



Organización Internacional para las Migraciones (OIM)
El Organismo de las Naciones Unidas para la Migración

**MIGRATION, ENVIRONMENT AND CLIMATE CHANGE:
CASE STUDIES IN SOUTH AMERICA
Migration Notebook No. 8**

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EXECUTIVE SUMMARY

Climate and environmental changes have effects on the human population in its entirety when extreme climate events increase and become more frequent. **One of its main consequences is the forced mobility of people affected by those events** (which can be temporary and/or permanent), jeopardizing their welfare and safety which in turn affects, on the one hand, the land organization, the use and distribution of resources, the management of river basins, the productive soils and forest areas and, on the other hand, the national, regional and global policies on population, migration and climate change, **presenting a substantial challenge to local governments** as being accountable in the first place for the issuance of measures to decrease the exposure and the human risk in the face of extreme climate phenomena.

This research is part of the strategy and the initiatives promoted by the **International Organization for Migration (IOM)** both at a regional and at a global level to better understand the connection among migration, environment and climate change, through the generation of conceptual and empirical knowledge. In its first phase, this study included five countries in the region: **Argentina, Brazil, Chile, Colombia** and **Ecuador**. In these countries, an analysis of the background behind the current status of the topic in question was made, a conceptual framework was developed and a field research was done, including the corresponding data analysis besides the preparation of conclusions and recommendations.

This study aims at **generating substantial evidence that will contribute to understanding the relationship among migration, environment and climate change** in the selected communities at five South American countries. It is expected that the results of the study in terms of theoretical, methodological and practical knowledge **will contribute to the formulation and implementation of local and national policies and strategies** for the prevention, preparation, adaptation, monitoring and response to extreme climate and environmental events leading to population movements.

The used methodology was **the study of focused cases** (one per country). The focus was put on human mobility (temporary or permanent) as an adaptation and resilience strategy in the face of extreme climate or environmental situations, **through a qualitative analysis in the selected communities** which especially took into consideration the feelings, perceptions, adaptation strategies, willingness and mobility features of the population most affected by climate change. The starting point of the research was **the analysis of documentary bases** (academic, normative and



journalistic) and interviews to key informants at a municipal, provincial and national level, besides participative meetings with the communities that were selected to be included in the study.

Conclusions by country

Argentina: Lujan's dwellers, a city in the province of Buenos Aires, are **highly vulnerable to floods**. As a result of that, most people living in town temporarily move to stay with friends or relatives; permanent mobility is minimal and affects mainly those with limited resources. In the face of this situation, the municipality has planned to transfer those people to new houses in nearby areas which are not affected by floods. 120 houses had been delivered until June 2016, which led to the **permanent mobility of 120 families** from the neighbourhoods which were most affected by the floods.

Brazil: One of the most important findings of the study was that **extreme climate events** (alternation of droughts and floods) **have led to significant migration movements** both temporary and permanent, from Rumo Certo, a community in the State of Amazonas, to nearby communities, due to the loss of harvests and houses, the close of shops and the lack of contingency policies. According to information provided by Civil Defence, over 1.000 families moved from Rumo Certo to different places in the State in the last 10 years. Recurrent forest fires make the situation in the area even more serious.

Chile: Frequent droughts which affect a town named Monte Patria, in the IV Region, combined with **significant flaws in water provision** are one of the main reasons that put a strain on **people to migrate to other regions in the country**, both temporarily or permanently. The study found that around 15 per cent of the population of Monte Patria, especially the jobless youth, have migrated to the mining area of northern Chile; there, men can work in mining and women in the provision of services.

Colombia: In the community of Tacamocho, Bolívar Department, **recurrent floods and an erosion problem (worsened by climate change)** have led to **a significant emigration of the population, mainly the young**, and of families living near the Magdalena River. Some families have moved to safer areas within the same community, others have moved to neighbouring communities such as Córdoba, main city in that municipality, and to other cities such as Barranquilla or Cartagena, where the chances to be employed are higher.

Ecuador: In Santa Lucía de Chuquipogyo, Chimborazo Province, the study concluded that damages are caused by **lahares** (a mixture of mud and melted snow), of considerable magnitude and which represent a significant danger to human lives, assets, infrastructure and productive lands. The consequence of the situation is that **nearly 10 per cent of the population** who make their livelihood through agriculture and cattle raising have had to move to urban centres on a permanent basis. Other dwellers prefer to temporarily move to Guano, main city in that municipality, or to Riobamba, the state capital, to work there and complement the family income.



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General Conclusions

The study has reached the following conclusions on the evidence found in relation to the connection among environment, climate change and migration:

One of the main conclusions is that **in all cases under study migration movements both permanent and/or temporary are the result of the intensification of extreme events caused by climate change.**

The field work in the five selected communities allowed researchers to confirm that most dwellers directly affected by extreme climate and environmental changes **are willing to move, on a permanent basis and in the framework of a relocation plan, to safer areas in their own state, province or region.**

The study confirmed **an important deficit in the information about the causes and the magnitude of population movements caused by extreme climate changes** due to, among other reasons: the lack of policies fostering scientific studies that connect both questions; the fact that a considerable proportion of government authorities, among other political actors and, in particular, the affected population, are not aware of the existing relationship between extreme climate events and population movements.

It the five countries it was possible to confirm that **there are not any entities or organizations especially engaged in the formulation and execution of comprehensive public policies involving population, migration and climate change.** It was also observed that there is a very limited coordination among the different levels of local, provincial and national governments, and among entities/areas of the same levels.

In all cases under study it was evident that **there is a very limited articulation between research and the scientific knowledge generated by academics,** on the one hand, **and decision making by public institutions** linked to the management of basins, land organization, conservation, and internal and external population movements, on the other.

Field work has evidenced the existence of **demands to local and national governments regarding the lack of infrastructure plans,** access to resources (especially land and water), prevention and contingency plans, and land organization taking into account the ecological, geographical, demographic and historical features of each location that has been affected.

The population groups that were interviewed **agree on the formulation and the execution of environmental management policies** promoting the conservation and restoration of natural systems, reducing vulnerability and allowing a decent subsistence. But at the same time they **demand improvements in their life conditions to diminish forced migration caused by climate change,** mainly in the case of the youth.



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In four of the five cases under study it is important to highlight the **linkage among poverty, access to production resources, vulnerability and displacement levels, being the poorest groups the ones that have suffered the most significant damage caused by extreme climate events**. The exception was Lujan (Argentina) where the area suffering the effect of floods includes middle class neighbourhoods.

From a **gender perspective** a fundamental aspect observed during the field work is the **active participation of women at the same level as men, in the identification of needs and in the search for collective solutions** to the problems linked to extreme climate events and the potential displacements arising from these situations.

General Recommendations

The study presents the following recommendations with the aim of contributing to the formulation of local, provincial and national policies and strategies to face the challenges implied in extreme environmental and climate changes as drivers of population movements.

At the regional level

Even if the topics of migration and climate change are fragmented in the agendas of regional integration organizations (**UNASUR, CAN, MERCOSUR**) and also in the agenda of the South American Conference on Migration (CSM), the study stresses the need **to tackle both topics simultaneously** to be able to know the cause and effect nexus between the two phenomena and to eventually take pertinent actions.

It is important to include in the agendas of regional events the **debate on human mobility as a result of climate change**, both in the case of a.m. integration organizations and in other cases in which any of those topics become the matter of study.

The study recommends the creation of a **Regional Committee on Migration and Climate Change** in charge of developing policies on risk management besides adaptation and mitigation measures with a gender perspective in South America, aimed at **implementing early alert programmes** and **taking care of displaced population groups** in the face of extreme climate events.

Following this same criterion, the study also highlights the need to **generate (and consolidate) laws and multilateral and/or bilateral agreements** to protect the rights of environmental migrants and to provide **support to additional research to show more evidence** on the effects of the linkage between migration, environment and climate change in the region.



At the national level

It is advisable to create **institutional mechanisms and spaces to exchange data** among the Ministries of the Interior, Environment, Foreign Affairs, Social Development, Education and Health, to facilitate the articulation of the work of governmental authorities, at different levels, in relation to population movements caused by extreme climate events.

The study also attaches the utmost importance to the fact that both the researchers and the decision makers must take into account the **opinion, knowledge, interests and needs of the affected dwellers**, differentiated by gender; this information is essential to get a comprehensive understanding of the phenomenon on which the policies for the population displaced by climate changes are planned and decided.

It is also advisable to develop **capacity building in officers, leaders and mentors**, including government authorities at the three levels as well as civil society organizations, academia, private sector representatives and community leaders, **through training and an access to information** on the linkage among environment, climate, migration, population and territory.

It is necessary to adopt measures **to reduce the vulnerability and the magnitude of the impacts on the human and natural systems**, and also to include the ordered planning of population displacements as part of an **adaptation strategy**, following the guidelines proposed by IOM when dealing with this matter.

The study also remarks the importance of developing **National Population Plans**, focused on gender and allowing the identification of different human groups living together in the countries, besides internal and external displacements induced by extreme climate events, identifying its **causes and consequences and previewing potential solutions** in the short, medium and long term.

A recommendation arises of the analysis of the activities deployed in the field: the implementation of **plans for relocating populations** in areas in which there are already evidences of extreme climate events. If the plans already exist, they should be **updated through studies on vulnerability and risk**, bearing in mind the participation of the community and paying attention to its socioeconomic, sociocultural and gender peculiarities.

Following the criterion mentioned above, it is also important to develop **educational programmes at schools and colleges** linking climate change to the local realities, including migration as an **adaptation strategy** in the face of the consequences of extreme climate events.

It is highly important **to take into account the culture of the different communities** and keep the population informed through a simple, non-technical language, using their mother tongue, **incorporating both men and women to work together** in plans of prevention, adaptation, resilience, risk management and even in their potential relocation, if necessary.