A Brief Note On

ICID's role in the 9th World Water Forum

21-26 March 2022, Dakar, Senegal

The World Water Forum represents one moment every three years where the international community can bring together a diversity of shared knowledge, raise awareness for water issues among political, social and economic decision makers based on shared knowledge, align activities toward a common agenda, and create collective action to reach those shared goals, notably but not limited to the SDGs. The content development will be articulated around four priorities: Water Security; Rural Development; Cooperation; and Means and Tools, each of which will be coordinated by a Pilot Group. Action groups will be established at a more focused objective level under each of these priority areas, as follows. Potential linkages to SDG targets are indicated in parentheses to create coherence, synergies and facilitate possible direct contributions towards the achievement of Agenda 2030, based on established indicators.

We are in the stage of promoting ICID's role in the 9th World Water Forum planned to be held in Dakar, Senegal, 21-26 March 2022. We have so far held several follow up virtual and physical meetings to this end.

ICID along with its potential partners is responsible to run three session groups under Action Group 2.D of the WWF9 under the title of "Ensure Sustainable Agricultural Practices, including Water Productivity and Efficiency, Reduction of Diffuse Pollution and Increased Food Losses" which we have been assigned as follows:

1. Switching From Rural Development Towards Rural Transformation

Rural development is the process of overall improving the quality and quantity of life and economic well-being of people living in rural areas. It is about reducing poverty and increasing productivity. Rural development has been traditionally centered on the exploitation of land and natural resources in agriculture and forestry. However, the rural transformation is recognized as a process impacting on development with or without interventions. In other words, it constitutes the dynamics in the rural space and does not by itself provide directions for sustainable development.

Rural transformation is a process of comprehensive community change in which rural communities diversify their economies and reduce their dependence on agriculture; they become dependent on distant places to trade and to acquire goods, services, and ideas; moving from scattered villages to small and medium-sized cities; and are culturally more like large urban agglomerations. ICID Vision 2030 for a water secure world free of poverty and hunger through sustainable rural development through its mission to facilitate prudent AWM by encouraging interdisciplinary approaches to irrigation and drainage management is an expression of intent of the network to help various stakeholders in moving towards a 'World we Want'. This 'Road Map to ICID Vision 2030' has been a collective effort of all ICID network members and partners who have deliberated various implications of emerging socio-economic scenarios and their effect on AWM issues.

2. Smart Water Management Systems

Population increase, urbanization growth, industrialization and water competition among sectors has become more severe in the world. It has threatened agricultural production and food security putting negative impacts on water quantity and quality. These conditions, compounded by the impacts of

climate change, will hamper the achievement of the Sustainable Development Goals (SDGs) in general and SDG6 in particular if not precisely addressed.

Smart water management plays a pivotal role in addressing and overcoming these kinds of issues. Digital technologies if correctly practiced can improve data collection and analytics to support proactive decisions and increase the performance of water utilities. Smart water management systems can provide a more resilient and efficient water supply system, reducing costs and improving sustainability. They can provide accurate and up to date information that enable informed and systematic, rather than ad-hoc, decision making by water managers.

Smart management systems also need capacity building on the part of implementations and end users. Generating the relevant information and understanding the nuances of operating and maintaining a complex system needs skill developments at every level for its success. So as to contribute to "A Road Map to ICID Vision 2030 – A Water Secure World Free of Poverty and Hunger" under GOAL B "Be a Catalyst for Change in Policies and Practices".

3. Farmers Collective Participation In Ground Water Resources Operation And Management

The irrigation demand for the agricultural sector already amounts to more than 70% of global water supply withdrawals and about 85% of global water-resource consumption. It is estimated that groundwater sources provide more than 40% of all water used for irrigation.

Over development of groundwater resources, particularly, in arid and semi- arid regions, has created ever-increasing socio- economic and also environmental negative impacts in these parts of the world. Continues decline in groundwater tables, land subsidence, groundwater pollution, salt intrusions, and many other economical and environment disorders are included.

Groundwater governance in concepts and implications have been scrutinized in the past few decades, whether groundwater can be treated as national assets, where the farmers can only enjoy the usage of the water, or indeed as a tradable commodity with the possibility to be inherited to the generations to come. There are many other views for the groundwater governance with deeply rooted in the past traditions prevailing in different localities.

There are also misconceptions about the groundwater resources management and by all means the operation. Each aquifer has its particular characteristics, with upstream and downstream users. There are usually accepted withdrawal regulations or licenced limited by capacity to take up, but nothing for the irrigation recharge impacts. Groundwater users associations are usually facing with the lack of defined boundary conditions with the other users where it may cause problems. These problems are exacerbated by the extent of government interaction in such a complex socio- physical dilemma. Mixed approaches have been practiced in many countries, however improvements through providing, universal guidelines and regulations are necessary.

Any Improvements in groundwater resources must be based on effective and sustainable methods for engaging farmers directly in the articulation of their needs and in the analysis, design, and implementation of rehabilitating and managing of the resources.

Enabling farmer participation in rehabilitating and managing water resources will help to develop appropriate innovations and will bring the farmers together with extension officers, research scientists and other groups in problem identification, solution, and evaluation.

