

Multi-stakeholders roundtable Water reuse in agriculture: Time for solutions!

October 13, 2015 ; 14:00-17: 30; Montpellier, Corum

FRAMEWORK

The success of the water reuse projects in agriculture is based on technical feasibility, economic viability, social acceptability, agronomic and environmental sustainability, and also on their ability to respond to agricultural production targets under water and climate constraints.

Reuse projects are particularly relevant when they contribute to a logic of improving the adequacy of water resources with needs (and vice versa), taking a comprehensive view of all levers acting either on supply (level of processing, storage, desalination ...) or on demand (modernization of irrigation systems, raising awareness, cultivation systems ...) which must be mobilized together to ensure the satisfaction of agricultural water needs without causing environmental degradation.

OBJECTIVES

Noting that reuse is a complex and an eminently multi-actors issue requiring adaptations to the local context, the objective of this multi-stakeholders round table is to address the issue of the reuse of water in agriculture with an integrative approach, "solutions" oriented, highlighting and articulating inspiring experiences that illustrate how obstacles to agricultural reuse projects have been overcome. The objective is also to contextualize these "solutions" to specify whether their application framework is general or specific to a climate, regulatory, economic or social particular context.

Following the two scientific and technical sessions (session 2.1 Monday, 10.12.2015 afternoon and session 2.1 Tuesday, 10.13.2015 morning), which will present more experimental work and technological innovations, this space aims at bringing into discussion the diversity of skills and responsibilities carried by each type of actors that are involved at different levels in the reuse sector, on the basis of concrete projects and experience feedbacks. We will ensure the participation of representatives of the decision-making level, engineering, industry, users...

Following the roundtable, the contributions will be summarized and a collective article will be written by AFEID mentioning the contributions of the authors.

ROUND TABLE GUIDELINES

The discussion will be organized and led to ensure that contributors and participants progress through a structured reflection scanning the main obstacles to reuse projects.

The following questions will first be illustrated by feedbacks from experience in a very concise format, and then discussed by the assembly:

- **Which are the best practices, technologies and methodologies to create effective, safe and cost effective water reuse chains?**

By water reuse chains, we mean: all technologies (processing, distribution, irrigation) and practices (maintenance, farming practices including choice of agricultural production, irrigation) which may be implemented to adapt the agricultural uses with the water source and quality ; and vice versa. Reuse chain is said sustainable if it meets the following criteria:

- Mastery of health, environmental and agronomic risks (salts or pollutants)
- Economic reliability on the medium / long term
- Maturity, ease of implementation and maintenance
- Social acceptance.

This vision supposes that there is no single model, and that reuse is necessarily 'site specific'.

The target of sharing experiences and debating on this first question is to identify chains that are successful, covering a wide range of choices on technologies and practices, which when combined, can offer the conditions of sustainability of the system.

- **Can we successfully reuse raw or low treated water ?**

Direct irrigation of raw sewage concerns more than 20 million hectares worldwide and is concentrated in areas where sanitation is poorly developed and where the needs for water are high. In these cases, raw sewage is no longer seen as a waste but as a resource (water, nutrients ...) that is valued. If these non-controlled systems ('unplanned water reuse') have major health impacts, they also make an economic activity possible (agricultural production), benefiting the rural population, and allow a form of local circular economy.

Many initiatives focus on improving and securing this form of low technology reuse which still remains in the shadow of more concentrated and spectacular reuse projects (peri-urban agriculture, golf etc.).

The target of sharing experiences and debating on this second question is to discuss practices and 'low cost' technologies that provide concrete and realistic solutions to secure raw water or poorly treated reuse systems, without affecting their cost which gives them their economic attractiveness.

PROGRAMME

14:00-14:30	Introduction by Nicolas CONDOM, Dr. and Samia EL GENDY, Dr.
14:30-15:30	Question 1: Which are the best practices, technologies and methodologies to create effective, safe and cost effective water reuse chains? <i>(several short presentations + debate with a panel)</i>
15:30-16:00	Coffee break
16:00-17:00	Question 2: Can we successfully reuse raw or low treated water? <i>(several short presentations + debate with a panel)</i>
17:00-17:30	Conclusions by Nicolas CONDOM, Dr. and Samia EL GENDY, Dr.

ORGANISATORS

1. French Association for Water, Irrigation and Drainage (AFEID), National Committee of the International Commission of Irrigation and Drainage, in collaboration with the French Agency for Development (AFD) and Ecofilae, through the Project COSTEA, financed by AFD.

2. The Working Group "Poor Quality Water" of the International Commission of Irrigation and Drainage.

TO SUBMIT A PROPOSITION

Participants who wish to ensure a talk time are invited to submit their contributions to the scientific committee using the template (icid2015_REUSE_roundtable_oral presentation_template) on the website of the conference icid2015.sciencesconf.org.

Speakers are required a special effort to select among their experience concrete illustrations to feed the one or the two questions, each question being introduced in maximum 2 slides.

CONTACT

For any need, please contact icid2015@irstea.fr