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THE NEXUS OF CLIMATE CHANGE AND MIGRATION[*]

Sanem ÖZER[**] & Senem ATVUR[***]

Abstract

International system has been facing a plethora of challenges since the beginning of the 21st century. Climate change and migration are among the crucial problems threatening the integrity of the system. Moreover, environmental and humanitarian crises have been triggered due to the global and transboundary effects of climate change and migration. This study argues that the nexus of climate change and migration is one great issue that requires the state to adopt a new governance approach to tackle with these problems. In this context, the study focuses on the different terms used in migration literature and the conceptualization of interrelation between migration and climate change with a descriptive method. The study aims to reveal vital problems by examining some hotspots where the migration flows happen as a result of climate change and its impacts. However, the study considers the potential positive effects of migration, as well. It is argued that for the state to respond to the crises caused by the climate change-induced migration, it should adapt itself to the new conditions. This study provides a normative approach that the state should take more responsibility to mitigate the core impacts of climate change and it should also integrate the civil society into the decision-making process without excluding the migrants.

Keywords: *Migration, Climate Change, State, Governance.*

İKLİM DEĞİŞİKLİĞİ VE GÖÇÜN KESİŞİMİ

Öz

21. yüzyılın başında uluslararası sistem pek çok farklı meydan okumayla karşı karşıyadır. İklim değişikliği ve göç de sistemin bütünlüğünü tehdit eden öncelikli sorunlar arasındadır. Bunun yanında iklim değişikliği ve göçün küresel ve sınır aşan etkileri çevresel ve insani krizleri tetiklemiştir. Bu çalışma iklim değişikliği ve göçün kesişiminde ortaya çıkan durumda, bu sorunları çözebilmek için devletin yeni bir yönetişim yaklaşımı belirlemesi gerektiğini savunmaktadır. Bu bağlamda çalışma göç literatüründe kullanılan farklı kavramlar ile göç ve iklim değişikliği arasındaki karşılıklı ilişkiyi betimleyici bir yöntemle

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[**] Assistant Professor, Akdeniz University Faculty of Economics and Administrative Sciences Department of International Relations, sanemozer@akdeniz.edu.tr, https://orcid.org/0000-0003-4182-5335

[***] Assistant Professor, Akdeniz University Faculty of Economics and Administrative Sciences Department of International Relations, senematvur@akdeniz.edu.tr, https://orcid.org/0000-0003-3616-1749

kavramsallaştırmaya odaklanmaktadır. Çalışma, iklim değişikliği ve etkileri sonucunda göç akınlarının ortaya çıktığı sıcak noktaları ele alarak, yaşamsal sorunları açığa çıkarmayı amaçlamaktadır. Bununla birlikte, çalışma göçün potansiyel olumlu etkilerini de dikkate almaktadır. İklim değişikliğinin neden olduğu göçün yarattığı krizlere devletin cevap verebilmesi için, kendini değişen koşullara uyarlamasının gerekliliği öne sürülmektedir. Bu çalışma, iklim değişikliğinin etkilerini azaltmak için devletin daha fazla sorumluluk alması gerektiğini ve göçmenleri dışlamadan sivil toplumun karar alma süreçlerine katılımının gerekliliğini normatif bir yaklaşımla ele almaktadır.

Anahtar Kelimeler: *Göç, İklim Değişikliği, Devlet, Yönetişim.*

Introduction

Human history is a history of migration. Through the ages, migration flows all around the world have not only changed political, economic and social systems, but also affected natural cycles. Human activities, particularly after the Industrial Revolution, have become the main cause of the environmental degradation which has also triggered new movement of people from rural to urban areas and beyond the frontiers of the states. One of the most crucial environmental problems caused by the distortion of climatic patterns is "climate change". The UN Framework Convention on Climate Change (UNFCC), opened for signature in the Rio Earth Summit in 1992 and entered into force in 1994, defines climate change as a change on the composition of the atmosphere caused directly or indirectly by human activity that is a different process from the natural climate variability observed over comparable time periods, (UNFCC, art. 1.2). Climate change has been affecting ecological cycles, interdependent ecosystems, biodiversity and all systems built by humanity. It has also become one of the most accurate threats to the humanity. The destruction caused by the climate change both creates new interdependent problems and deepens actual crises. This article will focus on one of these problems, climate change induced migration. People who are affected by direct impacts of climate change have little option but migrate. The aim of this article is to discuss the impacts of climate change on potential migration flows. In this context, the role of states to the displacement of people due to climate change is at the focus. Although there are several international initiatives and academic studies about migration, it is difficult to find a common term to define the migration flows due to climatic changes in different parts of the Earth. In the first part of this article the relation between migration and climate change is questioned and the differences between multiple concepts used in this term are analysed. In the second part, the risk of migration in the hotspots of climate change is assessed. Considering the power and capacity of the state to respond immediate crises born out of the nexus of climate change and migration, the study argues that the most reasonable response would be embracing sound policies that support and relieve people, who are displaced by environmental degradation due to climate change. Otherwise, the state

will be more vulnerable to the impacts of climate change and migration. As a rational actor, state is expected to adapt to this process imposed by climate change. This article examines the concepts related to the climate induced migration and the risk in the hotspots with a descriptive method; however, the potential role of state in this context is discussed with a normative perspective by considering the policies of governance. It is argued that accepting the climate migrants as parties to global governance will give a new role to the state to orchestrate multiple actors with differentiating interests. This study expects to provide a holistic perspective to the nexus of climate change and migration through an interdisciplinary reading and analysis. Therefore, the study defends that the state and the people can develop common policies to deal with the consequences of climate change, and redefine and distribute responsibilities.

1. MIGRATION AS AN IMPACT OF CLIMATE CHANGE

Migration literature contains different concepts used to define displacement related to environmental change or degradation. Environmental migration, climate change-induced migration, ecological/environmental refugees, climate change migrants, environmentally-induced forced migrants are the most frequently used concepts in the literature. The complexity of migration patterns, and the lack of consensus on definitions because of diverse theoretical approaches lead to a variety of nuanced notions (Dun and Gemene, 2008:10). Myers (2008) defines environmental refugees as people "who could no longer gain a secure livelihood in their homelands because of drought, soil erosion, desertification, deforestation and other environmental problems, together with the associated problems of population pressures and profound poverty" and he adds that the estimated 25 million environmental refugees in 1995 (compared with 27 million traditional refugees) would double by 2010 (Myers, 2002:609-611). He also argues that even though environmental problems oblige people to displace or migrate, there are also grey zones where different motivations of migration could be merged into other (Myers, 2002:610). The main theoretical approaches cannot reconcile on the scope of the definition. According to Dun and Gemene (2008:10), "the need for a definition is a crucial step in the conceptualization of environmental migration, and the development of policy responses to address these flows". Dun and Gemene also argue that a wide definition would be damaging for people who are most in need of protection, although there is a tendency to enlarge the definition to encompass as many people as possible (Dun and Gemene, 2008:11).

Bates (2002) points out the vagueness of the concept of "environmental refugees". She identifies different causes of migration and tries to offer a basis and a more stable framework for researchers and policy-makers to refer in their efforts to prevent environmental change

induced displacements. The definition given by the UNEP researcher Essam El-Hinnawi emphasises environmental distruption (natural and/or human made physical, chemical or biological changes in the ecosystems) as a factor jeopardising people's existence and/or affecting their life (El-Hinnawi, 1985: 4, as cited in Bates, 2002:466). However, Bates criticises El-Hinnawi's definition to be too broad, since he has not specified differences among environmental refugees (Bates, 2002:466). Castels (2002:5, as cited in Piguet, 2008:3) criticises the use of the term "environmental refugee" since "It implies a monocausality which very rarely exists in practice (...) [Environmental and natural factors] are part of a complex pattern of multiple causality, in which [they] are closely linked to economic, social and political ones".

The question of using the term migrant or refugee results from the refugee definition of 1951 UN Convention on Refugees and its 1967 Amendment. Whilst the Convention does not mention the difference between refugee and migrant, and does not imply environmental problems as a cause to displacement, Bates (2002:467-468) prefers to categorise migration as voluntary and involuntary movement of people "from their usual residence due to changes in their ambient non-human environment". Additionally, she classifies displaced people, who are dependent on the environmental stimulus of their decision. In this context, people who leave their homelands voluntarily are called migrant; who are compelled to displace or migrate are called environmental emigrants, and who had to migrate involuntarily are called environmental refugees (Bates, 2002:468). Bates links the appearance of environmental refugees to the environmental disruption and also clarifies the sources of disruption as disasters, expropriation of environment (for dam construction for example), and deterioration of environment (pollution, depletion etc.) (2002:469-475). Lonergan (1998) lists environmental push elements that might lead to migration in five groups of factors as natural disasters, development projects that involve changes in the environment, progressive evolution of the environment, industrial accidents, and environmental consequences due to conflicts. This study concentrates on progressive evolution of the environment as a result of climate change.

The discussion over the connection between climate change and migration was first introduced to the global agenda in 2008 UNFCCC negotiations (Warner, 2010:403). Since the COP14 held in Poznan in 2008, the International Migration Organization (IMO) has been integrated into the UNFCCC process and has been working for the recognition of migration and displacement dimensions related to climate change politics (Environmental Migration Portal, n.d.). Whether migration is a choice or a survival reflex may well be questioned. In some particular cases migration such as displacement due to rising sea levels is inevitable and can be considered as climate forced migration. People, who will lose or have already lost their living spaces, have no other choice but move to another

place to survive. This can be internal migration or migration towards another country, which is considered to be safe and liveable. Therefore, the IMO (2014:22) argues that the migration in the context of climate change is "likely to be neither entirely forced nor entirely voluntary, but in a grey zone in between".

Marshall (2016) claims that "distinguishing clearly framed categories of environmental migrants based on their individual experiences of displacement will better enable the international community to respond appropriately to their needs". Thus she argues for the categorisation of environmental migrants as Imperative Environmental Migrants, Pressured Environmental Migrants, Temporary Environmental Migrants and Human Environmental Migrants. According to Marshall's categorisation Imperative Environmental Migrants are persons, who have been or will be permanently and irrefutably displaced from their homes and/or livelihoods primarily as a result of environmental factors. Pressured Environmental Migrants include those peoples who are unable to continue effective lifestyles and are thus strongly pressured to migrate to more hospitable climates to sustain basic living requirements for food, water, and shelter as a result of the slow-moving processes of climate change. The author defines Temporary Environmental Migrants experiencing short-term forced migration resulting from a one-time severe environmental event. He also explains Human Environmental Migrants as residents displaced from their homes and/or livelihoods as a result of human conflict over environmental resources.

Although environmental changes have caused migration throughout history, climate change is a new process related to anthropogenic impacts. Therefore, ethical responsibility to mitigate effects of climate change especially on human beings is an obligation. Marshall (2016:2) states that the lack of "clear legal or moral language" for people displaced due to climate change complicate the official recognition and finding the set of rights to meet their ethical and practical demands. Marshall uses the term of "environmentally displaced peoples" instead of environmental refugees because the international status for refugees does not comprise people who migrate due to environmental problems.

Another concept in the migration literature is climate change migrant. Baldwin (2012:636) defines these migrants as "anyone whose actual existence is marked by his or her potential to migrate as a result of climate change". He suggests that this movement is a "form of existence conditioned by the always present future potential to migrate, a potential which lies dormant in subjective experience" (Baldwin, 2012:636). However, the identity of the climate migrant is defined from outside:

> *…the potential climate change migrant is racialised because she/he may migrate as a function of nature rather than reason, she/he may become the excess of political order. Or put differently, the climate change migrant is racialised because of its ambiguous, either/or status; its threatening posture may materialise, or it may not* (Baldwin, 2012:636).

According to Baldwin, race is not about the colour or skin, it is about the social construction. Climate migrants are racialised as they are associated with "the emergent potentiality of the world", something that may perpetually change. The figure of climate change migrant, thus, becomes the "clearest personification" of a world in crisis. To understand the effects of this crisis, it is necessary to examine the hotspots where the nexus of climate change and the migration create critical conditions.

2. CLIMATE CHANGE HOTSPOTS AND HUMAN MOVEMENTS

Environmental observations relate extreme weather events, such as stronger and more frequent storms and floods, as well as longer-term, gradual problems, such as droughts and rising sea levels to climate change. Consequences of climate change are affecting some regions more and likely to cause mass population displacements. The IPCC 5th Assessment Report affirms that extreme weather events affect mostly populations that do not have enough resources for planned migration, especially in developing countries with low income. The Report also projects that climate change, together with the poverty or other socio-economic problems, could indirectly increase risks of violent conflicts (IPCC, 2014:16). Climate change induced migration could be related to rising sea levels, higher temperatures, disruptions of hydrological cycles, and severe weather events. These inconveniences affect human settlements, food and water security, and spread of diseases and can cause competition for resources resulting in violent conflicts. The approach of Homer-Dixon (1999) affirms that scarcities of critical environmental resources could lead to conflict; scarcities could aggravate existing cleavages and/or inter or inner-state tension. People, who want to escape from the negative effects of climate change, either lead directly to migration or amplify migration indirectly by escaping from violent conflict and/or political instability related to ecological destruction (Newland, 2011:2-7).

The Syria Crisis, beyond its political impacts, has an environment-related dimension. According to the researches (Kelley, 2015; de Châtel, 2014), drought recorded in 2006-2009 in the Southern parts of Syria is linked to climate change. This region was the place where the first protests against the government in 2011 had begun. These researches show that drought caused the loss of agricultural productivity and rural people started to migrate to the urban areas where they faced unemployment and social exclusion. Including these inconveniences, the insufficient infrastructure, deepening economic problems and the pressure of the government triggered the internationalised conflict. The Syrian Civil War has become an international crisis not only because of the involvement of different foreign actors, but also because of the migration flow affecting the whole world. Due to the ongoing civil war, estimated

5.6 million Syrians fled to other countries since 2011, and 6.6 million people had to leave their homes and were trapped inside the country (UNHCR, 2019). The Syrian refugee crisis has become a challenge for the integrity of the international community and the stability of the international system. However, when the unpreparedness of the countries is considered, it is not clear how they will cope with migration flows due to climate change in the future.

Unfortunately, the strong physical and ecological effects of climate change are aggravated by large numbers of vulnerable and poor people and communities in so-called hotspots. Areas in the Amazon, the Sahel, tropical West Africa, Indonesia, and Central Eastern Asia emerge as primary observed climate change hotspots (Turco et al, 2015). Some researches group hotspots in general as such 1) deltas in Africa and South Asia; 2) semi-arid regions in Africa and parts of South and Central Asia; 3) glacier- and snowpack-dependent river basins, especially in the Himalayas. Climate changes in these regions influence ecosystems, livelihoods and development through changes in regular weather – i.e. daily, seasonal and annual patterns – and through irregular extreme events. The main influences are changes in temperature, rainfall and runoff, sea levels, tidal fluctuations and increasing extreme events such as storms, floods and drought. Hence, people that lack the resources or instruments flexible enough to cope with the present situation move to escape from the imminent harm. Bhola Island close to where the Meghna River fans out to the Bay of Benghal, is entitled as the zero point of climate change, because the increasing flow rate of the river as a result of glacier melt down in the Himalayas has eroded the island since 1995. More than 500.000 people have lost their homes since half of the island has become inhabitable and had to move to the capital city Dakka (Haque, 2009).

By 2060 it is projected that between 472 and 552 million people will be directly or indirectly affected by floods in rural areas in Africa, Asia, and Latin America and the Caribbean (Foresight, 2011:16). Populated urban areas located usually in delta or coastal floodplain regions are also at risk. The populations most vulnerable to the impacts of climate change live in low-lying areas or coastal line, doing fishery. Areas more prone to danger due to rising sea levels are in developing and highly populated countries' coastal and delta zones (where the agricultural production intensifies), and island states (which are in risk of total disappearance) (Newland, 2011:2-3). Furthermore, another threat is disruption of watercycles. Changing rainfall patterns will affect agricultural activities and reduce food security. The International Centre for Environmental Management (ICEM) (2010) relates in Climate Change Baseline Assessment Working Paper, how "projected climate changes for the Mekong basin point to increasing variability, a wetter wet season, less rain during the dry season in the south - and more frequent extreme

weather events". Accordingly, "seasonal water shortages and floods are expected to become worse in some areas of the basin, as may saltwater intrusion into the Mekong Delta due to storm surges and sea level rise". (ICEM, 2010) Mekong Basin laying from China to the Tonle Sap in Cambodia display distinctive and various biophysical characteristics. Hence, climate changes differ from zone to zone. Within the zone extending from China to Chiang Saen, for instance, agricultural productivity and food availability would decrease as a result of climatic impacts. Fish diversity would decrease, too. Due to these effects, people living in these areas and pursuing traditional economic activities become more vulnerable to the impacts of climate change.

Both torrential rains and drought are prompting people to migrate. Inequitable land tenure systems, land degradation (overgrazing or deforestation), trade patterns, and subsidies to agriculture in different countries can create food insecurity and cause migration. Severe storms are one of the most visible impacts of climate change and the cause of temporary migration of people who want to escape from the structural destruction (loss of shelter, income and public utilities). In this case, wealthier people migrate less than impoverished. Early warning systems, emergency preparedness, disaster risk reduction, and humanitarian relief can reduce the loss; however in the long term these preventions cannot be enough to stop climate change impacts (Newland, 2011:7). According to the report narrated by Rigaud et al. (2018:xix), "internal climate migration will likely rise through 2050 and then accelerate unless there are significant cuts in greenhouse gas emissions and robust development action". Thus,

> Climate change impacts (crop failure, water stress, sea level rise) increase the probability of migration under distress, creating growing challenges for human development and planning. Vulnerable people have the fewest opportunities to adapt locally or to move away from risk and, when moving, often do so as a last resort. Others, even more vulnerable, will be unable to move, trapped in increasingly unviable areas (Rigaud et al., 2018:xxi).

Lack of capacity, insufficient knowledge and infrastructure, and poor governance increase the risk of political instability and conflict particularly in developing regions. In 2008, after the migration flow from Zimbabwe to South Africa due to drought in rural areas in 2000, attacks against Zimbabwean migrants caused new displacements (Black et al., 2011). Hence, migration does not always mean that people will be better off in their new places. Migration may ignite conflicts between host communities and new comers. In the worst case scenario the projection is that in Sub-Saharan Africa 86 million people, in South Asia 40 million people, in Latin America 17 million people will be internal climate migrants by 2050, and the poorest areas will be hit by the hardest impacts (Rigaud et al., 2018:xxi). These regions host 55 percent of the developing world's population.

Most environmentally induced migration has tended to be within nation states rather than between nation states. Internal conflicts, poverty,

socio-economic distresses make it harder for some communities to adapt to the adverse consequences of climate change. Environmental pressures limit the prospective immigrants to travel long distances and permanently settle in far destinations. The existence of social and cultural networks and an income enough to support mobility, however, encourage permanent movements to distant destinations. Hence, migration first heads for other parts of the same country (internal migration), then to neighbouring countries, and finally to the other regions (particularly western countries) where the relatives of migrants live. The Worl Bank report notes that without concrete climate and development action, over 143 million people—or around 2.8 percent of the population of Sub-Saharan Africa, South Asia and Latin America—could be forced to move within their own countries to escape the slow-onset impacts of climate change. These people would migrate from less viable areas with water stress and loss of agricultural productivity and from areas affected by rising sea level and extreme weather events (Rigaud et al., 2018:xix).

Parnell and Walawege (2011:14) refer to the academic literature on Sub-saharan Africa, "which has long highlighted the importance of fluid human movement across the continent, … rural to rural and urban to urban migration as well as the urban absorption of traditionally peri-urban or traditional settlements by the physical expansion of cities". Depicting Africa as "the rural continent" may lead to dismissing an important dimension in reflecting the possible climate change impacts. Interestingly, cities in Sub-Saharan Africa, as well, are likely to be vulnerable to the escalation of the impacts of the global environmental change, which could drive migration to the cities. African urban areas display a fast growing character, yet they have inadequate urban management and limited capacity to respond migration. Yet, the bulk of migration in Africa is local, urban and stays within a subregion. Most of the displaced people remain in or near their original community in search of a source of income. These people, after all, lack the means such as livelihoods and incomes to migrate long distances. Initial move to closer vicinity may, however, provide them with the means in time to proceed with migration to longer distances. Migration and Environmental Change Report published by UK Government's Office for Science also warns against the increasing threat of population growth and environmental change pose to urban areas in the future. Urban migration may be the only escape for the populations trapped in vulnerable rural areas. Thus, the report does not advise preventing migration to urban areas. Yet, the report strongly advises taking action and "before the situation becomes irreversible, to build urban infrastructure that is sustainable, flexible and inclusive" (Foresight, 2011:10).

In this context, the adaptation process becomes more crucial at the nexus of climate change and migration. Policies targeting adaptation process could contribute to the discussion whether the migration in

hotspots could be reversed. A recent brief examining "opportunities and threats to adaptation in climate change hotspots in semi-arid (Northern) and deltaic (Southern) zones in Ghana" relates that "large numbers of people in the study sites (about 40% in deltaic zones) particularly youth, have migrated or are considering migrating due to climate related and livelihood concerns" (CARIAA, 2018:1). Recent exacerbation of climate change has been influencing food systems and livelihood activities in Ghana. While drought has reverse effects on rain-fed agriculture, erosion, flooding, soil salinisation and the destruction of critical habitats such as mangroves threaten the sustainability of urban settlements and maritime industries. Yet, the motivations to migrate diminish if people are offered options that facilitate smooth transition during climatic disasters. The 2018 brief on Ghana reports that "[i]n the Lawra and Nandom districts of the Upper West Region, for example, small-holder farmers are using integrated management techniques such as composting, improved seeds, and rain harvesting technologies to cope and adapt to climatic stressors" (CARIAA, 2018:2). It is possible to multiply similar examples around the world. Hence, these changes related to environmental degradation and the lack of essential policies are the main cause of actual and potential migration flow from these hotspots. Therefore, it is necessary to question how states cope with the migration and climate change.

3. POLICY RESPONSES TO CLIMATE CHANGE INDUCED MIGRATION

Coordination and integration of policies is a necessity to cope with the migration and climate change. Agricultural, energy, economic, social and environmental policies in developing countries have to be planned in an integrated and sustainable manner. The ecosystem must be observed and preserved. Technology may well be used to reverse environmental degradation, to support local economy in a sustainable way, to create a new relationship between local, national and global actors and policy-makers. For the people to benefit from technology and innovation, the driving motivation should be sustainability rather than growth. The partners, of course, need to agree upon the meaning of sustainability, which is to protect the continuum of ecological cycles, to integrate the environmental policies into economic and social policies, and to improve social conditions of vulnerable populations. In this context, it should be discussed which actor or actors would be able to develop and apply these policies.

3.1. Local Responses to Climate Change and Migration

Climate change degrades not only ecosystems but also environmental resources communities depend on to live. Along with the impacts of climate change, anthropocentric activities are also degrading ecological and social systems. For instance, the effects of climate change

on fish in the area from China to Chiang Saen are inextricably linked to development in other sectors, such as hydropower and agriculture. The International Centre for Environmental Management (ICEM) emphasises that the delicate balance of ecosystem is impaired by both increased glacial and snow melt and existing and planned dams in Yunnan Province. While increased glacial and snowmelt reduces water temperature, the dams obstruct fish migration. The local practices aggravate the climate impacts on the habitats of fish. Consequently, indigenous populations dependent on fisheries lose their livelihood.

The dams built in the upper stream of Mekong River have already affected the fisheries in Tonle Sap, Cambodia. Fishermen leave their communities and environment to work as farmers in the potato fields for daily allowances as low as 1.50 dollars. However, climate change is expected to increase environmental pressures on the local people. Chris Jacobson, a researcher from Australia's University of the Sunshine Coast found that climate change was main push factor for half of all migration in four communities in three provinces around the Tonle Sap (Jacobson et al., 2017). Migration had also affected half of all households (Sassoon, 2017). The fact that human movement spreads over a wide period of time does not make a huge difference. It is still a climate induced migration and displacement of people, whether it is an abrupt move of masses or not.

The discussions over which climate induced migration of people to call voluntary or forced are to no avail. Such discussions could be accepted as barren since they simply reflect the states' prudence and reluctance to take responsibility of "refugees" because the migration is usually seen as a challenge to the integrity of the nation-states. Therefore, efforts to expand the concept of refugee and distribute the responsibility for the climate induced migration accordingly, to the country where refugees first entered most probably, prevent a wider and integrated evaluation of the climate change and migration nexus. Hence, the imminent question shall be how can decision-making processes be informed to allow individuals, households and communities to better navigate their climate change adaptation options?

Native populations can be quite innovative and have the advantage of local resources and information. They have the accumulated knowledge of generations living within the natural resources that have fed them. For example, Osmose, the first local NGO initiated in 1999 in Cambodia, is a novel approach to environmental protection: advancing conservation objectives through environmental education, community support and alternative income generation from ecotourism. In Osmose's home page the opening title emphasises development for the benefit of environment, and environment for the benefit of local communities (Osmose, n.d.).

Warner states that views differ whether migration plays a role in helping home communities adapt or it is a maladaptive response that may increase trigger risks for those who migrate, and possibly exacerbate

environmental and economic problems in receiving areas (Warner, 2010:403). It is the complex character of human-environmental systems, which is shaped by social and ecological linkages that determines what role migration will play. In response to the direct impacts of climate change, governments in Mozambique, Vietnam and Egypt can relocate people with insecure livelihood prospects due to climatic impacts to new settlement centres. If people are unable to continue their traditional economic activities, which are mostly dependent on the environment, resettlement does not provide adaptation to climate change.

Resettled people remain largely dependent on governmental and international aid. States determine guiding principles for the policies and then implement them, too. Migrant networks however can help states develop policies with the involvement of grassroots. Additionally, social networks create links to livelihoods. Migrant networks play an important role in fostering the adaptation capacity, as well. Building a network between different kinds of migrants and communities can contribute to the formation of flexible policies and institutions that are specialised to provide education, training, and resource management and introduce tools for risk management such as insurance. Additionally, Warner underlines the requirement to develop mutual trust, obligations and social ties to improve the migrants network, and the necessity of active participation in planning activities for defining the real needs of migrants (2010:411).

Rigaud et al. (2018:xxii) emphasise the positive contribution of "in-migration" if it is well managed, especially to urban areas, which can benefit from agglomeration and economies of scale. They list components of successful local adaptation strategies as investing in climate-smart infrastructure, diversifying income generating activities, building more responsive financial protection systems for vulnerable groups, and educating/empowering women. Hence, poverty reduction and social protection programs targeted at rural areas can help resilience to climate change, by fostering adaptation capacity of people under distress and potentially reducing the need to move. (Rigaud et al., 2018: xxii). Although the local initiatives play an important role in this process, the acts of the state become more influential.

3.2. State Policies

The responses of states to climate change and migration could be problematic. States forge (bureaucratic and physical) barriers to stop and/or limit migration. States also take some responsibilities to protect citizens from adverse impacts of climate change (Newland, 2011:7) but these are small steps and focus usually on physical adaptation. Yet, the challenge to the state action is not confined to physical difficulties. Political instability, unequal policies or indifference of bureaucracy to the environmental and humanitarian improvements often reduce efficacy of state policies to respond climate change and migration. Cooperation and

financial support between states are important but money flow to the common funds or projects regarding migration and mitigation of and adaptation to climate change remain insufficient. In addition to that, humanitarian organisations, which lead the effort to assist people for rapid-onset events in coordination with national governments, can face a capacity challenge if the number of people affected from natural disasters grows significantly. Hence, efficacy of governance becomes increasingly important. Biswas states (2002:189):

> To the extent that the idea of the modern nation-state is so closely linked to the idea of the welfare state or the developmentalist state, the efficacy of the contemporary state depends on the ability of the state to deliver on 'welfare' or 'development'. To that extent, the decreased competency of the state to deliver on those promises could create the kinds of legitimacy crises that might call into question the durability of the nation- state.

Betts (2009:150) also recognises the new challenges to the nation-state as they transcend the traditional borders, and draws attention to the necessity of developing governance mechanism that go beyond national borders. Climate change is among many issues that cannot be regulated by a single state acting alone. Therefore, Betts points to new forms of regional and global governance that have emerged. In Betts (2009:150) words: "as authority has diffused beyond the nation-state, so non-state actors have had opportunities to become involved in governance". Among the non-state actors, particularly the civil society becomes more influential in the state governance. The civil society, which voices the environmental concerns, has the potential to bring issues into the government agenda.

"Greening the state" is one of the approaches to the transformation of the state's structure with the participation of the civil society, in order to cope with the ecological and political crises. Eckersley suggests that the participation of the civil society in decision-making process would improve both democratic governance and environmental policies. Besides, contribution of the civil society in decision-making process would increase the responsibilities of the state. Eckersley (2004:79) underlines that "environmental protection emerged as an additional, identifiable, but subsidiary task of the welfare state". She emphasizes the capacity of a reflexive state and societal learning for "an innovative transformation of policy direction in response to a critical analysis of existing structures, past failures, new circumstances and new knowledge culminating in fundamental institutional transformation" (Eckersley, 2004:80). She denotes:

> Environmental capacity is not just restricted to government policy. Rather, it refers to the structural preconditions for societal solutions to ecological problems, including ecological, technological, and administrative knowledge, legal and material resources, policy institutions, political participation, and the strength of environmental organizations relative to opposing economic interests (Eckersley, 2004:82-83).

Eckersley (2004:86) defends the state as a necessary evil for "facilitating democratic negotiations in the public sphere, and for steering

society along more ecologically sustainable lines". However, she suggests the transformation of the state based on responsibility to protect biodiversity, life-support services, integrity of the earth's ecosystems integrated with the commitments to human rights. This new green democratic state's ties with their citizens, far from nationalistic assumptions about the state, include participatory processes for improving environmental rights and responsibilities together with standard civil and political rights reflected in the constitution (Eckersley, 2004:243). State can provide an inclusive representation of otherwise excluded others. Baldwin (2012:636) gives the concept of environmental citizenship as a European notion, which considers indeed "the object referent of the environmental citizen" as "the emergent potentiality of the world". He also argues that this kind of citizenship could create new differences deeper than racial ones depending on the potentiality (Baldwin, 2012:636-37). Populations most affected from climate change can find an opportunity to participate in the creation of a common cultural community together with national governments, international organisations and non-governmental organisations, since globalisation has already initiated the restructuring of power relations. In order to mitigate climate change and support communities' and governments' efforts to adapt climate change, the right to democratic engagement should extend to include even non-citizens. Based on these assumptions, it is possible to discuss a new model of governance for the states, which face new challenges at the nexus of climate change and the migration.

4. REFLECTIONS ON THE GOVERNANCE OF CLIMATE INDUCED MIGRATION

The role of nation-state and its capacity to govern dependent on sovereignty have been increasingly questioned for the last 20 years as the impacts of globalisation grows. The notions of absolute sovereignty and property were established in international law after the Treaty of Westphalia (1648) and served the formation of the modern state and capitalism in Europe. Sovereignty is regarded as the primary rule of international organisation. The principle of closed borders can be considered as the source of unlimited state sovereignty, self-determination and non-intervention. Inside these borders the state functions as the sole centre of decision-making and governs "authoritative allocation of values for a society" (Easton, 1965:57). Thus, the state is able to allocate the material, ideational and symbolic assets of a society to its members. In time political authority of the state has enlarged to encompass the redistribution of economic resources to individuals and groups through the welfare state, the assignment to citizens of civil rights and liberties, etc.

The states not the societies have been so long accepted as the fundamental actors of the world politics. The dominant thought has been that political concerns linked to power and security determine relations

between states. Societal concerns; however, have little or no effect on the interstate relations. Unfortunately, this view overlooks how institutions such as state and economy have intertwined with the social networks that influence political and economic developments.

The historical context from which the idea of sovereignty has emerged is not static. As Poggi (1978) argues even early formations of state authority is shaped by the society it constructs; but the society continue also to be shaped by internal and external influences. As long as the state tries to ensure homogeneity in the society, diversity increasingly spreads and the society has also become different then what the state has defined. Migration flow triggered by climate change will make this differentiation more visible and probably this deepening differentiation would increase the risk of conflict.

4.1. Climate Induced Migration as a New Challenge to the Nation-State

Migration is a prominent factor of deterritorialisation and creator of new communities forming new types of political subjects and new spatialities for politics, yet with no allegiance and/or affiliation with the national state or the identity. While various minorities and disadvantaged groups gain visibility for their claim-making, most receiving countries are short of achieving "equal citizenship". Sassen (2006:14) asserts that the conditions, within which the classic or traditional definition of citizenship has embedded have differed in many cases. The undocumented migrants, for instance, engage in practices that are the same with that the formal citizens have been following in their daily routines. Sassen (2006:14) points out to an informal social contract produced between these undocumented migrants and the community.

Hence, the nation-state is tasked with guiding the cultural, economic, societal and political transactions and interactions between host and immigrant communities, destination and origin countries in a more complex world with transnational bonds. While, the nation-state is not the only most influential actor describing group and national identities, or allocators of rights and interests, still it is the most approachable organisation with institutions that are flexible enough to respond the demands of civil society in liberal democracies. We can still expect the states to adapt to the changing environment, shifting societal structures and communities' definition of self and governance. However, the states can display such a skill of adaptability, as far as they move beyond realist assumptions and adopt a more normative and critical evaluation of the global, regional and local conditions that affect ecological degradation, climate change and the migration issue.

In the near future, with the impact of climate change and environmental pressure, migration movements are expected to increase further and start a "migration age", resembling the 19th century (Castles

and Miller, 2009). Neither states nor global civil society or international organisations can deal with problems related to climate change and migration alone. For this reason, cooperation and solidarity of these actors are indispensable not only to ensure the stability in the global system and at home, but also to improve living conditions of migrants, potential migrants and residents of any state.

The response of the state at the nexus of these problems could be to develop a non-one-sided, mutual interaction with the immigrants. In democratic states where the migration flows are usually oriented, formation of an interaction seems easier; however as recent migration problems show, the rising nationalism and racism lead these states to use some antidemocratic prevention. Moreover, it is obvious that climate induced migration will not only spread to democratic developed countries; so the policies and responses of developing countries where the democratisation has not already rooted, become even more important to eliminate the problems such as discrimination or social unrest. Both host societies and immigrant communities have the opportunity to come together to redefine or strengthen their relationship for the greater good of the parties involved. Otherwise, narrowly defined or rigid goals of host societies and immigrant communities equally have the potential to bring up destructive conflicts.

In order to develop a new framework for environmentally displaced people, Marshall (2016:6) mentions restrictions of human rights regime, which focuses on states' guarantee to adoption and application. However since the state sovereignty is the fundamental principal of the international system, in case that states as a guarantor of human rights violate these rights, there are no sanctions or a coercive mechanism to improve the conditions. She argues "without a global recognition of responsibility for the migration and well-being of environmentally displaced peoples, their ethical status will likely remain precariously subsumed to domestic state's goodwill" (Marshall, 2016:6). Domestic politics remains too narrow to interpret immigration laws. For example visa applications do not contain a specific definition for environmentally displaced people. In Sweden's and Finland's Aliens' Act there is a condition for environmental disasters but they do not mention natural or climate change related problems. In the early 2000s Australia started to regulate its immigration procedures, and the Labour government pledged to recognise climate refugee status especially to the immigrants coming from small island states, which are going to be submerged due to rising sea levels in climate change process. Despite these political steps, legal renewal remained uncertain and authorities started to redirect immigrants to East Timor (Marshall, 2016:6-7; McAdam, 2011). White (2011:49) states, "African history is a history of migrations. Trans-Saharan, Trans-Sahelian, East African, and Southern African migrations systems are profoundly interconnected". Migrants go through unpatrolled borders of vast lands as their predecessors did. Thus,

the assumption of North Atlantic countries that associates sovereignty with the ability to control the borders lacks its connotation in Africa, where human movement is still following centuries old routes.

Migration and Environmental Change Report published by UK Government's Office for Science (Foresight, 2011:9-10) concludes that environmental change will affect migration now and in the future. Climate change is foreseen to influence a range of economic, social and political drivers which themselves affect migration. The impact of environmental change on migration is expected to increase in the future. However, migration will likely to continue regardless of climatic change, since powerful economic, political and social drivers will lead people to places of environmental vulnerability from these places. The Report also states that it is possible to manage migration to reduce the chance of later humanitarian emergencies. Besides, trapped populations will emerge as an important policy concern for the international community. Preventing or constraining migration, however, will only exacerbate the hardships people suffer. Policy makers need to develop a new strategic approach that combines measures that will diminish environmental change with an international policy of managing migration in a way, which builds long-term resilience.

Although different studies have showed that the impacts of climate change exacerbate the migration flows, it is obvious that the states have not been ready to cope with these problems. However, it is essential to discuss how the states respond to climate change and climate induced migration with a normative perspective.

4.2. A New Role for States at the Nexus of Climate Change and Migration

Helping people with adaptation processes that will prepare them for the changing environmental and climatic conditions may indeed be the most realistic solution. It can be less expensive, safer and more manageable to create resilient communities, through providing them with a survival toolbox of educational, technical and financial assistance. But, the question is who is responsible for populations once they are displaced, especially if they are living in small island states? Black et al. (2011) make suggestions to maintain resilience. Newland (2011:7) states, "[R]esilience depends on access to human, social, political and financial capital".

Climate mitigation and reduction of environmental change should be priority for international policy makers. Yet, the imminent needs of people, whose livelihoods are most diversely affected, should get international support. The international documents such as UNFCCC (1992) note the links between global environmental change and migration, and suggest doing scientific research in different areas related to migration. Unfortunately, states' response to neither climate change nor

migration is enough. There emerges another problem. The inadequacy of state response erodes its authority. The states may choose to ignore their responsibilities for climate action in global level, and disregard immigrants and refugees in national context. However, this will only harm the state sovereignty. States may soon come to perceive that the risk of environmental collapse and political collapse are not two distant events.

The discourse prophesying migration flows to the North Atlantic states due to climate change are increasingly securitising the issue. Security initiatives and military expenditures that have very little to do with the challenges posed by climate change are in rise. States focus on thickening their borders against climate induced-migration rather than human development and climate initiatives. Climate change is a global phenomenon with transboundary population movements emerging as a result. Therefore, the government responses need to get beyond externalising their border controls and consider participation into a global effort outside national territories. This effort requires the construction of a three-pillar approach. The first pillar is a decisive cooperation to reverse global warming by all the necessary measures to reduce emission rates, the second is a globally coordinated policy in support of human development in the regions and countries most affected by climate changes, and the third is a new governance model that requires the representation of a global civil society encompassing the climate migrants. This new governance model calls for "common but differentiated responsibility of states". Yet, the concept of "common but differentiated responsibility" (CDR) has been a contemporary topic of the discussions over climate induced displacement and migration (Stone, 2004). The first unambiguous adoption by a multilateral environmental agreement of "common but differentiated responsibilities", in those words, was the UNFCCC Article 3(1), which provides that "[T]he Parties should protect the climate system ... on the basis of equity and in accordance with their common but differentiated responsibilities and respective capability."

Although people and lands most affected by climate change are located in either developing or less developed regions, these regions are less responsible for the historical GHG emissions accelerating climate change. People, who have remissible contribution to GHG emissions, now have to bear the burden of climate change and face the risk of (total) destruction. Developed countries neglect their moral and legal responsibilities. Although the principle of "common but differentiated responsibility" has been recognised in the international negotiations related to climate change, the willingness and unwillingness of states to fulfil requirements depend on several other factors. States often cannot reach a consensus on sharing the financial burden or ensuring technical and economic assistance. For example, more general and non-binding provisions about climate finance adopted by the Paris Agreement could be related to states' (especially developed countries responsible for the

historical emissions) reluctant positions for sharing the burdens of climate change (Keohane and Oppenheimer, 2016; Atvur and Uysal Oğuz, 2018). However, Paris negotiations provided an "unprecedented visibility" of the interrelation of migration and climate change and new perspectives for the policy makers, civil society, researchers, media, lawyers and artists (Ionesco, 2015).

The question why states are still the fundamental actors of the climate negotiations waits for an answer. The states still possess an important position in the global system and they are also theoretically public mechanisms working for the sake of their citizens. However, states ignore citizens of other states while protecting their nationals and domestic political systems. Therefore, the calls for supporting the development of a mutually dependent relationship between "the transnational green democratic state" and "the green public sphere" provides a moral guidance for equally ecology and human rights sensitive policies.

4.3. Need for an Ecological Governance Model

Migration and climate change are two sides of the same coin. A holistic approach to the causes of these two intersecting problems and diagnosis of their consequences is necessary to come up with solutions. Furthermore, it is important for actors to agree that without coping with climate change and mitigating its impact, preventive actions or policies (judicial, military and/or economic etc) targeting migration would not be sufficient. They will certainly fall short of improving conditions for people who have to migrate. Climate change will accelerate interrelation of global problems. Therefore, global cooperation between different actors is an obligation to deal with complex international problems. In this context, the role of state to organise people with its wide power and ability is crucial. Latta (2007:378) argues that citizenship could be asserted "as a springboard for advancing the democratic impulse" and ecological citizenship could be the blunted form of radical democratic edge of citizenship studies and ecological political thought. A concern for individual rights and obligations, relative to collective problems or a "common good" is the focus of ecological citizenship studies (Latta, 2007:378). But the nation-state or state constructed on the assumed homogeneous identity of a society living in a particular piece of territory has become vulnerable to new challenges. We witness global processes leading to the fragmentation of some nations, so-called imagined communities. As capital extends beyond national borders some states have recognized that they are not territorially limited in their activities. State has been internationalising as a result of globalisation of finance. State answers this process through spatial reorganisation of production. Thus, state is apparently a social actor, which becomes what it is by international socialisation. Now, globalisation of environmental change is

requiring the state to reorganise both its production and relation with people either the national or "foreign". The impacts of climate change do not regard the borders. Migration invalidates traditional state power and authority. If the state is to answer new challenges it may well redefine its identity on the basis of common interests of humanity and collective identity. The state can fulfil the requirements of its global responsibility for mitigating climate change, developing and implementing multidimensional adaptation policies.

Even though state is the founding unit that shapes the global system, there is no structure to coerce the state when it does not take responsibility. The content of this responsibility is also important; it should be based on common interests, preservation of interconnected ecosystems and the rights of next generations. And beyond the consensus of states, the principals of responsibility should be shaped by participation of global civil society particularly containing those, who are directly affected by the impacts of environmental degradation and climate change. Despite the social movements and protests, the demands of civil society cannot be reflected to the legal framework. A global civil society network acting like an umbrella organisation, which unites with different social movements notwithstanding their differences, could increase the awareness on common problems and create a new framework for global action to solve equitably global problems.

There is an urgent need for the governmental attention to get beyond the border control and security for the climate induced migration. Actually, the pressure cross-border movement of people creates on human and social security is far serious than the threat to the state security. However, both academics and policy makers need to get beyond the traditional security discussions and deal with the subject of migration and climate change in the context of human and ecological security with a new security approach. Hence, the nation-state is far from becoming nascent in the near or far future. Instead of defining or redefining the identity on the basis of the "other", a new collective identity can be constructed based on common interests, values and objectives. National governments, international organisations and civil society are advised to observe climate science to define risks for people in certain regions and widely agreed principles such as common but differentiated responsibilities, and provide the reimbursement of full incremental costs (Biermann and Boas, 2008:12).

In this context, the future or survival of the Earth and the humanity might be the fundamental principal. Hence, the governments need to focus on policies that will meet migration with peace, produce knowledge and attitudes that encourage peaceful coexistence and transcend societal conflicts through the civil society and the contribution of the ideas, knowledge and experiences of immigrant communities. Governments must also intensify their efforts towards the preventions and common

actions for the mitigation of climate change, which will eventually trigger the new migration flows.

Conclusion

Most scenarios agree on a trend: in this century millions, mainly in Asia and Africa, will leave their homes and migrate to other places as a result of climate change. Even though assumptions about the number of climate induced migrants differ, there is a general agreement upon the increasing vulnerability of environment, humans and their livelihoods to frequency and extremity of weather events.

Major effects of climate change such as gradual rise of sea level, temperature rise, glacial meltdown, droughts, water scarcity and tropical cyclones are threatening some of the most populated areas around the world. Most climate refugees are expected to remain within their home countries. People with low income and means cannot travel long distances. However, some studies suggest that climate induced migrants could potentially cross international borders.

People, who are most affected from climatic impacts are living in parts of the world the least responsible for the GHG emissions. They also live in countries with limited capacity and flexibility to adapt to climate change. Hence, it becomes an international responsibility for the developed world to assist with the adaptation process. The adoption of the "common but differentiated responsibility" principle in different levels of the governance might be a catalyser to eliminate the root causes of climate change. In this context cooperation and collaboration between developed and developing states and other actors such as international organisations and civil society networks turn out to be an obligation for the future of the next generations.

Eventually the nexus of climate change and migration will arise problems touching every regime, regulation or life. It is important for states to take responsibility, but not enough. There is also a great need for an organised an enlightened civil society to check and control national governments. Though humble, interrelation between climate change and migration is recognised. Yet, such an approach is not sufficient to develop integrated solutions to vital problems emerging from this process. It is important to deepen and improve cooperation between state and non-state actors. For that purpose, green policies that emphasise democratic participation for ecologically sensitive policy-making need to be owned at local/strategic, national and global levels. It may be possible to implement more productive, representative, responsible and sustainable policies as far as governance transforms to include international organisations such as IPCC, IMO, UNHCR and various working groups with populations reversely affected by climate change and represented within civil society organisations next to state structure.

This study contributes to the existing literature of climate change induced migration by emphasising the role of state and responsibility to cooperate at multi-levels of governance. Traditional security issues once defined by states have developed into global security threats. In order to cope with the contemporary transnational security issues at the nexus of climate change and migration it is necessary that the state evolves into a more inclusive, participatory and ecologically sensitive institutional organisation. The ecologically sensitive or green policy covers responses to both environmental and humanitarian crises. In international politics, the state is the essential actor that deals with the new challenges at the nexus of climate change and migration. Global risks necessitate multilateral cooperation, and the only actor to pioneer for this cooperation is the state with its political, social and economic power. The revised state policies –less populist and nationalist, but more responsible and cooperative- could harmonize the interactions between the local and global civil society, and improve the instruments to develop new mitigation and adaptation strategies. States should act together in order to save the environment and to eliminate the root causes force people to migrate and to leave a liveable planet for the next generations.

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