National workshop

on

Sustaining the tank-fed agriculture through community-lead water conservation models

Scaling-up tank-fed agriculture: Partnership building

19th September 2024

Venue: WTC Auditorium, ICAR-IARI, New Delhi

In joint collaboration with

WTC, ICAR-IARI, New Delhi
&
DHAN Foundation, Madurai, Tamil Nadu

Introduction

Globally, almost 70% of all fresh water is consumed by the agriculture production systems, in India it is more than 80%, and exceeding 90% in many developing countries. India has become the most populous nation in the world and is expected to have a population around 1.68 billion in 2050. To feed that huge population with its diverse food requirement is a formidable challenge for a country with only 4% of the water and 2.4% of the land resources of the world. Global warming and other adverse impacts of climate change have further accentuated the complicated nexus that exists among water, food, climate and energy adversely affecting agriculture production. On the one hand, the availability of water has been continuously declining with time while on the other hand, the requirement of all sectors viz. agriculture, industrial and domestic etc. has been increasing consistently.

The urban population is also increasing and estimated to be around 55 per cent by 2050. As a consequence, the quantum of waste and poor-quality waters is going to increase enormously, which can be effectively treated at low cost for safe use in irrigation. As the population switches on to other commodities in its diet, their production will further increase the burden on the natural resources - both water and soil. In India, the processing and value addition is <10%, which is less than many developing countries in Asia. Since there is a focus on developing this particular sector, it will eventually increase the demand of water by the concerned industries.

While many discuss on water supply intervention, the water user's associations at grassroots are consistently demonstrating water demand management by through their community-led water conservation models. Indeed, addressing the growing water demand requires sound knowledge on traditional practices and adaptive skills. Several interventions made by IARI and DHAN Foundation around such knowledge, has witnessed a range of impact including shift from high to low water requirement crop, improved cropping practices leading to reduced water requirement, on-field water savings measures leading to improved moisture level in the soils etc.

Workshop objectives

a. Showcasing the success stories in community-lead water conservation models
b. Disseminating the technologies which sustained tank-fed agriculture
c. Generating way forward to expand the partnership for scaling-up tank-fed agriculture

Programme Schedule

Day	Programme schedule	Timing
19th September 2024 (Thursday)	Inaugural session	9.30-10.30 am
	Technical session -I	10.30-11.05 am
	Technical session -II	11.05-11.40 am
	Technical session -III	11.40-12.15 pm
	Community Session-IV	12.15-12.45 pm
	Valedictory session	12.45-1.15 pm

Themes

- ✓ *Water security for all: Localizing the global agenda (ESG and SDGs)*
- ✓ *Community-lead water conservation: Models and milestones*
- ✓ *Technology advancement in tank-fed agriculture: Research and Extension*

Deliverables

a. Generating policy prescriptions for sustainable water resources development at large

b. Action leads for joint research and technology advancements to expand partnership towards the mission

Participants

Scientist/ Professor/ Academician: working in the domain of water management

Water experts/officials: The key functionaries from government departments, practitioners from NGOs and CSR institutions, and private institutions

RA/ SRF/ YP/students: Working in the field of water and associated activities

Farmers/ Growers: Community from the grassroots who are playing leadership role in water users association spread across Tamil Nadu, Karnataka, Kerala and Bihar

About the Collaborators

IARI

The journey of the Indian Agricultural Research Institute (IARI), popularly known as Pusa Institute, began in 1905 at Pusa (Bihar); the institute was shifted to Delhi on 29th July 1936. The vision of the institute is to provide leadership for Science-led sustainable and globally competitive agriculture for food, nutrition and livelihood security, and mission is to explore new frontiers of science and develop human resources to provide the leadership in technology development and policy guidance for vibrant and resilient agriculture, which should be productive, eco-friendly, sustainable, economically profitable and socially equitable. In order to accomplish this mission, the Institute has adopted the following mandates:

Basic, strategic and anticipatory research in field and horticultural crops for enhanced productivity and quality.

Research in frontier areas to develop resource use efficient integrated crop management technologies for the sustainable agricultural production system.

Serve as a centre for academic excellence in the areas of post-graduate education and human resources development in agricultural science.

Provide national leadership in agricultural research, education, extension and technology assessment and transfer by developing new concepts and approaches and serving as a national reference point for quality and standards.

WTC-IARI

The Water Technology Centre (WTC) is an inter-disciplinary facility for research, teaching, training and extension in agricultural water management. It was established in 1969 with the technical collaboration of University of California, Davis and partial financial support from the Ford Foundation (USA). Since then, the Centre has evolved into a unique institution, addressing a wide range of issues pertaining to water management at farm, large irrigation commands and watershed scales. The centre also renders training and consultancy services to a wide range of clientele on the various aspects of agricultural water management through an innovative range of programmes of 3 days to 6 months duration. In fact, it was the first centre in the country to undertake the responsibility of training senior, middle and junior level administrative and technical personnel of the Command Area Development Authorities & Irrigation Departments, Central Water Commission, Agricultural Universities, State Soil and Water Conservation Departments and sponsored candidates from foreign countries on interdisciplinary aspects of water management. As a result of which, it was recognized as the "Centre of Excellence in Water Management" by the Directorate of Extension of the Department of Agriculture and Cooperation, Ministry of Agriculture and was also one of the headquarters for the two All India Coordinated Research Projects on the Agricultural Drainage and the Pumps and Wells. A unit of the Precision Farming Development Centre scheme, of the Ministry of Agriculture, is also housed in the Centre. In 1996, the Academic Council of IARl recognized the Centre for the award of the M.Sc. and the Ph.D. degrees in the discipline of Water Science and Technology.

DHAN Foundation

DHAN Foundation is a professional, not-for-profit and secular development organization working with 3 million people. The operations are spread in more than 22000 villages covering 16 states in India. The themes of focus include women empowerment (Kalanjiam Community Banking Programme), Water Conservation (Vayalagam Tank-fed Agriculture Development Programme), Agriculture, Information Communication Technology for Poor, Education, Climate Change, Local Governance, Youth and Development, and Migration. Through its 3 decades of community-led water conservation models, the institution has restored around 5000 waterbodies at National level benefitting around 4.5 Lakhs poor farming families. DHAN Foundation has implemented over 100 watershed development works and served as Resource Support Organisation and supported cultivation in 1.5 lakhs hectares of agriculture land. Besides restoration of Ooranis, about 10000 farm ponds were constructed to support farmers in combating climate change and also to provide life-saving irrigation.

Organizing teams

Convener

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Co-Convener

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