

HABITABLE - Linking climate change, habitability, & social tipping points: Scenarios for climate-migration

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Presentation Outline

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Presentation of the HABITABLE Project

2

Qualitative Research on the Climate-Migration Nexus

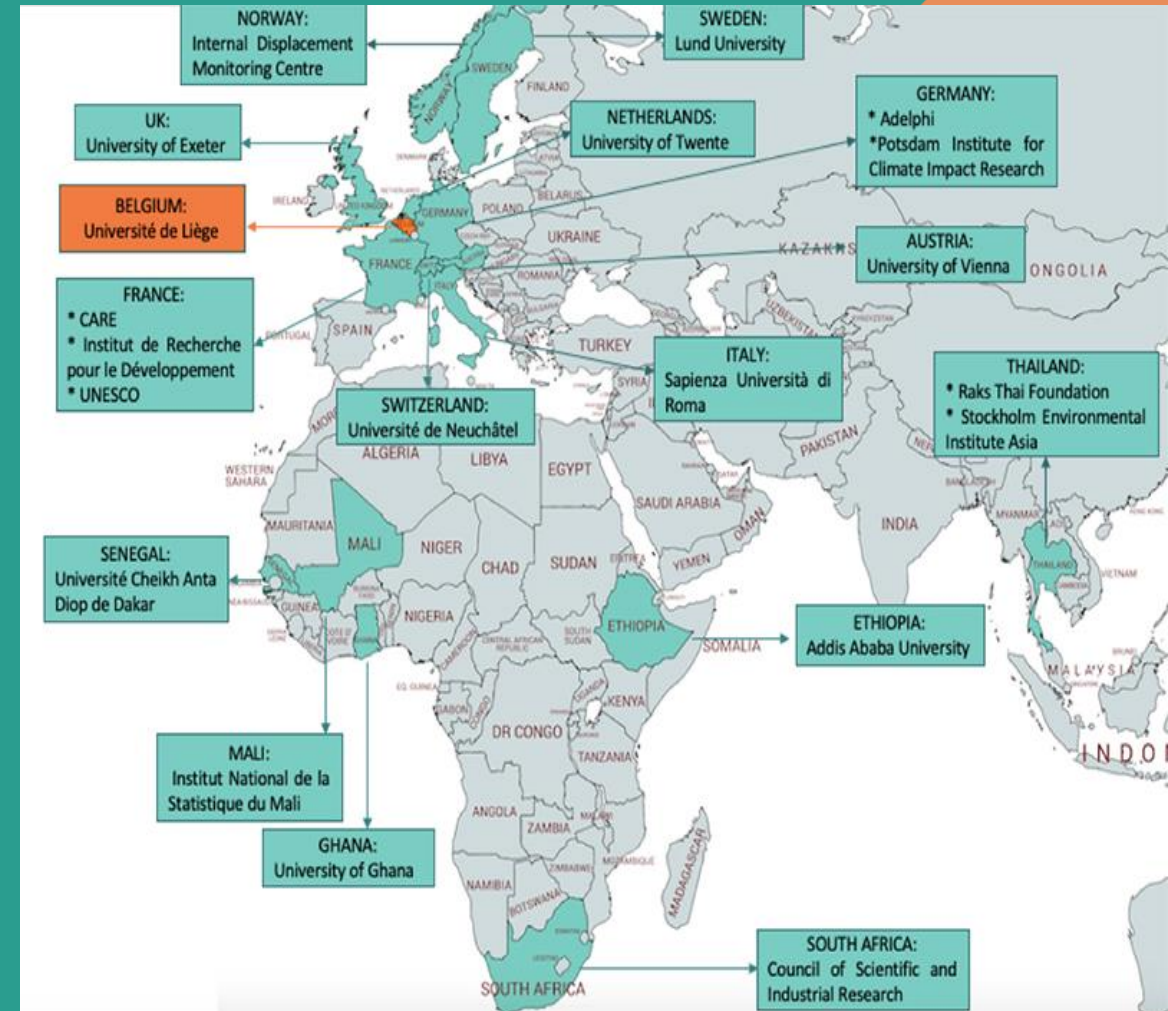
3

The Case of South Africa

HABITABLE Project Overview

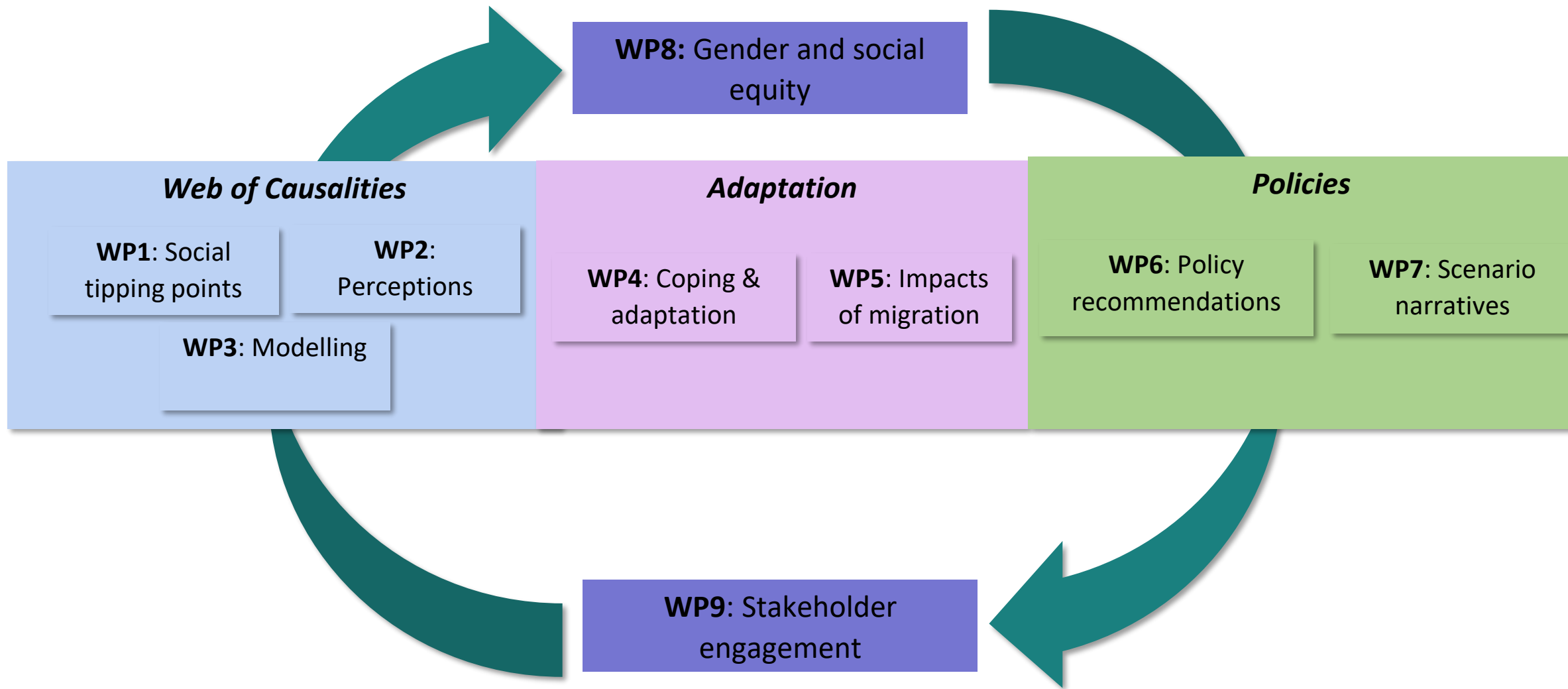
- A four-year project (**2020-2024**) funded under the Horizon 2020 programme
- Largest research initiative on climate change and migration to have been funded by the European Union.
- **22** international partners in **17** countries (from Africa, Asia and Europe, academic and non-academic)
- Focus on **Kenya, Ethiopia, Mali, Ghana, Thailand, Senegal, and South Africa.**

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HABITABLE Consortitium





WP10: Communication and dissemination

WP11: Management and coordination





Key Objective 1:

Causality

Develop a predictive understanding of migration trends under climate change

Key Objective 2:

Adaptation

Propose adaptation solutions and strategies for populations affected by climate change

Key Objective 3:

Gender and social equity

Mainstream the gendered and social equity dimensions of the climate-migration nexus

Key Objective 4:

Policy

Develop guidelines & recommendations to allow policies to better address the migration patterns associated with climate change

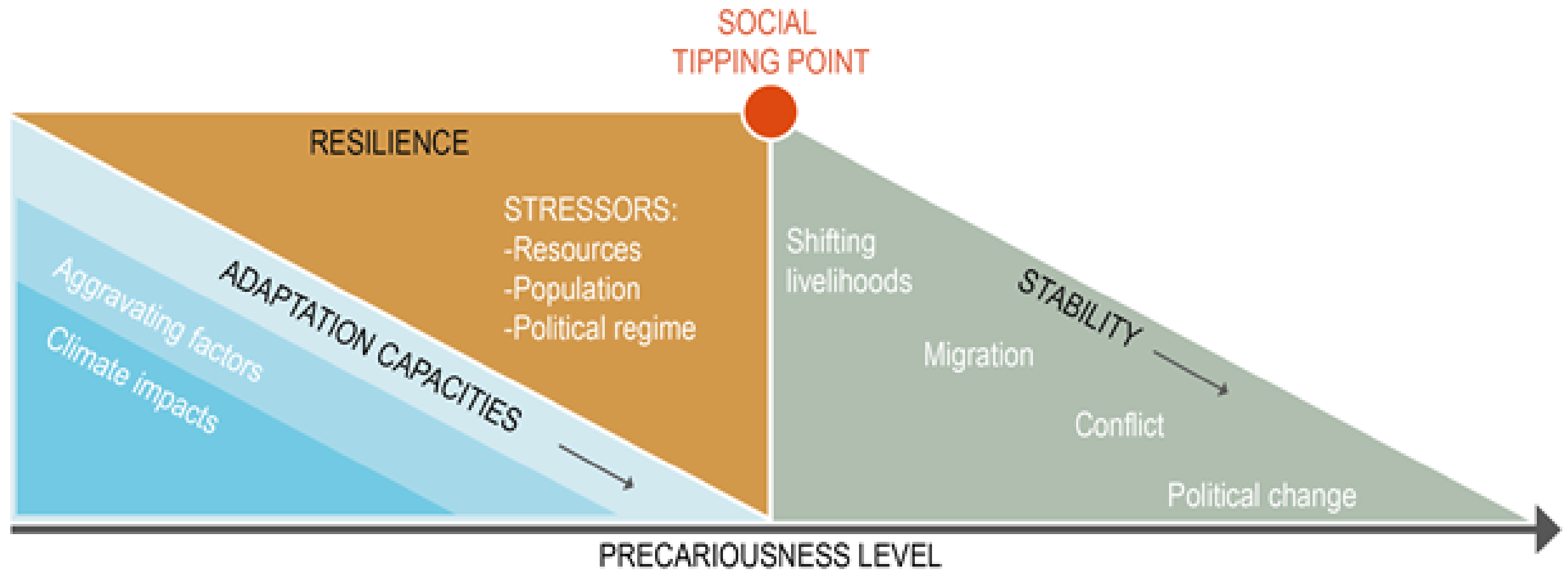
Key project research objectives

- Examine how incremental changes in (perceived) **climate impacts** may account for nonlinear effects on **migration patterns**.
 - Concept of social dimensions of habitability
 - Focus on perceptions and the micro and meso levels rather than on big numbers
- Explore how **adaptive capacities and strategies** may act as a **moderator** of this effect.
- Analyse **gendered and social equity** dimensions in context throughout the programme.
- Assess **effective policy responses** and areas for development.





The concept of critical thresholds



Source: Courtesy of Isabelle Schwengler

Erosion of livelihoods over time & outmigration



Cumulative effect of shocks on migration

- ↑ 0.81 percent with each additional environmental shock in past 12m (t)
- ↑ Weaker effects in previous periods



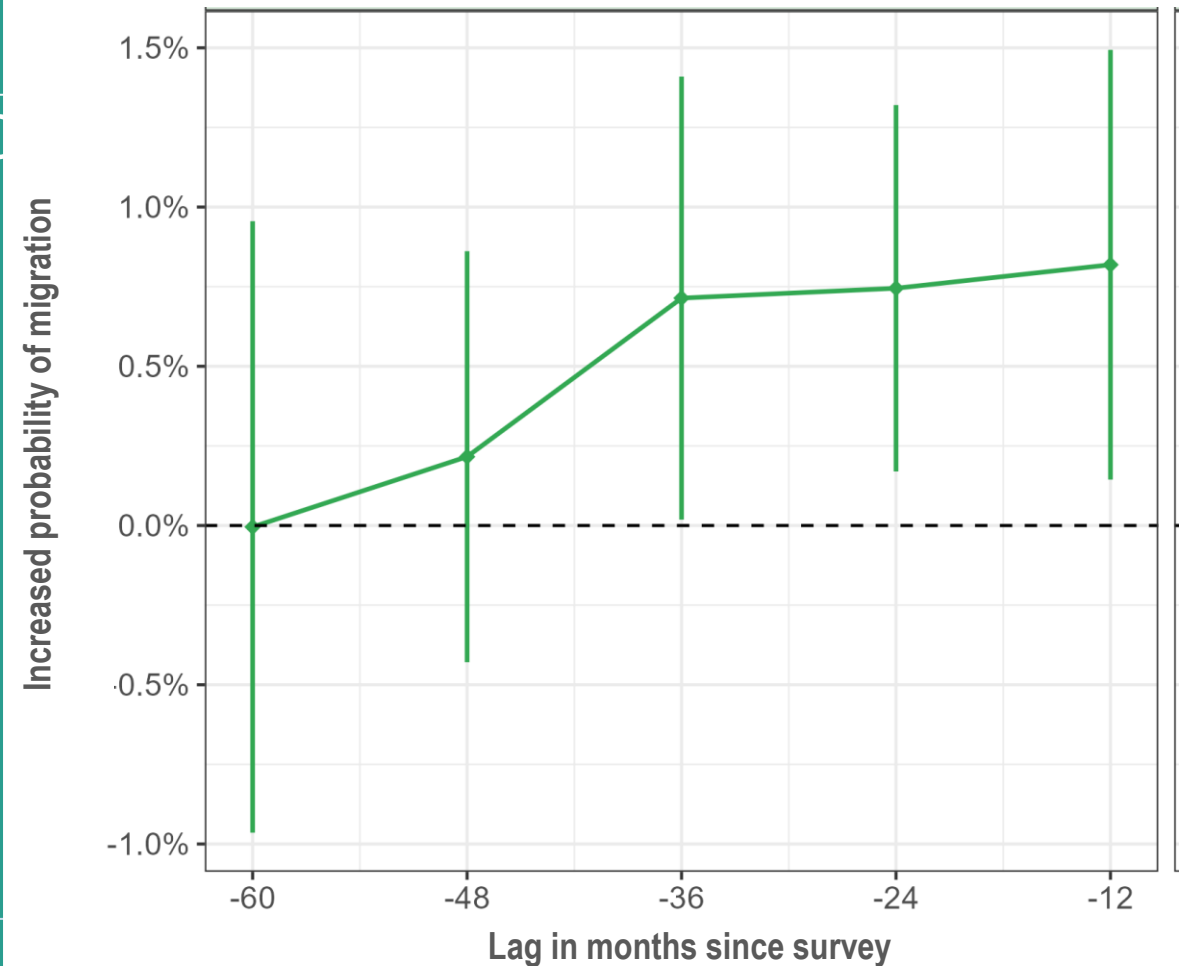
Inconsistent for non-environmental shocks



Individual shocks related to agriculture appear most important

Source: **Blocher, Hoffmann, Weisz (2024)** The Effects of Environmental and Non-Environmental Shocks on Livelihood and Migration in Tanzania. *Population & Environment* 46:7.

Fig. Marginal effects of each additional environmental shock (y-axis) on migration in time window considered (x-axis)



Methods

Large-scale household survey

- 2 waves in 5 countries, about 1,000 respondents per country

Fuzzy cognitive mapping

- An innovative participatory mapping method

Qualitative interviews & FGDs

- 516 OA & 136 DA semi-structured interviews processed, thematic FGDs

Modelling

- Building on existing models with greater regional and national specificity

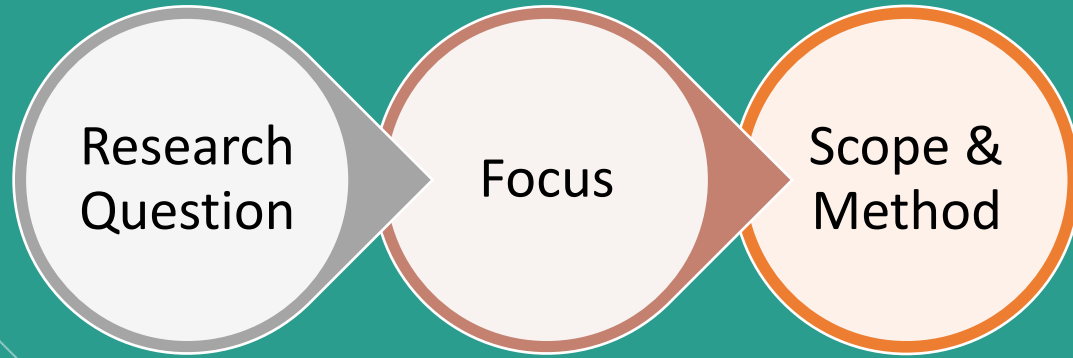
Scenarios

- Connecting evidence of current dynamics with future projections, co-created with stakeholders





Qualitative Approach to the Climate-Migration Nexus



Source: **Blocher et al. (2024)**
habitableproject.org/publication/handbook-for-qualitative-interviews-on-the-climate-migration-nexus/



Overview of Origin Area Interviews

Overview of the sample by country origin area								
Country	N. ITW	Gender		Age range	Average HH size	Dep. ratio	Ed. attainment	Migr. ratio
		M	F					
Ethiopia		TBC						
Ghana	144	86 (59%)	58 (41%)	35-39 (15%) 40-44 (13.19%) 45-49 (14%)	12.29 (range 2 to 39)	1.02	No ed. (32.5%) Middle school (39%) Higher ed. level (2%)	0.27 (range 1 to 20)
Kenya	105	53 (50.47%)	52 (49.52%)	35-59 (65%)	7.37 (range 2 to 21)	0.58	Comp. CPE (Standard 7 & 8) (40%)	0.46 (range 1 to 10)
Mali	130	117 (92.3%)	10 (7.7%)	40-64 (61.5%)	22.27 (range 1 to 144)	1.06	No ed. (28.5%) Inc. primary (45%) Comp. primary (26%)	0.15 (range 1 to 21)
Thailand	97	44 (45%)	53 (55%)	55-59 (19%) 45-49 (16%) 60-64 (15%)	3.62 (range 1 to 11)	0.36	No ed. (7%) Inc. primary (28%) Comp. primary (65%)	0.66 (range 1 to 5)
South Africa	34	11 (39%)	17 (61%)	35-39 (21.43%) 40-44 (14.29%) 55-59 (14.29%)	5.42 (range 2 to 12)	1.14	Comp. Grades 11 & 12 (28.5%) Higher ed. level (25%)	0.23 (range 1 to 4)





BACKGROUND BRIEF

SECURING HABITABILITY IN A CHANGING CLIMATE

THE PLACE OF HUMAN MOBILITY AMONG LOCAL ADAPTATION STRATEGIES IN VHEMBE
DISTRICT MUNICIPALITY, LIMPOPO PROVINCE, SOUTH AFRICA

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Julia Blocher ²
Sam Mc Culloch-Jones ³

Introduction

This background brief explores the impacts of climate change on livelihoods and human mobility in four communities within the Vhembe District Municipality, Limpopo Province, South Africa: Ha-Manyuwa, Lutomboni, Mukumbani, and Tshilapfene. After providing an overview of the climatic and socioeconomic challenges affecting South Africa, we present insights drawn from qualitative interviews with residents of these four agricultural communities, focusing on migration as one of the coping strategies employed locally. The challenges faced by these communities exhibit several common themes. This brief then examines South Africa's policies and legal frameworks acknowledging different dimensions of human mobility related to climate change, disasters, and environmental degradation. It evaluates the extent to

¹ Future Lab Social Metabolism and Impacts, Potsdam Institute for Climate Impact Research

Background Brief Outline

- **Contextualization** via desk research & interviews with 4 community leaders in Vhembe District);
- **Common challenges & themes** identified across the communities;
- Overview of South Africa's legal and policy frameworks relevant to climate-mobility nexus; and
 - Areas for further policy development.

Qualitative Insights from Vhembe District Municipality, Limpopo Province

Source: VDM, 2023.



Summary of Qualitative Interviews in South Africa

Community Name	Site Type	Total verified interviews*
Ha-Manyuwa	Origin area	09
Lutomboni	Origin area	08
Mukumbani	Origin area	07
Tshilapfene	Origin area	06
TOTAL		30



Common Themes and Challenges Emerged Across Communities

Climatic impacts and agricultural vulnerability

Water scarcity

Poor infrastructure and limited development support

Land and resource scarcity

Housing conditions

Migration for employment

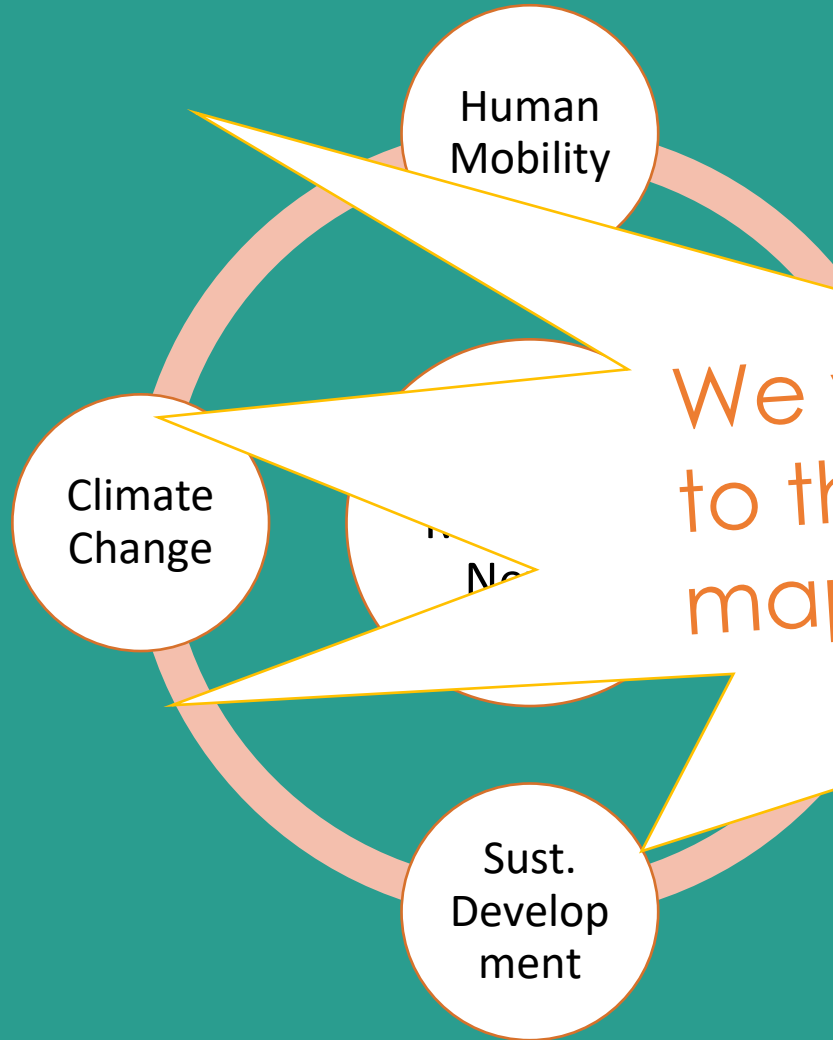


Next steps in the research

- Two-cycle qualitative content and thematic analysis
- Verification & triangulation continues

Code System	drought	rain*	flood*	fire*	harvest*	concepts of ...	livestock	government
concepts of home	•	●	●	●	•		●	•
harvest*	•	●		•		•	•	•
rain*	●		•	•	●	●	•	•
crop damage*	•	•	●	•		•		
flood*	●	•		●		●	•	
fire*	●	•	•		•	•	•	•
government	•	•		•	•	●	•	
support	•		•	•		●		•
livestock	•	•	•	•	•	●		•
drought		•	•	●	•	•	•	•

Policy Implications



We welcome contributions to this legal & policy mapping and assessment

Policies and legislation addressing human mobility in the context of climate change, disasters, and environmental degradation in South Africa

Human Mobility Governance	
Name of policy or legislation	Ref. No. / Yr. of Pub.
Migration Act	No. B8 of 2024
(d) Refugee Act	No. 23 of 2022
Department of Home Affairs (DHA) Immigration Act	No. 43.536 of 2020
International Migration	2017
(i) Immigration Act	No. 13 of 2002
	No. 88 of 1995
Disaster Risk Reduction (DRR) Governance	
	No. 22 of 2024
	2021
	2020
	2018
	No. 46.824 of 2017
	2016
	2014
	2011
	2011
Sustainable Development Governance	
South Africa's National Policy Framework for Women's Empowerment and Gender Equality	2017
National Development Plan 2030	2012

Areas for further policy development

Policies and legal tools can help **maximize adaptive potential** of migration and **ensure migration is a choice**.

- Develop comprehensive migration policy including climate lens, for e.g., facilitating regular migration pathways and humanitarian visas;
- Reduce barriers & costs to internal migration and remittances;
- Further develop climate-smart agricultural policies, integrated water resource management strategies, alternative livelihoods, and portable safety nets;
- Prioritize rural infrastructure and development, as well as promote land tenure management.





Stakeholder engagement

Local policy dialogues with a wide range of stakeholders

In-country exhibition of research results

Seeks to correct different biases in the perception of climate-induced migration

Generated data to be made available to all, for free.

FOR SOUTH AFRICA this could mean: helping to inform strategic plans and policies and deliver as one around one common agenda



Thank you!

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