

## Registration Form

**Application form for participation in ICAR Short Course**  
(To be sent directly to Course Director)

**Organizing Institute:**  
**Central Arid Zone Research Institute, Jodhpur-342 003**

1. Full name (In Block letters) .....
2. Designation .....
3. Present employer and address .....
4. Postal Address .....  
Phone/ Mobile No.....  
Fax.....  
E-mail.....
5. Permanent Address .....
6. Date of Birth.....
7. Sex: Male/Female .....
8. Teaching/research/professional experience (mention post held during last 5 years and number of publication) .....
9. Marital status: Married / Unmarried .....
10. Mention if you have participated in any Research seminar, Summer /Winter School/ Short Course, etc. during the previous years under I.C.A.R./ Other organizations .....
11. Demand Draft/Postal order No.....Dated.....  
of **Rs. 50/-** (Not Refundable) for registration of application.
12. Academic Record

Examination Passed	Subjects Main/ Subsidiary	Year of passing	Class, Rank, Distinction etc.	University/ Institution	Other Information

Date .....

Place .....

Signature of Applicant

13. Recommendations of the forwarding Institute.....

Signature.....

Designation.....

Address.....

Date.....

## Certificate

It is certified that the information was furnished by the office record and was found correct.

Signature and designation of sponsoring authority

Note: If more copies are required, typed copies/ photocopies may be made locally for use of application

## Organizers

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## ICAR Short Course

on

**Climate change mitigation  
and adaptation under  
arid and semi-arid region**

**December 8-17, 2014**

**Sponsored by**



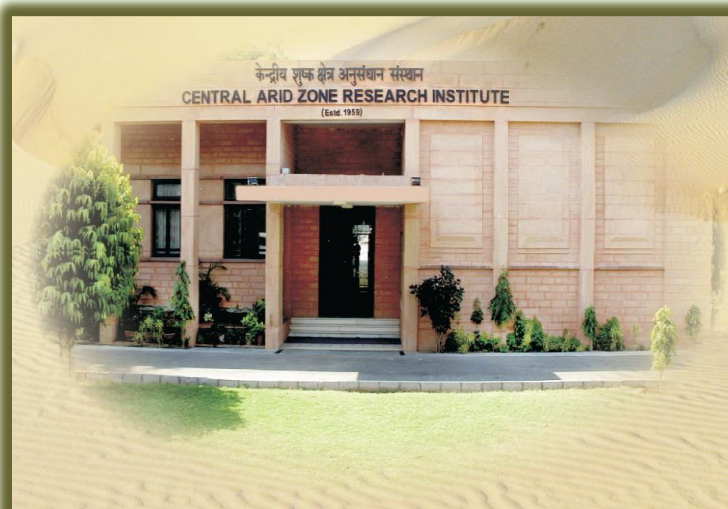
**Education Division  
Indian Council of Agricultural Research  
New Delhi- 110 012**

**Course Director  
Dr. R. K. Bhatt**

**Organized by**



**Central Arid Zone Research Institute  
Jodhpur – 342 003  
Rajasthan**



## Background

Climate change is real and its effects are already being experienced in several parts of the world, as is evident from the increase in extreme events like droughts, floods, windstorms and hail. Crop yields are normally affected by variations in climatic factors such as air temperature and precipitation. Besides the impact of climate change on crop growth and development, water availability, etc., there is a strong possibility of further soil degradation due to loss of soil organic matter as influenced by increased temperature regimes. Western part of Rajasthan and adjoining Punjab plains are likely to be hard hit where a combination of high summer and winter temperatures, reduced rainfall and few rainy days will make the environment dry, plant cover sparse and potential for wind erosion greater than at present.

Any adverse agricultural effects will pose serious risks to economic growth and livelihoods across the arid region in particular and country as a whole. In the past, farmers have coped with erratic climatic conditions by adjusting their farming practices. The projected increase in climate variability, however, brings new risks that will require new adaptation options. However, such adaptation options need to be designed jointly with farmers to increase local relevance. To combat adverse effects of climate change and to achieve sufficient and sustainable seed yield in the future, a multidisciplinary approach is required based on soil management, plant genomic, physiology, agronomy and finally up scaling and out scaling through modelling. Our understanding of the level of vulnerability of a society to climate change is low, and will require more research and knowledge sharing through continuous interaction. Proposed short course shall provide a platform for such an interaction.

Considering the multi-dimensional problem of climate change impact on arid and semi-arid agriculture, an integrated, multi-disciplinary programme has been developed. CAZRI with its strength of human resources from various relevant disciplines, excellent laboratory & field facilities and experience of working in the region for more than fifty years has developed this short course under different themes to sensitize the participants about various aspects of climate change and its impact on sustainability of livelihood.

## Date and Duration

The short course duration is 10 days from 08 to 17 December, 2014. Outstation participants are required to arrive latest by the evening of 7<sup>th</sup> December, 2014.

## Methodology

The course will consist of lectures, laboratory practicals, group discussions and field visits at research farms and nearby arid ecosystems.

## Course Content

- Current Scenarios of climate change
- Physiological approaches for climate change mitigation and adaptation
- Greenhouse gas emission from Indian agriculture and its impact on production
- Sensitivity analysis of climate variability and change on productivity of important crops
- Integrating farming systems for sustainable agriculture in climate change perspective
- Molecular approach for selection & development of climate resilient genotypes
- Assessment and monitoring of carbon form & stock under different cropping systems
- Potential options for carbon sequestration
- Silvopasture systems for arid and semi arid region and their role in carbon sequestration
- Effect of elevated CO<sub>2</sub> adaptation and biomass production of forage crops
- Policy and Frame work on global climate change
- Indian preparedness and current National Action Plan on climate change

## Eligibility

- i) Master's Degrees/Ph.D in Agriculture/ Agronomy/ Plant Breeding, biotechnology/ Crop or Plant Physiology/Environment Sciences/ Meteorology/ Botany or specialization in related subject.
- ii) Working not below the rank of Assistant professor and equivalent in the concerned subject under State Agriculture Universities/ ICAR Institutes/KVKs/Central/State/Central Universities/ Deemed Universities etc.
- iii) Two years research/teaching experience in the subject (Desirable)

## Application and Registration

Interested candidate may send their application in the prescribed form duly nominated/forwarded by the competent authority to the Course Director. Application along with registration fee of Rs. 50 in the form of Postal Order/Demand Draft drawn in favour of **ICAR Unit-CAZRI, Jodhpur, payable at SBI Shastri Nagar, Jodhpur Branch (Code 03258)**, as per proforma.

**Applications should be sent to:**

**Dr. R. K. Bhatt,**

Head of Division III & Course Director

CAZRI, Jodhpur-342 003 (Rajasthan)

Fax: 0291-2788706;

E-mail: [researcher.rkb@gmail.com](mailto:researcher.rkb@gmail.com)

Interested candidate may also apply online as given below: visit web site, <http://www.iasri.res.in/cbp> or click on Capacity Building Programme link under <http://www.icar.org.in>, create login ID & Password under "create New Account" link. After login click on "Participate in Training" link and fill up the Proforma. Take the print and send duly signed copy through proper channel. The proforma can also be down loaded from website of CAZRI, <http://www.cazri.res.in>.

**The application should reach on or before 10 November 2014.**

## Boarding and Lodging

The selected candidates will be paid travel fare to and fro for journey by Train and/or bus on production of certificate for travel by the shortest route. The payment will be made as per their entitlement class of travel but restricted to the maximum of AC II tier train fare only. Participants are required to produce a Photostat copy of the rail/bus ticket (only by public transport) for reimbursing the travel expenditure. DA will be paid for journey period only. The participants will be provided free boarding and lodging facilities in the institute.

## About Jodhpur

Jodhpur is the second largest city in the Indian state of Rajasthan. It is located 335 kilometers west of the state capital, Jaipur and 200 kilometers from the city of Ajmer. Jodhpur is a popular tourist destination, featuring a magnificent palace, towering fort and many temples, set in the stark landscape of the Thar desert. The city is traditionally known as the "Sun City" for the bright, sunny weather it enjoys all year. Jodhpur is fast becoming a major education hub for higher studies in India and becoming thereby the potential national center for science, technology and innovation. Almost every major discipline has a dedicated institution in the city, with disciplines varying from Engineering, Medicine, Law, Design among others. Jodhpur city is well connected with the national capital and other Indian cities through Air, Rail and Road transport.

