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Securing livelihood amidst climate change through adaptation among farming households in Roxas mountain range city of Koronadal, Philippines

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 Γ he study assessed the security of livelihood in the face changing climate among the farming households 🗘 in Roxas mountain range, City of Koronadal, South Cotabato. Livelihood security was measured based on the concept of human security advanced by the United Nations Development Program (UNDP), namely, Freedom from fear and Freedom from want. Freedom from fear indicators were based on support received from Local Government Units (LGUs) and predictable weather while freedom from want was based on household income. Data were gathered through a household survey involving 265 respondents complemented by Key Informant Interviews (KIIs), Focus Group Discussions (FGDs) and field observations in 2013-2015. Climate data and downscaled projections from the Philippine Atmospheric Geophysical and Atmospheric Services Administration (PAGASA) were used to examine the changes for the past three decades and in identifying potential adaptation options. Data were statistically analyzed qualitatively and quantitatively. Quantum GIS was also employed for visual presentation of the household livelihood security. Results showed that for three decades, temperature and rainfall patterns had changed in the study area. Also, the study revealed that majority (67.9%) of the households has insecure livelihoods. Many are still struggling to cope from their insecurities resulting from climate change and need urgent collective actions in securing their livelihood sources. Taking into consideration the scenario for future changes in rainfall and temperatures in 2020 and 2050, the respondents also identified potential adaptation strategies in securing their livelihoods which include investment on children's education, adoption of diversified farming system or agroforestry, seeking government support, financial management and development of alternative livelihood. Family planning was also raised by a minimal number of respondents. Further, the study suggested that LGUs should consider the identified options for policy development in enhancing the security of forest dependent communities residing at the Roxas Mountain range.

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