Improving food security in Nepal: Analyzing the results of a World Food Program survey

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The World Food Program carried out a national household food security survey in Nepal in 2005. This research analyzes the data collected in this survey to better understand the activities and characteristics of households that improve or diminish food security levels. An ordered logit econometric model was used to analyze the nearly 1800 data points collected in the survey. GIS maps were used to carry out a spatial analysis of food security and deforestation and various land use variables. The analysis particularly focuses on social capital, natural capital, human capital, and financial variables that influence food security. The analysis finds that membership in lower castes, living in areas with more conflict, poor soil quality, deforestation, and less access to agriculture training were indicative of a higher probability of food insecurity. Variables associated with higher food security include receiving remittances from family members abroad, higher educational levels, access to governmental and non-governmental aid, better access to clean drinking water, and access to irrigation systems. Food security was determined by the household’s food basket and the frequency at which household members consumed carbohydrates, fruits, vegetables, and protein. Such results are important for both governmental agencies and non-governmental organizations designing policies to strengthen food security, which is often considered vital for breaking poverty cycles and improving the welfare of households and communities.