



# Sahel Region

October 2006

## THE PRESENT CONTEXT

Since the early 1970s, the Sahel – Burkina Faso, Chad, Mali, Mauritania, Niger and Senegal – has been suffering from chronic food shortages caused by economic crisis, poverty, desertification and climate changes. At the same time, population rates have been some of the fastest growing in the world, with a total average increase of up to 120% in the last 30 years.

Two successive years of unusually poor rainfall and the 2004 locusts' invasion, combined with these structural causes have slashed farmers' crops, pushed market prices up and forced many families into debt. This has led to an estimated 3.7 million people in need of assistance: 2.5 million in Niger, 0.6 million in Mali and 0.6 million in Mauritania. In Burkina Faso, estimates in late 2005 indicated 500 000 people affected by crop losses. Avian Flu outbreaks in Niger and Burkina Faso have plunged the poultry industry into a crisis, curtailing a basic source of income for poor households.

In 2005, large-scale international relief operations were launched to respond to acute food shortages in the region, focusing on Niger.

Although grain market are currently reporting more stable conditions, with regular supplies and prices at levels below the figures for the same period in 2005, countries have not been able to replenish their national food reserves.

The food and nutritional levels in the Sahel remain worrying, and the latest nutritional surveys conducted in Burkina Faso, Chad, Mali, Mauritania and Niger indicate acute malnutrition levels that exceed the internationally agreed upon emergency threshold.

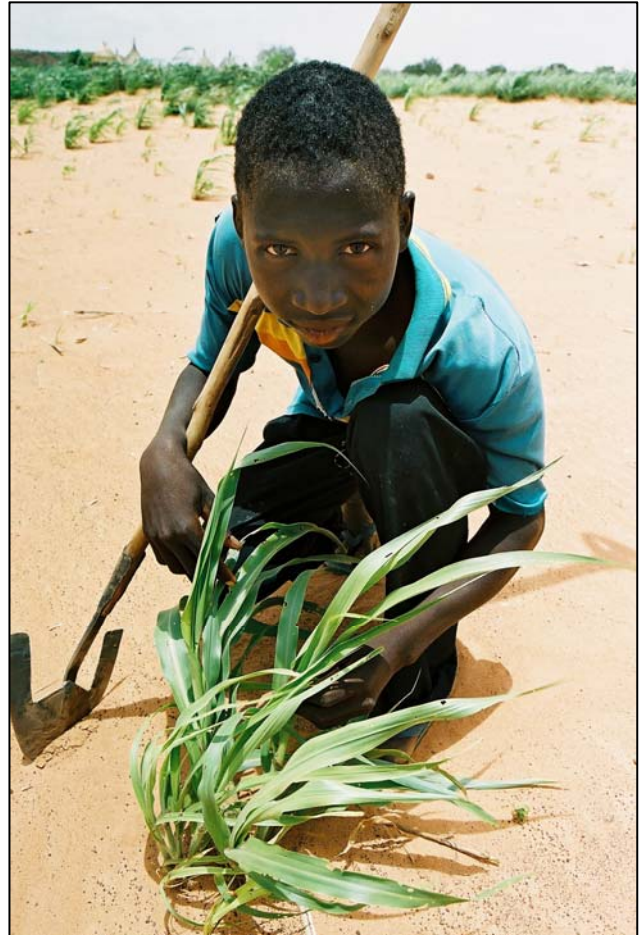
### Flooding

Torrential rains in August & September have affected thousands of people throughout the region. An estimated 46 000 have been left homeless in Niger, 11 170 in Burkina Faso and 9000 in Mauritania.

In all, an estimated four million children under five – or 10% of all children in this age group – in West Africa suffer from acute malnutrition and 13 million or one-third from chronic malnutrition. Up to 55% of all deaths are attributable to malnutrition.

In March 2006, the UN warned that hunger could kill more than 300 000 children in this region in 2006.

The resumption of some dormant conflicts in Mali and in Senegal and ongoing armed conflicts in Chad (and in neighbouring Côte d'Ivoire) are additional reasons for growing concern.



WHO intends to reinforce the immediate response to food crises and surveillance and response to outbreaks and emergencies, while collaborating with other partners to tackle some of the root causes of acute and recurring hunger in this region.

**Table 1a. Main Indicators I**

Country	UNDP Human Development Index rank (out of 177) <sup>a</sup>	Population living below the national poverty line <sup>a</sup>	Total expenditure on health as % of GDP <sup>b</sup>	General gov't expenditure on health as % of total gov't expenditure <sup>b</sup>	Population with sustainable access to improved water source <sup>a</sup>	Population with sustainable access to improved sanitation <sup>a</sup>
Burkina Faso	175	45.3	4.3	10.6	51%	12%
Chad	173	64.0	6.5	12.2	34%	8%
Mali	174	63.8	4.5	9.0	48%	45%
Mauritania	152	46.3	3.9	10.1	56%	42%
Niger	177	63.0	4.0	10.0	46%	12%
Senegal	157	33.4	5.1	11.2	72%	52%

**Table 1b. Main Indicators II**

Country	Maternal mortality per 100,000 live births <sup>a</sup>	Infant mortality per 1,000 live births <sup>a</sup>	Under-five mortality per 1,000 live births <sup>b</sup>	Fertility rate <sup>a</sup>	Birth attended by skilled health personnel <sup>b</sup>	Life Expectancy at birth (year) <sup>a</sup>
Burkina Faso	1000	107	207	6.7	38%	47.5
Chad	1100	117	200	6.7	16%	43.6
Mali	1200	122	220	6.9	41%	47.9
Mauritania	1000	120	184	5.8	57%	52.7
Niger	1600	154	262	7.9	16%	44.4
Senegal	690	78	137	5	58%	55.7

Sources: (a) *Human Development Report 2005*, UNDP, (b) *World Health Statistics 2005*, WHO.

## PUBLIC HEALTH ISSUES

### *Epidemiological profile*

Endemic and epidemic communicable diseases such as cholera, meningitis and yellow fever dominate the region's epidemiological profile, claiming each year scores of lives and causing extensive human suffering. Malaria and acute respiratory infections are also endemic, while non communicable diseases, including diabetes, cardiovascular diseases and cancers, show increasing trends.

### *Communicable diseases*

**Malaria**, of which 90-95% is due to *P. falciparum*, is responsible for 20 to 30% of outpatient consultations and is the first cause of morbidity and mortality. Children under-five and pregnant women are the most vulnerable, however adults are also highly affected in epidemic-prone areas. In Burkina Faso, Niger, Mali and Mauritania, the average number of cases reported each year is about 850 000 and increasing steadily. In Senegal up to 1.2 million cases were reported in 2000.

The Sahel belongs to the **meningitis** belt. During the epidemic season 2005-2006, almost 25 000 cases of meningitis were reported, including more than 18 500 in Burkina Faso and 4200 in Niger.

**Cholera** is a recurrent issue in West Africa and the sub-region was particularly hard hit in 2005 and 2006. A wave of outbreaks that began in October 2005 and continued in 2006 affected many countries in the region. Since the beginning of 2006, 1100 cases of cholera and 77 deaths were reported in the Sahel, including 962 in Niger and 57 in Senegal, 56 in Chad and 25 in Mauritania. Officially notified cases do not reflect the overall burden of the disease, as a result of both underreporting for fear of unjustified travel and trade-related sanctions and of other limitations in the surveillance system.

**Yellow fever** is endemic in the region; 136 cases were reported in Senegal between 2000 and 2004, and 66 in Burkina Faso during the same period. In 2005, epidemics were particularly numerous in West Africa, affecting Mali, where 58 cases and 25 deaths were reported, Burkina Faso (14 cases and four deaths) and Senegal. The recrudescence of epidemics may be partly explained by the high rainfall in West Africa in 2005, fostering an explosion of yellow fever and cholera outbreaks.

There are heightened concerns for the ever increasing proportion of vulnerable populations at risk for other waterborne epidemic-prone diseases, such as typhoid, shigellosis and hepatitis.

As of mid-August, 11 cases of **polio** have been reported in Niger, compared to five in 2005. Three had been reported in Mali and one in Chad in 2005.

Due to improved immunization coverage, the overall incidence of **measles** has declined; however, there are risks of outbreaks among migrants.

### **Under-nutrition**

Children are the most affected by the degrading food security; an estimated 300 000 children die each year from causes related to under-nutrition. External shocks, such as floods, locust invasions and rain levels slightly below the normal range, can have a significant impact on livelihoods and vulnerability. Reduced food intake and lack of varied diet leads to malnutrition and micronutrient deficiencies and results in increased morbidity and mortality, particularly from communicable diseases. Disease, in turn, will aggravate nutritional losses.

In *Niger*, a UNICEF/Center for Disease Control (CDC)/Government assessment carried out in October 2005 showed that 15.3% of children aged 6 months to 5 years suffered from acute malnutrition (considering cases of wasting), exceeding the WHO's 10% emergency threshold, showing a degradation of the situation (see Table 2).

In *Burkina Faso*, the latest demographic and health survey from 2003 showed a prevalence of acute malnutrition of 18.6% and a prevalence of chronic malnutrition of 38.7% among children under five. Food aid operations are ongoing in vulnerable zones in the North and centre of the country.

With a prevalence of acute malnutrition at 10.6% and chronic at 38.2%, the nutritional situation of children under five in *Mali* remain worrying. It reached alarming levels in certain areas of Mopti Region with a acute malnutrition rate of 19%. The situation may very well have deteriorated since the beginning of the lean season.

in December 2005, the prevalence of acute malnutrition among children under five in *Mauritania* was 12.8% that is about 63 000 malnourished children, of which 50 000 moderately. This rate is particularly worrisome as it reflects the post-harvest season, when food supplies are usually sufficient.

**Table 2. Nutritional Status of children under five**

Country	Underweight	Stunting	Wasting
Burkina Faso <sup>a</sup>	37.7%	38.7%	18.6%
Chad <sup>b</sup>	36.7%	40.9%	13.5%
Mali <sup>c</sup>	33.2%	38.2%	10.6 %
Mauritania <sup>d</sup>	31.8%	34.5%	12.8%
Niger <sup>e</sup>	40.1%	39.7%	13.6%
Senegal <sup>f</sup>	17.3%	16.3%	7.6%

Sources: (a) DHS 2003, (b) DHS 2004, (c) DHS 2001, (d) *Analyse de la sécurité alimentaire et de la vulnérabilité (CFSVA)* 2005, (e) MICS2, Niger/UNICEF 2001, (f) DHS 2005.

### **Access to clean water, sanitation and health care**

The vulnerability to under-nutrition is aggravated by limited access to clean water and sanitation, lack of adequate health care, often not available in rural or isolated communities.

With very weak capacities to address the issue at both national and international levels, the risk of outbreak is high and conditions for rapid spreading of communicable diseases are often present. Despite the support provided by international organizations, access to and availability of operational and affordable health care services are not granted to large numbers of most vulnerable people from rural communities.

Government expenditures for health are below the WHO recommendations, and in most instances, the preferential allocation of human and financial resources to urban areas has also done more to exacerbate than alleviate inequalities of access to health care. As a result, for those who have access to health care, it can be expensive and in many cases unaffordable.

## **STRATEGIC AXES OF WHO'S RESPONSE**

WHO's response is based on the following axes:

- ✓ Strengthen health sector coordination and information management to ensure better targeting and to address needs in under-serviced areas;
- ✓ Support local and national authorities as well as health partners, including NGOs in the early identification and control of suspected outbreaks by strengthening preparedness for epidemic prone diseases through provision of technical expertise and pre-positioning of medical kits;
- ✓ Enhance capacities to treat severe malnutrition at local level by ensuring that staff receive appropriate training and that therapeutic food supplies are available; and
- ✓ Support the development of a policy and strategy to improve reliability of access to and affordability of essential health care during crises.

## **NEXT STEPS**

To further WHO's activities in support of the Ministries of Health, the following axis of interventions are proposed in the Sahel countries:

1. Reinforce coordination and information management by:
  - ✓ Supporting health sector coordination and information management;
  - ✓ Disseminating regular situation updates and weekly morbidity and mortality updates;
  - ✓ Participating to national and sub-regional coordination meetings;
  - ✓ Supporting the weekly analysis of trends for communicable diseases.
2. Reinforce epidemiological surveillance and response by:
  - ✓ Continuing training on the management of communicable diseases such as malaria and on the response to Avian Influenza;
  - ✓ Pre positioning cholera kits, essential drugs against meningitis, malaria and shigellosis as well as laboratory tests;
  - ✓ Ensuring the transport of samples to the reference laboratories when needed;
  - ✓ Supporting national authorities in data collection and analysis.
3. Improve the management of malnutrition by:
  - ✓ Training health care providers and medical/nursing schools trainers on integrated management of severe malnutrition (community and health facility Based Care);
  - ✓ Supporting the supervision of activities;
  - ✓ Collaborating with nationals, UNICEF, WFP, FAO, and other health partners.

## **FUNDS NEEDED**

WHO is working with UN agencies and NGOs on a 2007 CAP for West Africa.

Three trans-national humanitarian priority issues will be addressed:

- ✓ Food security and nutrition in the Sahel;
- ✓ Rapid response to health crisis;
- ✓ Protection and populations movements.

The 2007 West Africa CAP will include Burkina Faso, Mali, Mauritania, Niger and Northern Benin for nutrition activities.

WHO is preparing projects which will be implemented in collaboration with other health partners.