



Republic of Indonesia



ICID SPECIAL SESSION in the 10th World Water Forum Bali Indonesia, 18-25 May 2024

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ICID's Role in WWF10, Bali- Indonesia

In line with promoting ICID's role in the 10th World Water Forum held in Bali, Indonesia, 18-25 May 2024, the International Commission on Irrigation and Drainage held the Special Session on “Water, Food, Energy Nexus Using Smart Water Technologies” in Bali International Conference Centre.

The session coordinator and moderator of this event were ICID President, Dr. Marco Arcieri, as well as ICID Vice President Alireza Salamat.

ICID's Role in WWF10, Bali- Indonesia

The session was opened by President Arcieri followed by an introduction made by Vice President Salamat on what was carried out during the past 12 months for organizing this event in close cooperation with its Task Force members.

Around 10 speakers from Iran, Italy, Saudi Arabia, South Africa, Japan, China, Korea, Taiwan as well as international organizations including FAO, Islamic Development Bank and the World Bank presented their contributions on various perspectives of Water, Food, Energy Nexus and Smart Water and Irrigation Management Technologies.

Highlights of the session

1. Water used in the agricultural sector is around 70-80 percent worldwide, which increases to more than 90 percent in some countries. Water productivity is quite low in comparison with the crops produced and energy used. This process could not be sustainably continued and practiced and we would therefore need to come up with a firm solution to overcome this critical issue.
2. When dealing with Water, Food, Energy Nexus under climate change conditions, environmental issues and concerns as well as increasing trend of human requirements should be taken into consideration.
3. Using renewable energies in the agricultural sector in general and desalination in particular should be considered as an important element.
4. Water reuse and recycling is one of the most important solutions for supplying water with minimum losses.

Highlights of the session

5. The population in 2050 will be around 1 billion, while the arable land per person will decrease 20 percent less than it is today.
6. Urbanization and population growth are the key elements producing pressure on water and food supply.
7. At present more than 40 percent of the people are experiencing water shortage.
8. Around 1.1 billion people do not have access to safe drinking water and around 2.7 billion have problem to accessing safe water at least one month per year.
9. 57 percent of fresh water abstraction and 70 percent of water is used in the Asian continent.
10. Estimations demonstrate that every 10 years the groundwater abstraction is increased to around 10-12 percent while water usage is increased to 1.33 time more than present.

Conclusions:

1. Sustainable use of water resources requires integrated approach in order to increase agricultural crop yield.
2. Water should be used in a smart manner and it should not be considered as an individual component.
3. Water harvesting, modern technologies in soil conservation, improved varieties of crops along with increased water use efficiency should be practiced.

Conclusions:

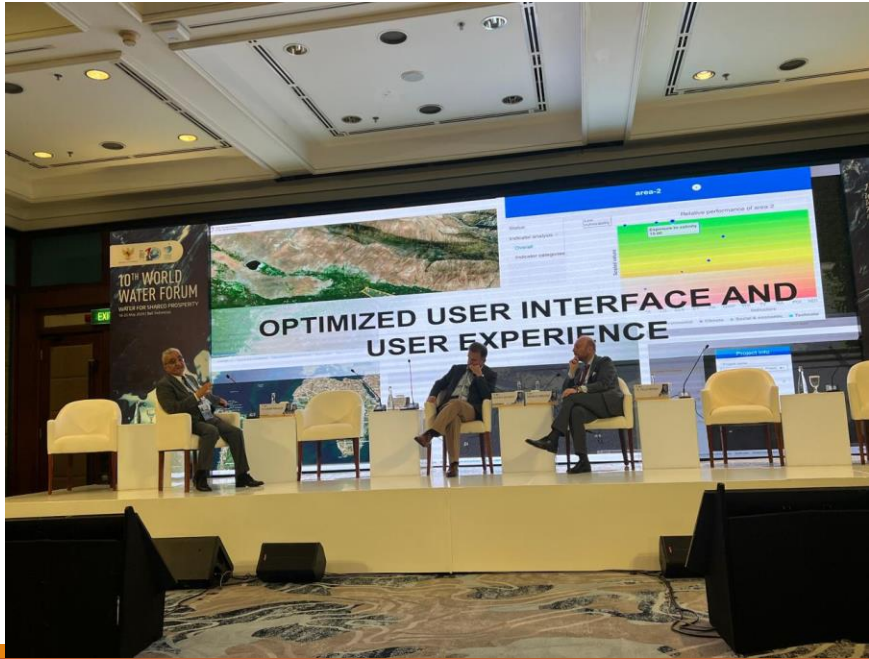
4. The benefits of smart water and irrigation systems are as follows, therefore it should be considered as the first priority in present and future agriculture industry:

- by using smart meters time is saved.
- Actual usage is measured and decisions are easily and effectively made and those using water without licenses could be easily determined.
- Decreasing bureaucracy and paper working
- Promoting water productivity for producing more crop per drop
- Smart devices are at least 5 times faster and investment in this field will have at least 13 times more investment return in a specified period.
- Smart systems work with a higher concentration, fast leakage detection, optimum operation efficiency, increased water quality monitoring, developing strategic infrastructures with a higher pace, etc.

Appreciations

President Marco Arcieri and Vice President Alireza Salamat would like to sincerely thank:

President Honorary Dr. Saeed Nairizi, ICID officials and particularly Secretary General Mr. Ashwin B. Pandya, Executive Director Dr. Harish Varma, Er. B. A. Chivate, Ex- Technical director, the lecturers and task force members for their taintless efforts for organizing this fruitful event.





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Thank you for your attention

