Final Circular

National Conference on
Climate Change and Agricultural Production
(Adapting Crops to Climate Variability and Uncertainty)

April 6-8, 2017

Organizer
Bihar Agricultural University
Sabour- 813 210, Bhagalpur (Bihar)

In Collaboration with
Indian Ecological Society, Ludhiana, Punjab

Conference website: http://iesconf.com

Partners
Due to increase in anthropogenic activities, global temperatures have shown a warming trend of 0.87°C over the period 1880-2015. Annual surface air temperatures over India also have shown increasing trends of similar magnitude during the period 1901-2015, making 2015 the warmest year in the period of instrumental data. Warmer temperature during the monsoon season (June-September, +0.72°C above average) and the post monsoon season (October-December, +1.1°C above average) mainly contributed to the warmer annual temperature. Climate change is now reality as evident from the significant increase in the CO₂ concentration (403.99 ppm as on July 2016) which has caused most of the warming and has contributed the most to climate change. Yet again, the first half of 2016 has blown away temperature records, capped off by a record hot June, bumping up the odds that 2016 will be the hottest year on record globally. Two drought years in south central India created panic and for the first time in the history and special trains were put in place to provide drinking water. Climate Change and its extremes are increasingly one of the most serious national security threats, which will have significant impacts on agriculture, natural resources, ecosystem and biodiversity. At the same time, it is likely to trigger food insecurity, human migration, economic and social depression, environmental and political crisis, thereby affecting national development. Although, scientific reports have amply proved that future food production is highly vulnerable to climate change. But, an important source of uncertainty in anticipating the effects of climate change on agriculture is limited understanding of crop responses to extremely weather events. This uncertainty partly reflects the relative lack of observations of crop behavior in farmers' field under extreme heat or cold. Crop yield increases have been slowed and may go into decline as the region runs out of natural resources. Therefore, regular assessments to understand the science of earth’s changing climate, and its consequences; primarily driven by global warming, which in turn is highly extensive, complicated, and uncertain, is a scientific challenge of enormous importance to society.

The summary of the recent IPCC's fifth assessment report (IPCC, 2014) has again a stark warning on how climate change is threatening the South Asia, but report has also shown the way out to combat rampant climate change. India needs to develop a regional strategy for adapting to climate change and its variability in order to ensure food and ecological sustainability. Recognizing the importance of science issues that need to be addressed to deal with climate change, new approaches and policy interventions are desperately needed to enable and encourage smallholder farmers to adopt new technologies and practices under more uncertain and extreme climatic conditions for a resilient agricultural production system. No doubt, Indian farmers have evolved many coping mechanisms over the years, but these have been fallen short of an effective response strategy in dealing with recurrent and intense forms of extreme climatic events on one hand and gradual changes in climate like rise in surface temperatures, changes in rainfall patterns, increases in evapo-transpiration rates and degrading soil moisture conditions on the other. Region wise climate change adaptation and mitigation options have been identified as important strategies to safeguard food production.

To address these issues, the proposed conference will focus on totality of the problem of climatic variability and change-its description, implications and explore approaches to maintain and increase crop productivity into the future. Based on the deliberations, future research strategies and recommendations will be developed to address the emerging matrix of the agricultural problems in holistic manner. Bihar Agricultural University has history of organizing six successful national and one international conference, which ended with sound recommendations for solving the problems of food and nutritional security. Climate change being one of the most complex issues facing us today, we expect overwhelming participation of delegates from across the country. It is hoped that their pro-active participation will play innovative and decisive role in shaping the future research aiming to look on climate change issues for farmers' welfare and environmental security. We consider it our privilege to extend you a warm invitation for your active participation in the conference to accomplish its objectives.

Looking forward to meet you in the conference at Sabour.
The Bihar Agricultural University was established on August 5th, 2010 at the initiative of visionary Hon’ble Chief Minister Shri Nitish Kumar. The Headquarters of the University is located at Sabour in the historic campus of Bihar Agricultural College. The university has 8 colleges (05 crop sciences, 01 Horticulture, 01 Veterinary and 01 Dairy science), 12 research stations and 20 KVKs spread in 3 agro-ecological zones. The Bihar Agricultural College, Sabour, one among the six agricultural colleges established in the country between 1905 and 1908 has to its credit the immense contributions made in systematic agricultural education and research in the country. One of the oldest colleges of its type, the foundation of Bihar Agriculture College was laid by Sir Andrew Henderson Leith Frazer, Lt. Governor of Bengal on 17th August 1908. (www.bausabour.ac.in).

The Indian Ecological Society (IES) was established in 1974 with eminent ecologist, educationist and administrator, Prof. A.S. Atwal as the Founder President. It is one of the pioneering organizations of India engaged in advances in ecological sciences and environmental protection to encourage and promote ecological studies in the country and to integrate research in different fields of ecology. The Society attempts to fulfill the above objectives by publishing the Indian Journal of Ecology since 1974. (www.indianecologicalsociety.com)

WHO CAN ATTEND

Participation is open to all scientist, teachers, policy makers, extension functionaries, students and field officers in the field of agriculture science and allied subjects. Delegates are invited to register early to enable us plan and make the best possible arrangements.

VENUE

The Conference will be held in the Main Auditorium of the Bihar Agricultural University, Sabour, Bhagalpur, Bihar.

HOW TO REACH

The Bihar Agricultural University, Sabour is about 250 Km from Patna, 430 Km from Kolkata. Two railway stations of Eastern Railways- Bhagalpur (BGP), Sabour (SBO) and one of East Central Railway- Naugachia (NNA) are located near the University campus at a distance of 8 Km, 0.5 Km and 23 Km, respectively. Persons coming from Delhi may board the Vikram Shila Exp. (12368), ANVT BGP G Rath (22406), Farakka Exp. (13414), Brahmaputra Mail (14056) and get down at Sabour/Bhagalpur. One can even board the DBRT Rajdhani (12424) and other trains from Delhi and get down at Naugachia. Persons coming from Kolkata can board HWH Gaya Exp. (13023), HWH JMP Exp. (13071), and get down at Bhagalpur. The nearest airports are Jay Prakash Narayan International Airport, Patna and Bagdogra Airport at a distance of 250 Kms and 245 Kms, respectively from the University campus.
WEATHER

The climate of the Sabour, Bhagalpur comes under the type 'Tropical Savanna' hot, seasonally dry (usually winter). Summer starts from April and lasts up to the middle of June. Temperature rises from the pleasant March weather (mean temperature about 24°C) due to westerly winds. Days in April are hot with an average temperature of 30°C. The highest temperature is often registered in May which is the hottest month in the state.

GUIDELINES FOR EXTENDED ABSTRACTS

Formatting Requirements: Keywords, Introduction, Materials and methods and Results / Conclusion. Visit http://iesconf.com/abstract/ for guidelines and online submission of extended abstract.

GUIDELINES FOR FULL LENGTH PAPER

Full length paper should be submitted up to January 30, 2017 for considering its publication in the conference special issue of 'Indian Journal of Ecology' (NAAS rating 4.47). Please visit: http://iesconf.com/full-paper/ for guidelines and online submission of full length paper.

POSTER PRESENTATION

For each theme, there will be a poster session to encourage detailed discussion with presenters. Poster for display should be 80 X 100 cm. Please visit for full details www.iesconf.com/poster presentation.

AWARDS

Conference Awards
The oral/poster presentations will be evaluated by a jury of eminent scientists. Best oral/poster presentations will be awarded in the valedictory session of the conference.

Indian Ecological Society Young Scientist Award
This award will conferred to young scientist for contribution in Agriculture and Climate Change by Indian Ecological Society.

Indian Ecological Society Best Scientific Writing Award
New initiative for scientists for best easy write up on theme areas of conference and award will be conferred at conference. For these above two awards, detailed information is available on website: http://iesconf.com/award

PHOTOGRAPH COMPETITION

It is said that a picture is worth a thousand words so we are inviting all amateur photographers to give us their visual take on climate change, which affects all of us in many different ways. To enter the contest during the conference, photograph related to climate change on the topic "How Climate Change is Affecting Agriculture" need to be uploaded on the web site of conference. The image should be original, of high resolution, not less than 300 dpi and on A4 size. All such photographs must have caption and details of contributor on the back. The contestant should also mention the name in credit line. Three best photos will be selected by the committee of experts and will be given prizes.

REGISTRATION FEE

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<tr>
<th>Category</th>
<th>Early bird registration 30.01.2017</th>
<th>Last registration after 30.01.2017</th>
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<tr>
<td>Indian Delegates</td>
<td>Rs. 4000/-</td>
<td>Rs. 4500/-</td>
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<tr>
<td>Student</td>
<td>Rs. 2000/-</td>
<td>Rs. 2500/-</td>
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<td>Industry</td>
<td>Rs. 6500/-</td>
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<td>Foreign delegates</td>
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<td>$150</td>
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HOW TO REGISTER

One can register by paying the registration fee online. Please register on-line at: http://iesconf.com/registration. However, the registration and payment details may kindly be emailed to Organizing Secretary at ccapbau@gmail.com.

ACCOUNT DETAILS

Account Holder Name: Climate Change and Agricultural, Production (CCAP)
Account Type: Saving Bank Account
Account No.: 6676000100035545
Bank: Punjab National Bank, Branch Sabour, Bhagalpur
IFSC Code: PUNB0667600
MICR Code: 813024001

ACCOMMODATION

Limited accommodation is available in University guest house on first cum first serve basis. The accommodation on payment basis will be booked in AC hotels ranging between Rs. 1500 and 2500 (Twin sharing basis) at Bhagalpur. Besides high end hotel accommodation can be booked for the delegates on request on advance payment. For students dormitory accommodation will be provided on request. Contact Dr. RN Singh/Dr. SK Gupta on (09934734126/08002746337).

ADVERTISEMENT

The Souvenir of the Conference, which will contain messages from VIP’s and articles from renowned scientists, policy makers and administrators, has provision for advertisement by the agricultural firms/organizations. Souvenir is a very important publication of the Conference and is usually retained by the delegates for long period to be used as reference book. Interested Companies may contact the organizers for giving their advertisements. The rates for the advertisement are as follows:

<table>
<thead>
<tr>
<th>Advertisement Type</th>
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<tbody>
<tr>
<td>Back cover page (Colour)</td>
<td>Rs. 25,000/-</td>
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<tr>
<td>Inner page of back cover (colour)</td>
<td>Rs. 15,000/-</td>
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<tr>
<td>Full page insertion (colour)</td>
<td>Rs. 10,000/-</td>
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<td>Half page insertion (colour)</td>
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IMPORTANT DATES

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<tr>
<td>Extended Abstract</td>
<td>January 15, 2017</td>
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<tr>
<td>Issue of Acceptance Letters for Abstracts</td>
<td>January 30, 2017</td>
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<tr>
<td>Full Length Papers</td>
<td>February 10, 2017</td>
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<tr>
<td>Registration Fee</td>
<td>February 10, 2017</td>
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<tr>
<td>Request for Accommodation</td>
<td>February 10, 2017</td>
</tr>
<tr>
<td>Notification of Acceptance for full length papers in Indian Journal of Ecology</td>
<td>February 20, 2017</td>
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NATIONAL STEERING COMMITTEE

Chairman: Dr. M. S. Swaminathan
Founder Chairman, MSSRF, Chennai,
Co-Chairman: Dr. Trilochan Mohapatra
Secretary, DARE and DG, ICAR, New Delhi,
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Chairperson, PPVFRA, Govt. of India, New Delhi
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The President, Horticulture Society of India, New Delhi
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DDG, Agricultural Extension and Horticulture, ICAR, New Delhi
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Dr. Joykrushna Jena
DDG, Fisheries, ICAR, New Delhi
Dr. S.K. Malhotra
Agricultural Commissioner, DAC, Govt. of India, New Delhi