



International Workshop (invited speakers ONLY):
Non-Conventional Water for Irrigated Agriculture -
Benefits of Advanced Technologies

At the 25th ICID International Congress/ 7⁴th IEC Meeting

3rd November 2023, 1400-1530 hours & 1600-1730 hours, Visakhapatnam, India

FIRST ANNOUNCEMENT AND CALL FOR PAPERS

This Workshop is being organised under the auspices of the International Commission for Irrigation and Drainage (ICID) in conjunction with the Irrigation Australia Limited (IAL).

Background:

According to the World Economic Forum, water quantity and quality have been identified as the biggest threat facing the planet over the next few decades. Due to climate change water is expected to become increasingly scarce. Fresh water is critical to everyone on this planet, whether for personal use, growing crops, manufacturing products, and washing clothes. At the same time, there is a large volume of nonconventional water being generated on a daily basis, which can only grow with increasing urbanisation. Nonconventional water includes - treated sewage water, drainage water, non-fresh water (i.e., with a relatively high salt, nutrient, and organic matter content), and reuse of those waters for irrigated agriculture. The FAO and UNEP/WHO all have published guidelines for the safe use of wastewater in irrigated agriculture. Mathematical modelling of irrigation with nonconventional water plays an important role and can provide useful insights in the acceptance of nonconventional irrigation water for greenfield development.

High-value horticultural crops, including fruits, vegetables, flowers, aromatic plants, and herbs, are key components of agricultural development and economic progress in many developing countries. In developed countries, the horticulture industry contributes significantly to the prosperity of people living in rural and regional areas. In 2019-2020 the horticulture sector in Australia exceeded \$15 billion in production value and employed over 60,000 people.

This workshop is focused on using nonconventional water more efficiently in irrigated agriculture to achieve a closed loop future for water. So, there is a greater need for resiliency, efficiency, and smart management. There are already numerous in-situ sensors and remote sensing are in use in orchards for efficient water, salt, and nutrient management. Precision horticulture is more about managing orchards for uniform growth and production year after year where smart technology is or will be playing ever increasing role when it comes to making the industry sustainable with minimum or zero footprints.

Objective:

This Workshop will bring together experts from all over the world to share information, experience, and views on the applications of modern technologies in nonconventional water irrigated agriculture.

Workshop Themes:

- Innovative science of nonconventional water irrigation and drainage
- Application of sensors and remote sensing in irrigated horticulture
- Machine learning and artificial intelligence for better decision making for nonconventional water irrigated agriculture.
- Environmental, economic, social, and cultural aspects of nonconventional irrigation
- Gender equity in nonconventional water irrigated agriculture

Workshop Committee

- Dr. Tapas Biswas (organiser), Commonwealth Scientific & Industrial Research Organisation & Australian National University, NCWRI-WG (ICID) vice-chair
- Dr Gauranga Kar – Director, CRIJAF, India (co-organiser)
- Dr. Wenyong Wu – China Inst of Water Res & Hydropower, China and chair-NCWRI-WG
- Er. BA Chivate, ICID Central Office, New Delhi India

Registration and travel information are available at: [ICID 25 Congress](#)

Non-Conventional Water for Irrigated Agriculture - Benefits of Advanced Technologies

Name (Mr/Ms/Dr):

Position:

Organisation:

Full Address:

City:

Postal Code:

Country:

Tel.:

E-mail:

Please tick boxes below:

- I would like to attend the workshop
- I would like to present a paper
- I would like to present a poster

Title of paper:

The abstract/paper should show examples of applications and address the workshop title's keywords.

E-mail these details and a 400-word abstract (as a WORD file) not later than 15 September 2023 to Er. B. A. Chivate at bachivate@icid.org (ICID Central Office) with copy (cc) to: Dr. Tapas Biswas at tapas.biswas@anu.edu.au

INTERNATIONAL WORKSHOP: NONCONVENTIONAL WATER FOR IRRIGATED AGRICULTURE - BENEFITS OF ADVANCED TECHNOLOGIES

At the 25th ICID International Congress/74th IEC Meeting

3rd November 2013, 1400-1530 hours & 1600-1730 hours, Vizag, India

Tentative Program and time

Chair: President Dr Ragab Ragab

14.00 – 14.05 - Welcome and introduction by the chair NCWRI

14.05 – 14.10 – Introductory remark (chair)

14.10 – 14.25 - Setting the scene: Dr. Tapas Biswas, ICID

14.25 – 14.40 – Dr. Wenyong Wu (Guidelines)

14.40 – 14.55 – Dr. Meng (Guidelines)

14.55 – 15.10 – Dr. Gouranga Kar (CRIJAF), Indian case study

15:10 – 15.30 - General Discussion

15.30– 16.00 – **Health Break**

16.00 – 16.15 – Prof. Tasuku Kato (Japan)

16.15 – 16.30 – Prof. Sunil Gorantiwar, Maharashtra

16.30 – 16.45 – Egypt

16.45 – 17.00 – Chinese Taipei Committee

17.00 – 17.15 – Open floor discussion

17.15 – 17.30 – Concluding remark (Dr. Tapas Biswas)