

Transformative climate action in cities

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A critical, but understudied, issue of concern is how climate change will affect migrant populations living in cities (including refugees and internally displaced people), and how local governance and actions to combat the effects of climate change will address migrants' vulnerability and support their inclusion in cities.

Cities today are at the forefront of climate change. Although they occupy only 2% of the earth's land surface, they are home to more than half the world's population and represent about 80% of the world's energy consumption and more than 60% of greenhouse gas emissions.¹ Due to expanding populations and growing needs, cities' residents, infrastructure and services are highly vulnerable to the impacts of climate change. Indeed, many cities are already suffering from climate-related hazards including flooding, coastal erosion, heatwaves and landslides, and many more will have to face these risks in the future. The recent decision by the Government of Indonesia to relocate the country's capital from low-lying Jakarta to the island of Borneo is telling in that regard.

In recent years, cities have affirmed their positions as driving forces in the fight against climate change and have

demonstrated leadership and concerted action. In particular, C40 Cities Climate Leadership Group (C40), the network of 96 cities committed to climate action, is fostering cooperation and ensuring that cities' voices are represented in international climate diplomacy and policy-making fora.

We argue that migration, including forced migration, have implications for cities' responses to climate change – in terms both of emissions reduction efforts and resilience building in cities, and specifically within urban migrant communities.² When considering inclusive climate action in cities, distinguishing between forced migrants and migrants matters little. What matters are, first, marginalisation (which prevents people's access to basic services) and, second, climate action (which has the potential to increase people's capacity to adapt and to contribute to reducing climate change impacts).



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Dasht-e Tarakhil is an informal settlement on the eastern outskirts of Kabul, Afghanistan, mostly populated by Afghans who have returned from Pakistan. UNHCR and its partners are helping returnees gain access to basic services, land and jobs.

Vulnerability of forced migrants to urban climate change

People often move to urban areas that provide improved income-generating opportunities, infrastructure and social services but which may be exposed to other kinds of risks. South and East Asia are particularly vulnerable to large-scale displacement because sea-level rise will have a disproportionate effect on their large populations living in low-lying urban areas. Six of Asia's ten mega-cities, for example, are located on the coast (Jakarta, Shanghai, Tokyo, Manila, Bangkok and Mumbai).

In cities and metropolitan areas, the economic, social, political and geographical marginalisation of migrants affects their abilities to cope with slow-onset (for example, temperature rise and recurrent heatwaves) and sudden shocks (such as flooding and storm surges) resulting from climate change. Urban migrant residents from lower-income groups bear, and will continue to bear, the greatest risks from the impacts of climate change, as they are less able than those with greater resources to put in place short-term coping measures, such as evacuating family members or protecting

assets from associated loss and damage. They are also less likely to be able to recover from detrimental impacts on their physical, economic and psychosocial wellbeing.

Sudden and slow-onset disasters may disproportionately affect marginalised migrant communities, particularly when they are already living in precarious conditions. Limited employment opportunities and livelihood insecurity, weakened or reduced access to social services, poor housing conditions, and exposure to crime and other social conditions contribute to migrants' increased vulnerability to environmental stresses and shocks. When housing choices and labour opportunities are limited, newcomers often settle in the most dangerous areas in terms of climate-related disaster risk – where housing is cheaper and more readily available but where living conditions are also comparatively worse. They end up occupying spaces with weak and inadequate infrastructure and limited social services, which are exposed to hazards such as flooding and landslides. Moreover, migrants often live in unsafe buildings that do not adhere to building codes or regulations (where such codes exist).

Migrants in these areas then end up suffering disproportionately when disasters occur – and their risk of displacement increases.³

Adding to the challenges above, language barriers, limited assets, a lack of knowledge of local contexts and previous environmental shocks, discrimination, insufficient community participation and representation, and weak social networks can all alter migrants' perception of environmental risks and hinder their access to timely, good-quality and complete information before, during and after disasters occur.⁴ These factors can push migrants to make hazardous choices. For example, a lack of personal experience of mudslides may be a contributing factor to why migrants from the northeast of Brazil erect precarious constructions on mudslide-prone slopes above favelas in Rio de Janeiro.⁵ Their vulnerability to disaster can also manifest itself in their evacuation responses. For migrants with few assets and/or living in informal settlements with precarious land rights, the need to stay behind to guard houses and belongings can also reduce their willingness to evacuate or can cause them to return home prematurely in the immediate aftermath of a disaster.

These constraints can also reduce people's abilities and willingness to seek and receive relief in the wake of sudden-onset events. A lack of roads and infrastructure can hinder emergency services from reaching informal settlements with critical supplies and services. When documentation is a prerequisite for receiving assistance, irregular and forced migrants who have lost their documents in the course of a disaster or previous displacement face difficulties in accessing relief. Even when this is not the case, for those undocumented the fear of deportation may outweigh their need for formal support, and be exacerbated when there is a lack of trust in local officials. When migrants are not taken into account in disaster risk reduction and preparedness and climate action plans, they may be forced to rely on informal aid and social networks for support.

The inclusion of urban migrants in climate change adaptation planning, disaster risk reduction and preparedness and in relief programmes is therefore critical.

With well-managed urban migration and settlement and good integration policies (economically, socially and civically), cities can enhance the capacity of incoming populations to cope with and adapt to the impacts of climate change. This requires improved governance, coordination and communication across all levels and sectors of government, engagement with civil society, and the active participation of all cross-sections of the urban migrant community.

The links between forced migration and climate action: a research agenda

In cities, forced migrants may have considerable transformative potential for climate action. We have identified a number of sectors where further research in this area is needed. Without such research, we argue, there is a high risk that climate action cannot be fully inclusive and climate action in cities cannot unleash its full potential in terms of reducing emissions, building resilience and ensuring that our cities lead the just transition of our societies to a low-carbon and inclusive future. It will be important to ensure specific consideration of gender, youth and the elderly in relation to the sectors identified below.

Transport is a key source of greenhouse gas emissions, and a key sector where transformations are possible. In the Global South, forced migrants often settle in informal settlements that are isolated from major services and/or relatively inaccessible. In emerging economies and industrialised countries, they often live in neighbourhoods that are insufficiently served by public transport, which affects their ability to access labour markets, job opportunities, social and health services, and so on. The city of Paris, for example, is currently redesigning its public transportation system so that it includes the greater suburbs where most immigrant populations live.

Housing is another key source of greenhouse gas emissions in cities but is also often a source of vulnerability, as migrants' homes are often more exposed to natural disasters. Therefore, improving migrants' housing can be both a mitigation and an adaptation policy.

Increasingly, cities will seek to achieve local **food security** in order to reduce dependence on imported food. It is essential that migrants – who often rely on their own food systems – are integrated into any resilient food systems that cities seek to develop.

In both industrialised and developing countries, access to **health services** is often problematic for migrants, especially undocumented migrants. This means they are likely to suffer more as a result of the health impacts of climate change, in addition to the health issues associated with migration. There needs to be more collaboration between researchers in the areas of climate change, migration and health.

Finally, **political participation and mobilisation** lie at the heart of realising the transformational potential of forced migration/migrants. Migrants are often unable to fully exert their political rights, even in countries where non-nationals have the right to vote in local elections. Sometimes they lack the documentation that would enable them to vote and participate in collective decisions, or they do not feel legitimate or safe enough to do so, yet it is essential that climate action is participatory and designed to include migrants.

We know the sectors mentioned above are critical to meeting cities' greenhouse gas emission targets and for building urban resilience. We suggest that in-depth research is needed to better understand how forced migration interacts with cities' action in those sectors. We propose a threefold research agenda on:

- **the impact of forced migration on critical climate action sectors:** how can researchers best support city planning and preparedness, including with data on what to expect in terms of forced migration in an era of accelerating climate crisis?
 - **the specific vulnerabilities of forced migrant populations:** how can we support city climate actions to ensure that they neither leave migrants behind nor have unintended consequences in terms of exacerbating vulnerabilities – such as congestion pricing in city centres that makes it difficult for migrant workers to get to work?
- **the shared vulnerabilities and opportunities for making common cause** among forced migrants and other vulnerable populations in urban areas: how can we empower and support coalition-building and joint advocacy by those people who are most affected, coming together around shared concerns?
- Addressing such issues together will be essential not only for effective climate action at the local level but also for migrants' successful inclusion in cities.
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1. Gemenne F and Rankovic A (2019) *Atlas de l'Anthropocène*. bit.ly/Atlas-Gemenne-Rankovic-2019
 2. This article is based on a study conducted for C40 Cities and the Mayors Migration Council, with the support of the Open Society Foundations and the Swiss Agency for Development and Cooperation.
 3. De Sherbinin A et al (2012) 'Migration and risk: net migration in marginal ecosystems and hazardous areas', *Environmental Research Letters* 7(4) <https://doi.org/10.1088/1748-9326/7/4/045602>
 4. IOM (2015) *World Migration Report: Migrants and Cities: New Partnerships to Manage Mobility* www.iom.int/world-migration-report-2015
 5. Warn E and Adamo S B (2014) 'The Impact of Climate Change: Migration and Cities in South America', *Bulletin* 63 (2), World Meteorological Organization
bit.ly/WMO-cities-south-america-2014