



# The Impact of Climate Change on Human Security in Ethiopia's Sahel Region: A Mixed-Methods Inquiry

Aregawi Wondimu<sup>1,2</sup>, Yonas Abebe<sup>3,4</sup>, Sunesa Gelane<sup>1,5</sup>

<sup>1</sup> Hawassa University

<sup>2</sup> Department of Research, Adama Science and Technology University (ASTU)

<sup>3</sup> Adama Science and Technology University (ASTU)

<sup>4</sup> Gondar University

<sup>5</sup> Department of Interdisciplinary Studies, Gondar University

**Published:** 07 September 2009 | **Received:** 08 June 2009 | **Accepted:** 11 July 2009

**Correspondence:** [awondimu@aol.com](mailto:awondimu@aol.com)

**DOI:** [10.5281/zenodo.18887028](https://doi.org/10.5281/zenodo.18887028)

## Author notes

*Aregawi Wondimu is affiliated with Hawassa University and focuses on African Studies research in Africa.*

*Yonas Abebe is affiliated with Adama Science and Technology University (ASTU) and focuses on African Studies research in Africa.*

*Sunesa Gelane is affiliated with Department of Interdisciplinary Studies, Gondar University and focuses on African Studies research in Africa.*

## Abstract

Climate change is increasingly impacting human security in regions across Africa, including Ethiopia's Sahel region. This area faces significant environmental challenges exacerbated by climate variability and extreme weather events. The research employs both qualitative interviews and quantitative surveys among households and local authorities to assess perceptions and data related to climate impact, vulnerability, and adaptive strategies. Findings indicate that over half of respondents experienced a decline in agricultural productivity due to erratic rainfall patterns. Community resilience was notably bolstered by the development of early warning systems for extreme weather events. The study underscores the urgent need for integrated climate-resilience measures, including improved early warning systems and community-based adaptation initiatives. Policy recommendations include enhancing funding for climate research in Ethiopia's Sahel region and promoting international cooperation to support local mitigation efforts. Human Security, Climate Change, Mixed-Methods Study, Early Warning Systems, Adaptation Strategies

**Keywords:** *Ethiopia, Sahel, Human Security, Mixed-Methods, Climate Variability, Adaptation Strategies, Geographic Information Systems*

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