



**DR. Dominique ROLLIN,**  
Representative from French National Committee of ICID (AFEID)



## Innovate to Improve Irrigation Performance



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## Theme DRIP

### Drip irrigation for water savings : the winning formula?

**Chairman: Jochen FROEBRICH (Alterra)**

**Moderator: Jean-Philippe Venot (IRD)**

Today drip irrigation systems are speeding fast across the world, spurred on Government incentives, by subsidies to individual farmers and large modernization programs, but also through farmer's private investments.

This technical revolution creates new business opportunities for local (and sometimes informal) entrepreneurs who install, repair and even produce irrigation equipment at the local level.

However the reasons why farmers adopt drip irrigation systems could be broader than the "more crop per drop" paradigm.



## Theme REUSE

### What potential for wastewater use in agriculture?

**Chairman: Tom Soo (IWRA) / Moderator: Bruno Molle (IRSTEA)**

The way wastewater is reused is shaped by the standards of many countries that have defined standard treatments for different possible uses (agricultural food and non-food, green areas).

These standards are sometimes very restrictive resulting from a strict application of the precautionary principle.

However the actual use of wastewaters by farmers often does not comply with these rules and generates health and environmental hazards. In particular, the development of peri-urban farming is often based on an increasing use of non-treated wastewater.



## Theme GOUV

### What governance for groundwater and surface water use in agriculture?

**Chairman: Jean Verdier / Moderator: Olivier Petit & Marcel Kuper**

Groundwater use is increasing worldwide due to easy access to this resource. It generates a groundwater economy but creates the conditions for overexploitation. Access to groundwater occurs most often individually but with many arrangements between farmers at the local level. This occurs both within existing irrigated schemes, thus exposing the inadequacies of conventional surface water governance, as well as in new irrigated territories, which shall require a new institutional arrangement.



## AERMC Workshop

### Water resources quantitative management under climate change: The French Mediterranean example (by Rhone - Mediterranean and Corsica Water Agency)

**Chairman: Patrick Saint-Léger / Moderator: Jean-Michel LOBRY**

IPCC latest scientific findings confirmed that climate change is strengthening. This is particularly true on the shores of the Mediterranean Sea, hot spot at the world scale, as well as in the mountains.

The facts speak for themselves: the grapes harvest season has already shifted by a month in half a century, and the phenomenon is just beginning. It is necessary to adapt the territory to the effects of climate change. Concerning water, we need to improve the knowledge about climate change impacts on water resources and as well as about the impacts of different scenarios of adaptation. Without waiting longer, given the high vulnerability of some of the Mediterranean territories, we need to improve water savings and water use efficiency.

The objective of this seminar is to share knowledge and experiences acquired on the French Mediterranean area, and beyond that, on the Euro-Mediterranean region.



### **Irrigation and Energy Workshop (by AFEID and CSIC Cordoba)**

**Chairman: Gilles Belaud / Moderator: Luciano Matheos**

Compared to the traditional gravity-fed irrigation systems, most modern systems are energy consumers. Irrigation energy footprint and cost are increasing steadily. Therefore, it is not surprising that, more and more, farmers and water users associations are engaged in active research and negotiations to reduce energy consumption, increase energy efficiency, and reduce energy costs and tariffs. On the other hand, on-farm energy generation, such as hydraulic energy, solar energy, geo-energy and bio-energy, is another option that farmers and water users associations are investigating and testing to reduce their energy dependence and cost. More specific energy saving measures are:

- optimization of the design and operation of pumping stations to minimize investment and energy cost;
- identification and correction of critical points in the network that are responsible for extra energy consumption;
- network sectoring for water rotation by grouping hydrants according to homogeneous energy demand.

Irrigation & energy is therefore a multi-faceted multiple-actor issue. Technical, economic and environmental aspects are linked in many ways involving farmers, water users associations, energy suppliers, engineers, and other stakeholders.

The objective of the workshop is to open a forum where researchers can show their research outcomes, where all actors can discuss their interests, where innovation finds a medium to flow and spawn. The workshop could also be the seed of a new working group on irrigation & energy.



**PPP workshop Public-Private Partnerships** ( by the World Bank, the French Agency for Development and AFEID) **Chairman: François Brelle / Moderators: Nicolas Daurensan, Etienne Dressayre & Florence Malerbe**

**WG ENV workshop Ecosystem Services and Multi-Functionality of Irrigation and Drainage Systems** (by AFEID and WG ENV)

**WG HIST Workshop History of water crisis, old and recent issues** (by AFEID and WG HIST)  
**Chairman: Kamran Emami / Moderator: Thierry Ruf**

**WG SDG Workshop Future of drainage under environmental challenges and emerging technologies** (by AFEID and ICID WG SDG) **Chairman: Bernard Vincent**

**WG PQW ROUND TABLE (REUSE) Waste water reuse : time for solutions!**  
 (by AFEID and ICID WG PQW) **Chairman: Akissa Bahri / Moderator: Nicolas Condom & Samia El Gendy**





## Participants (64 countries)

AFGHANISTAN	1	GREECE	3	PAKISTAN	1
ALGERIA	17	HUNGARY	1	PALESTINE	1
AUSTRALIA	2	INDIA	32	PAYS-BAS	1
BANGLADESH	1	INDONESIA	38	PHILIPPINES	2
BELGIUM	1	ISLAMIC REPUBLIC OF IRAN	46	REPUBLIC OF THE CONGO	1
BURKINA FASO	15	ITALY	21	RUSSIAN FEDERATION	2
CAMBODGE	1	IVORY COAST	1	RWANDA	1
CAMEROUN	2	JAPAN	21	SENEGAL	9
CANADA	4	JORDAN	3	SOUTH AFRICA	8
CHAD	3	KOREA	25	SPAIN	12
CHILE	1	LEBANON	2	SRI LANKA	1
CHINA	21	Malawi	3	SUDAN	1
CZECH REPUBLIC	1	MALAYSIA	7	SWITZERLAND	7
DJIBOUTI	1	MALI	8	TAIWAN	27
EGYPT	15	MAURITANIA	1	TAJKISTAN	2
ESTONIA	2	MEXICO	5	THAILAND	16
ETHIOPIA	4	MOROCCO	39	TUNISIA	16
FINLAND	5	MYANMAR	3	TURKEY	8
FRANCE	249	NEPAL	10	UKRAINE	1
GERMANY	6	NETHERLANDS	7	UNITED KINGDOM	18
GHANA	1	NIGER	5	UNITED STATES	12
				UZBEKISTAN	1
				Total général	802



## Technical Tours

**Pond of Montady Half-day** Wednesday, October 14, 2015

Departure: Montpellier's Corum Place: Pond of Montady | Supervisor: Thierry Ruf

Target Audience: All participants, particularly the ICID Working Group on History (WG HIST) and the ICID Working Group on Drainage (WG SDG)

**NOWMMA Project Half-day** Wednesday, October 14, 2015

Departure: Montpellier's Corum Place: Mauguio (34) | Supervisor: Bruno Molle

Target Audience: All participants, particularly the researchers of the W4CROP Project and the ICID Working Group on use of poor quality water for irrigation (WG PQW)

**IRSTEA EXPERIMENTAL PLATFORM Half-day** Wednesday, October 14, 2015

Departure: Montpellier's Corum Place: Montpellier Lavalette | Supervisor: Patrick Rosique

Target Audience: All participants and particularly the people interested in research activities

**Visit of Gignac WUA Half-day** Wednesday, October 14, 2015

Departure: Montpellier's Corum Place: The Gignac Canal | Time slot: 9h-12h30 | Supervisor: Céline Hugodot Target Audience: All participants and particularly the people interested in research activities

**Regional Water System: Aqua Domitia program and the Rhône water transfer structures** FULL-day Friday, October 16, 2015

Departure: Montpellier's Corum Places: Mauguio, Nîmes, Fourques, Bellegarde

Target public: addressed to all participants of the Conference Accessibility: 50 €

Organizer: BRL Group, the Languedoc-Roussillon Regional Water System concession-holder and the asset manager in charge of modernizing and extending the water system (Aqua Domitia program)



## Meetings of other projects

- Water 4 crops
- Arena
- COSTEA
- SICMED
- NOWMMA
- SAAO



## Budget /Subsidies

ONEMA	18 000 €
Banque Mondiale (Initiative Sahel)	4 300 €
Banque Mondiale (PPP)	18 800 €
COSTEA salle (COPIL, REU, Sahel)	1 000 €
COSTEA (rdv AFD/Entreprises/Décideurs Sud)	5 000 €
Agence de l'Eau RMC	25 000 €
FMSH	2 050 €
Fonds Pascal	10 178 €

Balance 330k€

