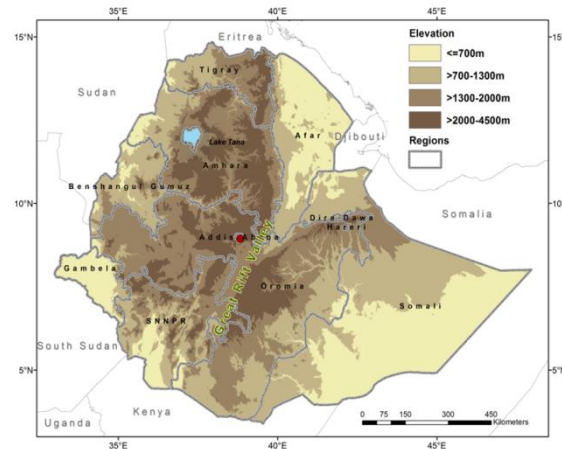


# ENVIRONMENT-RELATED MIGRATION WITHIN FARMING HOUSEHOLDS IN THE ETHIOPIAN HIGHLANDS

## A QUALITATIVE COMPARATIVE ANALYSIS



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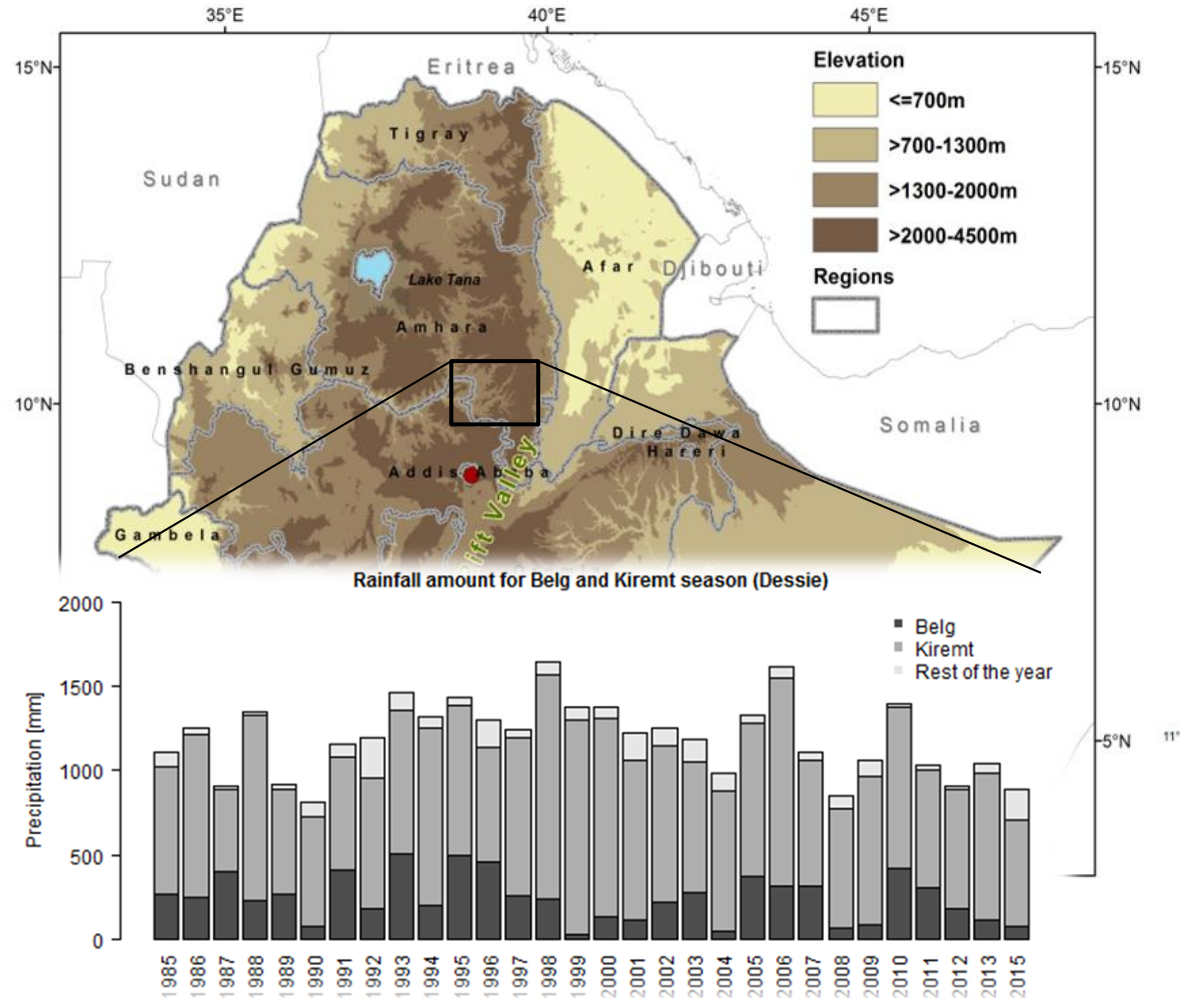
Environmental Non-Migration: Frameworks, Methods and Cases  
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# SOCIO-ECOLOGICAL PRESSURE IN THE ETHIOPIAN HIGHLANDS

- Rainfall: -20%, increasing variability
- Droughts
- Land degradation
- Food insecurity
- Land scarcity
- Rapid population growth and migration



# RESEARCH OBJECTIVES

## What are the circumstances under which households engage in migration?

- What is the influence of agro-ecological and socio-economic features?
- How are non-environmental and environmental factors interlinked?

→ receive an **in-depth understanding** by applying a qualitative case study design

→ **considering context** factors by using a multi-site approach

→ detect patterns in and interlinkages between intertwined influence factors of migration

→ employ a **formalized and systematic** analysis



# RESEARCH DESIGN

## Multi-site approach

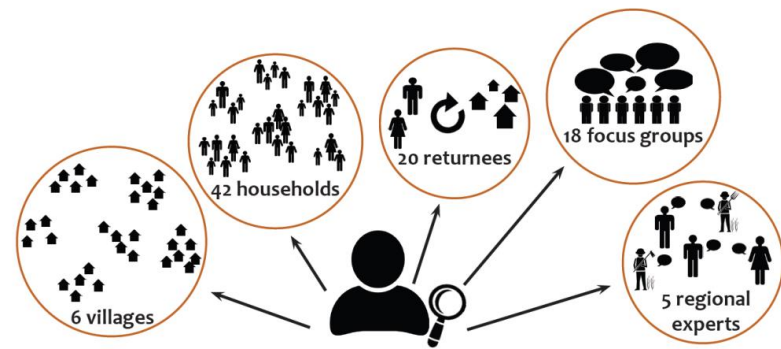
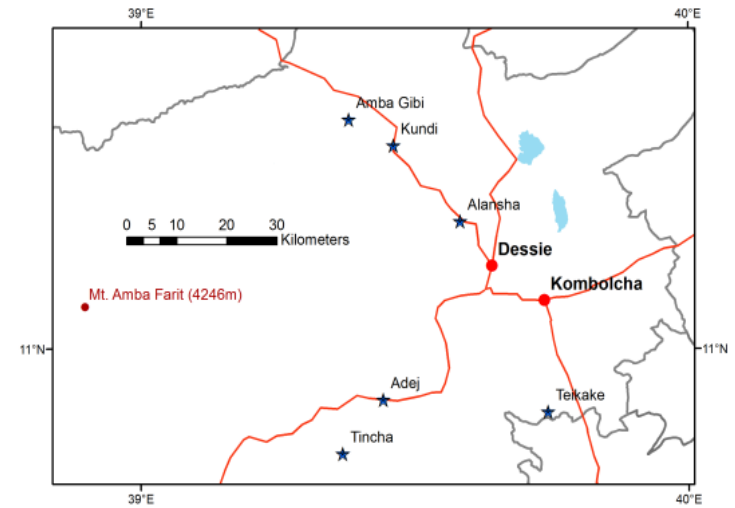
**6 villages** located in three different agro-ecological zones, differ in road connections and market availabilities

## Multilevel qualitative data

- Interviews with regional experts (n=5)
- Focus Groups within villages (n=18)
- **Household interviews (n=42)**
- Interviews with returnees (n=20)

## Data Analysis (QCA)

- Qualitative Comparative Analysis
- Identify patterns, factor interlinkages, formalized tool



# WHAT IS QCA?

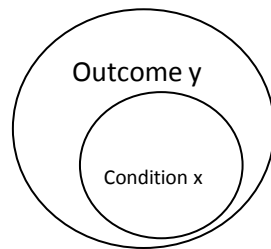
QCA is a **case-based, comparative, set-theoretic** research approach to detect causal relationships

It aims to “gather in-depth insight in the different cases and capturing the complexity of the cases” and to “produce some level of generalization”

(Rihoux and Lobe, 2009)

## ■ Set-theory

- **Sufficiency**, necessity and INUS



## Terminology

- **Condition** ~ Independent variable
- **Outcome** ~ Dependent variable

Gaining theoretical and case knowledge

Case construction

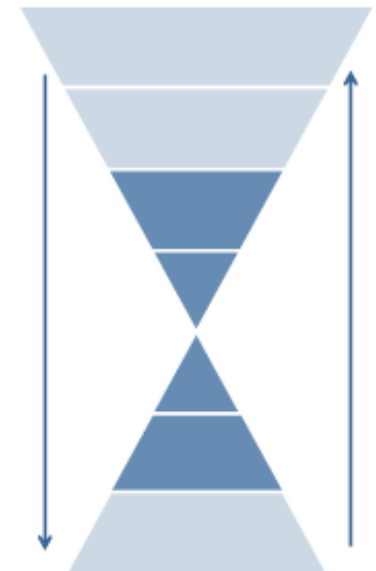
Raw data matrix

Truth table

Patterns

Interpretation

Return to the cases/theory

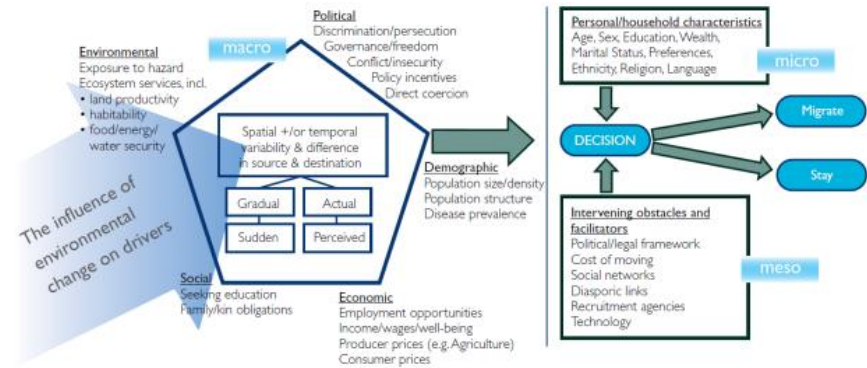


→ an iterative process!

# QCA AND ENVIRONMENT-RELATED MIGRATION

## The nature of ERM...

- **Complex causalities**



Foresight 2011

## The nature of (set-theoretic) QCA...

- **Configurational** (Logical AND)

Combinations of conditions produce an outcome

-> *Multiple, intertwined direct and indirect influence factors of migration*



- **Equifinality** (Logical OR)

Different conditions can produce the same outcome

-> *Multiple (and equally valid) pathways can explain migration outcome*

# QCA – STEPS

## 1. Define an outcome and conditions

**Outcome:** migrating family member in past 5 yrs, > 1month

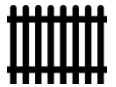


### Conditions:

■ Household engaged activity beyond cropping and livestock keeping (*additactive*)



■ Perceived land size is too small for fulfilling the households food needs (*landscar*)



■ Households exclusively using belg rainfalls (*belgonly*)



■ Village has own market or asphalt road (*marketroad*)



■ Migration experience within household (*migratexper*)



# QCA – STEPS

## 2. Calibration: translation of empirical information into numerical formats

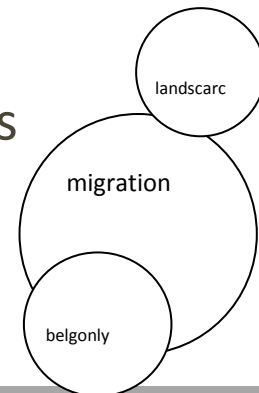


Cases	Conditions				Outcome
Household	additactive	migratexper	landscar	...	migration
1	0	1	1	...	1
2	1	0	0		0
3	1	1	1		1
4	...	...	...	...	...
...					

here: crisp-set QCA -> binary format -> the absence (0) and presence (1) of conditions within cases (households)

## 3. Detecting patterns using logical minimization process

-> Identification if (the combination of) conditions are necessary and/or sufficient for migration





# QCA – KEY FINDINGS SOUTH WOLLO

## Sufficient condition combination

<b>Solution term</b>	<b>migratexper * (~belgonly + additive) → migration</b>	
<b>Solution coverage</b>	85 % (17 out of 20)	
<b>Causal pathways</b>	migratexper * ~belgonly	migratexper * additive

\* = AND

+ = OR

~ = absence of

→ = sufficient for

Migrating households (positive cases) : n = 20

Non-migrating households (negative cases) : n = 22

... households with migration experience and which have kiremt season choose to migrate



AND



... households with migration experience and activities outside agriculture choose to migrate

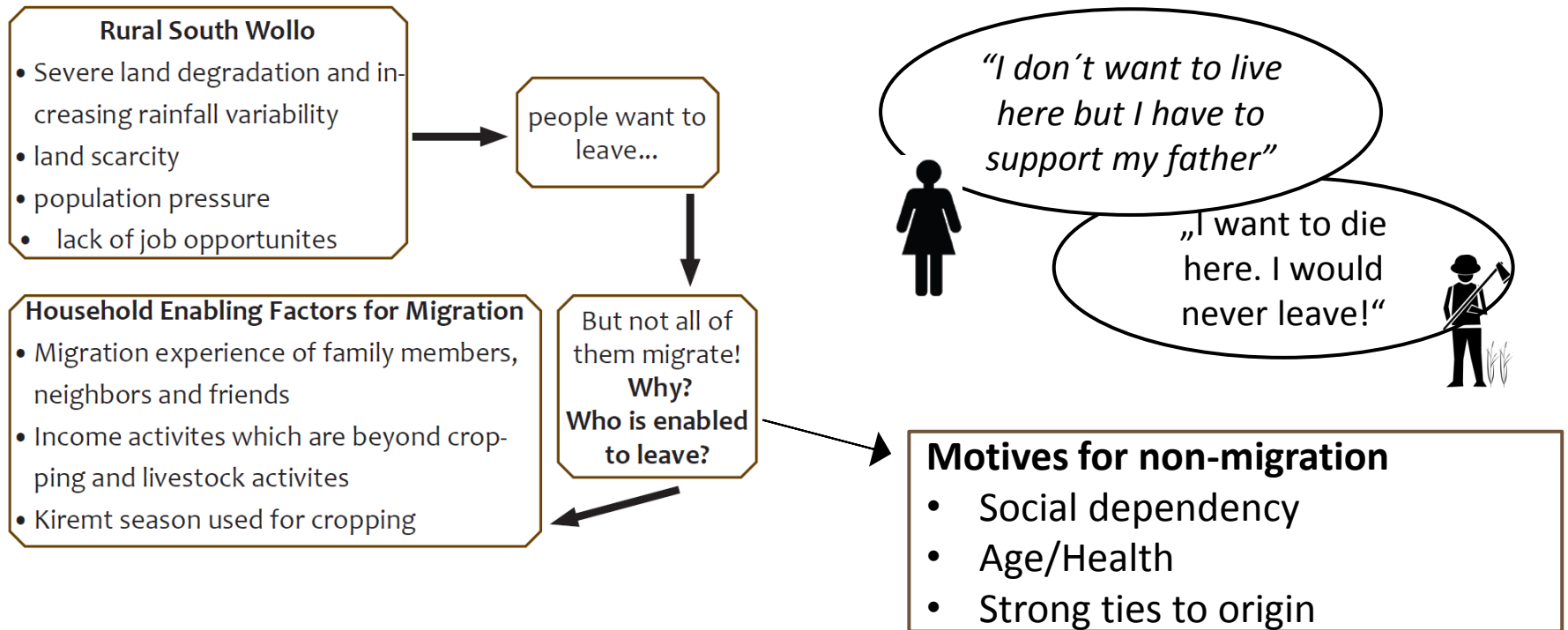


AND



**... social networks and diversification options for livelihoods are crucial for the ability of people to migrate**

# CONCLUDING REMARKS

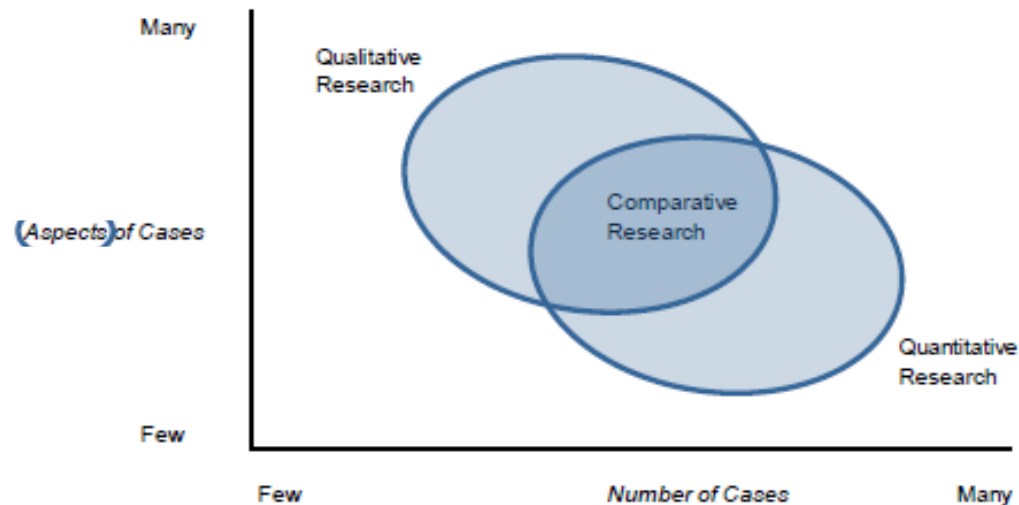


## Possible future QCAs

- **Non-migration:** to detect patterns explaining explicitly the non-migrating cases
- **Type of migration:** Understand migration distances and duration by applying fuzzySet-QCAs
- ...

# CONCLUDING REMARKS – QCA

- Combines **advantages of qualitative and quantitative analysis**
  - **Replicable** and **generalizable** but still case-based
- Ideal for **small-to-intermediate-N** research designs
- Provides powerful tool for dealing with **causal complexity** in the context of ERM



modified after Verweij S., 2015

THANKS A LOT FOR YOUR ATTENTION 😊



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