Policy Brief: Climate-induced internal migration and household welfare in Burkina Faso

Executive summary

Climate change has significantly influenced internal migration patterns in Burkina Faso, where droughts, declining soil fertility, and water scarcity threaten agricultural productivity and rural livelihoods. This policy brief presents empirical findings on the effects of migration on household welfare based on survey data from 493 households in Comoé province.

The findings reveal that migration helps households accumulate more wealth, as migrants generally possess higher-value assets than non-migrants. However, the study also highlights that not all individuals benefit equally from migration, as financial constraints and severe environmental degradation prevent some households from relocating, leaving them trapped in worsening conditions. Furthermore, remittance flows decrease over time, suggesting that migrants invest more in their host communities rather than sending money home.

This policy brief underscores the key environmental and socio-economic drivers of migration and provides policy recommendations to enhance migration outcomes and promote resilience. By strengthening climate-resilient agriculture, improving rural economic opportunities, supporting migrants in destination areas, and integrating migration into climate adaptation policies, Burkina Faso can mitigate migration pressures, enhance livelihoods, and foster long-term resilience in vulnerable communities.

Introduction

Climate-induced migration has become an increasingly critical issue in Burkina Faso, where environmental degradation, persistent droughts, and declining agricultural productivity drive rural populations to migrate in search of better opportunities. Migration serves as both an adaptation strategy and a vulnerability, depending on household circumstances. While some migrants improve their economic conditions, others remain trapped in deteriorating environments due to financial limitations.

Although international migration often dominates discussions on climate change, internal migration is far more widespread, particularly in low-income countries (Beine & Jeusette, 2021).

However, many studies focus on macro-level migration trends, neglecting how specific environmental stressors affect migration decisions at the household level.

This policy brief provides empirical insights into climate-induced migration in Burkina Faso, with a focus on:

1. Identifying the key environmental and socio-economic drivers of migration.
2. Assessing the impact of migration on household welfare, particularly in terms of asset accumulation and remittances.
3. Offering policy recommendations to improve migration outcomes and climate resilience.

Findings

Descriptive Results: Association Between Internal Migration and Climate-Induced Variables

The results confirm that internal migration is significantly associated with environmental stressors, particularly inadequate rainfall, poor soil quality, persistent droughts, and water scarcity. Pearson Chi-square tests indicate a highly significant relationship between migration and these environmental variables.

A significant proportion of migrants originate from regions experiencing inadequate rainfall (94.18%), poor soils (93.56%), and persistent droughts (97.39%). These environmental stressors disrupt agricultural productivity, pushing people to migrate in search of better economic opportunities. Additionally, land degradation (96.12%) and extreme weather conditions (87.80%) are strongly linked to migration. The lack of fertile farmland and insufficient water sources further exacerbate migration pressures, forcing rural households to relocate.

Although factors such as wildfires, floods, and erosion show high percentages of migrants from affected areas, their associations with migration are not statistically significant. This suggests that while they contribute to migration decisions, they are not as dominant as variables such as drought or poor soil fertility. The findings confirm that climate stressors—particularly those affecting agricultural productivity—are key drivers of internal migration in Burkina Faso.

Descriptive Statistics of Variables Used in the Regression Models

The comparison between migrants and non-migrants reveals significant differences in household asset values, age, education, employment, and migration experience. Migrants tend to have higher asset values (1,256.65 CFA) compared to non-migrants (719.58 CFA), suggesting that migration contributes to economic resilience. However, remittance flows are lower among migrants (205.44 CFA) than among non-migrants (69.17 CFA), indicating that migration may reduce financial support for households left behind.

Migrants are significantly older (50.27 years) than non-migrants (43.08 years), suggesting that older individuals accumulate more resources over time, making migration financially feasible. However, education levels are lower among migrants (2.04 years) than non-migrants (4.91 years), indicating that migration is more common among individuals with fewer local employment opportunities due to lower education levels.

Migrants also tend to have larger family sizes (9.74 dependents) compared to non-migrants (7.14 dependents), suggesting that migration may be driven by the need to support more household members. In terms of employment, non-migrants are more likely to be employed (82%) compared to migrants (68%), reinforcing the idea that migration is often motivated by economic insecurity in areas of origin.

Empirical Results: Factors Influencing Climate-Induced Internal Migration

Regression analysis reveals that both socio-economic and environmental factors significantly influence migration decisions. Education negatively affects migration, suggesting that better-educated individuals are more likely to find opportunities locally, reducing the need to migrate. Meanwhile, previous migration experience and sociocultural networks strongly increase the likelihood of migration, as individuals are more likely to relocate to areas where they have existing family or social ties.

The impact of climate stressors is also significant. Persistent drought has a strong positive effect on migration, as prolonged dry conditions reduce agricultural productivity and force people to relocate. The lack of fertile farmland and soil infertility further increase migration pressures, as individuals seek more productive land or alternative employment. However, extreme water scarcity reduces migration, highlighting the existence of trapped populations that lack the financial resources to move despite worsening environmental conditions.

Impact of Migration on Household Welfare

Migration significantly increases household wealth, with migrants accumulating 36.01% more assets than non-migrants. However, migration also reduces remittance flows, as migrants prioritize financial investments in their host communities rather than sending money back home. This finding suggests that while migration improves economic resilience for individuals who relocate, it may weaken financial support for non-migrants left behind in origin areas.

Policy Recommendations

Strengthen Climate-Resilient Agriculture

To reduce forced migration, Burkina Faso should invest in climate-resilient agricultural practices. Policies should promote:

- Drought-resistant crops and improved irrigation systems to enhance agricultural productivity;
- Soil conservation techniques to maintain soil fertility and reduce migration pressures;
- Water storage infrastructure, including rainwater harvesting, to mitigate the impact of water scarcity.

Improve Economic and Livelihood Opportunities

Enhancing economic resilience in rural areas can reduce migration pressures by:

- Expanding access to microfinance and credit, allowing rural communities to invest in alternative livelihoods;
- Developing rural job creation programs to provide employment opportunities outside agriculture;
- Introducing vocational training initiatives to equip individuals with skills for employment in non-agricultural sectors.

Support Migrants in Destination Areas

To ensure positive migration outcomes, policies should:

- Expand access to affordable housing and social services for migrants in urban centers;
- Improve labor market integration programs to provide economic stability for migrants;

- Develop remittance investment schemes encouraging migrants to invest in their home communities.

Integrate Migration into Climate Adaptation Policies

Migration should be recognized as a key adaptation strategy in national climate policies. Recommendations include:

- Strengthening local governance and data collection to improve policy responses to climate-induced migration;
- Implementing targeted migration support programs that address both migration pressures and non-migrants' needs.

Conclusion

Climate-induced internal migration is a growing challenge in Burkina Faso, driven by drought, soil degradation, and water scarcity. While migration enhances household resilience by increasing asset accumulation, it reduces remittance flows over time and does not benefit all equally.

A comprehensive policy response that integrates climate-smart agriculture, economic development, and migration support programs is necessary to reduce forced migration and enhance resilience. By investing in sustainable agriculture, economic opportunities, and migration assistance, Burkina Faso can ensure that migration becomes a choice rather than a necessity.

This policy brief emphasizes the urgent need for evidence-based interventions to address the climate-migration nexus and promote long-term stability and resilience in vulnerable communities.

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