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# Farmers' perception and knowledge on climate change and their coping strategies to the related hazards: case study from Adiha, central Tigray, Ethiopia

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## ABSTRACT

Climate change adversely affects Ethiopian economy due to heavy dependence of the agricultural sector on rainfall. A decrease of rainfall and rise in temperature has been increasing the exposure of the country to frequent drought. The study was conducted in central Tigray, Adiha tabia, to examine the perception of farmers on trends of climate changes and existing coping strategies. Farmers ' knowledge of various adaptation strategies, drought early warning system and weather forecasting were assessed using focus group discussion (FGD), which consisted of 144 systematically sampled respondents. Temperature is rising while precipitation is declining from time to time. Untimely rain and frequent drought are challenging crop production in the area. Drought is perceived, both by male and female respondents, as the primary climate related hazard which is occurring frequently and affecting their livelihood. Individual ' s vulnerability to this hazard varies based on their hazard coping capacity. Lack of modern early warning systems, inflexible cropping calendar and narrow choice of crop varieties should aggravates the vulnerability. Hence, improving forecasting and dissemination of climate information, developing drought resistant varieties and promoting farm-level adaptation measures like use of irrigation technologies and adjusting planting dates should be prioritized to improve community resilience to climate change.

## KEYWORDS

Adiha; Farmers ' Perception; Climate change; Hazard; Vulnerability; Coping; Adaptation

## Cite this paper

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