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## Measuring Food Consumption using Coping Strategies Adopted by Farm Households in the Dry Land Sector of Sudan

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### Abstract

Previous work has shown that majority of rural households in Sudan are food insecure, that is, they lacked access to food, due to economic obstacles and low agricultural productivity which influence their food security. In spite of the efforts have been conducted by the government and NGOs since the last two decades to help vulnerable people still there is a problem of food deficit. Therefore, households are obligated to cope with shortfall in food consumption using various strategies. The paper will present detailed results of this research and evaluate various strategies to cope with food insecurity. It will also describe and measure these coping strategies when households have no access to enough food within and between the seasons. The study was conducted in 2009 in the dry land sector of Western Sudan namely North Kordofan State. Primary data using structured questionnaire administered to 200 rural households selected via multi-stage random sampling technique. Moreover, focus group discussions with the key informants were conducted to explore their perceptions on the severity of these strategies. Data analysis procedures included descriptive statistics and Coping Strategies Index (CSI), developed by CARE/WFP 2003, were used to measure food insecurity based on frequency and severity of strategies. Descriptive statistics show that 78.5% did not have enough money to buy food whereas 76% did not have enough food in the past 30 days during both dry and rainy seasons. The result of CSI reveals higher value of score in rainy season which indicate the deteriorating in household's food consumption caused by seasonality effect and lack of income contradictory to dry season. Nevertheless, the percentage gaps of food consumption between the two seasons are higher for selected localities; Um-Ruwaba, Sheikan and Bara with percentage of CSI scores of 89%, 71% and 78% respectively. Though, the results show no significant differences in food consumption between localities. Consequently, the situation requires successful policy mechanisms so as to facilitate the access to food, improving access to market, credit and encouraging the off-farm activities. As well, food subsidy is necessary needed during the rainfall period to reduce the food gap.

**Keywords:** Coping Strategies Index, farm households, food consumption, food gap, food insecurity, lack of income, Sudan