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## Abstract / Introduction

Personal **experience** and local knowledge **influence** irrigation managers and farmers' climate risk perception



Methods guiding **storytelling** are usually focused on conducting **stakeholders' interviews**, **but**

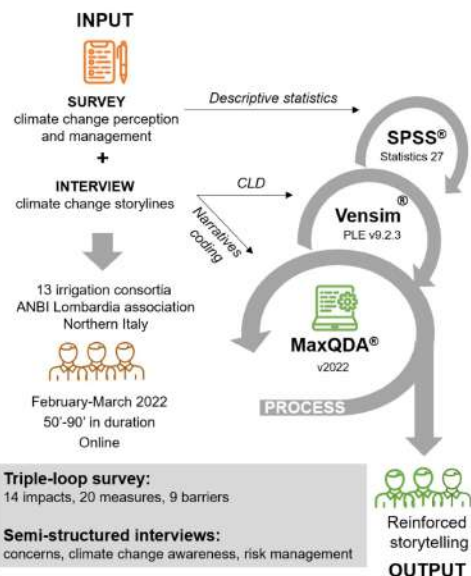


Can surveys be used to deepen physical and social aspects of climate change?

Can interviews and surveys be combined to improve climate change **storylines** and provide new **social scenarios** for **behaviour modelling**?

## Methods

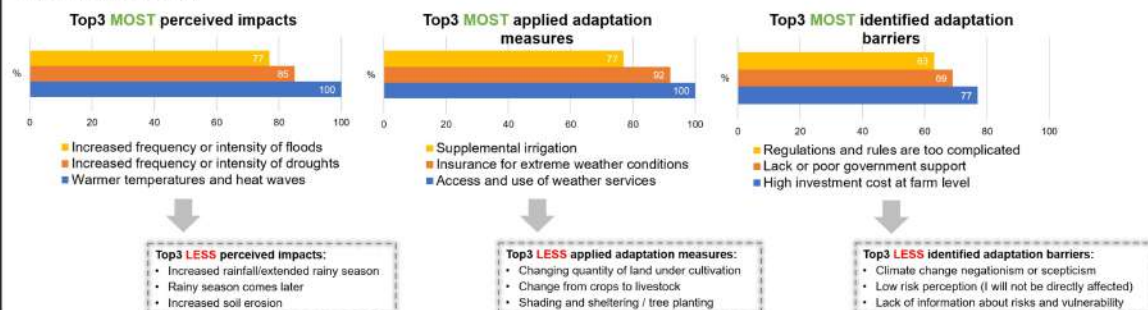
### A mixed-methodological approach



## A triple-loop survey to delve into physical climate storylines and address climate risk assessment: Learning from farmers' perception and behaviour in northern Italy

## Results

### Triple-loop survey



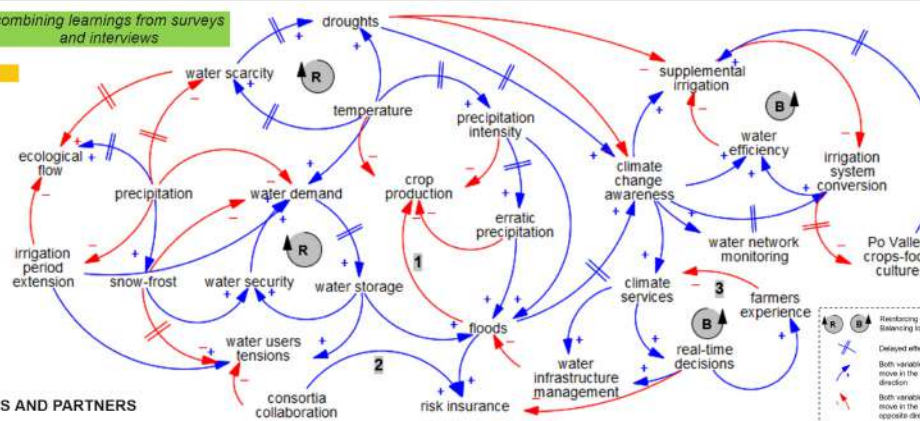
### Narratives



### Causal-loop diagram combining learnings from surveys and interviews

#### Storylines examples

- Farmers tend to remind instantaneous river floods due to their physical consequences on water infrastructure and crops production [Muzzza]
- Consortia are like farmers: they look at what their neighbours do and exchange learnings with those similar districts [Burana]
- Prediction takes much experience and sometimes luck [Oglio Mella]



#### SCENARIOS FORUM SPONSORS AND PARTNERS



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## Conclusion



- The triple-loop survey highlighted the most perceived impacts, adaptation measures and barriers in a structured form.
- Most of the impacts, measures and barriers have been endorsed in the farmers' narratives from semi-structured interviews.
- The combination of both tools in a CLD provided a snapshot of main driving-factors conditioning farmers' attitudes.
- Narratives and storylines increase social-learning, which is fundamental for behavioural transformation and (agent-based) modelling.

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## Keywords

Vulnerability  
Adaptation  
Methodology