About the Seminar

World population is projected to increase to 9 billion by 2050. By 2022 India will become the most populous country in the world surpassing China and it is going to be the 3rd largest economy in the world by 2030 accompanied by a rise in urbanization levels which will lead to a change in dietary needs. To accommodate this huge population, food production has to be increased and that too from the declining available cultivable land resource. Besides, climate change is another factor influencing the agriculture by alteration of abiotic stress, in return changes of biotic stress too. So, sustainable production and increasing productivity of existing agricultural land is an important aspect to address global food security. The Green Revolution towards the beginning of 1970s had major economic effects in terms of the production and productivity. Use of crop hybrids, agrochemicals, fertilizer and increasing irrigation facilities led India from a food deficient country to a food surplus economy. But Indian agriculture is still grappling with a number of challenges like high



Organizing Committee

Patrons : **Swami Atmapriyananda**, Vice-Chancellor, RKMVERI
Swami Sarvalokananda, Secretary, Ramakrishna Mission, Narendrapur
Dr. Trilochon Mohapatra, Director General, ICAR and Secretary, DARE
Mr. Pradip Majumder, Advisor to CM on Agriculture and Allied Sector, Govt. of West Bengal

Special Guest Of Honor : **Dr. S. Ayyappan,** Ex-DG, ICAR & Ex-Secretary, DARE
Dr. A. K. Singh, DDG (Agril. Extension), ICAR
Dr. D. D. Patra, Vice Chancellor, BCKV, Nadia
Dr. Chirantan Chattopadhyay, Vice Chancellor, UBKV, Coochbehar
Dr. P. K. Chakrabarty, ADG (Crop Protection and Bio-safety), ICAR
Dr. Sampad Ranjan Patra, Director of Agriculture and Ex-officio Secretary, Govt. of West Bengal

Advisory Committee : **Swami Shivapurnananda,** Asst. Admin. Head, IRDM F/C and Vice Chairman, SSKVK
Ms. Madhumita Chowdhury, Additional Secretary, Dept. of Agriculture, Govt. of West Bengal
Dr. S. S. Singh, Director, ICAR-ATARI, Kolkata
Dr. Anjan Bhattacharyya, Ex-Professor, Department of Agricultural Chemicals, BCKV, Nadia
Dr. Rati Kanta Ghosh, Ex-Professor, Department of Agronomy, BCKV, Nadia

President : **Dr. T. K. Dasgupta**, Professor and Dean, IRDM FC, RKMVERI

Vice President : **Dr. N. C. Sahu**, Senior Scientist and Head, SSKVK, RKMVERI
Mr. J. Chakraborty, Senior General Manager (East), Indofil Industries Ltd.
Mr. Amitava Ganguly, Deputy Director of Agriculture (Training), Govt. of West Bengal

Organizing Secretary : **Dr. Manas Ghosh**, Director, SAMETI-West Bengal

Joint Organizing Secretary : **Dr. Abhijit Ghosal**, Subject Matter Specialist (Plant Protection), SSKVK, RKMVERI
Dr. Sourendranath Das, Senior Lecturer, ATC, Narendrapur

Treasurer : **Dr. Anupam Mukherjee**, Farm Manager, SSKVK, RKMVERI
Mr. Debabrta Giri, Instructor, ATC, Narendrapur

Member : **Dr. Rupak Goswami**, Assistant Professor, Department of Agriculture and Rural Development, IRDM F/c, RKMVERI
Dr. Gautam Chatterjee, Assistant Professor, Department of Agricultural Biotechnology, IRDM F/c, RKMVERI
Dr. Krishnendu Ray, Subject Matter Specialist (Agronomy), SSKVK, RKMVERI
Dr. Prasenjit Kundu, Subject Matter Specialist (Horticulture), SSKVK, RKMVERI
Dr. Subhas Adak, Senior Lecturer, ATC, Narendrapur
Dr. Biplab Pal, Senior Lecturer, ATC, Narendrapur
Miss. Srijita Pal, Senior Lecturer, ATC, Narendrapur
Dr. Sanchayeeta Mishra, Assistant Professor, Department of Agriculture and Rural Development, IRDM F/c, RKMVERI

National Seminar
on
"Agro-Chemical Inputs and its Extension Approaches towards Food Security and Bio- Safety: Prospects & Challenges"

1. Name (in block letters) :
2. Designation and Mailing Address (with pin code) :
3. Institutional details :
4. Telephone :
5. Mobile No. :
6. E-mail :
7 Registration Fee (Rs.) :
8. Details of On line Transfer / NEFT / RTGS :
9. Title of Abstract / paper :
10. Place and Date :

Signature

Accommodation Request Form

1. Name (in block letters) :	
2. Designation and Mailing Address (with pin code) :	
3. Telephone / Mobile No. And E-mail :	
4. Number of accompanying persons with detail :	
5. Travel plan : Date and time of arrival	
Date and time of departure	
6. Place and Date :	

Place and Date : *Signature*

First Circular

NATIONAL SEMINAR
on
"Agro-Chemical Inputs and its Extension Approaches towards Food Security and Bio- Safety: Prospects & Challenges"

November 15 and 16, 2019

Venue

Conference Hall,
State Agricultural Management and Extension Training Institute - West Bengal (SAMETI)
Ramakrishna Mission Ashrama, Narendrapur,
South 24 Parganas, Kolkata 700103, West Bengal

Organised by

State Agricultural Management and Extension Training Institute - West Bengal
Ramakrishna Mission Ashrama, Narendrapur,
Dist -South 24 Parganas
Kolkata 700103, West Bengal

Integrated Rural Development and Management (IRDM) Faculty Centre
Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI)
Narendrapur, Dist-South 24 Parganas,
Kolkata 700103, West Bengal

Sasya Shyamala Krishi Vigyan Kendra,
Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI)
Arapanch, Sonarpur, Dist -South 24 Parganas,
Kolkata 700150, West Bengal

About the Seminar

World population is projected to increase to 9 billion by 2050. By 2022 India will become the most populous country in the world surpassing China and it is going to be the 3rd largest economy in the world by 2030 accompanied by a rise in urbanization levels which will lead to a change in dietary needs. To accommodate this huge population, food production has to be increased and that too from the declining available cultivable land resource. Besides, climate change is another factor influencing the agriculture by alteration of abiotic stress, in return changes of biotic stress too. So, sustainable production and increasing productivity of existing agricultural land is an important aspect to address global food security. The Green Revolution towards the beginning of 1970s had major economic effects in terms of the production and productivity. Use of crop hybrids, agrochemicals, fertilizer and increasing irrigation facilities led India from a food deficient country to a food surplus economy. But Indian agriculture is still grappling with a number of challenges like high monsoon dependency, unpredictable weather patterns, reduction in arable land, low per hectare yield, increase in pest attack, lower farmer incomes etc. Approximately 25% of the global crop output is lost due to attacks by pests, weeds and diseases and thus agro-chemicals have an increasing role to play in enhancing crop productivity. But, on the contrary, issues like soil degradation, declining soil biota, residue, resurgence, resistance, eco-system disruption, health hazards etc. and above all awareness on 'safe food' is becoming relevant. Recently, the issue of colony collapse disorder in honey bee assumed to be caused due to excessive use of neo-nicotinoids insecticides raised a controversy regarding use of agro-chemicals. So far as consumption of pesticides in global scenario is concerned India is using much less amount of pesticides (0.6 kg a.i./h) as compared to China's 17 kg, Japan's 12.5 kg, Germany's 3.7 kg, France's 3.7 kg and UK's 2.8 kg. Determining the balance between benefit and harm from pesticide use is complicated because it has been argued that the use of pesticides, broadly, has increased the quality and quantity of fruits and vegetables and consequently has improved public health, in spite of the potential adverse health effects. It is obvious that there are no potent alternative for Indian agriculture for sustaining or increasing production to feed the population except use of agro-chemicals. Only we have to restrain the faulty or excessive use of agro-chemicals which may lead towards food security without major disruption of ecosystem.

In this backdrop relevant contributions are invited from the agriculture scientists, scholars, technologists, industry and policy planners in its call for the National Seminar on "AGRO-CHEMICAL INPUTS AND IT'S EXTENSION APPROACHES TOWARDS FOOD SECURITY AND BIO-SAFETY: PROSPECTS & CHALLENGES".

Thematic areas:

A. New generation safer molecules and formulation for sustainable crop production

New generation insecticide, herbicide and fungicide in pest management, use of nano technology in fertilizer and pesticide, new formulation, mode of action, residue, ecotoxicology, environmental safety, health hazards and risk analysis.

B. Crop protection under changed environment

Integrated insect and disease management, integrated weed management, eco-safe crop protection, relevance of climate change to pest incidence and resurgence, genetic engineering and its pros and cons, biosafety, organic / botanical pesticides, biological pesticide, broad spectrum pest management, ready mix and tank mix pesticide, host plant resistance due to different biotic and abiotic stress.

C. Resource based crop production technologies for securing food and environment safety

Resource conservation technologies, soil health and management, customized and fortified fertilizers, organic farming, ITK, agronomic management of major field crops (major and minor cereals, pulses, oilseeds, fibre crops, fodder crops, tuber crops, sugar crops etc.), and horticultural crops (vegetables, fruits, plantation crops, spices and condiments, flowers, medicinal and aromatic plants etc.), farm mechanization, post harvest technologies and value-addition, advances in nutrient management, cropping system management, intercropping, irrigation water management, rainfed farming, climate change mitigation and adaptation strategies, green house gases (GHGs) emissions, seed science and technology, breeding approaches, plant biotechnology, hazardous materials and their management and agronomic factors influencing crop quality.

D. Extension approaches for eco-friendly pest management and judicious use of agro-chemicals for modern agriculture

Participatory research and extension through on-farm and on-station trials demonstrations, Extension approaches use of ICT, market policy and linkages, private-public-community linkages, role of ICAR / SAUs, KVKs and State Line Departments towards pest management in plants or animals, safe use of agro-chemicals, gender issues, (ITKs), environmental and market risk assessment, capacity building, entrepreneurship development and role of Private Sector, NGOs, SHGs, Farmers' Club, Farmers' Producers Organizations (FPOs) in implementing bottom-up approaches, value chain management and market-led extension.

Special Session

Safe molecules, safety measures and technology extension : Role of agro-chemical Industries

The participants

The seminar is hypothesized to be of great value for researchers, academicians, officials, scientists, extension professionals and policy planners who are ultimately devoted to foster sustainable, environment friendly, productive and profitable agriculture through accomplishing real good works in their respective arenas.

Call for papers

Participants are requested to submit both Abstract 12 pt font, Times New Roman, double spacing, A4 size page, 1" margin on all sides, should not be exceeding one and half page) and Full papers (about 300 words, 12 pt font, Times New Roman, double spacing, A4 size page, 1" margin on all sides, should not exceed twelve (12) pages including tables and figures) through online mode of submission. For submission of abstracts and full paper (maintaining author guideline) submission, please visit our **official website: sametiwb.org.** The acceptance of the papers will be on the basis of abstract submitted and will be communicated as soon as possible through e-mail only. Full paper will be published in the proceedings with ISBN No. E-mail address for corresponding author must be provided in both abstract and full paper for proper communication. Any further communication can be done in the following official e-mail.Id **agrochemicalseminar.rkm2019@gmail.com.**

Mode of Presentation

Both oral and poster presentations will be there. Abstracts in different theme areas will be selected for oral / poster presentation. For poster presentation, the size of the poster will be 80 cm (B) × 100 cm (L). The poster will briefly include the title of the paper, authors' names and affiliations, introduction, objective, methodology, results and discussion (including tables, figures and photographs) and bulleted summary or conclusion (only most innovative findings of the work). Posters must be attractive and readable from a distance of at least one meter.

Important Dates

1.Last date of abstract submission	30.09.2019
2.Last date of full paper submission	15.10.2019
3.Early bird registration ends	22.10.2019

Registration Fees

Types of delegates	Registration Fee for early bird registration (Rs.)	Registration Fee On spot (Rs.)
Students (Pursuing Post Graduation)	1500.00	2500.00
Research Scholar SRF/RA etc	2000.00	3000.00
Only Participants (without paper)	2000.00	3000.00
Faculties/Scientists/ Other officials	3000.00	4000.00
Accompany person	1500.00	2000.00
Foreign delegates	US $ 100.00	US $ 120.00

Contacts

- **Dr. Manas Ghosh,** Director, SAMETI-WB, R K Mission Ashrama, Narendrapur, Kolkata - 700103, Mobile - 9433390828, email ID: sametiwbrkm@gmail.com
- **Dr. Sourendranath Das,** Senior Lecturer, ATC, R K Mission Ashrama, Narendrapur, Kolkata - 700103, Mobile - 9830636511, email ID: sourenks@gmail.com
- **Dr. Abhijit Ghosal,** Subject Matter Specialist (Plant Protection), Sasya Shyamala Krishi Vigyan Kendra, Ramakrishna Mission Vivekananda Educational and Research Institute, Arapanch, Sonarpur, Kolkata - 700150, Mobile – 9126128877/8777784782, email ID: ghosalabhijit87@gmail.com

Accommodation and Transport

Delegates attending the seminar will have to contact well in advance for room accommodation. Accommodation will be made in Rishi Parashar Guest House, R K Mission Ashrama, Narendrapur, Kolkata - 700103 as "first-come-first-serve" basis. Rent of single bed will be ` 500 /- per day. No extra charge will be required for fooding during seminar i.e. 14th (from breakfast) to 15th November, 2019 (upto lunch). However, candidates will have to pay for food taken beyond these periods.

About the venue

Ramakrishna Mission Ashrama, Narendrapur is a huge educational complex with School, College and University. It is a branch of Ramakrishna Math and Mission, Belur Math. It was founded by Swami Lokeswarananda in 1956 with the motto of "ATMANO MOKSHARTHAM JAGAD HITAYA CHA" (For one's own salvation and for the welfare of the world). Ramakrishna Mission Ashrama, Narendrapur is devoted to work for the betterment of the society through its