



IWMI-TATA
Water Policy Program



Winter School on Implications of Climatic Change on Pedagogical Issues of Water Resources Management

September 21
to
October 11, 2015

Course Director

Dr. R. Subbaiah
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Junagadh

Co-Course Directors

Dr. Tushaar Shah IWMI, Anand	Dr. S. P. Wani ICRISAT, Hyderabad	Dr. Anoop Nagar Central Ground Water Board, Ahmedabad	Prof. G. V. Prajapati Junagadh Agricultural University, Junagadh
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Centre of Excellence on Soil and
Water Management,
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Junagadh - 362 001.

INTRODUCTION

The evidence for climate change is now considered to be unequivocal and is expected to alter the radiative balance of atmosphere, causing increases in temperature and changes in precipitation patterns and other climatic variables. In assessing the anticipated impacts of climate change on agriculture and agricultural water management, it is clear that water availability (from rainfall, watercourses and aquifers) will be a critical factor. Climate change will impact the agricultural and water productivity in both irrigated and rainfed agriculture across the globe. Reductions in river runoff and aquifer recharge are expected in some basins and affecting quantity and quality of water availability in some semi-arid regions that are already water-stressed. Large contiguous areas of irrigated land that rely on water will be affected by changes in runoff patterns, while highly populated deltas are at risk from a combination of reduced inflows, increased salinity and rising sea levels and appearance of frequent and severe droughts in rural and urban areas. Everywhere, rising temperatures will translate into increased crop water demand. Over-exploitation of natural resources due to increased demand, population expansion, and environmental degradation have added another dimension to this complex problem. Both the livelihoods of rural communities and the food security of a predominantly urban population are therefore at risk from water-related impacts linked primarily to climate variability. The rural poor, who are the most vulnerable, are likely to be disproportionately affected. Forecast of near term climate, or identification of the state of the global climate system and its local consequences on agriculture and water management can help managers develop adaptive strategies, implement mitigating policies, and make strategic investments in infrastructure and information sources for integrated watershed management.

OBJECTIVE

The objective of the present course is to:

- provide a broad overview of our current knowledge

on climate variations,

- discuss their impact on water resources management, planning and design and agriculture,
- characterize their predictability and advance the understanding of climate variations and climate change,
- disseminate this valuable information among the scientific, policy, researchers and NGO's knowledge domain and
- developing innovative and eco-friendly water management interventions to adopt climate change

COURSE CONTENTS

The course aims to include the following themes with particular emphasis to agricultural water resources management in the arena of climatic change

- Stochastic Hydrology and Conceptual Hydrological modeling
- Soft Computing Tools, MCDM and Geospatial Analysis in Water Resources
- Surface and Subsurface Water Assessment and Interaction in the arena of climate change
- Aquifer mapping and Management of Saline Water in Coastal Agro - eco System
- RS and GIS interventions in Water Resources Assessment and Management
- Weather Forecasting and Crop Growth Simulation Models
- Climate Change Modeling & Assessment
- Downscaling for assessment of Climate Change on Hydrology
- Hydro-climatic Extremes
- Surface and Subsurface Water Management Interventions to adopt Climate Change
- Harnessing Renewable Energy Sources for Agricultural Water Management

FACULTY

The faculty constitutes experts with specializations in hydro-climatology, eminent retired agricultural scientists and water management experts from Junagadh Agricultural University, Junagadh. ICRISAT, Hyderabad, International Water Management Institute Anand, Central Ground Water Board, Ahmedabad, NIT Surat, MS University Vadodara, CAZRI, Bhuj, CSWCRTI Vasad, and CSSRI Bharuch will deliver their topics pertaining to consequences of climate change on quantity and quality of surface and subsurface water resources. Each session would be followed by interactive sessions on the subject matter.

ELIGIBILITY

The training is open for participants from ICAR Institutes/State Agricultural Universities/Central Agricultural Universities/State Universities/Krishi Vigyan Kendras/State Departments of Climate Change, Water Resources, and DRDA. The participants should possess Ph.D/ M.Tech degree from any of the recognized University in Soil & Water Conservation/Irrigation and Drainage/WRDM/ Land Resource Management/ RS & GIS/ Agronomy/ Forestry and working in a position not below the rank of Scientist/Assistant Professor/Lecturer with at least two years' experience. Participants will be selected on the basis of their mathematical ability and computer proficiency to benefit from the training. The total number of seats in the training programme will be 25. On joining the training program participants have to deposit a non-refundable fee of Rs 500 towards the training program.

BENEFICIARIES

Officers, Engineers and Scientists working in water/ environmental/administration/ policy areas, Research Organizations, Govt. Engineering Departments, Consulting companies, NGOs and self-employed practitioners engaged in the climate/water/ environmental management would benefit from the proposed program.

As participants are expected from all over India, this course would provide an excellent opportunity for the participants to interact with one another and discuss problems and solutions of mutual interest. At the end of the workshop the participants may be in a position to identify and select appropriate problem and methodologies for their specific conditions.

TRAVEL

The participants will be paid only travel fare to and fro for journey by AC-III class train (Except Rajdhani / Shatabdi) /bus fare. Actual TA to be paid on production of original tickets by the participant for journey from the place of duty to the training course location and back by shortest route.

BOARDING AND LODGING

Arrangement for boarding and lodging will be provided by the host Institute located within the University premises.

FORWARDING DETAILS

The scanned copy of the completed registration form duly signed by the candidate and his/her competent authority may be mailed to course director's email given below in advance and the hard copy should be sent to the following postal address.

Dr. R. Subbaiah

Research Scientist (Agril. Engg.)
Centre of Excellence on Soil and Water Management
Research Testing and Training Centre,
Junagadh Agricultural University, Motibaugh, Junagadh,
Gujarat, 362001

Phone: (0285)–2672080 to 90 Ext 309; 405

Fax: (0285)–2672004; Cell: 09429115051

Email: ranga3711@gmail.com; rsubbaiah@jau.in

University web : www.jau.in

**Deadline for Submitting Application :-
17.8.2015 by 17:00 hours**

**Notification of Acceptance: Will be displayed on
University Website on 25.8.2015**



REGISTRATION FORM

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Climatic Change on Pedagogical Issues
of Water Resources Management

September 21 to October 11, 2015

NAME :

Gender :

Date of Birth :

Organization :

Mailing Address :

Telephone With STD Code

Office : Cell :

Residence : Fax :

E-mail :

Mathematical / Statistical Background

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
SSC					
HSC					
Bachelor Degree					
Master Degree					
Ph.D					
Others					

Teaching/Research/Professional experience (mention post held and number of publications during last 5 years)
:

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Mention if you have participated in any Training Course during the previous years under ICAR/other organizations
:

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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 training

Place :

Date : Signature of the Applicant

1. Incomplete application forms will not be entertained
2. For additional copies of the registration form, please Xerox or type in the format given