



Madagascar is one of the countries most affected by climate change, cyclically ridden by droughts and floods.  
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# Migration and Water Governance

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Today, almost 15 per cent of the global population is on the move, with more than 244 million international migrants and 763 million internal migrants, UN statistics estimate (UN DESA, 2015). An increasing proportion of these migration flows is linked with the scarcity of natural resources. Consequently, on the one hand, the

importance of managing natural resources is increasingly recognized in the migration debate. On the other hand, these migration flows have become an important issue to consider in various international, regional and national policy frameworks, including those related to water resource governance.

The increasing number of global water challenges and associated migration patterns – in many cases forced migration – create a strong impetus to discuss and integrate migration policy concerns in water governance at the global level. This policy brief examines the nexus between migration and freshwater governance and explores the potential synergies between both policy domains.

## I. What is at stake?

Since 2012, the World Economic Forum's Global Risk Report ranked water crises among the top global risks with the greatest impact – and for good reasons. There are 276 watersheds around the world that cross the boundaries of two or more States (Munia et al., 2016) and 592 shared aquifers (UNESCO-IHP and IGRAC, 2015). Within each international basin or aquifer, the demand for water is on the rise, especially in food production and other domestic and industrial uses. At the same time, however, the amount of fresh water in the world remains roughly the same. Given this growing pressure and the indispensable nature of water, effectively managing water between and inside countries will be one of the major policy challenges of the twenty-first century.

Water security depends not only on water resources located within the boundaries of a single State, but also on freshwater basins covering two or more States. Transboundary basins cover almost half of the Earth, and they are home to around 40 per cent of the world's population. Water pollution and overuse of these resources are common in many places. As the quality of water degrades and the quantity available must meet increasing needs, competition among uses and users intensifies. Cooperative management frameworks only exist for about 40 per cent of international watercourses. Moreover, a large portion of the existing agreements are not inclusive, as in the case with agreements on the Nile, the Indus, the Mekong and Ganges rivers. With water being a finite and limited resource, and in light of the steady increase in population, urbanization and environmental degradation, the competing demands of riparian States will continue to grow sharper and more complex.

Water challenges are becoming particularly complex with the increasing impacts of climate change, making water availability more uncertain and floods and droughts more frequent. **Water will be one of the resources most affected by climate change.** According to the Intergovernmental Panel on Climate Change (IPCC), "Observational records and climate projections provide abundant evidence that fresh water resources are

vulnerable and have the potential to be strongly impacted by climate change, with wide ranging consequences on human societies and ecosystems" (Bates et al., 2008).

## II. Water diplomacy and water governance as tools for cooperation

Water diplomacy is increasingly recognized as an **essential tool for the maintenance of peace and security** at international and regional levels. Water diplomacy has been defined as "[...] the use of water as a means for the primary objective of preventing or peacefully resolving (emerging) conflicts and facilitating cooperation and enhanced mutual benefits between different political entities" (Huntjens, 2016). **Water diplomacy provides a tool in supporting cooperative agreements between neighbouring countries and resolving intersectoral conflicts at the domestic level** (Global High-Level Panel on Water and Peace, 2017).

International instruments on shared water resources date back to the nineteenth century. Initially forged in the European and North American traditions – primarily in the context of navigation – international water instruments have acquired a variety of new characteristics resonant with the diversification of water-related activities (Boisson de Chazournes, 2013). The scope of the subject matter has gradually expanded to encompass multiple substantive fields and overlapping policy objectives, ranging from energy production, irrigation for agricultural purposes, access to drinking water for human consumption and preservation of the environment. The numerous uses of international watercourses may, at times, compete with one another and thereby generate disputes among States. **International law has endorsed a seemingly neutral position by not privileging any use of water, except when it is necessary to satisfy vital human needs** (see for example article 10.2 of the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses).

Considerable efforts have been made to tailor the legal regimes that govern the management and protection of shared water resources to a set of uniform standards. Examples are the 1997 UN Convention on the Law of the Non-Navigational Uses of International Watercourses and the 1992 Helsinki Convention on the Protection and Use of Transboundary Watercourses and International Lakes. Freshwater agreements establish a framework





Dry lands in La Savane Désolée, Haiti. © 2016/Alessandro GRASSANI

for negotiations, thereby mitigating the risks of water-related conflicts. Regional and local instances of water diplomacy are embedded in this overarching set of principles, which gives the field a multilayered character.

As indicated by the debates on water that have taken place at the UN Security Council in 2016 and 2017, **water management is intrinsically linked to the maintenance of international peace and security**. In November 2016, the former UN Secretary-General Ban Ki-moon noted the need “to invest in water security as a means to ensure long-term international peace and security” (UN Security Council, 2016). Aside from constituting a cause for conflict in certain cases, water may also be an important catalyst for greater cooperation and conflict prevention. Shared water resources often generate cooperation, with more than 200 water treaties having been successfully negotiated in the twentieth century. Along the same lines, in June 2017, UN Secretary-General António Guterres highlighted that “water is and should remain a reason for cooperation not conflict” (United Nations, 2017). Recognizing the manifold challenges related to global water governance, the United Nations General Assembly established the International Decade for Action “Water for Sustainable Development 2018–

2028” to put water in the spotlight for a decade between 2018 and 2028.

### III. Addressing the migration–water nexus

Change in water availability and prolonged water insecurity have long been a factor in the decision to migrate. Historically, communities around the world adjusted to seasonal water supplies by migrating temporarily. Nomadic pastoralists, for example, have been sustaining their livelihoods in peripheral environments by adapting seasonal migration as their way of life. Today, climate change and drought increasingly force nomadic pastoralists to alter their routes to travel further and for longer periods (Ionesco, Mokhnacheva and Gemenne, 2016), also increasing the risk of conflict over water.

Water stress was also identified as one of the key driving factors of migration in East and West Asia as well, with research available from Iraq (IOM, 2012), Bangladesh, Maldives and Nepal (IOM, 2016). Quantitative data from the Displacement Tracking Matrix (DTM) has similarly begun to demonstrate the migratory impacts of severe water scarcity in parts of Africa. The latest drought-



induced displacement figures collected by DTM during 2017 estimated more than 475,000 internally displaced people in Ethiopia (December 2017), over 1.2 million individuals in Somalia (November 2016—November 2017) and more than 14,000 in Madagascar (November 2017) (IOM, 2017).

As the risk of irreversible change in the hydrological cycle increases with progressing climate change, so does the vulnerability of people relying primarily on natural precipitation patterns to obtain water for sustaining their well-being and livelihoods. For example, the “Where the rain falls” study conducted in eight countries (Bangladesh, India, Guatemala, Peru, Ghana, United Republic of Tanzania, Thailand and Viet Nam) shed light on the specific conditions under which poor people are vulnerable to rainfall variability (Warner and Afifi, 2013). The study also described how vulnerable populations use migration as a risk management strategy in response to the threats to livelihoods associated to hydrological risk.

Water diplomacy can be a tool for tackling the root causes of environmental migration related to water

insecurity. The need to include water diplomacy in migration policies is illustrated by the need to protect migrants’ access to water and a healthy environment. On the one hand, the respect of migrants’ rights contributes to the maintenance of international peace and security and good governance on water resources (UN Security Council, 2016). On the other, the adoption of domestic laws governing the management and protection of water resources may contribute to eliminating the water-related drivers of migration.

Apart from the impact of water-related environmental factors on migration flows, the impact of migration on water sources is increasingly being discussed in the context of large-scale population movements and urbanization. While this relationship is most commonly perceived in negative terms, it should be noted that positive impacts of refugee populations on local communities can exist. One example is the development of potable water programmes for refugees that have also benefited nearby villages with no access to drinking water (Geneva Water Hub, 2017b). Moreover, migrants’ remittances are used to finance infrastructure and utilities, such as water, sewage, small dams and water



In November 2016, rains failed for the third year in a row, forcing Somalia into a devastating drought. © 2017/Muse MOHAMMED



Filling up jerry cans. It took over an hour and a half for Abdulahi to dig and find the hole containing the precious water. © IOM 2017/Muse MOHAMMED

treatment plants in their home countries. Remittances represent an important source of income that can contribute to the social and economic development of origin countries (World Bank, 2017).

**Migration and water governance are inherently interconnected policy fields.** It is therefore important to integrate migration concerns in water policies, and vice versa. The water needs of migrants can be framed in legal terms through the application of international instruments, such as the UN Convention on the Law of the Non-Navigational Uses of International Watercourses. For example, a watercourse or an aquifer State should take into account “the social and economic needs of the watercourse States concerned” and “the population dependent on the watercourse in each watercourse State” in determining the equitable and reasonable uses of a shared water resource. In light of this principle, **States should arguably take into consideration the needs of migrants when they determine the equitable use of transboundary water resources.**

The approach of combining water diplomacy and international water law may strengthen the inclusion of migration in water policies. The governance of fresh water is attracting increasing attention at the international level. The centrality of water resources governance to the international community’s agenda is attested by the Sustainable Development Goals (SDGs), notably SDG 6 on clean water and sanitation. Moreover, in June 2015, the Organization for Economic Cooperation and Development (OECD) adopted the Principles on Water Governance (OECD, 2015). These instruments point out the importance of international policies on water governance. While current approaches to water governance have been beneficial and continue to be necessary, however, realizing their potential requires new models of hydro-diplomacy, coupled with social and economic incentives (Geneva Water Hub, 2017a).

The international legal framework integrates detailed provisions to protect the rights of migrants, including those displaced by water scarcity. The integration of



migration in water policies, however, is not explicitly articulated in current laws and treaties. A better understanding of the links between water and migration can be obtained from looking at more traditional types of migration in response to water stress. Pastoral livelihoods are a prime example of a livelihood that uses migration, or mobility, as a key element in a rural living strategy. As a cross-border issue, migration poses challenges to traditional governance systems, as it needs to be addressed at all levels – local, national and international.

Migration policy has been rather slow to factor in the importance of environmental considerations, including water issues. Some progress has been made at the Regional Consultative Processes on Migration and at national levels, with some States reviewing their migration policies to consider environmental factors. Former initiatives that have addressed the role of environment in the migration policy arena include the following: (a) Bern Initiative in 2004; (b) IOM International Dialogue on Migration on Migration, Environment and Climate Change held in 2007 and 2011; (c) Nansen Initiative Protection Agenda; and (d) Migrants in Countries in Crisis Initiative.

With more people on the move than during any other time in history and with climate change impacts manifesting globally, considering the environment in migration is of pivotal importance. The New York Declaration for Refugees and Migrants, adopted in 2016, formally recognized the linkages between migration, environment and climate change and addressed migration due to environmental and/or climate change, as well as the environmental sustainability aspects of migration. **The New York Declaration is an important step towards addressing the challenges related to the migration, environment and climate change nexus, including those connected to water.**

Within the framework of the New York Declaration, United Nations Member States committed to develop, negotiate and adopt a global compact for safe, orderly and regular migration (GCM) to articulate a common set of commitments on how States could respond to the challenges and opportunities of contemporary migration.

A global compact for safe, orderly and regular migration offers an unprecedented opportunity to progress in terms of the overall governance and management of international migration and anchor the environmental dimensions – including those related to water – in the migration governance agenda (IOM, 2018).

## Conclusion

With “water wars” no longer being considered as pure figments of the imagination, transboundary water cooperation is the way forward in managing and protecting shared water resources. Such water governance structures **must recognize the need to factor in migration – both through better planning for increased population movements and safeguarding the basic needs of displaced people.** A contextual analysis of the migration–water nexus should support evidence-based policymaking, which has the potential to simultaneously tackle the root causes of environmental migration related to water insecurity and promote the human right to safe drinking water.

Accordingly, this paper recommends the following:

- (a) Governments to recognize that lack of water security, aggregated by climate change, is a potential driver of migration.
- (b) Policymakers to consider the two main directions by which migration and water interrelate: (i) environmental migration driven by water insecurity; and (ii) increasing pressure on water resources due to migration.
- (c) Policymakers to integrate migration in water governance frameworks and reciprocally water management issues in migration governance frameworks.
- (d) Governments to prevent forced forms of migration by: (i) identifying water and security hotspots in the context of climate change; (ii) ensuring the human right to access to water to all; and (iii) considering migration options such as seasonal migration frameworks to reduce pressures on water resources.

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