Water and society

Winds of change - exploring the growing phenomenon of environmental refugees

The occurrence of environmental refugees – people who have been forced to leave their home because of a marked environmental disruption – is receiving attention for the first time in South Africa. A new research project, funded by the Water Research Commission (WRC) and led by the CSIR, hopes to fill some crucial knowledge gaps on this growing phenomenon. Article by Lani van Vuuren.



At the height of the 2015/2016 El Niño phenomenon, more than 36 million people across southern and eastern Africa faced hunger as crops failed amid widespread drought. Potentially scores of people were forced to abandon their homes by this environmental disaster. The exact number is unknown, however, as little research has been done on the subject of environmental refugees, particularly in southern Africa.

All of this is about to change. On 20 June 2017, World Refugee Day, the CSIR with the WRC introduced a new project, titled 'Kukimbia - the impact of environmental refugees in southern Africa' ('Kukimbia' means 'to flee' in Kiswahili). The project will run until 2020.

"This is a first major thrust in this direction for any institution in South Africa," noted Dhesigen Naidoo, WRC CEO, during the launch. "The issue of migration due to environmental factors is hardly new - the environment has driven people from their homes for millennia. The difference now, of course, is that the kind of climate phenomena we are seeing today are largely man-made."

While an increasing number of people are being displaced by disasters such as drought, floods, volcanoes, hurricanes and earthquakes, they are not yet recognised in international law. According to the United Nations, a refugee is considered a person who flees their home country due to a 'well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion. Calls are increasing from the international community to amend this definition to include people displaced for environmental reasons.

"When major natural disasters hit or if sea levels rise dramatically, millions of people are displaced and left without homes, food or other basic resources needed for survival," explains project leader, Dr Inga Jacobs-Mata from the CSIR – Natural Resources and the Environment. "However, because these people are not considered refugees in the traditional definition of the word, they are not always offered the international aid they need."

Research indicates that the phenomenon of environmental refugees is rising, with some institutions, such as the International Red Cross, estimating that there are currently more environmental refugees than refugees displaced because of conflict. According to the Internal Displacement Monitoring Centre (IDMC), the occurrence of displacement closely mirrors people's exposure to hazards around the world. Exposure is increasing because ever growing numbers of vulnerable people live in areas prone to hazards.

The IDMC's report, *People displaced by disasters – Global estimates 2015*, notes an average of 26.4 million people have been displaced from their homes each year by disasters brought on by natural hazards – equivalent to one person displaced every second. This figure does not include displacement related to drought and gradual processes of environmental degradation, nor does it reflect the complexity and diversity of people's individual situations on how they evolve over time.

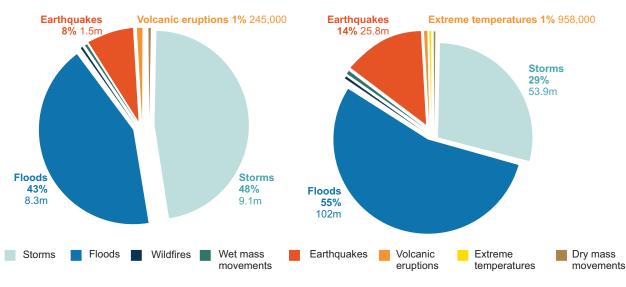
This omission is significant in light of climate change. Even gradual and relatively modest changes in climate can affect the frequency and intensity of hazards and communities' vulnerability to them. Higher temperatures increase the risk of both drought and episodes of heavy rainfall, also known as extreme precipitation events, while rising sea levels make storm surges worse and increase the risk of coastal flooding. Lower agricultural yields associated with gradual changes in climate undermine rural livelihoods and erode communities' capacity to cope with shocks.



The phenomenon of environmental refugees is set to increase as a result of climate change.

"Very little attention is placed on environmental migrants in South Africa from a climate change adaptation perspective and, as such, an intervention gap exists currently as to which institution/level of state is responsible to act and in what capacity."

In the last ten years China, India and the Philippines saw the largest displacement events, mostly related to typhoons, cyclones, and floods. However, Africa is particularly vulnerable, as illustrated by past events. For example, by 2009, a severe, persistent, five-year drought stretched across East Africa exerting



2014

2008 - 2014

Note: figures rounded to nearest 1,000 or 100,000 Source: IDMC data as of 1 June 2015

Global displacement by type of hazard

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a heavy human toll, made worse by violent conflict. The worst affected areas were Kenya, Ethiopia, Somalia and Uganda.

Similarly, in 2000, south-eastern Africa was devastated by heavy rains that began in January. In February, cyclone Eline swept across Madagascar and south-eastern Africa, bringing the worst flooding in decades. This was followed by cyclone Gloria. By March 2000, they had left at least 800 people dead and disrupted the lives of over 2.5 million people in various countries. Mozambique was hardest hit, with almost a million people losing their homes.

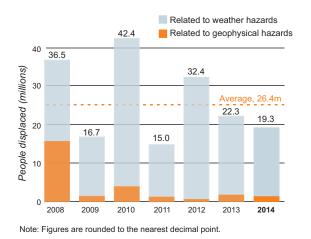
The new research project aims to investigate the real impact of environmental refugees in southern Africa, focusing both on internal displacement as well as cross-border displacement, noted Dr Jacobs-Mata. "The project will also investigate the national policy landscape and the preparedness of southern African countries to respond to future internal displacement as a result of environmental disasters."

Dr Jacobs-Mata continues to say that, given that this project includes a combination of multidisciplinary, basic and applied research, its impact will be achieved in these areas in different ways. "Firstly, the project aims to strengthen regional and national policy guidelines to better inform the impact of environmental migration in South Africa, including looking the potential of human mobility, and how to systematically integrate it into adaptation planning processes, financial mechanisms, technology transfers and capacity building. Secondly, using evidence-based policy methodology, the project aims to inform national policy."

Environmental refugees – the global picture

- More than 19.3 million people were displaced by disasters in 100 countries in 2014 (latest available figures)
- Since 2008, an average of 26.4 million people have been displaced by disasters each year equivalent to one person every second
- Around 17.5 million people were displaced by disasters brought on by weather-related hazards in 2014, and 1.7 million by geophysical hazards.
- An average of 22.5 million people have been displaced each year by climate or weather-related disasters in the last seven years – equivalent to 62 000 people every day.
- Climate change, in tandem with people's increasing exposure and vulnerability, is expected to magnify this trend, as extreme weather events become more frequent and intense in the coming decades.

Source: People displaced by disasters – Global estimates 2015



The scale of global displacement by disasters, 2008-2014. (Source: People displaced by disasters – Global estimates 2015)

Through the use of anthropological methods, the project further aims to identify specific case studies and investigate the interplay between environmental changes, stresses on ecological systems, socio-economic vulnerability and consequent population displacement by investigating how people have perceived, experienced and responded to climatic variability and long-term negative climate change. "More importantly, the project will investigate how cultural practices change, how identity formation changes as people's sense of belonging to a place is affected, and finally, how their livelihoods are affected," notes Dr Jacobs-Mata. "The benefit of including this localised and individualised aspect in the study is to better inform adaptive strategies for local communities." It is hoped that the findings from this study will contributing to the growing body of empirical evidence on the links between climate change and human mobility.

The project has a strong knowledge transfer and dissemination focus, due to the fact that the impact of environmental migrants in South Africa is largely still an under-researched domain. "Very little attention is placed on environmental migrants in South Africa from a climate change adaptation perspective and, as such, an intervention gap exists currently as to which institution/ level of state is responsible to act and in what capacity."

To date this work is unprecedented in South Africa. "No research programme of the kind currently exists in South Africa. Given the increasing importance of this topic globally and regionally, establishing a research capability in this field is both opportunistic (given the focus placed on the issue of environmental migration in recent years) and strategic (i.e. an opportunity for South African scientists to lead policy discussions in this domain)," Dr Jacobs-Mata concludes.

The new study hopes to contribute to the growing body of empirical evidence on the links between climate change and human mobility

