

Demographics and climate change: future trends and their policy implications for migration¹

The standard approach to linking climate change and migration is to identify areas affected by climate change, count the number of people living there, and use this to estimate the number likely to be forced to leave. Estimates ranging from 150-200 million have been based on such calculations.² However, this method is unsatisfactory since many factors drive migration and the effect of climate variability and shocks is difficult to isolate.

An alternative approach is to identify existing migration patterns and examine how demographic trends and climate change may affect the drivers of these specific migrations. This approach is adopted here with specific focus on Africa, although it is recognised that the evidence base on the drivers of migration remains weak.

Current migration patterns

Existing migration patterns in Africa are dominated by **internal and intra-regional movements**, with relatively limited movement beyond to Europe and North America. Key migration drivers include the 'push' of **political instability and conflict, lack of economic opportunities, and lack of access to resources** (including as a result of climate variability and shocks); they also include the 'pull' of employment, demand for workers and kin or social networks. There are also a number of intervening factors that influence the extent and patterns of migration, including aid and immigration policies that seek to stop people moving, but which frequently do not work. In Africa in particular, migration has long been **a strategy to cope with adverse conditions for agriculture** and subsistence farming. Major poles of attraction in Africa include major cities and resource-rich countries such as Côte d'Ivoire, Nigeria, Gabon, DR Congo, and South Africa.

Demographic trends

Global population is projected to rise to around 9 billion by 2050; if international migration were to remain at a constant 3% of the world's population, it would rise as a result by 40% to 275 million in 2050. Key demographic trends of relevance for migration are:

- Projected population growth to 2050 is highly unevenly distributed: 98% of growth is expected in Less Developed Regions, and 35% will be in SSA, the world's fastest growing region.
- The projected doubling of 15-24 year olds globally by 2050, the group most likely to migrate.
- Urban growth is projected to occur alongside population growth: around half of the population of SSA is expected to live in cities by 2030, with a higher proportion in Southern Africa, and the lowest proportion in East Africa.

Climate change trends

Painted extremely broadly, major climate change trends of relevance to migration are likely to be:

- Increasing temperature and reduced rainfall, leading to **water stress, drought and reduced growing season in tropical and sub-tropical drylands** (ie the Sahel);
- Sea level rise, increased frequency of storm surges, increased intensity of tropical cyclones, leading to **flooding in low-lying and coastal regions** (including the Niger delta);
- Increased temperatures leading to **increased growing season in temperate regions** (e.g. northern Europe and Siberia).

Linking demographics and climate change to migration

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² Stern, N. (2007): *The economics of climate change: the Stern Review*, Cambridge, Cambridge University Press, p77.

Combining these projected trends for demographics and climate change with current migration patterns, the following impacts may be expected:

- Climate change impacts are likely to be more substantial where ‘push’ drivers of migration coincide with high vulnerability to climate change and low capacity to adapt. In such areas (e.g. the Sahel, highlands of Ethiopia), the pressure to migrate is likely to increase;
- **Internal and cross-border movements appear more susceptible to climate change impacts** than long-distance international movements, as economic losses associated with climate change may prevent people investing in overseas migration and force them to look for work elsewhere locally;
- **Conflict-driven migration may be exacerbated** by climate change, particularly where this exacerbates conflict over natural resources (e.g. Darfur);
- **Temporary, short-distance ‘distress’ migration is likely to rise** as a consequence of climate shocks, (e.g. droughts in the Sahel or floods in Volta, Okavango and Niger deltas). However, the numbers affected may be lower if prior anticipatory migration occurs in response to increased climate vulnerability;
- Some migration streams driven by the ‘pull’ of economic opportunity may also be affected by climate change, including **reduced opportunities for seasonal work** in Eastern Sudan or Central Ghana and increasing employment opportunities in agriculture outside Africa;
- Coastal or low-lying areas will be vulnerable to sea level rise and increased flood hazards; this, combined with increased overcrowding in urban areas carries a risk of secondary migration.

Policy implications and conclusions

- The most important response is the **strengthening of adaptive capacity** of affected populations, including **agricultural diversification** and investment in **disaster risk reduction** and **early-warning** systems, including speedy and efficient humanitarian responses.
- The **removal of barriers to internal mobility** could play a role in facilitating the diversification of rural livelihoods. Given the poorest and most vulnerable are least likely to move, **continued attention to pro-poor policies is needed in rural source areas.**
- Attention needs to be paid to **urban planning, service provision** and **human security** in areas where people are already migrating – especially in **slum areas of major coastal cities** where population growth is likely to accelerate.
- The capacity of urban labour markets to absorb large and youthful migrant populations needs particular attention if secondary migration is to be avoided.
- Support could be provided to initiatives to **defuse tensions and encourage peaceful cohabitation** of both internal and intra-regional migrants and local populations.
- There is a need for further discussion on the **responsibility to protect** those who may be forced to leave their homes, and especially their countries, due to climate shocks.
- There is a need for further **research evidence** on the role of migration in adapting to climate change in particular national and regional contexts, and on the impact of climate change on “pull” factors of migration in destination areas.