1. Introduction and rationale

1.1 The great challenge for the coming decades will be to increase food production with less water, particularly in countries with limited water and land resources. The effective and sustainable use of water for agriculture has become a global priority of vital importance, requiring urgent and immediate solutions in view of intensifying competition. The importance of Capacity Development for attaining sustainable developments in irrigation, drainage and flood management sectors is fully realized.

1.2 The consensus among policy-makers in the developing world is that a lack of capacity is constraining the development of irrigated agriculture. Although this concern is not new, it is now receiving much attention in the irrigation and drainage world, where it is becoming an issue in its own right due to the increasing complexities of development, multi-disciplinary nature of solution for sustainable solutions, the close linkages between water-food-energy, impacts of climate change, rapid changes in the irrigation and drainage sector, the need to bring together various stakeholders who might not necessarily be experts.

2. Objectives

2.1 Relevance of the Working Group (WG)

2.1.1 It is evident that in order to meet growing food demand for rapidly growing world population the second green revolution has to be centered on the smallholder farmers in Africa and improved water use efficiency and production in large irrigation systems in Asia. A lack of capacity is identified as a constraint to the development of productive and viable irrigated systems. Both Asia and Africa will need a well-informed, skilled and technology savvy contingent of agriculture scientists, irrigation engineers, and extension service workers to support this effort. Capacity development has to be linked to the overall goal of the sector and serve the purpose of the ultimate beneficiaries – the irrigation community. There is need for systematic capacity development of both institutions and individual in terms of developing enabling environment for institutional reforms and good governance, supporting institutional capacity, and supporting policy development.

2.1.2 The capacity development activities are presently being undertaken by the WGs and CO in an unorganized and ad-hoc basis. There is need to fill this gap that has been existence since 2007 when the WG-CBTE was closed. At that time also the WG had recommended that there is need to keep this WG going-on, but it was not possible at that time. It is high time that a new WG for capacity development is established when at present we are in the process of developing a new vision, and capacity development is recognized as one of the six goals to realize its vision.

2.2 Relevance of the Working Group to the scope of the Thematic Area

2.2.1 Knowledge and its management is key to the capability of an institution, sector or nation to implement its policies for AWM including success of any professional network in fulfilling its vision and same is true for ICID also. It is crucial that generation, extraction consolidation/compilation, synthesis, packaging and dissemination of information and knowledge in the field of irrigation, drainage and flood management is given the right priority it deserves in order to fulfill the mission of ICID. Fast changing technologies influence the knowledge process and present a challenge on one hand and an opportunity on the other. As such the capacity development is a continuous process, therefore, the proposed Working Group on Capacity Development will be one of the WGs under the theme Knowledge.

2.3 Existing gap that the Working Group is expected to fill

2.3.1 That there exist gaps in global efforts in dissemination of knowledge is borne out by the existence of instances where highly useful and practical innovations did not succeed due to lack of dissemination of knowledge about appropriate techniques. Presently a lot of innovations and knowledge is available in the sector which does not reach the stakeholders concerned. It is necessary to ensure that this knowledge is tailored to the needs of irrigation professionals and other intermediaries such as extension service personnel and NGO volunteers, who can help the farmers in their efforts to generate more income per unit of water and land. It is therefore essential that the available knowledge is widely shared and transferred, particularly on the
outcomes of the latest researches being made in the fields of irrigation and drainage, to the end users at the field level.

2.3.2 The various Working Groups of ICID, through their activities help generate, extract, compile, and synthesize the available knowledge. At the same time ICID technical Working Groups compile some of the knowledge in the form of reports, manuals and guidelines. These outputs are publicized on their respective web pages so as to make the information available to all interested. Some of the chairs and members of the workbodies use their website as an effective way for dissemination of this knowledge.

2.3.3 Central Office is facilitating the sharing of this knowledge across a wide spectrum of stakeholders by making use of ICID Web pages. Initiatives have been taken to help members to get the latest information and to meet the growing requirements of the professionals. Some of the efforts that are being made by the Central Office in this direction are described in pamphlet “New Services from ICID Central Office”.

3. State of knowledge on the topic

3.1 Other International Organisations that are working on the subject

3.1.1 There are several other International Organisations that have programs and activities on this topic:

- (a) Food and Agriculture Organisation of the United Nations (FAO);
- (b) International Fund for Agricultural Development (IFAD);
- (c) Most of the 15 research institutes that are organised within the CGIAR Consortium, especially IWMI and ICARDA;
- (d) Multilateral development banks: ADB, AFDB, IADB, WB;
- (e) A number of universities and institutes for international education: AIT, Irrigation Training and Research Centre of California Polytechnic State University, McGill University, UNESCO-IHE; and
- (f) Private companies and Foundations

3.2 The niche that the WG ICID is expected to fill in this area

3.2.1 WG-CBTE (1995-2007) had been reasonably successful in accomplishing its mandated tasks. However, like many other Working Groups in ICID, it also suffered from a lack of continuity from year to year. The Group had organized four workshops wherein it was agreed that the workshops conducted by the Group were productive in disseminating the importance of Capacity Building for attaining sustainable developments in irrigation, drainage and flood management sectors.

3.3 How is the Working Group expected to collaborate with the other International Organizations?

3.3.1 Like in the past FAO will be the major partner in this WG. In addition, other International Organizations such as IFAD, IWMI, UN-Water, WWC, GWP, WMO partners would be invited to participate as observers. They will have the possibilities to share the initiatives and achievements of the WG. The adoption of a policy to make all knowledge products of the WG available on an open source basis in line with the Creative Commons will facilitate this collaboration.

4. Work Plan

4.1 Capacity development constitutes the capacity of the individual, institution, legal framework and stakeholders.

4.1.1 Scope

- (a) Coordinate and guide the knowledge management activities of the Commission and the capacity development activities by various WGs.
- (b) Compile the status of training and educational programmes offered in different regions,
- (c) Compile the Educational Programs being offered in Irrigation and Drainage in different regions;
- (d) Identify the training and education requirements, and identify gaps in available training programs, explore the feasibility of developing e-learning program and prepare guidelines for their development to support education and training programmes;
- (e) Explore the scope of use of IT in capacity development including distant learning, and implement where feasible;
(f) Make available various tools required for sustainable development;
(g) Oversee the establishment and functioning of a Technical Support Unit for supporting NCs; and
(h) Facilitate the process of balancing education and training requirements, and provision and training services.

4.2 Target audience

4.2.1 The main target audience of the activities of the WG will be the in-service irrigation and drainage professionals, professionals from the other sector associated with AWM related activities, intermediary or extension-service providers and professionals from the NGOs working at the Farm level.

4.3 Outputs

4.3.1 The major expected outputs during the six-year life of the WG are the following:

(a) Possible establishment of a distance learning mechanism;
(b) Identification of the required guidelines, manuals and position papers etc required and assessment of their availability;
(c) Monitoring of the guidelines preparations by WGs etc;
(d) An online directory of institutes providing formal degree in Irrigation and Drainage;
(e) A well established and functional TSU;
(f) Various tools made available in public domain; and
(g) Training workshops successfully organized.

4.4 Collaborators and dissemination strategy

4.4.1 The WG would have to base its activities on an open attitude with a clear scope for invitation of outsiders that are interested in the topic on a Permanent Observers (PO) or adhoc basis. The capacity development strategy would have to be based on reaching those who can apply the findings and recommendations of the WG in their research and especially in policy development, decision making and implementation in practice.

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\[(\text{Annex 4})\] [IEC Agenda, Appendix VIII, page 102]