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Dr. Vineeta, UBKV, Pundibari

Dates to be remembered

Last date of abstract submission : December 24, 2022
Notification of acceptance : January 04, 2023
Submission of full length articles : December 30, 2022
Date of early registration : January 7, 2023

Patrons

Dr. Himanshu Pathak, Director General (ICAR) & Secretary (DARE), New Delhi

Dr. Swarup Kumar Chakrabarti, Vice-Chancellor, UBKV

Chairman

Prof. (Dr.) Ashok Choudhury, Director of Research, UBKV

Co-Chairman

Prof. (Dr.) D. Mukhopadhyay, Dean, Faculty of Agriculture, UBKV

National Advisory Committee

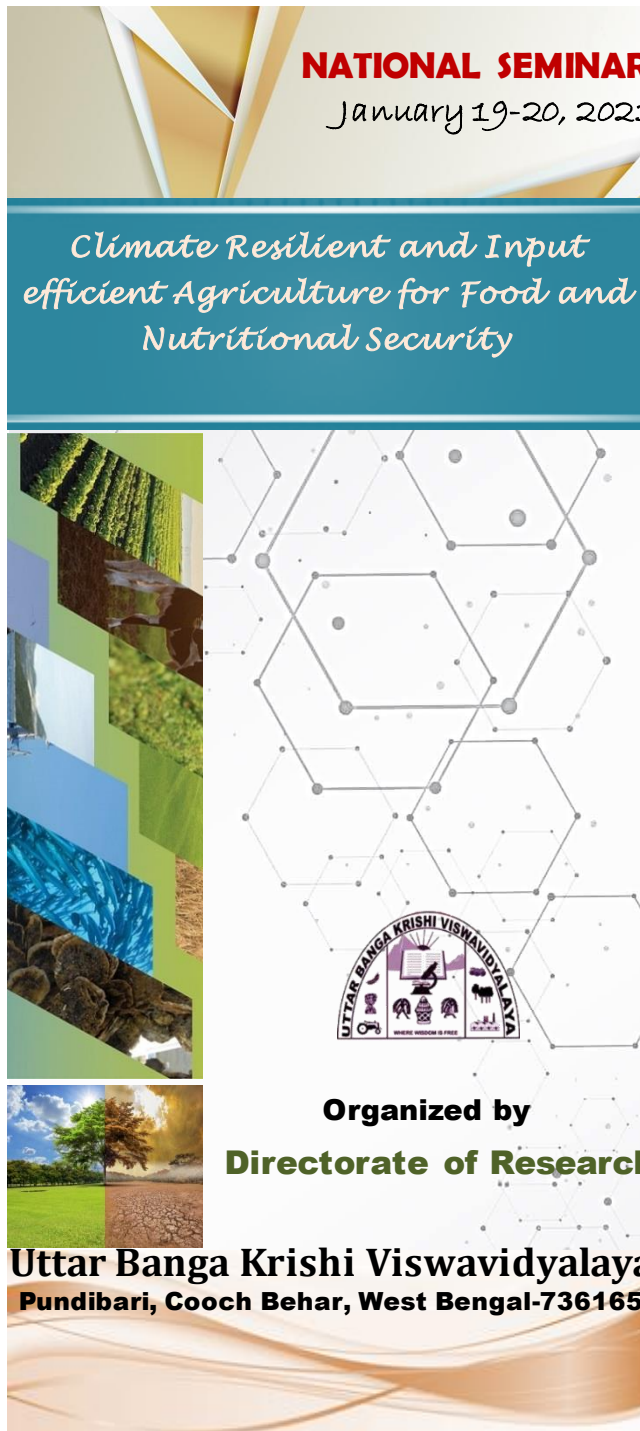
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NATIONAL SEMINAR
January 19-20, 2023

Climate Resilient and Input efficient Agriculture for Food and Nutritional Security



Organized by
Directorate of Research

Uttar Banga Krishi Viswavidyalaya
Pundibari, Cooch Behar, West Bengal-736165

About the Seminar

Agriculture is the foundation of the civilization, culture and heritage of India. It constitutes the primary source of livelihood for about 58 % of India's population. The country's population has increased 3.35 times since Independence and by the year 027 it will surpass China to become the most populated country in the world. India accounts for only 2.4 % of the global land but supports nearly 17% of world population. Moreover, the net sown area remained stagnant within the range of 140-142 m. ha for the last 3-4 decades. In spite that, the country emerged as the 2ⁿ largest in agricultural production and the 9th largest in agricultural exports in recent years due to a well-planned concerted effort of farmers, scientists, extension personnel and the policy planners. Nevertheless, majority of Indian farmers were facing numerous production related limitations like quality input, credit availability, storage, and transport and market accessibility. Most of those farmers are marginal and small having land holding less than 1.08 hectares. These groups of farmers are contributing almost 60% of the total food grain and nearly 50% of the nation fruits and vegetable production. In order to feed the burgeoning population, India has to double the food production by 2050. According to the State of Food Security and Nutrition in the World, 2020 survey, 189.2 million people in India (14% of the country's population) is still undernourished. It will take an integrated and multifaceted approach for the nation's overall sustainable agriculture and food systems to achieve "zero hunger" by 2030.

Climate change and its effects on a nation's food security, particularly in the form of extreme weather phenomena pose a huge challenge to the national food security. By 2030, the temperature is expected to increase by 1-2.5^oC, which would likely have a significant impact on crop production. High temperatures may reduce crop duration, allow changes in photosynthesis, speed up crop respiration, and affect the population of pests. Current climatic conditions have a significant impact on crop production and input use efficiency (IUE). Year-to-year differences in crop productivity around the world have increased recently due to increase in climate irregularities. The health of the soil and ecosystem are deteriorating as a result of increased variability in recent years. Because of this, IUE is declining; the sustainability of agriculture and natural resources is at risk, and threatening food security.

Extreme weather events have become more frequent and intense due to climate change, which has caused major yield losses every year as well as destruction of natural resources.

Adoption of farmer-friendly mitigation and adaptation techniques is absolutely necessary under such circumstances to maintain crop yield and the natural resource base. To improve crop resistance to the climate anomalies, several agronomic management techniques must be used, such as timing adjustments for sowing, irrigation management, fertilizer control, etc. To create varieties that can withstand various types of stresses, a genetic resource base for stress tolerance must be identified and developed. To establish the ideal crop microclimate, various microclimatic adjustments such as mulch applications, row orientation, row spacing, etc., should be studied. To monitor and forecast how crops will respond to different stresses and to identify effective regional solutions, developing remote sensing methods should also be incorporated. Multidisciplinary approach involving exhaustive research efforts is needed, a priori, for sustaining agricultural productivity as well as improving IUE and environmental health under changing climatic scenarios.

This National Seminar will offer an immense dais for the agricultural scientists, extension workers, research scholar, corporate personnel's and other direct and indirect stakeholders to shares their experiences, novelties and discuss issues with regard to food and nutritional wellbeing by minimizing resource use and mitigating adverse effect climate.

About the Institute

The 'Uttar Banga Krishi Viswavidyalaya (UBKV)' was established by West Bengal Act XX of 2000 and started functioning from 1st February, 2001. The headquarters is situated at Pundibari, a rural block in district of Cooch Behar (43 msl) and which is 13km away from district head-quarters. The University offers undergraduate courses in Agriculture, Horticulture and Technology (Agril. Engineering); post-graduate courses in Agriculture, Horticulture and Forestry. The nearest railway station is New Cooch Behar Jn., which lies between Kolkata-Guwahati/New Delhi-Guwahati train routes. It is 15km away from Cooch Behar town and situated besides NH 31 in between Cooch Behar-Siliguri route. The nearest airport is Rupsi (RUP), Assam (74 km)/Bagdogra (IXB), Siliguri (150km).



Climate During winter, average maximum temperature is 28-30^oC and minimum temperature is 16-17^oC.

Themes

- Resource Conservation Technologies (RCTs)
- Organic farming for soil health and crop quality
- Integrated approach for sustainable production
- Crop improvement for food and nutrition
- Use of Nano-particles in Agriculture
- Precision farming and geo informatics
- Physiological adaptation mechanism for stress resilience
- Seed enhancement for improved crop performance under changed climate
- Plant growth promoting rhizo-bacteria and bio-fertilizers
- Functional food advancements, quality production, and marketing
- Modern dairy and livestock management tools and techniques
- Water conservation for sustainable agriculture
- Climate change aspects: water budgeting & water use efficiency (WUE) in agriculture
- Impact of climate change on soil-biota
- Crop models, projections for smart agriculture
- Agro-meteorological perspectives on the production of sustainable crops
- Short-term & long-term weather prediction models
- Bio-remediation, renewable energy and energy conservation
- Climate change and abiotic stress management
- Climate change and global warming: Impacts, Policies, Planning, and Management
- Legal aspects: Organic farming & Crop insurance
- Scientist, Farmers, Corporate Sector & NGO'S meet

Incredible places to visit

Cooch Behar palace noted for its elegance and grandeur. Idealized from the concept of classical European style of Italian Renaissance, this magnificent palace was built by the famous Koch King Maharaja Nripendra Narayan in 1887, Mesmerizing Dooars, Chilapata Reserve Forest, Gorumara National Park and Jaldapara Wildlife Sanctuary, different hill stations of Darjeeling and Kalimpong district are also in a reachable distance.



Abstract and Full Paper Submission

Organizing committee invites delegates/participants to submit abstract for presentation (oral or poster) along with full length paper in different technical sessions. The manuscript/abstract must be in English with the title of the paper, name of Author(s), and designation in MS word (abstract strictly not more than 500 words) on A4 paper in Times New Roman and double space. All abstracts must be sent as E-mail attachment to nscieafns2022@gmail.com addressing the Organizing Secretary.

Full papers if received on or before January 05, 2023 will be considered for publication in a book with ISBN. The organizing committee reserves the right to delegate mode of presentation depending on the number of papers and merit of the paper based on originality/novelty of research work on the themes of conference. An area of 4 x 3 feet will be allotted to each participant for poster presentation. For oral presentation 15 minutes of time will be given for each participant.

Registration, Fees and Accommodation

Application for registration in the given format can be sent to the Organizing Secretary as per date. Registration fees include seminar kit, refreshment and food. Accommodation (including accompanying persons) on request will be arranged with payment basis. Accompanying person will not get seminar kit. Registration fees to be payable at **A/c No. 2250723632; Central Bank of India, Pundibari; IFSC: CBIN0281091**

| | |
|-----------------------------|---------------|
| Registration Fee (Academic) | : Rs. 3000.00 |
| Accompanying person (each) | : Rs. 1500.00 |
| Students/Research Scholar | : Rs. 1200.00 |
| Company/Industry/NGO | : Rs. 5000.00 |

Awards

Session wise Poster Award and **Oral Presentation Award** will be given. Discipline wise young scientist award will also be given.

Advertisement fees

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| Half page | : Rs. 15000.00 |
| Full page | : Rs. 30000.00 |



Uttar Banga Krishi Viswavidyalaya
Pundibari, Cooch Behar, West Bengal-736165

REGISTRATION FORM

National Seminar

on

**Climate Resilient and Input efficient
Agriculture for Food and Nutritional Security**

January 19-20, 2023

Name:

Designation:

Affiliation:

E-mail ID:

Mobile No.:

Title of the paper/abstract submitted:

Choice of theme:

Whether accommodation required? Y/N

No. of accompanying person:

Mode of presentation:

Status of payment of registration:

Signature of participant