

How far is climate change adaptation policy from practice?

Contrasting effectiveness and acceptance of local and regional strategies in irrigated agricultural systems, Northern Italy

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I N T R O D U C T I O N

Agriculture is highly **sensitive and exposed to climate change** impacts as the sector most affected **by water scarcity** (it accounts for 70% of global freshwater withdrawals and more than 90% consumption).

In terms of **adaptation**, **strategic principles** rather than **operational policies** have been established **to reduce climate change vulnerability**.

Adaptation strategies and actions should not be evaluated only from an **efficiency** perspective, and **acceptance** by stakeholders at different levels (i.e. water authorities, managers, farmers, citizens).

The aim of this contribution is **to check the status** and **to assess the effectiveness and acceptance** of main climate change **adaptation policies** affecting the agricultural sector in **Northern Italy**.

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<https://modfabe.deib.polimi.it/>

METHODS

Aim: To highlight how and at which level climate change adaptation policies and measures are both implemented and perceived in Lombardy (Northern Italy)

Method: Policy and public survey review

Sources:



Framework (Policy)

MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE

National Adaptation Strategy (**NAS**): *Strategia Nazionale di Adattamento ai Cambiamenti Climatici* (SNACC, 2015)

National Adaptation Plan (**NAP**): *Piano Nazionale di Adattamento ai Cambiamenti Climatici* (PNACC, 2018*)

Regional Action document for adaptation to climate change in Lombardy (**RAP**, 2016)

*First draft, to be approved in 2021



Public opinion (Perception)

Special Eurobarometer (survey):

490 Climate Change – April 2019
504 Europeans, Agriculture and the CAP – September 2020

The **NAS** does not provide information on financing; and available information does not distinguish between mitigation and adaptation funding.

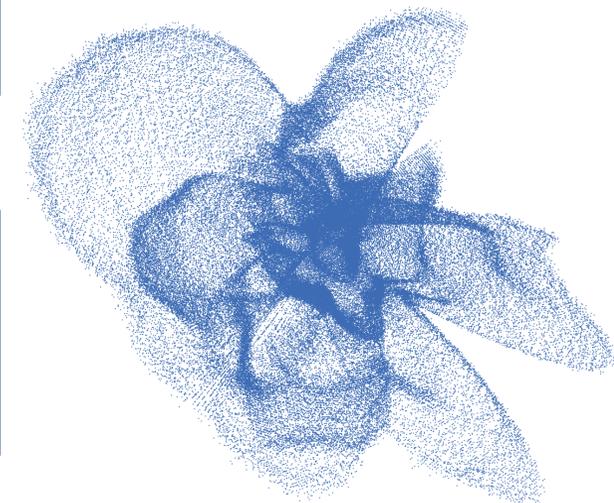
The **NAP** provides financial and human resources and considers possible sources of funding.

The **RAP** is a governance tool to define the priority areas of action.

Adaptation options were selected on the basis of: effectiveness, economic efficiency, side-effects, performance under uncertainties and conditions for decision making

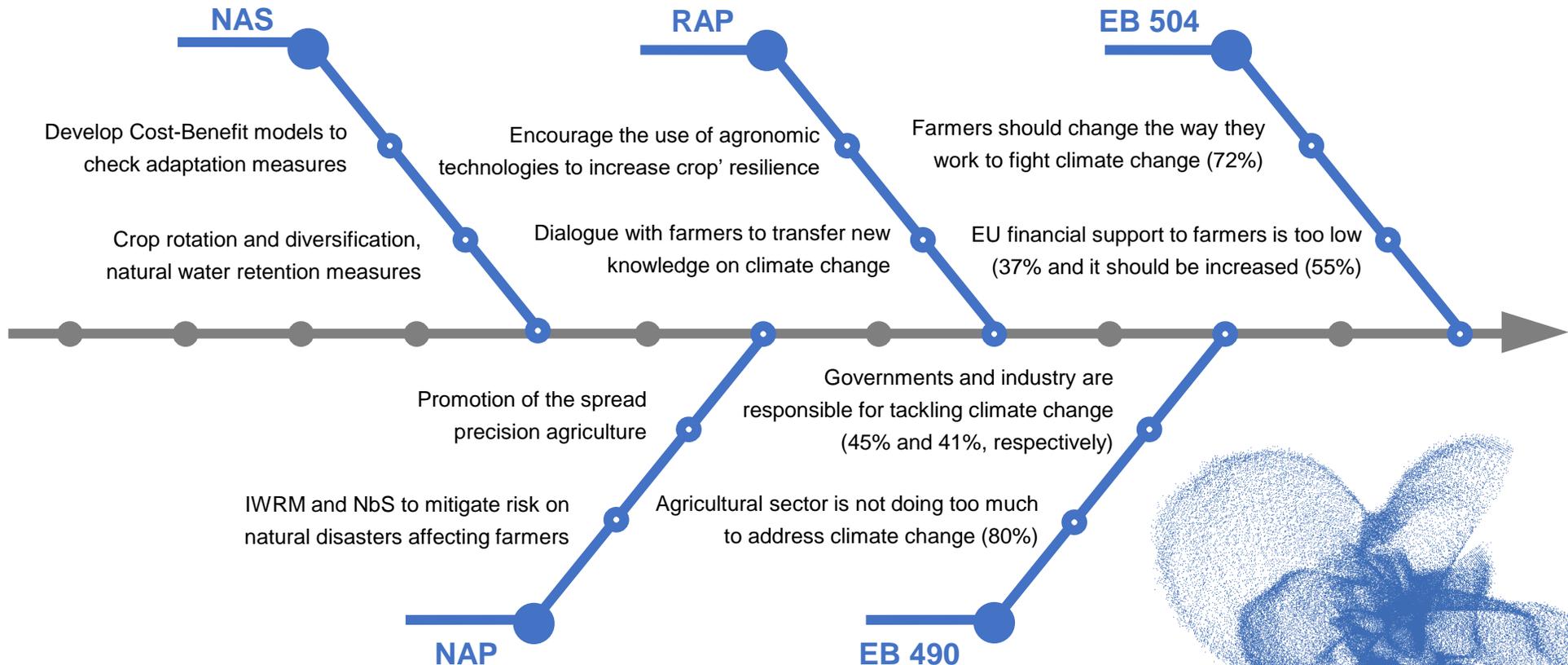
Special 490:
1.022 face-to face interviews
From 9th to 19th April 2019

Special 504:
1.021 face-to-face interviews
From 4th to 26th August 2020

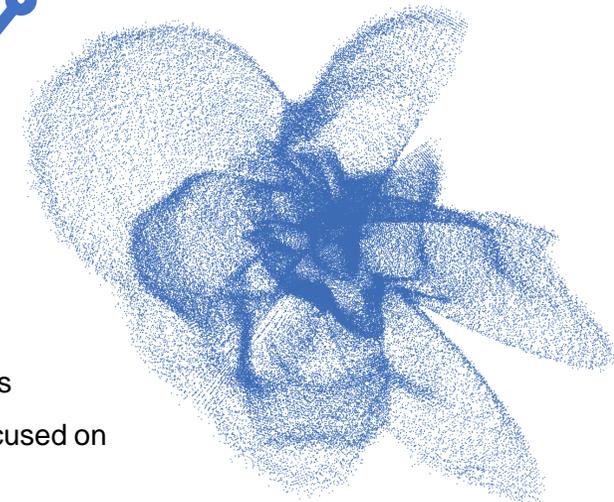


R E S U L T S

Climate change adaptation measures (NAS, NAP and RAP) and social perception (EBs)



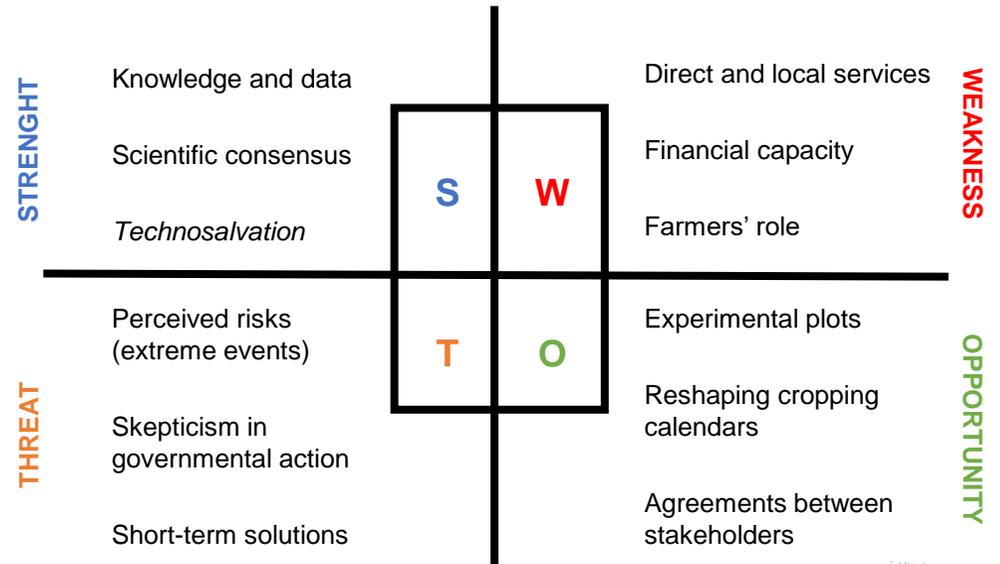
Climate change adaptive responses seem to be more **PROTECTIVE** (focused on prevention to address impacts, e.g. crop rotation and diversification, or promoting spread precision) than **OPPORTUNISTIC** (focused on reaction to identify benefits, e.g., expansion of the agriculture to new areas, or ensuring food security).



R E S U L T S

- A large majority of respondents (84%) **consider climate change to be a very serious problem**. Furthermore, 1 in 5 think it is the single most serious problem facing the world.
- 26% of respondents think that **the main responsibility of farmers** in the society should tackling climate change.
- 62% of respondents agree on **pay 10% more for agricultural products** that are produced in a way that limits their **carbon footprint**.
- 60% of respondents consider that agriculture has already made a **major contribution in fighting climate change**.
- 48% think that **agriculture** is also one of the **major causes of climate change**.

Contrasting policies and survey results



C O N C L U S I O N S

Policies (**NAS**, **NAP** and **RAP**) seem to be manifests rather than consolidated instruments to establishing policy actions.

RAP is the most proactive at the execution level by screening current policies and adaptation options, but it is not legally binding on a dedicated budget.

Policies do not include examples of **good practices or maladaptation**.

Citizens consider climate change to be a **very serious problem**.

The public opinion recognizes the role of **agriculture** as a **contributor and affected by climate change**, although adaptation responsibility is shared between economic sectors, governments, and citizens.

