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The impact of economic and environmental shocks on household food security and sustainability in Afghanistan

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Abstract

Household food security in Afghanistan remains highly fragile due to economic instability, environmental shocks, and persistent structural vulnerabilities affecting rural livelihoods. While existing studies often examine economic or environmental shocks separately, limited evidence exists on their combined effects across multiple dimensions of food security, particularly coping capacity, dietary quality, and hunger severity. This study investigates the joint impact of economic and environmental shocks on households' food security, focusing on coping stress (rCSI), food consumption score (FCS), dietary diversity (HDDS), and household hunger outcomes (HHS) in rural Afghanistan. Using survey data from 2,143 rural households, the analysis employs Ordinary Least Squares (OLS), Poisson, and Ordered Logit models to assess how exposure to high food prices, low crop prices, droughts, floods, and other shocks influences food security outcomes. The findings reveal that most households experience moderate to severe food insecurity. Both economic shocks (e.g., high food prices, low crop prices) and environmental shocks (e.g., droughts, floods) significantly increase coping stress (rCSI), reduce dietary diversity (HDDS), and intensify hunger (HHS). In contrast, exposure to cold temperatures and hail is associated with lower coping stress and hunger, alongside modest improvements in food consumption (FCS), indicating context-specific effects. Socioeconomic factors, particularly higher income and secondary education, consistently enhance resilience, although higher education shows mixed effects, including reduced dietary diversity in some cases. These findings highlight the urgent need for integrated policy interventions, including income stabilisation, education investment, climate-smart agriculture, and social protection measures, to strengthen resilience and improve access to adequate and nutritious food in Afghanistan.

Keywords: Climate change, climate shocks, economic shocks, household resilience, livelihood adaptation, vulnerability

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