

CHIANG MAI FORUM STATEMENT, 2016

Second World Irrigation Forum (WIF2) was held from 6 to 8 November 2016 in Chiang Mai, Thailand. The Forum was organized by the International Commission of Irrigation and Drainage (ICID) and the Thailand National ICID Committee (THAICID) in cooperation with a number of International and National Partners that brought together representatives of various stakeholders involved in irrigation of all types at all scales. About 1200 participants from 71 countries, 10 International Organizations and 9 Ministers attended the Forum.

The main theme '**Water Management in a Changing World: Role of Irrigation for Sustainable Food Production**' recognizes that The world's population is growing rapidly and is expected to reach about 9 billion by 2050, mostly living in urban areas, which pose challenges in meeting the sharply growing water, food and energy demands. In order to feed this growing population it is estimated that agricultural production needs to be increased by about 70 % globally and by as much as 100 % in developing countries. It is likely that increased food production will have to be achieved with a reducing share of water for agriculture due to competition from other sectors including uncertainty due to climate change and variability. This calls for growing more with less water in a sustainable manner. New ways to grow food in ecologically and ethically responsible manners and expansion of irrigation to previously rainfed areas, along with supply and demand side management options will play a significant role in achieving this goal.

The key to sustainable development of irrigated agriculture in the changing environment and the on-going rural transformation lies around modernization of irrigation systems and related services to improve water use efficiency; improving water and land productivity supported by financial mechanisms; reform of management institutions; adoption of efficient water management techniques including recycling and reuse of waste water; use of modern technologies; increasing awareness about water scarcity and capacity development of service providers and farmers etc. with participation of all the stakeholders (public and private sector, academic and research institutions, industry, civil society, farmers' and their organizations etc.).

Within the context of the Main theme, more than 183 papers, short communications and posters were presented and discussed under three Sub-themes: (1) Key issues of irrigation and drainage in balancing water, food, energy and ecology; (2) Management of climatic extremes with focus on floods and droughts; (3) Key and smart actions to alleviate hunger and poverty through irrigation and drainage. In addition to the thematic sessions there were 17 Side events and an Exhibition.

A WIF first was the round table Ministerial meeting where Ministers from Bhutan, Cambodia, China, Ethiopia, Indonesia, Laos, Nepal, Pakistan, Sudan participating in the Second World Irrigation Forum, hosted by the Kingdom of Thailand, under the chairmanship of Honourable Minister of Agriculture and Cooperatives of Thailand, made a press release based on their deliberations on 6th November 2016. They agreed to establish a High Level Advisory Group on "**Partnerships for Agriculture Water Management**" as an action-oriented multi-stakeholder partnership. The objective is to support member countries in achieving the Sustainable Development Goals (SDGs) and share experiences in implementation of targets related to agriculture water management which is key to both water and food security. It will also support the UN System efforts in monitoring the progress on related SDGs. The partnership will advocate strong policy support for higher investments in Agriculture Water Management (AWM) to ensure food and water security.

As a result of the presentations and discussions at the World Irrigation Forum, the following statements were agreed:

1. The great challenge for the coming decades will be to increase food production with fewer resources -water, soil, energy, and biodiversity.
2. In order to foster sustainable development, it is essential to maintain the balance between water, energy, food, and ecosystem services.
3. The issues that irrigation and drainage sector is facing are (a) safeguarding resource availability and its quality when designing new systems, (b) the operation and maintenance of existing systems and in turn their impact on resources and the environments that hold them, and (c) the stakeholder interaction and participation that lead to the governance of the systems and their underlying resources.
4. The future challenges require unconventional thinking and solutions. Thinking within the water-energy-ecosystem-food nexus framework with water resources at its heart is essential.
5. Increasing water supply to meet the future demand requires a more efficient water use, use of non-conventional water resources, and water harvesting.
6. Sustainability can only be achieved within a complete water chain approach and with full stakeholder involvement from start to end and from farmer to minister.
7. We need to adopt a more integrated holistic approach to understand and sustainably manage resources with the aim to produce more from less “more crop per drop per kilowatt” without hampering natural ecosystem services.
8. Climate change is recognized as one of the most serious and urgent issue for human society and global environment. In the context of agriculture, improving irrigation and drainage systems and rural development will play a key role in achieving the rural water and food security under impending climate change, especially in the developing countries.
9. To reduce the disaster risks, the global and local society or community need to assess the magnitudes, frequencies, and variabilities of weather and climate events; the exposure of the society for these events; and the vulnerability of the region and society to these extremes.
10. Under the given uncertainties in climate change impact projections, improving resilience by reinforcing the capability of societies to better cope with the extreme events is one of the most favoured approaches.
11. In the pursuit of information to support the policies and actions to alleviate hunger and poverty from a perspective of the role and impacts of irrigation and drainage, correlation must be provided between water scarcity, community and poverty.
12. One of the main goals of the international community is to eliminate hunger and poverty and in this perspective, through the Millennium Development Goals much progress has been achieved and evidence obtained. Sustainable Development Goals and various United Nations and other initiatives, intend to move forward this agenda by making it a part of the broader development frameworks.
13. The important elements of irrigation and drainage that affect the alleviation of hunger and poverty can be grouped into governance, rights-based development, water rights and pricing, management, efficiency improvement, and role of

technology.

14. Both the potential and the need to make use of innovative technology and solutions in irrigation are underlined and these can be used to cater the challenges in different sub-sectors with focus on maximizing productivity and efficiency, reducing water losses, achieving sustainable intensification and managing demands on water resources and the associated trade-offs.

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