Amuru region           | 2.0               | 0.2               |

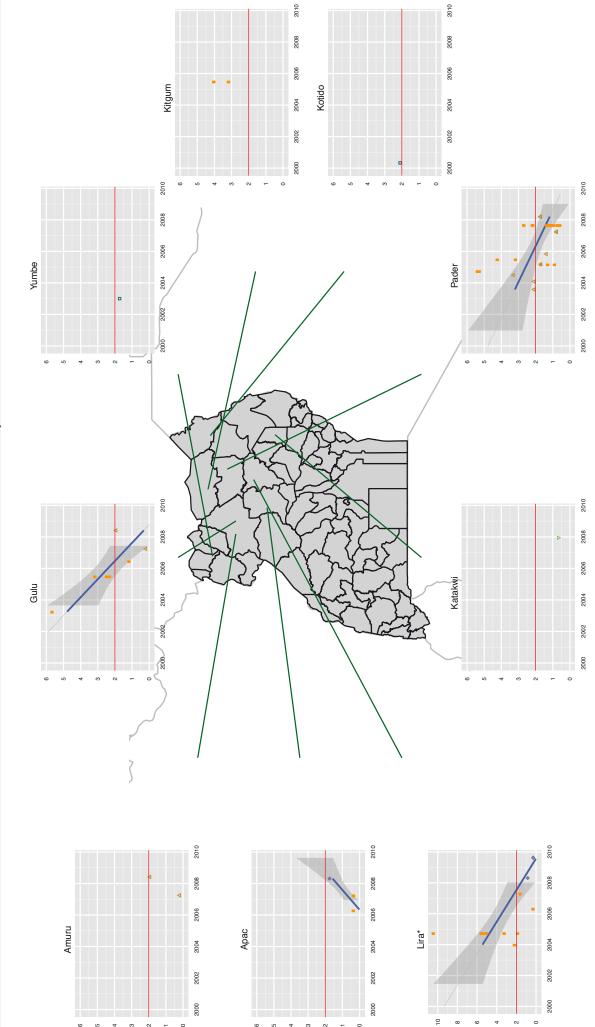


Improvement = a 20% or more decrease in 2008-2010 compared to 2006-2007; Deterioration = a 20% or more increase in 2008-2010 compared to 2006-2007.

Note:

Squares represent U5MR above threshold; Circles represent U5MR below threshold.

# Trends in child mortality



Note: the charts represent U5MR values (in deaths per 10,000 per day) as reported in the surveys included in the CE-DAT database.

# Measles vaccination coverage

The majority (68%) of surveys undertaken in Uganda report measles vaccination coverage above the WHO-recommended threshold of 80%. Most surveys were conducted among displaced populations. Indeed, 29 out of 51 report on IDP health status, seven reflect mixed resident-IDP populations and five were undertaken among Sudanese refugees.

All of the locations for which a comparison between 2006-2007 and 2008-2010 is possible showed little change over this time, with MCV coverage remaining above the WHO-recommended level. In fact, coverage was stable across the whole decade.

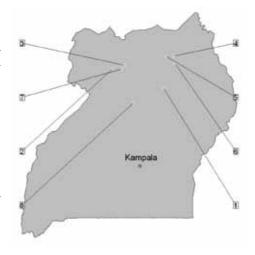
Only one district reports fluctuating immunization: Pader, in northern Uganda. IDPs in this frequently war-torn district appear to be worse off than groups of IDPs and residents surveyed together. Measles vaccination coverage among displaced people living in camps in Agago county in Pader varies from 50% to 70%, according to the latest data (September 2007).

In the neighboring northern district of Lira, a slight decrease in coverage was registered between 2004 and 2007 among the displaced, but coverage was still sufficient according to WHO standards.

# Trends in measles vaccination coverage over the last five years

## **Average Measles Vaccination Coverage (%)**

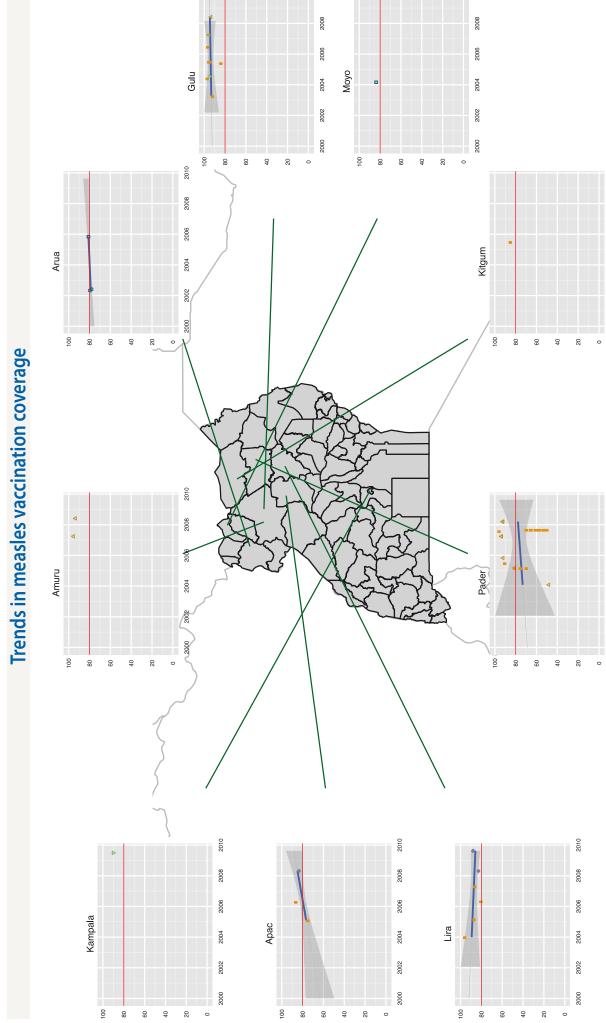
| Location                  | 2008 2010 surveys | 2006 2007 surveys |
|---------------------------|-------------------|-------------------|
| Status quo                |                   |                   |
| 1. Lira                   | 82.8              | 83.4              |
| 2. Amuru                  | 94.0              | 95.5              |
| 3. Parabongo area (Pader) | 92.0              | 93.6              |
| 4. Paimol area (Pader)    | 92.0              | 93.6              |
| 5. Wol area (Pader)       | 92.0              | 93.6              |
| 6. Lapono area (Pader)    | 92.0              | 93.6              |
| 7. Gulu                   | 94.0              | 96.1              |
| 8. Apac                   | 83.6              | 86.6              |



Improvement = more than 10% increase in absolute terms from 2008-2010 to 2006-2007 or a 20% or more increase in 2008-2010 compared to 2006-2007; Deterioration = more than 10% decrease in absolute terms from 2008-2010 to 2006-2007 or a 20% or more decrease in 2008-2010 compared to 2006-2007.

Note:

Squares represent MCV above threshold; Circles represent MCV below threshold.



Note: the charts represent MCV values (in %) as reported in the surveys included in the CE-DAT database.

2004

2002

# Table 1: Chad

| Location        |  | GAM  | CMR | U5MR | MCV  | Start Date                 | Population Status |
|-----------------|--|------|-----|------|------|----------------------------|-------------------|
| Kanem           | Kanem                                  | 18.9 |     |      | 21.4 | July 2000                  | resident          |
| Kanem           | Kanem                                  | 21.9 |     |      | 23.5 | July 2001                  | resident          |
| Kanem           | Kanem                                  | 27.3 |     |      | 7.5  | March 2002                 | resident          |
| Kanem           | Kanem                                  | 27.2 |     |      | 2.6  | March 2002                 | resident          |
| Kanem           | Kanem                                  | 19.7 |     |      | 16.9 | March 2002                 | resident          |
| Wadi Fira       | Tine                                   | 27.2 |     |      |      | October 2003               | refugee           |
| Wadi Fira       | Bahai, Cariari                         | 39.2 | 1.1 | 0.4  |      | June 2004                  | refugee           |
| Biltine         | Kounoungo, Iridimi, Touloum            | 35.6 | 2.6 | 1.6  |      | June 2004                  | refugee           |
| Wadi Fira       | Wadi Fira                              | 35.0 |     |      |      | June 2004                  | resident          |
| Biltine         | Iridimi                                | 19.6 | 1.3 | 2.2  | 96.0 | September 2004             | refugee           |
| Wadi Fira       | Guereda                                | 13.6 | 1.3 | 0.9  |      | November 2004              | resident          |
| Wadi Fira       | Guereda                                | 13.7 | 0.9 | 1.3  | 33.2 | December 2004              | resident          |
| Wadi Fira       | Treguine                               | 14.2 | 0.8 | 1.1  | 31.5 | December 2004              | resident          |
| Wadi Fira       | Bahai                                  | 21.4 | 0.7 | 1.0  | 29.2 | December 2004              | resident          |
| Biltine         | Mile                                   | 15.8 | 1.0 | 1.6  | 64.2 | December 2004              | refugee           |
| Biltine         | Oure Cassoni                           | 20.5 | 0.7 | 0.8  | 87.6 | December 2004              | refugee           |
| Wadi Fira       | Koukou Angarana                        | 12.1 | 0.8 |      | 47.2 | January 2005               | resident          |
| Wadi Fira       | Goz Bida                               | 12.4 | 0.7 |      | 32.6 | January 2005               | resident          |
| Assongha        | Bredjing, Farchana                     | 8.0  | 0.7 | 1.6  | 32.0 | January 2005               | refugee           |
| sila            | Goz Amer                               | 10.1 | 0.9 | 1.0  | 89.8 | January 2005               | refugee           |
| Sila            | Djabal                                 | 15.6 | 0.9 | 1.2  | 83.7 | January 2005               | refugee           |
| Duaddai         | Treguine                               | 11.3 | 0.5 | 0.8  | 97.2 | January 2005               | refugee           |
| Duaddai         | Treguine                               | 14.2 |     | 1.1  | 31.6 | January 2005               | resident          |
| Biltine         | Oure Cassoni                           | 21.4 |     | 1.0  | 29.2 | January 2005               | resident          |
| Biltine         | Mile                                   | 13.6 |     | 1.3  | 43.2 | January 2005               | resident          |
| Biltine         | Oure Cassoni                           | 26.0 |     | 1.3  | 43.2 | April 2005                 | refugee           |
| Wadi Fira       | Cariari                                | 43.9 |     |      |      | April 2005                 | refugee           |
| Biltine         | Am Nabak                               | 24.6 | 1.1 |      |      | April 2005                 | refugee           |
| Wadi Fira       | Guereda                                | 19.3 | 0.4 | 0.3  |      | · ·                        | resident          |
|                 |  | 12.8 | 0.4 | 1.9  | 87.5 | May 2005                   |                   |
| Assongha        | Bredjing                               |      |     |      | 85.5 | July 2005<br>November 2005 | refugee           |
| Sila            | Djabal                                 | 4.8  | 0.4 | 0.2  |      |                            | refugee           |
| Biltine         | Am Nabak                               | 18.1 | 0.3 | 0.6  | 90.7 | November 2005              | refugee           |
| Biltine         | Oure Cassoni                           | 15.7 | 0.1 | 0.2  | 85.0 | November 2005              | refugee           |
| Assongha        | Bredjing                               | 5.5  | 0.5 | 0.8  | 68.2 | February 2006              | refugee           |
| Wadi Fira       | Bredjing, Farchana                     | 5.8  | 0.4 | 0.5  | 68.2 | February 2006              | resident-refugee  |
| Wadi Fira       | Koloma, Koubigou, Gourounkoun, Gassire | 19.5 | -   | 2.0  | 22.2 | April 2007                 | ldp               |
| Sila            | Dogdore                                | 8.1  | 0.9 | 2.0  | 90.8 | October 2007               | ldp-resident      |
| Logone Oriental | Gondjé, Amboko                         | 3.8  | 0.3 | 1.3  | 87.8 | July 2008                  | refugee           |
| Logone Oriental | Dosseye                                | 9.8  | 0.3 | 0.6  | 54.5 | July 2008                  | refugee           |
| Sila            | Goz Amer                               | 11.2 | 0.6 | 0.9  | 96.1 | July 2008                  | refugee           |
| Sila            | Djabal                                 | 9.2  | 0.4 | 0.9  | 88.0 | July 2008                  | refugee           |
| Ouaddai         | Gaga                                   | 13.4 | 0.4 | 0.6  | 92.0 | July 2008                  | refugee           |
| Assongha        | Farchana                               | 12.6 | 0.4 | 1.0  | 88.9 | July 2008                  | refugee           |
| Assongha        | Bredjing                               | 10.4 | 0.4 | 1.0  | 92.4 | July 2008                  | refugee           |
| Ouaddai         | Treguine                               | 11.7 | 0.4 | 0.8  | 95.2 | July 2008                  | refugee           |
| Biltine         | Oure Cassoni                           | 15.2 | 0.5 | 0.9  | 97.5 | July 2008                  | refugee           |
| Biltine         | Am Nabak                               | 11.5 | 0.2 | 0.4  | 97.5 | July 2008                  | refugee           |
| Moyen-Chari     | Yaroungou                              | 6.2  | 0.2 | 0.6  | 76.4 | July 2008                  | refugee           |
| Moyen-Chari     | Moula                                  | 5.4  | 0.1 | 0.6  | 95.7 | July 2008                  | refugee           |
| Biltine         | Touloum                                | 10.8 | 0.4 | 0.9  | 96.9 | July 2008                  | refugee           |
| Biltine         | Iridimi                                | 11.1 | 0.5 | 0.7  | 96.6 | July 2008                  | refugee           |
| Sila            | Djabal                                 | 13.1 | 0.4 | 0.8  | 94.6 | July 2008                  | refugee           |

### Table 1: Chad

| Location       |                      | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|----------------|----------------------|------|-----|------|------|----------------|-------------------|
| Biltine        | Mile                 | 10.6 | 0.3 | 0.6  | 97.7 | August 2008    | refugee           |
| Biltine        | Kounoungo            | 12.8 | 0.4 | 0.6  | 94.5 | August 2008    | refugee           |
| Sila           | Gourounkoun          | 4.7  | 0.5 | 2.1  | 64.3 | September 2008 | Idp               |
| Sila           | Dogdore              | 5.8  | 0.5 | 1.1  | 87.5 | September 2008 | ldp               |
| Sila           | Gassire              | 10.1 | 0.5 | 1.6  | 83.9 | September 2008 | ldp-resident      |
| Sila           | Habile               | 7.2  | 0.5 | 1.4  | 49.7 | September 2008 | ldp-resident      |
| Sila           | Aradib               | 5.6  | 0.6 | 1.1  | 41.5 | October 2008   | Idp-resident      |
| Assongha       | Goundjang, Arkoum    | 7.6  | 0.3 | 0.4  | 12.0 | October 2008   | Idp-resident      |
| Sila           | Kerfi                | 8.3  | 0.8 | 1.1  | 27.5 | November 2008  | Idp-resident      |
| Ouaddai        | Hile Deye, Mourouske | 7.5  | 0.2 | 0.2  | 18.5 | November 2008  | ldp-resident      |
| Ouaddai        | Abéché               | 20.6 | 0.8 | 0.5  | 86.2 | June 2009      | resident          |
| Kanem          | Mao                  | 20.8 | 0.5 | 2.3  |      | July 2009      | resident          |
| Kanem          | Nokou                | 18.7 | 0.2 | 0.5  | 32.0 | November 2009  | resident          |
| Kanem          | Oure Cassoni         | 18.7 | 0.4 | 0.1  | 93.1 | November 2009  | refugee           |
| Bahr el Ghazel | Bahr el Ghazel       | 26.9 | 0.9 | 1.6  | 28.9 | November 2009  | resident          |
| Ouaddai        | Abéché               | 16.8 | 0.1 | 0.2  | 80.7 | January 2010   | resident          |

| Location   |   | GAM  | CMR               | U5MR              | MCV  | Start Date                               | Population Statu                 |
|--|---|------|-------------------|-------------------|------|--|----------------------------------|
| South Kivu   | Lemera Health Zone  | 10.9 |                   | 2.5               |      | December 1999                            | IDP-resident                     |
| Province Orientale   | Kisangani   |      | 1.0               | 1.6               |      | February 2000                            | resident                         |
| South Kivu   | Uvira Health Zone   | 3.3  |                   | 2.7               |      | March 2000                               | IDP-resident                     |
| South Kivu   | Katana Health Zone  |      | 1.0               | 2.3               |      | March 2000                               | resident                         |
| South Kivu   | Kalonge Health Zone   |      | 2.1               | 4.6               |      | March 2000                               | resident                         |
| Province Orientale   | Kisangani   |      | 0.9               | 1.6               |      | April 2000                               | resident                         |
| South Kivu   | Kabare Health Zone  |      | 0.9               | 1.9               |      | April 2000                               | resident                         |
| South Kivu   | Katana Health Zone  |      | 0.9               | 2.3               |      | April 2000                               | resident                         |
| South Kivu   | Katana Health Zone  |      | 2.1               | 4.6               |      | April 2000                               | IDP                              |
| Katanga  | Moba Health Zone  |      | 3.8               | 8.1               |      | April 2000                               | resident                         |
| Katanga  | Moba Health Zone  |      | 4.0               | 8.1               |      | April 2000                               | resident                         |
| Province Orientale   | Makiso Kisangani Health Zone  | 6.9  | 0.8               | 1.5               |      | July 2000                                | IDP-resident                     |
| Province Orientale   | Kisangani   | 8.5  | 0.6               | 1.0               |      | July 2000                                | IDP-resident                     |
| Maniema  | Kalima Health Zone  | 14.1 | 3.0               | 7.9               | 60.0 | December 2000                            | IDP-resident                     |
| Katanga  | Kalemie Health Zone   | 14.1 | 3.6               | 7.8               | 00.0 | February 2001                            | resident                         |
| Maniema  | Kalima Health Zone  |      | 2.5               | 5.6               |      | February 2001                            | resident                         |
| South Kivu   | Katana Health Zone  |      | 1.6               | 4.2               |      | February 2001                            | resident                         |
| South Kivu   | Kabare Health Zone  |      | 1.4               | 1.8               |      | February 2001                            | resident                         |
| Province Orientale   | Lubunga Health Zone   |      | 0.9               | 2.3               |      | February 2001                            | resident                         |
|  |   |      |                   |                   |      | · ·                                      |                                  |
| Kasai Occidental   | Lusambo Health Zone Kimbanseke Health Zone. Biyela Health Zone. Masina Health |      | 1.0               | 3.3               |      | February 2001                            | resident                         |
| Kinshasa   | Zone. Kikimi Health Zone  | 11.0 |                   | 0.8               |      | April 2001                               | resident                         |
| Kinshasa   | Biyela Health Zone  | 11.3 |                   | 0.8               |      | April 2001                               | resident                         |
| Kinshasa   | Masina Health Zone  | 8.5  |                   | 0.7               |      | April 2001                               | resident                         |
| Kinshasa   | Kimbanseke Health Zone  | 5.0  |                   | 1.1               |      | April 2001                               | resident                         |
| Kinshasa   | Kikimi Health Zone  | 18.3 |                   | 0.3               |      | April 2001                               | resident                         |
| Maniema  | Kalima Health Zone  | 4.6  | 1.2               | 3.6               | 22.0 | April 2001                               | IDP-resident                     |
| Katanga  | Malemba N'kulu Health Zone  |      |                   | 10.4              | 39.7 | June 2001                                | IDP-resident                     |
| North Kivu   | Oicha   | 11.1 |                   |                   |      | November 2001                            | resident                         |
| Equateur   | Basankusu Health Zone   |      | 2.7               | 6.6               |      | November 2001                            | IDP-resident                     |
| Equateur   | Lisala Health Zone  |      | 0.8               | 1.8               | 31.5 | November 2001                            | IDP-resident                     |
| Bas-Congo  | Kimpangu Health Zone  |      | 0.6               | 2.0               | 70.5 | November 2001                            | IDP-resident                     |
| BandunduKatanga  | Inongo Health Zone  |      | 0.4               | 1.0               | 23.2 | November 2001                            | resident                         |
| North Kivu   | Oicha Health Zone   | 11.1 |                   |                   |      | December 2001                            | IDP-resident                     |
| North Kivu   | Kyondo Health Zone  | 3.3  | 0.3               | 0.7               | 91.9 | April 2002                               | resident                         |
| Kasai Oriental   | Tshofa Health Zone  | 12.2 | 1.1               | 3.3               |      | May 2002                                 | resident                         |
| Kasai Oriental   | Kalonda Health Zone   | 12.6 |                   |                   |      | August 2002                              | IDP-resident                     |
| Kasai Oriental   | Lubao Health Zone   | 3.7  |                   |                   |      | August 2002                              | IDP-resident                     |
| South Kivu   | Baraka  | 10.9 |                   |                   | 26.2 | September 2002                           | IDP-resident                     |
| South Kivu   | Katana Health Zone  |      | 0.6               | 1.0               |      | September 2002                           | resident                         |
| Katanga  | Kalemie Health Zone   |      | 1.4               | 4.9               |      | September 2002                           | resident                         |
| North Kivu   | Butembo Health Zone   |      | 0.1               | 0.7               |      | September 2002                           | resident                         |
| Kinshasa   | Kimbanseke Health Zone  |      | 0.6               | 1.4               |      | September 2002                           | resident                         |
| Bandundu   | Popokabaka Health Zone  |      | 1.0               | 2.9               |      | September 2002                           | resident                         |
| Bas-Congo  | Lukula Health Zone  |      | 0.5               | 1.5               |      | September 2002                           | resident                         |
| North Kivu   | Kyondo Health Zone  |      | 0.3               | 0.5               |      | October 2002                             | resident                         |
| Katanga  | Pweto Health Zone   |      | 1.6               | 5.2               |      | October 2002                             | resident                         |
| Province Orientale   | Kisangani   |      | 2.0               | 3.4               |      | October 2002                             | resident                         |
| Maniema  | Kalima Health Zone  |      | 1.0               | 2.9               |      | October 2002                             | resident                         |
| Province Orientale   | Aketi Health Zone   |      | 1.5               | 3.1               |      | October 2002                             | resident                         |
| North Kivu   | Mweso Health Zone   |      | 2.1               | 7.9               |      | October 2002                             | resident                         |
|  | Isiro Health Zone   |      | 0.7               | 1.5               |      | October 2002                             | resident                         |
|  | Lukonga Health Zone   |      | 1.3               | 2.6               |      | October 2002                             | resident                         |
|  | LUNUIUA FICALLII ZUIIC  |      | 1.3               | _                 |      |  |                                  |
| Kasai Occidental   |   |      | 0.0               | 117               |      |  |                                  |
| Kasai Occidental<br>Kasai Oriental                                 | Bipemba Health Zone   |      | 0.9               | 1.7               |      | October 2002                             | resident                         |
| Province Orientale Kasai Occidental Kasai Oriental Katanga Katanga |   |      | 0.9<br>0.8<br>0.6 | 1.7<br>1.8<br>1.3 |      | October 2002  October 2002  October 2002 | resident<br>resident<br>resident |

| Location           |  | GAM  | CMR | U5MR | MCV  | Start Date    | Population Status |
|--------------------|--|------|-----|------|------|---------------|-------------------|
| Bandundu           | Kahemba Health Zone                    |      | 0.5 | 1.1  |      | October 2002  | resident          |
| Equateur           | Gbadolite Health Zone                  |      | 0.2 | 1.3  |      | November 2002 | resident          |
| Maniema            | Kindu                                  | 16.9 |     |      | 75.6 | December 2002 | IDP-resident      |
| Katanga            | Divuma                                 |      | 0.1 | 0.4  |      | December 2002 | refugee           |
| Bas-Congo          | Kilueka                                | 3.1  | 0.1 | 0.2  |      | December 2002 | refugee           |
| Bas-Congo          | Kimvula                                | 0.8  | 0.2 | 0.6  |      | December 2002 | refugee           |
| Katanga            | Kisenge                                |      | 0.2 | 0.4  |      | December 2002 | refugee           |
| Bandundu           | Kulindji                               | 23.4 | 0.1 | 0.3  |      | December 2002 | refugee           |
| Bas-Congo          | Nkondo                                 | 2.4  | 0.1 | 0.2  |      | December 2002 | refugee           |
| Province Orientale | Aba                                    |      | 0.1 | 0.2  |      | December 2002 | refugee           |
| Bandundu           | Tshifwameso                            | 49.8 | 0.1 | 0.2  |      | December 2002 | refugee           |
| Katanga            | Tshimbumbulu                           | .510 | 0.2 | 0.5  |      | December 2002 | refugee           |
| Bandundu           | Napassa                                | 22.9 | 0.1 | 0.1  |      | December 2002 | refugee           |
| Province Orientale | Doruma                                 | 22.9 | 0.0 | 0.1  |      | December 2002 | refugee           |
| Kasai Oriental     | Kabinda Health Zone                    | 28.1 | 0.0 |      |      | February 2003 | IDP-resident      |
|                    |  |      |     |      |      |               | IDP-resident      |
| North Kivu         | Oicha Health Zone                      | 12.4 |     |      |      | May 2003      | IDP-resident      |
| North Kivu         | Mutwanga Health Zone                   | 11.3 | 1.0 | E A  | 27.0 | May 2003      |                   |
| Katanga            | Kabalo Health Zone                     | 7.7  | 1.9 | 5.4  | 37.8 | May 2003      | resident          |
| Katanga            | Kongolo Health Zone                    | 6.7  | 0.9 | 2.1  |      | June 2003     | resident          |
| Maniema            | Samba Health Zone                      | 7.2  |     | 1.5  |      | June 2003     | resident          |
| Katanga<br>        | Kongolo Health Zone                    | 3.8  | 1.4 | 4.4  | 38.0 | July 2003     | resident          |
| Katanga            | Kansimba Health Zone. Moba Health Zone | 3.7  | 1.4 | 2.9  | 45.5 | October 2003  | resident          |
| South Kivu         | Shabunda Health Zone                   | 7.4  |     |      |      | October 2003  | resident          |
| South Kivu         | Shabunda Health Zone                   | 15.7 |     |      | 43.8 | October 2003  | resident          |
| South Kivu         | Lemera Health Zone                     | 6.3  |     |      |      | October 2003  | resident          |
| South Kivu         | Nundu Health Zone                      | 15.7 |     |      |      | November 2003 | resident          |
| Equateur           | Bolomba Health Zone                    | 4.4  | 2.1 | 4.9  | 97.9 | December 2003 | resident          |
| Katanga            | Kalemie Health Zone                    | 7.7  | 1.6 | 4.0  |      | December 2003 | resident          |
| Equateur           | Basankusu Health Zone                  | 8.8  | 1.0 | 3.2  | 55.8 | January 2004  | resident-returnee |
| Equateur           | Befale 2 Health Zone                   | 12.7 | 1.3 | 2.5  | 81.3 | January 2004  | resident          |
| Equateur           | Bongandanga Health Zone                |      | 0.3 | 0.7  |      | March 2004    | resident          |
| North Kivu         | Rwanguba Health Zone                   |      | 0.4 | 1.2  |      | March 2004    | resident          |
| Province Orientale | Kisangani                              |      | 0.4 | 0.7  |      | March 2004    | resident          |
| North Kivu         | Oicha Health Zone                      |      | 0.5 | 1.0  |      | March 2004    | resident          |
| Kasai Oriental     | Tshofa Health Zone                     |      | 0.5 | 1.1  |      | March 2004    | resident          |
| Equateur           | Lisala Health Zone                     |      | 0.5 | 1.1  |      | March 2004    | resident          |
| Province Orientale | Adi Health Zone                        |      | 0.5 | 1.3  |      | March 2004    | resident          |
| Kasai Occidental   | Mushenge Health Zone                   |      | 0.5 | 1.1  |      | March 2004    | resident          |
| Province Orientale | Isangi Health Zone                     |      | 0.6 | 1.0  |      | March 2004    | resident          |
| Province Orientale | Titule Health Zone                     |      | 0.7 | 1.2  |      | March 2004    | resident          |
| South Kivu         | Katana Health Zone                     |      | 0.8 | 1.9  |      | March 2004    | resident          |
| Katanga            | Moba Health Zone                       |      | 1.1 | 3.7  |      | March 2004    | resident          |
| Katanga            | Kalemie Health Zone                    |      | 1.2 | 3.2  |      | March 2004    | resident          |
| Maniema            | Kalima Health Zone                     |      | 1.2 | 2.7  |      | March 2004    | resident          |
| South Kivu         | Shabunda Health Zone                   |      | 2.1 | 3.9  |      | March 2004    | resident          |
|                    |  |      | 0.3 | 0.9  |      |               | resident          |
| Bas-Congo          | Sona Bata Health Zone                  |      | _   | _    |      | March 2004    |                   |
| Bandundu           | Kikwit North Health Zone               |      | 0.4 | 0.9  |      | March 2004    | resident          |
| Katanga            | Dilolo Health Zone                     |      | 0.4 | 1.2  |      | March 2004    | resident          |
| Bandundu           | Panzi Health Zone                      |      | 0.5 | 1.2  |      | March 2004    | resident          |
| Kinshasa           | Maluku 1 Health Zone                   |      | 0.5 | 1.2  |      | March 2004    | resident          |
| Kasai Oriental     | Tshilenge Health Zone                  |      | 0.5 | 1.2  |      | March 2004    | resident          |
| Kasai Occidental   | Mutena Health Zone                     |      | 0.6 | 1.7  |      | March 2004    | resident          |
| Katanga            | Kipushi Health Zone                    |      | 0.7 | 1.4  |      | March 2004    | resident          |
| Kasai Oriental     | Kalonda Health Zone                    |      | 0.8 | 2.0  |      | March 2004    | resident          |
| Kasai Oriental     | Kalonda Health Zone                    |      | 0.9 | 2.2  |      | March 2004    | resident          |
| South Kivu         | Fizzi Health Zone                      | 9.0  | 1.5 | 4.4  | 10.1 | April 2004    | resident          |
| North Kivu         | Rutshuru Health Zone                   | 11.9 | 0.8 | 1.2  |      | July 2004     | IDP-resident      |

| Location           |                                  | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|--------------------|----------------------------------|------|-----|------|------|----------------|-------------------|
| Katanga            | Malemba N'kulu Health Zone       | 5.8  | 1.0 |      | 33.8 | July 2004      | resident          |
| Katanga            | Lwamba Health Zone               | 7.1  | 1.1 |      | 21.1 | August 2004    | resident          |
| North Kivu         | Masisi Health Zone               | 6.2  |     |      |      | August 2004    | resident          |
| South Kivu         | Uvira Health Zone                | 3.9  | 1.9 |      | 58.5 | August 2004    | resident          |
| South Kivu         | Shabunda Health Zone             | 12.0 | 1.7 |      | 74.4 | November 2004  | resident          |
| Maniema            | Lubutu Health Zone               | 14.4 | 2.2 |      | 51.9 | November 2004  | resident          |
| Katanga            | Kalemie Health Zone              | 10.0 | 0.9 | 2.8  |      | December 2004  | resident          |
| Province Orientale | Tche                             |      | 4.1 | 6.9  |      | March 2005     | IDP               |
| Katanga            | Kilwa Health Zone                |      | 1.8 | 4.4  | 74.6 | March 2005     | resident          |
| Katanga            | Bunkeya Health Zone              |      | 0.8 | 2.3  | 89.9 | March 2005     | resident          |
| North Kivu         | Masisi Health Zone               | 6.1  | 0.8 | 2.3  | 85.0 | April 2005     | resident          |
| Equateur           | Basankusu Health Zone            |      | 2.3 | 4.8  | 90.5 | April 2005     | resident          |
| Bandundu           | Inongo Health Zone               |      | 2.2 | 5.5  | 75.4 | April 2005     | resident          |
| Equateur           | Bwamanda Health Zone             | 6.7  | 0.5 | 1.6  | 95.5 | May 2005       | resident-refugee  |
| Equateur           | Gemena Health Zone               | 8.5  | 0.7 | 1.9  | 80.5 | May 2005       | resident-refugee  |
| Equateur           | Kungu Health Zone                | 4.0  | 0.6 | 1.7  | 25.8 | May 2005       | resident-refugee  |
| Equateur           | Libenge Health Zone              | 8.5  | 0.6 | 1.5  | 59.4 | May 2005       | resident-refugee  |
| Equateur           | Zongo Health Zone                | 10.2 | 0.6 | 2.1  | 33.8 | May 2005       | resident-refugee  |
| Maniema            | Lubutu Health Zone               | 10.2 | 3.4 | 6.2  | 75.8 | May 2005       | resident          |
| South Kivu         | Shabunda Health Zone             | 3.2  | 1.0 | 0.2  | 75.0 | May 2005       | resident          |
| Katanga            | Malemba N'kulu Health Zone       | 4.5  | 1.1 |      | 73.4 | July 2005      | resident          |
| Katanga            | Lwamba Health Zone               | 5.3  | 1.0 |      | 69.8 | July 2005      | resident          |
| North Kivu         | Masisi Health Zone               | 10.7 | 0.7 | 1.5  | 86.6 | October 2005   | resident          |
| South Kivu         | Nundu Health Zone                | 9.6  | 0.7 | 1.5  | 60.7 | December 2005  | resident          |
|                    | Dubie                            | 19.2 | 4.3 | 12.7 | 00.7 | March 2006     | IDP               |
| Katanga            | Ikela Health Zone                | 13.6 | 1.3 | 3.4  | 84.8 |                |                   |
| Equateur           |                                  |      |     |      |      | May 2006       | resident-returnee |
| Katanga            | Mufunga Sampwe Health Zone       | 9.6  | 1.0 | 2.6  | 66.2 | June 2006      | resident          |
| Katanga            | Kilwa Health Zone                | 6.6  | 1.1 | 3.1  | 58.9 | June 2006      | resident          |
| Equateur           | Mondombe Health Zone             | 9.1  | 1.2 | 2.0  | 79.5 | June 2006      | resident          |
| Bas-Congo          | Boma                             | 8.4  | 0.3 | 0.4  | 90.5 | July 2006      | resident          |
| Bas-Congo          | Kimpese Health Zone              | 8.1  | 0.3 | 0.7  | 89.8 | July 2006      | resident          |
| Katanga            | Mitwaba Health Zone              | 11.1 | 0.7 | 1.5  | 84.2 | July 2006      | resident          |
| Katanga            | Mitwaba                          | 14.4 | 1.4 | 2.8  | 59.2 | July 2006      | IDP               |
| Katanga            | Mukanga Health Zone              |      | 1.0 | 2.8  | 56.6 | July 2006      | resident          |
| Katanga            | Malemba N'kulu Health Zone       | 8.6  | 1.1 | 2.7  |      | August 2006    | resident          |
| Katanga            | Lwamba Health Zone               | 7.7  | 1.4 | 2.5  | 39.3 | August 2006    | resident          |
| Katanga            | Dilolo Health Zone               | 10.1 | 0.5 | 1.1  | 80.4 | August 2006    | resident          |
| Province Orientale | Yakusu Health Zone               | 6.8  | 0.3 | 0.4  | 82.5 | August 2006    | resident          |
| Province Orientale | Lubunga Health Zone              | 10.2 | 0.5 | 1.2  | 59.4 | August 2006    | resident          |
| South Kivu         | Uvira Health Zone                | 3.7  | 0.3 | 0.5  | 63.8 | September 2006 | resident          |
| South Kivu         | Ruzizi Health Zone               | 3.6  | 0.6 | 1.4  | 44.9 | September 2006 | resident          |
| Bandundu           | Mosango Health Zone              | 16.7 | 0.8 | 1.9  | 96.7 | September 2006 | resident          |
| Bandundu           | Vanga Health Zone                | 10.7 | 0.4 | 1.2  | 94.8 | September 2006 | resident          |
| Kasai Oriental     | Kamana Health Zone               | 26.2 |     |      | 90.5 | September 2006 | resident          |
| Kasai Oriental     | Kalambayi- kabanga Health Zone   | 11.5 |     |      |      | September 2006 | resident          |
| Kasai Oriental     | Mukumbi Health Zone              | 15.9 |     |      |      | September 2006 | resident          |
| Province Orientale | Bafwasende Health Zone           | 8.2  |     |      | 84.7 | September 2006 | resident          |
| Province Orientale | Opala Health Zone                | 5.1  |     |      | 81.5 | September 2006 | resident          |
| Province Orientale | Yaleko Health Zone               | 13.0 |     |      | 77.6 | September 2006 | resident          |
| North Kivu         | Masisi Health Zone               | 4.2  | 0.6 | 0.7  | 85.4 | October 2006   | resident          |
| Province Orientale | Mahaqi                           | 9.7  |     |      | 74.3 | October 2006   | resident          |
| South Kivu         | Lemera Health Zone               | 2.8  | 0.3 | 0.9  | 61.9 | October 2006   | resident          |
| South Kivu         | Fizzi Health Zone                | 2.9  | 0.3 | 1.0  | 69.1 | November 2006  | resident          |
| South Kivu         | Kimbi Lulenge Health Zone        | 1.5  | 0.4 | 1.6  | 59.6 | November 2006  | resident          |
| Province Orientale | -                                | 8.0  | 0.7 | 1.0  | 81.4 | November 2006  | resident          |
|                    | Djugu  Kimbi Lulanga Haalth Zana |      | 0.0 | 1.4  |      |                |                   |
| South Kivu         | Kimbi Lulenge Health Zone        | 1.4  | 0.8 | 1.4  | 76.7 | December 2006  | resident          |
| Bandundu           | Bulungu                          | 9.5  | 0.4 | 1.4  | 92.0 | December 2006  | resident          |

| Location           |                              | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|--------------------|------------------------------|------|-----|------|------|----------------|-------------------|
| Province Orientale | Irumu                        | 10.8 |     |      |      | December 2006  | resident          |
| Maniema            | Lusangi. Saramabila          | 11.3 | 1.1 | 2.1  | 50.5 | January 2007   | resident          |
| North Kivu         | Rwanguba Health Zone         | 12.5 |     |      |      | February 2007  | resident          |
| Maniema            | Kunda Health Zone            | 9.7  | 1.4 | 3.1  |      | February 2007  | resident          |
| Maniema            | Lusangi                      | 11.3 | 1.1 | 2.4  | 50.5 | February 2007  | resident          |
| Maniema            | Samba Health Zone            | 6.5  | 0.6 | 1.2  | 30.3 | March 2007     | resident          |
| Kinshasa           | Kinshasa                     | 11.0 | 0.0 | 1.2  | 89.8 | March 2007     | IDP-resident      |
| Bandundu           | Idiofa Health Zone           | 4.9  | 0.3 | 0.6  | 93.8 | April 2007     | resident          |
| Bandundu           |                              | 7.9  | 0.3 | 0.5  | 94.9 | <u> </u>       | resident          |
|                    | Gungu Health Zone            | 6.3  | 0.4 | 0.5  |      | April 2007     |                   |
| Katanga            | Manono Health Zone           | 0.3  | 0.3 | 0.6  | 72.0 | April 2007     | resident          |
| Equateur           | Lolanga Mampoko Health Zone  |      | 0.3 | 0.6  |      | April 2007     | resident          |
| Katanga            | Mumbunda Health Zone         |      | 0.3 | 0.7  |      | April 2007     | resident          |
| Kasai Oriental     | Bonzola Health Zone          |      | 0.3 | 0.7  |      | April 2007     | resident          |
| Kinshasa           | Kasa-Vubu Health Zone        |      | 0.4 | 0.6  |      | April 2007     | resident          |
| Kinshasa           | Masina 1 Health Zone         |      | 0.4 | 0.8  |      | April 2007     | resident          |
| Bas-Congo          | Matadi Health Zone           |      | 0.5 | 1.0  |      | April 2007     | resident          |
| Katanga            | Kambove Health Zone          |      | 0.5 | 1.9  |      | April 2007     | resident          |
| Kasai Occidental   | Kalomba Health Zone          |      | 0.5 | 1.2  |      | April 2007     | resident          |
| Bandundu           | Koshibanda Health Zone       |      | 0.6 | 1.3  |      | April 2007     | resident          |
| Kasai Occidental   | Masuika Health Zone          |      | 0.6 | 1.4  |      | April 2007     | resident          |
| Bandundu           | Idiofa Health Zone           |      | 0.9 | 2.2  |      | April 2007     | resident          |
| Bandundu           | Vanga Health Zone            |      | 1.0 | 2.3  |      | April 2007     | resident          |
| Katanga            | Kilwa Health Zone            |      | 1.0 | 2.2  |      | April 2007     | resident          |
| Kasai Oriental     | Kasansa Health Zone          |      | 1.1 | 2.5  |      | April 2007     | resident          |
| Kasai Oriental     | Ngandanjika Health Zone      |      | 1.2 | 2.7  |      | April 2007     | resident          |
| Equateur           | Bosomondanda Health Zone     |      | 0.3 | 0.9  |      | April 2007     | resident          |
| Equateur           | Tandala Health Zone          |      | 0.6 | 1.4  |      | April 2007     | resident          |
| Equateur           | Kungu Health Zone            |      | 0.7 | 1.0  |      | April 2007     | resident          |
| Kasai Oriental     | Vanga-kete Health Zone       |      | 0.8 | 1.6  |      | April 2007     | resident          |
| Kasai Occidental   | Muetshi Health Zone          |      | 1.0 | 1.9  |      | April 2007     | resident          |
| North Kivu         | Lubero Health Zone           |      | 0.3 | 0.6  |      | <del>  '</del> | resident          |
|                    |                              |      | _   | _    |      | April 2007     |                   |
| Province Orientale | Makiso Kisangani Health Zone |      | 0.3 | 0.5  |      | April 2007     | resident          |
| South Kivu         | Katana Health Zone           |      | 0.5 | 1.5  |      | April 2007     | resident          |
| Province Orientale | Aru Health Zone              |      | 0.5 | 1.4  |      | April 2007     | resident          |
| South Kivu         | Kamituga Health Zone         |      | 0.6 | 1.4  |      | April 2007     | resident          |
| Province Orientale | Faradje Health Zone          |      | 0.6 | 0.8  |      | April 2007     | resident          |
| North Kivu         | Itebero Health Zone          |      | 0.6 | 1.2  |      | April 2007     | resident          |
| Maniema            | Kalima Health Zone           |      | 0.7 | 1.7  |      | April 2007     | resident          |
| North Kivu         | Rwanguba Health Zone         |      | 0.7 | 1.5  |      | April 2007     | resident          |
| Province Orientale | Lubunga Health Zone          |      | 0.7 | 1.5  |      | April 2007     | resident          |
| South Kivu         | Nyangezi Health Zone         |      | 0.8 | 1.8  |      | April 2007     | resident          |
| Province Orientale | Rimba Health Zone            |      | 0.9 | 1.9  |      | April 2007     | resident          |
| Katanga            | Kalemie Health Zone          |      | 1.2 | 2.9  |      | April 2007     | resident          |
| Maniema            | Kunda Health Zone            |      | 1.3 | 2.3  |      | April 2007     | resident          |
| Katanga            | Ankoro Health Zone           |      | 2.3 | 5.5  |      | April 2007     | resident          |
| Katanga            | Bukama Health Zone           | 3.8  | 0.8 | 2.0  |      | May 2007       | resident          |
| Equateur           | Monkoto Health Zone          | 7.7  | 0.6 | 1.5  | 90.2 | July 2007      | resident          |
| Province Orientale | Mangobo Health Zone          | 5.5  | 0.3 | 0.9  | 70.0 | July 2007      | resident          |
| Province Orientale | Buta Health Zone             | 8.3  | 0.5 | 0.8  | 61.5 | July 2007      | resident          |
| Equateur           | Befale Health Zone           | 11.6 | 1.1 | 2.9  | 95.1 | August 2007    | resident          |
| Province Orientale | Djugu                        | 5.8  | 0.9 | 2.8  | 81.9 | September 2007 | resident          |
|                    |                              |      | _   |      |      | <u> </u>       |                   |
| Bandundu           | Kajiji Health Zone           | 7.0  | 0.4 | 1.2  | 97.7 | November 2007  | resident          |
| South Kivu         | Uvira Health Zone            | 3.5  | 0.2 | 0.4  | 85.6 | November 2007  | resident          |
| South Kivu         | Ruzizi Health Zone           |      | 0.6 | 1.7  | 87.8 | November 2007  | resident          |
| South Kivu         | Lemera Health Zone           | 2.3  | 0.6 | 1.3  | 92.1 | November 2007  | resident          |
| Province Orientale | Dungu Health Zone            | 3.6  | 1.0 | 1.7  | 76.8 | December 2007  | resident          |
| Equateur           | Mobayi Mbongo Health Zone    | 4.4  | 0.7 | 0.9  | 74.8 | December 2007  | resident          |

| Location                      |  | GAM        | CMR | U5MR | MCV          | Start Date    | Population Status     |
|-------------------------------|--|------------|-----|------|--------------|---------------|-----------------------|
| Maniema                       | Kalima Health Zone                     | 10.1       | 1.3 | 3.4  |              | December 2007 | resident              |
| Maniema                       | Kalima Health Zone                     | 10.1       | 1.3 | 3.3  |              | December 2007 | resident              |
| South Kivu                    | Fizzi Health Zone                      | 0.9        | 0.8 | 0.5  | 92.1         | January 2008  | resident              |
| Kasai Oriental                | Lomela Health Zone                     | 14.0       | 1.3 | 3.4  | 92.8         | January 2008  | resident              |
| Kasai Oriental                | Lodja Health Zone                      | 4.9        | 0.5 | 1.4  | 64.1         | January 2008  | resident              |
| Kasai Oriental                | Djalo Ndjeka Health Zone               | 6.1        | 0.7 | 2.4  | 79.3         | January 2008  | resident              |
| South Kivu                    | Nundu Health Zone                      | 3.7        | 0.5 | 0.6  | 95.3         | January 2008  | resident              |
| Kasai Oriental                | Kamana Health Zone                     | 6.5        | 0.3 | 0.9  | 68.6         | January 2008  | resident              |
| Kasai Oriental                | Tshumbe Health Zone                    | 2.5        | 0.7 | 2.1  | 81.4         | January 2008  | resident              |
| North Kivu                    | Vohovi Health Zone                     | 6.9        | 0.3 | 0.7  | 96.0         | January 2008  | resident              |
| North Kivu                    | Manguredjipa Health Zone               | 4.2        | 0.4 | 1.0  | 87.9         | January 2008  | resident              |
| South Kivu                    | Hauts Plateaux Health Zone             | 4.4        | 1.6 | 4.7  | 90.6         | February 2008 | resident              |
| Kasai Oriental                | Bena-Dibele Health Zone                | 12.0       | 2.0 | 5.4  | 86.7         | February 2008 | IDP-resident          |
| Bandundu                      | Sia Health Zone                        | 8.2        | 0.7 | 1.3  | 90.6         | February 2008 | resident              |
| Bandundu                      | Yasa Bonga Health Zone                 | 11.5       | 0.2 | 0.1  | 88.2         | February 2008 | resident              |
| Bandundu                      | Mosango Health Zone                    | 5.4        | 0.3 | 0.8  | 93.3         | February 2008 | resident              |
| North Kivu                    | Kiroshe Health Zone                    | 8.6        | 0.6 | 1.3  | 1            | February 2008 | IDP-resident-returnee |
| Maniema                       | Lubutu Health Zone                     | 5.4        | 0.6 | 1.0  | 85.9         | February 2008 | resident              |
| North Kivu                    | Pinga Health Zone                      | 17.1       | 1.1 | 2.9  | 80.9         | March 2008    | IDP-resident          |
| North Kivu                    | Mweso Health Zone                      | 6.8        | 1.3 | 3.2  | 70.0         | March 2008    | IDP-resident-returnee |
| Maniema                       | Punia Health Zone                      | 5.2        | 0.5 | 1.0  | 77.2         | April 2008    | resident              |
| Maniema                       | Ferekeni Health Zone                   | 3.4        | 0.6 | 0.9  | 92.5         | April 2008    | resident              |
| Maniema                       | Saramabila Health Zone                 | 3.6        | 0.7 | 1.9  | 72.3         | April 2008    | resident              |
| Maniema                       | Samba Health Zone                      | 4.3        | 1.1 | 3.6  |              | April 2008    | resident              |
| Maniema                       | Lusangi                                | 5.3        | 0.9 | 2.0  |              | April 2008    | resident              |
| Maniema                       | Kasongo Health Zone                    | 3.8        | 1.0 | 2.6  |              | April 2008    | resident              |
| Maniema                       | Kunda Health Zone                      | 4.3        | 1.0 | 3.1  |              | April 2008    | resident              |
| North Kivu                    | Kibua Health Zone                      | 4.8        | 0.4 | 1.1  | 87.3         | June 2008     | resident              |
| South Kivu                    | Ibanda Health Zone                     | 2.3        | 0.4 | 0.2  | 89.9         | June 2008     | resident              |
|                               | Manono Health Zone. Kiambi Health Zone | 11.3       | 1.6 | 4.3  | 66.7         | June 2008     | resident              |
| Katanga Katanga               | Sandoa Health Zone                     | 5.1        | 0.5 | 1.3  | 87.9         | July 2008     | resident              |
| Province Orientale            | Aketi Health Zone                      | 12.0       | 1.4 | 3.1  | 64.4         | + '           | resident              |
| South Kivu                    |  | 4.6        | 0.9 | 2.7  | 85.5         | July 2008     | resident              |
|                               | Kalehe Health Zone Binza Health Zone   |            | _   |      |              | July 2008     |                       |
| North Kivu                    |  | 4.9        | 0.5 | 0.9  | 92.3         | July 2008     | resident              |
| North Kivu Province Orientale | Birambizo Health Zone                  | 6.6        | 1.0 | 1.5  | 89.6<br>74.1 | July 2008     | IDP-resident-returnee |
|                               | Buta Health Zone                       | 2.2<br>8.7 | 1.1 | 2.2  |              | July 2008     | resident              |
| Province Orientale            | Yaleko Health Zone                     |            | 0.9 | 1.9  | 70.0         | August 2008   | resident              |
| Province Orientale            | Lubunga Health Zone                    | 8.0        | 1.1 | 2.3  | 68.2         | August 2008   | resident              |
| North Kivu                    | Masisi Health Zone                     | 7.1        | 0.7 | 1.8  | 86.6         | August 2008   | resident              |
| North Kivu                    | Rutshuru Health Zone                   | 6.0        | 0.5 | 0.8  | 91.1         | August 2008   | IDP-resident          |
| Province Orientale            | Dungu Health Zone. Doruma Health Zone  | 1.7        | 0.6 | 1.0  | 83.3         | August 2008   | resident              |
| Kasai Oriental                | Minga Health Zone                      | 10.7       | 0.8 | 1.0  | 85.2         | October 2008  | resident              |
| Bandundu                      | Djuma Health Zone                      | 9.6        | 0.3 | 0.9  | 91.5         | October 2008  | resident              |
| Kasai Oriental                | Katako Kombe Health Zone               | 11.2       | 0.5 | 1.1  | 86.6         | October 2008  | resident              |
| Bandundu                      | Pay Kongila Health Zone                | 7.5        | 0.6 | 1.0  | 90.2         | October 2008  | resident              |
| Bandundu                      | Masi Manimba Health Zone               | 10.8       | 0.6 | 1.2  | 83.7         | October 2008  | resident              |
| Kasai Oriental                | Minga Health Zone                      | 10.7       | 0.8 | 1.0  | 85.2         | October 2008  | resident              |
| Province Orientale            | Mahagi                                 | 4.4        | 0.6 | 1.9  | 81.2         | November 2008 | resident              |
| Kasai Occidental              | Tshikapa Health Zone                   | 10.1       | 0.9 | 1.9  | 56.8         | November 2008 | resident              |
| Kasai Occidental              | Luiza Health Zone                      | 13.8       | 0.7 | 1.1  | 82.3         | November 2008 | resident              |
| South Kivu                    | Bunyakiri Health Zone                  | 5.3        | 0.3 | 0.3  | 79.8         | December 2008 | resident              |
| Bandundu                      | Kahemba Health Zone                    | 12.1       | 0.2 | 0.6  | 74.1         | December 2008 | resident              |
| Kasai Oriental                | Kabinda Health Zone                    | 11.2       | 1.3 | 2.6  | 82.5         | January 2009  | resident              |
| Province Orientale            | Irumu                                  | 5.6        | 1.1 | 2.2  | 92.1         | January 2009  | resident              |
| South Kivu                    | Minova Health Zone                     | 4.3        | 0.2 | 0.3  | 88.2         | March 2009    | resident              |
| South Kivu                    | Kalonge Health Zone                    | 7.7        | 0.4 | 1.3  | 77.3         | May 2009      | resident              |
| Province Orientale            | Titule Health Zone                     | 5.0        | 0.3 | 0.6  | 73.8         | May 2009      | resident              |

| Location           |                          | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|--------------------|--------------------------|------|-----|------|------|----------------|-------------------|
| Province Orientale | Lubunga Health Zone      | 10.1 | 1.1 | 0.9  | 47.0 | June 2009      | resident          |
| Province Orientale | Likati Health Zone       | 5.2  | 1.0 | 1.8  | 62.5 | July 2009      | resident          |
| Province Orientale | Bafwasende Health Zone   | 7.6  | 0.9 | 1.7  | 73.7 | July 2009      | resident          |
| North Kivu         | Walikale Health Zone     | 4.8  | 0.3 | 0.7  | 85.7 | September 2009 | IDP-resident      |
| Bandundu           | Djuma Health Zone        | 22.5 | 0.8 | 1.1  | 81.2 | October 2009   | resident          |
| Bandundu           | Pay Kongila Health Zone  | 14.8 |     |      |      | October 2009   | resident          |
| Katanga            | Mulongo Health Zone      | 5.0  | 0.6 | 1.1  | 62.1 | October 2009   | resident          |
| Maniema            | Pangi Territory          | 12.8 | 0.2 | 0.8  |      | October 2009   | resident          |
| Maniema            | Mikelenge Commune        | 11.9 | 0.6 | 0.4  |      | October 2009   | resident          |
| Maniema            | Kailo Territory          | 18.2 | 0.2 | 0.7  |      | October 2009   | resident          |
| Maniema            | Kabambare Territory      | 9.3  | 0.2 | 0.8  |      | October 2009   | resident          |
| Maniema            | Kasango Territory        | 8.9  | 0.4 | 0.7  |      | October 2009   | resident          |
| Maniema            | Lubutu Territory         | 14.2 | 0.3 | 0.6  |      | October 2009   | resident          |
| Maniema            | Punia Territory          | 11.3 | 0.8 | 1.1  |      | October 2009   | resident          |
| Maniema            | Kibombo Territory        | 10.3 | 0.0 | 0.0  |      | October 2009   | resident          |
| Maniema            | Kasuku Commune           | 9.7  | 0.4 | 1.3  |      | October 2009   | resident          |
| Maniema            | Alunguli Commune         | 7.1  | 1.0 | 2.4  |      | October 2009   | resident          |
| Bandundu           | Lusanga Health Zone      | 10.6 | 0.9 | 1.2  | 85.8 | October 2009   | resident          |
| Bandundu           | Masi Manimba Health Zone | 7.3  | 0.2 | 0.4  | 93.6 | October 2009   | resident          |
| Bandundu           | Yasa Bonga Health Zone   | 7.2  |     |      | 86.7 | October 2009   | resident          |
| Katanga            | Ankoro Health Zone       | 4.3  | 0.6 | 1.3  | 78.7 | October 2009   | resident          |
| Bas-Congo          | Moanda Health Zone       | 5.7  | 0.1 | 0.2  | 85.5 | November 2009  | resident          |
| Kasai Occidental   | Kananga Commune          | 6.3  | 0.3 | 0.6  | 86.0 | November 2009  | resident          |
| Kasai Occidental   | Katoka Commune           | 6.4  | 0.4 | 0.4  | 88.5 | November 2009  | resident          |
| Kasai Occidental   | Ndesha Commune           | 5.4  | 0.3 | 0.8  | 82.5 | November 2009  | resident          |
| Kasai Occidental   | Nganza Commune           | 5.2  | 0.2 | 0.2  | 89.7 | November 2009  | resident          |
| Kasai Occidental   | Lukonga Commune          | 10.3 | 0.6 | 1.1  | 93.4 | November 2009  | resident          |
| Kasai Occidental   | Demba Territory          | 11.3 | 0.6 | 1.2  | 88.3 | November 2009  | resident          |
| Kasai Occidental   | Dibaya Territory         | 9.9  | 0.6 | 1.2  | 82.5 | November 2009  | resident          |
| Kasai Occidental   | Dibelenge Territory      | 10.9 | 0.6 | 1.0  | 81.9 | November 2009  | resident          |
| Kasai Occidental   | Kazumba Territory        | 10.3 | 0.6 | 1.1  | 93.4 | November 2009  | resident          |
| Kasai Occidental   | Luiza Territory          | 11.3 | 0.6 | 1.1  | 93.4 | November 2009  | resident          |
| Bas-Congo          | Kuimba Health Zone       | 10.3 | 0.5 | 0.7  | 94.1 | November 2009  | resident          |
| South Kivu         | Bunyakiri Health Zone    | 6.6  | 0.4 | 1.0  | 79.2 | December 2009  | resident          |
| Bas-Congo          | Ngidinga Health Zone     | 14.1 | 0.8 | 2.2  | 97.1 | December 2009  | resident          |
| Kasai Oriental     | Katako Kombe Health Zone | 9.6  | 0.6 | 1.1  | 90.0 | December 2009  | resident          |
| Kasai Oriental     | Kole Health Zone         | 15.7 |     |      | 64.3 | December 2009  | resident          |
| Province Orientale | Niangara Health Zone     | 5.3  | 0.9 | 1.1  | 83.0 | February 2010  | resident          |
| North Kivu         | Kiroshe Health Zone      | 5.8  | 0.3 | 0.3  | 89.6 | February 2010  | resident-returnee |
| Province Orientale | Rungu Health Zone        | 5.4  | 0.9 | 1.3  | 83.5 | March 2010     | resident          |
| Province Orientale | Ganga Health Zone        | 5.1  | 1.2 | 1.5  | 57.2 | March 2010     | resident          |
| Bandundu           | Kisandji Health Zone     | 12.0 | 1.0 | 1.8  | 89.4 | April 2010     | resident          |
| Bandundu           | Boko health Zone         | 9.8  | 0.7 | 1.1  | 71.6 | May 2010       | resident          |
| Bandundu           | Popokabaka Health Zone   | 12.3 | 1.3 | 1.8  | 79.0 | May 2010       | resident          |
| Bandundu           | Feshi Health Zone        | 11.7 | 0.4 | 0.7  | 89.0 | July 2010      | resident          |
| Bandundu           | Kajiji Health Zone       | 17.4 | 1.0 | 1.9  | 88.8 | July 2010      | resident          |

# Table 3: Ethiopia

| Location                        |                       | GAM  | CMR | U5MR        | MCV  | Start Date                  | Population Status    |
|---------------------------------|-----------------------|------|-----|-------------|------|-----------------------------|----------------------|
| SNNP                            | Damot Woyde           | 25.6 |     |             |      | March 2000                  | resident             |
| Somali                          | Denan                 | 52.9 | 8.9 | 27.5        |      | April 2000                  | IDP-resident         |
| Somali                          | Denan                 | 49.1 | 6.7 | 18.5        |      | April 2000                  | resident             |
| Somali                          | Denan                 | 55.1 | 9.9 | 32.0        |      | April 2000                  | IDP                  |
| SNNP                            | Bolosso Sorie         | 45.1 |     |             |      | May 2000                    | resident             |
| Gambella                        | Bonga                 |      |     |             | 88.1 | June 2000                   | refugee              |
| Benishangul-Gumuz               | Sherkole              |      |     |             | 91.5 | June 2000                   | refugee              |
| Oromia                          | Arero                 | 13.9 |     |             | 34.0 | June 2000                   | resident             |
| Oromia                          | Teltele. Yabello      | 11.8 | 0.4 | 0.6         |      | June 2000                   | resident             |
| Somali                          | Godie                 | 29.4 | 3.1 | 9.2         |      | July 2000                   | resident             |
| SNNP                            | Konso Special         | 10.9 | 0.4 | 0.8         | 93.0 | July 2000                   | resident             |
| Somali                          | Denan                 | 43.7 | 0.4 | 1.2         |      | July 2000                   | IDP-resident         |
| Somali                          | Denan                 | 28.9 |     |             |      | July 2000                   | resident             |
| Somali                          | Denan                 | 50.8 |     |             |      | July 2000                   | IDP                  |
| Somali                          | Fik                   | 24.1 |     |             |      | July 2000                   | resident             |
| Somali                          | Hamero                | 32.3 |     |             |      | July 2000                   | resident             |
| Somali                          | Duhun                 | 40.2 |     |             |      | July 2000                   | resident             |
| Somali                          | Segeg                 | 34.3 |     |             |      | July 2000                   | resident             |
| Oromia                          | Arero                 | 10.6 | 0.6 | 1.2         | 69.1 | September 2000              | resident             |
| Somali                          | Denan                 | 40.8 | 0.1 | 0.3         |      | September 2000              | IDP-resident         |
| Somali                          | Denan                 | 32.6 |     | 0           |      | September 2000              | resident             |
| Somali                          | Denan                 | 44.5 |     |             |      | September 2000              | IDP                  |
| Gambella                        | Bonga                 | 41.5 |     |             | 91.9 | October 2000                | refugee              |
| Benishangul-Gumuz               | Sherkole              |      |     |             | 85.6 | October 2000                | refugee              |
| Gambella                        | Pugnido               |      |     |             | 74.7 | October 2000                | refugee              |
| Gambella                        | Dimma                 |      |     |             | 85.5 | October 2000                | refugee              |
| SNNP                            | Bolosso Sorie         | 7.4  | 3.2 | 5.2         | 23.8 | October 2000                | resident             |
| SNNP                            | Offa                  | 19.6 | 3.2 | J.2         | 23.0 | October 2000                | resident             |
| Somali                          | Duhun                 | 24.2 |     |             | 31.5 | October 2000                | resident             |
| Somali                          |                       | 17.2 |     |             | 45.0 | October 2000                | resident             |
|                                 | Hamero Kalu           | 10.8 | 0.5 | 0.8         | 82.9 | October 2000                | resident             |
| Amhara SNNP                     |                       | 7.2  | 0.3 | 0.8         | 1.8  | October 2000                | resident             |
|                                 | Damot Woyde           | 5.9  | 0.4 | 0.8         | 1.0  | November 2000               |                      |
| Oromia SNNP                     | Borena Bolosso Sorie  | 7.8  | 0.7 | 1.2         | 25.5 | January 2001                | resident<br>resident |
|                                 |                       |      | 0.7 | 1.2         | 23.3 | -                           |                      |
| Somali                          | Denan                 | 37.2 | 0.0 | 1.0         |      | January 2001                | IDP-resident         |
| Oromia                          | Teltele               | 4.6  | 0.8 | 1.6         | 65.0 | February 2001               | resident             |
| Amhara Amhara                   | Legambo               | 9.5  | 0.6 | 1.4         | 65.9 | February 2001               | resident             |
| Somali                          | Kalu Fafan            | 13.8 | 0.5 | 1.0<br>22.8 | 91.2 | February 2001<br>March 2001 | resident             |
|                                 |                       |      | 1.2 |             | 6.0  |                             |                      |
| Oromia                          | Golo Odana Meyumuluke | 19.4 | 1.2 | 3.1         | 6.8  | March 2001                  | resident             |
| Gambella<br>Ranishan and Commun | Bonga                 | 9.0  |     |             |      | April 2001                  | refugee              |
| Benishangul-Gumuz               | Sherkole              | 9.8  |     |             |      | April 2001                  | refugee              |
| Gambella                        | Pugnido               | 20.7 |     |             |      | April 2001                  | refugee              |
| Gambella                        | Dimma                 | 10.8 | 0.1 | 0.3         |      | April 2001                  | refugee              |
| Somali                          | Denan                 | 51.1 | 0.1 | 0.2         |      | April 2001                  | IDP-resident         |
| Somali                          | Denan                 | 56.3 |     |             |      | April 2001                  | IDP                  |
| Somali                          | Denan                 | 41.3 | 0.3 | 0.0         | 45.0 | April 2001                  | resident             |
| SNNP                            | Damot Woyde           | 2.8  | 0.3 | 0.8         | 15.9 | April 2001                  | resident             |
| Amhara                          | Goncha Siso Enebse    | 8.5  | 0.6 | 1.3         | 30.7 | May 2001                    | resident             |
| Somali                          | Godie                 | 30.0 | 0.1 | 0.3         | 88.2 | August 2001                 | IDP-resident         |
| Somali                          | Hartisheik            | 28.4 |     | 4.0         | 96.0 | January 2002                | IDP                  |
| SNNP                            | Wolayita              | 4.4  | 0.4 | 0.9         | 28.3 | January 2002                | resident             |

## Table 3: Ethiopia

| Location          |   | GAM  | CMR | U5MR | MCV  | Start Date     | Population Statu |
|-------------------|---|------|-----|------|------|----------------|------------------|
| SNNP              | Wolayita  | 4.7  | 0.7 | 1.5  | 31.5 | January 2002   | resident         |
| Amhara            | Kalu  | 9.7  | 0.3 | 0.8  | 86.0 | January 2002   | resident         |
| Somali            | Hartisheik  | 26.6 | 0.2 | 1.6  | 93.0 | February 2002  | IDP              |
| Somali            | Moyale  | 17.1 | 0.7 | 1.8  | 48.5 | March 2002     | resident         |
| Oromia            | Moyale  | 6.8  | 0.5 | 1.7  | 70.0 | March 2002     | resident         |
| Afar              | Assayita - Gehertuna Hamitole. Assayita - Alasebolo | 32.4 |     |      |      | June 2002      | resident         |
| Afar              | Afar Zone 3   | 17.9 | 0.7 | 3.2  | 17.6 | July 2002      | resident         |
| Amhara            | West Belessa  | 13.0 | 1.7 | 3.0  |      | July 2002      | resident         |
| SNNP              | Soro. Badawocho                                     | 10.3 | 0.5 | 2.5  | 45.3 | August 2002    | resident         |
| SNNP              | Alaba Special                                       | 6.2  | 0.4 | 1.6  | 44.1 | August 2002    | resident         |
| SNNP              | Soro  | 10.3 | 0.5 | 2.5  | 45.3 | August 2002    | resident         |
| )romia            | Golo Odana Meyumuluke                               | 15.0 | 0.6 | 1.8  | 4.6  | September 2002 | resident         |
| Amhara            | Dessie Zuria  | 17.2 | 0.6 | 1.7  |      | November 2002  | resident         |
| lmhara            | Kalu  | 16.6 | 0.6 | 1.7  |      | November 2002  | resident         |
| Sambella          | Bonga   | 3.6  | 0.1 | 0.2  |      | December 2002  | refugee          |
| Gambella          | Dimma   | 0.6  | 0.0 | 0.0  |      | December 2002  | refugee          |
| Sambella          | Pugnido   | 1.6  | 0.0 | 0.1  |      | December 2002  | refugee          |
| Benishangul-Gumuz | Sherkole  | 1.4  | 0.0 | 0.1  |      | December 2002  | refugee          |
| Benishangul-Gumuz | Yarenja   | 4.7  | 0.0 | 0.1  |      | December 2002  | refugee          |
| Somali            | Hamero  | 34.0 | 1.4 | 4.6  | 27.6 | March 2003     | resident         |
| Somali            | Duhun. Gerbo  | 31.3 | 1.1 | 4.0  | 19.6 | March 2003     | resident         |
| Afar              | Afar Zone 3   | 11.6 | 1.8 | 3.7  | 87.0 | March 2003     | resident         |
| Amhara            | Kalu  | 9.2  | 1.0 | 1.9  | 61.5 | March 2003     | resident         |
| Oromia            | Fentale   | 5.2  | 0.9 | 1.7  | 94.0 | April 2003     | resident         |
| Oromia            | Bedeno. Kurkfa Chelle. Grawa. Meyu                  | 14.9 | 0.7 | 1.6  | 34.0 | April 2003     | resident         |
| Amhara            | Tenta   | 11.9 | 0.7 | 0.6  | 37.3 | May 2003       | resident         |
| Amhara            | Gubalafto   | 3.8  | 0.3 | 0.0  | 45.9 | May 2003       | resident         |
|                   |   | 6.9  |     |      |      | -              |                  |
| SNNP              | Kedida Gamilla  Hidhabu Abote                       |      | 0.2 | 0.6  | 79.5 | May 2003       | resident         |
| Oromia            | Omo Sheleko   | 14.2 | 0.3 | 0.8  | 48.5 | May 2003       | resident         |
| SNNP              |   | 12.9 | 0.2 | 0.4  | 60.8 | May 2003       | resident         |
| Oromia            | West Harerghe                                       | 10.1 | 0.3 | 0.9  | 40.0 | May 2003       | resident         |
| Oromia<br>        | Adami Tullu Jido. Ziway Dugda                       | 17.1 | 0.5 | 1.5  | 48.0 | May 2003       | resident         |
| Oromia            | Darolebu  | 5.1  | 0.7 | 2.1  | 86.0 | May 2003       | resident         |
| SNNP              | Offa  | 16.7 | 1.1 | 2.6  |      | May 2003       | resident         |
| Oromia<br>        | Siraro  | 7.4  |     |      |      | June 2003      | resident         |
| Amhara            | Kalu  | 8.4  | 0.4 | 0.2  | 94.4 | July 2003      | resident         |
| Amhara            | Dessie Zuria  | 11.7 | 0.4 | 1.2  | 91.4 | July 2003      | resident         |
| Somali            | Erer. Ayshia  | 11.2 |     |      | 9.4  | September 2003 | resident         |
| Somali            | Erer  | 11.1 |     |      | 4.7  | September 2003 | resident         |
| SNNP              | Dale  | 7.9  | 0.5 | 1.4  | 58.6 | September 2003 | resident         |
| Oromia            | Adami Tullu Jido                                    | 7.1  | 0.5 | 0.8  |      | September 2003 | resident         |
| SNNP              | Offa  | 19.4 | 0.5 | 1.6  | 44.5 | September 2003 | resident         |
| Amhara            | Kalu  | 9.9  | 0.4 | 1.0  | 85.8 | October 2003   | resident         |
| INNP              | Meskan  | 9.1  |     |      | 91.2 | October 2003   | resident         |
| INNP              | Mareko  | 12.8 | 0.6 | 1.9  | 96.7 | October 2003   | resident         |
| NNP               | Boricha   | 4.1  | 0.7 | 2.2  | 65.0 | October 2003   | resident         |
| ıfar              | Assayita  | 13.8 |     |      |      | October 2003   | resident         |
| mhara             | Dessie Zuria  | 12.0 | 0.4 | 1.0  | 72.6 | November 2003  | resident         |
| ımhara            | Tehuledere  | 7.5  |     |      | 81.5 | November 2003  | resident         |
| )romia            | Golo Odana Meyumuluke                               | 6.3  | 0.8 | 1.4  | 43.6 | November 2003  | resident         |
| SNNP              | Dalocha   | 6.1  | 0.6 | 1.9  | 87.1 | November 2003  | resident         |
| SNNP              | Lanfuro   | 9.7  | 0.7 | 1.9  | 56.3 | November 2003  | resident         |

## Table 3: Ethiopia

| Location      |                           | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|---------------|---------------------------|------|-----|------|------|----------------|-------------------|
| Oromia        | Meta                      | 4.1  | 0.8 | 2.0  | 77.6 | December 2003  | resident          |
| SNNP          | Offa                      | 13.4 | 0.5 | 1.0  | 11.8 | December 2003  | resident          |
| Somali        | Godie                     | 21.4 | 1.2 | 3.8  | 81.4 | January 2004   | resident          |
| SNNP          | Shebdino                  | 7.8  | 0.4 | 0.8  | 73.2 | January 2004   | resident          |
| Oromia        | Chewaka Resettlement Area | 9.8  | 0.7 | 2.6  | 93.2 | March 2004     | Resettled         |
| Somali        | Erer. Dembel              | 8.1  | 0.3 | 1.2  | 51.0 | July 2004      | resident          |
| Somali        | Erer. Shinile             | 9.8  | 0.1 | 0.4  | 47.0 | July 2004      | resident          |
| Oromia        | Kurkfa Chelle             | 4.7  | 0.1 | 0.2  |      | September 2004 | resident          |
| Oromia        | Grawa                     | 5.9  | 0.2 | 0.5  |      | September 2004 | resident          |
| Oromia        | Bedeno                    | 8.5  | 0.3 | 0.6  |      | September 2004 | resident          |
| Oromia        | Chiro                     | 7.2  | 0.1 | 0.3  |      | September 2004 | resident          |
| Oromia        | Miesso                    | 9.6  | 0.3 | 0.6  |      | September 2004 | resident          |
| Oromia        | Kuni                      | 7.9  | 0.3 | 0.5  |      | September 2004 | resident          |
| Oromia        | Guba Koricha              | 7.1  | 0.3 | 0.6  |      | September 2004 | resident          |
| Somali        | Liben                     | 17.7 | 0.6 | 2.1  | 83.3 | September 2004 | resident          |
| Somali        | Liben                     | 17.6 | 0.6 | 3.2  | 81.0 | September 2004 | resident          |
| Afar          | Semu Robi                 | 9.2  | 0.9 | 3.0  | 1.7  | November 2004  | resident          |
| Afar          | Assayita                  | 11.5 | 2.4 | 1.2  | 50.5 | December 2004  | resident          |
| Somali        | Misraq Gashamo            | 19.7 | 1.2 | 4.9  | 47.3 | December 2004  | resident          |
| Afar          | Abe-Ala                   | 13.5 | 1.3 | 0.5  | 15.0 | February 2005  | resident          |
| Somali        | Fafan                     | 21.8 | 0.8 | 4.7  | 30.2 | February 2005  | IDP               |
| Somali        | Hartisheik                | 16.4 | 0.5 | 3.5  | 30.2 | February 2005  | IDP               |
| Gambella      | Bonga                     | 19.3 | 0.5 | 3.3  | 30.2 | February 2005  | refugee           |
| Gambella      | Pugnido                   | 20.7 |     |      |      | April 2005     | refugee           |
| Gambella      | Pugnido                   | 21.9 |     |      |      | April 2005     | refugee           |
| Somali        | Hamero                    | 16.1 |     |      | 28.3 | April 2005     | resident          |
| Somali        | Duhun. Segeg              | 20.7 |     |      | 27.1 | April 2005     | resident          |
| Amhara        | Dehana Dehana             | 16.1 | 0.2 | 0.9  | 71.5 | May 2005       | resident          |
| Amhara        | Sekora                    | 14.8 | 0.2 | 0.9  | 68.3 | May 2005       | resident          |
| SNNP          | Gofa Zuria                | 2.6  | 0.3 | 0.4  | 65.8 | May 2005       | resident          |
| SNNP          | Shebdino                  | 15.8 | 0.3 | 0.9  | 71.6 | May 2005       | resident          |
| Oromia Oromia | Kuni                      | 6.1  | 0.2 | 0.7  | 39.4 | June 2005      | resident          |
|               |                           |      | 0.2 |      | 72.1 |                |                   |
| SNNP          | Dale                      | 15.9 | _   | 0.3  |      | June 2005      | resident          |
| Amhara        | Kalu                      | 12.0 | 0.3 | 0.4  | 95.2 | July 2005      | resident          |
| SNNP          | Awassa                    | 4.6  | 0.2 | 0.5  | 58.0 | September 2005 | resident          |
| Afar          | Abe-Ala                   | 13.6 | 0.5 | 1.4  | 64.4 | October 2005   | resident          |
| Afar          | Berahile                  | 19.0 | 0.4 | 1.1  | 71.8 | October 2005   | resident          |
| Oromia        | Kuni                      | 7.5  | 0.3 | 0.5  | 66.9 | November 2005  | resident          |
| SNNP          | Offa                      | 4.7  | 0.2 | 0.5  | 57.5 | November 2005  | resident          |
| SNNP          | Damot Woyde               | 4.0  | 0.2 | 0.6  | 50.4 | November 2005  | resident          |
| Somali        | Denan                     | 23.5 | 2.0 | 6.7  |      | December 2005  | resident          |
| Somali        | Chereti                   | 18.6 | 1.0 | 3.3  |      | December 2005  | resident          |
| Oromia        | Fedis                     | 6.9  | 0.3 | 0.6  | 74.0 | December 2005  | resident          |
| Afar          | Assayita                  | 11.1 | 0.2 | 1.0  |      | December 2005  | resident          |
| SNNP          | Dale                      | 5.3  | 0.3 | 0.7  |      | December 2005  | resident          |
| SNNP          | Konso Special             |      | 0.1 | 0.3  |      | December 2005  | resident          |
| Amhara        | Kalu                      | 8.2  | 0.2 | 0.6  | 59.2 | December 2005  | resident          |
| Amhara        | Dessie Zuria              | 12.4 | 0.2 | 0.9  | 39.5 | December 2005  | resident          |
| Somali        | Dollo Addo                | 20.1 | 0.7 | 2.4  | 20.7 | January 2006   | resident          |
| Somali        | East Imey                 | 21.7 |     |      |      | January 2006   | resident          |
| Somali        | Dollo Addo. Dollo Bay     | 18.7 | 0.8 | 3.4  |      | January 2006   | resident          |
| Somali        | Moyale. Hudet             | 19.7 | 1.0 | 3.2  |      | January 2006   | resident          |

### Table 3: Ethiopia

| Location   |                       | GAM  | CMR | U5MR | MCV  | Start Date           | Population Statu |
|--|-----------------------|------|-----|------|------|----------------------|------------------|
| Oromia   | Dire                  | 10.0 | 0.1 | 0.0  |      | January 2006         | resident         |
| Oromia   | Moyale                | 10.9 | 0.2 | 0.2  |      | January 2006         | resident         |
| Oromia   | Teltele               | 6.1  | 0.1 | 0.1  |      | January 2006         | resident         |
| Dromia   | Arero                 | 5.5  | 0.2 | 0.5  |      | January 2006         | resident         |
| Oromia   | Goro                  | 6.1  | 0.5 | 1.3  | 16.7 | January 2006         | resident         |
| Somali   | Denan                 | 23.5 | 2.0 | 6.7  | 9.4  | January 2006         | resident         |
| Somali   | Degehabur             | 20.2 | 0.4 | 1.1  | 5.0  | February 2006        | resident         |
| SNNP   | Hula                  | 18.1 | 0.1 | 0.1  | 94.3 | March 2006           | resident         |
| SNNP   | Hula                  | 7.4  | 0.1 | 0.2  |      | March 2006           | resident         |
| SNNP   | Mreko                 | 13.6 | 0.2 | 0.8  | 94.6 | March 2006           | resident         |
| SNNP   | Lowlands of Meskan    | 9.9  | 0.2 | 0.7  | 83.9 | March 2006           | resident         |
| Afar   | Yalo                  | 11.1 | 0.5 | 1.5  | 5.5  | March 2006           | resident         |
| SNNP   | Silti                 | 12.2 | 0.5 | 0.9  |      | April 2006           | resident         |
| SNNP   | Silti                 | 11.9 | 0.4 | 1.4  | 68.9 | April 2006           | resident         |
| SNNP   | Hula                  | 6.8  | 0.0 | 0.1  | 91.9 | April 2006           | resident         |
| SNNP   | Kedida Gamilla        | 8.5  | 0.3 | 0.1  | 89.7 | April 2006           | resident         |
| Oromia   | Kombolcha             | 6.3  | 0.3 | 0.5  | 27.2 | April 2006           | resident         |
| Oromia (Tromia | Boset                 | 4.8  | 0.2 | 0.3  | 39.1 | April 2006           | resident         |
| Sambella   | Dimma                 | 13.9 | 0.2 | 0.4  | 91.8 | April 2006           | refugee          |
| igray  | Shimelba              | 14.3 | 0.2 | 0.7  | 71.0 | April 2006           | resident         |
| SNNP   | Hula                  | 16.5 | 0.1 | 0.4  | 94.3 | May 2006             | resident         |
| Benishangul-Gumuz  | Sherkole              | 10.2 | 0.2 | 0.2  | 88.7 | May 2006             | refugee          |
|  |                       | 11.8 | 0.5 | 1.2  | 98.4 | -                    |                  |
| Benishangul-Gumuz<br>Somali  | Yarenja<br>Kebribeyah | 10.5 | 0.5 | 0.3  | 91.2 | May 2006<br>May 2006 | refugee          |
| SNNP   |                       |      |     |      |      |                      | refugee          |
|  | Shashego              | 7.7  | 0.4 | 1.0  | 71.8 | June 2006            |                  |
| SNNP   | Silti                 | 5.7  | 0.0 | 0.0  | 87.8 | June 2006            | resident         |
| Oromia   | Kombolcha             | 9.5  | 0.4 | 0.6  | 75.1 | June 2006            | resident         |
| Oromia   | Kombolcha             | 9.3  | 0.2 | 0.4  | 78.4 | June 2006            | resident         |
| Gambella   | Bonga                 | 8.6  | 0.4 | 0.9  | 94.8 | June 2006            | refugee          |
| SNNP   | Offa                  | 3.6  | 0.1 | 0.5  | 18.6 | June 2006            | resident         |
| SNNP   | Damot Woyde           | 3.8  | 0.4 | 0.7  | 15.2 | June 2006            | resident         |
| Oromia   | Deder                 | 9.4  | 0.4 | 0.6  | 75.0 | June 2006            | resident         |
| SNNP   | Hula                  | 7.6  | 0.2 | 0.6  | 71.2 | July 2006            | resident         |
| Oromia   | Darolebu              | 6.5  | 0.2 | 0.5  | 51.2 | July 2006            | resident         |
| Amhara   | Kalu                  | 10.2 | 0.5 | 0.0  | 92.1 | July 2006            | resident         |
| Somali   | Afder                 | 10.5 | 0.6 | 1.8  | 57.8 | July 2006            | resident         |
| Gambella   | Pugnido               | 8.7  | 0.8 | 1.9  | 76.2 | July 2006            | refugee          |
| Gambella   | Pugnido               | 9.3  | 0.3 | 0.4  |      | July 2006            | refugee          |
| Amhara   | Dessie Zuria          | 12.4 | 0.3 | 0.3  | 84.7 | August 2006          | resident         |
| Somali   | Liben                 | 14.5 | 0.6 | 2.5  | 57.8 | August 2006          | resident         |
| SNNP   | Lanfuro               | 5.7  | 0.3 | 0.2  |      | August 2006          | resident         |
| Somali   | Chereti               | 16.4 | 0.6 |      | 80.5 | August 2006          | resident         |
| Somali   | Hamero. Duhun         | 12.2 | 0.3 | 1.0  | 37.2 | September 2006       | resident         |
| INNP   | Bolosso Sorie         | 3.0  | 0.5 | 0.6  |      | November 2006        | resident         |
| INNP   | Dale. Aleta Wondo     | 5.6  | 0.1 | 0.1  |      | November 2006        | resident         |
| NNP  | Mreko                 | 6.0  | 0.4 | 0.8  |      | November 2006        | resident         |
| ıfar   | Yalo                  | 11.3 | 0.4 | 1.2  | 34.0 | November 2006        | resident         |
| )romia   | Kombolcha             | 4.9  | 0.2 | 0.3  | 70.4 | November 2006        | resident         |
| romia  | Darolebu              | 5.6  | 0.3 | 0.7  | 55.8 | November 2006        | resident         |
| ıfar   | Teru                  | 9.3  | 0.5 | 0.5  | 13.3 | November 2006        | resident         |
| SNNP   | Hula                  | 9.1  | 0.2 | 0.4  | 87.7 | November 2006        | resident         |
| SNNP   | Boricha               | 8.2  | 0.1 | 0.2  | 80.4 | January 2007         | resident         |

### Table 3: Ethiopia

| Location          |                      | GAM  | CMR | U5MR | MCV  | Start Date             | Population Status |
|-------------------|----------------------|------|-----|------|------|------------------------|-------------------|
| SNNP              | Duna                 | 6.6  | 0.4 | 1.0  | 64.0 | January 2007           | resident          |
| SNNP              | Boreda Abaya         | 1.2  | 0.2 | 0.2  | 87.2 | January 2007           | resident          |
| SNNP              | Mirab Abaya          | 2.5  | 0.1 | 0.2  | 93.2 | January 2007           | resident          |
| SNNP              | Humbo                | 2.4  | 0.2 | 0.7  |      | January 2007           | resident          |
| SNNP              | Sodo Zuria           | 3.9  | 0.1 | 0.3  | 85.3 | January 2007           | resident          |
| Amhara            | Dessie Zuria         | 16.7 | 0.4 | 0.3  |      | January 2007           | resident          |
| Amhara            | Kalu                 | 7.7  | 0.1 | 0.3  |      | January 2007           | resident          |
| Somali            | Dollo Addo           | 22.5 | 0.0 | 0.3  | 44.6 | January 2007           | resident          |
| SNNP              | Silti                | 8.9  | 0.1 | 0.2  |      | February 2007          | resident          |
| Oromia            | Fedis                | 6.9  | 0.2 | 0.9  | 48.2 | February 2007          | resident          |
| Somali            | Elkare. Hargele      | 15.7 | 0.4 | 0.9  |      | March 2007             | resident          |
| SNNP              | Bona                 | 16.4 | 0.4 | 1.1  |      | May 2007               | resident          |
| Afar              | Chefera              | 11.1 | 0.4 | 0.9  |      | May 2007               | resident          |
| Gambella          | Pugnido              | 8.3  | 0.6 | 1.4  | 82.1 | May 2007               | refugee           |
| Tigray            | Shimelba             | 13.5 | 0.1 | 0.1  | 93.0 | May 2007               | refugee           |
| Gambella          | Bonga                | 4.0  | 0.1 | 5.1  | 96.7 | May 2007               | refugee           |
| Gambella          | Pugnido              | 9.7  | 0.2 | 0.4  | 93.0 | May 2007               | refugee           |
| SNNP              | Offa                 | 1.1  | 0.2 | 0.4  | 72.9 | June 2007              | resident          |
| SNNP              | Dugna Fango          | 2.2  | 0.1 | 0.6  | 65.8 | June 2007              | resident          |
| SNNP              | Damot Woyde          | 2.2  | 0.1 | 0.0  | 65.4 | June 2007              | resident          |
| Benishangul-Gumuz | Sherkole             | 7.0  | 0.4 | 0.9  | 84.0 | June 2007              | refugee           |
| SNNP              | Silti                | 3.0  | 0.2 | 0.5  | 66.6 | July 2007              | resident          |
| Oromia            | Dire                 | 13.5 | 0.2 | 1.6  | 65.9 | July 2007<br>July 2007 | refugee           |
|                   |                      |      | _   |      |      | -                      | -                 |
| Amhara            | Kalu                 | 9.6  | 0.3 | 1.0  | 93.3 | August 2007            | resident          |
| Oromia            | Darolebu             | 9.3  | 0.1 | 0.2  | 45.5 | August 2007            | resident          |
| Amhara            | Dessie Zuria         | 11.9 | 0.4 | 0.5  | 24.3 | September 2007         | resident          |
| Afar              | Gewane               | 20.5 | 1.2 | 3.0  | 38.6 | October 2007           | resident          |
| Oromia            | Darolebu             | 7.4  | 0.3 | 0.8  | 44.7 | January 2008           | resident          |
| SNNP              | Dugna Fango          | 12.5 | 0.5 | 1.8  | 70.2 | March 2008             | resident          |
| SNNP              | Offa                 | 8.4  | 0.4 | 0.9  | 74.7 | April 2008             | resident          |
| SNNP              | Damot Pulassa        | 17.8 | 0.4 | 0.9  | 81.0 | April 2008             | resident          |
| SNNP              | Boricha              | 20.3 | 0.3 | 0.8  | 65.1 | April 2008             | resident          |
| Amhara            | Dessie Zuria         | 12.2 | 0.3 | 0.4  | 78.0 | May 2008               | resident          |
| Oromia            | Kersa                | 12.8 | 0.4 | 0.8  | 61.8 | June 2008              | resident          |
| Gambella          | Pugnido              | 11.2 | 0.2 | 0.4  | 85.6 | June 2008              | refugee           |
| Gambella          | Pugnido              | 12.3 | 0.3 | 0.7  | 89.7 | June 2008              | refugee           |
| Somali            | Kebribeyah           | 9.1  | 0.4 | 0.9  | 98.6 | June 2008              | refugee           |
| Oromia            | Kersa                | 12.3 | 0.4 | 0.8  | 61.8 | June 2008              | resident          |
| SNNP              | Damot Gale           | 13.0 | 0.7 | 2.2  | 78.1 | July 2008              | resident          |
| Somali            | Teferi Ber (Awbarre) | 9.0  | 0.4 | 1.2  | 72.2 | July 2008              | refugee           |
| Tigray            | Shimelba             | 8.5  | 0.4 | 0.8  | 97.0 | August 2008            | refugee           |
| Oromia            | Kuni                 | 12.4 | 0.2 | 0.8  | 44.6 | September 2008         | resident          |
| SNNP              | Soro                 | 11.4 | 0.2 | 0.8  | 86.9 | September 2008         | resident          |
| SNNP              | Mareko               | 5.9  | 0.2 | 0.9  | 84.3 | October 2008           | resident          |
| Amhara            | South Wollo          | 12.8 | 0.2 | 0.2  | 83.9 | November 2008          | resident          |
| SNNP              | Damot Gale           | 4.9  | 0.2 | 0.0  | 85.9 | December 2008          | resident          |
| SNNP              | Damot Pulassa        | 16.7 | 0.4 | 0.4  | 81.0 | December 2008          | resident          |
| SNNP              | Arba Minch Zuria     | 2.7  | 0.1 | 0.2  | 92.8 | January 2009           | resident          |
| SNNP              | Soro                 | 12.4 | 0.3 | 0.8  | 64.3 | January 2009           | resident          |
| SNNP              | Shashago             | 6.8  | 0.2 | 0.2  | 10.2 | January 2009           | resident          |
| SNNP              | Gedeb                | 10.5 | 0.2 | 0.1  | 31.9 | February 2009          | resident          |
| SNNP              | Bule                 | 7.1  | 0.2 | 0.2  | 62.1 | February 2009          | resident          |

### Table 3: Ethiopia

| Location          |                          | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|-------------------|--------------------------|------|-----|------|------|----------------|-------------------|
| Oromia            | Kuni                     | 9.6  | 0.2 | 0.5  | 59.3 | March 2009     | resident          |
| SNNP              | Damot Gale               | 9.9  | 0.2 | 1.2  | 64.2 | March 2009     | resident          |
| SNNP              | Shebdino                 | 17.5 | 0.2 | 0.5  | 68.9 | March 2009     | resident          |
| Oromia            | Kombolcha                | 10.8 | 0.2 | 0.6  | 72.2 | March 2009     | resident          |
| Oromia            | Kersa                    | 12.8 | 0.1 | 0.3  |      | March 2009     | resident          |
| Amhara            | Ambasel                  | 11.1 | 0.2 | 0.8  | 87.5 | March 2009     | resident          |
| SNNP              | Boricha                  | 11.2 | 0.2 | 0.6  | 68.1 | April 2009     | resident          |
| SNNP              | Damot Pulassa            | 11.0 | 0.1 | 0.8  | 87.8 | April 2009     | resident          |
| Gambella          | Pugnido                  | 10.1 | 0.2 | 0.4  | 87.2 | May 2009       | refugee           |
| Amhara            | Mekdela                  | 13.2 | 0.1 | 0.4  | 76.1 | June 2009      | resident          |
| Amhara            | Gubalafto                | 8.1  | 0.2 | 0.4  | 78.9 | June 2009      | resident          |
| Benishangul-Gumuz | Sherkole                 | 7.9  | 0.3 | 1.2  | 97.9 | June 2009      | refugee           |
| Somali            | Sheder                   | 7.8  | 0.5 | 1.0  | 80.8 | June 2009      | refugee           |
| Somali            | Kebribeyah               | 11.4 | 0.2 | 0.5  | 98.2 | June 2009      | refugee           |
| Somali            | Teferi Ber (Awbarre)     | 10.2 | 0.1 | 0.3  | 90.9 | June 2009      | refugee           |
| Oromia            | Hawigudina               | 12.1 | 0.2 | 0.3  | 24.4 | July 2009      | resident          |
| Oromia            | Burka Dintu              | 14.4 | 0.4 | 1.1  | 18.5 | July 2009      | resident          |
| Oromia            | Boke                     | 16.4 | 0.4 | 1.0  | 32.6 | July 2009      | resident          |
| Tigray            | Shimelba                 | 11.0 | 0.1 | 0.4  | 92.0 | July 2009      | refugee           |
| Tigray            | Mayaini                  | 4.3  | 0.1 | 0.0  | 93.1 | July 2009      | refugee           |
| Oromia            | Abaya                    | 10.8 | 0.3 | 0.6  | 25.3 | August 2009    | resident          |
| Amhara            | Ambasel                  | 12.8 | 0.1 | 0.0  | 82.2 | August 2009    | resident          |
| Oromia            | Meta                     | 11.9 | 0.2 | 0.3  | 61.9 | September 2009 | resident          |
| Oromia            | Deder                    | 10.6 | 0.3 | 0.2  | 54.7 | September 2009 | resident          |
| SNNP              | Gedeb                    | 6.2  | 0.2 | 0.3  | 40.3 | September 2009 | resident          |
| SNNP              | Bule                     | 4.9  | 0.2 | 0.5  | 27.2 | September 2009 | resident          |
| Oromia            | Meta                     | 11.9 | 0.2 | 0.3  | 61.9 | September 2009 | resident          |
| Amhara            | Dessie Zuria             | 14.2 | 0.5 | 0.9  | 83.4 | September 2009 | resident          |
| Amhara            | Wara Babo                | 11.1 | 0.4 | 1.3  | 83.6 | September 2009 | resident          |
| Oromia            | Darolebu                 | 10.2 | 0.1 | 0.1  | 41.9 | October 2009   | resident          |
| Oromia            | Melkabello               | 13.2 | 0.3 | 1.0  | 53.3 | October 2009   | resident          |
| Oromia            | Goro Gutu                | 7.5  | 0.1 | 0.2  | 61.0 | November 2009  | resident          |
| Oromia            | Gelana                   | 12.2 | 0.2 | 0.2  | 27.7 | November 2009  | resident          |
| Oromia            | Fedis                    | 9.2  | 0.1 | 0.2  | 73.5 | November 2009  | resident          |
| SNNP              | Bolosso Sorie            | 4.5  | 0.2 | 0.9  | 93.0 | December 2009  | resident          |
| SNNP              | Dugna Fango. Damot Woyde | 6.3  | 0.2 | 0.5  | 78.2 | February 2010  | resident          |
| SNNP              | Offa                     | 6.7  | 0.2 | 0.7  | 47.0 | February 2010  | resident          |
| Oromia            | Mena Angetu              | 16.4 | 0.3 | 1.0  | 44.3 | February 2010  | resident          |
| Oromia            | Miesso                   | 10.7 | 0.1 | 0.4  | 52.8 | April 2010     | resident          |

### Table 4: Kenya

| Location                    |                           | GAM  | CMR | U5MR | MCV  | Start Date               | Population Status   |
|-----------------------------|---------------------------|------|-----|------|------|--------------------------|---------------------|
| North Eastern               | Daghaley                  | 20.0 |     |      |      | July 2000                | refugee             |
| North Eastern               | Wajir                     | 21.2 | 2.7 | 7.1  |      | September 2000           | IDP                 |
| North Eastern               | Daghaley                  | 16.1 |     |      |      | January 2001             | refugee             |
| North Eastern               | Mandera                   | 28.1 | 0.9 | 2.4  | 78.0 | January 2001             | resident            |
| Rift Valley                 | Kakuma                    | 17.2 |     |      |      | March 2001               | refugee             |
| North Eastern               | Mandera                   | 22.2 | 0.5 | 2.9  | 76.2 | February 2002            | resident            |
| North Eastern               | Daghaley                  | 15.0 |     |      |      | May 2002                 | refugee             |
| North Eastern               | Daghaley                  | 15.9 |     |      |      | May 2002                 | refugee             |
| Rift Valley                 | Kakuma                    | 14.3 |     |      | 91.9 | August 2002              | refugee             |
| Rift Valley                 | Kakuma                    | 26.8 | 0.1 | 0.4  |      | December 2002            | refugee             |
| Rift Valley                 | Kakuma                    | 12.5 | 0.5 | 1.2  |      | January 2003             | IDP                 |
| North Eastern               | Daghaley                  | 23.9 | 0.5 | 2.1  | 93.4 | May 2003                 | refugee             |
| Rift Valley                 | Kakuma                    | 21.2 | 0.1 | 0.3  |      | November 2003            | refugee             |
| Rift Valley                 | Kakuma                    | 29.2 |     | 0.5  |      | November 2003            | resident            |
| Rift Valley                 | Kakuma                    | 16.8 | 1.5 | 1.2  | 66.0 | January 2004             | resident            |
| Rift Valley                 | Kibish. Lokitaung         | 34.4 | 2.1 | 2.6  | 83.3 | January 2004             | resident            |
| North Eastern               | Garissa                   | 16.5 | 0.5 | 1.1  | 03.3 | August 2004              | resident            |
| Rift Valley                 | Kakuma                    | 18.4 | 0.5 | 2.3  | 85.8 |                          |                     |
| Rift Valley                 |                           |      | 1.6 |      | 86.5 | September 2004           | refugee<br>resident |
| KIπ Valley<br>North Eastern | Kakuma                    | 18.8 |     | 3.0  |      | September 2004           |                     |
|                             | Wajir                     | 31.5 | 0.7 | 2.9  | 69.5 | September 2004           | resident            |
| North Eastern               | Wajir                     | 22.4 | 0.2 | 1.5  | 79.6 | September 2004           | resident            |
| Eastern                     | Kitui                     | 4.5  | 0.7 | 1.0  | 90.8 | September 2004           | resident            |
| Coast                       | Taita Taveta              | 3.0  |     |      | 89.0 | September 2004           | resident            |
| Coast                       | Taita Taveta              | 4.5  |     |      | 88.2 | September 2004           | resident            |
| Rift Valley                 | Oropoi. Lokichoggio       | 19.2 | 1.5 | 2.8  | 76.0 | February 2005            | resident            |
| Rift Valley                 | Kibish. Lapur             | 22.1 | 1.9 | 2.4  | 86.0 | February 2005            | resident            |
| North Eastern               | Mandera                   | 26.6 | 0.4 |      | 89.0 | March 2005               | resident            |
| North Eastern               | Daghaley. Hagadera        | 26.3 | 0.5 | 1.6  | 91.6 | May 2005                 | refugee             |
| North Eastern               | Daghaley                  | 25.5 |     |      |      | May 2005                 | refugee             |
| North Eastern               | Hagadera                  | 16.6 |     |      |      | May 2005                 | refugee             |
| North Eastern               | Ifo                       | 34.5 |     |      |      | May 2005                 | refugee             |
| North Eastern               | Dadaab                    | 26.3 |     |      |      | May 2005                 | refugee             |
| Rift Valley                 | Kakuma                    | 19.6 |     |      |      | November 2005            | resident            |
| Eastern                     | Moyale                    | 18.2 |     |      |      | February 2006            | resident            |
| Rift Valley                 | Samburu                   | 19.2 |     |      |      | February 2006            | resident            |
| Eastern                     | Marsabit                  | 29.9 |     |      |      | February 2006            | resident            |
| North Eastern               | Central Mandera. Khalalio | 21.0 | 0.2 | 0.2  | 82.9 | February 2006            | resident            |
| North Eastern               | Mandera                   | 15.3 | 0.3 | 0.8  | 87.0 | February 2006            | resident            |
| North Eastern               | Malkamari. Rhamu          | 23.6 | 0.3 | 0.3  | 62.9 | February 2006            | resident            |
| North Eastern               | Dandu                     | 27.0 | 0.3 | 0.6  | 62.2 | March 2006               | resident            |
| North Eastern               | Mandera                   | 29.8 | 1.5 | 4.1  | 93.8 | March 2006               | resident            |
| Rift Valley                 | Turkana                   | 21.2 |     |      | 84.4 | April 2006               | resident            |
| Rift Valley                 | Turkana                   | 23.6 |     |      | 92.0 | April 2006               | resident            |
| Rift Valley                 | Turkana                   | 24.0 |     |      | 78.6 | April 2006               | resident            |
| Rift Valley                 | Turkana                   | 26.6 |     |      | 78.4 | April 2006<br>April 2006 | resident            |
|                             |                           |      |     |      |      | -                        |                     |
| Rift Valley                 | Turkana                   | 26.6 |     |      | 89.2 | April 2006               | resident            |
| Rift Valley                 | Turkana                   | 25.9 | 0.4 | 10   | 87.5 | April 2006               | resident            |
| Eastern                     | Sericho                   | 28.5 | 0.4 | 1.0  | 95.5 | May 2006                 | resident            |
| North Eastern               | Dadaab                    | 22.2 | 0.3 | 1.2  | 97.7 | May 2006                 | refugee             |
| Rift Valley                 | Kakuma                    | 21.3 |     |      | 90.6 | September 2006           | refugee             |
| North Eastern               | Mandera                   | 15.3 | 0.3 | 0.8  | 87.0 | September 2006           | IDP-resident        |

### Table 4: Kenya

| Location      |   | GAM  | CMR | U5MR | MCV  | Start Date    | Population Statu |
|---------------|---|------|-----|------|------|---------------|------------------|
| North Eastern | Central Mandera   | 20.9 | 0.2 | 0.8  | 92.2 | February 2007 | resident         |
| North Eastern | Banisa  |      | 0.3 | 1.4  |      | February 2007 | resident         |
| lorth Eastern | Dandu   |      | 0.2 | 0.3  | 64.5 | February 2007 | resident         |
| North Eastern | Wajir   | 23.0 |     |      |      | March 2007    | resident         |
| North Eastern | Daghaley  | 12.5 | 0.7 | 1.3  | 97.5 | July 2007     | refugee          |
| North Eastern | Hagadera  | 10.4 | 0.3 | 0.8  | 94.7 | July 2007     | refugee          |
| North Eastern | Ifo   | 12.9 | 0.4 | 1.5  | 97.2 | July 2007     | refugee          |
| Rift Valley   | Kakuma  | 9.0  |     |      | 93.9 | August 2007   | refugee          |
| North Eastern | Garissa   | 14.4 | 0.2 | 0.2  | 85.4 | October 2007  | resident         |
| North Eastern | Garissa   | 15.9 | 0.5 | 0.6  | 91.9 | November 2007 | resident         |
| North Eastern | Central Mandera   | 24.3 | 0.3 | 0.2  | 90.0 | February 2008 | IDP-resident     |
| North Eastern | Banisa, Malkamari   | 21.3 | 0.4 | 1.6  | 71.6 | March 2008    | resident         |
| Vorth Eastern | Dandu   | 21.7 | 0.4 | 1.0  | 70.1 | March 2008    | resident         |
| Rift Valley   | Turkana   | 24.8 | 2.4 | 2.4  | 77.3 | March 2008    | resident         |
| lorth Eastern | Wajir   | 2.10 | 0.8 | 1.5  | 89.4 | April 2008    | resident         |
| lorth Eastern | Bute. Hadado. Buna. Eldas. Griftu. Gurar                    | 18.5 | 0.3 | 0.6  | 57.1 | April 2008    | resident         |
| lorth Eastern | Habaswein. Central. Tarbaj. Sabuli. Kotulo. Wajir-Bor. Diff | 27.2 | 1.1 | 2.1  | 89.4 | April 2008    | resident         |
| Vorth Eastern | Central Mandera   | 27.2 | 0.3 | 0.4  | 95.5 | April 2008    | resident         |
| Rift Valley   | Kakuma  | 10.9 | 0.5 | 0.4  | 91.0 | April 2008    | refugee          |
| lift Valley   | Kakuma  | 24.7 |     |      | 78.8 | April 2008    | resident         |
| •             | Turkana   | 18.2 | 1.3 | 1.0  | 89.7 | June 2008     | resident         |
| Rift Valley   |   |      |     |      |      |               |                  |
| Rift Valley   | Turkana   | 17.9 | 2.8 | 0.8  | 91.2 | June 2008     | resident         |
| Rift Valley   | Turkana   | 28.9 | 1.3 | 0.8  | 93.0 | June 2008     | resident         |
| Rift Valley   | Nakuru  | 3.0  | 0.1 | 0.2  | 93.8 | July 2008     | IDP-resident     |
| Central       | Nyandarua South   | 3.5  | 0.0 | 0.0  | 87.0 | July 2008     | IDP-resident     |
| Rift Valley   | Trans Nzoia   | 5.8  | 0.2 | 0.3  | 85.6 | July 2008     | IDP-resident     |
| Rift Valley   | Uasin Gishu   | 6.0  | 0.2 | 0.3  | 85.9 | July 2008     | IDP-resident     |
| Rift Valley   | Kakuma  | 10.1 |     |      | 92.3 | October 2008  | refugee          |
| Rift Valley   | Kakuma  | 21.9 |     |      | 86.5 | October 2008  | resident         |
| oast          | Bangale. Madogo. Galore. Bura. Wenje                        | 12.1 | 0.3 | 0.5  |      | November 2008 | resident         |
| astern        | Oldonyiro. Garba Tulla. Sericho                             | 14.9 | 0.3 | 0.5  |      | November 2008 | resident         |
| lairobi       | Nairobi   | 3.9  | 0.3 | 0.6  | 90.5 | November 2008 | resident         |
| lorth Eastern | Central Mandera. Libehia. Hareri                            | 19.5 | 0.7 | 0.8  | 92.6 | January 2009  | resident         |
| lorth Eastern | Banisa. Rhamu Dimtu   | 26.0 | 0.8 | 1.5  | 72.9 | January 2009  | resident         |
| lorth Eastern | Dandu. Takaba   | 31.5 | 0.9 | 1.1  | 65.6 | January 2009  | resident         |
| North Eastern | Mandera   | 27.8 |     |      |      | February 2009 | resident         |
| North Eastern | Mandera   | 40.9 |     |      |      | February 2009 | resident         |
| lorth Eastern | Mandera   | 25.3 |     |      |      | February 2009 | resident         |
| lorth Eastern | Garissa   | 13.6 |     |      |      | February 2009 | resident         |
| Vorth Eastern | Garissa   | 21.7 |     |      |      | February 2009 | resident         |
| Vorth Eastern | Garissa   | 13.1 |     |      |      | February 2009 | resident         |
| North Eastern | Daghaley  | 22.3 | 0.2 | 0.3  | 70.4 | March 2009    | refugee          |
| lorth Eastern | Daghaley  | 19.2 | 0.2 | 0.9  | 53.1 | March 2009    | resident         |
| lairobi       | Nairobi   | 4.5  |     |      | 81.8 | April 2009    | resident         |
| astern        | Laisamis  | 20.0 | 0.3 | 0.4  | 93.1 | May 2009      | resident         |
| lift Valley   | Samburu   | 22.0 | 0.7 | 1.1  | 23.1 | May 2009      | resident         |
| lift Valley   | Baringo   | 12.0 | 0.7 | 0.2  | 89.6 | May 2009      | resident         |
| Rift Valley   | Loima. Turkwel. Kalokol. Kerio                              | 20.5 | 0.5 | 0.2  | 83.7 | May 2009      | resident         |
| ,             |   |      |     |      |      | -             |                  |
| Rift Valley   | Kainuk. Katilu. Lokichar. Lomelo. Lokori                    | 21.9 |     |      | 90.6 | May 2009      | resident         |
| tift Valley   | Kibish. Kaaleng   | 26.9 |     |      | 71.8 | May 2009      | resident         |
| Rift Valley   | Oropoi  | 22.7 |     |      | 86.3 | May 2009      | resident         |

### Table 4: Kenya

| Location      |             | GAM  | CMR | U5MR | MCV  | Start Date   | Population Status |
|---------------|-------------|------|-----|------|------|--------------|-------------------|
| Coast         | Kwale       | 8.4  | 0.6 | 2.0  | 92.8 | May 2009     | resident          |
| Coast         | Kilifi      | 5.9  | 0.3 | 0.4  | 93.6 | May 2009     | resident          |
| Rift Valley   | Kajiado     | 11.5 |     |      |      | June 2009    | resident          |
| Nairobi       | Nairobi     | 5.2  |     |      |      | July 2009    | resident          |
| North Eastern | Wajir West  | 23.1 | 0.6 | 1.0  | 80.4 | July 2009    | resident          |
| North Eastern | Wajir North | 21.0 | 0.8 | 1.3  | 88.7 | July 2009    | resident          |
| North Eastern | Daghaley    | 12.0 |     |      | 86.9 | August 2009  | refugee           |
| North Eastern | Hagadera    | 12.7 |     |      | 92.6 | August 2009  | refugee           |
| North Eastern | Ifo         | 12.6 |     |      | 91.5 | August 2009  | refugee           |
| Eastern       | Kitui       | 8.9  | 0.0 | 0.0  | 95.4 | October 2009 | resident          |
| Eastern       | Mwingi      | 8.3  | 0.1 | 0.3  | 93.1 | October 2009 | resident          |
| Rift Valley   | Kakuma      | 17.0 |     |      | 87.9 | October 2009 | refugee           |

### Table 5: Niger

| Location   |   | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|------------|---|------|-----|------|------|----------------|-------------------|
| Agadez     | Bilma   | 13.7 |     | 3.3  | 84.4 | February 2002  | resident          |
| Zinder     | Zinder  | 13.4 |     |      |      | December 2004  | resident          |
| Maradi     | Maradi  | 13.4 |     |      |      | December 2004  | resident          |
| Maradi     | Birnin Lalle. Bader Goula. Mayahi. Tagris Soli. Kanembakache.<br>Ourafane | 19.3 | 0.8 | 2.2  | 65.9 | April 2005     | resident          |
| Tahoua     | Tamaske. Garhanga. Keita  | 19.6 | 1.0 | 2.4  | 77.7 | April 2005     | resident          |
| Maradi     | Maradi  |      | 1.0 | 3.1  |      | May 2005       | resident          |
| Zinder     | Zinder  |      | 0.9 | 2.5  |      | May 2005       | resident          |
| Zinder     | Zinder  | 18.6 | 1.7 |      | 67.1 | July 2005      | resident          |
| Tillabéry  | Ouallam   | 15.3 | 0.5 | 1.4  | 91.3 | September 2005 | resident          |
| Tahoua     | Tahoua  |      | 0.5 | 2.0  | 61.7 | September 2005 | resident          |
| Tahoua     | Tahoua  | 16.4 | 0.5 | 1.7  | 42.6 | September 2005 | resident          |
| Agadez     | Agadez  | 11.8 | 0.2 | 0.3  |      | September 2005 | resident          |
| Diffa      | Diffa   | 16.0 | 0.4 | 1.4  |      | September 2005 | resident          |
| Dosso      | Dosso   | 13.7 | 0.3 | 1.2  |      | September 2005 | resident          |
| Maradi     | Maradi  | 16.0 | 0.3 | 1.3  |      | September 2005 | resident          |
| Tahoua     | Tahoua  | 17.9 | 0.5 | 2.1  |      | September 2005 | resident          |
| Tillabéry  | Tillabéry   | 14.0 | 0.5 | 1.7  |      | September 2005 | resident          |
| Zinder     | Zinder  | 16.1 | 0.7 | 2.2  |      | September 2005 | resident          |
| Niamey     | Niamey  | 8.9  | 0.4 | 1.1  |      | September 2005 | resident          |
| Tahoua     | Tahoua  | 24.7 | 0.4 | 1.6  | 52.9 | October 2005   | resident          |
| Zinder     | Zinder  | 11.3 | 1.7 | 1.0  | 44.2 | November 2005  | resident          |
| Zinder     | Magaria   | 11.5 | 1.9 |      | 36.3 | November 2005  | resident          |
| Tahoua     | Tahoua  | 10.6 | 0.7 | 2.1  | 59.6 | March 2006     | resident          |
|            | Tahoua  |      | 0.7 | 0.9  | 74.2 |                |                   |
| Tahoua     |   | 12.1 | 1.0 | 3.1  | 28.0 | March 2006     | resident          |
| Tahoua     | Tahoua Paura Madaana  |      |     |      |      | April 2006     |                   |
| Tahoua     | Bouza. Madaoua  | 10.3 | 1.4 | 3.5  | 66.0 | May 2006       | resident          |
| Tahoua     | Illela  | 13.9 | 0.7 | 1.8  | 70.4 | June 2006      | resident          |
| Tahoua     | Tahoua  | 10.6 | 0.9 | 1.8  | 76.1 | June 2006      | resident          |
| Maradi     | Aguie health  | 8.2  | 0.5 | 1.3  | 71.8 | September 2006 | resident          |
| Tahoua<br> | Madaoua   | 7.8  | 0.6 | 1.6  |      | October 2006   | resident          |
| Tahoua<br> | Bouza   | 9.2  | 0.4 | 1.1  |      | October 2006   | resident          |
| Tahoua     | Birmin Konni  | 9.8  | 0.5 | 1.6  |      | October 2006   | resident          |
| Tahoua     | Tahoua  | 8.1  | 1.7 | 1.9  |      | December 2006  | resident          |
| Tahoua     | Illela  | 9.5  | 1.0 | 2.3  | 78.0 | December 2006  | resident          |
| Maradi     | Mayahi  | 16.2 | 0.2 | 0.7  | 55.7 | April 2007     | resident          |
| Maradi     | Dakoro  | 17.7 | 0.2 | 0.4  |      | April 2007     | resident          |
| Agadez     | Agadez  | 18.4 | 0.2 | 0.3  |      | May 2007       | resident          |
| Diffa      | Diffa   | 20.5 | 0.2 | 0.5  |      | May 2007       | resident          |
| Dosso      | Dosso   | 9.5  | 0.2 | 0.6  |      | May 2007       | resident          |
| Maradi     | Maradi  | 14.5 | 0.3 | 0.5  |      | May 2007       | resident          |
| Tahoua     | Tahoua  | 7.9  | 0.5 | 1.6  |      | May 2007       | resident          |
| Tillabéry  | Tillabéry   | 10.2 | 0.4 | 0.5  |      | May 2007       | resident          |
| Zinder     | Zinder  | 15.4 | 0.3 | 0.4  |      | May 2007       | resident          |
| Niamey     | Niamey  | 9.8  | 0.2 | 0.5  |      | May 2007       | resident          |
| Tahoua     | Tahoua  | 13.5 | 0.4 | 0.5  | 66.4 | June 2007      | resident          |
| Tahoua     | Illela  | 9.5  | 0.7 | 0.9  | 64.6 | June 2007      | resident          |
| Zinder     | Zinder  | 9.9  | 0.2 |      |      | June 2007      | resident          |
| Zinder     | Magaria   | 10.3 | 0.2 |      |      | June 2007      | resident          |
| Maradi     | Mayahi  | 16.3 | 0.3 | 0.0  | 11.9 | September 2007 | resident          |
| Maradi     | Dakoro  | 9.2  | 0.2 | 0.6  | 45.9 | October 2007   | resident          |
| Agadez     | Agadez  | 9.7  | 0.5 | 0.9  | 80.0 | October 2007   | resident          |

### Table 5: Niger

| Location  |                | GAM  | CMR | U5MR | MCV  | Start Date    | Population Status |
|-----------|----------------|------|-----|------|------|---------------|-------------------|
| Diffa     | Diffa          | 12.9 | 0.4 | 1.1  | 50.5 | October 2007  | resident          |
| Dosso     | Dosso          | 10.6 | 0.9 | 2.6  | 52.4 | October 2007  | resident          |
| Maradi    | Maradi         | 12.2 | 0.3 | 0.8  | 64.7 | October 2007  | resident          |
| Tahoua    | Tahoua         | 14.2 | 0.6 | 1.6  | 50.7 | October 2007  | resident          |
| Tillabéry | Tillabéry      | 8.9  | 0.9 | 3.1  | 42.9 | October 2007  | resident          |
| Zinder    | Zinder         | 13.9 | 1.0 | 3.5  | 45.2 | October 2007  | resident          |
| Niamey    | Niamey         | 12.2 | 0.5 | 1.6  | 70.2 | October 2007  | resident          |
| Tahoua    | Abalak         | 15.2 | 0.5 | 1.6  |      | November 2007 | resident          |
| Tahoua    | Keita          | 14.7 | 0.6 | 2.3  |      | November 2007 | resident          |
| Maradi    | Mayahi         | 9.1  | 0.3 | 0.6  | 82.8 | January 2008  | resident          |
| Tahoua    | Keita          | 11.8 | 0.4 | 0.4  |      | February 2008 | resident          |
| Tahoua    | Tchintabaraden | 9.2  | 0.5 | 0.9  |      | February 2008 | resident          |
| Tahoua    | Abalak         | 10.0 | 0.4 | 1.0  |      | March 2008    | resident          |
| Maradi    | Dakoro         | 12.6 | 0.1 | 0.2  | 75.9 | April 2008    | resident          |
| Agadez    | Agadez         | 9.0  | 0.8 | 1.5  |      | June 2008     | resident          |
| Diffa     | Diffa          | 13.8 | 0.7 | 2.2  |      | June 2008     | resident          |
| Dosso     | Dosso          | 9.6  | 0.3 | 0.9  |      | June 2008     | resident          |
| Maradi    | Maradi         | 11.7 | 0.4 | 1.8  |      | June 2008     | resident          |
| Tahoua    | Tahoua         | 9.4  | 0.4 | 1.7  |      | June 2008     | resident          |
| Tillabéry | Tillabéry      | 10.3 | 0.4 | 1.1  |      | June 2008     | resident          |
| Zinder    | Zinder         | 17.4 | 0.6 | 2.1  |      | June 2008     | resident          |
| Niamey    | Niamey         | 7.9  | 0.4 | 0.3  |      | June 2008     | resident          |
| Tahoua    | Tahoua         | 10.6 | 0.2 | 0.2  | 65.7 | July 2008     | resident          |
| Zinder    | Zinder         | 15.5 | 2.1 |      |      | November 2008 | resident          |
| Agadez    | Agadez         | 11.7 |     |      |      | May 2009      | resident          |
| Diffa     | Diffa          | 16.8 |     |      |      | May 2009      | resident          |
| Dosso     | Dosso          | 11.9 |     |      |      | May 2009      | resident          |
| Maradi    | Maradi         | 10.7 |     |      |      | May 2009      | resident          |
| Tahoua    | Tahoua         | 11.3 |     |      |      | May 2009      | resident          |
| Tillabéry | Tillabéry      | 6.8  |     |      |      | May 2009      | resident          |
| Zinder    | Zinder         | 15.0 |     |      |      | May 2009      | resident          |
| Niamey    | Niamey         | 9.9  |     |      |      | May 2009      | resident          |
| Tahoua    | Tahoua         | 13.1 | 0.6 | 1.0  | 61.1 | June 2009     | resident          |
| Tahoua    | Illela         | 8.9  | 0.5 | 0.4  | 70.4 | June 2009     | resident          |
| Agadez    | Agadez         | 13.9 | 0.3 | 0.4  |      | May 2010      | resident          |
| Diffa     | Diffa          | 22.1 | 0.6 | 0.7  |      | May 2010      | resident          |
| Dosso     | Dosso          | 14.3 | 0.4 | 1.7  |      | May 2010      | resident          |
| Maradi    | Maradi         | 19.7 | 0.6 | 1.0  |      | May 2010      | resident          |
| Tahoua    | Tahoua         | 15.8 | 0.2 | 0.3  |      | May 2010      | resident          |
| Tillabéry | Tillabéry      | 14.8 | 0.6 | 1.3  |      | May 2010      | resident          |
| Zinder    | Zinder         | 17.8 | 0.7 | 2.0  |      | May 2010      | resident          |
| Niamey    | Niamey         | 13.3 | 0.3 | 1.2  |      | May 2010      | resident          |

|                                       | GAM   | CMR  | U5MR  | MCV   | Start Date                | Population Status     |
|---------------------------------------|---|--|-------|-------|---------------------------|-----------------------|
| Rabdure                               | 30.0  |  |       |       | January 2000              | IDP-resident-returnee |
| Wajid                                 | 20.5  |  |       |       | February 2000             | IDP-resident-returnee |
| Luuq                                  | 20.0  |  | 6.6   | 36.4  | March 2000                | IDP                   |
| Beledweyne                            | 16.0  |  |       |       | April 2000                | resident              |
| Luuq                                  | 14.9  |  | 5.8   | 79.7  | April 2000                | IDP-resident          |
| <u> </u>                              | 11.4  |  |       |       |                           | IDP                   |
|                                       | 22.0  |  |       |       | •                         | resident-returnee     |
| Burhakaba                             |   |  |       |       | -                         | resident-returnee     |
| Mogadishu                             |   | 0.7  | 7.1   | 73.4  | -                         | IDP                   |
|                                       |   |  | 7     | 7311  |                           | resident              |
|                                       |   |  | 2.0   |       |                           | resident              |
|                                       |   |  | 2.0   |       |                           | resident              |
|                                       |   |  | 1.0   |       |                           | resident              |
|                                       |   |  | 1.0   | 20.0  |                           | IDP-resident-returnee |
|                                       |   |  |       | 36.0  |                           |                       |
|                                       |   |  |       |       |                           | resident              |
|                                       |   |  |       |       |                           | resident              |
|                                       |   |  |       |       | -                         | resident              |
|                                       |   |  |       |       |                           | resident              |
|                                       |   |  |       |       |                           | IDP                   |
|                                       |   |  |       |       | -                         | IDP-resident-returnee |
|                                       |   |  |       |       | ,                         | IDP                   |
|                                       |   |  |       |       | -                         | resident              |
| Rabdure                               | 19.3  |  |       |       |                           | IDP-resident-returnee |
| Burao                                 | 13.6  |  |       |       | September 2001            | IDP-resident          |
| <u> </u>                              | 18.4  |  |       |       | September 2001            | resident              |
| Zeila. Lughaya                        | 26.8  |  |       |       | October 2001              | resident              |
| Beled Hawo                            | 37.1  |  |       |       | December 2001             | IDP-resident          |
| Galcayo                               | 8.2   |  |       |       | March 2002                | IDP-resident          |
| Woqooyi Galbeed                       | 11.8  |  |       |       | April 2002                | IDP-resident          |
| Berdale                               | 17.1  |  |       |       | April 2002                | resident              |
| Sanaag                                | 13.7  |  |       |       | April 2002                | resident              |
| Beledweyne                            | 21.0  |  |       |       | April 2002                | resident              |
| Hargeisa                              | 8.8   |  |       | 22.3  | April 2002                | resident              |
| Bossaso                               | 18.7  |  |       |       | May 2002                  | IDP-refugee           |
| Kandala. Bargal                       | 12.6  |  |       | 66.7  | July 2002                 | resident              |
| Rabdure                               | 14.8  |  |       |       | August 2002               | resident              |
| Beled Hawo                            | 21.5  |  |       |       | September 2002            | IDP-resident          |
| Goldogob                              | 12.5  |  |       | 32.2  | November 2002             | resident              |
|                                       |   |  |       | 50.2  | November 2002             | resident              |
|                                       |   | 1.1  | 2.9   |       |                           | IDP-returnee          |
| -                                     |   |  |       | 69.3  | -                         | IDP-resident          |
| · · · · · · · · · · · · · · · · · · · |   |  |       |       |                           | IDP-resident          |
| ,                                     |   | 0.9  | 1.9   |       |                           | IDP-resident          |
|                                       |   |  |       |       |                           | resident              |
| ,                                     |   |  | 3.3   | 68.0  | -                         | IDP-refugee           |
|                                       |   | 0.8  | 2.0   |       |                           | resident              |
|                                       |   | 0.0  | 2.0   | 01.1  |                           | resident              |
|                                       |   | 1.2  | 3.6   | 25 5  |                           | resident              |
|                                       |   |  |       |       |                           |                       |
| Tayeglow Tayen                        | 15.3  |  |       | 80.2  |                           | IDP-returnee          |
|                                       | 11/)  | 0.7  | 1.3   |       | October 2003              | resident              |
|                                       | Wajid Luuq Beledweyne Luuq Goldogob. Burtinle. Jariban Beled Hawo Burhakaba Mogadishu Bualle Huddur Baidoa Rabdure Burdhubo Dinsor Berdale Bualle Jamame Bossaso Hargeisa Margaga Elder Rabdure Burao Qansadhere Zeila. Lughaya Beled Hawo Galcayo Woqooyi Galbeed Berdale Sanaag Beledweyne Hargeisa Bossaso Kandala. Bargal Rabdure | Wajid         20.5           Luuq         20.0           Beledweyne         16.0           Luuq         14.9           Goldogob. Burtinle. Jariban         11.4           Beled Hawo         22.0           Burhakaba         22.4           Mogadishu         12.9           Bualle         14.7           Huddur         12.6           Baidoa         16.7           Rabdure         13.7           Burdhubo         17.0           Dinsor         14.6           Berdale         12.4           Bualle         8.4           Jamame         14.3           Bossaso         14.8           Hargeisa         16.3           Margaga         15.0           Elder         9.3           Rabdure         19.3           Burao         13.6           Qansadhere         18.4           Zeila. Lughaya         26.8           Beled Hawo         37.1           Galcayo         8.2           Woqooyi Galbeed         11.8           Berdale         17.1           Sanaag         13.7           Beledweyne </td <td>  Wajid</td> <td>  Wajid</td> <td>  Wajid   20.5   6.6   36.4    </td> <td>  Wajid</td> | Wajid | Wajid | Wajid   20.5   6.6   36.4 | Wajid                 |

| Location        |                                       | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|-----------------|---------------------------------------|------|-----|------|------|----------------|-------------------|
| Nugaal          | Burtinle                              | 15.9 |     |      | 52.3 | January 2004   | IDP-resident      |
| Mudug           | Goldogob                              | 14.2 | 0.2 | 0.3  | 34.0 | March 2004     | resident          |
| Middle Juba     | Middle Juba                           | 19.5 | 2.2 | 5.4  |      | April 2004     | resident          |
| Bakool          | Elberde                               | 15.7 | 0.9 | 1.1  |      | April 2004     | resident          |
| Mudug           | Galcayo                               | 9.7  | 0.5 | 1.0  | 49.0 | April 2004     | IDP-resident      |
| Sool            | Sool                                  | 13.7 | 0.9 | 2.9  | 73.0 | May 2004       | resident          |
| Bari            | Bossaso                               | 20.3 | 1.8 | 2.3  | 46.0 | June 2004      | IDP               |
| Benadir         | Mogadishu                             | 15.8 | 0.5 | 0.7  | 46.0 | June 2004      | IDP               |
| Bari            | Gardo. Bender Beila                   | 12.8 | 0.6 | 1.4  | 52.0 | September 2004 | resident          |
| Bari            | Kandala                               | 14.6 | 0.1 | 0.2  | 69.8 | September 2004 | resident          |
| Bay             | Baidoa                                | 16.3 | 0.1 | 0.2  | 41.0 | September 2004 | IDP-resident      |
| Galgadud        | Dusa Mareb. Adado                     | 20.5 | 1.7 | 2.4  | 34.6 | September 2004 | IDP-resident      |
| Lower Juba      | Lower Juba                            |      | 1.7 | 2.4  | 24.0 | October 2004   | resident          |
|                 |                                       | 10.9 | 1.5 | 1.4  |      |                |                   |
| Gedo            | Luuq                                  | 25.4 | 1.5 | 1.4  | 61.0 | October 2004   | IDP-resident      |
| Sool            | Sool                                  | 12.0 | 0.2 | 0.9  |      | November 2004  | resident          |
| Sanaag          | Sanaag                                | 33.9 | 1.8 | 6.5  |      | November 2004  | resident          |
| Mudug           | Hardhere                              | 6.0  | 0.6 | 2.2  |      | May 2005       | resident          |
| Galgadud        | Elder                                 | 6.1  |     | 0.3  |      | May 2005       | resident          |
| Sool            | Huddum. Taleex                        | 10.5 | 1.0 | 3.2  | 65.5 | June 2005      | resident          |
| Benadir         | Mogadishu                             | 16.0 |     |      | 34.0 | August 2005    | IDP               |
| Nugaal          | Dangoroyo. Eyl                        | 8.9  | 0.2 | 1.3  | 41.1 | August 2005    | resident          |
| Mudug           | Goldogob                              | 8.8  | 0.4 | 1.0  | 16.0 | August 2005    | IDP-resident      |
| Woqooyi Galbeed | Hargeisa                              | 7.6  |     |      | 44.7 | September 2005 | resident          |
| Mudug           | Galcayo                               | 19.0 |     |      |      | September 2005 | resident          |
| Togdheer        | Burao                                 | 15.1 | 1.0 | 2.7  |      | October 2005   | IDP-returnee      |
| Sool            | Daami. Saamaley. Farxaskule           | 9.2  | 0.3 | 2.5  |      | October 2005   | resident          |
| Bay             | Qansadhere                            | 19.4 | 0.3 | 1.3  |      | December 2005  | resident          |
| Bakool          | Wajid                                 | 27.1 |     |      | 76.2 | January 2006   | IDP               |
| Bakool          | Wajid                                 | 14.7 | 0.6 | 1.2  | 79.7 | January 2006   | resident          |
| Bakool          | Rabdure                               | 15.9 | 0.9 | 1.5  | 81.0 | January 2006   | resident          |
| Gedo            | Gedo                                  | 23.8 | 1.0 | 2.5  | 60.9 | March 2006     | resident          |
| Woqooyi Galbeed | Berbera                               | 16.3 |     |      | 89.0 | March 2006     | resident          |
| Middle Juba     | Sakow. Bualle                         | 21.9 | 0.6 | 2.0  | 92.5 | April 2006     | resident          |
| Gedo            | Bardera Town                          | 19.0 | 0.8 | 1.7  | 89.7 | April 2006     | resident          |
| Lower Juba      | Afmadow                               | 22.0 | 0.8 | 1.6  | 87.5 | May 2006       | resident          |
| Middle Juba     | Jilib                                 | 16.2 | 0.8 | 2.0  | 97.0 | May 2006       | resident          |
| Togdheer        | Odweine. Durugsi. Ballidling. Buhodle | 9.9  | 0.4 | 0.8  | 72.5 | June 2006      | resident          |
| Bay             | Dinsor                                | 19.8 | 0.7 | 1.1  |      | June 2006      | resident          |
| Bakool          | Huddur                                | 9.3  | 0.3 | 0.3  | 73.3 | June 2006      | resident          |
| Sool            | Sool                                  | 9.0  | 0.5 | 1.4  | 75.7 | August 2006    | resident          |
| Bay             | Berdale                               | 11.5 | 1.3 | 1.5  | 80.2 | September 2006 | resident          |
| Bari            | Kandala. Iskushuban. Alula            | 13.8 | 0.4 | 1.0  | 29.3 | September 2006 | resident          |
| Bari            | Bossaso                               | 15.5 | 0.4 | 1.3  | 58.6 | September 2006 | IDP               |
| Woqooyi Galbeed | Hargeisa                              | 8.1  | 0.4 | 0.8  | 50.0 | October 2006   | resident          |
| Mudug           | Goldogob                              | 11.1 | 0.3 | 0.6  | 24.5 | October 2006   | resident          |
| Sool            | Aynabo                                | 8.9  | 0.5 | 1.3  | 74.1 | November 2006  | resident          |
|                 | •                                     |      |     |      | _    |                |                   |
| Bakool          | Elberde                               | 17.7 | 0.6 | 1.0  | 66.6 | December 2006  | resident          |
| Hiran           | Hiran                                 | 18.2 | 0.5 | 1.5  | 58.9 | February 2007  | resident          |
| Bay             | Dinsor                                | 19.9 | 1.1 | 2.0  | 73.3 | February 2007  | resident          |
| Bakool          | Wajid                                 | 15.6 | 0.6 | 1.6  | 63.7 | February 2007  | resident          |
| Hiran           | Hiran                                 | 15.6 | 0.2 | 0.9  | 51.1 | March 2007     | resident          |

| Location             |                  | GAM          | CMR | U5MR | MCV          | Start Date               | Population Status |
|----------------------|------------------|--------------|-----|------|--------------|--------------------------|-------------------|
| Hiran                | Beledweyne       | 15.4         | 0.6 | 1.4  | 68.9         | March 2007               | resident          |
| Hiran                | Belet Weyn       | 12.6         | 0.6 | 2.2  | 70.5         | March 2007               | IDP-resident      |
| Bay                  | Qansadhere       | 17.9         | 0.7 | 0.5  | 65.1         | March 2007               | resident          |
| Gedo                 | Gedo             | 19.9         | 1.1 | 1.5  | 86.1         | March 2007               | resident          |
| Gedo                 | Gedo             | 16.7         | 1.5 | 2.6  | 29.7         | March 2007               | resident          |
| Gedo                 | Gedo             | 17.7         | 1.1 | 1.6  | 71.4         | March 2007               | IDP-resident      |
| Mudug                | Galcayo          | 21.9         |     |      |              | April 2007               | IDP               |
| Lower Shabelle       | Lower Shabelle   | 17.3         | 1.1 | 1.4  | 31.0         | April 2007               | IDP-resident      |
| Lower Shabelle       | Lower Shabelle   | 17.0         | 1.3 | 2.0  | 26.4         | April 2007               | resident          |
| Bay                  | Burhakaba        | 15.6         | 1.3 | 1.8  | 48.8         | April 2007               | resident          |
| Bay                  | Burhakaba        |              | 1.9 | 2.8  | 35.1         | April 2007               | resident          |
| Nugaal               | Nugaal           | 14.9         | 0.6 | 1.5  | 50.1         | May 2007                 | resident          |
| Lower Juba           | Lower Juba       | 15.6         | 2.0 | 3.0  | 75.8         | May 2007                 | resident          |
| Lower Juba           | Lower Juba       | 13.4         | 0.8 | 2.5  | 26.5         | May 2007                 | resident          |
| Lower Juba           | Lower Juba       | 10.3         | 1.1 | 2.5  | 48.6         | May 2007                 | resident          |
| Woqooyi Galbeed      | Hargeisa         | 10.3         | 0.9 | 0.5  | 58.3         | August 2007              | IDP               |
| Togdheer             | Burao town       | 15.8         |     |      | 2.30         | August 2007              | IDP               |
| Woqooyi Galbeed      | Berbera          | 16.0         |     |      | 78.6         | August 2007              | IDP               |
| Lower Shabelle       | Lower Shabelle   | 17.6         | 0.4 | 1.0  | 22.8         | September 2007           | resident          |
| Lower Shabelle       | Merka            | 15.2         | 1.4 | 3.0  | 67.6         | September 2007           | IDP               |
| Galgadud             | Galgadud         | 15.9         | 0.8 | 1.8  | 0710         | September 2007           | resident          |
| Lower Shabelle       | Lower Shabelle   | 14.0         | 1.3 | 2.0  | 47.4         | October 2007             | resident          |
| Galgadud             | Galgadud         | 17.2         | 0.4 | 0.9  | 17.1         | October 2007             | resident          |
| Gedo                 | Gedo. Wajid      | 14.3         | 0.6 | 1.6  | 56.0         | October 2007             | resident          |
| Bay                  | Bay              | 20.6         | 0.9 | 1.2  | 51.0         | November 2007            | resident          |
| Lower Juba           | Lower Juba       | 15.0         | 0.9 | 1.8  | 28.3         | November 2007            | resident          |
| Lower Juba           | Lower Juba       | 14.7         | 0.8 | 1.1  | 48.7         | November 2007            | resident          |
| Lower Juba           | Lower Juba       | 14.7         | 0.7 | 1.7  | 69.6         | November 2007            | resident          |
| Bakool               | Huddur           | 12.8         | 0.6 | 1.0  | 45.2         | November 2007            | resident          |
| Bakool               | Bakool           | 19.2         | 1.0 | 1.4  | 31.3         | November 2007            | resident          |
| Bari                 | Bossaso          | 23.3         | 0.8 | 2.1  | 31.3         | November 2007            | IDP-refugee       |
| Galgadud             | Dusa Mareb       | 12.4         | 1.0 | 1.9  | 55.1         | December 2007            | resident          |
| Bakool               | Rabdure. Elberde | 24.1         | 0.7 | 1.1  | 32.6         | April 2008               | resident          |
| Middle Shabelle      | Cadale           | 13.9         | 1.3 | 2.4  | 27.1         | April 2008               | resident          |
| Nugaal               | Garowe           | 19.8         | 0.4 | 0.3  | 2.0          | April 2008               | IDP               |
| Mudug                | Galcayo          | 21.3         | 0.4 | 0.7  | 31.0         | April 2008               | IDP               |
| Gedo                 | Gedo             | 22.8         | 0.4 | 1.5  |              |                          | resident          |
| Gedo                 | Gedo             | 18.8         | 1.4 | 2.1  | 77.0<br>39.3 | April 2008               | resident          |
|                      | Gedo             | 21.5         |     | 0.9  | 81.1         | April 2008<br>April 2008 | resident          |
| Gedo                 |                  |              | 0.8 |      |              | April 2008               |                   |
| Galgadud<br>Galgadud | Galgadud         | 19.3<br>19.1 | 0.6 | 1.4  | 20.9         | April 2008               | resident          |
| Lower Shabelle       | Galgadud         |              | 0.6 | 1.4  | 8.8          | <u> </u>                 | IDP               |
|                      | Lower Shabelle   | 15.5         | 1.0 | 1.5  | 63.5         | May 2008                 |                   |
| Lower Shabelle       | Lower Shabelle   | 19.8         | 1.0 | 1.4  | 42.2         | May 2008                 | resident          |
| Lower Shabelle       | Lower Shabelle   | 13.2         | 1.4 | 2.2  | 61.7         | May 2008                 | resident          |
| Hiran                | Hiran            | 15.9         | 0.6 | 0.6  | 42.1         | May 2008                 | IDP-resident      |
| Hiran                | Hiran            | 17.7         | 0.7 | 1.8  | 65.9         | May 2008                 | IDP-resident      |
| Lower Juba           | Lower Juba       | 14.0         | 0.7 | 0.7  | 43.4         | June 2008                | resident          |
| Lower Juba           | Lower Juba       | 21.0         | 1.0 | 1.8  | 49.4         | June 2008                | resident          |
| Lower Juba           | Lower Juba       | 16.3         | 1.6 | 2.7  | 73.4         | June 2008                | resident          |
| Bakool               | Bakool           | 25.2         | 0.6 | 1.7  |              | July 2008                | resident          |
| Awdal                | Awdal            | 20.7         | 1.1 | 1.1  | 43.0         | September 2008           | IDP-resident      |

| Location        |                                 | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|-----------------|---------------------------------|------|-----|------|------|----------------|-------------------|
| Sool            | Sool                            | 9.9  | 0.6 | 1.6  |      | September 2008 | resident          |
| Lower Shabelle  | Merka                           | 12.3 | 0.7 | 1.7  |      | October 2008   | IDP               |
| Lower Shabelle  | Lower Shabelle                  | 13.1 | 0.9 | 1.8  |      | October 2008   | resident          |
| Lower Shabelle  | Lower Shabelle                  | 10.8 | 1.0 | 2.1  |      | October 2008   | resident          |
| Bari            | Bossaso                         | 27.9 | 1.0 | 3.0  |      | November 2008  | IDP               |
| Galgadud        | Galgadud                        | 21.9 | 0.9 | 1.8  | 15.7 | November 2008  | resident          |
| Galgadud        | Galgadud                        | 18.9 | 0.6 | 1.9  | 23.8 | November 2008  | resident          |
| Lower Juba      | Lower Juba                      | 14.9 | 0.9 | 1.8  | 44.0 | December 2008  | resident          |
| Lower Juba      | Lower Juba                      | 14.3 | 1.2 | 2.3  | 53.4 | December 2008  | IDP-resident      |
| Lower Juba      | Lower Juba                      | 12.6 | 1.1 | 3.3  | 69.0 | December 2008  | IDP-resident      |
| Gedo            | Gedo                            | 25.4 | 0.7 | 1.1  | 63.4 | December 2008  | resident          |
| Gedo            | Gedo                            |      | 0.7 | 1.0  | 20.4 | December 2008  | resident          |
| Awdal           | Awdal                           | 13.6 |     |      |      | February 2009  | IDP-resident      |
| Nugaal          | Nugaal                          | 9.8  |     |      |      | February 2009  | IDP-resident      |
| Lower Juba      | Lower Juba                      | 16.5 |     |      |      | February 2009  | IDP-resident      |
| Shabelle        | Lower Shabelle. Middle Shabelle | 16.5 |     |      |      | February 2009  | IDP-resident      |
| Hiran           | Hiran                           | 15.0 |     |      |      | March 2009     | resident          |
| Hiran           | Hiran                           | 24.5 | 0.6 | 1.4  |      | March 2009     | resident          |
| Hiran           | Hiran                           | 15.9 | 0.0 | 1.6  |      | March 2009     | resident          |
| Togdheer        | Burao town                      | 18.8 | 0.4 | 0.6  |      | March 2009     | IDP               |
| Woqooyi Galbeed | Berbera                         | 17.9 | 0.6 | 1.0  |      | March 2009     | IDP               |
| . ,             |                                 |      | 1.0 |      |      |                |                   |
| Lower Shabelle  | Lower Shabelle                  | 20.0 | 1.0 | 2.4  |      | April 2009     | resident          |
| Lower Shabelle  | Lower Shabelle                  | 10.3 | 0.7 | 0.0  |      | April 2009     | resident          |
| Galgadud        | Galgadud                        | 18.0 | 0.7 | 0.9  |      | April 2009     | resident          |
| Galgadud        | Galgadud                        | 17.3 | 0.6 | 1.4  |      | April 2009     | resident          |
| Galgadud        | Galgadud                        | 14.9 | 0.2 | 0.3  |      | April 2009     | resident          |
| Galgadud        | Galgadud                        | 6.6  |     |      |      | April 2009     | resident          |
| Вау             | Bay                             | 23.9 | 0.7 | 1.2  |      | May 2009       | resident          |
| Bakool          | Bakool                          | 14.9 | 0.5 | 1.0  |      | May 2009       | resident          |
| Bakool          | Bakool                          | 25.1 | 0.6 | 0.8  |      | May 2009       | resident          |
| Nugaal          | Nugaal                          | 17.9 | 0.4 | 1.1  |      | May 2009       | resident          |
| Nugaal          | Nugaal                          | 15.0 | 0.2 | 0.8  |      | May 2009       | resident          |
| Awdal           | Awdal                           | 13.3 | 0.5 | 0.8  |      | May 2009       | resident          |
| Sanaag          | Sanaag                          | 19.1 | 0.3 | 1.1  |      | May 2009       | resident          |
| Sanaag          | Sanaag                          | 14.8 | 0.2 | 0.8  |      | May 2009       | resident          |
| Gedo            | Gedo                            | 19.9 | 1.2 | 3.8  |      | June 2009      | resident          |
| Gedo            | Gedo                            | 23.4 | 0.8 | 2.9  |      | June 2009      | resident          |
| Gedo            | Gedo                            | 22.9 | 0.8 | 2.9  |      | June 2009      | resident          |
| Lower Juba      | Lower Juba                      | 20.2 | 0.8 | 2.2  |      | June 2009      | resident          |
| Lower Juba      | Lower Juba                      | 19.9 | 0.2 | 0.4  |      | June 2009      | resident          |
| Lower Juba      | Lower Juba                      | 11.3 | 1.2 | 2.6  |      | June 2009      | resident          |
| Bari            | Bossaso                         | 15.2 |     |      |      | June 2009      | resident          |
| Bari            | Bossaso                         | 20.7 | 0.4 | 0.9  |      | June 2009      | IDP               |
| Mudug           | Galcayo                         | 20.0 | 0.6 | 0.4  |      | June 2009      | IDP               |
| Nugaal          | Garowe                          | 24.5 | 0.5 | 1.3  |      | June 2009      | IDP               |
| Bari            | Qardho                          | 18.4 | 0.3 | 0.2  |      | June 2009      | IDP               |
| Lower Shabelle  | Merka. Afgoye                   | 15.8 | 1.3 | 2.3  |      | October 2009   | IDP               |
| Lower Shabelle  | Merka                           | 15.9 | 1.3 | 2.3  |      | October 2009   | IDP               |
| Middle Shabelle | Middle Shabelle                 | 12.5 | 0.9 | 1.1  |      | October 2009   | resident          |
| Middle Shabelle | Middle Shabelle                 | 10.2 | 0.6 | 0.8  |      | October 2009   | resident          |
| Hiran           | Hiran                           | 21.2 | 0.5 | 0.8  |      | October 2009   | resident          |

| Location        |               | GAM  | CMR | U5MR | MCV  | Start Date    | Population Status |
|-----------------|---------------|------|-----|------|------|---------------|-------------------|
| Hiran           | Hiran         | 23.4 | 0.5 | 0.8  |      | October 2009  | resident          |
| Hiran           | Hiran         | 18.8 |     |      |      | October 2009  | resident          |
| Galgadud        | Galgadud      | 19.1 | 0.9 | 2.0  |      | October 2009  | resident          |
| Galgadud        | Galgadud      | 19.4 | 0.9 | 0.6  |      | October 2009  | resident          |
| Galgadud        | Galgadud      | 19.8 | 0.8 | 1.6  |      | October 2009  | resident          |
| Mudug           | Mudug         | 21.3 | 0.8 | 0.4  |      | October 2009  | resident          |
| Sanaag          | Sanaag        | 5.9  |     |      |      | October 2009  | resident          |
| Nugaal          | Nugaal        | 6.7  |     |      |      | October 2009  | resident          |
| Nugaal          | Nugaal        | 5.1  |     |      |      | October 2009  | resident          |
| Nugaal          | Nugaal        | 7.1  |     |      |      | October 2009  | resident          |
| Mudug           | Galcayo       | 23.7 |     |      |      | October 2009  | IDP               |
| Bari            | Bossaso       | 17.5 |     |      |      | October 2009  | IDP               |
| Sool            | Sool          | 9.1  |     |      |      | October 2009  | resident          |
| Awdal           | Awdal. Sanaag | 6.8  |     |      |      | October 2009  | resident          |
| Sanaag          | Sanaag        | 5.9  |     |      |      | October 2009  | resident          |
| Woqooyi Galbeed | Hargeisa      | 9.4  |     |      |      | October 2009  | resident          |
| Nugaal          | Nugaal        | 7.1  |     |      |      | October 2009  | resident          |
| Togdheer        | Togdheer      | 10.4 | 0.7 | 1.0  |      | October 2009  | resident          |
| Togdheer        | Togdheer      | 16.1 | 0.6 | 1.1  |      | October 2009  | resident          |
| Awdal           | Awdal         | 8.7  |     |      | 61.1 | October 2009  | resident          |
| Woqooyi Galbeed | Hargeisa      | 11.4 |     |      |      | October 2009  | IDP               |
| Togdheer        | Burao town    | 13.9 |     |      |      | October 2009  | IDP               |
| Woqooyi Galbeed | Berbera       | 19.2 |     |      |      | October 2009  | IDP               |
| Gedo            | Gedo          | 23.4 | 0.5 | 1.3  |      | November 2009 | resident          |
| Gedo            | Gedo          | 15.9 |     |      |      | November 2009 | resident          |
| Gedo            | Gedo          | 17.8 |     |      |      | November 2009 | resident          |
| Lower Juba      | Lower Juba    | 23.5 | 2.2 | 3.0  |      | November 2009 | resident          |
| Lower Juba      | Lower Juba    | 15.4 |     |      |      | November 2009 | resident          |
| Lower Juba      | Lower Juba    | 8.5  |     |      |      | November 2009 | resident          |
| Вау             | Bay           | 21.7 | 0.6 | 0.7  |      | November 2009 | resident          |
| Bakool          | Bakool        | 13.5 |     |      |      | November 2009 | resident          |
| Bakool          | Bakool        | 29.2 |     |      |      | November 2009 | resident          |

| Location             |                      | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status     |
|----------------------|----------------------|------|-----|------|------|----------------|-----------------------|
| Lakes                | Rumbek               | 8.5  | 0.9 | 0.7  |      | February 2000  | IDP-resident          |
| Lakes                | Yirol                | 11.3 | 0.4 | 0.3  |      | February 2000  | IDP-resident          |
| North Bahr-El-Ghazal | Aweil West           | 11.0 |     |      |      | April 2000     | resident              |
| North Darfur         | El Tweisha. El Laeit | 19.5 | 3.7 | 8.5  | 26.3 | April 2000     | IDP                   |
| North Darfur         | El Tweisha           | 13.0 | 0.7 | 1.0  | 84.9 | April 2000     | resident              |
| Unity                | Padeah               | 28.6 | 1.5 | 1.4  |      | May 2000       | resident              |
| Central Equatoria    | Juba                 | 18.4 |     |      | 81.0 | May 2000       | IDP-resident          |
| West Bahr-El-Ghazal  | Wau                  | 9.2  |     |      |      | May 2000       | IDP-resident-returnee |
| Unity                | Bentiu               | 28.6 |     | 2.7  |      | June 2000      | IDP-resident-returned |
| Unity                | Rubkoana             | 30.0 |     | 3.3  | 21.6 | June 2000      | IDP-resident-returned |
| West Bahr-El-Ghazal  | Marial Agieh         | 6.1  |     | 1.5  | 67.3 | July 2000      | IDP                   |
| West Bahr-El-Ghazal  | Momoi                | 6.0  |     | 1.4  |      | July 2000      | IDP                   |
| West Bahr-El-Ghazal  | Bar Yar              | 10.9 |     | 1.7  | 60.2 | August 2000    | IDP                   |
| Jonglei              | Akobo                | 25.2 |     | 1,   | 00.2 | September 2000 | IDP-resident          |
| Central Equatoria    | Juba                 | 8.6  |     | 1.1  | 82.1 | November 2000  | IDP-resident          |
| West Bahr-El-Ghazal  | Wau                  | 8.2  |     | 1.4  | 60.9 | December 2000  | IDP-resident          |
| North Bahr-El-Ghazal | Wunrok. Aweng        | 26.0 | 0.5 | 0.8  | 00.9 |                | IDP-resident          |
|                      | Akobo                | 29.1 | 0.5 | 0.8  | 15.4 | January 2001   | IDP-resident          |
| Jonglei              |                      |      |     |      | 15.4 | January 2001   |                       |
| Unity                | Bentiu               | 30.0 |     | 4.2  |      | January 2001   | IDP-resident          |
| Unity                | Bentiu               | 30.7 |     | 4.2  | 66.0 | January 2001   | IDP-resident-returne  |
| Unity                | Rubkoana             | 26.0 |     |      | 66.0 | January 2001   | IDP-resident-returne  |
| Unity                | Pariang              | 28.7 |     | 2.7  | 64.6 | January 2001   | IDP-resident-returne  |
| Unity                | Komagon              | 16.7 |     | 1.9  | 72.2 | January 2001   | IDP-resident-returne  |
| Unity                | Tor                  | 17.3 |     | 2.0  | 97.3 | January 2001   | resident-returnee     |
| North Bahr-El-Ghazal | Aweil East           | 15.5 |     |      |      | February 2001  | IDP-resident          |
| North Bahr-El-Ghazal | Ayat                 | 13.9 | 0.9 | 2.2  |      | February 2001  | IDP-returnee          |
| Jonglei              | Old Fangak           | 20.4 |     |      | 4.0  | March 2001     | resident              |
| Jonglei              | Mareang              | 21.3 |     |      | 0.9  | March 2001     | resident              |
| North Darfur         | North Darfur         | 31.3 |     |      |      | March 2001     | resident              |
| North Darfur         | North Darfur         | 26.1 |     |      |      | March 2001     | resident              |
| North Darfur         | North Darfur         | 18.9 |     |      |      | March 2001     | resident              |
| North Darfur         | North Darfur         | 20.8 |     |      |      | March 2001     | resident              |
| North Darfur         | North Darfur         | 20.3 |     |      |      | March 2001     | resident              |
| North Darfur         | El Fasher            | 26.1 |     |      |      | March 2001     | IDP                   |
| Warab                | Kuajok               | 15.5 |     |      | 0.9  | April 2001     | resident              |
| Unity                | Bentiu               | 28.9 |     |      | 76.3 | May 2001       | IDP-resident          |
| Unity                | Rubkoana             | 38.4 |     |      | 76.2 | May 2001       | IDP-resident          |
| North Bahr-El-Ghazal | Aweil East           | 28.9 |     |      |      | May 2001       | IDP-resident          |
| North Bahr-El-Ghazal | Aweil East           | 28.9 |     |      |      | June 2001      | IDP-resident          |
| Warab                | Paweng               | 7.9  |     |      |      | June 2001      | resident              |
| Central Equatoria    | Juba                 | 12.1 |     | 2.3  | 64.4 | June 2001      | IDP-resident          |
| Central Equatoria    | Juba                 | 9.3  |     | 0.7  | 53.3 | June 2001      | IDP-resident          |
| North Bahr-El-Ghazal | Aweil South          | 21.9 |     | 3.9  | 13.0 | July 2001      | IDP-resident          |
| North Bahr-El-Ghazal | Aweil East           | 26.4 |     | 6.5  | 41.1 | August 2001    | IDP                   |
| North Bahr-El-Ghazal |                      | 15.9 |     |      | 61.0 |                | IDP-resident          |
|                      | Aweil                |      | 2.0 | 1.2  |      | August 2001    |                       |
| Jonglei              | Old Fangak           | 28.6 | 3.9 | 7.5  | 1.3  | September 2001 | resident              |
| Unity                | Rubkoana             | 19.8 |     | 2.6  | 50.1 | September 2001 | IDP-resident          |
| North Bahr-El-Ghazal | Aweil South          | 25.8 |     | 3.7  | 6.5  | September 2001 | IDP-resident          |
| North Bahr-El-Ghazal | Malual East          | 19.1 |     | 2.2  | 33.3 | October 2001   | resident              |
| Jonglei              | Mareang              | 18.1 | 0.7 | 1.4  | 0.3  | October 2001   | IDP-resident          |
| Central Equatoria    | Juba                 | 8.9  |     | 1.1  | 69.4 | November 2001  | IDP-resident          |
| Central Equatoria    | Juba                 | 8.2  |     | 0.4  | 56.2 | November 2001  | IDP-resident          |
| Jonglei              | Nyandin              | 18.1 | 0.7 | 1.4  | 0.3  | November 2001  | IDP-resident          |
| Jonglei              | Toch. Mareang        | 16.8 | 8.9 | 25.3 | 1.0  | November 2001  | resident              |

| Location             |                 | GAM  | CMR | U5MR | MCV  | Start Date                 | Population Status |
|----------------------|-----------------|------|-----|------|------|----------------------------|-------------------|
| West Bahr-El-Ghazal  | Wau             | 11.6 |     | 2.0  | 87.1 | December 2001              | IDP-resident      |
| North Bahr-El-Ghazal | Wunrok. Turalei | 16.9 | 0.1 | 0.2  |      | December 2001              | resident          |
| North Darfur         | Kutum           | 13.6 |     |      |      | December 2001              | IDP-resident      |
| North Darfur         | Al Malha        | 18.5 |     |      |      | January 2002               | resident          |
| Unity                | Nyal            | 16.4 | 0.4 | 0.7  |      | January 2002               | resident          |
| West Bahr-El-Ghazal  | Easter Bank     | 18.4 |     | 1.1  | 57.2 | January 2002               | IDP               |
| West Bahr-El-Ghazal  | Marial Agieh    | 14.3 |     | 0.7  | 72.9 | January 2002               | IDP               |
| West Bahr-El-Ghazal  | Bar Yar         | 15.7 |     | 0.0  | 70.2 | January 2002               | IDP               |
| North Bahr-El-Ghazal | Aweil South     | 17.8 |     | 2.0  | 7.2  | January 2002               | resident          |
| North Bahr-El-Ghazal | Malual East     | 25.0 | 0.9 | 2.6  | 35.9 | February 2002              | resident          |
| Jonglei              | Akobo           | 32.0 | 1.2 | 1.0  | 49.8 | February 2002              | resident          |
| Kassala              | Girba           | 10.2 |     |      |      | February 2002              | refugee           |
| Kassala              | Kilo 26         | 9.8  |     |      |      | February 2002              | refugee           |
| Kassala              | Wad Sherifey    | 10.2 |     |      |      | February 2002              | refugee           |
| Al-Gadarif           | Karkora         | 12.9 |     |      |      | February 2002              | refugee           |
| Kassala              | Abuda           | 9.5  |     |      |      | February 2002              | refugee           |
| Al-Gezira            | Fau 5           | 9.0  |     |      |      | February 2002              | refugee           |
| Kassala              | Wad Hileaw      | 10.2 |     |      |      | February 2002              | refugee           |
| Kassala              | Shagarab        | 15.8 |     |      |      | February 2002              | refugee           |
| Sinnar               | Suki            | 11.3 |     |      |      | February 2002              | refugee           |
| Kassala              | Aburakham       | 7.5  |     |      |      | February 2002              | refugee           |
| Kassala              | Um Ali          | 5.4  |     |      |      | February 2002              | refugee           |
| Al-Gadarif           | Hawata          | 13.2 |     |      |      | February 2002              | refugee           |
| Al-Gadarif           | Mafaza          | 5.8  |     |      |      | February 2002              | refugee           |
| Al-Gadarif           | Um Sagata       | 10.4 |     |      |      | February 2002              | refugee           |
| Upper Nile           | Old Fangak      | 30.3 | 1.1 | 2.2  | 0.5  | February 2002              | resident          |
| North Darfur         | Al Malha        | 18.5 |     |      |      | March 2002                 | resident          |
| Jonglei              | Atar            | 31.0 | 3.5 |      | 8.0  | March 2002                 | IDP-resident      |
| Jonglei              | Old Fangak      | 30.3 | 1.1 | 2.2  | 0.5  | March 2002                 | resident          |
| Warab                | Paweng          | 15.0 |     |      |      | March 2002                 | resident          |
| Unity                | Bentiu          | 21.0 |     | 1.3  | 81.7 | March 2002                 | IDP-resident      |
| Unity                | Rubkoana        | 24.3 |     | 1.0  | 75.5 | March 2002                 | IDP-resident      |
| Upper Nile           | Atar            | 31.0 | 3.5 | 6.0  | 8.0  | March 2002                 | resident          |
| Jonglei              | Mareang         | 23.1 | 6.7 | 9.2  | 1.0  | April 2002                 | IDP-resident      |
| Jonglei              | Padak           | 37.7 | 0.6 | 1.7  | 81.2 | April 2002                 | IDP-resident      |
| Jonglei              | Dirror          | 39.9 | 1.1 | 2.2  |      | April 2002                 | resident          |
| Jonglei              | Padak           | 37.7 | 0.6 | 1.7  | 81.2 | April 2002                 | IDP-resident      |
| Unity                | Bentiu          | 21.1 | 0.0 | 1.1  | 73.1 | June 2002                  | IDP-resident      |
| Unity                | Rubkoana        | 23.4 |     | 0.7  | 76.7 | June 2002                  | IDP-resident      |
| Jonglei              | Nyrol           | 28.4 | 7.2 | 15.0 | 14.8 | June 2002                  | IDP-resident      |
| Upper Nile           | Malakal         | 22.9 |     | 0.7  |      | July 2002                  | IDP-resident      |
| Kassala              | Kassala         | 17.6 |     | 0.5  |      | July 2002                  | IDP               |
| Kassala              | Girba           | 22.6 |     | 0.5  |      | July 2002                  | refugee           |
| Kassala              | Kilo 26         | 19.2 |     |      |      | July 2002                  | refugee           |
| Kassala              | Wad Sherifey    | 17.2 |     |      |      | July 2002                  | refugee           |
| Al-Gadarif           | Karkora         | 19.4 |     |      |      | July 2002                  | refugee           |
| Kassala              | Shagarab        | 19.7 |     |      |      | July 2002<br>July 2002     | refugee           |
| Jonglei              | Keew            | 19.7 | 3.9 | 1.6  | 57.5 | July 2002<br>July 2002     | IDP-resident      |
| Jonglei<br>Jonglei   | Old Fangak      | 34.1 | 1.4 | 4.0  | 8.3  | August 2002                | IDP-resident      |
| Jonglei<br>Jonglei   | Jeich Jeich     | 37.5 | 7.5 | 11.7 | 28.5 | August 2002<br>August 2002 | resident          |
| Upper Nile           |                 |      |     |      | 8.3  |                            | resident          |
| ••                   | Old Fangak      | 34.1 | 1.4 | 4.0  | 0.3  | August 2002                |                   |
| North Darfur         | Al Malha Pawana | 19.5 |     |      |      | October 2002               | resident          |
| Warab                | Paweng          | 18.4 |     |      |      | October 2002               | resident          |

| Location                   |                            | GAM  | CMR  | U5MR | MCV  | Start Date     | Population Status     |
|----------------------------|----------------------------|------|------|------|------|----------------|-----------------------|
| Unity                      | Bentiu                     | 20.1 |      | 0.8  |      | November 2002  | IDP-resident          |
| Unity                      | Rubkoana                   | 19.0 |      | 0.7  |      | November 2002  | IDP-resident          |
| Central Equatoria          | Juba                       | 9.4  |      | 0.8  |      | November 2002  | IDP-resident          |
| Central Equatoria          | Juba                       | 7.6  |      | 0.2  |      | November 2002  | IDP-resident          |
| Upper Nile                 | Panomdit. Chuei            | 23.4 | 10.0 | 25.0 | 19.6 | January 2003   | resident              |
| West Bahr-El-Ghazal        | Wau                        | 14.4 |      | 1.2  | 75.2 | January 2003   | IDP-resident          |
| West Bahr-El-Ghazal        | Easter Bank                | 24.5 |      | 1.4  | 54.2 | January 2003   | IDP                   |
| West Bahr-El-Ghazal        | Marial Agieh               | 23.4 |      | 0.4  | 49.2 | January 2003   | IDP                   |
| West Bahr-El-Ghazal        | Bar Yar                    | 16.7 |      | 1.3  | 74.9 | January 2003   | IDP                   |
| West Bahr-El-Ghazal        | Salvation                  | 12.1 |      | 0.0  | 62.1 | January 2003   | IDP                   |
| Jonglei                    | Jalle. Baidit              | 20.8 | 0.6  | 2.0  | 29.4 | February 2003  | resident              |
| Jonglei                    | Old Fangak                 | 35.9 | 5.3  | 9.4  | 32.5 | February 2003  | IDP-resident          |
| Upper Nile                 | Old Fangak                 | 35.9 | 5.3  | 9.4  | 32.5 | February 2003  | resident              |
| North Darfur               | Al Malha                   | 15.5 |      |      |      | March 2003     | resident              |
| North Bahr-El-Ghazal       | Akoc. Panyok               | 33.1 | 0.5  | 0.3  |      | March 2003     | resident              |
| Upper Nile                 | Pagak                      | 23.9 | 3.7  | 7.8  | 5.4  | March 2003     | IDP-resident-returnee |
| North Bahr-El-Ghazal       | Ayat. Aroyo. Malual Centre | 24.3 | 1.1  | 2.5  |      | March 2003     | IDP-resident          |
| Warab                      | Pathuon. Toch              | 32.0 | 0.4  | 0.2  |      | April 2003     | resident              |
| Warab                      | Pathuon                    | 29.3 |      |      |      | April 2003     | resident              |
| Warab                      | Toch                       | 35.3 |      |      |      | April 2003     | resident              |
| Warab                      | Pagol. Thiet               | 20.1 | 0.7  | 0.3  |      | April 2003     | resident              |
| Upper Nile                 | Tonga. Fashoda             | 18.4 |      |      | 38.4 | April 2003     | IDP-resident          |
| Upper Nile                 | Maiwut                     | 23.9 | 3.7  | 7.8  | 5.4  | April 2003     | IDP-resident          |
| Warab                      | Warab                      | 24.0 |      |      |      | April 2003     | resident              |
| Warab                      | Thiet                      | 23.2 |      |      |      | April 2003     | resident              |
| Warab                      | Pagol                      | 19.2 |      |      |      | April 2003     | resident              |
| Warab                      | Tonj                       | 15.8 |      |      |      | April 2003     | resident              |
| Jonglei                    | Dirror                     | 20.3 | 1.7  | 1.0  |      | April 2003     | resident              |
| Warab                      | Paweng. Makuac             | 22.9 | 1.6  | 1.8  |      | April 2003     | resident              |
| Jonglei                    | Lokongole                  | 32.5 | 2.6  | 6.3  | 0.3  | April 2003     | IDP-resident          |
| Jonglei                    | Nyrol / Langkien           | 28.8 |      |      | 9.3  | May 2003       | IDP-resident          |
| Upper Nile                 | Maban                      | 13.1 | 4.4  | 8.9  | 0.0  | July 2003      | IDP-resident          |
| East Equatoria             | Lafon                      | 32.0 | 1.1  | 0.5  | 0.0  | July 2003      | resident              |
| Unity                      | Gumriak                    | 15.7 | 3.9  | 13.0 | 39.5 | August 2003    | IDP-resident          |
| North Darfur               | El Fasher                  | 21.5 | 1.0  | 15.0 | 96.3 | August 2003    | resident              |
| North Darfur               | Um Kedada                  | 22.9 | 1.0  | 1.8  | 70.5 | August 2003    | resident              |
| North Darfur               | Al Malha                   | 25.0 |      | 2.5  | 98.5 | September 2003 | resident              |
| Jonglei                    | Mareang                    | 17.8 | 5.4  | 8.4  | 12.3 | September 2003 | resident              |
| Upper Nile                 | Nyadin Boma                | 19.4 | 5.4  | 7.8  | 12.8 | September 2003 | IDP-resident          |
| Upper Nile                 | Mareang                    | 17.8 | 5.4  | 8.4  | 12.3 | September 2003 | IDP-resident          |
| North Darfur               | Korma. Tawilla             | 17.6 | 1.8  | 0.1  | 98.3 | September 2003 | resident              |
| Jonglei                    | Nyandin                    | 19.4 | 5.4  | 7.8  | 70.5 | October 2003   | IDP-resident          |
| North Bahr-El-Ghazal       | Wathmok. Mangargier        | 16.6 | 3.1  | 7.0  | 25.6 | October 2003   | resident              |
| North Bahr-El-Ghazal       | Malual East                | 16.2 |      |      | 39.8 | October 2003   | resident              |
| Upper Nile                 | Atar                       | 12.1 | 1.5  | 0.9  | 6.2  | October 2003   | resident              |
| North Darfur               | Umm Barro                  | 18.6 | 1.5  | 1.4  | 61.3 | October 2003   | resident              |
| Jonglei                    | Alam. Atar. Piji. Duk      | 12.1 | 1.5  | 0.9  | 01.3 | November 2003  | resident              |
| Unity                      | Bentiu                     | 18.0 | 1.5  | 0.5  | 74.7 | November 2003  | IDP-resident          |
|                            | Rubkoana                   | 19.0 |      | 1.2  | 75.1 | November 2003  | IDP-resident          |
| Unity North Bahr-El-Ghazal | Aweil North                | 12.9 | 0.0  | 1.2  | 73.1 |                |                       |
|                            |                            |      | 0.8  | 1.7  | 61.2 | November 2003  | IDP-resident-returne  |
| North Darfur               | Dar Zagawa                 | 18.6 |      | 1.3  | 61.3 | November 2003  | resident              |
| North Bahr-El-Ghazal       | Mangok. Yargot             | 13.0 |      |      |      | December 2003  | resident              |
| North Bahr-El-Ghazal       | Akoc                       | 21.0 |      |      | =0 - | December 2003  | resident              |
| West Bahr-El-Ghazal        | Wau                        | 9.4  |      | 1.3  | 78.9 | January 2004   | IDP-resident          |

| Location             |                                   | GAM  | CMR | U5MR | MCV  | Start Date    | Population Status    |
|----------------------|-----------------------------------|------|-----|------|------|---------------|----------------------|
| West Bahr-El-Ghazal  | Easter Bank                       | 16.2 |     | 0.5  | 47.3 | January 2004  | IDP                  |
| West Bahr-El-Ghazal  | Bar Yar                           | 14.4 |     | 0.9  | 62.0 | January 2004  | IDP                  |
| West Bahr-El-Ghazal  | Marial Agieh                      | 19.6 |     | 0.5  | 61.1 | January 2004  | IDP                  |
| West Bahr-El-Ghazal  | Salvation                         | 5.9  | 0.0 |      | 81.2 | January 2004  | IDP                  |
| Kassala              | Kassala                           | 12.1 |     |      | 75.5 | January 2004  | IDP                  |
| East Equatoria       | Kapoeta                           | 19.1 | 1.5 | 3.4  | 7.4  | January 2004  | resident             |
| Jonglei              | Wuror                             | 22.2 |     |      |      | January 2004  | resident             |
| North Bahr-El-Ghazal | Malual East                       | 13.6 |     |      |      | January 2004  | resident             |
| North Bahr-El-Ghazal | Wathmok                           | 13.2 |     |      |      | January 2004  | resident             |
| West Bahr-El-Ghazal  | Wau                               | 9.4  |     | 1.3  | 78.9 | January 2004  | IDP-resident         |
| Jonglei              | Old Fangak                        | 14.0 | 1.3 |      | 21.7 | February 2004 | resident             |
| Kassala              | Kassala                           | 15.7 | 0.3 | 0.6  |      | February 2004 | IDP                  |
| Kassala              | Kassala                           | 19.6 |     |      |      | February 2004 | IDP                  |
| Upper Nile           | Old Fangak                        | 14.0 | 1.3 |      | 21.7 | February 2004 | IDP-resident         |
| North Darfur         | Kutum                             | 12.6 |     | 2.0  |      | February 2004 | IDP-resident         |
| North Bahr-El-Ghazal | Ayat. Ariath. Mariam. Malual East | 19.6 | 0.9 | 1.8  |      | February 2004 | IDP-resident         |
| West Darfur          | Wade Saleh                        | 21.5 | 3.6 | 5.2  | 67.0 | March 2004    | IDP-resident         |
| Jonglei              | Manejang                          |      | 0.7 |      | 83.7 | March 2004    | IDP-resident         |
| Upper Nile           | Keew Boma. Juaibor Boma           | 11.6 | 0.7 |      | 83.7 | March 2004    | IDP-resident-returne |
| North Darfur         | Al Malha                          | 26.1 |     |      |      | April 2004    | resident             |
| West Darfur          | Zalingei                          | 23.4 | 2.2 | 1.8  |      | April 2004    | IDP                  |
| Warab                | Ananatak. Paweng. Akop            | 21.5 | 0.2 | 0.6  | 18.9 | April 2004    | resident             |
| North Darfur         | Al Malha                          | 33.4 |     | 0.6  | 30.9 | May 2004      | resident             |
| West Darfur          | Murnei                            | 20.6 | 3.4 | 1.6  |      | May 2004      | IDP                  |
| Jonglei              | Lokongole                         | 32.5 | 2.6 | 6.3  | 0.3  | May 2004      | resident             |
| South Darfur         | Kalma                             |      | 1.8 |      |      | May 2004      | IDP                  |
| North Bahr-El-Ghazal | Mangok                            | 23.3 |     |      |      | May 2004      | resident             |
| West Darfur          | El Geneina                        | 25.8 | 5.6 | 14.1 |      | June 2004     | IDP                  |
| North Darfur         | Abu Shok                          | 39.0 | 2.1 | 6.8  | 52.8 | June 2004     | IDP                  |
| North Bahr-El-Ghazal | Aweil North                       | 23.8 | 0.4 | 3.2  | 46.2 | June 2004     | resident             |
| Jonglei              | Duk Payauel                       | 22.7 | 1.4 |      | 53.2 | June 2004     | resident             |
| West Darfur          | Niertiti                          |      | 1.5 | 2.1  |      | June 2004     | IDP-resident         |
| North Bahr-El-Ghazal | Ayai. Tieralet                    | 18.4 | 0.1 | 0.7  | 28.5 | June 2004     | resident             |
| Unity                | Bentiu                            | 23.4 |     | 0.6  | 77.5 | June 2004     | IDP-resident         |
| North Bahr-El-Ghazal | Malual East                       | 14.5 |     |      |      | June 2004     | resident             |
| North Bahr-El-Ghazal | Ayai                              | 18.4 |     |      |      | June 2004     | resident             |
| West Darfur          | Ararah                            | 10.2 |     |      |      | June 2004     | IDP-resident         |
| Upper Nile           | Duk Payuel                        | 22.7 | 1.4 |      | 53.2 | June 2004     | resident             |
| West Darfur          | Habilah                           | 17.2 | 2.6 | 6.7  | 98.5 | July 2004     | IDP-resident         |
| East Equatoria       | Lafon                             | 15.3 | 0.3 |      | 64.0 | July 2004     | resident             |
| Unity                | Maryandit                         | 20.4 | 0.6 |      | 22.2 | July 2004     | resident             |
| West Darfur          | Mesteri                           | 12.7 |     |      |      | July 2004     | IDP-resident         |
| North Bahr-El-Ghazal | Ayat                              | 23.8 | 0.4 | 3.2  | 46.2 | July 2004     | resident-returnee    |
| North Darfur         | North Darfur                      |      | 1.5 | 2.5  |      | August 2004   | IDP                  |
| West Darfur          | West Darfur                       |      | 2.9 | 3.1  |      | August 2004   | IDP                  |
| South Darfur         | Kalma                             |      | 3.8 | 11.7 |      | August 2004   | IDP                  |
| North Darfur         | Kabkabiya                         | 17.5 | 1.2 | 2.9  | 63.2 | August 2004   | IDP-resident         |
| South Darfur         | Kass                              | 14.1 | 3.2 | 5.9  |      | August 2004   | IDP-resident         |
| South Darfur         | Nyala                             | 23.6 |     |      | 51.4 | August 2004   | IDP-resident         |
| Jonglei              | Wuror                             | 26.6 |     |      |      | August 2004   | resident             |
| North Bahr-El-Ghazal | Aweil West                        | 21.2 |     |      |      | August 2004   | resident             |
| Upper Nile           | Mayiandit                         | 20.4 | 0.6 |      | 22.2 | August 2004   | resident             |
| North Darfur         | Saraf Omra                        | 20.6 |     |      |      | August 2004   | IDP-resident         |
| Jonglei              | Toch. Nyandin                     | 20.6 | 2.1 |      | 7.2  | August 2004   | IDP-resident-returne |

| Location              |                                 | GAM  | CMR | U5MR | MCV  | Start Date               | Population Status                       |
|-----------------------|---------------------------------|------|-----|------|------|--------------------------|---|
| West Darfur           | Azirni. UmTagouk. Sanidadi      | 8.0  | 0.3 | 0.2  |      | September 2004           | IDP-resident                            |
| West Darfur           | West Darfur                     | 21.8 | 0.7 | 1.0  | 66.7 | September 2004           | IDP-resident                            |
| South Darfur          | Muhajiria                       | 10.7 | 1.3 | 0.7  |      | September 2004           | IDP-resident                            |
| South Darfur          | Kalma                           | 23.6 | 1.7 | 3.0  |      | September 2004           | IDP                                     |
| Jonglei               | Mareang                         | 20.6 | 2.1 |      | 7.2  | September 2004           | IDP-resident                            |
| North Bahr-El-Ghazal  | Ayat. Malual West. Malual North | 21.2 | 0.5 | 1.5  | 57.8 | September 2004           | IDP-resident                            |
| Kassala               | Kassala                         | 27.4 | 1.4 | 2.7  |      | September 2004           | resident                                |
| North Darfur          | Saraf Omra                      | 14.7 | 0.8 | 1.8  |      | October 2004             | IDP-resident                            |
| North Darfur          | Abu Shok                        | 27.0 | 1.5 | 2.7  | 49.7 | October 2004             | IDP                                     |
| South Darfur          | Otash                           | 25.2 | 1.5 | 2.4  |      | October 2004             | IDP                                     |
| North Bahr-El-Ghazal  | Ayat                            | 20.3 |     |      |      | October 2004             | resident                                |
| North Bahr-El-Ghazal  | Malual East                     | 14.8 |     |      |      | October 2004             | resident                                |
| North Bahr-El-Ghazal  | Ayai                            | 15.2 |     |      |      | October 2004             | resident                                |
| North Darfur          | Fata Borna                      | 23.9 | 1.0 | 1.5  | 93.1 | October 2004             | IDP-resident                            |
| Upper Nile            | Old Fangak                      | 15.5 | 1.1 |      |      | October 2004             | resident                                |
| South Darfur          | Sanya Afandu                    | 9.4  |     |      | 81.6 | October 2004             | IDP                                     |
| South Darfur          | Umkunia                         | 19.8 |     |      | 22.5 | October 2004             | IDP                                     |
| South Darfur          | Marla                           | 21.9 |     |      | 0.0  | October 2004             | IDP                                     |
| South Kordofan        | Rashad                          | 9.4  | 1.0 |      | 58.2 | November 2004            | resident                                |
| South Kordofan        | El Salmat                       | 13.4 |     |      | 49.3 | November 2004            | resident                                |
| West Bahr-El-Ghazal   | Aweil Centre                    | 12.9 |     |      |      | November 2004            | resident                                |
| Warab                 | Akon. Gogrial. Alek             | 20.5 |     |      |      | November 2004            | resident                                |
| Warab                 | Pathuon                         | 25.2 |     |      |      | November 2004            | resident                                |
| Warab                 | Tonj                            | 22.8 |     |      |      | November 2004            | resident                                |
| NorthBahr-El-Ghazal   | Ayat. Gomjuer                   | 23.0 | 0.4 | 0.7  | 55.9 | November 2004            | IDP-resident-returne                    |
| West Darfur           | Fur Baranga                     | 6.6  | 0.9 | 1.8  | 55.0 | January 2005             | IDP-resident                            |
| South Darfur          | Gereida                         | 15.6 | 1.8 | 4.2  | 39.3 | January 2005             | IDP                                     |
| South Darfur          | Kalma                           | 9.9  | 1.2 | 1.5  | 30.3 | January 2005             | IDP                                     |
| Lakes                 | Bunagok                         | 11.6 | 0.8 |      | 82.6 | January 2005             | resident                                |
| East Equatoria        | Kapoeta                         | 10.1 | 1.0 |      | 10.5 | January 2005             | resident-returnee                       |
| Upper Nile            | Luakpiny                        | 24.0 | 0.4 |      | 38.5 | January 2005             | IDP-resident-returne                    |
| Kassala               | Kassala                         | 17.7 | 0.4 | 0.6  |      | January 2005             | resident                                |
| Red Sea               | Red Sea                         | 19.4 | 1.1 | 1.8  |      | January 2005             | resident                                |
| NorthBahr-El-Ghazal   | Ayat                            | 18.3 | 0.3 | 1.5  |      | January 2005             | IDP-resident-returne                    |
| West Darfur           | Murnei                          | 4.9  | 0.8 | 1.2  |      | January 2005             | IDP                                     |
| West Darfur           | Seleia                          | 8.7  | 0.6 | 1.9  |      | January 2005             | IDP-resident                            |
| Blue Nile             | Kurmuk                          | 9.1  | 1.3 | 2.5  | 29.7 | February 2005            | IDP-resident                            |
| South Darfur          | Nyala                           | 10.6 | 0.3 | 0.6  | 78.4 | February 2005            | IDP-resident                            |
| Warab                 | Tonj                            | 20.9 | 0.9 | 3.4  |      | February 2005            | resident                                |
| Unity                 | Bentiu                          | 16.2 | 0.1 | 0.2  | 67.4 | February 2005            | IDP-resident                            |
| Unity                 | Rubkoana                        | 16.1 |     | 0.2  | 65.0 | February 2005            | IDP-resident                            |
| South Darfur          | El Firdous                      | 25.2 |     |      |      | March 2005               | IDP                                     |
| West Darfur           | Galado. Rokoro                  | 16.2 | 1.1 | 3.2  | 85.4 | March 2005               | IDP-resident                            |
| Upper Nile            | Luakpiny                        | 15.1 | 0.4 |      | 38.5 | March 2005               | resident                                |
| North Bahr-El-Ghazal  | Twic. Abyei                     | 30.7 | 0.4 |      | 48.8 | March 2005               | IDP-resident-returne                    |
| North Darfur          | El Fasher                       | 17.1 | 0.3 | 0.6  | 88.8 | March 2005               | IDP-resident                            |
| North Darfur          | Korma                           | 19.6 | 1.3 | 2.2  | 00.0 | March 2005               | IDP-resident                            |
| Upper Nile            | Panomdit                        | 28.1 | 0.2 |      | 32.7 | April 2005               | IDP-resident                            |
| West Bahr-El-Ghazal   | EasterBank                      | 25.0 | 0.6 | 1.3  | 0.0  | April 2005               | IDP                                     |
| West Bahr-El-Ghazal   | Marial Agieh                    | 16.6 | 0.6 | 1.3  | 0.0  | April 2005               | IDP                                     |
| West Bahr-El-Ghazal   | Bar Yar                         | 16.4 | 0.6 | 1.3  | 0.0  | April 2005               | IDP                                     |
| West Bahr-El-Ghazal   | Salvation                       | 21.2 | 0.6 | 1.3  | 0.0  | April 2005               | IDP                                     |
| West Bahr-El-Ghazal   | Wau                             | 13.1 | 1.5 | 2.5  | 82.9 | April 2005<br>April 2005 | IDP-resident                            |
| WC3C Dalli-Li-UlldZdl | North Darfur                    | 13.1 | 0.8 | 1.5  | 02.7 | April 2005 April 2005    | ווייייייייייייייייייייייייייייייייייייי |

| Location                                   |                                    | GAM          | CMR   | U5MR | MCV  | Start Date                     | Population Status    |
|--|------------------------------------|--------------|-------|------|------|--------------------------------|----------------------|
| West Darfur                                | West Darfur                        |              | 0.8   | 1.0  |      | April 2005                     | IDP                  |
| South Darfur                               | South Darfur                       |              | 0.8   | 2.6  |      | April 2005                     | IDP                  |
| North Darfur                               | North Darfur                       |              | 0.8   | 1.1  |      | April 2005                     | resident             |
| North Darfur                               | North Darfur                       |              | 0.9   | 1.8  |      | April 2005                     | IDP                  |
| West Darfur                                | West Darfur                        |              | 0.4   | 0.7  |      | April 2005                     | resident             |
| West Darfur                                | West Darfur                        |              | 0.5   | 0.8  |      | April 2005                     | IDP                  |
| Kassala                                    | Adrama                             | 9.9          |       |      |      | April 2005                     | IDP-resident         |
| North Darfur                               | Fata Borna                         | 17.7         | 0.3   | 0.7  | 83.5 | May 2005                       | IDP-resident         |
| North Darfur                               | Kabkabiya                          | 17.0         | 0.7   | 1.2  | 79.7 | May 2005                       | IDP-resident         |
| North Darfur                               | Abu Shok                           | 25.9         | 0.6   | 2.0  | 78.7 | May 2005                       | IDP                  |
| Jonglei                                    | Jalle                              | 39.3         |       |      | 73.1 | May 2005                       | resident             |
| Jonglei                                    | Jalle. Athoc                       | 39.3         |       |      | 73.1 | May 2005                       | resident             |
| Upper Nile                                 | Kodok                              | 22.9         | 0.9   | 2.3  | 72.7 | May 2005                       | resident             |
| Central Equatoria                          | Kajokeji                           | 8.3          | 0.2   |      | 83.4 | June 2005                      | resident-returnee    |
| West Darfur                                | Abu-Zar. Ardamat. Riyad. Dorti     | 16.9         | 0.5   | 0.2  | 78.8 | June 2005                      | IDP                  |
| West Darfur                                | Sirba                              | 16.3         | 0.7   | 1.0  | 20.9 | June 2005                      | IDP-resident         |
| Kassala                                    | Dablawet                           | 13.5         |       |      |      | June 2005                      | IDP-resident         |
| Red Sea                                    | Port Sudan                         | 11.5         |       |      | 85.9 | July 2005                      | resident             |
| West Darfur                                | Seleia                             | 16.2         | 0.6   | 1.0  |      | July 2005                      | IDP-resident         |
| West Darfur                                | Kamsa Dagaic. Hamidya. Hassa Hissa | 14.5         | 0.9   | 1.1  |      | July 2005                      | IDP                  |
| South Darfur                               | South Darfur                       | 12.3         | 0.4   |      |      | July 2005                      | IDP-resident         |
| West Darfur                                | West Darfur                        | 6.2          | 0.6   |      |      | July 2005                      | IDP-resident         |
| West Darfur                                | Zalingei                           | 18.1         | 0.6   | 1.6  |      | August 2005                    | resident             |
| Jonglei                                    | Akobo                              | 20.3         | 0.3   | 0.6  | 28.6 | August 2005                    | resident             |
| Jonglei                                    | Akobo / Nyandit                    | 20.3         | 0.3   | 0.6  | 29.6 | August 2005                    | resident             |
| West Equatoria                             | Mvolo                              | 8.0          | 0.5   |      | 47.1 | August 2005                    | resident             |
| South Darfur                               | Nyala                              | 19.1         | 0.4   | 0.8  | 93.7 | August 2005                    | IDP-resident         |
| South Darfur                               | Kalma                              | 16.9         | 0.9   | 0.9  | 90.7 | August 2005                    | IDP                  |
| Central Equatoria                          | Juba                               | 9.2          |       |      | 77.7 | August 2005                    | IDP-resident         |
| North Bahr-El-Ghazal                       | Aweil North                        | 18.3         | 0.3   | 1.5  | 45.0 | August 2005                    | resident-returnee    |
| North Bahr-El-Ghazal                       | Aweil North                        | 19.8         | 0.7   | 2.0  | 45.0 | August 2005                    | resident             |
| North Darfur                               | North Darfur                       | 15.6         | 0.5   | 2.0  | .5.0 | August 2005                    | IDP-resident         |
| West Darfur                                | Galado. Golo                       | 13.5         | 1.8   | 2.3  | 83.6 | September 2005                 | IDP-resident         |
| Jonglei                                    | OldFangak / PhouState              | 17.3         | 0.3   | 0.7  | 47.0 | September 2005                 | resident             |
| West Darfur                                | Fur Baranga                        | 8.5          | 0.5   | 0.8  | 51.4 | September 2005                 | IDP-resident         |
| North Darfur                               | Kabkabiya                          | 18.2         | 0.7   | 1.7  | 72.3 | October 2005                   | IDP-resident         |
| Upper Nile                                 | Malakal                            | 22.8         | 0.7   | 1.7  | 84.4 | October 2005                   | IDP-resident         |
| Upper Nile                                 | Nimni                              | 13.5         | 0.4   | 0.3  | 27.2 | October 2005                   | resident             |
| Upper Nile                                 | Maiwut                             | 15.0         | 0.9   | 1.6  | 55.9 | October 2005                   | resident             |
| West Darfur                                | Habilah                            | 6.8          | 0.2   | 0.4  | 51.7 | October 2005                   | IDP-resident         |
| North Bahr-El-Ghazal                       | Mangok. Malualbai                  | 14.4         | 0.3   | 0.8  | 31.7 | October 2005                   | resident             |
| North Bahr-El-Ghazal                       | Mangok, Wunlang, Mangar Tong       | 22.7         | 0.6   | 1.4  | 67.2 | October 2005                   | resident-returnee    |
| North Darfur                               | Kutum                              | 16.3         | 0.8   | 0.7  | 71.3 | October 2005                   | IDP-resident         |
| North Darfur                               | Zamzam                             | 10.0         | 1.7   | 2.0  | 59.2 | October 2005                   | IDP                  |
| Unity                                      | Bentiu                             | 20.8         | 0.3   | 0.9  | 80.1 | October 2005                   | IDP-resident         |
| Unity                                      | Rubkoana                           | 22.2         | 0.3   | 1.1  | 87.0 | October 2005                   | IDP-resident         |
| Kassala                                    | Kassala                            | 11.8         | 0.3   | 0.4  | 89.9 | October 2005                   | resident             |
| Kassala                                    | Kassala                            | 14.6         | 0.2   | 0.4  | 66.0 | October 2005                   | resident             |
| West Darfur                                | El Geneina                         |              |       | 0.4  | 00.0 | October 2005                   | IDP-resident         |
| North Darfur                               | Abu Shok                           | 12.1<br>18.5 | 1.1   | 1.5  | 73.3 |                                | IDP-resident         |
|  |                                    |              | 0.5   | 1.5  |      | November 2005                  |                      |
| West Darfur                                | Sanya Afendu                       | 11.6         | 0.3   | 1.0  | 82.8 | November 2005                  | IDP-resident         |
| North Bahr-El-Ghazal  North Bahr-El-Ghazal | Aweil North                        | 12.5         | 0.3   | 1.0  | 30.0 | November 2005<br>November 2005 | resident<br>resident |
|  | Ayai. Panthou                      | 1110         | 1 (1) | 1.0  | 20.0 | Movember 2005                  | rocidont             |

| Location                |  | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status     |
|-------------------------|--|------|-----|------|------|----------------|-----------------------|
| North Bahr-El-Ghazal    | Ayat   | 12.5 | 0.3 | 1.0  |      | November 2005  | IDP-resident-returnee |
| South Darfur            | El Firdous   | 13.9 | 0.4 | 1.0  |      | November 2005  | IDP                   |
| Kassala                 | Kassala. Dablawet  | 16.5 |     |      |      | December 2005  | IDP                   |
| North Darfur            | Mellit. Hay Abassy   | 18.0 | 0.8 | 2.1  | 94.7 | January 2006   | IDP-resident          |
| South Kordofan          | El Muglad. El Meram. Abyei   | 13.4 | 0.4 | 0.5  |      | January 2006   | IDP-resident-returnee |
| South Darfur            | Kalma  | 7.0  | 0.9 | 1.3  | 95.7 | February 2006  | IDP                   |
| North Bahr-El-Ghazal    | Ayai. Wathmok. Gakrol  | 3.7  | 0.3 | 0.7  | 35.4 | February 2006  | resident-returnee     |
| Upper Nile              | Panomdit. Koladar  | 20.8 | 0.7 | 1.1  | 46.3 | February 2006  | resident              |
| North Darfur            | El Fasher  | 11.9 | 0.4 | 1.0  |      | February 2006  | IDP-resident          |
| North Bahr-El-Ghazal    | Alek West. Alek South. Alek North. Riau                                      | 23.9 | 0.2 | 0.2  | 14.3 | February 2006  | resident              |
| Unity                   | Bentiu   | 18.2 | 0.3 | 0.7  | 70.9 | February 2006  | IDP-resident-returne  |
| Unity                   | Rubkoana   | 20.0 | 0.0 | 0.0  | 64.6 | February 2006  | IDP-resident-returne  |
| Red Sea                 | Port Sudan   | 6.8  | 0.2 | 0.3  | 85.4 | February 2006  | resident              |
| Warab                   | Twic   | 28.7 | 0.3 | 0.3  | 26.5 | February 2006  | resident              |
| West Darfur             | Murnei   | 6.4  | 0.4 | 0.8  | 78.3 | February 2006  | IDP                   |
| South Darfur            | Mosey. Otash   | 9.7  | 0.7 | 1.0  | 94.7 | March 2006     | IDP                   |
| South Darfur            | El Firdous   | 25.9 |     |      | 64.7 | April 2006     | IDP                   |
| Jonglei                 | Atar   | 27.0 | 2.2 |      | 30.1 | April 2006     | resident              |
| North Darfur            | Kabkabiya  | 21.7 | 0.7 | 1.0  | 89.2 | May 2006       | IDP-resident          |
| West Darfur             | Beida. Kongo Haraza. Ararah  | 17.2 | 0.5 | 0.7  | 78.1 | May 2006       | IDP-resident          |
| Central Equatoria       | Juba   | 11.5 | 0.4 | 0.7  | 78.4 | May 2006       | IDP-resident          |
| Central Equatoria       | Juba   | 9.3  | 0.4 | 0.7  | 70.0 | May 2006       | IDP-resident          |
| North Darfur            | Saraf Omra   | 10.3 | 1.3 | 0.9  |      | May 2006       | IDP-resident          |
| Red Sea                 | Sinkat   | 30.8 | 0.7 | 1.2  | 64.1 | May 2006       | resident              |
| Red Sea                 | Port Sudan   | 19.7 |     | 0.4  | 52.0 | May 2006       | resident              |
| Red Sea                 | Halaib   | 29.5 | 0.8 | 1.0  |      | May 2006       | resident              |
| Red Sea                 | Tokar  | 27.3 | 0.4 | 1.1  |      | May 2006       | resident              |
| West Darfur             | Geneina  | 12.3 | 0.7 | 0.6  | 68.4 | May 2006       | IDP-resident          |
| North Darfur            | Abu Shok   | 22.8 | 0.5 | 1.1  | 83.6 | June 2006      | IDP                   |
| South Darfur            | Gereida  | 15.5 | 0.5 | 3.0  | 05.0 | June 2006      | IDP                   |
| Jonglei                 | Kassingor. Boma  | 21.2 |     | 3.0  | 65.5 | June 2006      | resident              |
| Jonglei                 | Haat. Menime   | 18.1 | 0.2 | 0.2  | 03.3 | June 2006      | resident              |
| North Darfur            | Dar Es Salaam. Alowna. Saq Alnaam. Abu Delek. Ed al Beida.<br>Wad Kota rural | 27.0 | 0.5 | 1.6  | 50.0 | July 2006      | resident              |
| Unity                   | Rubkoana   | 18.2 | 0.2 | 0.7  | 78.2 | July 2006      | resident              |
| Upper Nile              | Wudier   | 6.7  | 0.7 | 0.1  | 10.4 | July 2006      | resident              |
| Unity                   | Bentiu   | 16.2 | 0.0 | 0.1  | 77.4 | August 2006    | resident              |
| Unity                   | Nhialdiu   | 13.6 | 0.0 | 0.3  | 65.0 | August 2006    | resident              |
| West Darfur             | West Darfur  | 13.1 | 0.0 | 0.5  | 66.9 | August 2006    | IDP-resident          |
| North Darfur            | North Darfur   | 16.0 |     |      | 66.3 | August 2006    | IDP-resident          |
| West Darfur             | West Darfur  | 10.5 |     |      | 65.0 | August 2006    | IDP-resident          |
| South Darfur            | South Darfur   | 12.6 |     |      | 68.3 | August 2006    | IDP-resident          |
| Kassala                 | Wad Sherifey   | 21.6 |     |      | 00.5 | August 2006    | refugee               |
| Al-Gadarif              | Umgargour  | 16.0 |     |      |      | August 2006    | refugee               |
| Al-Gezira               | Fau 5  | 17.6 |     |      |      | August 2006    | refugee               |
| Kassala                 | Shagarab   | 13.6 |     |      |      | August 2006    | refugee               |
| Sinnar                  | Suki   | 18.2 |     |      |      | August 2006    |                       |
| Al-Gadarif              | Ubuda / Ali  | 11.8 |     |      |      | August 2006    | refugee<br>refugee    |
| North Bahr-El-Ghazal    | Aweil North  | 17.4 | 0.2 | 0.8  |      |                | resident              |
|                         |  |      |     |      | 00 6 | August 2006    |                       |
| South Darfur            | Mosey. Sakaly  | 18.9 | 0.8 | 1.6  | 88.6 | September 2006 | IDP-resident          |
| Unity                   | Tam. Mankien   | 15.6 | 0.7 | 0.8  | 42.4 | September 2006 | resident              |
| Jonglei<br>North Dorfor | Mareang  | 15.1 | 0.2 | 0.2  | 20.9 | September 2006 | resident              |
| North Darfur            | Kabkabiya  | 25.4 | 0.7 | 1.2  | 60.4 | October 2006   | IDP-resident          |
| South Darfur            | Kalma  | 22.3 | 1.2 | 2.2  | 88.5 | October 2006   | IDP                   |

| Location                    |   | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status    |
|-----------------------------|---|------|-----|------|------|----------------|----------------------|
| West Darfur                 | Beida                                       | 11.4 | 0.4 | 0.4  |      | October 2006   | IDP-resident         |
| West Darfur                 | Umshaleya                                   | 13.1 | 0.9 | 2.1  | 49.1 | October 2006   | IDP-resident-refugee |
| North Darfur                | Abu Shok                                    | 22.6 | 0.7 | 1.8  | 93.0 | November 2006  | IDP                  |
| Jonglei                     | Old Fangak                                  | 17.8 | 0.8 | 1.2  | 52.6 | November 2006  | resident             |
| South Darfur                | Otash                                       | 15.6 | 2.0 | 2.6  |      | December 2006  | IDP                  |
| Warab                       | Gogrial                                     | 19.0 | 0.6 | 1.0  | 21.0 | January 2007   | resident             |
| Jonglei                     | Pibor                                       | 14.9 | 0.8 | 1.5  | 44.2 | January 2007   | resident             |
| Unity                       | Bentiu                                      | 18.4 | 0.4 | 1.0  | 66.4 | February 2007  | resident             |
| Unity                       | Nhialdiu                                    | 15.6 | 0.2 | 0.5  | 52.5 | February 2007  | resident             |
| South Darfur                | El Firdous                                  | 21.9 | 0.2 | 0.4  | 64.0 | February 2007  | IDP                  |
| South Darfur                | Gereida                                     | 6.4  | 0.5 | 0.9  |      | February 2007  | IDP-resident         |
| Upper Nile                  | Galdora. Bemichuk. Melut. Paloch            | 21.0 | 0.8 | 0.7  | 52.0 | February 2007  | resident             |
| North Bahr-El-Ghazal        | Aweil East                                  | 19.4 |     |      |      | February 2007  | resident             |
| Upper Nile                  | Malakal                                     | 22.2 | 0.5 | 0.6  | 80.3 | March 2007     | resident             |
| Warab                       | Twic  | 25.4 | 1.7 | 2.5  | 56.5 | March 2007     | IDP-resident-returne |
| North Bahr-El-Ghazal        | Ayai  | 24.0 | 0.3 | 0.7  |      | March 2007     | resident             |
| longlei                     | Wuror                                       | 20.3 | 1.4 | 1.4  |      | March 2007     | resident             |
| South Darfur                | Nyala                                       | 11.8 | 1.1 | 2.4  | 88.0 | April 2007     | IDP-resident         |
| Blue Nile                   | Kurmuk                                      | 9.4  | 1.0 | 2.8  | 62.2 | April 2007     | IDP-resident-returne |
| South Darfur                | Al Salam                                    | 23.3 | 0.9 | 1.6  | 56.6 | May 2007       | IDP                  |
| Jonglei                     | Khorfulus                                   | 31.6 | 0.7 |      |      | May 2007       | resident             |
| longlei                     | Jalle                                       |      | 0.4 | 0.5  | 79.4 | May 2007       | resident             |
| West Darfur                 | Beida                                       | 19.5 |     |      | 77.1 | May 2007       | IDP-resident         |
| South Darfur                | Otash                                       | 17.2 | 1.2 | 2.4  | 70.9 | May 2007       | IDP                  |
| North Darfur                | Kabkabiya                                   | 27.0 | 0.5 | 1.3  | 81.4 | June 2007      | IDP-resident         |
| South Darfur                | Kass  | 17.8 | 2.1 | 4.4  | 67.0 | June 2007      | IDP-resident         |
| North Darfur                | Abu Shok                                    | 30.4 | 0.6 | 1.1  | 86.0 | June 2007      | IDP                  |
| Upper Nile                  | Sobat                                       | 20.8 |     |      |      | June 2007      | resident-returnee    |
| South Darfur                | Adayla                                      | 21.7 | 0.6 | 1.3  |      | June 2007      | IDP-resident         |
| South Darfur                | El Firdous                                  | 29.7 | 0.6 | 1.1  |      | June 2007      | IDP                  |
| Upper Nile                  | Panyikang                                   | 20.8 | 1.8 |      |      | June 2007      | resident-returnee    |
| West Darfur                 | Seleia                                      | 15.9 |     |      |      | July 2007      | IDP-resident         |
| Jonglei                     | Nyrol / Langkien. Nyrol / Tut               | 17.3 | 1.2 | 0.1  |      | August 2007    | resident             |
| Upper Nile                  | Medakon. Wunkiir. Gaberona (Graves)         | 17.7 | 1.0 | 2.3  | 84.6 | August 2007    | IDP                  |
| West Darfur                 | West Darfur                                 | 16.1 | 0.3 | 0.7  | 73.7 | August 2007    | IDP-resident         |
| North Darfur                | North Darfur                                | 20.5 | 0.2 | 0.6  | 73.7 | August 2007    | IDP-resident         |
| South Darfur                | South Darfur                                | 14.2 | 0.3 | 0.7  |      | August 2007    | IDP-resident         |
| West Darfur                 | West Darfur                                 | 12.2 | 0.4 | 1.0  |      | August 2007    | IDP-resident         |
| Unity                       | Bentiu                                      | 20.5 | 0.6 | 1.0  | 72.3 | September 2007 | resident             |
| Upper Nile                  | Renk  | 13.9 | 0.2 | 0.5  | 91.9 | September 2007 | resident             |
| North Darfur                | Abu Shok                                    | 14.3 | 0.4 | 0.6  | 83.1 | October 2007   | IDP                  |
| Warab                       | Pagol. Kwanythii. Warab                     | 6.2  | 0.4 | 0.0  | 62.5 | November 2007  | resident             |
| South Darfur                | El Firdous. El Neem. Khor Omer. Abu Matariq | 15.7 | 0.6 | 1.3  | 63.3 | November 2007  | IDP                  |
| Jonglei                     | Wuror                                       | 16.2 | 5.0 |      | 03.5 | November 2007  | resident             |
| North Bahr-El-Ghazal        | Aweil East                                  | 12.7 | 0.4 | 1.0  |      | November 2007  | resident             |
| North Bahr-El-Ghazal        | Aweil South                                 | 19.2 | 1.4 | 3.7  | 50.6 | November 2007  | resident             |
| Kassala                     | Kassala                                     | 18.5 | 0.3 | 0.6  | 30.0 | November 2007  | IDP-resident         |
| North Darfur                | Kaguro Borey                                | 17.4 | 0.3 | 1.1  | 21.9 | November 2007  | IDP-resident         |
| West Darfur                 | Umshaleya                                   | 11.6 | 0.4 | 0.9  | 54.6 | November 2007  | IDP-resident-refuge  |
| West Darfur<br>North Darfur | Fata Borna. Kasab                           | 16.4 | 0.4 | 1.1  | 34.0 | December 2007  | IDP-resident-refuge  |
|                             |   |      |     |      |      |                |                      |
| South Kordofan              | Abyei Cogrist Wort                          | 21.0 | 0.4 | 0.6  | 50.0 | December 2007  | IDP-resident         |
| Warab                       | Gogrial West                                | 14.5 | 0.2 | 0.4  | 58.9 | January 2008   | resident             |
| Warab                       | Gogrial East                                | 13.5 | 0.2 | 0.4  | 58.9 | February 2008  | resident             |

| Location             |                      | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status     |
|----------------------|----------------------|------|-----|------|------|----------------|-----------------------|
| North Darfur         | Shanguil Tobaya      | 9.0  |     |      | 74.7 | February 2008  | IDP                   |
| North Bahr-El-Ghazal | Aweil North          | 18.8 | 0.2 | 0.3  |      | March 2008     | resident              |
| Warab                | Twic                 | 22.6 | 0.6 | 1.2  |      | March 2008     | resident-returnee     |
| South Darfur         | Kalma                | 10.7 | 0.6 | 1.2  | 68.6 | March 2008     | IDP                   |
| Jonglei              | Khorfulus            | 23.9 | 0.4 |      | 59.2 | May 2008       | resident              |
| South Darfur         | Al Salam             |      | 0.8 | 1.3  | 43.7 | May 2008       | IDP                   |
| Upper Nile           | Panyikang            | 28.4 | 0.8 |      |      | May 2008       | IDP-resident-returnee |
| North Bahr-El-Ghazal | Mangok. Madhol. Baac | 16.9 | 0.4 | 0.9  | 38.8 | June 2008      | IDP-resident-returnee |
| North Darfur         | Kabkabiya            | 24.8 | 0.6 | 0.9  | 79.3 | June 2008      | IDP-resident          |
| North Darfur         | Abu Shok. As Salam   | 21.7 | 0.3 | 0.8  | 83.9 | June 2008      | IDP                   |
| South Darfur         | Otash                | 21.1 | 0.7 | 1.3  | 54.9 | June 2008      | IDP                   |
| South Darfur         | Kass                 | 13.6 | 0.8 | 2.2  | 78.1 | June 2008      | IDP-resident          |
| West Darfur          | Um Dukhun            | 8.6  | 0.3 |      | 68.7 | June 2008      | IDP-resident-refugee  |
| South Darfur         | El Firdous           | 24.2 | 0.3 | 0.8  |      | June 2008      | IDP                   |
| South Darfur         | Gereida              | 14.0 | 0.5 | 1.3  | 52.6 | July 2008      | IDP                   |
| West Darfur          | Murnei               | 14.9 | 0.3 | 0.7  | 82.4 | July 2008      | IDP                   |
| West Darfur          | Geneina              | 12.0 | 0.5 | 0.7  | 80.5 | July 2008      | IDP-resident          |
| Unity                | Bentiu               | 18.2 | 0.7 | 2.0  | 66.2 | August 2008    | resident              |
| South Darfur         | Kalma                | 14.4 | 0.8 | 2.0  | 87.5 | August 2008    | IDP                   |
| South Darfur         | Mosey. Dereig        | 14.0 | 0.4 | 1.0  | 88.2 | September 2008 | IDP-resident          |
| Upper Nile           | Malut                | 18.8 | 0.8 | 0.2  | 76.3 | October 2008   | resident              |
| Kassala              | Kassala              | 18.5 | 0.6 | 0.4  | 83.5 | October 2008   | IDP-resident          |
| Upper Nile           | Malakal              | 27.2 | 0.3 | 0.7  | 67.7 | November 2008  | resident              |
| North Bahr-El-Ghazal | Aweil North          | 12.3 | 0.3 | 0.4  | 46.2 | November 2008  | resident-returnee     |
| South Darfur         | Al Salam             | 8.9  | 0.7 | 1.4  | 63.3 | November 2008  | IDP                   |
| West Darfur          | Beida                | 10.4 | 0.5 |      |      | November 2008  | IDP-resident          |
| South Darfur         | El Firdous           | 12.1 | 0.3 | 0.7  | 72.0 | November 2008  | IDP                   |
| North Darfur         | Abu Shok             | 17.5 | 0.6 | 1.2  | 90.5 | December 2008  | IDP                   |
| South Darfur         | Otash                | 11.6 | 0.5 | 1.1  | 71.5 | December 2008  | IDP                   |
| Warab                | Gogrial West         | 20.1 | 0.3 | 0.3  | 26.3 | January 2009   | resident              |
| Blue Nile            | Kurmuk               | 10.7 | 1.3 | 2.8  | 53.5 | February 2009  | IDP-resident-returnee |
| Warab                | Twic                 | 22.8 | 0.9 | 2.3  | 43.1 | March 2009     | resident              |
| North Bahr-El-Ghazal | Aweil North          | 19.7 | 0.7 | 1.2  | 28.7 | March 2009     | resident-returnee     |
| North Darfur         | El Fasher            | 16.9 | 0.7 | 0.8  |      | April 2009     | IDP-resident          |
| Upper Nile           | Balliet. Ulang       | 22.8 | 0.6 | 0.3  | 42.7 | May 2009       | IDP-resident-returnee |
| North Darfur         | Kabkabiya            | 25.5 |     |      |      | May 2009       | IDP-resident          |
| North Bahr-El-Ghazal | Aweil East           | 29.8 | 0.2 | 0.3  |      | June 2009      | resident              |
| North Darfur         | Malha                | 34.5 | 0.3 | 0.5  | 97.7 | June 2009      | resident              |
| North Darfur         | Um Kadada            | 25.1 | 0.3 | 0.7  | 90.9 | June 2009      | IDP-resident          |
| West Darfur          | Beida                | 14.3 | 0.5 | 1.2  | 82.5 | July 2009      | IDP-resident          |
| North Bahr-El-Ghazal | Aweil North          | 17.6 | 0.7 | 1.3  | 27.8 | November 2009  | resident-returnee     |
| East Equatoria       | Ikotos               | 13.3 | 0.5 | 1.2  | 38.6 | November 2009  | resident              |
| Jonglei .            | Bilkey Nyandit       | 45.7 | 0.4 | 1.2  | 34.2 | February 2010  | resident              |
| Warab                | Gogrial West         | 20.0 | 0.2 | 0.4  | 11.6 | February 2010  | resident              |
| Blue Nile            | Kurmuk               | 11.9 | 0.5 | 1.1  | 63.8 | February 2010  | resident              |
| Jonglei              | Wuror                | 22.0 | 0.5 | 0.2  | 55.4 | February 2010  | IDP-resident          |

### Table 8: Uganda

| Location |                       | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|----------|-----------------------|------|-----|------|------|----------------|-------------------|
| Kotido   | Kotido                | 10.7 | 1.0 | 2.1  |      | April 2000     | refugee           |
| Adjumani | Adjumani A            | 6.2  |     |      |      | April 2000     | refugee           |
| Adjumani | Adjumani B            | 9.3  |     |      |      | April 2000     | refugee           |
| Adjumani | Adjumani C            | 6.1  |     |      |      | April 2000     | refugee           |
| Моуо     | Palorinya             | 7.4  |     |      |      | April 2000     | refugee           |
| Arua     | Imvepi                | 3.7  |     |      |      | April 2000     | refugee           |
| Arua     | Rhinocamp             | 5.9  |     |      |      | April 2000     | refugee           |
| Masindi  | Kiryandongo           | 7.5  |     |      |      | April 2000     | refugee           |
| Hoima    | Kyangwali             | 0.6  |     |      |      | April 2000     | refugee           |
| Mbarara  | Nakivale              | 2.0  |     |      |      | April 2000     | refugee           |
| Mbarara  | Oruchinga             | 2.4  |     |      |      | April 2000     | refugee           |
| Arua     | Rhinocamp             | 5.6  |     |      | 79.6 | April 2002     | refugee           |
| Arua     | Imvepi                | 9.0  |     |      | 78.0 | May 2002       | refugee           |
| Adjumani | Adjumani A            | 0.1  |     |      | 70.0 | December 2002  | refugee           |
| Moyo     | Palorinya             | 0.1  |     |      |      | December 2002  | refugee           |
| Mbarara  | Nakivale              | 0.1  | 0.1 |      |      | December 2002  | refugee           |
| Yumbe    | lkafe                 | 5.2  | 0.1 | 1.7  |      | December 2002  | refugee           |
| Arua     |                       | 0.3  | 0.4 | 1./  |      | December 2002  |                   |
|          | Phinocomp             |      | 0.1 |      |      |                | refugee           |
| Arua     | Rhinocamp             | 0.3  | 2.2 | E 7  | 02.1 | December 2002  | refugee<br>IDP    |
| Gulu     |                       | 6.7  | 2.3 | 5.7  | 92.1 | April 2003     | IDP-resident      |
| Pader    | Kalongo               | 11.6 | 1.0 | 2.1  | 06.1 | July 2003      |                   |
| Lira     | Lira                  | 4.9  | 1.9 | 2.2  | 96.1 | December 2003  | IDP               |
| Pader    | Kalongo               | 4.7  | 1.5 | 2.1  | 48.2 | January 2004   | IDP-resident      |
| Moyo     | Palorinya             | 5.0  |     |      | 83.9 | February 2004  | refugee           |
| Gulu     | Gulu                  | 4.6  | 1.2 | 1.8  | 97.0 | May 2004       | IDP               |
| Gulu     | Gulu                  | 4.6  | 1.2 |      | 97.0 | May 2004       | IDP               |
| Pader    | Kalongo               | 7.2  | 1.7 | 3.3  |      | June 2004      | IDP-resident      |
| Gulu     | Gulu                  | 3.3  | 1.2 |      | 95.1 | July 2004      | resident          |
| Lira     | Lira                  | 4.5  | 2.3 | 3.5  |      | September 2004 | IDP               |
| Lira     | Aloi                  |      | 3.6 | 3.2  |      | September 2004 | IDP               |
| Lira     | Amugo                 |      | 4.3 | 10.5 |      | September 2004 | IDP               |
| Lira     | Aromo                 |      | 2.1 | 5.6  |      | September 2004 | IDP               |
| Lira     | Agweng                |      | 2.1 | 5.0  |      | September 2004 | IDP               |
| Lira     | Apala                 |      | 2.3 | 1.9  |      | September 2004 | IDP               |
| Pader    | Pader                 |      | 2.0 | 5.3  |      | September 2004 | IDP               |
| Lira     | Agweng. Amugo         |      | 2.8 | 5.4  |      | September 2004 | IDP               |
| Pader    | Pader                 | 7.7  | 2.1 | 3.5  |      | October 2004   | IDP               |
| Apac     | Minakulu. Ngai. Otwal | 4.4  | 1.4 |      | 75.1 | February 2005  | IDP               |
| Lira     | Lira                  | 1.9  | 0.7 |      | 87.1 | February 2005  | IDP               |
| Pader    | Kalongo               | 4.4  | 0.7 | 1.7  | 81.0 | March 2005     | IDP-resident      |
| Pader    | Wol                   | 7.2  | 0.8 | 1.3  | 75.6 | March 2005     | IDP               |
| Pader    | Paimol                | 4.0  | 0.6 | 1.7  | 81.2 | March 2005     | IDP               |
| Pader    | Omiya Pacwa           | 6.5  | 0.6 | 0.9  | 69.9 | March 2005     | IDP               |
| Gulu     | Gulu                  | 4.1  | 0.8 |      | 84.0 | May 2005       | IDP               |
| Gulu     | Gulu                  |      | 1.2 | 2.3  | 94.8 | June 2005      | IDP               |
| Gulu     | Gulu                  |      | 1.3 | 2.5  | 95.7 | June 2005      | IDP               |
| Kitgum   | Kitgum                |      | 1.9 | 4.0  | 85.1 | June 2005      | IDP               |
| Pader    | Pader                 |      | 1.9 | 4.2  | 90.6 | June 2005      | IDP               |
| Gulu     | Gulu                  |      | 1.5 | 3.2  |      | June 2005      | IDP               |
| Adjumani | Adjumani A            | 9.7  | 1.5 | 3.2  |      | August 2005    | refugee           |
| Arua     | Imvepi                | 7.9  |     |      | 81.0 | October 2005   | refugee           |
| Pader    | Kalongo               | 4.2  | 0.8 | 1.4  | 92.2 | October 2005   | IDP-resident      |

### Table 8: Uganda

| Location      |                                  | GAM  | CMR | U5MR | MCV  | Start Date     | Population Status |
|---------------|----------------------------------|------|-----|------|------|----------------|-------------------|
| Apac          | Apac                             | 4.7  | 0.5 | 0.4  | 86.6 | April 2006     | IDP               |
| Lira          | Lira                             | 5.9  | 0.4 | 0.3  | 80.5 | May 2006       | IDP               |
| Gulu          | Gulu                             | 4.3  | 0.8 | 1.2  | 96.7 | June 2006      | IDP               |
| Pader         | Parabongo                        | 7.1  |     |      |      | February 2007  | IDP-resident      |
| Pader         | Wol                              | 8.0  |     |      |      | February 2007  | IDP-resident      |
| Pader         | Paimol                           | 2.7  |     |      |      | February 2007  | IDP-resident      |
| Pader         | Lapono                           | 4.0  |     |      |      | February 2007  | IDP-resident      |
| Amuru         | Amuru                            | 3.5  | 0.3 | 0.2  | 95.5 | March 2007     | IDP-resident      |
| Apac          | Apac                             | 5.4  | 0.6 | 0.4  |      | March 2007     | IDP               |
| Pader         | Parabongo. Wol. Lapono           | 5.3  | 0.9 | 0.8  | 93.6 | March 2007     | IDP-resident      |
| Lira          | Lira                             | 9.5  | 1.1 | 1.6  | 86.3 | March 2007     | IDP               |
| Pader         | Pader                            | 4.9  |     |      | 96.0 | July 2007      | IDP               |
| Pader         | Agago                            |      | 0.6 | 1.1  | 59.1 | September 2007 | IDP               |
| Pader         | Adilang                          |      | 0.5 | 0.7  | 58.3 | September 2007 | IDP               |
| Pader         | Amyel                            |      | 0.7 | 1.1  | 53.8 | September 2007 | IDP               |
| Pader         | Geregere                         |      | 0.4 | 1.0  | 65.9 | September 2007 | IDP               |
| Pader         | Lira Kato                        |      | 0.6 | 1.1  | 65.2 | September 2007 | IDP               |
| Pader         | Lukole                           |      | 0.4 | 0.6  | 61.3 | September 2007 | IDP               |
| Pader         | Namabili                         |      | 1.2 | 2.7  | 51.3 | September 2007 | IDP               |
| Pader         | Lacekotoo                        |      | 0.6 | 1.4  | 50.0 | September 2007 | IDP               |
| Pader         | Ogwang                           |      | 0.7 | 2.2  |      | September 2007 | IDP               |
| Pader         | Kamolo                           |      | 1.1 | 1.2  |      | September 2007 | IDP               |
| Pader         | Ongalo                           |      | 0.6 | 2.2  | 69.8 | September 2007 | IDP               |
| Pader         | Orina                            |      | 0.5 | 1.3  | 57.4 | September 2007 | IDP               |
| Katakwi       | Katakwi                          | 1.7  | 0.4 | 0.7  |      | December 2007  | resident          |
| Abim          | Abim                             |      | 1.1 |      |      | January 2008   | resident          |
| Kaabong       | Kaabong                          |      | 1.1 |      |      | January 2008   | resident          |
| Moroto        | Moroto                           |      | 1.1 |      |      | January 2008   | resident          |
| Abim          | Abim                             | 8.6  |     |      |      | January 2008   | resident          |
| Kaabong       | Kaabong                          | 9.1  |     |      |      | January 2008   | resident          |
| Kotido        | Kotido                           | 6.3  |     |      |      | January 2008   | resident          |
| Moroto        | Moroto                           | 15.6 |     |      |      | January 2008   | resident          |
| Nakapiripirit | Nakapiripirit                    | 15.1 |     |      |      | January 2008   | resident          |
| Pader         | Parabongo                        | 6.0  | 1.0 | 1.7  | 92.4 | March 2008     | IDP-resident      |
| Lira          | Lira                             | 5.9  | 0.4 | 0.8  | 82.8 | April 2008     | resident-returnee |
| Apac          | Арас                             | 7.1  | 0.7 | 1.8  | 83.6 | April 2008     | resident-returnee |
| Amuru         | Amuru                            | 9.0  | 1.3 | 1.9  | 93.6 | May 2008       | IDP-resident      |
| Kampala       | Kawempe. Central Kampala. Nakawa | 1.8  |     |      | 90.1 | June 2009      | resident          |
|               | Erute. Moroto. Otuke             | 3.5  | 0.2 | 0.3  | 88.0 | August 2009    | resident-returnee |

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