DETERMINANTS OF HOUSEHOLD FOOD INSECURITY IN THE WETLAND ADJACENT AREAS OF UGANDA

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ABSTRACT

Conversion of wetlands for food production is a major driver of wetland degradation in Uganda. Yet, many communities neighbouring wetlands are seriously affected by food insecurity leading to further concerns over conservation of wetlands. This study of the "determinants of household food insecurity in the wetland adjacent areas of Uganda" was undertaken from June to October 2014 to inform food security interventions in the wetland areas. The overall objective of the study was to contribute to the livelihoods of wetland adjacent households by generating knowledge for sustainable use of wetland resources for improving household food security in wetland areas in Uganda. The specific objectives were: (1) to assess the implications of the institutional development of wetland policy for food insecurity in the wetland adjacent areas; (2) to assess household perception of climate change, meteorological trends and vulnerability to food insecurity in the wetland adjacent areas in Uganda; (3) to determine the prevalence of household food insecurity in the wetland adjacent areas in Uganda; (4) to assess household property rights to wetland resources, wetland ownership and utilisation practices, and its effects on food insecurity in the wetland adjacent areas in Uganda; (5) to determine the diet diversity of households in wetland adjacent areas; and (6) to identify the determinants of household food insecurity in the wetland adjacent areas in Uganda. Data were obtained through review of information from secondary sources, key informant interviews and a survey of 520 households. Qualitative data were analysed using qualitative content analysis. An ordered logit model was used to establish the determinants of household food insecurity. There was a significant association between wetland systems and household perception of climate change ($\chi2=18.976$, df=2, $P<0.001$) percived as perceived increased temperature (92%), decreased rainfall (95%), changes in the length of seasons (97%), more frequent droughts (93%) and more severe droughts (92%). More households in L. Nakivale wetland system expected climate change to be more severe in future than it was now ($\chi2=43.67$, df=2, $P<0.001$). Almost all households had adjacent to the wetlands had access rights to wetland resources, 88% had withdrawal rights while about 28% had management rights. However, about 93% of the households in wetland adjacent areas were food insecure. Commercialisation of wetland resources increased a households probability of being food secure by 2.7% ($P<0.05$) and only 2.1% of the households had the recommended

level of diet diversity (>6 food groups). Adjacency to L. Nakivale wetlands, living in a permanent house, and an additional Tropical Livestock Unit (TLU) increased a households Months of Adequate Household Food Provisioning (MAHFP) by 4.08 ($P<0.01$), 1.91 ($P<0.01$), and 0.23 ($P<0.05$) respectively. Households adjacent to L. Nakivale wetlands were 3.3% more likely to have higher diet diversity ($P<0.001$). An increase in the distance of a household from a wetland by 1km and an increase in the dependency ratio of a household by one unit increased the diet diversity of a household by 0.3% ($P<0.1$) and 0.4% ($P<0.05$) respectively. While adjacency to L. Nakivale wetland system increased a households probability of being totally food insecure by 28% ($P<0.001$), their membership to a community-based group ($P<0.01$) and an increase in land ownership by 1 acre ($P<0.1$) decreased the households probability of being totally food insecure by 14% and 4.4% respectively. Food insecurity was associated with adjacency to L. Nakivale wetlands and exclusion rights to wetlands owing to restrictions on use of wetlands and limited social capital to support food security. Group membership, off-farm occupation and commercialisation of wetland resources reduced food insecurity. Failure to address the high prevalence of food insecurity in the wetland areas could lead to malnutrition in addition to undermining conservation efforts. Domestication of commercially viable wetland resources, livelihood diversification and sensitization on proper food security practices are recommended to improve food security. Future food security initiatives in wetland areas could benefit from integration of wetland conservation in food security studies.