

Kukimbia: the impact of environmental refugees in Southern Africa

*A regional perspective on climate-induced
migration*

Presentation to IOM staff
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Key human mobility terms

Human mobility

Displacement

Situations where people are forced to leave their home or place of habitual residence. Displacement is usually associated with intensive risk, where the occurrence of a disaster event is the primary driver of movement. It can take place within or across national borders.

Migration

Movements which are, to some degree, voluntary. This is usually associated with extensive risk, and can take place within or across national borders. The decision to move is complex and often linked to multiple drivers, including but not limited to climate risk.

Planned relocation

An organised relocation, typically instigated, supervised and carried out by the state with the aim of reducing (usually extensive) weather and climate risks. Ideally, planned relocation should be undertaken transparently and with the informed consent of, or upon the request of the community. It should also be accompanied by resettlement (the restoration of communities and socio-economic conditions) (McAdam and Ferris, 2015).

Geography of research

Migration, climate change and the environment: mapping the world's case studies



Jérémie Guélat, IGG, University of Neuchâtel
Source: CLIMIG Project
Philcarto <http://philcarto.free.fr>

Project purpose and aims

- This project focuses on **the regional, national and sub-national policy landscape and the preparedness of Southern African countries** to respond to future **internal and cross-border displacements as a result of environmental disasters**.
- Goal is to grow a **social research capability on climate-induced human movement patterns** in the region.

Aims:

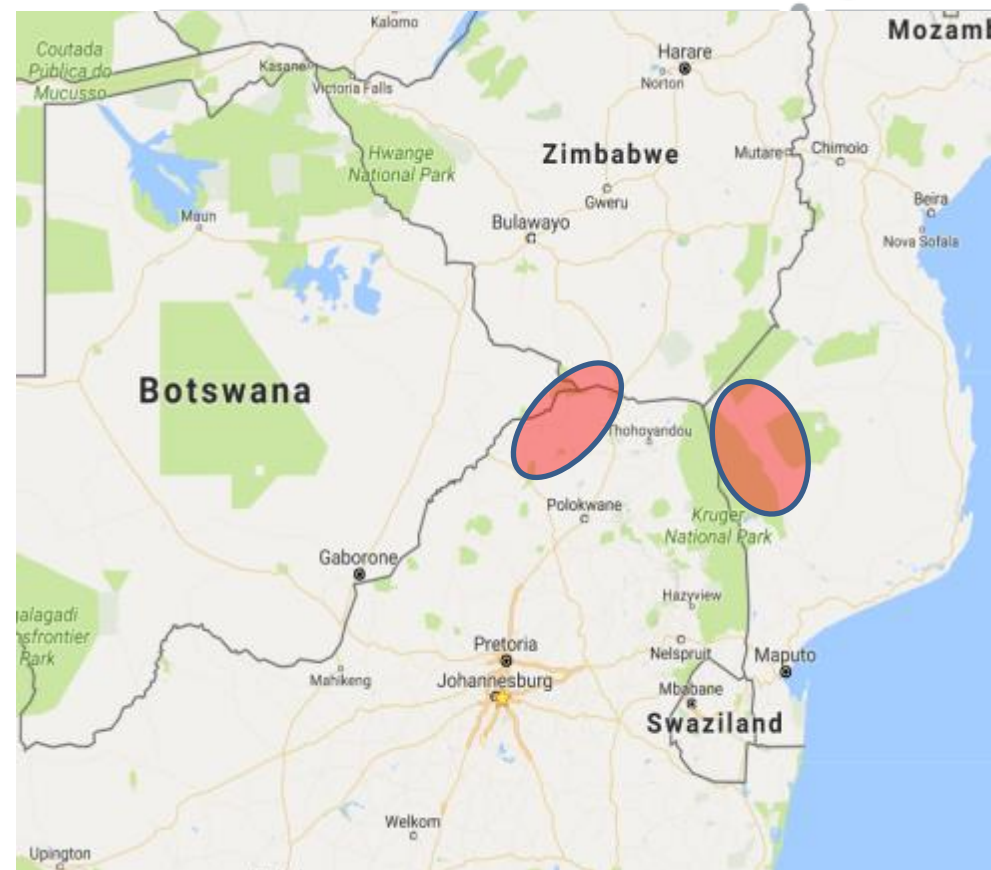
1. To inform/strengthen the Southern African policy position on environmental migrants affected by floods and droughts and provide policy guidelines to strengthen this in regional law.
2. To develop national policy guidelines on environmental migration to strengthen national disaster response plans for floods and droughts in the case study areas identified.
3. To develop local adaptive management strategies for environmental migration in the case study areas identified.

Project scales

Descriptors	Global / regional	National	Sub-national / Local
Unit of analysis	SADC region / states	States (country of origin, country of destination)	Municipalities / Local communities / individuals
Key areas of investigation	Legislative and policy frameworks	National policy, strategies	Disaster response plans, individuals' experiences
Impact areas	Regional climate change adaptation capacity Regional support/acknowledgement of climate-induced migration	Adaptive capacity of states, preparedness	Individual's level of resilience, agency, access to support systems

Case study areas

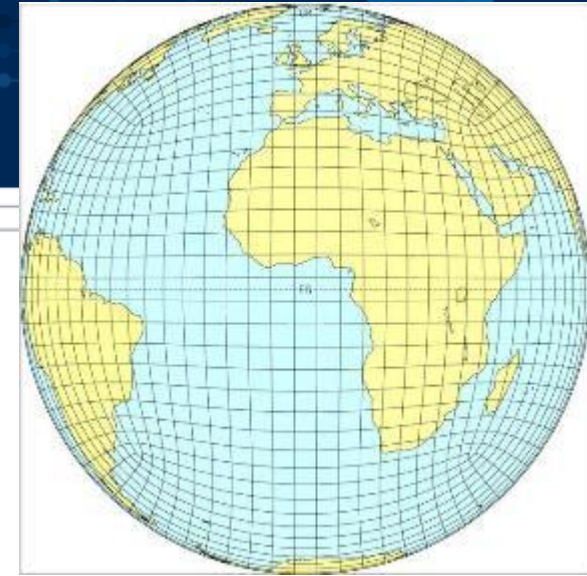
1. Chokwe and Guija, Gaza Province, Mozambique - **flooding**
2. Musina, Louis Trichardt, and surrounding areas, Limpopo Province, South Africa - **drought**



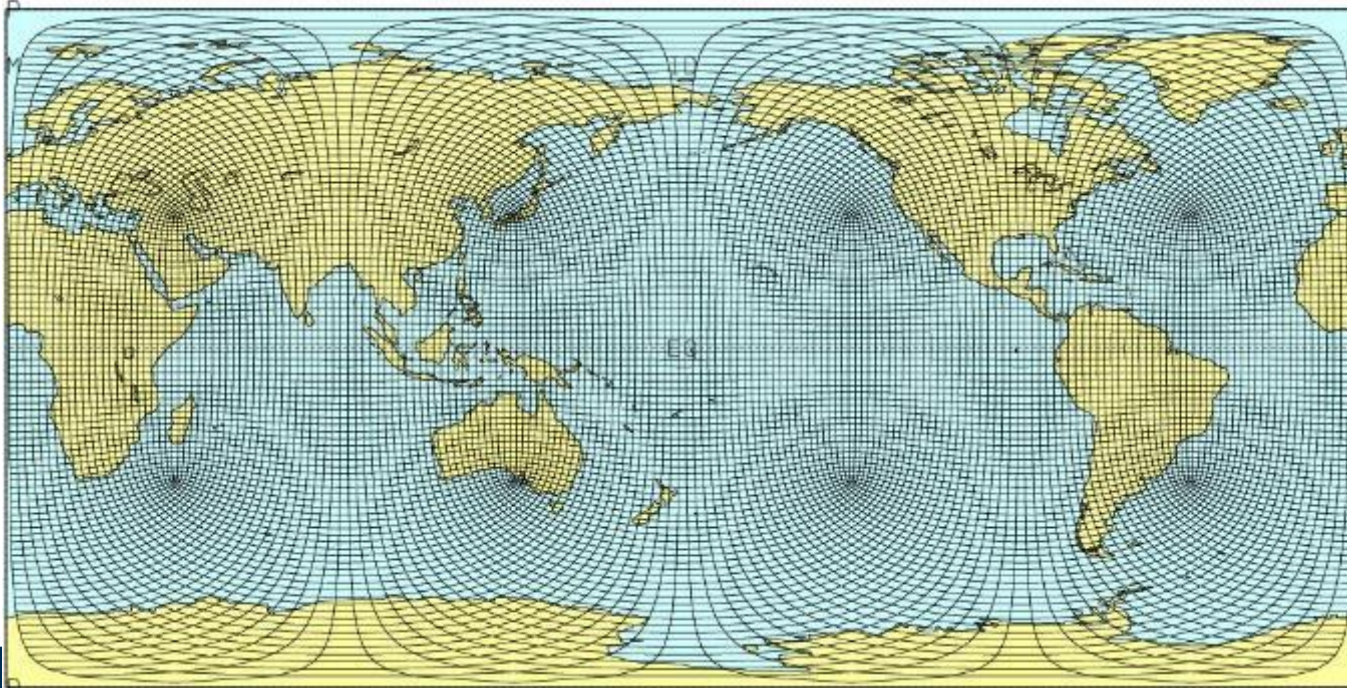
Case study considerations and challenges

- Difficult to find displacement statistics for drought. Recommendation: find large communities of subsistence farmers.
- Difficult to find cross-border statistics
- Funding limitation. Northern Mozambique would have been an ideal case study but too far and too costly.

Global climate modelling at the CSIR



- NWP and RCM capacity build around the conformal-cubic atmospheric model (CCAM) of the CSIRO
- A cube-based global model; semi-Lagrangian semi-implicit solution of the primitive equations
- Includes a wide range of physical parameterizations
- Developed by the CSIRO Marine and Atmospheric Research (McGregor, 2005)
- Runs in quasi-uniform or in stretched grid mode
- Multi-scale climate modelling.



The first African-based earth system model VRESM is under development through a CSIR-CSIRO-JAMSTEC-University of Paris collaboration

Drought in southern Africa



Depleted grazing in Kruger Park in September 2016.

By September 2016, The entire summer rainfall region of South Africa was in a state of mild drought, or worse.

The Free State, northern KwaZulu-Natal and eastern Mpumalanga was in a state of severe drought .

Main messages related to the climate-change signal

A robust pattern of drastic temperature rise is projected for southern Africa – an actionable climate change signal!

Temperature increases are projected to range between 4 and 7 ° C over the interior by the end of the century – increases larger than 6 ° C are plausible over much of semi-arid southern Africa.

Drastic increases in the number of high fire-danger days, very hot days and heat-wave days are projected under low mitigation.

Hot-spots from a migration perspective may include:

- regions that depend on rain-fed, subsistence farming (maize crop highly vulnerable)
- Regions where a large component of the population depend on livestock (e.g. cattle in Botswana)

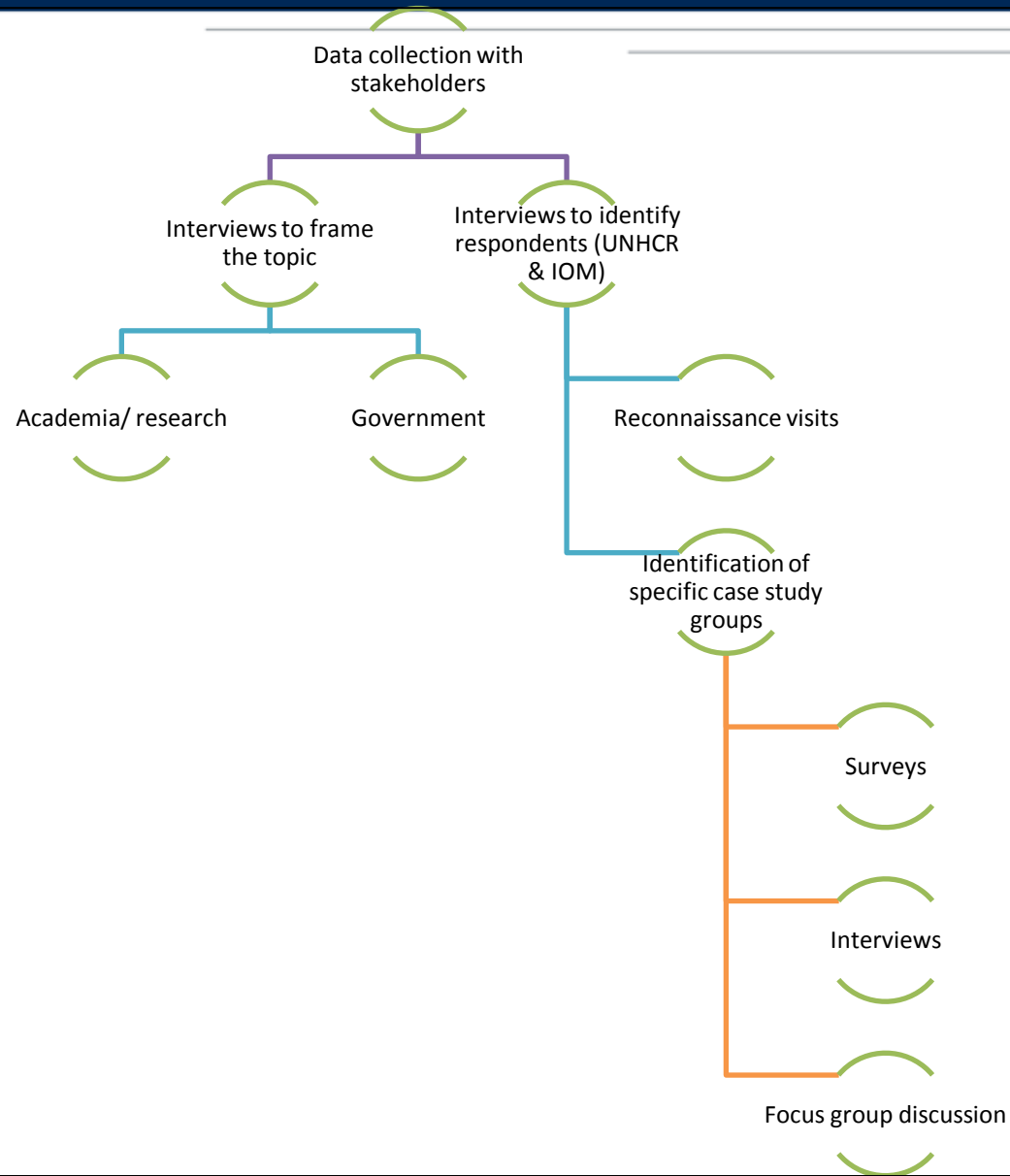
Effects of flooding: Note that poor communities most vulnerable to high impact climate events are often not particularly mobile (e.g. Mozambique floods of Feb/Mar 2000).

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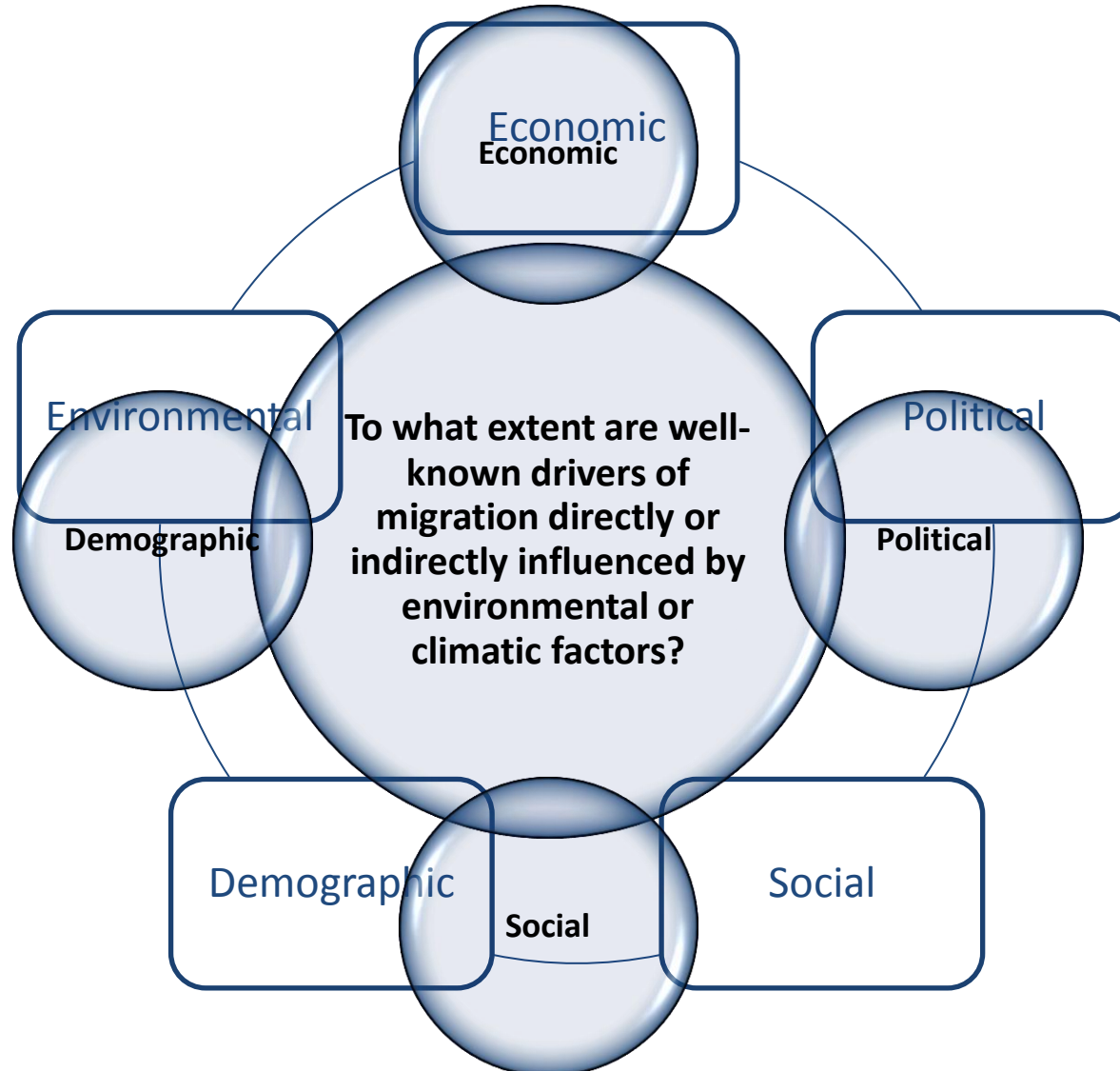
Methodology

Descriptor	Global/regional	National	Sub-national/local
Approach	Dual: textual and field	Dual: textual and field	Dual: textual and field
Data collection: textual	Analysis of legal, policy and institutional documents of international and regional organisations/institutions	Textual analysis of national policies, disaster response plans and strategies, climate change adaptation plans, gender mainstreaming plans	Case specific textual analysis, urban spatial development plans (Green Book), IDPs,
Data collection: Field	Mixed-method data collection strategy consisting of semi-structured interviews, informal discussions, email correspondence, and participatory approaches such as workshops, focus groups, closed meetings and participant observation techniques to determine the relationships between global, regional and domestic laws and compliance thereof		Survey, interviews, focus groups

Data collection strategy



Drivers of migration decisions



Expected impact and outputs

Outputs

- National dialogue 1
- National dialogue 2
- Regional dialogue
- Documentary
- Policy briefs
- Policy guidelines
- Reports and publications
- Community of Practice (CoP)

Impact

- Better preparedness at different levels of scale
- Institutional enhancement
- Improvement in capacity/capability and skills
- Contribution to knowledge through regional case studies
- Supporting informed planning and decision-making

Deliverable schedule

Deliverable	Due Date
Deliverable 1: Advance	01/04/2017
Deliverable 2: Concept Note: Overview of the policy landscape: environmental refugees in southern Africa	30/08/2017
Deliverable 3: Case Report	30/01/2018
Deliverable 4: Results and Discussion	30/11/2018
Deliverable 6: Documentary	30/09/2019
Deliverable 5: Environmental Refugees Regional Workshop Synthesis Report	30/11/2019
Deliverable 7: Final Report	30/11/2019

Knowledge dissemination outputs

Output	Due date	Status
National dialogue 1	2017/18	Complete
National dialogue 2	2018/19	
Regional dialogue	2019/20	
Documentary	2019/20	
Policy brief	2018/19	
Policy guidelines	2019/20	

HCD targets

Degree	2017/18	2018/19	2019/20
PhD	x	x	x
Masters		x	x
Masters (TBC)		x	x
PhD		x	x

Project Plan

Activity	4/18	5/18	6/18	7/18	8/18	9/18	10/18	11/18	12/18	1/19	2/19	3/19
Fieldwork (Limpopo)					TBC							
Fieldwork (Moz)						TBC						
Fieldwork (Limpopo)						TBC						
Del 4: Results								30/11				
Dialogue 2			20/6									

Activity	4/19	5/19	6/19	7/19	8/19	9/19	10/19	11/19	12/19	1/20	2/20	3/20
Documentary						30/9						
Regional dialogue												
Del 5: Synthesis Report								30/11				
Del 6: Final Report / Policy Guidelines								30/11				

Collaborators

- UNHCR
- University of Pretoria, GovInn
- University of Johannesburg
- WRC (funder)
- IOM (TBC)

Envisaged IOM collaboration:

- Identification of migrant communities in study sites
- Support in the field? Field officers, MECLEP survey?
- Interviews with officials based on expert/on-the-ground experience
- Collaboration on regional study? Synergies?
- Co-host dialogues
- Co-develop regional policy guidelines

Concluding remarks

So what is necessary to link human mobility, disaster risk reduction, climate change adaptation and development to address environmental migration?

1. Evidence
2. Integration
3. Collaboration
4. Balance

Thank you



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