

Findings

Our qualitative and quantitative data shows that households who either engage in non-farm enterprises or receive income from non-farm sources tend to show a higher resilience level.

Given the low levels of engagement in non-farm activities, promoting income diversification, increasing financial access and climate resilient infrastructure can enhance household opportunities and conditions and improve resiliency.

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Building resilience to climate change through financial inclusion, income diversification, and climate resilient infrastructure

By Peter Fisker Kielberg, Jacob Wiman, Finn Tarp

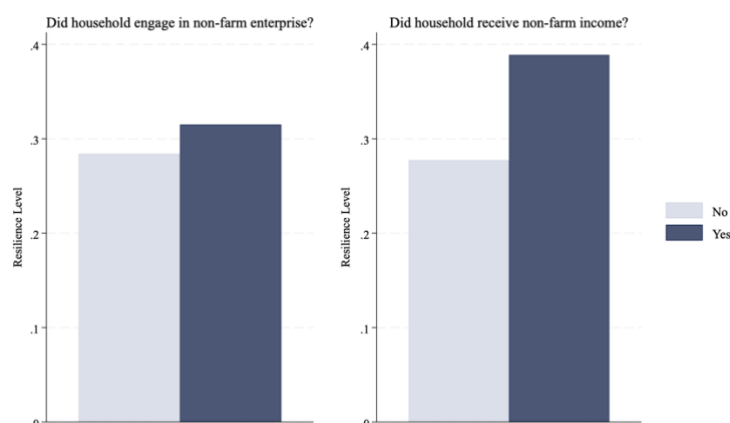
Climate-induced hazards, such as droughts, pose a major threat to the livelihoods of rural households in Ethiopia. The climate-induced threats to Ethiopian households present significant challenges for livelihoods and agricultural production, potentially leading to further famines and humanitarian crises. Therefore, it is crucial to shield the economy from severe adverse climate impacts, build resilience, and reduce vulnerability to climate change-induced shocks by adopting effective policies.

The collaborative research project titled "Building Resilience to Climate Change in Ethiopia: Policy Options for Action" (BRCC), conducted between researchers at the Policy Studies Institute (PSI) and the University of Copenhagen Development Economics Research Group (UCPH-DEERG), aims to identify drivers of resilience to climate change and assess the conditions, methods, and strategies of households in rural Ethiopia. The research consists of both household survey data and key informant interview data and is used to form the policy recommendations highlighted in this policy brief.

Ethiopia is highly dependent on agriculture. According to USAID, it accounts for about 40% of the GDP and 80% of exports and employs about 75% of the Ethiopian workforce. Although increased agricultural productivity is important to support rural livelihoods, access to financial services, climate-resilient financial infrastructure, and income-generating opportunities beyond agriculture, are needed to build resilience.

Our research shows that households who have additional income sources, access to capital, and engage in additional income-generating activities, tend to be more resilient and able to successfully cope with climate shocks. In about 89% of the woredas, the key informants indicated that households who engage in non-farm activities and have access to additional non-farm income sources are more resilient. Figure 1 shows the average resilience level among households in the survey sample divided by whether households engaged in a non-farm enterprise or received income from non-farm sources in the last 12 months. The average share of households who either engaged in non-farm enterprises or received non-farm income are relatively more likely to successfully adapt to future climate-induced shocks.

Figure 1. Average household resilience level divided by if household engaged in non-farm enterprise and received non-farm income



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Despite the potential benefits of participating in non-farm activities and having non-farm income sources, our survey data reveals that very few households engage in such activities. Only about 5% of households are involved in non-farm enterprises and 7% receive non-farm income. In total, just 5% of sampled households are employed in non-farm work. At the same time, about 75% of the households indicated that engaging in non-farm activities would substantially contribute to their family livelihood.

These low participation rates could be explained by the various constraints experienced by households in engaging in non-farm activities. Out of those who did not participate in a non-farm enterprise, about 42% of households indicate that the first factor constraining their engagement is the difficulty of accessing financial services, while 16% mention the lack of access to electricity services, and markets and training opportunities, as the first constraining factors. Thus, through increasing financial accessibility, inclusion, and infrastructure, non-farm employment opportunities can be promoted and encouraged in efforts to lessen dependency on agriculture and build resilience.

Policy Recommendations

We suggest that Ethiopia should opt for a resilience strategy focusing on enhancing financial opportunities and conditions for households, particularly in the rural parts of the country. Such efforts would not only improve the financial structure and make it climate resilient, but also support households with better access to financial services and diverse opportunities for generating income from other sources than from agriculture. We specifically recommend:

1. **Promotion of income diversification** should be a priority area for policymakers. Household resilience can be increased if efforts are put into encouraging income diversification and improving employment opportunities and alternative livelihoods beyond agriculture. The high dependency on agriculture in Ethiopia, specifically in rural areas, leaves households vulnerable to climate change. Diversifying households' income sources enables households to reduce their reliance on agriculture and ensure access to capital, which improves their ability to cope with climate shocks, such as droughts.
2. **Improving financial access and inclusion** can support resilience and increase the ability to mitigate climate change impacts among households in Ethiopia. Distinguished from income diversification, improving financial inclusion focuses on accessibility to financial tools, products, and services for households to start enterprises, and manage and grow their income. Factors such as access to financial services, labor shortage, and high registration cost and time were constraints for non-farm engagement reported by the sampled households. Lifting such constraints will help households access opportunities for non-farm activities and improve their resilience.
3. **Climate-resilient infrastructure** must be sufficiently developed for there to be a possibility and accessibility of engaging in non-farm activities and creating diverse income opportunities. Investments in infrastructure that can support alternative income-generating activities, such as markets, training opportunities, and other basic services such as information, roads, and networks, need to be made to enhance household resilience. Therefore, increasing non-farm activities and income from non-farm sources necessitates an improved inclusive and easily accessible climate resilient financial infrastructure, to build resilience and stabilize livelihoods in rural Ethiopia.

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