BACKGROUND

This document aims at reporting on the mandate of ICID Working Group on Water Saving in Irrigated Areas (WG-WATS), in view of its closure at the end of 2023 (completion of current mandate). ICID has long been concerned and addressing the issues associated with Water Saving in agriculture and Irrigated areas. These activities have especially been driven by Working Group on Water Saving for Agriculture (WG-WATS) [1994-2013] and Working Group on Water Saving in Irrigated Areas (WG-WATS) which was established in 2015. Completion of mandate was initially set at 2021, then later postponed to 2023.

HISTORY AND SCOPE

The Working Group on Water Saving for Agriculture was concluded at Mardin meeting in 2013 after completion of its mandate. Accordingly, the 65th International Executive Council (IEC) held at Gwangju in September 2014 had decided to establish a new Working Group under the Strategy Theme “Schemes”.

As per the Scoping Document, scope of activities of the WG is proposed are as follows:

(a) water accounting and irrigation auditing (and other ancillary uses); (b) irrigation water measuring devices; (c) assessment of water loss in various components of irrigation systems; (d) various methods and techniques used for water saving in irrigation; (e) policies and strategies for irrigation water saving; (f) charging for Irrigation Services; (g) success stories and best management practices in water saving; (h) tools and processes apply in irrigation water saving; (i) outreach of water saving technologies; (j) WatSave Awards.

ACTIVITIES UNDERTAKEN

In order to address the Scoping of the Working Group on Water Saving, the Working Group determined a number of points during its Mandate to work on it and accomplish it according to the interaction and activities of the members, which can be summarized as follows:

(a) Compile success stories and best management practices in water saving which includes techniques, technology, management, and innovation, as an example (Presentation by the WatSave Award winners)

(b) Collecting data and issuing official reports and books regarding a number of important topics, Policy and Legal Approaches to Water Saving, Water Charging Policies.

(c) Encouraged WG members to share documents, information, papers, presentation made on topics related to scope of work of the WG to the ICID Central Office for uploading on the web site of the WG.

(d) Organizing Workshops, Seminar and Symposium Which is related to issues of water saving in irrigated areas.

Summary of activities of the WG- on Water Saving in Irrigated Areas (WG-WATS is at Annex 1.

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CONCLUSION AND RECOMMENDATIONS

Based on the review of the activities and achievements of the WG on Water Saving in Irrigated Areas, we conclude from the results of a questionnaire of Water Charging Policies questionnaire of several member countries

(a) Water tariffs vary significantly in gravity networks and for pressurized networks as well as lands that contain water user associations or not.

(b) in general, the water price divided into water supply price of the water supply works and water resource fee (tax).

(c) Some countries may resort to providing free water delivery services for a period time in support of farmers.

(d) Through the research papers published within this working group that are related to the issue of water saving, the following can be concluded.

(e) one of the common solutions to compensate for water shortages, especially in arid areas in recent decades, is to use tools and methods to increase irrigation efficiency to reduce conveyance and distribution losses and water application on the farms, and with the idea that reducing irrigation losses, provide a new water source for the development of irrigated agriculture and increase agricultural production.

(f) The Water Administration System (WAS) is an integrated information management system for irrigation schemes that deliver water on demand through canal networks and rivers. WAS is used for water distribution management, debit accounts management and for the calculation of canal and dam operating procedures for a given downstream demand.

(g) Water management it is very importance to continue with the efforts of increasing irrigation efficiency so as to expand the irrigated area using available water resources.

(h) Matching irrigation supply and demand comes in the list of priorities since it is one of the major water saving measures and is very low cost.

(i) Conventional water-saving techniques have to be applied and, improved. These include precise land leveling, night irrigation, long furrows, modern irrigation in old lands, converting irrigation of orchards from gravity to pressurized systems (micro-irrigation) in old lands and introducing short duration varieties of crops etc.

(j) The potential savings in rice production is very large.

(k) Encouraging farmers to establish water user associations.

(l) Non-conventional water resources i.e poor quality water, (urban wastewater, agriculture drainage water, desalinated water) are required to be managed properly, considering environmental issues.

1. WAY FORWARD

Based on the new structure that was approved for the Working Groups, perhaps one of the most important proposals is for the new and complementary Working Group to continue completing the questionnaires that this group had previously adopted because of their importance in identifying facts related to the member countries in the field of water provision.

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Annex 1

SUMMARY OF ACTIVITIES OF WG (2015-2023)

2015 OCTOBER  The WG was established in 2015 and held its 1st meeting on 13 October 2015 at Montpellier, France. WG proposed to compile success stories and best management practices in water saving which includes techniques, technology, management and innovation. By taking advantage from research that submitted for the WatSave Award and presented it at the WG annually meetings.

2016 NOVEMBER At 2nd meeting of the WG held at Chiang Mai, Thailand on 9 November 2016, WG agreed to identify and collect and review and analyze the data for Policy and Legal Approaches to Water Saving and Water Charging Policies and to highlight the most recent researches and newest ideas on the scope of this working group. WG members agreed to overview paper on aspects of management, technology, technique and policies for water saving in irrigated areas and agreed to provide an opportunity to organizing a Seminar / Symposium on ‘Water Saving’ during the next ICID meeting in Mexico in 2017.

2017 OCTOBER At 3rd meeting of the WG held at Mexico City, Mexico on 12 October 2017, the chair Mr. Ehsani presented the outcome of Question 60.1 that's covers topic of best practices and successful story on water saving. It has also agreed to developed the draft questionnaire to collect data for Policy and Legal Approaches to Water Saving and Water Charging Policies and proposed to submitted a paper for in ICID Journal cover the State of the Art on Water saving and Mr. Chris Norman (Australia), the winner of WatSave Technology Award 2017 presented his contribution on “Saving Water in Northern Victoria, Australia”.

2018 AUGUST At 4nd meeting of the WG held at Saskatoon City, Canada on 15 August 2018, Continuation of responses for Water Charging Policies questionnaire from Members countries, finish filling out the questionnaire of Policy and legal approaches to water saving. It was also recommended by W.G to share the book of the Egyptian National Committee (ENCID) on “Water Saving in Irrigated Agriculture in Egypt – case studies and lessons learned” with Members countries by the ICID Central.

2019 OCTOBER At 5nd meeting of the WG held at Bali City, Indonesia on 05 September 2019, the Secretary of the WG presented different chapters of “Water Saving in Irrigated Agriculture in Egypt – case studies and lessons learned” book with a review of the results of a number of questionnaires and WG decided to prepare an overview paper on State of the art on water saving based on the South African experience and would table the final paper on South African case study.

2020 SEPTEMBER At 6nd meeting of the WG Which was held virtually on 19 October 2020, the results of a Water Charging Policies questionnaire of a number of member states were discussed and W.G members were encouraged to introduce new cases especially in arid and semi-arid areas and it was mentioned to the new book titled “An Approach on Concept of Irrigation Efficiency” from (IRNCID).

2021 DECEMBER At 7nd meeting of the WG held at Marrakesh City, Morocco on 9 December 2021, continue discussing the results of the questionnaires adopted by the W.G. urging member countries that have not filled them out to fill them out, and discussing extending the W.G for the next two years which was approved.

2022 OCTOBER At 8nd meeting of the WG held at Adelaide City, Australia on 08 October 2022, A new chair was elected for W.G, An electronic copy for a book titled “Water Saving in Irrigated Agriculture in Egypt” has been shared and also a report titled “Project for Sustainable Irrigation Water Management through Water Users Association in IRAQ” has been shared with all members present.

2023 NOVEMBER At 9nd meeting of the WG held at Vizag City, India on 06 November 2023, Four lectures were given in an internal workshop organized on the topic of water saving. The lecturers were: (Ayyed Kadhim, Rafat Nael, Nisreen Sami, Dr. MOHAMED ELHAGAREY), A presentation on the results of the Survey on Water Charging Policies was given, WatSave Technology Award Winner 2023 for a presentation. Mr. CARLO DE MICHELE and Mr. Guido D’URSO made an interesting presentation on “IRRISAT –A Satellite-based Irrigation Advisory Service”, W.G members and attendees were informed with the new structure that was approved for the working groups, this meeting will be the last.

2023 Virtual W.G meetings, Within the year 2023, two online meetings were held for members of the working group, and the topics focused on preparing for an internal workshop on the topic of water saving to be held in the India meetings.

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