



# Migration in Climate Change Hotspots: Opportunities and Challenges for Adaptation

**Migration plays a significant role as a response strategy for coping with climatic and non-climatic drivers of change among vulnerable households in Ghana. At the same time, it exacerbates gendered vulnerabilities with consequences for community resilience and national economic planning.**

## Introduction

This brief examines opportunities and threats to adaptation in climate change hotspots in semi-arid (Northern) and deltaic (Southern) zones in Ghana: two districts in the Upper West Region, and nine districts in the Volta Delta (Fig 1). Large numbers of people in the study sites (about 40% in deltaic zones), particularly the youth, have migrated or are considering migrating in the future due to climate related and livelihood concerns. Human mobility in these areas is not new. However, recent exacerbation of climate change impacts is partially reshaping these processes. In the Volta Delta region, there has recently been

increased out-migration contributing toward higher female household-headships. This is expected to intensify existing gender inequalities both in the migrants' sending and receiving areas, due both to changing female-male ratios in the receiving areas, and additional work falling onto women in the sending areas. On the other hand, in Northern Ghana, high out-migration of young females is leading to changes in household structures and

**Climate change hotspots** are geographic regions that are home to a large number of vulnerable people whose livelihoods depend on economic activities that are threatened by climate change.

economies, and undermining community resilience as livelihood security related tasks traditionally led by women have been increasingly dis-attended. It is important to note that most migrants are staying within the national borders in Ghana, although Accra is a minor route for international migrants trying to reach Europe, and traditional trans-frontier and seasonal mobility with Togo (fisheries sector) and Burkina Faso (livestock sector) continue.

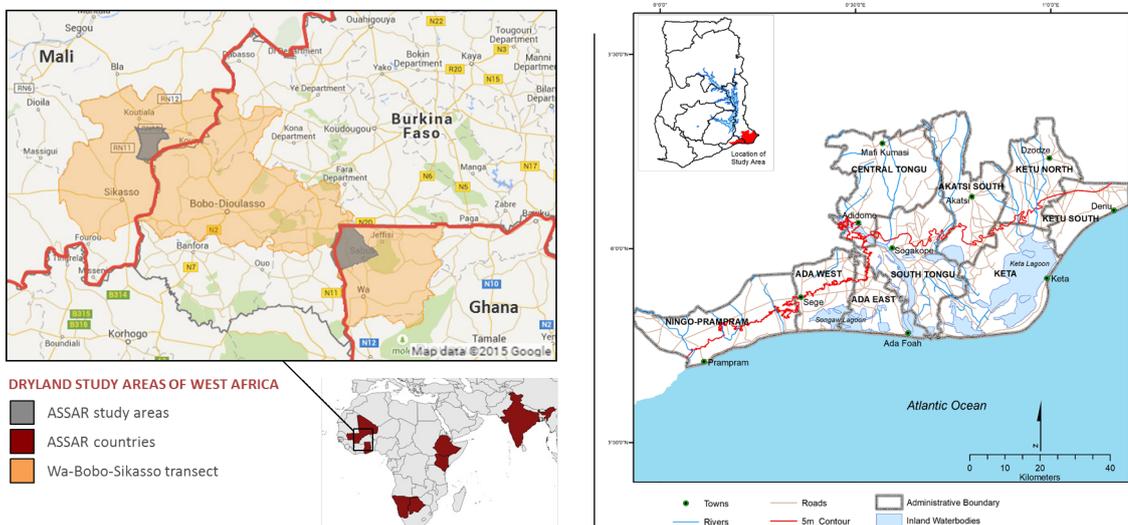


Figure 1: Climate change hotspot study areas in Ghana - the Northern dry semi-arid band that extends from the Upper West Region and the Southern coastal Volta Delta. Source: GeoData (University of Southampton)



## Migration in the context of multiple drivers of change

The drivers of migration in Ghana are slowly changing due to climatic impacts that are simultaneously influencing food systems and livelihood activities. Historically in Ghana, migration has occurred as people went in search of economic opportunities and education. Even though income differential and job opportunities are still recognized by migrants as the main immediate driver to moving, the root causes of these drivers in rural areas are also linked to climatic impacts as they have threatened the sustainability of agrarian livelihoods. Dominant livelihood activities include rain-fed agriculture in northern Ghana; and fishing, salt extraction and trading activities in the coastal areas of the delta (Fig 2).

When these livelihood activities are secured and vibrant, there tends to be less migration. A major climatic driver that affects these socio-economic activities and influences migration is drought, occurring in both the northern semi-arid regions as well as in coastal deltas. Coastal communities face additional challenges from erosion, flooding, soil salinization and the destruction of critical habitats such as mangroves, which further threatens the sustainability of urban settlements and maritime industries.

Migration is usually from rural to urban regions and can be temporal or permanent. A significant proportion of migrants from the semi-arid regions from northern Ghana tend to migrate seasonally owing to agrarian shocks and to regions with farming opportunities. There is no direct relationship between environmental hazards to migration in deltas, as less vulnerable regions to hazards seem to have higher migration rates. However, new primary data shows that the majority of migrants from the coastal delta regions are seeking to permanently relocate and mostly move to urban areas to engage in industrial job opportunities (Fig. 3).

The motivations to migrate or to stay are often complex and intersect at households' perceived risk of loss of incomes, jobs, and social well-being. Across both semi-arid and deltaic zones, key factors that discourage migration include: strong community ties and a sense of place; obligation to family members; access to land and housing; and established socioeconomic activities that can facilitate smooth transition during climatic disasters. Availability, affordability, and acceptance of better in-situ adaptation options is also an incentive to stay. In the Lawra and Nandom districts of the Upper West Region, for example, small-holder farmers are using integrated management techniques such as composting, improved seeds, and rain harvesting technologies to cope and adapt to climatic stressors. These interventions discourage out-migration, and have also strengthened community resilience.

Additionally, household income levels are being improved through off-farm livelihood activities and social support through kinship ties. Important questions remain as to the extent to which this option increases resilience or creates potential future vulnerabilities, encouraging people to remain in a place where these opportunities may not be suited in the future. Moreover, how can decision-making processes be informed to allow individuals, households and communities to better navigate those options?



Figure 2: Livelihoods vulnerable to drought and other environmental hazards, from top to bottom: women planting groundnut, salt-making heaps, and fishing in the Volta Delta. Photo credit: P. Adiku

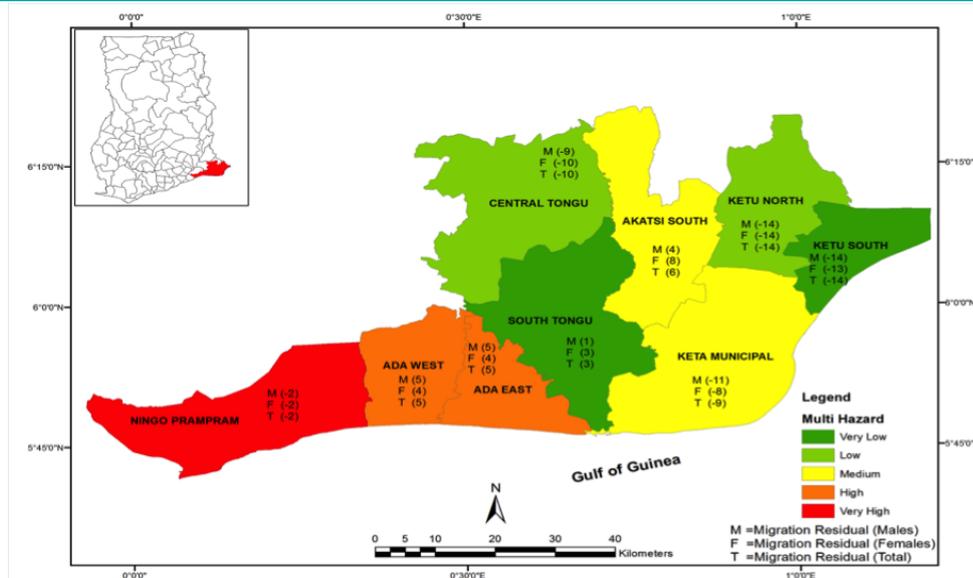


Figure 3: Net migration patterns in the Delta Volta region. Source: GeoData (University of Southampton)

### Migration paradox: an adaptation strategy or threat to community resilience?

At the same time, migration presents an apparent paradox for adaptation planning in both sending and receiving areas. It can provide access to alternative livelihoods in one location, yet it can also undermine households' ability to cope in the short term. Migration from vulnerable to non-vulnerable regions offers opportunities for alternative livelihoods as well as to acquire education and learn new skills. Ada East and Ada West districts in south eastern Ghana have been identified as net receiving migrant districts due to their closeness to two industrial coastal cities (Accra and Tema), known for their fishing and maritime industries. Remittances, generally in the form of cash transfers, are key ways migrants contribute to their families back home. In many vulnerable households, migrants tend to remit food items instead of cash as a way of enhancing the nutritional well-being of their families.

In contrast, migration can result in pressures on existing facilities in receiving or destination areas. Migration can also be negative for the individual migrant, in the absence of integration programs and policies for housing and skills development. In many instances, unplanned migration in large numbers can lead to the development of slums and deteriorating environmental, health and security conditions. Furthermore, the out-migration of youth and active populations reduces the active labor force in sending communities, resulting

in lower adaptive capacities and resilience. In some instances, migration greatly reduces the adaptive capacity of women in patrilineal systems where access to land and collateral is inaccessible particularly when male household heads emigrate. In the Volta Delta region, increasing male out-migration in search of employment and female headship has exacerbated gender inequality with negative implications for household saving, tenure, and access rights for female-headed households. Our emerging findings highlight that the level of vulnerability or adaptability depends on the demographics of the migrant household in the sending area, i.e., gender, marital status, age, and family types (nuclear or extended), as well as on the nature and scope of employment opportunities in the receiving areas.

### Implications for policy and practice

The increased internal migration of people from vulnerable rural to urban industrial areas owing to climatic impacts has implications for community resilience and national economic development. The National Climate Change Policy of Ghana and other development policy initiatives have specific objectives for promoting economic and social opportunities for migrants and building resilience in both sending and receiving areas. Through the National Expert Advisory Group initiated by DECCMA, a Community of Practice, there are plans to engage community and government members on special initiatives on disaster risk reduction, gender mainstreaming, and coastal development. This brief contributes to the knowledge base to



inform policy decisions and action plans regarding integrating vulnerable migrants into suitable labor markets, skills development and training, as well as improving the capacity to nurture a sense of place and community resilience for those wanting to stay. A special attention to gender has been encouraging in Ghana with a 33% gender inclusion, compared to other countries in the region. But more could be done, with current evidence that points to the following recommendations:

1. Improve girls education in rural communities as well as increase female participation and attention to gender in policy implementation;
2. Strengthen women entrepreneurs' capacity to access resources and tenure. This could meaningfully contribute to household savings, food security, and resilient development;
3. Coordinate existing remittances and cash transfer (graduation) programs with special focus on climate hotspots;
4. Improve knowledge brokering and innovation uptake in rural markets in climate hot spots, to allow better decision making to provide options and action plans on the factors that trigger migration.

### Further reading

- Mumuni Abu et al. (2017). Household headship, vulnerability and migration in deltas in Africa and Asia. DELtas, vulnerability and Climate Change: Migration and Adaptation (DECCMA) 7th Consortium Workshop, Ghana, 2-5 July 2017.
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- Ahmed et al. (2016). Adaptation to climate change or non-climatic stressors in semi-arid regions? Evidence of gender differentiation in three agrarian districts of Ghana. *Environmental Development* 20:45–58.
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### About this brief

The Adaptation at Scale in Semi-Arid Regions (ASSAR); and Deltas, vulnerability and Climate Change: Migration and Adaptation (DECCMA) are two consortia contributing to migration research in semi-arid and deltaic hotspot regions, respectively. Both projects fall within the Collaborative Adaptation Research Initiative in Africa and Asia (CARIIA). The research in this brief draws on participatory interview processes and field work in the Upper West and household surveys on migrant households in the Volta Delta with the University of Ghana and partner institutions.

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