



case study

Tackling malnutrition in Niger

Situation

Malnourished children are among the most vulnerable in Niger, one of the world's poorest countries. Niger came in last (182nd) in the 2009 ranking of the Human Development Index¹ and had a poverty rate estimated at 59.5 per cent in 2008.²

In normal times, stunting rate of children in Niger is over 50 per cent, one of the highest in the world. Stunted children are those who are too short for their age and have experienced impaired growth and cognitive development, which is generally considered irreversible.

In June 2010, the rate of acute malnutrition (low weight in comparison to height) in Niger was 16.7 per cent in children under five, a figure well above the emergency threshold of 15 per cent and the 12.3 per cent estimated for 2009. In some regions, such as Diffa and Maradi, it stood at 22.1 per cent and 19.7 per cent, respectively, as compared with 17 per cent and 13.1 per cent in 2009. Similarly, the rate of severe acute malnutrition, which considerably increases the risk of infant mortality, raised from an average of 2.1 per cent in 2009 to 3.2 per cent in 2010³. In November 2010, the overall rate for severe acute malnutrition reached 15.5 per cent, while the rate for overall acute malnutrition remained unchanged.⁴

Malnutrition, the leading cause of infant mortality and morbidity in Niger, is significantly affected by food insecurity. However, other causes are also important, such as illness, poor sanitary conditions and hygiene practices, and poor infant and young child feeding practices. Dietary practices, limited access to health services and the limited access to drinking water are all factors which are underlying causes of illness and an inadequate diet.⁵ When children suffer from malnutrition, their immune system is affected. Common illnesses like malaria or diarrhoea may lead to complications, and the risk of death is very high. Yet malnutrition can be treated, and preventive action is possible.

As a result of the meagre farming and stockbreeding season for the year 2009–2010, Niger was hit by a serious food crisis in 2010. The analysis of the current food crisis in households conducted by the government in April 2010 shows that severe food insecurity affected 22.2 per cent of the population or some 3.3 million people, whereas moderate food insecurity hit 25.5 per cent of the population or 3.3 million people. Moderate and severe food insecurity affected 47.7 per cent of the population, or 7.1 million people.

Facts and figures

Today, throughout the world, one billion people suffer from malnutrition.

Every year, more than six million children die of complications due to malnutrition.

Every day, 25,000 people, mainly children, die of malnutrition.

In Africa, one-third of all children suffer from malnutrition.

In Niger, only 9.9 per cent of children under six months are 100 per cent breastfed, and this percentage is lower still for uneducated mothers.

Forty per cent of the country's population has no access to drinking water.

Eighty per cent of households in Niger do not have their own latrines.

In Niger, 96 per cent of people in the countryside and 57 per cent in cities do not have access to adequate sanitation.

The Red Cross and Red Crescent combat malnutrition in the countries that are worst affected.

In Niger, the Red Cross is active in 66 IHCs and three CRENI in district hospitals in the regions of Zinder, Agadez and Niamey.

Action

The French Red Cross has been present in Niger since 1998. It has established cooperation ties with the Niger Red Cross to combat malnutrition in the regions of Niamey, Agadez and Zinder, and has set up programmes to fight against malnutrition on a long-term basis.

Capacity-building

The Red Cross programmes support capacity-building for health agents who are trained in the national protocols for the treatment of malnutrition. Under these programmes, integrated health centres (IHCs) are equipped with anthropometric material (scales and height gauges) for evaluating children's nutritional status, as well as medical equipment to ensure a thorough examination of children when they arrive at the IHC. Therapeutic foods are provided for treatment.

Partnership

The French Red Cross approach focuses on enabling public health centres to treat malnourished children. Integrating programme activities into structures managed by the Ministry of Health is an important approach to ensure sustainable impact of humanitarian action. It supports stronger long-term capacity to address public health and nutrition challenges.



By giving public health centre staff the mandate and training to treat malnourished children, important skills are developed, practiced and institutionalized. Health centres can deal with children's health from a holistic perspective. Working together with the Ministry of Health helps ensure the long-term viability of projects and closer proximity to the public. These public health centres existed before the Red Cross interventions, and will continue to exist after they are completed.

Screening and referral

Food taboos and a lack of knowledge are among the underlying causes of malnutrition and are a real hindrance when it comes to improving children's health and nutritional status. Awareness-raising must be one of the pillars of the integrated programme approach in order to generate behavioural change in the population in general, and among mothers of children under five in particular.

Ferdows Brah, French Red Cross

In conjunction with its project “Community-based nutrition”, the French Red Cross has trained volunteers from the Niger Red Cross to monitor the growth of children aged 0-36 months by means of active screening (using middle upper arm circumference, i.e., MUAC) and the seven essential family practices⁶ in 85 villages located in the health area of 14 IHCs. The volunteers build community awareness through messages relating to health and child nutrition, monthly growth monitoring (children aged 0-36 months are weighed with results noted on growth charts), as well as active screening of children for acute malnutrition (aged 37-59 months via measurement of MUAC). Children with a MUAC under 125 mm are referred to an IHC, where they are weighed and their height is measured. Their nutritional status is evaluated, and they are treated if they are suffering from moderate or severe acute malnutrition.

In the wake of the 2010 food crisis, the Red Cross introduced active screening in 253 villages in the health areas of 14 IHCs in Tanout health district (within a 10 km radius from the IHCs). Screening was conducted by five mobile teams composed of five members each (four Niger Red Cross volunteers and a male nurse as head of team), two team supervisors and a screening officer.

In all, 24,268 children aged 6-59 months benefited from active screening based on MUAC measurement. All children with a brachial perimeter under



125 mm were weighed and their height was measured by the teams in the villages. Children suffering from moderate or severe malnutrition or severe malnutrition with complications were referred to public health structures for treatment.

A total of 2,356 children were screened and referred to health structures for treatment. Among them, 2,072 were treated, that is 88 per cent (1,534 suffering from moderate acute malnutrition, 517 from severe acute malnutrition and 21 from severe acute malnutrition with complications). The remaining 284 children will be surveyed during the second round of active screening.

This type of screening is essential, because early detection of the pathology boosts a child's chances for survival. Children are referred to public health structures for evaluation of their nutritional status and quality treatment. Screening is often conducted jointly with UNICEF and other organizations, so as to reach a greater share of the population and estimate the number of children suffering from this pathology. Engaging in awareness-raising in addition to screening is crucial, as this increases the possibility for behavioural change.

Treatment

The treatment of malnourished children varies depending on the degree of malnutrition. Moderately acute malnourished children are systematically treated with Vitamin A, iron, folic acid and mebendazol; their vaccination status is checked (measles vaccination if need be), and the mother is given therapeutic inputs (CSB⁷, oil and sugar in the form of a premix) to prepare as a baby cereal. In cases of severe acute malnutrition without complications, children are given "plumpy nut", a ready-to-use therapeutic food (RUTF). It is administered according to the child's weight. In the event of severe acute malnutrition with medical complications (malaria, acute upper respiratory infection, diarrhoea), children are referred to a district hospital, where they receive appropriate treatment (the IHCs are not authorized to treat cases involving medical complications). Following the medical consultations, mothers attend awareness-raising sessions organized by Red Cross volunteers, which focus on essential steps to ensure proper child nutrition, an adequate diet and other preventive measures linked to hygiene and health promotion.

Depending on the type of programme (moderate acute malnutrition or severe acute malnutrition without complications), mothers come back either bi-weekly or weekly to have their child's nutritional status monitored and to receive supplementary food rations or RUTF provided by WFP and UNICEF. In this way, the Red Cross has reinforced existing health structures (in terms of skilled human resources, medical equipment, treatment facilities and medicine), which are now capable of treating malnourished children, regardless of the gravity of their state of health.

Awareness-raising

In addition, the Red Cross runs awareness-raising campaigns to increase knowledge of malnutrition and to identify acutely malnourished children in the villages and treat them in the IHCs.

This awareness-building helps populations change their behaviour.

Niger Red Cross community outreach worker

These awareness-raising campaigns are conducted by Niger Red Cross volunteers, who have been trained in a number of key messages relating to children's health/nutrition, especially early and exclusive breastfeeding, complementary feeding, use of treated bed nets, and the importance of vaccination. The volunteers pass these messages on by means of the awareness-building sessions organized at the village level.

Results

The Red Cross is active in 66 IHCs and three CRENI (intensive nutritional recovery centres) in the district hospitals in the regions of Zinder, Niamey and Agadez.

For the year 2010, the number of beneficiaries by programme and by region may be broken down as follows:

In the centres where the Red Cross operates, the cure rate for acute malnourished children is 87 per cent. It is broken down as follows: 84 per cent for moderately acute malnourished children; 94 per cent for severely acute malnourished children without complications; and 91 per cent for severely acute malnourished children with complications. This difference is considered to be due to the fact that monitoring for children suffering from severe acute malnutrition is more thorough.



	Moderately acute malnourished children (CRENAM)	Severely acute malnourished children w/o complications (CRENAS)	Severely acute malnourished children w/ complications (CRENI)
Zinder			
Children who entered the programme	33,407	13,969	683
Children who left the programme	19,276	9,666	569
Children who left the programme cured	16,104	8,923	524
Cure rate	83.54%	92.31%	92.09%
Agadez			
Children who entered the programme	6,012	3,233	389
Children who left the programme	4,355	2,446	326
Children who left the programme cured	3,784	2,067	290
Cure rate	86.9%	84.51%	88.96%
Niamey			
Children who entered the programme	1,677	1,204	0
Children who left the programme	1,317	902	
Children who left the programme cured	1,174	824	
Cure rate	89.14%	91.35%	

What about the long term?

Infant and young child feeding practices, limited access to health services, household dietary diversity, and the limited availability of drinking water are all factors that impact nutrition and health. The causes of malnutrition are multi-dimensional. Awareness-raising, screening and treatment for acute malnutrition must be supplemented by strengthened health and nutrition services which should also address problems of chronic malnutrition (stunting). Moreover, vulnerable populations must have access to drinking water, sanitation, and the means to practice good hygiene behaviours. Improvement in food security is critical for vulnerable populations. It is necessary to strengthen livelihoods, thereby facilitating access to food. An integrated approach is critical to achieve impact over the long-term.

¹ UNDP, Human Development Index 2009, <http://hdr.undp.org/fr/statistiques/>

² Per capita Gross Domestic Product (GDP) is about USD 340 according to the National Consumption Budget Survey.

³ Survey on nutrition and survival among children aged 6–59 months in Niger, May–June 2010. <http://ochaonline.un.org/CoordinationIASC/Securitealimentairenutrition/tabid/5651/language/fr-FR/Default.aspx>

⁴ Nutrition survey among children aged 6–59 months, Niger, October–November 2010.

⁵ How to conduct a food security assessment? A step-by-step guide for National Societies in Africa. International Federation of Red Cross and Red Crescent Societies, April 2006.

⁶ These seven practices are: (1) 100 per cent breastfeeding; (2) washing of hands; (3) use of treated bed nets; (4) diagnosis and treatment of diarrhea; (5) high-quality food supplements; (6) use of preventive and curative health services; (7) danger signs of the three leading illnesses.

⁷ A corn-soya-bourgou mix.



**For further information,
please contact:**

Community preparedness and risk reduction department
International Federation of Red Cross and Red Crescent Societies
P.O. Box 372
CH-1211 Geneva 19
Telephone: +41 22 730 4222
Telefax: +41 22 733 0395
E-mail: secretariat@ifrc.org
Web site: www.ifrc.org

www.ifrc.org
Saving lives, changing minds.

