

# Farmers' attitudes regarding climate change: How risk awareness and perception effects adaptive capacity?

## MOTIVATION

- Farmers are not 'blank slates', they socially construct risk
- Social-learning is fundamental for behavioral transformation

*Farmers provide first-hand observations on climate change*

## AIM AND METHODS

*a triple-loop overview*

WoS & Scopus

2010-2020

RQ1: What is the current publication trend?

RQ2: What is the farmers' intellectual structure?

Bibliometrics

435 publications

*Bibliometrix R-package  
VOSviewer (1.6.17)*



Systematic review

108 publications

*Exploratory protocol  
Clusters*



- Awareness
- Impacts
- Adaptation

## RESULTS

- 1,428 authors / 669 institutions / 65 countries
- 174 journals: climatic sciences, sustainable development & natural resources management
- **Growing interest:** 85% of papers in 2015–2020
- A ratio of 1 to 9 in favor of Global South studies

### RISK AWARENESS

- Farmers **agree** about climate is changing
- Most highlighted that it is **caused by human activity**

### RISK PERCEPTION

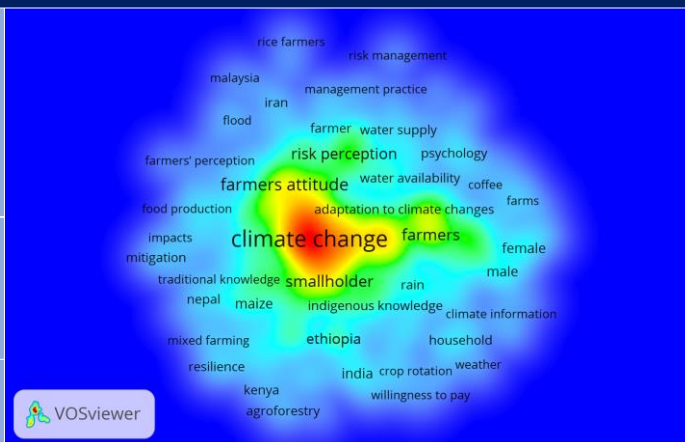
Studies reported **13 significant impacts, top-3:**

- Rising and **extreme temperatures**
- Changes in **rainfall pattern**
- Increase of **drought periods** and dry spells

### ADAPTATION MEASURES

Studies reported **11 main measures, top-3:**

- **Changing** cropping patterns
- **New** crop varieties
- Soil and water **conservation techniques**



## REMARKS

The triple-loop analysis is fundamental to increase farmers' resilience from an attitude change.

### Benefits:

- **focusing** the specific behaviors to be changed
- **examining** the driving factors motivating those behaviors
- **defining** and **applying** different interventions
- **evaluating** the effects of these interventions on the resulting behaviors