

PRESS RELEASE
Indus River System Authority (IRSA)
Ministry of Water Resources

IRSA Meeting with Technical Team of CSIRO and ACIAR, Australia
and Workshop Regarding Incorporation of Mid-Season Planning in Water Apportionment Accord
(WAA)-Tool

IRSA HQs, Islamabad, the 16th of November, 2023

Pakistan operates the world's largest contiguous irrigation system, the Indus Basin Irrigation System (IBIS) spanning all the 4 provinces of Pakistan. This system, which is under increasing pressure from population growth and climate change, provides water, energy and food security for the nation. Since 1993, water resources of the Indus River System have been shared among the four provinces of Pakistan according to the WAA 1991 by IRSA. The water distribution process is a complex set of procedures which takes considerable time and man hours to fully execute at the start of each cropping season. For different scenarios, the process is often repeated adding even much more time and effort on the part of IRSA technical personnel. Although common computer software is used as a tool to carry out the different steps but the whole process is very time-consuming, disjointed and not automated.

2. Through a joint collaborative historic effort - conducted under the Australia-Pakistan Memorandum of Understanding (MoU) on Water Management - by Pakistani and Australian Governments through the entities from the Pakistani side of Ministry of Water Resources (MoWR), IRSA, WAPDA, Provincial Irrigation Departments (PIDs) and from the Australian side of Commonwealth Scientific and Industrial Research Organization (CSIRO) and Australian Centre for International Agricultural Research (ACIAR), the WAA-Tool was developed over a 4-year period from 2018 to 2022.

3. The initial versions of the Tool have been in operation since December 2020 by the stakeholders in Pakistan, being the Tool of choice, and have been actively employed to aid in informed decision making for advance seasonal planning, operation of reservoir and river network and distribution of the water resources of the Indus River System between the provinces as per policies of WAA 1991. During the utilization of the software Tool, IRSA and the stakeholders identified the next steps required to sustain the investment: (1) continued and more intensive training of a wider audience; and (2) expanding its use to capture the mid-season allocation planning process which is often required to revise the system operational parameters due to changed inflows, storages, demands, etc, due to hydrological uncertainty in a world of Changing Climate.

4. To move further with the step 2 as above and to discuss other ancillary steps in the software's development, representatives of ACIAR and CSIRO, namely, Dr. Neil Lazarow, Dr. Munawar Kazmi, Dr. Mobin Ud Din Ahmad and Ms Sue Cuddy, met with Members and technical personnel of IRSA at its HQs at Islamabad on 16.11.2023 to discuss the way-forward to further develop the WAA-Tool so as to incorporate / develop mid-season planning module in the WAA-Tool. IRSA expressed gratitude to the Australian Government's agencies involved in the technical and financial support shown so-far and said that similar support was expected to continue in the future for facilitating the important tasks of the Authority. In turn, the representatives of the Australian agencies, highly appreciated all the support and keen interest shown by IRSA and the stakeholders during the development process of the software. Dr. Neil Lazarow presented to Chairman IRSA a report of ACIAR's mandate, past activities and future plans.

5. Later in the evening, a Workshop was organised at IRSA HQs Islamabad in order to facilitate the CSIRO representatives to gather vital views from IRSA personnel, provincial stakeholders, WAPDA and PCRWR. A purely technical discussion of evolving a consensus on joint methodology to be adopted for the proposed further development of the WAA-Tool unused, which fortunately culminated in identifying common approaches and techniques for significantly enhancing the envisaged capability of the Tool. All the participants openly conveyed their technical views and insights on the inflows, losses / gains forecast techniques, etc, already being utilized and novel approaches which could be applied to make the Tool a more robust system planning model.

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