

Impact of Environment to Migration

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Introduction

Environmental degradation, climate change and human migration are all-the-time present issues in both human practice and theory with their rapid increasing importance to the global community as a whole. These phenomena have become both more challenging and more critical to ensuring sustainable regional and local development. As a matter of fact, gradual and sudden forms of environmental changes as well as immigrant fluctuations determine the territory in question as well as the regional/territorial co-operation and development.

Migration has also a demonstrable impact, both positive and negative, impact on the environment and territory in both the communities of origin and destination. Both phenomena are in reversible, proportional correlation and figure more apparently just before, during and shortly after upon the undesirable environmental changes, depending on their expansion and cross-border territorial involvement in human and material sources.

The recognition of the need of the related researches and also regional, state and interstate policies became crucial for the prevention of the unwilling, dysfunctional occasions and circumstances as well as for the willing improvements of the parts of the societies and their wholes.

Many European regions are permanent turbulent zones related to the both phenomena. Defined as 'territorial memory' (Smith: 1996), non-static 'space-movement' (Braudel: 1972), with a 'unique access' (Turri: 1999), 'being among the lands' (Cocco: 2007) like some other cycled territorial seas and by that the intersection of the diversified movements and interchanges throughout all the history. By that, it became the cosmopolitan and local zone at the same time (paraphrasing Apollonio, 1998, Mucci and Chiarini, 1999, Ivetic, 1999, in: Minardi, Cocco ed., 2007). This issue became an ever-lasting topic that is lacking in misses scientific data to an enormous extent. This article is based on deduction, supported with synthesis, and content analysis of the expert documents.

Identification of the issue and definitions

Apart from the economic reasons, environmental degradation has contributed to increased population movements over the last decades. Scholars, academics, policymakers and practitioners try to achieve a greater coordination, especially regional levels in particular in the regional frame, in order to manage more effectively the migratory causes and consequences of environmental change.

Those who migrate partly or wholly due to the environmental reasons can be represented in a large scale - from these who are suddenly displaced by an extreme environment in a broader sense up to these who pre-emptively migrate due to deteriorating environmental conditions. While most of these migrants remain within their countries of origin, some cross international borders. Similarly, there are temporary and permanent migrations.

Within those two variables - territorial environment and migration, some European regions are represented mostly by the fluctuations caused by the environmental changes of the ethnic conflicts, drying land and earthquakes.

A further challenge of the topic is to reconcile divergent views as to whether or not it is feasible to differentiate a direct from an indirect co-relation between migration and environmental change, particularly where this change is gradual. The economic, social, cultural and political factors can strengthen or weaken the linkages between environmental change and migration.

Population growth, poverty in the region and the country, type of governance play a crucial role in shaping the migratory outcomes of environmental change.

Socio-economic differences within a community also have an impact on migration factors into family's and individual's strategy to cope with environmental change as well the extent to which such migration is planned or forced. Resulting migration flows can therefore be mixed in a sense of comprising of both environmental migrants as well as those more traditionally referred as "economic" migrants. Economic reasons also influence the later-on fluctuations caused by the environmental changes.

In addition, environmentally induced rural-to-urban migration can evolve into cross-border labour migration. The statistic data, nevertheless, does not typically differentiate between those categories in even one single review.

Existing international instruments, such as the 1951 Refugee Convention, do not cover the issue of environmentally induced migration. The Guiding Principles on Internal Displacement, while relevant to addressing internal population movements resulting from natural disasters, typical for the certain areas in particular in undeveloped areas, is not intended to address cross-border displacement that is rather a case for some European regions.

One of the possible typology of the categories of environmental migrants is:

- Environmentally motivated migrants, characterized as those who "pre-empt the worst" by leaving before environmental degradation results in the devastation of their livelihoods and communities. These individuals leave a deteriorating environment that could be rehabilitated with proper policy making. These migrants are often seen as economic migrants, and their movement may be either temporary or permanent;
- Environmentally forced migrants that can be defined as those who are "avoiding the worst." These individuals have to leave due to a loss of livelihood, and their displacement is mainly permanent. Examples include displacement or migration due to the contaminated environment in the war/conflict, to sea level rise, to loss of soil or destroyed places of living;
- Environmental refugees, described as disaster refugees or those who are "fleeing the worst." These individuals are often fleeing immediate devastation not only of livelihoods, but of lives. Their displacement can be temporary or permanent as well.

The working definition in this article, rather inclusive and synthetic, is that "Environmental migrants are persons or group of persons who, by the reasons of sudden or gradual progressive changes in the environment that adversely affect their lives or living conditions, willingly or unwillingly leave their habitual homes, either temporarily or permanently, within or outside their country of residence". All those phenomena, although mostly influential on the local and regional level, have to be treated globally, since both environment and migration flows do not have the distinctive, isolated, (state) boundaries.

There are a few different crucial dimensions of the intersection of migration and the environment intersection. One of these is the impact of environmental change on

migration, with the possible division to those caused by gradual territorial environmental changes as well as those caused by the extreme environmental events. The further aspect is the opposite – the impact of migration to the environment. Else, these intersections create the space for the potential of further conflicts within the new environment, including regional/local population and overall conditions.

Some of the assumptions may not be fully grounded in scientific research due to the paucity of reliable data in this field.

If environmental degradation and drought are particularly protracted or irreversible, migration can become permanent. In the case of the lack of management planning, these migrations likely become in some extent irregular.

Impact of gradual environmental change to migration

Although extreme environmental events, such as natural or industrial disasters, are more likely to result in sudden, massive population displacement, larger number of people overall are migrating due to a gradual deterioration of environmental conditions and anthropogenic, or man-made, climate change and its effects. Gradual environmental changes, such as desertification, land degradation and deforestation occur slowly over a long period with small, cumulative manifestations.

In the worldwide extent, the most presented examples are those caused by rising the sea-level rise and those caused by the regional/local conflicts. The sea-level rise circumstances result in the movement of people in a large scale worldwide that are also represented in the Euro regions. Those movements or migrant flows are present not only from south to north but also within and among northern regions and provinces as well as northern states, due to the coastal locations of many northern urban centres. Both internal and international environmentally induced migration can often take the form of temporary or seasonal, rather than permanent movements. The other case of gradual environmental change is global deforestation which influences particularly that has influence in particular the maritime zones in Europe.

Gradual forms of environmental change may most acutely affect those who depend directly on fragile ecosystems to sustain small-scale farming, fishing, livestock herding, related wage labour and similar livelihoods. It is often related to the grey economy even in the developed countries but still cause the migrant and economic transformation at all sub-levels, in particular local ones and small regions.

As fragile or degraded ecosystems are increasingly unable to sustain resident populations, regional communities react by adapting through a variety of measures, including migration, whether or not these movements are viewed unfavourably in the host regions/countries.

Normative definitions of extreme environmental events are typically constructed in relation to the normalized distribution of rainfall and temperatures, such that an "extreme" event is one that falls between two to three standard deviations away from a normal distribution. As gradual climate change accelerates and average temperatures and precipitation patterns change, what is considered as "extreme" is also likely to change. While extreme environmental events appear to be instantaneous and unpredictable, these events still, viewed over the long period of time, tend to follow a certain periodicity or interval length between occurrences. It offers the space for the policy makers to create the proper policies for the prevention of the occurrences or even more for prevention of their consequences. However, some events such as monsoons, apart from the possible prediction, occur in such a

great magnitude that there is still no available prevention in these mostly underdeveloped countries .

The larger share of this migration may be state-internal, as migrants move to more arable regions or fishable coastal areas within their country. Many migrants move from degraded areas to urban centres and provincial, state and national capitals. The migration and displacement caused by this type of the environmental changes remain more likely as internal, sudden and collective.

Whether or not affected populations are displaced over the long term or opt to migrate permanently is also a function of other economic, social or cultural determinants. There is a causal link between poverty, local displacement of population and temporary or permanent labour migration associated with environmental degradation.

Impact of extreme environmental events onto migration

The term "extreme environmental event" is understood to refer to any disaster that is likely to affect a sizeable population over a large region and whose effects are experienced immediately by the surrounding community. Extreme environmental events are considerably represented in mass media due to the mass human displacement and widespread destruction that occur. Some examples of the extreme environmental events include hurricanes, tsunamis, cyclones, earthquakes and volcanic eruptions.

Due in large part to the sudden nature of their displacement, populations affected by extreme environmental disasters may be relatively more vulnerable to whole-scale deprivation and exploitation. In further contrast to migration induced by gradual environmental change that is irreversible and allows give some time for individual and group action, victims of extreme environmental events are said to be more likely to be displaced in the short- rather than long-term, as returns to the disaster site are often possible. However, the sustainability of returns may be compromised where reintegration means are inadequate, leaving returnees prone to engaging in secondary population movement. In other circumstances, returns may not be sustainable if the area of return has suffered long-term environmental damage or there is a continuing risk of disaster. In such situations, displacement can become protracted or permanent.

Where ever overpopulation and development projects upset misbalance the fragile natural balance, floods, drought, or other traumatic effects can occur. The consequences of mega-hydrologic projects, river channel diversions and resultant siltation, expansion of agricultural and aquaculture practices in many marginal areas are the cases in point (Khan, 2005, Rahman and Hassan, 2006, and IUCN, 2006). Some of these large development projects are carried out in ecologically inappropriate areas, such as those prone to natural disasters like earthquakes, by the governments without the means or political will to institute costly and long-term environmentally friendly safeguards.

In some cases even a slight interference with ecological-geological balance can initiate enormous environmental damage. Like most environmental events, the possible consequences of poorly planned development projects are not limited by political borders and one nation's actions in creating and ecosystem imbalance can have disastrous implications for neighbouring countries in the Euroregions. Poverty of the local population and vulnerability to disasters are also closely linked (Elahi,

1991). There some proved data that show that Statistical data shows that there is an average of some 3,000 deaths per event in less developed countries compared with less than 400 in the middle and high income countries (Kotter, 2003).

The mutual impact of two types of the environmental changes

Gradual environmental degradation can substantially increase the vulnerability of a region to extreme environmental events. For instance, where natural landslides are exacerbated by human activities, such as deforestation, inappropriate cultivation means and industrial constructions, surrounding areas are said to be at increased risk of natural disaster. Some coastal and riverbank areas have similarly become more prone to flooding as they lose other natural flood or water retention areas due to resource exploitation and unsustainable agricultural practices. In some cases, gradual environmental changes, including long-term droughts and increased salinity of freshwater sources, can by themselves constitute a “disaster” for human security, depending on their intensity and the size of the population and area affected.

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