



Info-package 5

Consumers and General Public

Fact Sheet 5.3 – Public perception and consumer acceptance of agricultural products irrigated with reclaimed water



SUWANU EUROPE is a H2020 project aiming to promote the effective exchange of knowledge, experience and skills among practitioners and relevant actors on the use of reclaimed water in agriculture. This factsheet is part of a total of 5 factsheets in Info-package 5 aimed at consumers and general public, that focuses on public perception’s relevance in the use of reclaimed water in agriculture, analyzing the main factors influencing it and the public outreach strategies that can be implemented to build a positive response to this type of projects.

1. Introduction

Reclaimed water has been used in the past 50 years around the world for diverse purposes, from non-potable to drinking water. The experience of these projects shows that public acceptance is a key element to ensure the success of the initiatives. Moreover, many failed projects have demonstrated that a negative public perception can frustrate a technically well-developed project. Thus, this fact sheet presents the most relevant elements linked to public’s acceptance in water reuse in agriculture and provides useful tips to build a positive relation with the community.

2. Factors influencing public perception

The existing research provides a general picture of the key elements involved in public perception. They are interrelated and can vary considerable in every context. The table below summarizes the main factors.

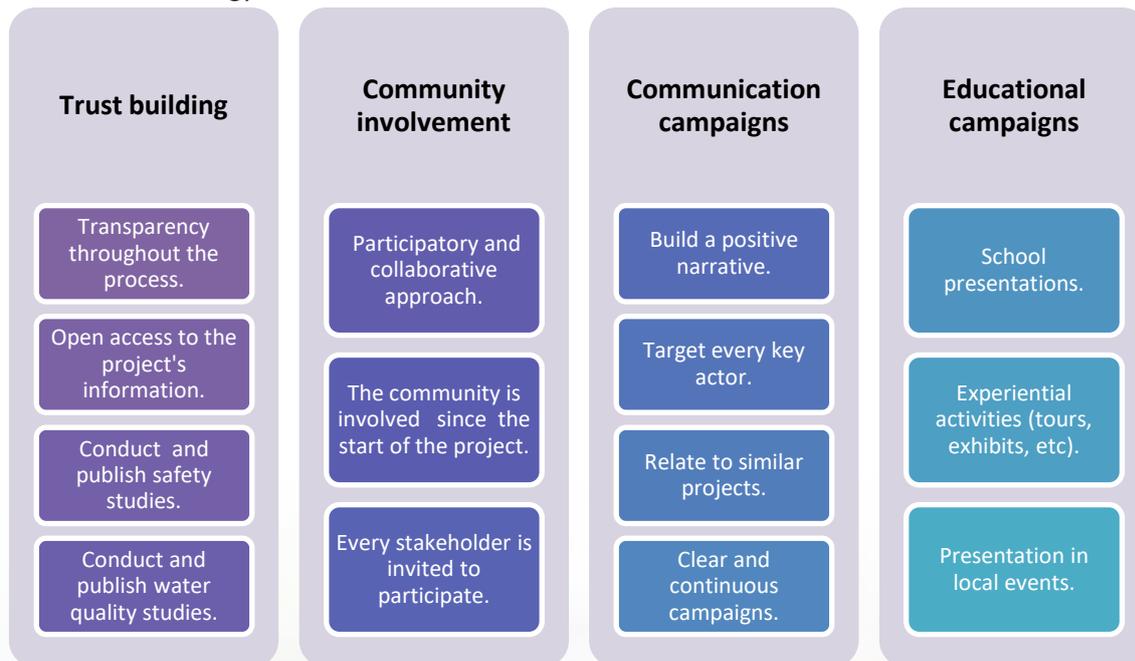
Factor	Characteristics	Response from the policy makers
Yuck Factor	Psychological barrier produced by the repulsion /disgust emotion related to the source of the water. Difficulty to separate the source (treated wastewater) to the final product (reclaimed water).	Create a positive narrative, avoiding the reference to wastewater.
Risk concerns	Public health concerns, especially with children’s consumption of crops irrigated with reclaimed water. Fear of the potential long time unknown effects.	Carry out safety studies on reclaimed water with prestigious and recognized organizations (scientific institutions, universities, etc.)
Source and quality of the water	Distrust of reclaimed water due to the lack of knowledge and control over the source and the quality of the water.	Circulate the criteria and methodology used to measure water quality. Explain the water reclamation process.
Effects on edible crops	Better reaction to crops not oriented to human consumption. The type of process required before consumption - cooking, peeling, etc.- influences the acceptance.	Carry out safety studies on crops irrigated with reclaimed water with recognized organizations .
Trust in public authorities	The public is more willing to accept reuse when the institutions in charge are trustworthy, responsible and concerned with public welfare.	Ensure the transparency and fairness of the reuse projects. Establish alliances with the main stakeholders .
Water scarcity	Areas facing scarcity are more receptive to water reuse, especially if social awareness is already existing	Raise awareness on water scarcity and the benefits of non-conventional sources.
Water Cost	The public has the expectation to pay less, because the water is consider of lower quality.	Analyse the marketability of crops and work with the growers to ensure their commitment.



A great number of studies are focused on demographic characteristics, however the variability of the results could not relate public acceptance to a certain demographic criteria. A similar result was obtained with the study of environmental attitudes, where high environmental awareness did not implied a positive attitude towards the use of reclaimed water. Furthermore, the literature highlights the lack of in-depth research on the factors influencing public perception given the relevance of public acceptance in the success of water reuse projects.

3. Public outreach strategies

The review of past reclamation projects, both successful and failed, provides an insight on the key points to be considered in order to gain the communities trust and support. The figure below illustrates the guidelines to build a strong public outreach strategy.



As every region and context are different, the strategy has to contemplate the specificity of the community involved and the characteristics of the reclamation project. The key of these guidelines is to understand that public outreach requires a multidimensional and participatory approach, in order to achieve a fruitful and long-lasting relationship between the community, the public authorities and the stakeholders involved in the reclamation project.

Reference/ further readings

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- Smith, H.M.; Brouwe, S.; Jeffrey, P.; Frijns, J. "Public responses to water reuse - understanding the evidence", *Journal of Environmental Management*, V 207, 1 February 2018, pp. 43 - 50.

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