



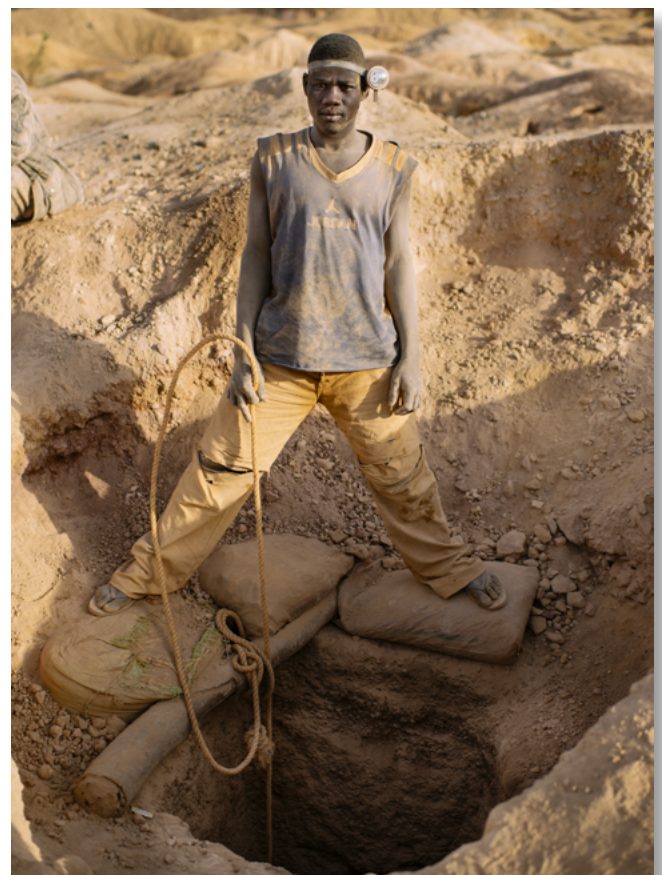
HUMAN MIGRATION AND NATURAL RESOURCES

GLOBAL ASSESSMENT OF AN ADAPTIVE COMPLEX SYSTEM

International Resource Panel 2023

Minerals, arable land, water and energy delivery are key resource drivers of human mobility. While an abundance of these resources can attract immigration, resource scarcity can either trap populations or lead to emigration (when this is possible). Property rights to resources, as well as opportunities for international migrant remittance flows, can be key determinants of migrants' mobility decisions. From a broader perspective, resources can be an intervening variable between global environmental change (including climate change) and human mobility. This means that resource scarcity measurements can serve as an early warning system for the potential impact of global change on proximate indicators of migration.

Policymakers should recognize the complexity of the resource-migration nexus and the need to monitor resource security areas with vulnerable human populations (for example, the Sahelian regions of sub-Saharan Africa, parts of Central and South America and Small Island Developing States (SIDS)). It is critical to adopt a systems approach and an adaptive planning framework, with continuous monitoring of a range of data and thresholds, as well as a consultative process with community members for mobility that is related to resources. The Global Compact for Safe, Orderly and Regular Migration could serve as a policymaking framework for managing the intersection between resources and mobility. The Platform on Disaster Displacement also has the potential to have resource-linked early warning mechanisms incorporated within its implementation plan.



10 KEY MESSAGES

- 1 Natural resources mediate the impacts between global environmental change and human mobility dynamics.** However, the relationship is not linear and can be bidirectional. Human migrations have occurred for much of the history of the species. Policy interventions linking climate change and migration need to distinguish between voluntary aspects of adaptive migration and forced displacement as a result of disasters and rising sea levels.
- 2 Natural resources policies that affect mobility should be aligned to increase resilience of population to avoid migrating or to do so safely if needed.** The first aim should be to enhance adaptation potential, sustainability of resources and socioeconomic and environmental resilience so that resource pressures do not force people to move. When this cannot be ensured, the second aim should be to promote the safe and well-managed movement of people to other locations.
- 3 Land ownership and tenure over resources can mitigate forced migration, while also facilitating greater opportunity for voluntary mobility.** Property rights to resources can create resilience for populations in times of natural systems stress and may prevent involuntary migration. However, such tenure can also facilitate greater mobility and hybrid livelihood situations where one family member may move temporarily for supplemental income.
- 4 Resource rushes are often accompanied by relatively rapid internal movement of population and abrupt land-use changes for the purposes of settlement establishment and mineral extraction.** Such rushes are typically characterized by trade-offs between improved socioeconomic outcomes for migrants (and local communities) and widespread environmental externalities. Policies to address rushes need to be calibrated around such trade-offs.
- 5 Impact of droughts on migration is highly dependent on local income.** Using episodes of drought as an indicator of land resource stress, throughout Africa internal mobility increases with natural resource stress. However, for the relatively richer African countries, drought is associated with increased international mobility. This contrasts with the finding that, for poorer countries, drought is associated with decreased international mobility and poverty traps, indicating liquidity constraints on this type of mobility.
- 6 Reductions in soil carbon are not significantly related to mobility flows.** According to quantitative analysis of data sets linking ecological indicators and migration flows in Africa, soil carbon is impacted by a variety of fire ecology factors that offset any link to migration flows.
- 7 Hydropower infrastructure is the most direct example of a link between resource development and involuntary migration.** Globally, the top 200 recent hydropower developments (2000-2018) are estimated to have displaced between 900,000 and 2 million people (mostly in Asia), as well as giving rise to substantial land-use change since the start of the century. This has been despite the work of the World Commission on Dams, which in 2001 published its findings on the prior century of social disruptions caused by dams and the need for reform.
- 8 The establishment of refugee camps is associated with rapid land-use changes. However, the activities of camp inhabitants (such as fuelwood gathering or subsistence farming) often constitute productive land use in and around the camp where access and use are permitted.** Policies related to refugee encampment choice and resettlement should consider how socioeconomic vulnerability, freedom of movement and host community relations all impact natural resource access.
- 9 Incorporating systems mapping into policy intervention planning could help visualize trigger points and areas in need of support.** Systems maps highlight factors that can trigger policy interventions to reduce the link between natural resource shocks and forced or undesirable mobility or immobility. Such systems mapping practices could be used by organizations working on early warning assessment.
- 10 Migrant remittances to home countries can be leveraged for natural resource restoration efforts.** The economic value of migrant remittances to vulnerable resource-stressed countries can be a useful way of promoting policy innovations such as “green remittance bonds”. A systems approach to the positive feedback loops of migration would be one example of such interventions.

The full report, summary for policymakers, video and factsheet can be downloaded at:

<https://www.resourcepanel.org/reports/human-migration-and-natural-resources>

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