16 CLIMATE CHANGE AND DISPLACEMENT FMR31

## Ghana

Kees van der Geest and Richard de Jeu

## Migration from northern Ghana is a strategy for dealing with structural environmental scarcity rather than degradation.

One of the problems in migrationenvironment studies is the difficulty of establishing causal relations. In an EACH-FOR case study survey among 203 internal migrants from north-west Ghana, the vast majority mentioned environmental reasons for leaving their homes.1 The respondents - settler farmers living in rural areas of Brong Ahafo Region in Central Ghana - said they decided to migrate because of scarcity of fertile land, unreliable rainfall, low crop yields and/or food security problems. A minority mentioned non-environmental reasons for migrating - lack of nonfarm income opportunities, family conflicts, witchcraft, cattle theft and the desire to be free and independent.

The survey findings indicate that this group of migrants indeed experienced a degree of environmental push. However, such findings are not enough to adequately assess the environment-migration link. For example, respondents with low levels of formal education and poor access to information will not mention certain underlying causes of migration. Complex explanations of migration will be hard to distil from this type of interviews whereas the environment easily becomes part of local discourses on migration because farmers experience environmental conditions every day.

Northern

Ghana

If the environment is an important factor in explaining migration from the West African interior savanna to the moister forest and coastal zones, one could reasonably expect the propensity to migrate to be higher a) in environmentally less wellendowed areas and b) in times of increased environmental scarcity. To test these two hypotheses, we carried out a cross-sectional and a longitudinal analysis of migration and natural resources.

## Results

In examining the geographic relation between out-migration propensities and different indicators of scarcity of natural resources, we looked at four indicators of natural resources scarcity: rainfall, vegetation, rural population density and soil suitability for agriculture. Our results indicated that, firstly, as expected, there was a strong inverse relationship between precipitation and out-migration. Districts that receive less rainfall tend to experience more out-migration. Secondly, again as expected, there was an inverse relationship between the propensity to migrate and the amount of vegetation. However, the relation is not as strong as with rainfall.

Thirdly, again as expected, densely populated districts tend to have higher out-migration rates. High rural population density causes scarcity

> of land for farming, one of the prime motives for migrating mentioned by our survey respondents. Fourthly, contrary to what one would expect, districts with more land suitable for agriculture experienced more outmigration. Our explanation is that areas with good soils have historically attracted human settlement and are the most densely populated. Land scarcity and reduced soil fertility now push people off the land.

If environmental degradation is a prime driver of migration, then one would have expected to see an increase in migration at the time of the great Sahelian droughts of the 1970s and 1980s. Surprisingly, this was rather a period of reduced outmigration from northern Ghana. The 1970s and 1980s were also a time of widespread economic crisis, political instability and high food prices in southern Ghana. The adverse conditions in the South made many decide to refrain from migrating. In those years, many migrants also returned to the North. The late 1980s and 1990s were a time of environmental recovery in the North and political stability and economic growth in the South. In this period, North-South migration increased again. Hence, political and economic forces seem to have more influence than environmental push on migration flows.

## Conclusions

The analyses show that migration propensities are higher in districts with more natural resource scarcity and that migration did not increase in times of environmental stress in the source areas of migration, due to adverse economic conditions in the prime destination area.

The picture that emerges for northern Ghana is not one of distress migration in the face of environmental disaster. The environmental driver of migration from northern Ghana appears to be structural scarcity rather than degradation.

Kees van der Geest (geest@uva.nl) is a PhD candidate at the Amsterdam Institute for Metropolitan and International Development Studies and junior lecturer in the Department of Geography and Planning, University of Amsterdam (www. uva.nl). Richard de Jeu (richard. de.jeu@falw.vu.nl) is assistant professor at the Department of Earth Sciences, Free University of Amsterdam (www.falw.vu.nl).

 Full results are available at www.each-for.eu or www. keesvandergeest.nl See also: Van der Geest K. (2004), "We are managing!" Climate Change and Livelihood Vulnerability in Northwest Ghana. Leiden: Afrika-Studie Centrum.



CASE STUDY