



नेपाल खाद्य सुरक्षा अनुगमन प्रणाली
Nepal Khadhyo Surakshya Anugaman Prandali (NeKSAP)
Nepal Food Security Monitoring System



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Highlights:

- Prevalence of global acute malnutrition (GAM) among the randomly sampled households (n=324) in this round is 18.2%. This represents an increase in prevalence compared to the period from April-June 2010 which was estimated to be 15.1%.
- Prevalence of GAM in the hill and mountain districts of the Mid- and Far-Western development regions is significantly higher than the national averages.
- Other groups of children with a higher than average risk of GAM include: children living in VDCs classified as highly or moderately food insecure, children in the mountainous areas of the country, and children living in households with sub-optimal food consumption scores.

Introduction:

Nepal is a signatory to the United Nations Millennium Declaration and its eight Millennium Development Goals (MDGs). Continuous monitoring of nutrition indicators, such as underweight among children less than 5 years of age, is essential for tracking the progress of the country in achieving the MDG targets (specifically MDG1: the eradication of extreme poverty and hunger). To address this issue, the World Food Programme (WFP) and Helen Keller International (HKI) have taken the joint initiative to include nutrition information as part of the Nepal Food Security Monitoring System (NeKSAP).

The *Child Nutrition Bulletin* is the first nationwide monitoring system to collect nutritional indicators on a regular basis to assess how feeding and care practices, and the prevalence of malnutrition change over time. This bulletin supplements *Nepal Food Security Bulletin #29*, and represents the second in a series of quarterly surveillance reports. The series will capture seasonal variability in feeding practices and nutritional status, and can assist with the efficient targeting and allocation of resources for nutrition-related development and emergency activities.

Methodology

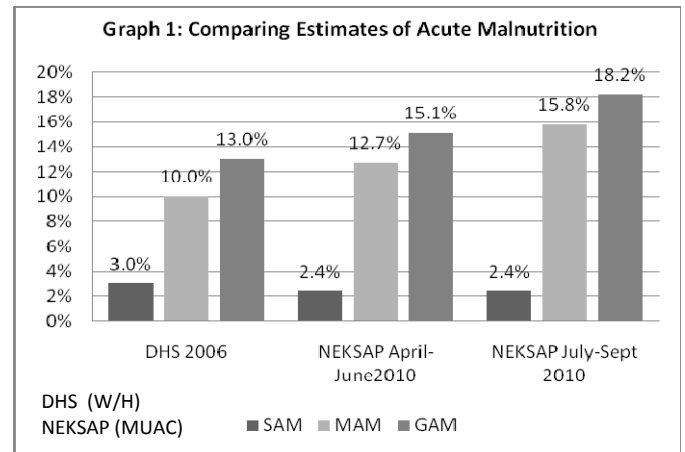
Child nutrition and food security data were collected from the families of 511 children aged 0-59 months during the period from July-September 2010. Two sampling methodologies were utilized in this round: probability sampling and sampling by food security phase. (See the *sampling methodology document for details on the procedures*). Information on Infant and Young Child Feeding (IYCF) practices and child illnesses were obtained through interviews with mothers, and children's mid upper arm circumference (MUAC) was measured to assess acute malnutrition. In the analysis phase, prevalence estimates and cross-tabulations are based on the probability sample (n=324). When conducting cross-tabulations by food security phase, prevalence was estimated from the total sample (n=511). Future bulletins will increase the sample size in order to improve estimates when stratifying by variables of interest such as age, cluster and demographic factors.

Findings

Acute Malnutrition

Among children aged 6-59 months, 18.2% of children in our sample (n=307) are suffering from global acute malnutrition: 2.4% from severe acute malnutrition (SAM, MUAC <115mm) and 15.8% from moderate acute malnutrition (MAM, MUAC ≥115mm - <125mm). Our findings on SAM are consistent with the 2006 Nepal Demographic and Health Survey (NDHS) which estimates that 3% of children in this age group are severely wasted. Similarly, NEKSAP data from the April – June 2010 period (Child Nutrition Bulletin Issue #1) estimated the prevalence of SAM to be 2.4%. The prevalence of MAM however, is higher in this sample compared to both the 2006 NDHS data and the NEKSAP surveillance data from the April – June 2010 period.

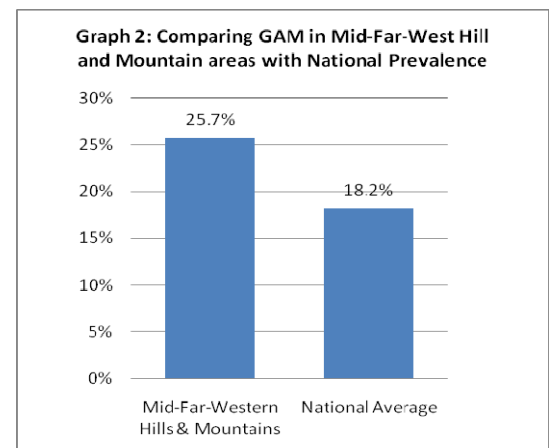
The cross-sectional nature of this surveillance system makes it impossible to infer causality about the reason for this increase; however continuous analysis of quarterly data on malnutrition will better enable this bulletin to determine the relationship between seasonal variation and malnutrition.



GAM across geographic and household characteristics

The prevalence of GAM in the hill and mountain districts of the Mid and Far Western development regions is much higher than the national average; however, it is worth noting that the rate of GAM in these areas remained consistent with the previous quarter's estimate (25.0%). This corresponds with the continuity of food security status in this area which was reported in *Nepal Food Security Bulletin #29*.

The chart below shows trends in GAM across geographic and household characteristics. It is worth noting that prevalence of GAM in Nepal seems to be consistently linked with household food security status. During this quarter, as well as last quarter, children who live in VDCs classified as highly food insecure (Phase 3), have the highest rates of acute malnutrition. This is followed by children in moderately food insecure VDCs (Phase 2), and then children in food secure VDCs (Phase 1).



The link between household food security status and GAM can be partially explained by household food consumption patterns. The food consumption score is a composite indicator which is calculated based on dietary diversity, food frequency, and the relative nutritional importance of different food groups. As the chart to the left reveals, children living in households with “acceptable” food consumption scores have lower rates of GAM compared to their counterparts in households classified as having “poor” or “borderline” food consumption scores.

Prevalence of GAM by Food Security Phase	
Phase 1 (n=167)	16.8%
Phase 2 (n=127)	22.8%
Phase 3 (n=102)	28.4%
Prevalence of GAM by Ecological Belt	
Hill (n=116)	17.2%
Mountain (n=71)	21.1%
Terai (n=104)	17.3%
Prevalence of GAM by Food Consumption Group	
Borderline or poor (n=85)	25.9%
Acceptable (n=206)	15.1%

Conclusion

The data in this bulletin confirms the widespread prevalence of GAM across Nepal (with a national average above international emergency threshold level of 15%). This bulletin verifies the relationship between household consumption and food security status and the nutritional status of children in Nepal. While the Child Nutrition Bulletin also collects data on Infant and Young Child Feeding (IYCF) practices and care of sick children, the sample size for this information is relatively small. In order to present our findings in an informative manner, the Child Nutrition Bulletin will aggregate across quarters in order to present an accurate estimate of national practices. Future bulletins will thus report on changes in child feeding and care practices over time and the impact of seasonal variation.