

REGISTRATION FORM					
WINTER SCHOOL ON WATER AND ENERGY SECURITY IN THE ARENA OF CLIMATE CHANGE					
17 January, 2017 to 06 February, 2017					
College of Agricultural Engineering and Technology, Anand Agricultural University, Dholakva, Godhra –Dahod Highway, Godhra 389001 Gujarat					
NAME (BLOCK LETTERS) :					
Gender	Male/Female				
Date of Birth					
Organization					
Mailing Address					
Telephone with STD code	Office:	Cell:			
	Residence	Fax Number			
Email					
Mathematical/statistical Back-ground	Poor/Average/Good/Excellent				
Computer Proficiency and language skills	Poor/Average/Good/Excellent				
Academic record					
Exam	Year of Passing	Board / University	Class	Main Subjects	Other information if any
Bachelor degree					
Master degree					
Ph.D					
others					
Teaching/Research/Professional experience (mention post held and number of publications during last 5 years)					
Mention if you have participated in any Training Course during the previous years under ICAR/other organizations					
Guest House Accommodation required		Yes/No			
Place:					
Date:	Signature of the Applicant				
The details furnished by the Candidate are correct based on verification of records available in the office and the undersigned recommend the candidature for this winter school					
Place:					
Date:	Signature of the Competent Authority				

The candidates may send the scanned copies of their applications duly signed by the candidates and his/her sponsoring authority through email/fax.

Candidates need to send DD of Rs. 1500.00 to Course Director, Winter School, CAET, AAU, Payable at Godhra along with the application form.

Contact

Course Director

Dr R Subbaiah,
Principal,
College of Agricultural Engineering and Technology
Anand Agricultural University, Godhra 389001
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Fax: 02672-265027
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Course Co-Director

Dr Mukesh Tiwari
Assistant Professor,
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Important Dates

Deadline for Submitting Application: 27.12.2016 by 17:00 hours.

Notification of Acceptance: Will be displayed on University Website on 31.12.2016

Information Technology Research Academy (ITRA-Water) Sponsored Winter School On Water and Energy Security in The Arena of Climate Change

17 January, 2017 to 06 February, 2017



Organized By



**College of Agricultural Engineering and
Technology, Anand Agricultural University,
Godhra-389001, Gujarat**



INTRODUCTION

Water is the most scarce and valuable resource in the world; it is predicted that by 2025 around 3 billion people will be living under a water-stressed situation. Most of the fresh water withdrawals (about 70%) are utilized towards irrigated agriculture. A large majority of the world's poor continue to live in rural areas and depend on agriculture for their livelihoods. Agriculture remains dependent on climate prevailing. Climate is a paradigm of a complex system. Results of General circulation models and long-term regional meteorological observations analysis removed virtually the doubt over the fact of climatic change due to global warming. Climate change will exacerbate the water management problems that countries already face. The impacts of climate change on the water sector are not linear; rather they are most complicated with multilevel interconnected impacts on society, community and ecosystems. Changes in precipitation, more frequent and intense floods and droughts, snowfall, soil moisture availability at different depths, evapotranspiration regime, lowering groundwater table, shortage of irrigation water, change in river flow, higher sea levels, and groundwater recharge in the hydrologic cycle and rapid desertification that ultimately invoke settlement loss, crop damage, diseases, food insecurity, malnutrition, income loss and more poverty. The most threatening aspect is that the whole development track will lag behind the target. So Climate change and its devastating impacts are approaching at such a rapid pace that policy reconfiguration is urgently needed.

The consequences of water sector vulnerabilities for climate change are posing fundamental challenges to achieving the development aspirations. Water is already a scarce resource for reasons not directly associated to climate change: burgeoning population, excessive groundwater extraction, and industrial pollution, among others. Projections of the impact of climate change suggest that it would further exacerbate the water stress felt in many places around the world. As the causes of water quality and quantity deterioration become increasingly climate-challenged, it will be a daunting challenge for policy-makers to attribute responsibility to specific stakeholders for taking corrective action.

The impact assessment of climate change on water resources management is a complex issue and the volume of knowledge in this field continues to grow rapidly. There is a critical and urgent need to develop climate-change-related training programs that teach the basic science of climate change, and teach cutting-edge technologies and policies for mitigating and adapting to climate change. Regulatory aspects of climate change mitigation and adaptation at the local, regional, and global levels should also be taught. Furthermore, there is a significant need to develop appropriate local, regional, national, and international socioeconomic policies to minimize the adverse effects of climate change. The winter school is directed to attain these defined goals.

COURSE CONTENTS

The aim of this training is to provide practical guidance on how to incorporate climate change when dealing with existing challenges in water resources management. The training also addresses many topics relating to the applications and limitations of climate change models and scenarios, particularly those related to precipitation projection which is the critical factor for managing water resources; the potential impacts of climate change on water resources including water quality; exposes uncertainties and data deficiencies that affect the reliability of predictions about the consequences of climate change on water resources; the potential impacts of climate change on crop production and adaptation strategies for crop production; and case studies of climate change adaptation and mitigation strategies from water resources availability and water conservation and use perspectives. Some highlighting topics include

- Hydrological modeling
- Soft computing tools in water resources
- Surface and subsurface water assessment
- RS and GIS interventions
- Crop growth simulation models
- Climate change modeling & assessment
- Climate change and crop production
- Hydro-climatic extremes
- Adaption strategies for climate change
- Urban runoff and management

INTENDED FOR

Aimed at Officers, Engineers and Scientists working in water/ environmental/ administration/policy areas, Research organizations, Govt. engineering departments, and policy makers engaged in the climate/water/environmental management would benefit from the proposed program. Candidate must have Master degree and/or higher degrees in climate/water/ environmental management. Topics in the training will provide international coverage of topics related to climate change, including both a synthesis of facts and discussions of future research perspectives and possible solutions. Coverage will encompass all areas of environmental and agricultural sciences. The course provides an excellent opportunity to interact with one another and discuss problems and solutions of mutual interest. At the end the participants may be in a position to identify and select appropriate problem and methodologies for their specific conditions.

OBJECTIVES

The objectives of the training include:

1. To provide an overview of the implications climate change on hydrologic cycle and water security concerns
2. To review the methods of assessing climate change and their limitations

3. To expose the trainers on hydrologic modeling and climate modeling aspects
4. To expose trainers to climatic resilient water management interventions
5. To enrich the trainers experience on soft computing skills

FACULTY

The teaching faculty constitutes experts are from Indian Institute of Science, and various Indian Institute of Technology's and NIT's of the country. The software experts from corporate sector are also invited to demonstrate the latest software's developed in this direction to the trainers

LECTURE NOTES

To fully realize the objectives of the course, the lecture notes will be made available at the time of registration.

BOARDING AND LODGING

Accommodation on twin sharing basis is available in the Institute Guest house for participants. Please note that, no accommodation in the guest house will be provided to the family members or guests of the participants. Free lodging and boarding will be provided to the participants.

TRAVEL

Participants will be paid travel fare to and fro through the shortest route from their respective institution to College of Agric Engg and Technology, Anand Agricultural University, Godhra and back for journey by AC III class train fare or bus (Except Rajdhani/Shatabdi). TA will be paid on production of original tickets by the participant.

FORWARDING DETAILS

The scanned copy of the completed registration form duly signed by the candidate and his/her competent authority along with a DD of Rs. 1500.00 (Rs. One thousand and Fifty only) to Course Director, Winter School, CAET, AAU, Payable at Godhra may be mailed to course director's email in advance and the hard copy should be sent to the "Course Director, Winter School, College of Agricultural Engineering and Technology, Anand Agricultural University, Dholakuva, Godhra -Dahod Highway, Godhra-389001 Gujarat"

ABOUT GODHRA

Godhra is the administrative headquarter of the Panchmahals district Godhra is connected to all major towns of Gujarat by public transport service operated by GSRTC and Godhra is Railway Junction that connects Godhra with different parts of state and nation. Champaner, a UNESCO World Heritage site is located in this district. Godhra is known for the natural hot water spring that contain sulphur which is said to have medicinal value. Godhra is well connected to nearby cities Vadodara, Anand and Ahmedabad by road and railways having distance 80, 90 and 130 km, respectively.

