COTE D’IVOIRE NUTRITION SURVEY
JULY 2009

BACKGROUND

UNICEF is continuously assessing the evolving nutritional status of children in Côte d’Ivoire to inform programmers on the specific needs and to propose appropriate responses. The July 2009 survey was executed to follow up on the data obtained through the July 2008 SMART survey conducted due to increasing reports on malnutrition cases in the north of Côte d’Ivoire. The 2008 survey revealed an alarming situation with global acute malnutrition rate of 17.5 percent in children under five, far above the emergency threshold of 15 percent.

While the 2008 assessment focused on five regions (Savanes, Zanzan, Denguele, Bafing and Worodougou) in the north, the 2009 survey covered also the areas in the West of the country (Bas Sassandra, Monyen Cavally and Montagnes) for a more comprehensive analysis of the nutritional status in areas most affected by the crisis.

The 2009 survey indicates that stunting (or shortness, also referred to as chronic malnutrition) with the rate of 43.1 percent is a major cause of concern in children from 6 to 59 months. At the national level, one in three children under the age of five suffers from chronic malnutrition, which is the main underlying cause of death in children. Many children were also found to be underweight for their age in all regions (22.7 percent).

Many past and present social and economic factors contribute to the poor food security situation in Côte d’Ivoire: (i) the collapse of the economy due to politico-military conflict that has led to increased poverty thus affecting the purchasing power and resiliency to price fluctuations of basic commodities; (ii) the poor capacity of the health system to respond to emergency situations and inappropriate feeding and care practices demonstrated by the low rates of exclusive breastfeeding (only 4 percent) and low birth weight (17 percent).

OBJECTIVES OF THE SURVEY

- Estimate the acute malnutrition rate of children aged 6 - 59 months
- Estimate the nutritional status of women aged 15 - 49 years
- Evaluate feeding practices of young children
- Assess the coverage of vitamin A supplementation and deworming.

MAIN FINDINGS

Anthropometric measurements (weight, height, and Mid Upper Arm Circumference (MUAC)) for 4,356 children between 6-59 months were taken in the five northern administrative regions (Worodougou, Savanes, Zanzan, Denguele and Bafing) and three western regions (Bas Sassandra, Monyen Cavally and Montagnes). Amongst the measured children, 49.7 percent were boys and 50.3 percent girls.
The average prevalence of malnutrition in the eight administrative regions, based on WHO 2005 Standards, is as follows:

- Global acute malnutrition (GAM) based on weight-for-height: 7.2 percent.
- Global underweight, based on weight-for-age: 22.7 percent.
- Global chronic malnutrition based on height-for-age: 43.1 percent.
- Global chronic malnutrition prevalence is below 40 percent only in the Bas Sassandra region (27.9 percent) and the highest global chronic malnutrition was detected in Worodougou region at 48.4 percent.
- Disaggregation by sex showed a slightly higher malnutrition rates for boys. Among age groups the children between 6-29 months show the highest prevalence of acute malnutrition and underweight.
- 7.8 percent of non pregnant women aged from 15 to 49 years are malnourished (Body Mass Index below 18.5).
- 33 percent of babies benefit from early breastfeeding, while exclusive breastfeeding was about 13.5 percent.
- Vitamin A coverage is 70 percent, while de-worming is 45 percent.
- 56.4 percent of the households use iodized salt (>15 parts per thousand).

SURVEY METHODOLOGY

The survey was conducted using the Standardized Monitoring & Assessment of Relief & Transition (SMART) methodology. It is a basic integrated method for assessing nutritional status and mortality rates providing the basis for understanding the magnitude and severity of a humanitarian crisis in terms of nutrition.

Sampling method: Emergency Nutrition Assessment (ENA) statistical package was used to calculate the sample size based on the regional population, and to sample clusters of villages and households randomly.

Geographic area: eight regions with a total population of 7,215,396 (2009 estimation from National Statistic Institute -See map below).

Target Population: Children aged 6 - 59 months and mothers aged 15 - 49 years.

Survey Population: 4,356 children under five weighed and measured. More than 4,350 household interviews were conducted.


Information collected: Weight, height, and MUAC were collected for children 6-59 months in addition to data on child health and nutrition.

Analysis: Anthropometric data were analyzed using nutrition survey analysis software, whereas data on child health and nutrition was analyzed using SPSS.
RESULTS

PREVALENCE OF ACUTE MALNUTRITION

The prevalence of global acute malnutrition (GAM) or wasting based on weight-for-height, is 7.2 percent among children 6-59 months of age, which is below the emergency threshold set at 10 percent. However, when the prevalence is between 5 and 9 percent, the situation is classified as poor. The prevalence of severe acute malnutrition (SAM) is high at (2.3 percent). The highest prevalence of SAM was found in the Montagnes region (4.5 percent), while the prevalence was the lowest in Bas Sassandra (0.5 percent).
PREVALENCE OF CHRONIC MALNUTRITION

The prevalence of chronic malnutrition, also referred to as stunting, was 43.1 percent. 17 percent of children were severely stunted. Global stunting prevalence is above 40 percent in all regions except in Bas Sassandra (27.9 percent). A prevalence of 40 percent or higher indicates a critical situation. The high level of stunting is a sign of chronic poverty, inappropriate infant and young child care and practices and lack of access to health care services. Past nutrition studies have also indicated stunting to be the main nutritional problem in Côte d’Ivoire (MICS 2006), according to which the national stunting rate was 34 percent.

PREVALENCE OF UNDERWEIGHT

Among children of 6-59 months of age, the survey results showed that the average global underweight or low weight-for-age for all regions was 22.7 percent, with 6.6 percent of children severely underweight. A prevalence between 20 and 29 percent indicates a serious situation. As per the below chart, the region with the highest levels of underweight is Worodougou (28.0 percent), followed by Zanzan (25.2 percent) and Bafing (24.6 percent). The regions with the lowest prevalence are Bas Sassandra (11.1 percent), followed by Moyen Cavally (19.5 percent) and Denguele (22.6 percent).
VITAMIN A AND DEWORMING COVERAGE

Vitamin A
Vitamin A supplementation coverage is 70 percent for all children aged from 6 to 59 months. The coverage in all regions is above 80 percent, except in Zanzan (73.2 percent) and Worodougou (63.2 percent).

Deworming
Only 45 percent of all the children of 12-59 months of age had received a deworming drug. The coverage is the highest in Moyen Cavally (67.9 percent), followed by Savanes (62.8 percent) and Zanzan (54.5 percent). The lowest coverage is found amongst children in Worodougou (17.4 percent).

CONCLUSIONS AND RECOMMENDATIONS

• Although the observed levels of acute malnutrition and underweight are not alarmingly critical, the food security situation should be closely monitored and the current surveillance systems strengthened.
• Chronic malnutrition is the main problem Côte d’Ivoire, especially in the north. Long term comprehensive and sustainable interventions must be put in place by the Government to address its main causes.
• The impact of food assistance and other food security and nutrition programmes must be assessed.
• Nutrition education programmes should be strengthened at the community level. The emphasis should be on the importance of appropriate infant and young child feeding practices, care, hygiene, diet diversification and its quality.

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