

Regionals' strategies Po Valley - ITALY



Adriano Battilani
Consorzio Bonifica CER

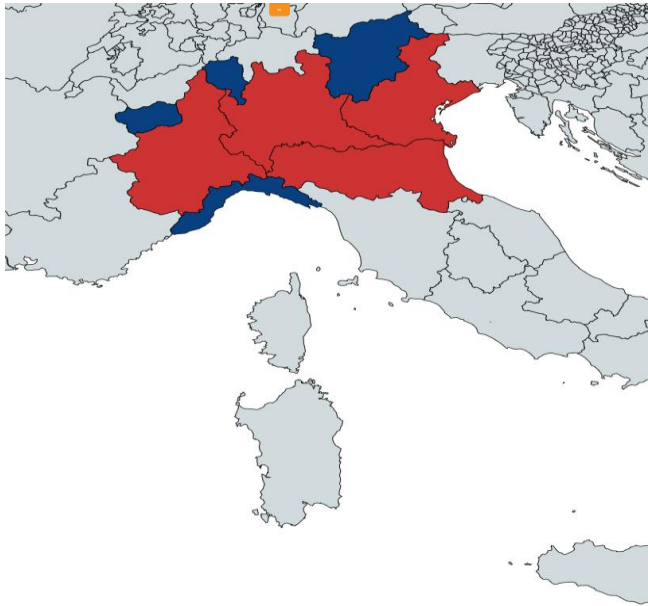


**PATHWAYS TO EXTEND SUSTAINABLE WATER REUSE PRACTICES IN
EUROPE**

International Conference - 18 May 2021

Network for effective knowledge transfer on safe and economic
wastewater reuse in agriculture in Europe - GA 818088

Socio-economic characterization of the region



UAA (Agri ha)	Irr. Area (ha)	Irr. Vol. (hm ³)	% of the IT total Irr. Areas	% of the IT total Irr. Vol.
2.770.059	1.154.172	7.099.879	47.7	64.0

POTENTIAL supply of reclaimed water	Plant Number	Volume (hm ³ /y)
WWT Plants [> 100.000 p.e.]	61	1240449
WWT Plants range [10.000 pe to 100.000 p.e.]	271	574268
WWT Plants range [2.000 pe to 10.000 p.e.]	561	17395
WWT Plants range [<2.000 pe]	2686	67545

The PO VALLEY is the largest and most important economic region in Italy.

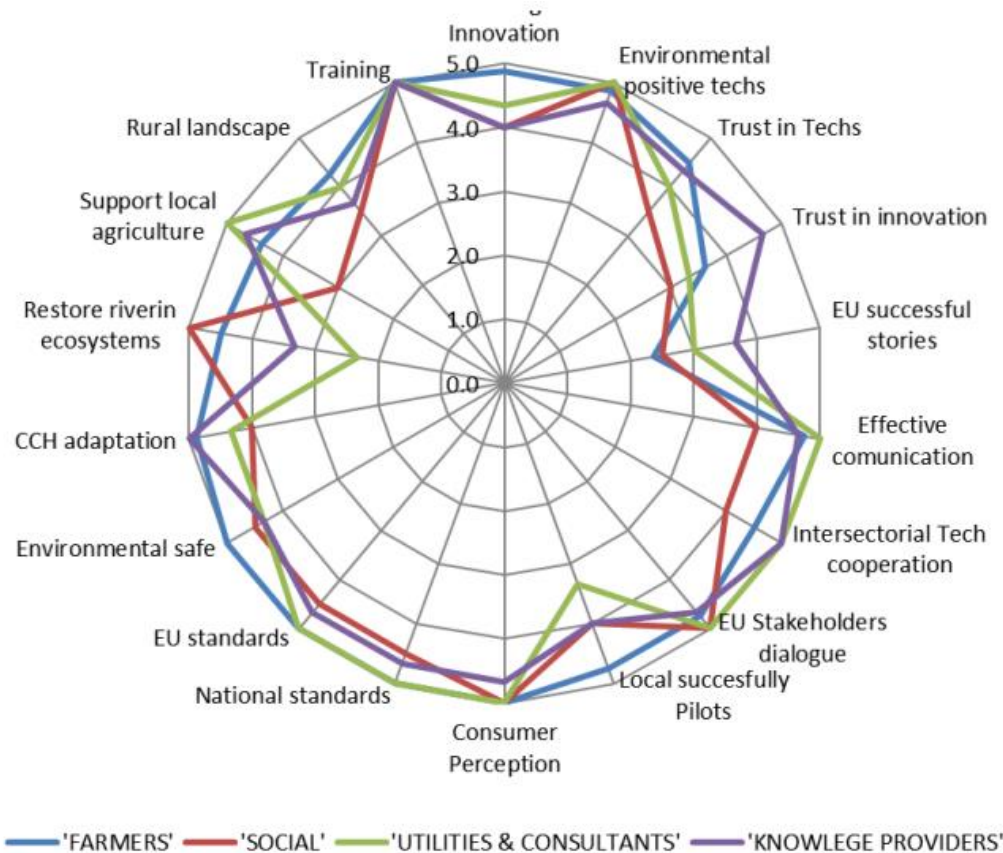
About 23 million people, a third of all Italian citizens, live in the Po Valley, the population density (355 inhab/km²) is almost double compared to the national average.

In the study area operate 710 WWTPs equipped with tertiary treatment technologies.

The Po valley has a GDP that reaches 738 billion euros (40 % IT GDP), exceeding nations such as the Netherlands, Sweden or Poland. Intensive farming, cattle and pig breeding are widely practiced in this area.

The Po river suffered serious environmental consequences through the poor water management, industrial and sewage pollution, and agricultural runoff.

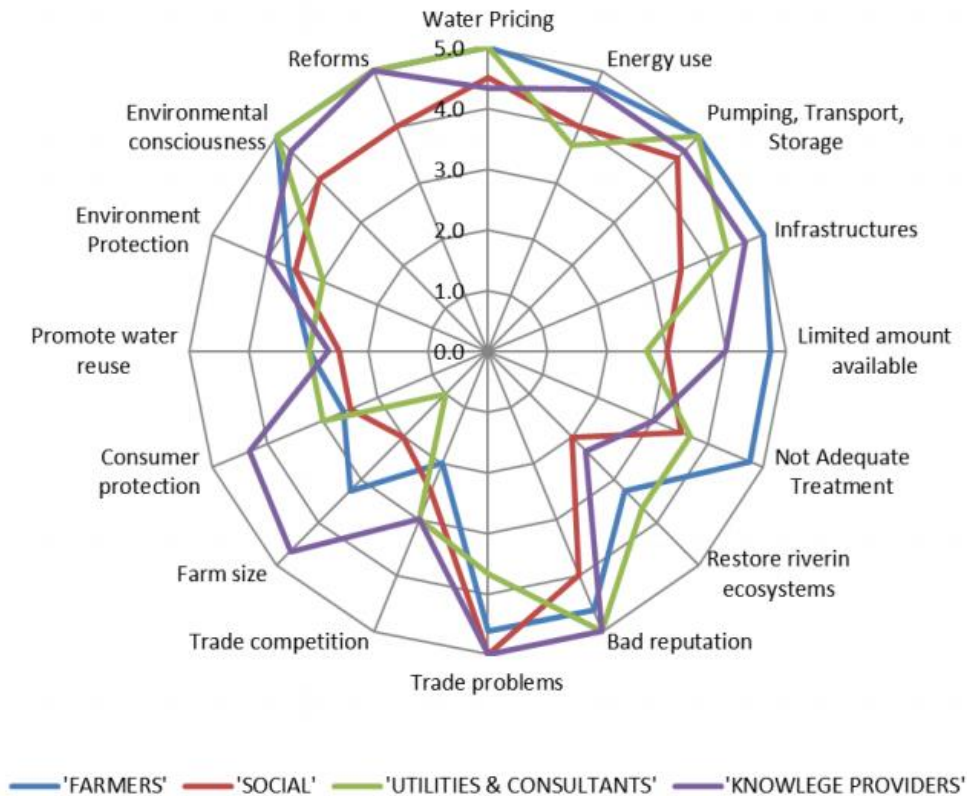
SWOT ANALYSIS - STRENGTHS



Stakeholders involved in the expert panel found agreement on the need of training, promote environmental positive technologies, having a stakeholder's dialogue at EU level, consumer perception, national and EU standards, environmentally safe.

The wide gaps are on the trust in innovation, restore riverine ecosystems and support local agriculture, the latter of course with opposite magnitude particularly for "social" stakeholders, unwilling to let resources go mainly towards agriculture

SWOT ANALYSIS - WEAKNESSES

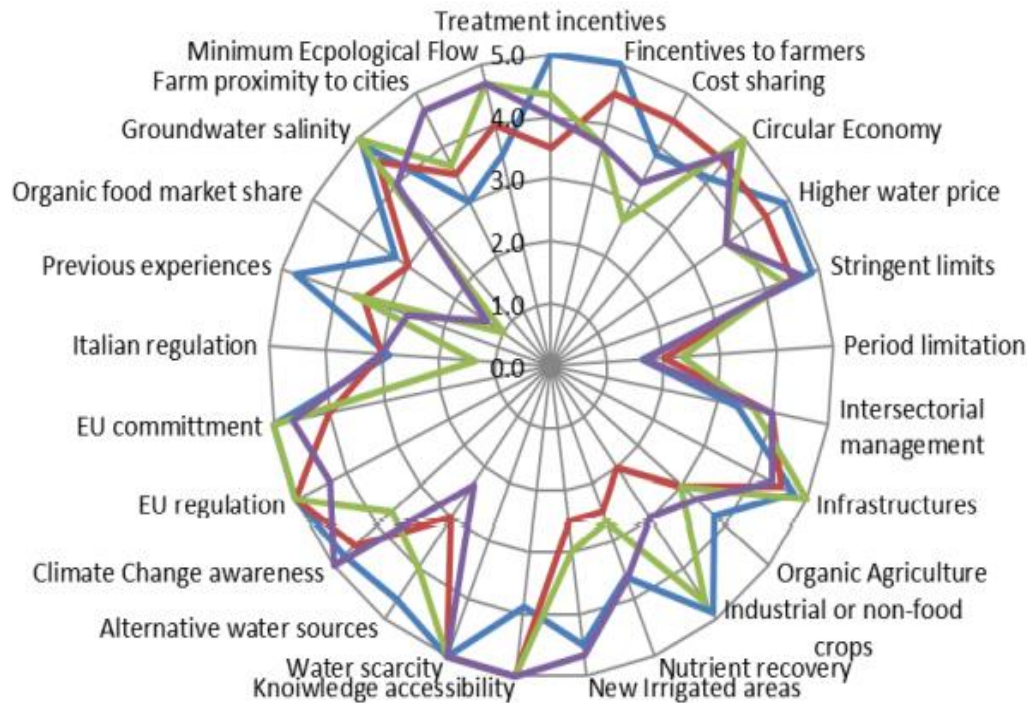


Agreement is found on water pricing, need to pump and store, and on promotion of water reuse, but at a lower score.

Disagreement were mainly about limited availability, farm size and consumer protection.

On many other crucial aspects there is a sufficiently common understanding about the potential negative impacts. Of relevance the use of energy and the need of infrastructures, bedside the bad reputation of water reuse.

SWOT ANALYSIS - OPPORTUNITIES



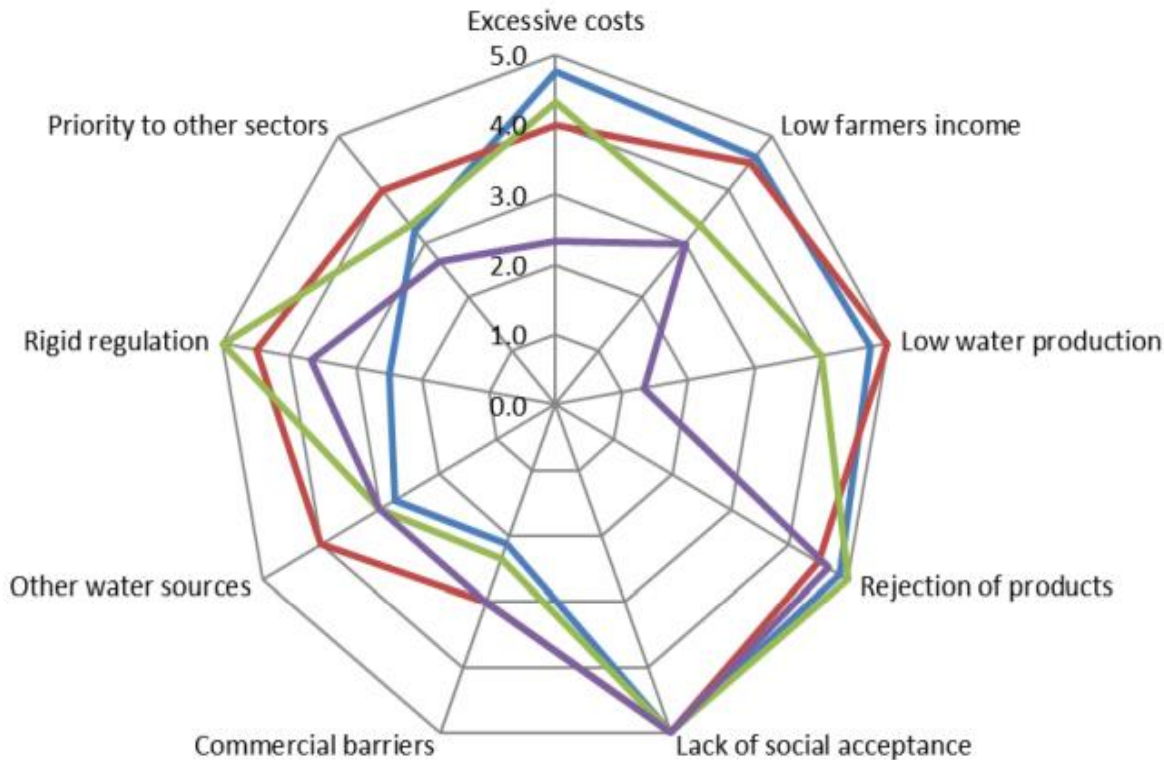
Among the large list of opportunities agreement is found only on international management and EU regulation, infrastructures and water scarcity.

There is a clear disagreement about cost sharing, limitation to industrial or non-food crops, new irrigated areas, alternative water sources, previous experiences and the impact of the organic food market.

Overall, opportunities are perceived in a very different way, starting from quite far standpoints.

The perception of opportunities is the very basis of motivations and willingness to undertake the necessary efforts and to cope with the unavoidable reforms, which seems not clearly expressed by the survey results.

SWOT ANALYSIS - TREATHS



Concerning threats, there is a strong agreement about the lack of social acceptance and the rejection of products risk.

The disagreement is on rigid regulation, low water production and excessive costs.

The quite far position about water standards and regulations as well as cost depict the existing conflicts between productive technological sectors and "society" strongly influenced by environmental organisation communication and approach.

The lack of objective and agreed risk analysis keep open the door to emotional or "political" choices on technical matters.

SuWaNu Participatory Workshops



Meetings

**Bologna 24th of June,
Rimini 7th of November,
Rome 12th of December 2019**



Research & Innovation Agri- Food Cluster: Water Management in the food industry Research & Innovation
Food Industries: Environment in the Agrifood Industry
Farmers: Renewables Energies and Natural resources
Farmers: Wine sector
Research Agency: Water reuse and Water management
Farming cooperatives : Citrus fruits Production and water management in Sicily/ Water scarcity area

**Regional Working
Group
30 members**

REGIONAL ACTION PLAN:

A joint and coordinated action



A network for dissemination and BMPs sharing

Effective knowledge sharing and technology transfer

Partnership between public and private sectors, Academia and research Agencies

Farmers Organizations have to share their experiences on water treatments and reuse



REGIONAL ACTION PLAN:

Positive narrative



- Public opinion needs to be informed about the benefits of reusing water in water scarcity or dryness or on environment protection
- Consumer benefits awareness on water
- Consumers have to accept reuse water treated products

REGIONAL ACTION PLAN:

A major barrier



EU Reg. 741/2020 does not contain any provision concerning who pays the adjustment in treatments and does not indicate to set any tariff for agricultural and industrial uses.

Cropping systems must remain productive and economically capable of guaranteeing the right income to rural society called upon to invest with even greater intensity than usual.

The introduction of reuse should not lead to increases in the cost of the resource for the irrigation sector.



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THANKS

A. Battilani
Consorzio Bonifica CER

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