



## Winter School

on



### Harnessing the Potential of Underutilized Horticultural Crops of Arid and Semi-Arid Region for Food, Nutritional and Economic Security

(28<sup>th</sup> January 2026 to 17<sup>th</sup> February 2026)

*Sponsored by*

**Indian Council of Agricultural Research,  
New Delhi**



#### Course Director

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Senior Scientist (Veg. Sci.)

#### Course Co-Director

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*Organized by*

**ICAR-Central Institute for Arid Horticulture  
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#### ABOUT ICAR-CIAH

The Indian Council of Agricultural Research established the National Research Centre for Arid Horticulture (NRCAH) on 1<sup>st</sup> April, 1993 in 125-hectare area at Beechwal, Bikaner, Rajasthan. After dreaming of the progress made by NRCAH in a miniature span of time and the forthcoming needs of the nation, on 27<sup>th</sup> September, 2000, the NRCAH was promoted to the Central Institute for Arid Horticulture, Bikaner (ICAR-CIAH) by merging Central Horticultural Experiment Station (CHES), Vejalpur, Gujarat. The institute is conserving a wide range of diversity of more than 50 arid horticultural crops and acting as a treasure trove of several lesser-known crops having horticulture significance. So far the institute has developed 29 improved varieties of fruit crops and 39 of vegetable crops to cater the needs of farmers and stakeholders. The institute has come out with several pro-farmer production, protection and post-harvest management technologies for arid and semi-arid horticulture. ICAR-CIAH is coordinating the research on arid horticultural crops at 18 centers across 10 states under AICRP on Arid Zone fruits.

#### COURSE BACKGROUND

Harnessing the potential of underutilized horticultural crops in arid and semi-arid regions is crucial for strengthening food, nutritional, and economic security. In India, arid ecosystems span 39.54 million hectares, comprising 31.71 million hectares of hot arid zones across

Rajasthan, Gujarat, Haryana, Punjab, Karnataka, and Andhra Pradesh, and 7.83 million hectares of cold arid zones in Jammu & Kashmir and Himachal Pradesh. These regions are characterized by extreme temperature fluctuations, erratic rainfall, recurrent droughts, and nutrient-poor sandy soils with low water-holding capacity. Fortunately, indigenous and locally adapted horticultural species have evolved unique traits enabling them to withstand multiple abiotic and biotic stresses under changing climatic conditions. Arid horticultural crops, being naturally climate-resilient, offer immense scope for improving nutrition, income, and livelihood security when supported with improved cultivars and appropriate production and post-harvest technologies. Research institutions such as ICAR-CIAH, Bikaner, CHES, and AICRP-AZF have developed several climate-resilient varieties and farmer-centric technologies for production, protection, and value addition tailored specifically for arid environments. These innovative interventions are delivering tangible benefits to farmers and stakeholders by enhancing productivity, profitability, and resource-use efficiency. The training program is designed to sensitize participants to these recent technological advancements and equip them with the skills necessary to guide farmers in adopting modern, sustainable, and climate-resilient horticultural practices that strengthen food systems and secure livelihoods in arid and semi-arid regions.

## ELIGIBILITY

Scientists, Assistant Professors, Subject Matter Specialists (SMS) or equivalent professionals working in the National Agricultural Research System (NARS) including ICAR Institutes, Deemed Universities, State Agricultural Universities (SAUs) and KVKs in the disciplines of Horticulture/ Agriculture Science. The total participants limited to 25 and finalized by screening committee as per the ICAR guidelines. The decision of the selection committee will be final, and no correspondence in this regard will be entertained for non-selected candidates.

## WEATHER

In January-February 2026, Bikaner is expected to have cool and pleasant winter weather, with average high temperatures around 21°C to 23°C and average low temperatures around 7°C to 8°C. The climate remains pleasant during February. The minimum temperature is about 17°C. Candidates are advised to bring winter clothes for a comfortable stay

## BOARDING AND LODGING

Free boarding and lodging (shared) will be provided to participants only during the training program by ICAR-CIAH, Bikaner.

## HOW TO REACH?

Bikaner city is well connected by flight, train, and bus services. There are two main railway stations—Bikaner Junction and Lalgah and one airport (Nal Airport), which are about 15 km, 7 km, and 23 km away from ICAR-CIAH, respectively.

## TRAVEL

Participants will be paid travel fare to and fro by the shortest route restricted to the maximum of

AC-II tier fair excluding Rajdhani/ Shatabdi Express as per the guidelines and norms of ICAR. Participants are required to produce receipts/ tickets in support of their claim.

## IMPORTANT DATES

**Duration of course:** 21 days (28.01.2026 to 17.02.2026)

**Last date to apply:** 21<sup>st</sup> December 2025

**Number of participants:** 25 (Twenty-five)  
**Communication/Intimation of Selection by** 10<sup>th</sup> January 2026 (only through E-mail)

## HOW TO APPLY?

Eligible and interested candidates may download nomination form from given QR code and send duly filed nomination form forwarded by Competent Authority in the prescribed format to the Course Director along with DD/ IPO/ online of Rs. 50/- (non-refundable) fee in favor of 'ICAR Unit CIAH' payable at Bikaner.



## MAKE THE ONLINE PAYMENT

Pay the registration fee (Rs. 50/-) using the QR code and bank details as given below:



Beneficiary Name: ICAR UNIT, CIAH, Bikaner  
Bank Name: PNB Bank  
A/c No: 0057012100000015  
IFSC Code: PUNB0625300  
Branch: Samta Nagar, Bikaner

The scanned application copy may be sent to the mail ID of Course Director.

## WEEKEND DESTINATION



Karni Mata Temple

Junagarh Fort

Sam Sand Dune

## For more details:



## Course Director

**Dr. Lalu Prasad Yadav**

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## Dr. Jagadish Rane

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