

# Managing “Climate Migration” in Mongolia: The Importance of Development Policies

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## Abstract

Each winter, tens of thousands of destitute Mongolian herders move to the insalubrious suburbs that surround Ulaanbaatar (“*ger* districts”). This migration can partly be attributed to climate change, as a rapid warming and a slight change in the precipitation patterns (decrease in summer precipitations) reduce the yield of the grassland. On the other hand, the resilience of nomadic animal husbandry declined markedly since the collapse of the communist regime in 1990: the “Age of the Market” and the imposition of a radical neoliberal ideology led to the interruption of the services indispensable to the traditional Mongolian way of life (e.g. boarding schools, mobile health brigades, but also veterinary services and a centralized system of fodder production and distribution that mutualizes environmental risks). Thus, this chapter shows that, in the context of Mongolia’s internal migration, climate change adaptation is inseparable from domestic development policies that, it is argued, need urgently to be rectified.

## Introduction

The debate on climate change-induced migration has often focused on exotic “sinking” islands such as the Maldives and Tuvalu, and on coastal least-developed countries such as Bangladesh. The government of the Maldives has been particularly prominent in setting the issue on the international agenda, for instance through organizing a largely mediated underwater cabinet to call for the world’s attention (BBC, 2009). Yet, the effects of climate change extend well beyond those few countries and they are likely to have an impact on human migration in many other contexts. Echoing the communication strategy of the Maldives, Mongolian ministers met in the Gobi desert, at about fifteen hours drive from the capital city Ulaanbaatar, in order to “draw ... the attention of the world community to the fact that Mongolia’s traditional nomadic civilization based on pastoral animal husbandry is likely to be at risk by mid of 21<sup>st</sup> Century” as a consequence of climate change (Mongolia, 2010b).

Nomadic livestock husbandry, which has long been Mongolia’s main economic activity, continues to occupy a third of the national workforce despite the rapid development of the extractive industry. Mongolian herders adapted to arid and cold climatic conditions by frequently moving their folk – which allowed the pasture to regenerate. Today, however,

nomadic livestock husbandry is in crisis, and the massive migration of herders to Ulaanbaatar is a symptom of this crisis. From 2002 to 2012, Ulaanbaatar has registered about 350,000 new arrivals from the rest of the country, reaching a population of roughly 1,3 millions, in a country that counts no more than 3 millions inhabitants. These migrants are former herders who lost their livestock; they are destitute, settle in peripheral “*ger* districts”<sup>1</sup> where they often lack access to basic services (health, education, sanitation and running water, etc.); most of them have been unable to find their place in the city centre’s thriving economy.

This migration (the settlement of former herders in the peripheral districts of Ulaanbaatar) is related to climate change, but climate change is only a part of a complex story that also features economic (dis)incentives, developmental policies, and ideological shifts. In other words, if the impacts of climate change “cause” migration, this is only in conjunction with certain political, economic, social and cultural factors. By exploring the causes of migration in Mongolia, this chapter examines the various policy levers that could be used to address this phenomenon, in particular climate change adaptation and domestic development policies. The following discussions also illustrate the problematic causal links between climate change and its social impacts by highlighting the existence of multiple proxy factors such as political responses or economic capabilities.

This chapter is based on a series of semi-directive interviews of different stakeholders conducted in March and April 2013, completed by a documentary research. The author did not conduct any quantitative study and had to rely on a paucity of available statistical tools.

## ***Dzud* and Migration**

Migrants often tell a similar story. They were herders and lost their flock. Some of them sought a job in small urban centres but were unable to make a living there; others moved directly to Ulaanbaatar in search for new economic opportunities. Attention has often been focused on the causes of the loss of their flock: the *dzud*, an untranslatable Mongolian term for a specific type of natural disaster that results from the conjunction of a dry summer with harsh winter conditions. The dry summer decreases the yield of the pasture and the resilience of the livestock. The following harsh winter conditions may consist alternatively in extremely cold temperatures, powerful winds, heavy snowfall, freezing rain, the late arrival of the spring, or a combination of these factors (Field et al., 2012: 500; Batima, 2006: 57). Whereas it is normal for Mongolian herders to lose up to 3% of their folk during a winter, a *dzud* leads to significantly heavier losses.

*Dzud* is not a new phenomenon. Plenty of historical sources describe the phenomenon at different times of Mongolia’s history (e.g. Lansdell, 1885: 318; Khazanov, 1978: 121). The Book of the Later Han (後漢書) recounts that, in 45 CE, the Xiongnu (a nomadic people living on the territory of today’s Mongolia) suffered from repeated droughts, as a consequence of which “[t]wo thirds of its people and domestic animals died of hunger and illness” (at 2942-44, cited in Fang & Liu, 1992: 151). The 1945 *dzud* remains the worst in recent history, which led to the death of one third of the national livestock (Field et al., 2012: 500; Batjargal, 2001: 41).

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<sup>1</sup> “*Ger*” (yurt) is the traditional tent in which the Mongolian nomads live. Many destitute internal migrants settle around Ulaanbaatar in their “*ger*,” hence the name “ger districts.”

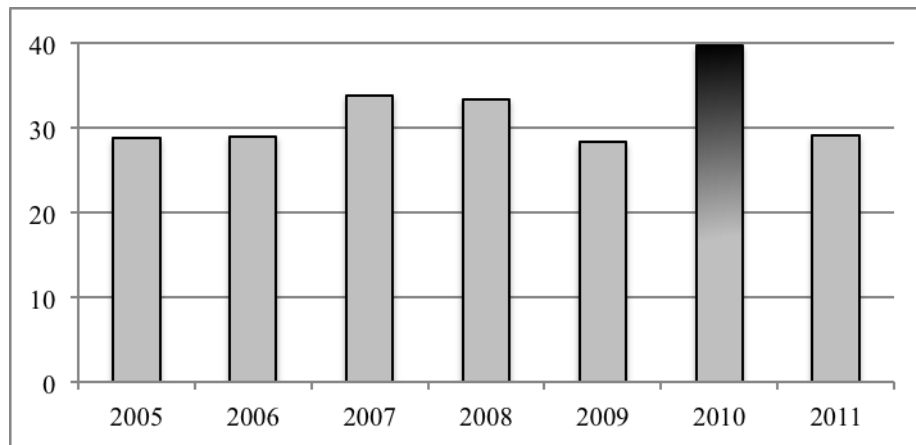
Yet, there is a widespread understanding that *dzud* has become more frequent and more severe over the last decades. In 2000, 2001, 2002, and again in 2010, all or most of Mongolia was hit by severe *dzud* (Field et al., 2012: 501; UNDP & Mongolia, 2011: 1). At the scale of the country, 26% of the livestock perished in 2010 (see Table 1). In addition to these large *dzud*, local *dzud* affect some part of the country almost every year.

**Table 1: Loss of livestock in years of large *dzud* (more than 3% of loss), 1972-2012. Source: data provided by the Mongolian National Statistical Office (2013).**

Year	Loss of livestock
1976	3%
1977	3%
1980	2%
1983	5%
1984	4%
1991	1%
1993	2%
2000	10%
2001	14%
2002	8%
2010	26%

These disasters have naturally had tremendous social consequences (Janzen, 2005: 80). At least 75,000 herders families lost more than half of their livestock in 2010 (Sternberg, 2010). Many more encountered a situation of great economic distress: “[t]he most critical consequences of *dzud* are increased poverty and mass migration from rural to urban and from remote to central regions” (Field et al., 2012: 502). Historical studies show that *dzud* affects the migratory behaviour of the Mongols. In 45 CE, the Xiongnu reportedly migrated Southward and resettled as far as Yunyang (now in Chongqing province, central China) (Fang & Liu, 1992: 151). On a long perspective, Southward migration flows toward China were correlated to drought and extreme winter conditions (Fang & Liu, 1992: 166; Zhang et al., 2007: 405). Some studies even suggest that a slight climatic change in the early 13<sup>th</sup> Century may have precipitated Genghis Khan’s conquest of the world, forming an empire that extended, at its peak, all the way to Hungary (Jenkins, 1974; Hvistendahl, 2012; May, 2012). Although recent *dzud* do not seem to impact international out-migration from Mongolia, it has a discernable impact on internal migration. Following the 2010 *dzud*, the registration office of Ulaanbaatar noted an increase of the annual inflow of migrants from the countryside to Ulaanbaatar by 40%, representing 10,000 additional migrants (see Figure 1). Many other migrants may only move to Ulaanbaatar the following years, or may be displaced by more local *dzud*.

**Figure 1: Registration of individual newcomers from the countryside in Ulaanbaatar (in thousands), 2005-2011. Source: data provided by Ulaanbaatar registration office (3 April 2013).**



## The Causes of Migration

The concept of *dzud* is a complex one, as it relates environmental phenomena (summer drought and harsh winter conditions) as well as to their social impact (loss of livestock). The increasing frequency and severity of *dzud* may be explained in two ways. Firstly, the physical phenomena are amplified by a change in the prevailing climatic conditions. Secondly, the social impact of these phenomena is exacerbated by the change of the political conditions since the early 1990s.

### Climate Change

The Mongols are highly aware of climate change (Marin, 2010; Sternberg & Chatty, 2008), perhaps due to their conscience that Mongolia's "fragile ecosystems, pastoral animal husbandry and rainfed agriculture are extremely sensitive to climate change" (Mongolia, 2010a: 7). Yet, the causal relation between climate change and migration is indirect and complex. Warming may have a direct positive impact on Mongolia's environment by prolonging the growing season, but, in most places, the ensuing lack of water will overwhelmingly dissipate this positive impact. Overall, warming and a change in the precipitation pattern that can be attributed to climate change may increase the frequency and severity of *dzud*, hence indirectly "cause" migration.

Warming is occurring in Mongolia three times faster than the global average: temperatures increased by 2.1°C between 1940 and 2010, compared with 0.7°C globally (Dagvadorj, 2010: 98). The country is characterized by an arid climate situated at an ecotone between forests and steppes, which is highly sensitive to virtually "any external disturbance of the environment, natural or human" (Saizen, 2013: 215). The country has little surface or ground water storage, and evapotranspiration accounts for 82-97% of the precipitations. The increase in temperature has already led to an estimated 7-12% increase of the potential evapotranspiration (Tsogtbaatar, 2013: 90), thus significantly increasing the lack of water and causing numerous rivers and lakes to dry up, desertification and land degradation to progress, and dust and sand storms to become more frequent (Mongolia, 2010a: 61). Only a few places in the East of the country benefit from a temporary availability of water from the melting of glaciers (Lkhagvadorj et al., 2013: 88).

A change in the precipitation pattern has also had a significant impact on the viability of nomadic livestock husbandry. While the annual level of precipitations has not changed significantly, summer precipitations have decreased while winter precipitations were increasing (Batima et al., 2005: 20; Dagvadorj, 2010: 99). The persistence of Mongolia's grassland depends on the concentration of the precipitations in June and July, where higher temperatures allow the vegetation to grow. The livestock also needs access to water. Herders identify water shortage as the main environmental problem with which they are faced (Marin, 2010: 166; Sternberg, 2008). On the other hand, snowfall is harmful to nomadic livestock husbandry, as the layer of snow may prevent the livestock from eating, or even from moving; snowstorms may even be fatal to herders.

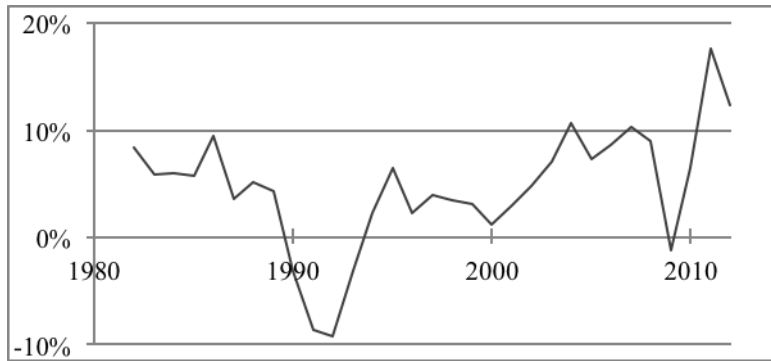
Thus, by increasing the frequency of drought and snowfall, climate change affects the viability of nomadic livestock husbandry, increasing in particular the likelihood of *dzud* causing heavy loss of livestock. As a consequence, many destitute herders migrate to seek an alternative livelihood in Ulaanbaatar.

This, however, is only one part of the story. A natural disaster is never totally "natural." In the case of Mongolia, it is particularly evident that political factors have largely increased the vulnerability of the herders to *dzud*, as this will now be shown.

### Regime Change

From 1924 to 1990, Mongolia was governed by a communist regime supported by the USSR, following which it entered into what the Mongols call the "Age of the Market." The brutal "shock therapy" of the early 1990s led to a profound economic upheaval (see Figure 2) as the aid from the USSR, on which Mongolia largely depended, was suddenly interrupted. Within a few months, half of the state's employees were laid off; production collapsed; and unemployment, prices and corruption skyrocketed. For the Mongols, this resulted in a transformation "from a middle-income to a poor country, as if the process of development had been put on reverse" (Sneath, 2006: 196). The economy recovered in the second half of the 1990s, and, during the first decade of the 2000s, the country witnessed a rapid economic growth on the extraction of mineral resources (except for the brief impact of the 2009 economic crisis). Yet, this economic growth has not resulted in a genuine development benefited the Mongols: half of the population was left behind. The UN Special Rapporteur on Extreme Poverty and Human Rights recently noted "the significant income inequalities affecting communities living in poverty," adding that "the gap widens, poverty is becoming entrenched, not only in rural areas, but also in urban centres" (Sepulveda, 2013: para. 9). The economic gap went along an increased cultural isolation leading to the "continued denigration of rural life" by Mongolian elites (Pedersen, 2006: 177). These new elites, living in the centre of Ulaanbaatar and drawing all the benefits from the mining boom, consider the herders as laid back, lazy, and responsible for their failure to adapt to a modern economy (Levin, 2012; diplomatic source, 2013).

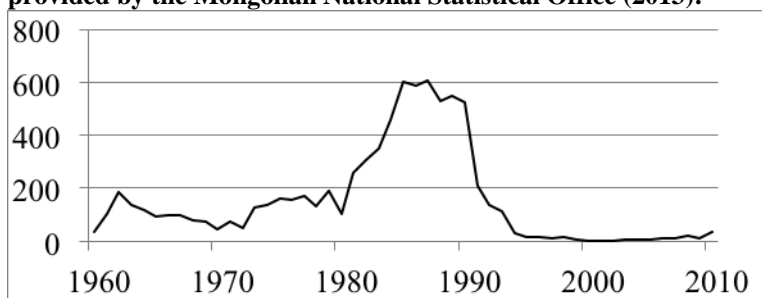
**Figure 2: Mongolia's annual GDP growth, 1982-2012. Source: data provided by the World Bank (2014).**



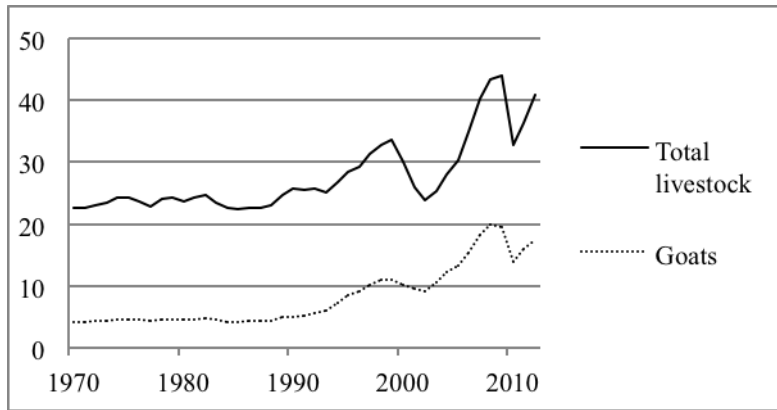
This regime change contributes to explain the migration occurring in Mongolia. This is because the new regime has shown unable to maintain nomadic animal husbandry as a viable economic activity for many herders, to provide economic alternatives in the countryside, or to integrate the migrants in Ulaanbaatar.

Firstly, many herders strive to make a living, and climate change is only a part of the story. In 1990, the specific services responding to the needs of herder families were discontinued: mobile health brigades (Medvedeva, 1996: 182), boarding schools (Sneath, 2006: 155), veterinary, and the system of centralized fodder production and distribution that helped herders affected by a local *dzud* (see Figure 3). As the transportation costs increased, many herders concentrated close to urban centres where they could access to public services: an author estimates that one third of Mongolian herders stopped moving completely while another third reduced the frequency or distance of their displacement (Lkhagvadorj et al., 2013: 85). Yet, mobility is essential for nomadic livestock husbandry to sustain a fragile environment (Konagaya & Maekawa, 2013: 11): a lesser mobility led to overgrazing – the use of the pasture beyond its capacity to regenerate. Moreover, for lack of regulation, individual profit-seeking strategies led to a dramatic increase of the number of livestock, in particular of goats (see Figure 4) – certainly far beyond the carrying capacity of Mongolia’s grassland. Overgrazing further decreased the resilience of Mongolian herders to *dzud*.

**Figure 3: Evolution of annual fodder crop production, 1962-2012 (thousands tonnes). Source: data provided by the Mongolian National Statistical Office (2013).**

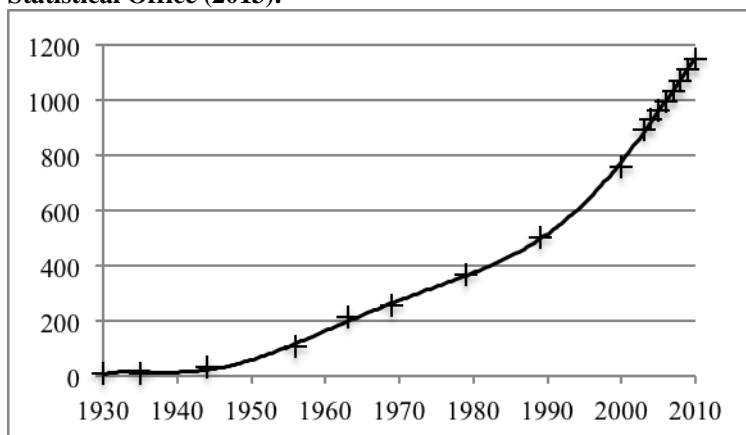


**Figure 4: Evolution of the Mongolian livestock, 1970-2012 (millions of animals). Source: data provided by the Mongolian National Statistical Office (2013).**

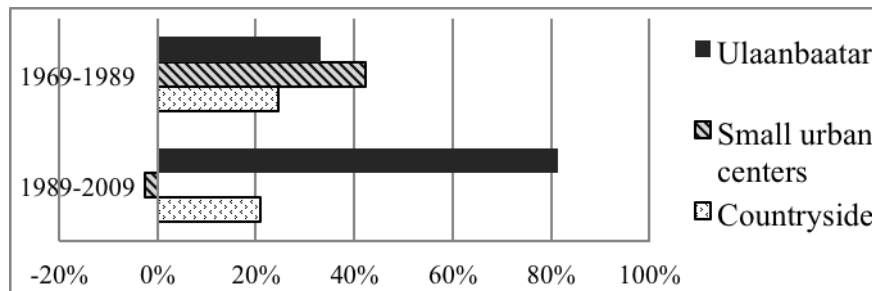


Secondly, small urban centres are no more able to offer an alternative livelihood to herders who have lost their livestock. Herders have always interacted with small sedentary populations, which, at some time, were mostly centred around Buddhist monasteries (Fernández-Giménez, 1999). There, destitute herders could settle for a few years and, through diverse temporary works, reconstitute a flock. Throughout the 1960s and 1970s, the communist regime organized a collective system of nomadic animal husbandry that also guaranteed that everyone would have a role to play. In particular, light industry was developed, through heavy subsidies, in small urban centres. However, the 1992 Constitution allowed freedom of movement at a time when many state employees were being laid off and where the heavy subsidies in support to light industry were discontinued. The result is that, during the last two decades, destitute herders have been unable to find any economic opportunity in small urban centres, and have found no alternative other than moving to Ulaanbaatar. The growth of Ulaanbaatar increased significantly in the 1990s (see Figure 5). Figure 6 suggests that the rapid growth of Ulaanbaatar since 1990 can largely be attributed to the sharp decrease of attraction of small urban centres rather than to the slightly decreased attraction of the countryside. The population of Ulaanbaatar grew by 3,700 per year between 1930 and 1956, 12,000 between 1956 and 1989, but 24,000 between 1989 and 2000, and 39,000 between 2000 and 2010 (National Statistical Office, 2013), and most of this growth is due to incoming internal migration.

**Figure 5: Population of Ulaanbaatar, 1930-2010 (in thousands).** Source: data provided by the National Statistical Office (2013).



**Figure 6: Repartition of the population growth, during and after the democratic transition.** Source: data provided by the Mongolian National Statistical Office (2013).



Thirdly and overall, the current economic regime has been unable to integrate migrants arriving in Ulaanbaatar. Rather than necessary an issue, migration is the normal state of any society; it has its social functions, including to foster development by promoting the circulation of ideas and the construction of a social cement, and it may favour social adaptation to environmental changes. However, migration becomes a social issue when the rights of migrants are not adequately protected. In Mongolia, the geographical and economic exclusion of the migrants in Ulaanbaatar transforms rural-to-urban migration in a social issue. Current migrants are not able to find a place in Ulaanbaatar’s economy as their predecessors did in previous decades. As an observer notes, “[i]t is hard to write about Ulaanbaatar's development without a sense that you are chronicling a colossal failure of city planning (or lack thereof)” (White, 2012).

### Policy Levers to Address Migration

Attributing “causes” to migration matters because each cause might also be a policy lever. Considering Mongolian migrants as “climate migrants” suggests that the policy responses should be included in the climate regime; attributing this migration to the policies adopted by Mongolia’s government suggests different responses.

The climate regime, however, does not offer any evident policy response to Mongolian migration. Climate change mitigation should of course be an element to consider, but no amount of effort on climate change mitigation will address the needs of existing migrants or even significantly decrease future migration flows. Climate migration may be an *argument for* mitigation (whereby the migrants become, so to speak, the human face of climate change), but mitigation is at best a very partial response to the ongoing migration. Therefore, climate change adaptation may be more relevant. The *Cancun Agreements* included “measures to enhance understanding, coordination and cooperation with regard to climate change induced displacement, migration and planned relocation, where appropriate, at the national, regional and international levels” within a framework on “enhanced action on adaptation” (UNFCCC, 2010: para. 14(f)). Two years later, the climate conference in Doha recognized that patterns of migration affected by climate change may be addressed as “loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change” (UNFCCC, 2012: para. 7). By including migration within adaptation (or, if it is conceived beyond the scope of adaptation, as loss and damage), these documents converge to suggest that states should address climate migration by cooperating within the climate regime, that is, “on the basis of equity and in accordance with [states’] common but differentiated responsibilities and respective capabilities” (UNFCCC, 1992: art. 3). Beyond this principal approach of burden sharing, however, the climate regime does not favour any specific responses. It says little as to, for instance, whether the government of Mongolia should avoid migration by providing alternative economic opportunities in small



urban centres, or whether it should rather facilitate migration by supporting social and economic insertion in Ulaanbaatar.

There is no specific legal regime applying to climate migrants, who are not recognized as refugees (McAdam, 2012). In fact, it would be both impractical and arbitrary to treat migrants in a similar situation differently depending on the cause of their migration (i.e. isolating “climate migrants” among the flow of Mongolian migrants): ethical and human rights arguments suggest that all migrants in a similar situation of vulnerability should be treated in the same way (Betts, 2013; Mayer, 2013). Managing the partly-climate-induced migration occurring in Mongolia supposes policies that extend beyond the climate regime. The climate regime should arguably organize a financial support to domestic politics taken to address such phenomenon in application of the principle of common but differentiated responsibilities, but it should not go beyond such financial support.

International law defines some constraints as to the substances of policy responses to migration, but it does not define a unique option that the government of Mongolia or its partners must follow. The constraints include, in particular, the obligation of states to “take steps ... with a view to achieving progressively the full realization” of economic and social rights such as the “enjoyment of just and favourable conditions of work,” to social security, to “an adequate standard of living ... including adequate food, clothing and housing,” to “the enjoyment of the highest attainable standard of physical and mental health,” and the right to education, among others (ICESCR, 1966: arts. 2, 7, 9, 11-13). In the protection of these rights, any overt or *de facto* discrimination is prohibited; rather, states are “under an obligation to adopt special measures to attenuate or suppress conditions that perpetuate discriminations”:

“The exercise of Covenant rights should not be conditional on, or determined by, a person’s current or former place of residence; e.g., whether an individual lives or is registered in an urban or a rural area, in a formal or an informal settlement, is internally displaced or leads a nomadic lifestyle. Disparities between localities and regions should be eliminated in practice by ensuring, for example, that there is even distribution in the availability and quality of primary, secondary and palliative health care facilities” (CESCR, 2009: paras. 9, 34).

The government of Mongolia is arguably in breach of its obligations with regard to the non-discriminatory protection of the economic and social rights of herders and migrants. Many in Mongolia consider that their economic and social entitlements were replaced in 1990 by a protection of their civil and political freedoms. Following the rapid economic growth of the last fifteen years, Mongolia has now the capacity to guarantee a reasonable level of economic and social entitlements to everyone. Yet, the constant prioritization of its development policy on the sole extractive industry creates few jobs and benefits little to unskilled herders; the benefits are reserved to the country’s elite. The Mongolian government does not do enough to assist the large population of migrants living around Ulaanbaatar. It largely relies to foreign actors (international organizations and non-governmental organizations) to care for the country’s poor, despite its responsibilities under international human rights law.

There are different ways for the Mongolian government to comply with its international legal obligations. One option would be to address the causes of migration. This could be done in particular through resuming the provision of basic and public services in the countryside, that were discontinued in the early 1990s; through limiting the use of the pasture to its regeneration capacities through capping the number of livestock and coordinating the

geographical distribution of the herders; through developing financial mechanisms (such as insurance) and job opportunities to support the destitute herders; and through limiting the environmental impact of the many mines, in particular their use of water and their production of dust including through transportation, and preventing the development of mines in the most sensitive environmental areas. There is no reason to exclude the possibility of a “smart nomadism” that would be compatible with a modern economy, improving the living conditions of herders while preserving their mode of life, if this is the choice favoured by the Mongols through a democratic deliberation (Campi, 2006: 50).

Another option would consist in a drastic economic transition toward a “modern” economy, through the intensive raising of livestock indoors supported by the production of fodder. This option would possibly increase the productivity of Mongolia’s agriculture and, while it would also mean the end of a traditional way of life, it *may* help improve the conditions of life of the (former) herders. It is however of paramount importance, if this is the decision adopted by the Mongols, that herders be provided for with alternative livelihood, for intensive raising of livestock indoors is likely to be significantly less labour intensive. Such political orientation must therefore come along with substantial investment in education and re-training and plans for an extension of Ulaanbaatar or for the development of new urban centres in conditions that would ensure the provision of basic services to everyone with an emphasis on the needy, among others. If human rights are to be protected for everyone at all time, such transition can only be brought about progressively.

The government of Mongolia has ostensibly turned toward the latter option of modernizing Mongolia’s economy. While massively desinvesting from the countryside, it has opted for a “resolute urban prioritization” (Sneath, 2006: 162). International investments and international development assistance over the last two decades have constantly focused on the extractive industry and on urbanization to the exclusive benefit of Ulaanbaatar. Such development policy is inadequate because it does not benefit to the poorer half of the population: herders and migrants. It was seemingly justified by the widespread misconception of herders as self-sufficient, able to count on their folk to survive.

It is likely to be true that migrants are generally better off than herders. In this sense, the UN Special Rapporteur on Extreme Poverty and Human Rights asserted that, “poverty is more prevalent in rural and remote areas of Mongolia,” yet immediately adding that “inequality in living standards is more pronounced in urban areas” (Sepulveda, 2013: para. 83). From this observation, many concluded that Mongolian herders had to first settle if they wanted to benefit from development. This, however, is not necessary: basic services could also be effectively provided to nomadic herders, and a growing economy could support the additional expenses that this would induce. Yet, the cultural changes that accompanied the Age of the Market led the younger generation to aspire for an urban life, and the older generations to stop fighting against such aspirations (Sneath, 2006: 177; Lkhagvadorj et al., 2013; Marin, 2010). New development policies need to be conceived that would respond to these aspirations while realizing the economic and social rights of everyone.

## **Conclusion**

There are plenty of ways to manage the impacts of climate change, but they do not necessarily fall squarely within a distinct category of measures on “climate adaptation.” Partly-climate-induced migration can most adequately be addressed through development policies. In Mongolia, it seems, the impact of climate change exacerbates the effects of *dzud*; in the

current circumstances, this accelerates the migration of destitute migrants to Ulaanbaatar. The causal link between climate change and migration pleads for a financial support by other states, in application of the principle of a common but differentiated responsibilities for climate change. Yet, such migration may also be seen as the symptom of a growing tension between the aspirations of herders and the economic opportunities offered to them.

The concept of climate adaptation says little about what could be done to address migration. By contrast, in the Mongolian context at least, approaching partly-climate-induced migration as the symptom of development issues suggests a set of effective measures that the government of Mongolia should take in order to promote an equitable development. In other words, it seems more politically productive to consider Mongolia's internal migrants as "development migrants" rather than as "climate migrants." On the basis of the case studied, it seems that thinking of "climate migrants" as a distinct category of migrants may be misleading and counterproductive when other, more efficient policy levers are available. While the "climate migration" rhetoric identifies migration as an issue, other perspectives may reveal that it is a symptom, and, perhaps, a solution. As a symptom, migration should be the opportunity for a discussion on the social gap between Mongolia's new rich and those left behind. As a possible solution, migration should generate public debate in Mongolia as to the future of nomadic livestock husbandry in a modern economy.

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