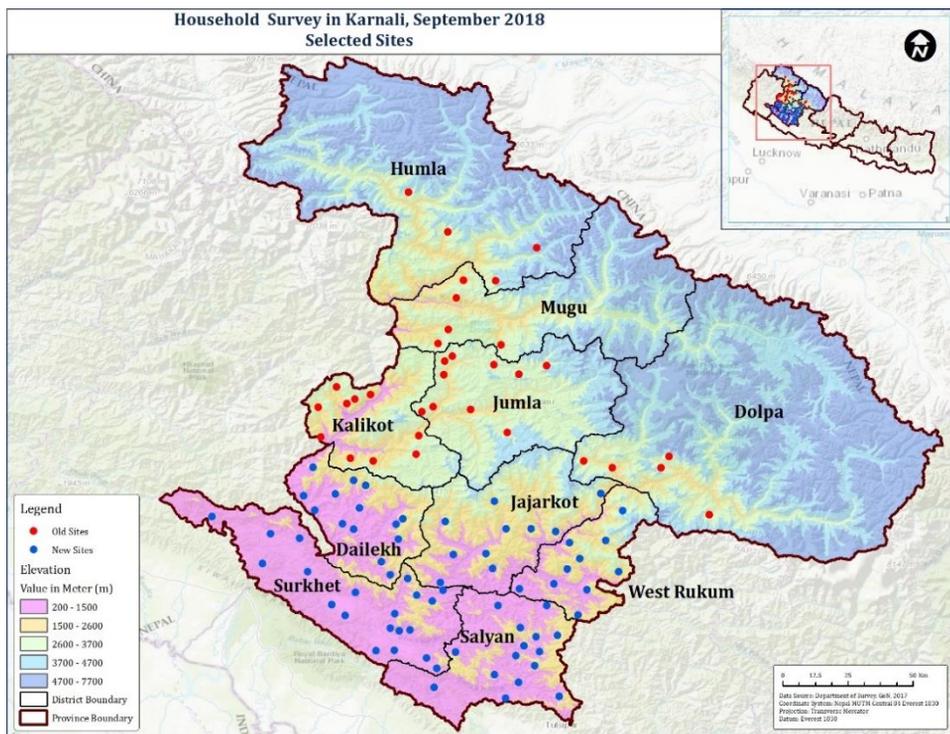


SDGs and Food Insecurity in Karnali: Results from The Food Insecurity Experience Scale

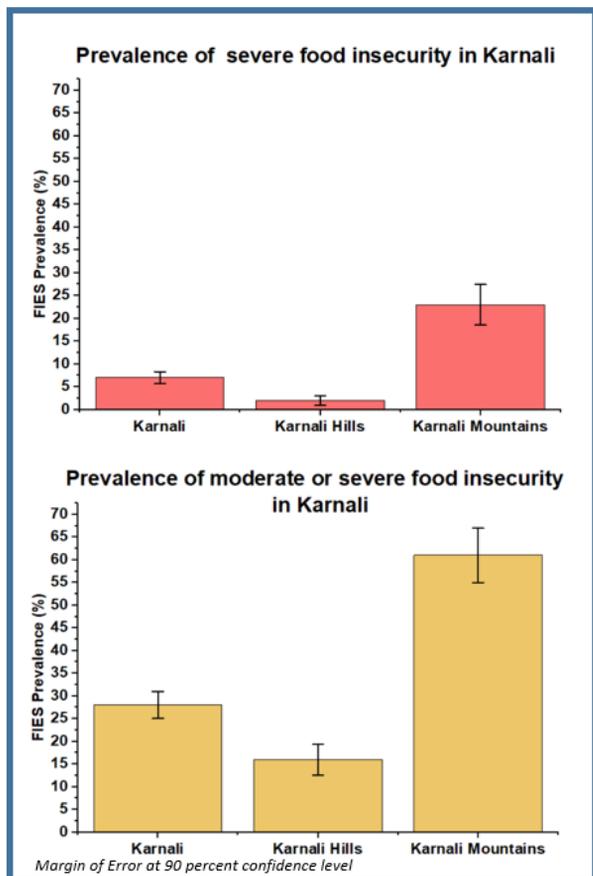
Summary

Nearly 7 percent of households in Karnali Province were found to be severely food insecure, and four times that number either severely or moderately food insecure. Severe food insecurity means that people have compromised the quality of their diet due to lack of resources to access food and may have been forced to reduce the quantity they consume to the point of experiencing hunger or going for an entire day without eating. This was most prevalent in Karnali's mountain districts (23%), indicating clear regional disparities in a Province which is already classified as the most food insecure in Nepal.

Karnali Province is considered the most food insecure Province of Nepal according to the Nepal Demographic and Health Survey (NDHS 2016). Analysis of mVAM FIES data in this province yields a picture that is highly consistent with the one that emerges from the analysis of HFIAS data collected in the NDHS.



❖ Overall prevalence of food insecurity in Karnali Province, combining moderate and severe levels as defined and measured with the FIES, was of 28 percent. However, disparities across ecological belt were large, with food insecurity affecting over 60 percent of households in the Karnali mountain Districts, against a lower 16 percent in the hill Districts.



- ❖ Prevalence of severe food insecurity followed a similar trend, with mountain Districts (23 percent—est. 106,000 people) recording more than three times the overall rate for Karnali Province (7 percent—est. 124,000 people). Prevalence of severe food insecurity in Karnali's hill Districts was a markedly lower 2 percent (est. 26,000 people).
- ❖ Households in Karnali's mountain Districts rely extensively on cereal-based crop production for their livelihoods, and are less likely to have diversified livelihoods than their counterparts in the Province's hills. Given historically low crop production and productivity in this region, paucity of livelihoods may be a central driver of food insecurity in this area.
- ❖ Furthermore, the mountain districts are areas of low physical access, characterized by low road density and high travel time to access markets and essential services.
- ❖ This results in higher food prices—cereal food prices were 45 percent higher in Karnali mountain Districts than the national average in September 2018—and insufficient food supply: 46 percent of traders interviewed reported insufficient food availability in mountain District markets, compared to 28 percent for the rest of the province.
- ❖ The diversity of diet was also lower in Karnali mountain District households, with 24 percent of households having poor dietary diversity, against less than 13 percent of households in the rest of the province. These households reported consuming fewer than five food groups in the week prior to the survey. Furthermore, households with lower dietary diversity consumed fewer nutrient-rich foods—including meat, fish, eggs, fruits and milk, a trend exacerbated in the mountain Districts.
- ❖ FIES results are found to be overall consistent with other relevant food security indicators such as the food consumption score: some 30 percent of households had inadequate consumption of diversified foods. Dynamics between mountain and hill Districts are also found to be generally similar, with mountain Districts' prevalence of inadequate food consumption almost twice that of hill Districts. While not denoting statistically significant differences, women heads of household surveyed also had higher food insecurity across the Province, both according to FIES and Food Consumption Score results.

Methodology

mVAM Survey

The World Food Programme, together with the Nepal Ministry of Agriculture and Livestock Development, has been monitoring household food insecurity trends in the Far West Mountain regions of the country through the WFP mobile VAM ('mVAM') project since December 2016. In August/September 2018, the survey area was expanded to include the entire newly-formed Karnali Province, collecting for the first time a baseline on household food security.

This household survey was undertaken by the United Nations World Food Programme (WFP) in close cooperation with the Ministry of Agriculture and Livestock Development, the National Planning Commission, the Central Bureau of Statistics and the United Nations Food and Agriculture Organization as part of WFP's support to the Nepal Food Security Monitoring System (NeKSAP). Technical support in the analysis of FIES scores was provided by Carlo Cafiero, UNFAO Food Security and Nutrition Statistics Team Leader and Manager of the "Voices of the Hungry" project, which led to the establishment of FIES globally.

The baseline survey in Nepal's Karnali Province was conducted in August-September 2018 using a two-stage stratified cluster design—with two strata: mountain and hill. A total of 124 primary sampling units (PSUs) comprising of 75 PSUs in the hill and 49 PSUs in the mountain were selected, and 15 households in each PSU were interviewed using a dual-mode survey— face-to-face and telephone. Out of 1860 households sampled, a total of 1708 households were interviewed, along with 85 traders. Sample size calculation parameters are as follows: design effect (2), margin of error (5.5%), confidence interval (95%), response distribution (50%) and response rate (1.5%). All estimated group differences for the mVAM survey, except where mentioned, are statistically significant at $\alpha = 0.055$. Standard errors for FIES estimates of prevalence were calculated at the 90% confidence level.

FIES and the Sustainable Development Goals

GOAL 2 End hunger, achieve food security and improved nutrition and promote sustainable agriculture

TARGET 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

INDICATOR 2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale

"The FIES is a metric of severity of food insecurity at the household or individual level that relies on people's direct yes/no responses to eight brief questions regarding their access to adequate food. It is a statistical measurement scale similar to other widely-accepted statistical scales designed to measure unobservable traits such as aptitude/intelligence, personality, and a broad range of social, psychological and health-related conditions. A common misconception is that the FIES is a "subjective" measure. However, the eight questions, when analysed together, form a quantitative tool to measure the prevalence of food insecurity (at moderate and severe levels) in a given population, using statistical methods that enable estimation of error (confidence intervals around the measures produced)."¹

The eight questions are as follows:

During the last 12 months, was there a time when...

1. You were worried you would not have enough food to eat because of a lack of money or other resources?
2. You were unable to eat healthy and nutritious food because of a lack of money or other resources?
3. You ate only a few kinds of foods because of a lack of money or other resources?
4. You had to skip a meal because there was not enough money or other resources to get food?
5. You ate less than you thought you should because of a lack of money or other resources?
6. Your household ran out of food because of a lack of money or other resources?
7. You were hungry but did not eat because there was not enough money or other resources for food?
8. You went without eating for a whole day because of a lack of money or other resources?

¹ The Food Insecurity Experience Scale: Measuring Food Insecurity through People's Experiences. UNFAO. I7835EN/1/09.17.

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