

The Governance of Climate-Related Migrations

Summary

In 2014, more than 19.3 million people have been displaced by natural disasters in 100 countries around the world, among which 92% because of storms and floods. The annual average of displacements since 2008 is 26.4 million people, corresponding to one person every second¹.

Climate change is already influencing the picture, and it is likely to make it even worse in the future, increasing the severity and frequency of several hazards². The International Organization for Migration estimates climate change to increase both the frequency and the intensity of sudden- and slow-onset events alike. This means more severe impacts from floods and storms as well as droughts and sea-level rise. Desertification, ocean acidification and erosion will be exacerbated, too³. These impacts will alter the lives of millions of people around the world, especially in the developing one. However, a specific policy or normative framework to address the phenomenon of climate-related migrations, concerning internal or international movements, does not exist. The first request of environmental asylum ever presented has recently been rejected by New Zealand⁴. For this reason, rather than questioning the nature of climate-related displacements and the causal relationship between climate change and migration, this work focuses on the governance of the phenomenon.

Climate-related Migrations

The problem is indeed very complex, with the result that there is no general agreement on the theme of climate-induced migrations neither in terms of its definition nor in terms of numbers and predictions. In fact, climate change would probably never constitute the only factor determining the decision to migrate, but only one among many others. Rather,

¹ INTERNAL DISPLACEMENT MONITORING CENTRE, *Global Estimates 2015. People Displaced by Disasters*,

² *Ibid.*, p. 14

³ INTERNATIONAL ORGANIZATION FOR MIGRATION, *IOM Outlook on Migration, Environment and Climate Change*, Geneva, 2014, p. 5

⁴ LE MONDE, "Ioane Teitiota n'a pas obtenu le statut de premier réfugié climatique de la planète", 21 July 2015, <http://goo.gl/BQwMwT>

climate change can be considered as an accelerator of already existing patterns, or as a threat multiplier. Furthermore, the majority of these movements often remains within the country of origin, and people fall in the category of internally displaced persons (IDPs). Moreover, migration is only one of the possible responses that a population can put in place in order to cope with climate change, as there are other adapting strategies among which migration needs to be included, rather than being considered as a failure to adapt⁵. In this work, we refer to the broad working definition provided by IOM, according to which:

Environmental migrants are persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad.

Therefore, climate-related migrations can be considered as a subset of this category. They are defined by Kniveton et al. and recalled by McAdam as:

persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment as a result of climate change that adversely affect their lives or living conditions, are obliged to leave their homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad.

Even though it is not universally accepted, we believe this definition best represents the complexity of the issue, considering both internal and international displacements, voluntary or forced, temporary or permanent. A frequent critique to the term environmental migrants is that it seems to establish a direct and mono-causal relation

⁵ MCADAM J., (b) "Creating New Norms on Climate Change, Natural Disasters and Displacement: International Developments 2010–2013", *Refuge*, vol. 29, n°2, 2014, p. 11

⁶ INTERNATIONAL ORGANIZATION FOR MIGRATION, *Discussion Note : Migration and the Environment*, Geneva, 1 November 2007, MC/INF/288, p. 1

⁷ McAdam J., "Environmental Migration" in Betts A., *Global Migration Governance*, Oxford, Oxford University Press, 2011, p. 160

between environmental changes and migratory movements⁸, even though we have already presented the blurriness of this link. Hence, we mainly use the term “climate change-related migrations” or more simply “climate-related migrations”, in order to avoid this shortcoming.

In spite of all these difficulties, the lack of a normative or political framework within which to cope with this kind of human displacements remains. Thus, as anticipated, this work focuses on the governance of the phenomenon, asking why the international community has until now been unable to fill this normative vacuum. We answer this question through four independent variables, taken from Hale et al.⁹, and corresponding to four elements of the current system of global governance that cause its shortcomings, or “pathways to gridlock”. These are the growing multi-polarity of the system, its institutional inertia, the increasingly harder nature of modern problems and institutional fragmentation. Our hypothesis is that these four elements explain the lack of international cooperation on the issue of climate-related displacements, and that the system of global governance in this field is therefore gridlocked.

Further, we investigate the nature of the phenomenon itself, in order to demonstrate that the structure of the system of governance is not the only problem. In fact, as already briefly exposed, climate-related migration is an issue of unprecedented complexity and therefore, the “harder problems” variable receives particular attention. Suffice to think that, because of its nature, climate-related migration brings together climate change and migration, which are among the most complex and debated issues of our times. Being cooperation difficult on these two issues when negotiated separately, this obviously worsens when they are considered together. As we recognize this as a particularly interesting and important element, we propose three hypothetical scenarios, whose objective is also the questioning of the role of governance in the management of this phenomenon.

Theoretical framework and methodology

Our theoretical framework is based on the theory of Hale et al., from which we have taken our independent variables. The general point raised by the authors is that the increasing number of international institutions and alternative forms of governance has generated a self-reinforcing dynamic, through which growing interdependence became more and

⁸ FIGUET E., PECOUD A., DE GUCHTENEIRE P., “Migration and Climate Change : An Overview”, *Refugee Survey Quarterly*, Vol. 30, n°3, 2011, p.17

⁹ HALE, Thomas, HELD, David, YOUNG, Kevin, *Gridlock: Why Global Cooperation is Failing When We Need It Most*, Maiden, Polity Press, 2013, p. 34

more institutionalized and called for new interdependence, favoured by post war institutions¹⁰.

However, interdependence has been growing to the point that it now obstructs cooperation at the global level. The current level of interconnectedness, which is unprecedented, would need a parallel increase of institutionalized multilateral cooperation. Yet, in several domains it is insufficient or completely lacking, causing a gridlock that is common to all issue areas of global governance.¹¹ It is in this context that the authors identify the four pathways to gridlock that constitute the independent variables of our research.

Furthermore, as our work needs a reference point in terms of theory of migratory movements, we make reference to the vulnerability model exposed by McLeman in his book "Climate and Human Migration. Past Experiences, Future Challenges". Building on Ravenstein's Laws of Migration and several scholarly contributions, he draws some distinctions between migrants, which can be categorized on the basis of the duration of migration, its distance and the degree of agency of the migrant. He also identifies some common elements in migration theories, as the concepts of path dependency, cumulative causation, human life course and the relationship between agency and structure¹². Considering the influence on populations of cultural, economic, political, demographic and environmental forces operating at the macro, meso and micro levels, McLeman builds a scheme representing the adaptation of a system to a climatic event. Responses will be first searched for at the macro level: if adaptation fails or is insufficient here, the meso or, in case of its failure, the micro levels would be involved. The last element to be considered and introduced is the reason why people migrate and, in order to do this, McLeman refers to social theories referring to the concept of capital¹³. The consideration of several factors intervening in the final decision to migrate is one of the strength of this model.

In order to demonstrate our hypothesis and explain why the international community has not yet bridged the normative gap concerning climate-related displacements, we employ content analysis of documents. "Content analysis has been defined as a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding"¹⁴. Traditionally, it was based on the "objective,

¹⁰ *Ibid.*, p. 224

¹¹ *Ibid.*, p. 226

¹² MCLEMAN, Robert A., *Climate and Human Migration. Past Experiences, Future Challenges*, Cambridge, Cambridge University Press, 2014, pp. 26-28

¹³ *Ibid.*, pp. 72-73

¹⁴ STEMLER S., "An Overview of Content Analysis", *Practical Assessment, Research & Evaluation*, Vol. 7, No. 17, 2001, Retrieved July 25, 2015 from <http://PAREonline.net/getvn.asp?v=7&n=17>

systematic and quantitative description of the manifest content of communication”¹⁵, while recently the interpretation of the more latent content and meaning has entered the analysis, and the qualitative method has sided the quantitative one¹⁶.

In our work, we adopt a macro level of analysis. Hence, we analyse the existing initiatives of cooperation on the issue of climate-related migrations at the international, regional and national level, in order to identify the most relevant actors.

Cooperation on Climate-Related Migrations

At the international level, cooperation on this theme is still limited: an international migration regime is not in place, and states maintain a significant degree of autonomy in dealing with the issue of migrations, without an international regulation of their responses¹⁷. The same can be said for the narrower category of climate change-related migrations. If people move within the boundaries of a state, they may be protected through the Guiding Principles on Internal Displacement, which were adopted in 1998 by the United Nations. Even if they are not binding and they do not explicitly refer to environmental displacements, it is often claimed that climate- and environmental migrants remaining within the borders of their state may be protected under this framework¹⁸. Concerning international displacements, on the other hand, the picture is more blurred and complex.

Among international organization, UNHCR, IOM and UNFCCC are the most interesting for our purposes. Even though the United Nations High Commissioner for Refugees (UNHCR) is often considered as the most likely organization to take care of climate change displaced people, it has for a long time contested the notion of environmental refugee. It argues that people displaced for environmental events do not meet the requirements of the 1951 Geneva Convention relating to the Status of Refugees, according to which refugees are those people persecuted for reasons of “race, religion, nationality, membership of a particular social group or political opinion”¹⁹. Its involvement began only at the end of the 2000s. The turning point came in 2007, when the High Commissioner António Guterres, during the annual meeting of the executive committee, first acknowledged that the drivers of migration were changing and that there was a linkage

¹⁵ Zaidman-Zait A., “Content Analysis”, in Michalos A.C., *Encyclopedia of Quality of Life and Well-Being Research*, the Netherlands, Springer, 2014, p. 1258

¹⁶ *Ibidem*

¹⁷ *Ibidem*

¹⁸ Kälin W., “Conceptualising Climate-Induced Displacement”, in McAdam J., *Climate Change and Displacement. Multidisciplinary Perspectives*, Oxford and Portland, Hart Publishing, 2010, p.86

¹⁹ UNITED NATIONS GENERAL ASSEMBLY, *Convention Relating to the Status of Refugees*, Geneva, 28 July 1951, p.14

between climate change and displacement²⁰. During the following years, the UNHCR itself increased its involvement with climate change. However, the general position of the UNHCR remained the critique of the term refugee.

The UNHCR played a catalytic role in the organization of the Nansen Conference on Climate Change and Displacement, hosted by Norway in 2011. The conference was spurred by the Closed Expert Meeting on Climate Change and Displacement organized by the UNHCR in Bellagio in February 2011. The expert group highlighted the insufficiency of the actual legal and policy framework, and called for further development²¹. In this respect the Nansen conference adopted a set of broad principles, the Nansen Principles, which called on states to work with the UNHCR and “other relevant stakeholders” in order to define a guiding framework or instrument to manage externally-displaced people “owing to sudden-onset disasters”²².

In sum, UNHCR never gained a formal mandate for the protection of climate change-induced migrants, but it tried to change its rhetoric, policy and structure in order to increase awareness on and respond to this phenomenon²³.

The International Organization for Migration (IOM), on its part, has been among the first actors to be active on the question of environmental migration, with its commitment starting in the 1990s. It produced a number of studies and researches and it proposed action and governance paths to be taken on the issue. It also managed numerous programs of relocation or temporary migration of workers coming from populations hit by environmental changes. With its involvement, IOM contributed to the inclusion of the problem within the agenda of international migrations, and it stressed the role of displacement as an adaptation, rather than as a failure²⁴. However, IOM is not part of the UN system, and it is structurally different from the UNHCR. Unlike the latter, IOM neither have the mandate to supervise over the application of an international treaty, nor it has legitimacy on a regime of international law. In spite of its competences on the management of migration, because of these limits it is often claimed that IOM is not the most suitable institution to deal with climate-related displacements²⁵.

²⁰ HALL N., *op. cit.*, pp. 97-98

²¹ MCADAM J., (b), *op.cit.*, p. 14

²² NORWEGIAN REFUGEE COUNCIL, *The Nansen Conference. Climate Change and Displacement in the 21st Century*, 2011, p.5

²³ HALL N., *op. cit.*, p. 102

²⁴ COURNIL, Christel, MAYER, Benoît, *Les migrations environnementales*, Paris, Presses de Sciences Po, 2014, p. 89

²⁵ MCADAM, Jane, *Climate Change, Forced Migration and International Law*, Oxford, Oxford University Press, 2012, p. 230

Further, the UN Framework Convention on Climate Change (UNFCCC) has taken the place of the UN Development Program (UNDP), which has been the first institution to engage on the issue. The main objective of the Convention is the stabilisation of Green House Gases emissions within a non-dangerous limit²⁶. Therefore, its commitment and action have initially been focused on the reduction of emissions, limiting the impact of industrialized countries on the global climate. More recently, a complementary approach has emerged: the focus on the adaptation of human societies to climate change. It is in this framework that the UNFCCC has established its Bali Action plan, during the Thirteenth Conference of the Parties (COP13) in Bali in 2007, which identified two priorities: prevention and adaptation. The plan also introduced the concept of common but differentiated responsibilities, recognizing the importance of developed countries' support to the states most affected by climate change effects²⁷. After this, migration began to appear in some negotiating texts or drafts working papers of the UNFCCC, like in Copenhagen during the COP15 or in Cancun (COP16).

Analysis

Therefore, we have selected the outcome documents of the UNFCCC Conference of the Parties (COP) from 2007 to nowadays. 2007 was chosen as our starting date because COP13 in Bali marked the first inclusion of climate-related migrations topic into UNFCCC negotiations. We have also included the last meeting of the parties that was held in Geneva in preparation to COP21 in Paris in December 2015, in order to be as exhaustive as possible. Then, we first of all look at whether and how those documents deal with the topic of our research, in order to trace its evolution. Our analysis is qualitative rather than quantitative.

However, our independent variables concern more the dynamics of decision-making than the final result. That is why we have decided to include in our analysis also the summaries of the negotiations that took place during the different Conferences of the Parties. Our study proceeds in a deductive fashion, as we have built four grids, one for each independent variable, in which our indicators are constituted by the mechanisms identified by Hale et al. for each pathway to gridlock. These are: increased transaction costs, exacerbated legitimacy dilemma and divergence of interests for growing multipolarity; formal lock-in of decision making authority and entrenchment of cognitive and organizational focal points for institutional inertia; extensity and intensity for harder

²⁶ COURNIL, Christel, MAYER, Benoît, *op.cit.*, p. 90

²⁷ *Ibid.*, p. 91

problems; increased transaction costs, inefficient division of labour and excessive flexibility for institutional fragmentation²⁸.

Nevertheless, as we have shown, the UNFCCC is not the only relevant actor in the picture and we have considered also the role of the UNHCR and IOM.

The results of our research have confirmed our hypothesis, which was that the inability of the international community to bridge the normative gap concerning the issue of climate-related displacements is due to three characteristics of the global governance system, namely growing multi-polarity, institutional inertia and institutional fragmentation, and one attribute of the problem, its unprecedented complexity. In fact, all the four independent variables were found to have contributed to the immobility of the international system.

In particular, as far as the UNFCCC is concerned, the prevailing elements identified are growing multi-polarity and fragmentation. For the first one, several examples of divergent interests between developed and developing countries were identified. For instance, in Bali the text on mitigation was adopted only at the last moment²⁹. In Doha, developing countries proposed an institutional mechanism to regulate loss and damage, but this was rejected by developed nations³⁰. Also increased transaction costs resulting from an increased number of countries were frequently recognized: discussions were slowed down in Copenhagen because the African Group and the LDCs, with the support of the G77-China, suspended the negotiations as a form of protest against informal negotiations that were taking place. These latter too can be considered as a consequence of increased multi-polarity, as countries find incentives in building agreements outside formal talks³¹. In Bali, fragmentation was recognized in the fact that the delegates had to find a balance between the sessions of the UNFCCC COP, of the Kyoto Protocol COP/MOP, of the subsidiary bodies, of the Ad Hoc Working Group and informal meetings, as well as among the several negotiating issues³². Fragmentation was identified in Copenhagen too, generated by the lack of major progress of the UNFCCC which incentivized several subnational and non-state actors to turn to initiative, programmes and policies addressing climate change outside the UNFCCC umbrella³³.

²⁸ HALE T., HELD D., YOUNG K., "Gridlock: from Self-reinforcing Interdependence to Second-order Cooperation Problems", *Global Policy*, 2013, vol. 4, n° 3, p. 227

²⁹ INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, (a) *op.cit.*, p. 15

³⁰ INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, (f) *op.cit.*, p. 20

³¹ INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, (c) *op.cit.*, p. 28

³² INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, (a) *op.cit.*, p. 18

³³ INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT, (c) *op.cit.*, p. 30

IOM and UNHCR, on the other hand, are mostly characterized by institutional inertia. However, this is different from the one identified by Hale et al., who define it in terms of crystallized distribution of power among countries. Here, we found institutional inertia in the mandate and scope of action of the two institutions. As far as the UNHCR is concerned, the lack of consensus among parties on the widening of the definition of “refugee” makes it impossible for this institution to protect climate-related migrants³⁴. IOM, on its part, does not belong to the UN system, and it lacks a specific mandate, normative authority³⁵ and a treaty to oversee³⁶. Even though it committed to the issue of climate-related migrations, it cannot count on a comprehensive and coherent mandate of action. Therefore, we can inscribe the lack of an international agreement on the theme of climate-related migration to the general gridlock characterizing current global governance.

However, two elements resulted more crucial than the others. The first one is the institutional fragmentation of the system of global governance on this phenomenon. The absence of an international institution in charge of the management of the issue leads to, as McAdam states, both vertical fragmentation, with actors operating at different levels, and horizontal fragmentation, so that the phenomenon is addressed as part of other policy categories³⁷.

The second element, as anticipated, is constituted by the characteristics of the problem, which make it of such a complexity that cooperation results hampered. In fact, climate change is hardly ever the only factor determining the decision to migrate, but one among many others. Thus, climate change should rather be considered as an accelerator of already existing dynamics, or as a threat multiplier. Furthermore, very often these movements remain within the boundaries of the country of origin, with people falling in the category of internally displaced persons (IDPs). Moreover, it is often argued that migration constitutes only one of the possible adaptive responses to climate change, as there are other strategies that population can put in place. In any case, migration is not always a failure to adapt, but it can be acknowledged as an adaptive mechanism³⁸. The complexity of this phenomenon, as we have already argued, derives also from its combining of two major global problems of our times, namely migration and climate change. Cooperation is difficult on the two issues when discussed separately, and it can only be made even more difficult by their coming together.

³⁴ HALL N., *op.cit.*, p. 102

³⁵ MCADAM, Jane, *op.cit.*, p. 230

³⁶ Betts A., “Introduction: Global Migration Governance”, in BETTS A., *Global Migration Governance*, Oxford, Oxford University Press, 2011, p. 8

³⁷ MCADAM, Jane, *op.cit.*, p. 213

³⁸ MCADAM J., (d) “Creating New Norms on Climate Change, Natural Disasters and Displacement: International Developments 2010–2013”, *Refugee*, vol. 29, n°2, 2014, p. 11

Hypothetical Scenarios

As we have established to focus with particular attention on the independent variable represented by “harder problems”, we have decided to build three hypothetical scenarios, representing the particularly complex nature of the phenomenon. These consider three different cases: New York and New Jersey, the Netherlands and Morocco. They have been chosen because these states are in different ways highly exposed to climate change and subject to its effects, as sea level rise or increased storms. Moreover, they represent three different levels of analysis: the purely national one in the first case, the national and regional in the second one, and the inter-regional one (as migration from North-Africa to Europe is considered) in the third case. Starting from actual data about past weather events, we argue that planned relocation of part of their population cannot be excluded in the future, and we investigate the role of global governance in each of the three cases.

Hurricane Katrina in 2005 but even more Hurricane Sandy in 2012 showed that extreme weather events are likely to cause loss, harm and even displacement in both poor and wealthy countries alike. Nonetheless, the most disadvantaged social categories, like the poor or the marginalized, are also the most vulnerable ones in these cases.

The coast running from Virginia to New Jersey is particularly subject to major storms passing from south to north, and sea level has been rising of 2 to 3mm per year³⁹. Therefore, this area is particularly subject to sudden environmental events and to sea level rise (SLR). Hurricane Sandy hit New York City and New Jersey in October 2012. Its impact was particularly catastrophic because of several reasons, but it was amplified by two main phenomena: the first one is the fact that it hit the coast during full moon, therefore when the tide was at its highest level; but the second factor was the long-term element of sea-level rise⁴⁰. This is particularly important for our analysis, as sea level rise is one of the consequences of climate change, and it is an evident phenomenon in New York and New Jersey, which are particularly vulnerable to it. Therefore, even though it is not possible to categorize the hurricane itself as a product of climate change, the flooding damages are strictly linked to it. In fact, the storm was surely made worse by climate change, and in the

³⁹ Bokuniewicz H., “New York and New England)” in Bird E.C.F, *Encyclopedia of the World’s Coastal Landforms*, Switzerland, Springer, 2010, p. 113

⁴⁰ Delavelle F., “Hurricane Sandy in New York and New Jersey : Evacuation, Displacement and Adaptation”, in Gemenne F., Brücker P., Ionesco D., *The State of Environmental Migration 2013. A review of 2012*, Paris, Studies IDDRI – OIM, 2013, p.16

future the losses of similar events would be even more serious, as sea level will continue to rise⁴¹.

In the case of Hurricane Sandy the answer of the authorities has been to evacuate endangered areas, and this massive displacement of people brought with it a long series of difficulties and costs. Of the thousands of people who left their homes because of super storm Sandy, 14,000 are still displaced and waiting for a long-term solution⁴². Therefore, if the frequency and power of these events increase, we can argue that it would be necessary to act in a long-term logic. It would probably be better and less costly to relocate some people permanently and not only to improve engineering in order to reduce the impact of the storms. However, planned relocation involves some logistical problems, like the considerable financial costs of relocating even a small part of the population and the physical availability of a territory in which displaced people could settle down⁴³.

At the international level, the Guiding Principles on Internal Displacement could be applied in the case of sudden onset disasters. Given that our future scenario considers natural disasters as hurricanes worsened by sea level rise, a consequence of human-induced climate change, displaced people in this case would be covered by them. However, they do not form a binding document and therefore they do not impose any obligation on any state. Hence, it is very likely that in a similar case it would be the nation state the only actor to intervene, in terms of population management. Moreover, the United States has considered the issue of climate-related displacements only in terms of immigrants entering the US: it is to foreigners that the temporary protected status is addressed. Therefore, the US lacks a comprehensive normative or policy framework under which dealing with IDPs for environmental and climate-related causes. It is this gap that needs to be filled, in order to be prepared when similar events will take place in the future.

Our second case considers the country of the Netherlands, which is particularly at risk of suffering from sea-level rise impact, due to its geographical position and conformation. Nonetheless, the Dutch coast is protected against the sea by dykes and dunes⁴⁴. The major hazard to which the country is subject is the one of flooding, and SLR is particularly dangerous for the Netherlands because it will increase the destructive impacts of

⁴¹ KAHN B., "Superstorm Sandy and Sea Level Rise", *National Oceanic and Atmospheric Administration*, November 15th, 2012

⁴² INTERNAL DISPLACEMENT MONITORING CENTRE, *op.cit.*, p. 70

⁴³ MCLEMAN, Robert, *op.cit.*, p. 189

⁴⁴ Jelgersma S., "The Netherlands", in Bird E.C.F, *Encyclopedia of the World's Coastal Landforms*, Switzerland, Springer, 2010, p. 665

flooding⁴⁵. Moreover, the majority of the population lives along the 400 kilometres of coastline and often below the level of the sea. Therefore, the highest risks of flooding concern the most densely populated area, increasing the disruptive potential of a disaster⁴⁶. Storms are also already frequently hitting the Dutch coastline⁴⁷.

In this context, some authors consider migration to become a relatively natural strategy for people living in the affected areas, who could move to the most secure ones. Foreigners living in the Netherlands could come back to their country of origin, and retired people could move to southern Europe. Nonetheless, migration would not be that simple⁴⁸. Whether a part of the Dutch population would be forced to permanently leave its place of residence, and be displaced elsewhere, the primary duty of assistance would fall on the nation state itself, and therefore on national policies implemented by the government. The difference here would be caused by the responsiveness of the authorities: planning would clearly help facilitating relocation. Nevertheless, planned relocation entails some several difficulties.

In the case of internal displacement, people migrating or resettled because of SLR would be covered by the Guiding Principles on Internal Displacement, which are not binding. In-between the national and the international levels, it is worth considering the regional one, as it is very likely that the European Union would intervene in some way. However, even though the European Union has begun to consider the issue of climate-related migrations, all the resulting documents consider migration in the Union coming from outside it. Therefore, there is not any kind of normative or policy framework that could be specifically applied to our scenario. This will impact on the Union's response to a similar event. Hence, it is sensible to imagine that in the case of migratory movements, spontaneous or planned, within the Netherlands itself, the European Union would intervene only in terms of financial and logistical assistance and support.

The picture is likely to be different in case of movements from the Netherlands to other European member states. Given the freedom of movement of people established by the Schengen agreement, Dutch citizens would have the full right to move to other countries in the Schengen area. The Union could not hinder this choice, especially because, for several among them, life in their country would be dangerous and life threatening.

⁴⁵ Roggema R., "Climate Change Around the World : Australia, the Netherlands, and India", in Sundaresan J., Santosh K.M., Déri A., Roggema R., Singh R., *Geospatial Technologies and Climate Change*, Switzerland, Springer International Publishing, 2014, p. 4

⁴⁶ *Ibid.*, p. 8

⁴⁷ Jelgersma S., *op.cit.*, p. 665

⁴⁸ OLSHOORN X., VAN DER WERFF P., BOUWER L.M., HUITEMA D., "Neo-Atlantis: The Netherlands under a 5-m sea level rise", *Climatic Change*, Vol. 91, 2008, p. 117

Nevertheless, in case of a mass movement of people, the problems would come from its unprecedented dimension, that would make it necessary to regulate and coordinate these displacements. Hence, a major problem will be constituted by the absence of a European policy or normative framework when floods will make part of the Netherlands uninhabitable. Responses and actions would be taken without proper guidelines or a comprehensive strategy. Thus, even though the probability related to these events is not high, especially in the short term, we consider it necessary for the European Union to begin including the issue of climate-induced displacements within the area of the Union in its debates.

The third case we have chosen to analyse is the one of Morocco. Belonging to the region of North Africa, at a distance of few kilometres from Spain and even surrounding the two autonomous Spanish cities of Ceuta and Melilla, this is one of the countries often looked at by Europe as a possible origin of immigrants. Its nature of transit state, i.e. a state crossed by migrants heading over a further destination (usually Europe) makes it interesting also for debates over climate-induced migrations, as many of them often depict Sub-Saharan inhabitants leaving those areas for the northern shores of the Mediterranean.

Morocco has been an emigration country for the most part of its recent history, with emigration flows directed primarily towards Western Europe⁴⁹. Moroccan immigration history began more recently, in the late 1980s, when migration flows were pushed towards Morocco, as a way to reach European shores, which offered better lifestyles, jobs and consequent remittances⁵⁰. In several cases, migrants also remain in Morocco instead of continuing toward the North, and they usually settle down in big cities⁵¹.

As far as climate change is concerned, the country is already characterized by deteriorating environmental conditions, which are likely to worsen due to climate change. Among the expected impacts, we can list a lower level of precipitations, a higher risk of droughts, the increase of dry areas in the North, and decreasing ground water⁵². Water shortages, which are already experienced by Morocco, can be linked to climate-related causes in the South and to demographic pressure in the North. By 2025 or 2030,

⁴⁹ Wodon Q., Burger N., Grant A., Joseph G., Liverani A., Tkacheva O., "Climate Change, Extreme Weather Events, and Migration : Review of the Literature for Five Arab Countries", In Piguët E., Laczko F., *People on the Move in a Changing Climate. The Regional Impact of Environmental Change on Migration*, Dordrecht, Springer, 2014, p. 120

⁵⁰ WHITE, Gregory, *Climate Change and Migration: Security and Borders in a Warming World*, Oxford, Oxford University Press, 2011, p. 105

⁵¹ *Ibid.*, p. 107

⁵² Wodon Q., Burger N., Grant A., Joseph G., Liverani A., Tkacheva O., *op.cit.*, p. 121

agricultural output may drastically fall, especially in those regions (northern and centre-west areas) where it depends primarily on rainwater⁵³.

Those changes are likely to have impacts on migration flows. In fact, 40% of Moroccan population works in the agricultural sector and nearly 70% of the poor are settled in rural areas. Thus, environmental and climatic shocks causing declines in agricultural output will have negative impacts on the livelihoods of thousands of people⁵⁴. Another impact of climate change to which Morocco is and will be subject is the increase in floods and the rise of the sea level. This is going to have severe consequences on the country, which has 3,500 km of coastline, and it is going to impact on migration movements too.

Even though the poorest people are often also the less able to undertake the decision to migrate, future migration from North Africa to Europe is very likely to increase, and a progressively huge amount of migration decisions would be linked to environmental and climate conditions. In this respect, an interregional cooperation between the European Union and North Africa would probably be a necessary instrument to better manage these movements, in the interest and advantage of both origin and receiving countries and migrants themselves. Given that a sort of cooperation already exists between the EU and Morocco, further developments in this sense would be very likely. The need for an international regulatory framework will depend on whether inter-regional cooperation would be successful or not. In the case of a well-planned and functioning strategy of prevention and adaptation between the two regions, or between the European Union and some single country, the issue would probably be enough regulated. In this perspective, even though an international agreement – binding or non binding – on the phenomenon of climate-related migrations would not be reached in the short or medium run, the issue could be managed through regional or inter-regional agreements.

It is worth noting that, among the three scenarios considered, the one in which a minimum action already exists is the last one, in which migration would run from the developing to the developed world. This highlights a lack of awareness in the Western and developed world about the risks of climate change impacts on population movements within and across the developed world itself.

Conclusion

We have decided not to concentrate this work on the causal relationship between climate change and migration. Rather, we preferred to shift our focus on the governance of

⁵³ *Ibidem*

⁵⁴ *Ibidem*

climate-related migrations, acknowledging the existence of a normative and political gap and scrutinizing why it has not been bridged yet. Therefore, this made it possible to focus on the problems of cooperation and identifying the causes, or at least a part of causes, at the basis of the lack of it. In our view, this is an important contribution of our research. In fact, this allows moving on to the most urgent need regarding climate-related displacements, which is the creation of a new or reformed framework to address them. It is not possible, we believe, to solve a problem without knowing its underlying origins, and this is valid also for international cooperation.

Hence, future paths of research following our work could be focused either on the deeper analysis of the causes of the lack of cooperation or, perhaps more interestingly, on possible solutions to this *impasse*. We briefly suggested in chapter 3 that the management of this phenomenon at the regional or inter-regional level could have several advantages, among which a better knowledge of local situations and a higher national propensity to cooperate with neighbouring countries. Moreover, countries in a same region often share similar problems related to both climate change and migration. A further possibility could be the building of a multi-level system of governance, combining in a comprehensive way the local, regional and international level, as suggested by McAdam. For lack of space, we could not examine in depth these possibilities, but we believe they constitute interesting starting points for future research.

Lack of space and time brought with them other limitations. A major one was considering only people moving in case of natural disasters or weather events. As it is often the case, our analysis concentrated on those who are able to leave. However, frequently the most vulnerable and most poor do not even owe the necessary means to migrate, which constitutes a rather costly solution, sometimes because they have lost them as a result of the natural disaster that hit them. Thus, they remain stuck and subject to threats and hazards. A gap in the governance system exists for them too⁵⁵, but we could not address it here. Yet, this constitutes another spark for future analysis.

⁵⁵ WARNER K., (a) *op.cit.*, p. 410