Taking Command Area Development and Water Management closer to the Farmers:

Proposal for India Irrigation Forum

1.0 Introduction

India's population is steadily growing and is expected to stabilize around 1.6 billion by 2050 (present about 1.28 billion) putting pressure on limited and scarce water resources due to rapid urbanization, industrialization and pollution of water sources. Indiafaces a daunting task of feeding population requiring about380 metric tons (MT)[1]food against present food production of about 260 MT.

Since both land and water resources are finite resources, increased agricultural production to meet the requirement of the increasing population will have to come from the same limited net sown area by increasing productivity with an optimal use of available water and land resources and irrigation along with improved water management and agronomical practices will play a significant role in achieving this target.

Command Area Development and Water Management Program (CAD / CADWM), has proved to be the best method of managing water below the irrigation outlets, provided it is implemented meticulously. This brief note proposes an India Irrigation Forum to be supported by CADWM Program to improve capacity and skill development in order to assimilate new technologies.

2.0 Water and food security challenge

India would be facing increasing water stress in near future due to increasing population and impacts of increasing climate variability due to impacts of climate change - monsoon already shows changing patterns,which is likely to adversely impact both the availability, dependability and quality of water as a resource. In many parts of the country, seasonal water scarcity is already being experienced. In order to overcome regional and seasonal water scarcity already being faced and ensure the assured food production, it is necessary to conserve and store water through various means bycreation of all kinds of storages, improve efficiency of delivery, increase the productivity of water, and expand irrigated area without withdrawing additional water.

Given the numerous challenges and concerns plaguing water sector and the large share of water withdrawn for agriculture, irrigation and drainage management has to address many of these concerns and challenges related to climatic, technical, economic and organizational aspects through holistic and integrated approach is adopted. Some of the measures which need to be adopted are - to conserve, reuse and recycle water; adopt improved water management and agronomical practices including water saving micro irrigation technologies such as drip, sprinkler etc. for optimal and efficient use of scarce land and water resources; reclamation of degraded land; and promoting participatory irrigation management.

The Command Area Development Program, initiated by Central Government in 1974 and whose importance has again been recognized are to (i) Bridge the gap between potential created and their utilization through micro level infrastructure development and efficient farm water management practices;(ii) Optimization of agricultural productivity & production; and (iii) Improvement in socio-economic conditions of farmers.These objectives have substantially been achieved over the years[2] to a satisfactory degree.

However, considering the increasing complexity requiring multi-disciplinary approach to agriculture water management, stakeholder participation in the development process and the

---

[1]Carrying capacity of Indian agriculture: issues related to rainfed agriculture, B. Venkateswarlu and J. V. N. S. Prasad, Central Research Institute for Dryland Agriculture, Hyderabad 500 059, India

[2]NitiAyog, 2015, "Evaluation Study on Command Area Development and Water Management Program", PEO Report No 230, Development Monitoring and Evaluation Office, Government of India, New Delhi.

need for adopting new technologies for the benefit of farmers there is an increasing realization that a lack of capacity is one of the major constraint in the sustainable development of irrigated agriculture. For the future success of Command Area Program in particular there is need of a well-informed, skilled and technology savvy contingent of agriculture scientists, irrigation engineers, and extension service workers to support this effort. There is need for creating an enabling environment for supporting institutional capacity, capacity development of staff to update them in latest advances in the field etc.

Without active participation of the beneficiaries the irrigation systems cannot be managed efficiently. The experience shows that wherever farmers have been actively engaged, the overall management of irrigation system and the water use efficiency have significantly improved. Hence, efforts have to be made to enhance participation of the beneficiaries on a sustainable basis.

3.0 India Irrigation Forum

Fully realizing the importance of knowledge sharing and capacity developmentfor attaining developments in irrigation, drainage and flood management sectors, there is proposalto set up India Irrigation Forum(IIF) to provide a platform for interaction amongst various stakeholders engaged in agriculture water management with the following mission and objectives:

Mission: Enhance the science based discourse in policy making,field implementation of research findings and new technologies, skill development at various levels and sharing of experiences in the field of agriculture water management in India.

Objectives: India Irrigation Forum aims at:

1. Providing a platform for networking, interaction and sharing of knowledge and experiences amongst various professionals;
2. Facilitating interdisciplinary understanding and dialogue;
3. Skill development of all stakeholders including WUA functionaries by organizing courses, trainings workshops and seminars on thematic topics of interest;
4. Bringing the advances in research, developments, technology and successful innovations in the sector within easy access of field level professionals;

Stakeholders: India Irrigation Forum will be a Farmer Centric network of various stakeholders engaged in agriculture water management such as staff of state irrigation department, experts from irrigation utilities, extension staff, professional bodies involved in area of irrigation and water resources development, management and research, professionals of allied disciplines related to agriculture water management like agriculture, socio-economic, environment and energy besides academic institutes, private sector, chamber of commerce etc.

Partners: Some of the institutional partners expected to take lead are central and state government and private organizations engaged in discipline relate to agriculture water management such as State Irrigation/ Water Resources and Agriculture Departments, Union Ministry of Water Resources, Union Ministry of Agriculture, Central Water Commission, Central Ground Water Board, Central Board of Irrigation and Power, WALMIs, State Irrigation Research Institutes, Water Technology Centers, FICCI, India Irrigation Association, Jain Irrigation System Limited etc. International Commission on Irrigation and Drainage, which organizes a World Irrigation Forum on the similar grounds could play an important role providing international inputs to the India Irrigation Forum. First IIF was organized in IWW in 2016 by ICID as a demonstration where the experts stressed the need for a regular organization of IIF .

Command Area Development and Water Management Program whose objectives are enshrined in the objectives of India Irrigation Forum may take the lead in organizing an India Irrigation Forum once every year.