Important Dates

Last date for receipt of applications : December 11, 2023
Intimation to selected candidates : December 15, 2023
Confirmation by selected candidates : December 18, 2023

After acceptance, cancellation at the last moment will be regarded as serious breach of ethical conduct since it may deprive other candidates who could have availed of the opportunity.

How to Apply ?

The interested candidates should register and apply online through 'Capacity Building Programme' (CBP) portal as follows:

1. Visit the website https://cbp.icar.gov.in or click on Capacity Building Programme link under http://www.icar.org.in/
2. Login using your user ID and Password. To create user ID use "Create New Account" link.
3. After login, click on "Participate in Training" link and fill the proforma.
4. Take a printout and send duly signed copy through proper channel to the **Course Director**, Winter School on '**Improving Water Use Efficiency and Productivity through Advancement in Micro-Irrigation System under Limited Water Conditions'**, Agricultural Research Station, Mandor-Jodhpur 342304, Rajasthan by post along with registration fee as per details given overleaf. The advance scanned copy of the nomination may be sent by e-mail (mlmehriya@gmail.com). Please feel free to contact the Course Director for any assistance.

Important Note : The participants are required to pay a sum of Rs. 50/- (Rupees Fifty only) as a registration fee (Non-refundable) along with the completed application in the form of Demand Draft/ Indian Postal Order drawn in favour of '**ZDR & CHAIRMAN, ORGANISING COMMITTEE ARS, MANDORE JODHPUR'** payable at Jodhpur. Payment may be made through **online** in the account of "**ZDR & CHAIRMAN, ORGANISING COMMITTEE ARS, MANDORE JODHPUR**". Bank: UCO Bank, A/C No. **05630110032114**, Branch Name: Mandor, Jodhpur; IFSC Code: **UCBA0000563**; MICR Code: 342028003. In such a case, the transaction details need to be sent along with the application form.

Contacts

Course Director

Dr. M. L. Mehriya
Zonal Director Research, ARS, Mandor
Mobile: 09414663289
Email : mlmehriya@gmail.com

Course Co- Directors

Dr. U. N. Shukla
Controller of Examinations &
Associate Professor (Agronomy), COA, Jodhpur
Mobile: 08769810071
Email: umanaths7@gmail.com

Dr. Moola Ram
Associate Professor (Agronomy), PC Unit,
ICAR-AICRP on Pearl Millet, Jodhpur
Mobile: 9414295707
Email: mramresearch@gmail.com

Announcement-cum-Information Brochure

ICAR Sponsored Winter School

On

Improving Water Use Efficiency and Productivity through Advancement in Micro-Irrigation System under Limited Water Conditions

(January 08-28, 2024)

Organized by
Agricultural Research Station, Mandor
Agriculture University, Jodhpur
Mandor – Jodhpur 342304, Rajasthan

About Host Institute

Agriculture University, Jodhpur was established on 14th September, 2013, with the goal of education, research and extension in agriculture and allied sciences, as well as the upliftment of economy of the farming community of Western Rajasthan. The University jurisdiction includes eleven districts (Jodhpur, Jodhpur Rural, Phalodi, Barmer, Balotra, Beawar, Nagaur, Didwana, Pali, Jalore and Sirohi) covering 28 per cent of the State's total geographical area supporting 20.8 per cent human and 28.4 per cent animal populations with a wide range of annual precipitation from 100 to 600 mm. Through its six constituent colleges, two Agricultural Research Stations (ARS), three Agricultural Research Sub-Stations (ARSS) and eight Krishi Vigyan Kendras (KVKs), the Agriculture University, Jodhpur, has a strong teaching, research and extension set up to envision agricultural development in the western parts of Rajasthan. The headquarter is situated at Mandor, Jodhpur.

ARS, Mandor was established in 1983, a premier research station of the University located in the main campus of the University.

About Winter School

Water is the most critical input for agricultural production. As we know there is huge scarcity of water in many parts of the country not only for drinking purpose but also for agricultural production. Rajasthan having only 1.16 per cent of the total surface water available in India is highly water scarce State in the country. In such situation, we need to adopt irrigation methods that not only provide sufficient water to plants but also help in saving of water. One such method is 'microirrigation'. Micro irrigation offers greater potential for precise water management. Sprinkler and drip systems have substantially high irrigation efficiencies (60–70% and 80–90%, respectively) than that of traditional surface flooding (45–60% efficiency). It also provides an opportunity to supply nutrients in a timely and efficient manner to root zone (Fertigation). In recent decades, there has been considerable growth in the acreage under micro-irrigation, mainly as a result of lower costs, improvements in filtration and emitter technology, and increased grower confidence in the technology. Research advances and technological improvements have made micro-irrigation applicable to a more diverse set of applications, cropping systems, and water quality conditions. Research in biofiltration techniques, soil moisture sensors, and precision irrigation shows great promise for the advancement of micro-irrigation. Nevertheless, several technological challenges remain, especially for non-row or non-orchard crops, and in regions where water quality is severely impaired. Innovations in these areas are required, as well as a transfer of the technology to small farmers in water-scarce regions who still use traditional surface irrigation method. With this background the present winter school training programme on "**Improving Water Use Efficiency and Productivity through Advancement in Micro-Irrigation System under Limited Water Conditions**" is being organized with anaim to explore the recent advances on technologies pertaining to micro-irrigation.

Objectives

The training program will help to enrich the technical knowledge of the participants on micro-irrigation. The major objective of this course is to impart the knowledge of technological advancement in the field of micro-irrigation. The technological advances like improvements in filtration and emitter technology with reduction in cost are not only need to be known by the participants but also implement it in their research and development. Training will also deliver the knowledge and information of sensors and automation of irrigation, artificial intelligence, intellectual properties, copyright, entrepreneurship development to make it useful for the stakeholders.

Key Course Contents

The training curriculum is largely based on the various aspects of microirrigation. Following points represent the tentative subject matter will be covered in the winter school:

- Concept of micro irrigation scheduling based on crop water requirement and plant growth parameters
- Soil and plant based micro irrigation scheduling
- Profile water depletion and changes in soil water potentials under micro irrigation
- Climatological approach for micro irrigation scheduling
- Use of geo-spatial products for water resource management in water scarce areas
- Modeling irrigation water scheduling using crop weather models to reduce water foot prints
- Scope of micro irrigation for doubling the farm income in water scarce areas
- Micro irrigation based nutrient management including fertigation for enhancing crop and water productivity
- Site specific nutrient management approach for fertigation scheduling
- Significance of micro irrigation systems for enhancing nutrient and water availability to plants in relation to soil hydraulic dynamics and root growth
- N, P and K dynamics in fertigation vis a vis conventional fertilizer application
- Economic feasibility and success of micro irrigation systems for profitability of agriculture sector in India

Eligibility

- The training programme is open to Scientists/Teachers/Subject Matter Specialists/ Professionals of ICAR Institutes /CAUs /SAUs/KVKs involved in research, development, training, testing and extension programmes.
- The applicant should be working in a position **not below the rank** of Scientist / Assistant Professor/Lecturer/Subject Matter Specialists or Equivalent in Agriculture and its Allied Disciplines.
- A maximum of 25 participants will be selected based on their qualification, experience, area of work and relevance to the subject.

Boarding and Lodging

Free lodging and boarding will be provided to the participants as per the approved ICAR norms. ARS, Mandor has a well-furnished guesthouse with dining facilities. Please note that, strictly no accommodation in the guest house will be provided to the family members or guests of the participants. The lodging & boarding will not be provided to the local candidates, however local hospitability (lunch, tea, snacks, etc) will be provided to them.

Travel

Participants will be paid travel fare to and fro through the shortest route from their respective institution to ARS, Mandor-Jodhpur by Rail or bus or other means of transport. The payment will be made as per their entitlement but restricted to the maximum of AC-II tier train fair. If any participant chooses to travel by air, he/she may do so, but their claim shall be restricted to AC-II tier train fair. TA to be paid on production of a certificate or tickets by the participant.

How to Reach ARS, Mandor

Jodhpur is well connected by flight, rail and road. ARS, Mandor is situated on NH 65 towards Nagaur and Bikaner, which is 10 km from the main railway station and 13 km from the airport. Pre-paid taxi or citybus can be availed at airport/railway station/bus stand to reach Mandor (https://www.aujodhpur.ac.in/contact-us.php).

Weather

In January, the atmospheric temperature ranges from 14°C to 28 °C. It is advised to bring woollens.