



Processes of Change: Climate Variability and Agro-pastoralists' Livelihood Strategies in Gaza Province, Mozambique

Claudia Levy¹, Siboniso Moyo², Christian Hülsebusch¹, Edward Webster³, Brigitte Kaufmann¹

Introduction

Overall, the research inquires about agro-pastoralists' local strategies to cope with a changing climate. This first phase concentrates on the household level. It aims to comprehend local life-worlds of peasant groups in Mozambique's semi-arid. Hence, the following issues are looked at:

1. Organization of livelihood activities;
2. Role of pluriactivity concerning livelihood and long-term food security; and
3. Constraints and options resulting from the latter.



Material and Methods

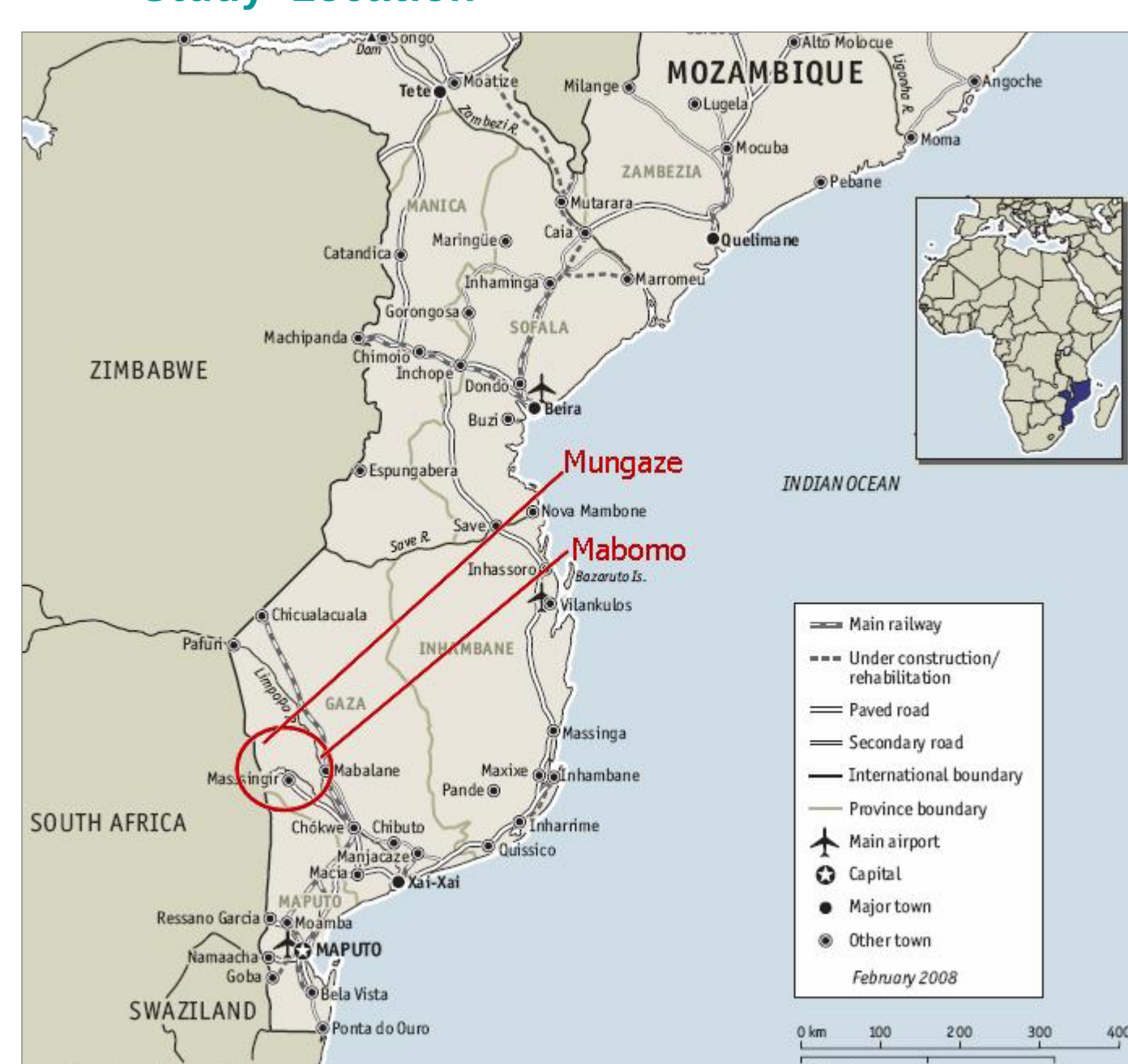
6-week in-depth field research with smallholders in 2 villages. (different contexts of market and resources' availability)
Mixed & low-input systems.

Collaborative assesment and reflection through tools of applied anthropology:

- Group discussions with Associations of 20 farmers: 07
 - Participant Observation
 - Narratives: 08
 - In-depth interviews: 10
- 23 hours of digitally sound recordings were transcribed, categorized; Daily field diary was kept.



Study Location



¹ German Institute for Tropical and Subtropical Agriculture (DITSL), Germany

² International Livestock Research Institute (ILRI), Mozambique

³ University of the Witwatersrand, Society, Work and Development Institute, South Africa



Preliminary Results

Some of Agro-pastoralists' strategies to cope with the challenges posed by climatic conditions are: **c**ultivation of multiple plots in the low and upper lands, exploiting microclimates; **d**omestication of wild plants to complement diet; **p**reference to short-cycle crops, minimizing risks and taking advantage of soil humidity; **m**arketing of small livestock. In addition, off-farm activities complement the household necessities: **m**igration to South Africa, **w**ork-for-food programe; **h**unt; **p**roduction of charcoal and **e**xtraction of wood. The two latter are growing in intensity.



Production of charcoal and extraction of wood are some of the alternatives sought. Game complements the diet

Preliminary Conclusions

The exploitation of wood is expanding as an alternative to assure food security. This trend demands the reflection on the use of resources as a common property, and on its sustainability.

The analysis of aspects of a socially based spatiality reveals the influence of values, memories, routines, networks and strategies of local realities afflicted by the challenges of a changing climate. In this framework, the role of social learning and empowerment is to be observed on the next phase of the research process.



Claudia.levy@gmail.com

This research integrates the Project in the BMZ funded research program "Adaptation of African Agriculture for Climate Change": Supporting the vulnerable: Increasing the adaptive capacity of agro-pastoralists to climatic change in West and Southern Africa using a transdisciplinary research approach. It is a partnership between DITSL - German Institute for Tropical and Subtropical Agriculture at the University of Kassel in Wittenhausen and:





Charcoal production & dry meat from hunt



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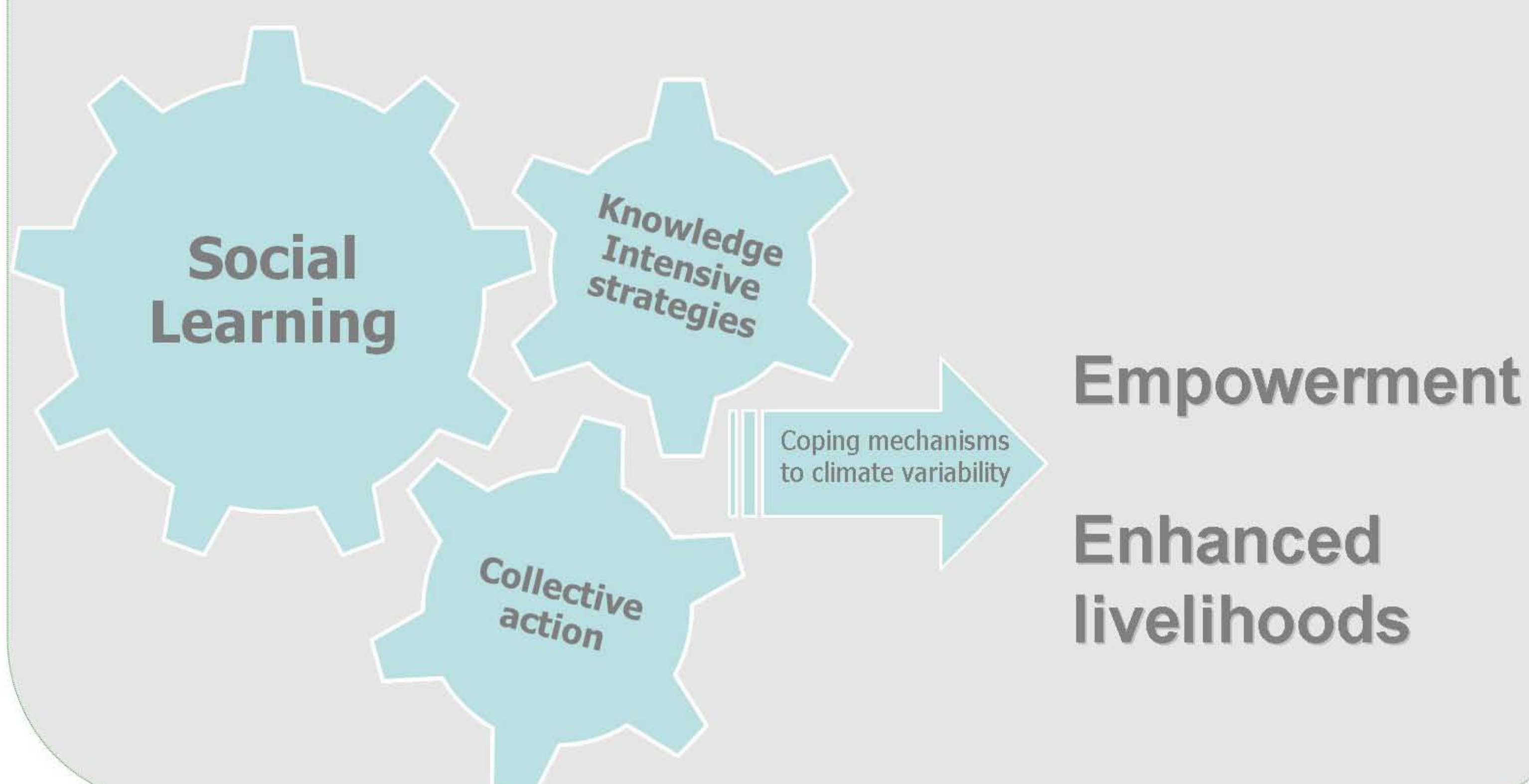
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Introduction

Smallholders agro-pastoralists' production systems in drylands.
Low external input systems.



Material and Methods

Tools from PLAR - Participatory Learning and Action Research

Facilitation of two farmer groups of 20 smallholders in 2 villages
(different contexts of market and availab. of resources).

Circular concept that puts the learner with his life experiences and self regulation at the center.



Study Location

Preliminary Results

Narratives

Changing climate: longer and more frequent drought periods; empty barns; sequence of crop failure since 2003;
Agricultural calendar: not applicable.
Crop when rain falls, sporadically.

Socio-spatial characterization

Peasant society
Subsistence farmers: ca 1 hec /hh
Mixed-system
Changana: Patrilineal and Patrilocal
Boys-pastoralists
Livestock: buffer; social security

Strategies

Cultivate variety of plots: low and upper lands --> exploit microclimates.
short-cycle crops: minimize risks and take advantage of soil humidity.
Migration to South Africa;
Production of charcoal;
Extraction of wood.

Farmers Groups – Action Plan

- Small dams in the pasture area;
- Raise goats
- Communal Animal Health Care

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Claudia.levy@ymail.com