The 24th ICID International Congress on Irrigation and Drainage 30 May-06 June 2022, Adelaide, Australia

DRAFT SESSION PLAN

Session Title: Achieving Climate Resilience through Improved Irrigation Water Management from farm to basin scale: a response to achieving SDGs

Conveners: (i) International Water Management Institute (IWMI), (ii) World Bank- *co-lead*, (iii)ADB- co-lead (tbc), (iv) Indian Council of Agricultural Research (ICAR), (v) AWP (tbc)

Introduction

With agriculture using 70% of global water supply, water management in agriculture sits at the center of many challenges in sustainable development. Water has a critical role to play across global agenda of Sustainable Development Goals (SDGs) and UNFCCC. Water relates to all SDGs as it's key to human, economic and environmental activities. Water is also at the heart of climate change adaptation and its management needs to be scrutinized through a climate-resilience lens. Irrigation systems management must therefore re-look at the way water is being managed to achieving SDGs and address commitment to Nationally Determined Contributions (NDCs) under UNFCCC.

Scope and Objectives

Researchers, water managers and policy makers are challenged to address Sustainable Development Goals (SDGs) and to meet growing water demands under the changing climate scenario. Under **SDG 6**, indicators 6.4.1 changes in water-use efficiency over time and 6.4.2 reduction in freshwater withdrawal as well as other indicators under SDG 6, SDGs 2, 7 and 13 show a strong interconnectivity and relevance for the irrigation sector. Global Commission on Adaptation (GCA) has identified eight action tracks with '**making water resources management more resilient**' with the example of investments in flexible and resilient infrastructure to support smallholder climate adaptation.

With agriculture currently using 70% of the global water withdrawals and the increasing demand to produce food for growing population by 2050 requires urgent action to reduce current water use in agriculture. Technical, institutional, and social innovations are needed to increase resilience of current irrigation infrastructure and its users under a changing climate. This requires a flexible approach from farm to scheme and basins scale. For example, novel tools like water accounting and telemetric networks support enabling us to better assess demand and adjust supply when needed. Infrastructure asset management, digital extension, scheme level sensing and innovative approaches to water governance aid in improving water use efficiency from farm to scheme level. The combination, integration and feedback loops between scales are important factors underpinning 'flexible' design in climate adaptation.

The session will bring together lessons from technical, social, and institutional innovations tested in the field by government, researchers, and donors towards climate adaptation of irrigation infrastructure and communities. The aim of the session is to 1) discuss advantages and challenges for each of the innovations; 2) analyze the linkages and opportunities between the innovations; and 3) provide a systems approach towards flexible irrigation design and infrastructure for increased climate resilience including investment priorities for irrigation sector. The conclusions and recommendations will be followed up with an action plan for the ICID National Committees in their respective countries.

Tentative Program As on 31 May 2020

Time (Hrs.)	Session – Particulars	
14.00-14.05	Welcome and brief introduction	IWMI
14.05-14.15	Opening remarks by Co-Chairs	Chair & Co-chair
14.15-14.35*	Mainstreaming water accounting and water productivity for improved resilience of irrigation systems	IWMI
14.35-14.55	Reducing water use in irrigation schemes in a changing water scarce climate: World Bank's approach to increased resilience	World Bank
14.55-15.15	Reducing water use in irrigation schemes in a changing water scarce climate: Modernizing irrigation schemes in changing climate: Asian Development Bank's approach to irrigation performance assessments	ADB (tbc)
15.15-15.35	Leaving no-one behind when adapting irrigation to climate change: gender and social inclusion approaches	AWP (tbc)
15.35-15.45	Discussion	
15.45-16.15	Health Break	
16.15-18.00	Irrigation Service Delivery and Asset Management:	
16.15-16.30	World Bank's approach to irrigation service delivery	World Bank
16.30-16.45	SAMS and remote sensing for benchmarking and asset management for irrigation investment decisions	IWMI
16.45-17.00	FAO's approach to asset management in irrigation	FAO
17.00-17.15	Conventional approach to asset management	Country I&D Dev. Dept.
17.15-17.55	Interactive panel and audience Discussion	Moderated by Chair (TBC)
	On irrigation service delivery for improved irrigation service delivery and climate resilience Panelists (World Bank, ADB, Govt. Reps, Irrigation Australia, IWMI)	

17.55-18.00 Wrap-up

Coordinator: Alok Sikka, Country Representative, IWMI-India (<u>A.Sikka@cgiar.org</u>) * **Each presentation will be for 15 Minutes followed by 5 minutes of Q&A**