

International Workshop on “The Water-Energy-Food-Nexus: Applications & Impact on Societies, Environment and Ecosystem”

3 September 2024, Sydney, Australia



9th ASIAN REGIONAL
CONFERENCE

Irrigation & Drainage

75th IEC MEETING

1 - 7 Sept 2024 | ICC Sydney

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Call for Papers

The Workshop is being organized by the ICID's Working Group on Water Food Energy Nexus (WG-WFE_N) during the 75th International Executive Council (IEC) Meeting and 9th Asian Regional Conference scheduled from 1-7 September 2024 at Sydney, Australia.

I. Background

The world's population is expected to grow from 8 billion today to at least 9.8 billion by the year 2050. The population growth, urbanization and industrialization are imposing rapidly growing demands and pressures on the water and energy resources and causing, in many cases, an imbalance between water supply and demand. This growing imbalance has led to shortages, competition, and other environmental pressures. Achieving food, water and energy security as well as improving the quality of life, while preserving the environment, will continue to pose major challenges to scientists, decision-makers and technicians in the next few decades. Irrigation globally consumes around 70% of freshwater resources. This water is becoming increasingly scarce. Irrigation requires energy. Therefore, improving water and energy use efficiency and productivity in agriculture practices will be valuable.

The interdependence of water, food and energy is well known since early civilization. The present challenge is how to produce more crop per drop per kwatt energy per unit area of land. This is the essence of the new focus on the nexus. The WEF Nexus has benefit at local, regional, national and trans-boundary scales. Nexus application has also impact on Societies, Environment and Ecosystems at the same time the WEF Nexus could be affected by Climate Change. Attempts were made to quantify the Nexus by the integration of water, energy and food securities

indices into a single Index. This index is crucial for improving the Water, Energy & Food Securities.

II. Objectives

This Workshop will bring together experts from all over the world to share information, experience, and views on how to implement the water-energy food nexus in agriculture. The focus will be on the examples of the application of the Nexus at different scales, the impact of Nexus application on Societies, Environment and Ecosystem and the impact of Climate Change on the WEF-Nexus. The papers should show examples of application and must include the three elements of the Nexus: Water, Food and Energy.

III. Theme/Sub-themes

The main theme of the International Workshop of Working Group is “The Water-Energy-Food-Nexus: Applications & Impact on Societies, Environment and Ecosystem”.

Sub-themes:

- (i) Approaches to calculate the WEF Nexus Index;
- (ii) Quantifying the WEF Nexus at field, regional and country scales;
- (iii) The spatial distribution of the WEF Nexus and the trade-offs to improve the WEF Nexus across different scales;
- (iv) Institutional and Governance issues in implementing the WEF Nexus;
- (v) WEF Nexus application and benefit at trans-boundary scale;
- (vi) Quantifying the climate change impact on the WEF Nexus;
- (vii) WEF Nexus impact on the Societies, Environment, and the Ecosystem.

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Venue: ICC Sydney



Abstracts/papers are invited and encouraged from professionals, researchers, experts, practitioners, managers, and policy-makers on the State, Province or Local levels based on the mandate of the WG.

IV. Schedule for Submission of of Abstracts/ Full Papers

- | | |
|--|---------------------|
| i. Submission of abstracts
(max. 600 words): | 1 May 2024 |
| ii. Notification of acceptance: | 15 May 2024 |
| iii. Submission of full papers
(max. 10 pages of A-4 size): | 15 June 2024 |
| iv. Notification of acceptance of full papers: | 01 July 2024 |

Contact Coordinates:



Workshop Chairman: Prof. Dr Ragab Ragab, President Hon. ICID and Chairman of the Working Group on “Water-Energy-Food Nexus” (E-mail: ragab@icid.org) and Fellow at UK Centre for Ecology & Hydrology, UKCEH, UK



Dr. K. Yella Reddy, Vice President Hon. ICID and Vice-Chair of the WG on Water Energy-Food Nexus” & Officer on Special Duty, Government of Andhra Pradesh, India (E-mail: kyreddy@icid.org)



Workshop Coordinator: Er. Balasaheb Anantrao Chivate, Director (Technical), International Commission on Irrigation and Drainage (ICID) (E-mail: icid@icid.org), New Delhi. India

Registration and travel Information are available at: <https://irrigationconference2024.com.au/>

International Workshop on “The Water-Energy-Food Nexus: Applications & Impact on Societies, Environment and Ecosystem”, Sydney, Australia, 2024

Name (Mr/Ms/Dr):.....

I would like to present a paper

Position:.....

a poster

Organisation:.....

Entitled:

Full Address:.....

City:

Note: E-mail these details and a 600 word abstract (as a WORD file) as soon as possible and not later than **1 May 2024** to Er. B.A. Chivate at icid@icid.org ICID Central Office, with CC to VPH Dr. K. Yella Reddy at kyreddy@icid.org

Postal Code:

Country:

Tel.:

Acceptance for presentation will be sent during **July 2024**.

E-mail:



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