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Climate Change Impacts, Vulnerability, and Adaptation among Rural Households in Ethiopia

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Abstract: Climate change disproportionately affects many Africans who heavily rely on climate-exposed sectors such as rainfed agriculture and fishing, rendering them highly vulnerable. Gender plays a significant role, as men and women experience unequal impacts and vulnerabilities due to gender norms, labor divisions, resource access, and power dynamics. Drawing on an integrated framework, this study sheds light on the gendered impacts of climate change on household's livelihood, their vulnerability, and adaptation in rural Ethiopia's Lake Tana Basin. This study utilized mixed research methods, integrating diverse qualitative techniques such as focus group discussions, key informant interviews, and field observations, along with quantitative data gathered through household surveys. The findings reveal that women-headed households were more vulnerable to climate change than male-headed households. Flood was the major climate-induced hazards in the area that threatened the lives and livelihoods of households. In response to climate change, households undertook different adaptation measures such as agroforestry practices, crop diversification, seasonal migration, petty trading, charcoal and fuel wood sales. However, the adaptation strategies were slightly varied based on the gender of the household head. Women-headed households specifically engaged in fuelwood collection and selling and petty trading activities. The main constraints for adaptation were limited access to technologies, extension services, information, and financial services. Therefore, this research urges attention from research, policy, and advisory services on rural households who are trying to survive in the face of climate change.

Keywords: agriculture, climate change impacts, ethiopia, gender

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