

# Changing culture, changing climate: how is the adaptive capacity shaped by the intersections of gender and ethnicity in a semi-arid rural setting, Namibia?

Margaret N. Angula<sup>1&2</sup> Mark New<sup>1</sup> & Nitya Rao<sup>3</sup>

University of Cape Town<sup>1</sup>, University of Namibia<sup>2</sup>, University of East Anglia<sup>3</sup>

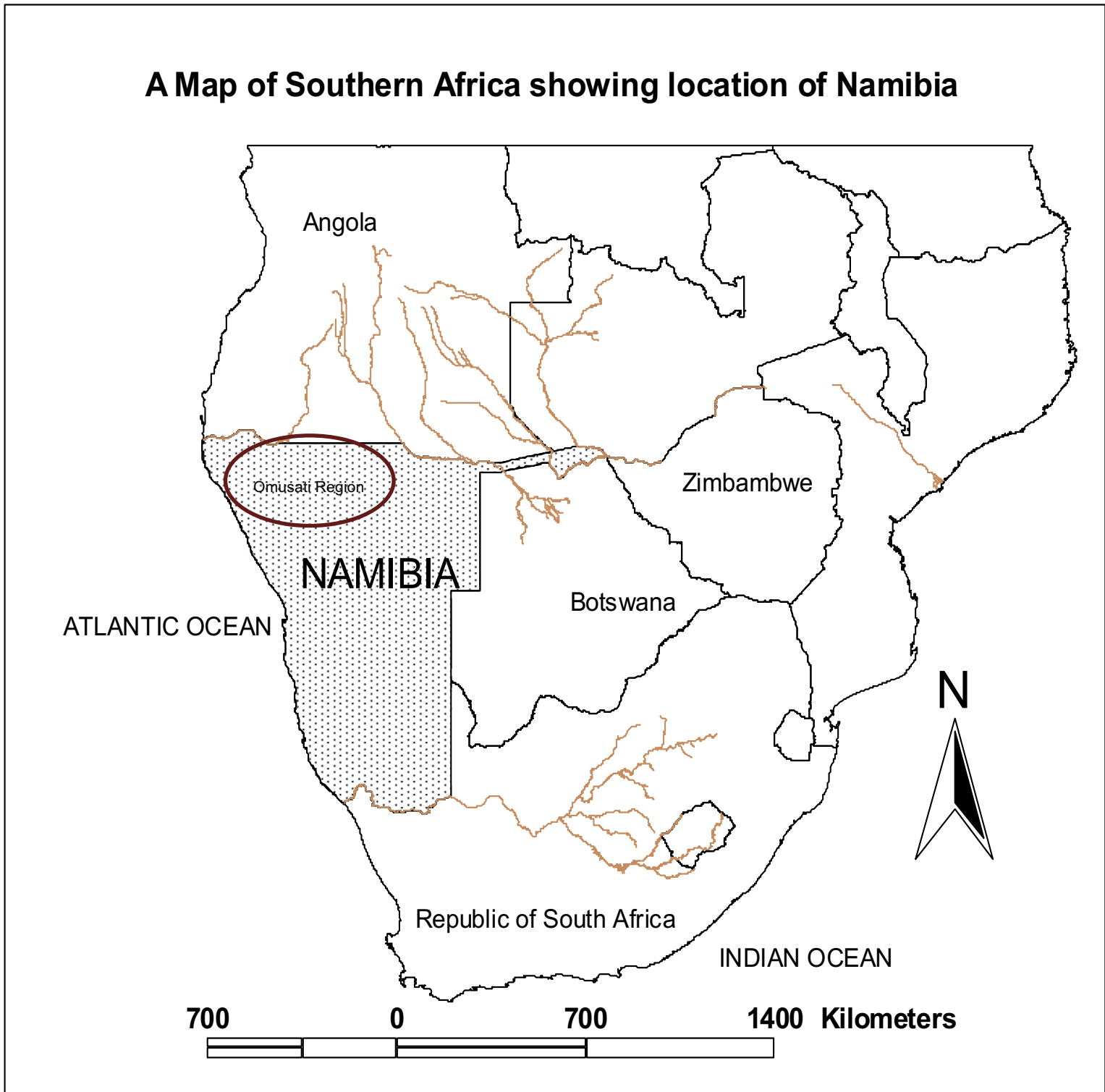
## INTRODUCTION

Gender research in the context of climate change have demonstrated that climate change vulnerability and capacity to respond to its impacts is socially differentiated. Research that goes beyond gender as a binary view that look at men and women as independent categories (Carr and Thompson, 2014) has recently emerged to highlight the heterogeneity in societies and factors that motivate them (Van Aelst & Holvoet, 2016) . This study has combined the vulnerability, gender and intersectionality frameworks to analyse intersections of gender and ethnicity, age and marital status highlighting who is more sensitive to impacts of climate change and who has adaptive capacity to respond to impacts of climate change (drought, water scarcity and high temperatures). The case study was carried out in Onesi Constituency, Omusati Region, North-Central Namibia using qualitative research methodology. In-depth interviews, focus group discussions and semi-structured interviews were carried out with 78 farmers from the Kolonkadhi, Dhemba and Ndongona ethnic groups. This poster presentation is based on an adaptive capacity assessment study that looked at how gender, ethnicity and other socio-cultural and socio-economic factors shape households vulnerability to impacts of climate change.



## CHANGING CULTURE, CHANGING CLIMATE

- Rain is an important event in the life of a Kolonkadhi, Ndongona and Dhemba farmer. All ethnic groups have observed changes in rainfall and temperatures.
- The duration of rainfall has become shorter and temperature has increased. These impacts both crops and livestock production and output.
- Ethnic identity, norms and gender roles are closely linked to rain-fed agriculture. Mahangu crop field is the main and important asset complemented by livestock farming and cash income.
- A Ndongona and Kolonkadhi woman is a “crop field”, she is a custodian of the most valuable asset “crop field and its produce” yet control and decision-making power over its use differs among the three ethnic groups.
- A man is a livestock farmer, for all ethnic groups “a man without cattle is not a man”.
- The value of a Dhemba man is seen in his love for cattle.
- Gender productive and reproductive roles are cultural but differs from household to household depending on the level of patriarchy exercised by the head of household.
- The stronger the influence of post-independent gender laws and adoption of education in an ethnic group, the more egalitarian and relatively equal bargaining power for women in a conjugal family. This is strongest among Kolonkadhi and lowest among Dhemba ethnic groups.



Area in sq.km	601.9 km <sup>2</sup>	
Population sizes	Total	13, 149
	Female	7, 170
	Male	5, 979
	Annual growth rate	0.1%
Population density	People per sq.km	
	21.8%	
Households	Number of Households	
	2,527	
	Average size	5.2
Head of households	Female	55%
	Male	45%
Employment	Employed	58%
	Unemployed	42%

## IS GENDER AND ETHNICITY SHAPING ADAPTIVE CAPACITY?

### FARMING SKILLS:

- Seed management and cultivation skills are important owing to the long history of crop farming in a semi-arid environment.
- Kolonkadhi and Ndongona women are more successful in managing their seeds and have adapted the planting system to the changing climate.
- Seed is managed to reduce crop failure and to secure reserve for the subsequent rain season. This drought preparedness strategy is weaker among the Dhemba.
- Seasonal migration to cattle posts is common among men from all ethnic groups. Dhemba and Ndongona are more successful in livestock farming.
- Until recently, livestock farming is seen more important than employment among Dhemba and Ndongona.

### ACCESS TO ASSETS AND FINANCES:

- Access to agricultural input, information and finances are crucial for food security and sustained livelihood outcomes.
- The capacity to respond and access to resources is ethnically differentiated due to Socio-economic factors also bring out ethnic differences, for instance, the Dhemba who are also marginalised due to education and poverty tend to face more challenges during drought.
- Co-ownership of a crop field and farm equipment is common in a Kolonkadhi male headed household, whereas among Ndongona and Dhemba this is a transitional phase prompted by post-independent laws.
- There a few Ndongona and Dhemba households whereby couple own separate plots for mahangu cultivation.

### DECISION-MAKING AGENCY:

- Men and women are making decisions in all ethnic groups, it is the bargaining power and contestation for adaptation options that differs.
- Rain and crop field require a woman to act autonomously in order to access agricultural input, finances for hiring tractor and labour in order to plant on time.
- Female head of household have autonomous decision-making advantage as compared to female in a marital household although managing a household as a single woman is a challenge.
- The mobility of men and women differs with Dhemba women most likely to have the lowest agency due to patriarchy as well as limited access to information regarding opportunities to attend meetings and training that would empower them.

## SOCIAL RELATIONS

### Inter-household relations (neighbours and friends)

- The Ndongona group has ethnic social relations that are stronger compared to the Dhemba and Kolonkadhi.
- The Dhemba ethnic group display weaker social cohesion, stronger dependency on neighbours and in some cases engage in reciprocal social relations where they work in exchange for food.
- The Kolonkadhi have social relations with neighbours which is based on what the helper and receiver is able to offer to this relationship. Well-endowed households and neighbours have stronger relations.
- There are variations in the nature of social relations among the three ethnic groups and this clearly demonstrate different levels of vulnerabilities and marginalisation among the three ethnic groups.

### Intra-household relations (gender relations)

- Gender relations operate within cultural norms to ensure that men and women understand their cultural assigned roles. These roles are not fixed but are negotiated between husband and wife at household level.
- Gender relations characterized by overdependence on the woman for food consumption needs and overdependence on the husband for financial needs of the household are common in households that align strongly to cultural norms and practices.

In a changing climate environment, timing is very important, the capacity to cultivate timely is affected by all these factors presented above. These capacities are differentiated by gender, age and ethnicity.

## CONCLUSIONS

- Comparatively higher levels of marginalisation and patriarchy in a given ethnic group tend to be associated with low levels of adaptive capacity.
- Differences in patriarchy influence decision-making agency, control over resources and gender equality.
- These levels are further differentiated by gender, household composition and age of household head.
- Overall findings suggest that an intersectional approach highlights how gender, ethnic norms and cultural values mediates differential adaptive capacity.
- Such an understanding is crucial for strengthening farmers' adaptive capacity in rural settings.



[www.assar.uct.ac.za](http://www.assar.uct.ac.za)

This work was carried out under the Adaptation at Scale in Semi-Arid Regions project (ASSAR). ASSAR is one of five research programmes funded under the Collaborative Adaptation Research Initiative in Africa and Asia (CARIAA), with financial support from the UK Government's Department for International Development (DfID) and the International Development Research Centre (IDRC), Canada. The views expressed in this work are those of the creators and do not necessarily represent those of DfID and IDRC or its Board of Governors.