



ICAR- Indian Institute of Horticultural Research

Hesaraghatta Lake Post, Bengaluru - 560089



National Conference on Seed Chain Management in Eastern and North Eastern Hill Region: Challenges & Opportunities

21st - 22nd January 2025



Organized by:



ICAR-Indian Institute of Horticultural Research

In association with

Society for Promotion of Horticulture

ICAR-Indian Institute of Seed Science

National Seed Association of India (NSAI)



Venue: ICAR-IIHR-CHES, Bhubaneswar

Background Information

Seed is the basic and most critical input for sustainable agriculture. In India, where agriculture serves as the backbone of the economy, the seed industry plays vital role in ensuring food and nutritional security for the 1.4 billion people in the country. The response of all other inputs largely depends on the quality of seeds and planting material used for cultivation. It is estimated that the direct contribution of quality seed alone to the total production is about 15 – 20% depending upon the crop and it can be further raised up to 45% with efficient management of other inputs. The seed status in East and North-Eastern India reflects unique regional challenges and resource allocations for major crops such as rice, maize, oilseeds and vegetables. The Assam, West Bengal and Odisha states are the key rice producers in East India, while the North-Eastern states focus on rice and maize, though small-scale cultivation of oilseeds and pulses is also prominent. Horticulture in East and North-East India has seen considerable growth due to favorable agro-climatic conditions, government support, and an increasing focus on high-value crops. The region is well-suited for cultivating a variety of horticultural crops, including fruits like mango, pineapple, banana, jackfruit and oranges, as well as spices such as black pepper, turmeric and cardamom, medicinal plants, tea, coconut, and bamboo. In recent years, North-Eastern India has experienced gradual growth in seed distribution of field and horticultural crops, with support from government initiatives aiming to improve seed quality and availability. Data indicate that about 17% of India's rice seed requirements come from this region. Furthermore, pulses and oilseeds are increasingly supported by the National Mission on Oil seeds and Oil Palm to enhance self-sufficiency. The Eastern and North-Eastern regions have benefited from the broader push for high-yield varieties and certified seeds to increase overall production resilience.

In East and North-East India, many farmers rely on their own saved seeds. However, over time, saved seeds tend to lose vigour and, reducing yields. Research indicates that the seed replacement rate (SRR) for rice, a major crop in these regions, falls below the national average in multiple North-Eastern states. The region's rugged and mountainous terrain further complicates the distribution of quality seeds, especially during peak planting periods. These access issues are exacerbated by limited infrastructure, which delays the timely delivery of seeds to rural and tribal communities. Unlike other areas with well-established seed production systems, the North-East has a relatively low seed production capacity, often depending on external suppliers.

Several initiatives have been implemented by the government to facilitate access to high-quality seeds at affordable prices, empowering farmers with the essential inputs for maximizing agricultural productivity. To maximize its impact, the seed industry needs to be supported with science-based policies, predictable regulatory frameworks, sustained investments in R&D, and harmonization with global best practices. These ingredients create an enabling environment for innovation and pave the way for a sustainable agricultural research ecosystem. With cutting-edge technologies and strategic collaborations, the seed sector becomes a vital catalyst for progress and prosperity.

The ICAR-Indian Institute of Horticultural Research (ICAR-IIHR) which has developed more than 300 improved varieties in 54 horticultural crops and 150 farmer's friendly technologies for improving the livelihood of farmers has set the target of reaching the unreached. Through the special schemes such as Tribal Sub Plan, Scheduled Caste Sub Plan, and North Eastern Hill schemes to supply the quality seeds, planting material and several other inputs to increase the area, production and productivity of the Horticultural Crops in eastern and north eastern states, which have great potential to adopt the new technologies to reduce the gap between yields from seed of locally available old varieties than that from good quality seed of improved varieties.

Convergence of public and private seed sectors should lead to enhanced Varietal and Seed Replacement Rate (SRR) vis-à-vis enhanced production. The Government bodies such as Department of Agriculture and Cooperation (DAC), Agricultural and Processed Food Products Export Development Authority (APEDA), National Biodiversity Authority, several seed producing companies and ONDC platform are playing their role in assuring supply of genuine quality seeds with in India and abroad. The policy issues like enactment of new seed bill, lifting embargo from commercial cultivation of GM crops and adequate allocation of funds to Seed Sector need to be addressed.

With this background, the ICAR-IIHR, in collaboration with Society for Promotion of Horticulture (SPH), Bengaluru, ICAR-Indian Institute of Seed Sciences and National Seed Association of India (NASI) is organizing the National Conference on Seed Chain Management in Eastern and North Eastern Hill Region, at Central Horticultural Experiment Station, Bhubaneswar, Odisha, during 21-22 January, 2025.

The Participants

The conference aims to create a platform for exchange of ideas and thoughts associated with all the aspects of strengthening seed sector, among the scientific fraternity, entrepreneurs, farmers, growers, industries, seed companies, students etc., from ICAR institutes, SAUs, KVKs, other government and non-governmental organizations and private agencies from different parts of the country.

Technical Sessions

There will be five Technical Sessions spanning over two days. Each session will have invited lectures from the experts, followed by selected oral and poster presentations, and discussions. The participants from all over the country are expected to deliberate on issues pertaining to seed supply chain during the conference to share and gain knowledge.

Thematic Areas

- ❖ Present status, challenges & prospects of seed sector & Seed Chain Management System in Eastern and North Eastern Hill Region
- ❖ Recent developments in seed processing, seed health, supply chain management and market intelligence system
- ❖ Unleashing the importance of landraces, local genotypes, heritage seeds and GI tagged varieties farmers' empowerment.
- ❖ Emerging technologies for improving quality seed chain management for cereals, pulses, oil seeds & horticultural crops and relevant policies
- ❖ Strengthening seed sector in Eastern and North Eastern Hill Region: Road map & way forward

Abstract

Abstracts should not exceed 300 words and to be typed in Times New Roman (12 font). Abstract should have a Title (bold, 14), names of author (s) (bold, 12), affiliations (italics, 12), email of corresponding author and five keywords. Abstracts will be scrutinized and selected for Oral/Poster presentation by the evaluation committee. Abstract book of the accepted papers shall be published and released during the event.

Target stakeholders

The conference will be a knowledge sharing platform for various relevant stakeholders including the researchers, academicians, amateurs, conservationists, farmers, industries, entrepreneurs, research scholars, policy makers and state officials.

Presentation mode

The conference will be organized through physical mode.

Important dates to remember

Registration and abstract submission open	:	21 st November, 2024
Abstract submission closes	:	21 st December, 2024
Intimation of abstract acceptance	:	31 st December, 2024
Registration closes	:	10 th January, 2025
Conference dates	:	21-22 January, 2025

Registration fees

Category Amount

- ❖ Scientists/entrepreneurs/industry Rs. 5,000/-
- ❖ SPH members Rs. 3,000/-
- ❖ Research scholars and students Rs. 1,000/-

Registration fee includes Registration kit, Souvenir, Book of Abstract, Breakfast and lunch for two days.

Mode of payment

Demand draft/NEFT in favour of
Society for Promotion of Horticulture
(State Bank of India, A/c No.: 37807617355,
Hesaraghatta Branch, IFSC Code: SBIN0041187).

Payment details should be included
in the registration form available in the link.

Registration link

<https://forms.gle/er1iBC2sfTXT2B5x9>



About Central Horticultural Experiment Station, Bhubaneswar

The Central Horticultural Experiment Station, Bhubaneswar is the Regional Station of ICAR-IIHR, Bengaluru. The Station was established during year 1992 and since then, the Station has made many significant contributions in the horticultural crops of the regions. Some of the significant achievements include development of extra-early variety of mango, Arka Neelachal Kesari, varieties of custard apple & rose apple, bacterial wilt resistant variety- “Arka Neelachal Yodha”, protein rich dolichos variety, Arka Neelachal Pushti, rust resistant amaranthus varieties;

Arka Neelachal Ruchitha, Arka Neelachal Vrichitha, Arka Neelachal Bainishi, brinjal variety Arka Neelachal Shyama, varieties of pointed gourd, spine gourd, ivy gourd, chili, canopy management of fruit crops, perennial crops based cropping system, regionspecific IPDM module against disease of mango, fruit fly management in mango and cucurbit crops, development of mango wash technology for removal of sooty blotch stains from affected mangoes etc. This Station has also actively involved in PG & Ph.D research programmes, capacity building programmes (CBP) and transfer of Technology programmes.



About the Host City: Bhubaneswar

Bhubaneswar is the capital of Odisha situated 55 kms away from eastern coast of India. In Bhubaneswar, January is considered to be a pleasant month with mild temperatures. The average high temperature during the day is around 29°C, while the average low temperature at night is around 16°C. The weather is generally dry with relative humidity range between 50-90 per cent. The city is well-connected by various modes of transportation. Bhubaneswar's Biju Patnaik International Airport has direct flights from several major cities like Delhi, Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmedabad, Pune, Jaipur, Varanasi, etc. The city is also well-connected by rail. Bhubaneswar Railway Station is a major railway junction in the East Coast Railway zone and is well-connected to various cities across India. Bhubaneswar is also well-connected by road. National Highway 16 (NH 16) passes through the city, connecting it to major cities like Kolkata, Chennai, and Visakhapatnam.

About Society for Promotion of Horticulture

Society for Promotion of Horticulture was started on September 20, 2005 at ICAR-Indian Institute of Horticultural Research, Bengaluru under Karnataka Societies Registration Act, 1960. The society organizes International and National Conferences/Seminar/Symposia/Workshop/Training programs/National Fairs in horticultural sciences. The Society also publishes peer reviewed scientific journal, 'Journal of Horticultural Sciences' (JHS) reviews, research articles and short communications on basic and applied aspect of original research in all branches of horticulture and other cognate disciplines.

About ICAR-IISS, Mau

'Indian Institute of Seed Science' (IISS). ICAR-IISS is a unique institute of ICAR engaged exclusively to coordinate and conduct seed science research countrywide. Besides its mandate for undertaking seed production and seed technology research, the institute is deemed to undertake training and capacity building in this important sector of agriculture. IISS works in a mission to enhance genetic and physical characteristic of seed for increased productivity, quality and sustainability.

About NASI

NSAI is an apex organization representing the Indian Seed Industry and the aim of the association is to meet the requirement of the farmers in seed sector and contribute to the sustainable growth of Indian Agriculture. NSAI encourages investment in the state of the art R & D to bring to the Indian farmer superior genetics and technologies with better performance & adoption to a wide range of agro-climatic conditons.

Accommodation

Accommodation will be arranged in nearby guest houses and hotels on request basis. Limited accommodation is available at the guest houses of ICAR Institutes like ICAR-NRRI, ICAR-CIWA, ICAR-IIWM, ICARF-CIFA, in which shared accommodation shall be arranged on payment basis. For accommodation, please send the information in the Registration Form of the conference.

HOW TO REACH

Central Horticultural Experiment Station, Bhubaneswar is 10 km from Bhubaneswar Railway Station, 8 kms km from Biju Pattanaik International Airport and 1.5 km from Baramunda Bus Stand. Bhubaneswar has a well-developed public transportation system, including buses, auto-rickshaws and availability and ride-hailing services by Ola, Uber which provide convenient connectivity within the city.

Sponsorship details

Type of Amount Facilities Sponsorship (Rs.)

DIAMOND

₹. 3,00,000/-

Registration of three delegates and a slot in the interaction session. Display of logo on Registration kits /Back drop / Banners Display space for specimens at the event venue one page (colour) advertisement in Abstract Book / Conference Proceedings.

PLATINUM

₹. 2,00,000/-

Registration of two delegates. Display of logo on Registration kits/ Back drop/Banners Display space for specimens at the event venue Three-fourth page (colour) advertisement in Abstract Book / Conference Proceedings.

GOLD

₹. 1,00,000/-

Registration of two delegates. Display of logo on registration kits/ Back drop/Banners Display space for specimens at the event venue Half page (colour) advertisement in Abstract Book / Conference Proceedings.

SILVER

₹. 50,000/-

Registration of one delegate. Display of logo on registration kits and banners Half page (B&W) advertisement in Abstract Book/Conference Proceedings

NATIONAL ADVISORY COMMITTEE

CHIEF PATRON: Dr. Himashu Pathak

Secretary, DARE & DG, ICAR, New Delhi

PATRON: Dr. Sanjay Kumar Singh

DDG (Horticultural Science), ICAR, New Delhi

MEMBERS:

Dr. Trilochan Mohapatra, Chairperson, PPVFRA, New Delhi

Dr. Prabhat Kumar, Commissioner (Horticulture), GoI, New Delhi

Sh. Priya Ranjan, Managing Director, NHB, Gurgaon

Prof. Pravat Kumar Roul, Vice Chancellor, Odisha University of Agriculture & Technology, Bhubaneswar

Prof. Sabita Acharya, Vice Chancellor, Utkal University, Bhubaneswar

Dr. Arabinda K. Padhee, IAS, Principal Secretary, Dept. of Agriculture & Farmers' Empowerment, Govt. of Odisha, Bhubaneswar

Prof. Shreepad Karmalkar, Director, IIT, Bhubaneswar

Prof. Hirendra Nath Ghosh, Director, NISER, Bhubaneswar

Dr. V. B. Patel, ADG (Fruits and Plantation Crops), ICAR, New Delhi

Dr. Sudhakar Pandey, ADG (Vegetables, Flower, Spices and Medicinal Crops), ICAR, New Delhi

Dr. Amaresh Kumar Nayak, Director, ICAR-NRRI, Cuttack

Dr. Arjamadutta Sarangi, Director, ICAR-IIWM, Bhubaneswar

Dr. P. K. Sahoo, Director, ICAR-CIFA, Bhubaneswar

Dr. Mridula Devi, Director, ICAR-CIWA, Bhubaneswar

Dr. Anup Das, Director, ICAR-RCER, Patna, Bihar

Dr. O. P. Yadav, Director, ICAR-CAZRI, Jodhpur

Dr. Jagadish Rane, Director, ICAR-CIAH, Bikaner

Dr. Brajesh Singh, Director, ICAR-CPRI, Shimla

Dr. Parveen Kumar, Director, ICAR-CCARI, Goa

Dr. Abhijit Kar, Director, ICAR-NISA, Namkum, Ranchi

Dr. G. Byju, Director, ICAR-CTCRI, Thiruvananthapuram

Dr. Sujay Rakshit, Director, ICAR-IIAB, Ranchi

Dr. K. B. Hebbar, Director, ICAR-CPCRI, Kasaragod

Dr. N. Rai, Director, ICAR-IIVR, Varanasi

Dr. H. S. Jat, Director, ICAR-IIMR, Ludhiana

Dr. Ratan Tiwari, Director, ICAR-IIWBR, Karnal

Dr. C. Tara Satyavathi, Director, ICAR-IIMR, Hyderabad

NATIONAL ORGANIZING COMMITTEE

CHAIRMAN: Prof. Tusar Kanti Behera

Director, ICAR-IIHR & President, SPH, Bengaluru

CO-CHAIR PERSONS: Dr. Sanjay Kumar

Director, ICAR-Indian Institute of Seed Science, Mau &

Dr. M. Prabhakar Rao, President, NSAI

MEMBERS:

Dr. B.B Pattanaik, General Secretary, NSAI

Dr. Prakash Patil, PC (ICAR-AICRP on Fruits), ICAR-IIHR Bengaluru

Dr. S. Sriram, Principal Scientist and Head, Division of Crop Protection, ICAR-IIHR, Bengaluru

Dr. M. Sankaran, Principal Scientist and Head, Division of Fruit crops, ICAR-IIHR, Bengaluru

Dr. H. C. Prasanna, Head, Division of Vegetable Crops, ICAR-IIHR, Bengaluru

Dr. P. Naveen Kumar, Principal Scientist & Head, Division of Flower and Medicinal crops, ICAR-IIHR, Bengaluru

Dr. Basavaprabhu L. Patil, Principal Scientist & Head, Division of Basic Sciences, ICAR- IIHR, Bengaluru

Dr. V. K. Jayaraghavendra Rao, Principal Scientist & Head, Division of Social Sciences & Training, ICAR-IIHR, Bengaluru

Dr. R. B. Tiwari, Principal Scientist & Head, Division of PHT & Agril. Engg. ICAR-IIHR, Bengaluru

Dr. T. R. Rupa, Principal Scientist and Head, Division of Natural Resources, ICAR-IIHR, Bengaluru

Dr. Sridhar Gutam, Joint Secretary, SPH, Principal Scientist, Division of Basic Sciences, ICAR-IIHR, Bengaluru

Dr. G.R. Smitha Principal Scientist, Treasurer SPH, ICAR-IIHR, Bengaluru

Dr. E. Sreenivasa Rao, Principal Scientist, Division of Vegetable Crops, ICAR-IIHR, Bengaluru

Dr. H. P. Sumagala, Principal Scientist, Division of Flower & Medicinal Crops, ICAR-IIHR, Bengaluru

Dr. B. Balakrishna, Principal Scientist, Division of Social Science & Training, ICAR-IIHR, Bengaluru

Dr. K. V. Ravishankar, Principal Scientist, Division of Basic Sciences, ICAR-IIHR, Bengaluru

Dr. G. Sangeetha, Principal Scientist, Division of Crop Protection, ICAR-IIHR Bengaluru

Dr. Smaranika Mishra, Senior Scientist, Division of Vegetable Crops, ICAR-IIHR Bengaluru

Director, Odisha State Seed and Organic Products Certification Agency, Bhubaneswar

Mr. Bhabesh Kumar Nayak, Managing Director, Odisha State Seeds Corporation Ltd, Bhubaneswar

Mr. Sachin Agnihotri, CAO (SG), ICAR-IIHR, Bengaluru

Mr. K. G. Jegadeesan, SFAO, ICAR-IIHR, Bengaluru

Dr. R. P. Singh, Director, ICAR-ICFMD, Bhubaneswar
Dr. R. A. Marathe, Director,
ICAR-NRC on Pomegranate, Solapur
Dr. Vinay Bharadwaj, Director, ICAR-NRCSS, Ajmer
Dr. G. P. Dixit, Director, ICAR-IIPR, Kanpur
Dr. V. K. Mishra, Director, ICARNEH, Barapani
Dr. T. Damodaran, Director, ICAR-CISH, Lucknow
Dr. K. Suresh, Director, ICAR-IIOPR, Pedavegi
Dr. K. V. Prasad, Director, ICAR-DFR, Pune
Dr. R. Dinesh, Director, ICAR-IISR, Kozhikode
Dr. K. Banerjee, Director, ICAR-NRC for Grapes, Pune
Dr. Dillip Ghosh, Director, ICAR-CCRI, Nagpur
Dr. Bikash Das, Director, ICAR-NRC for Litchi,
Muzaffarpur
Dr. S. P. Das, Director,
ICAR-NRC for Orchids, Pakyong
Dr. J. Dinakara Adiga, Director, ICAR-Puttur
Dr. M. K. Verma, Director, ICAR-CITH, Srinagar
Dr. R. Selvarajan, Director, ICAR-NRC for Banana,
Tiruchirappalli
Dr. G. Kadirvel, Director, ICAR-ATARI, Guwahati
Dr. A. K. Mohanty, Director, ICAR-ATARI, Umiam,
Dr. Shaik N. Meera, Director,
ICAR-ATARI, Hyderabad
Dr. Pradip Dey, Director, ICAR-ATARI, Kolkata
Dr. Anjani Kumar, Director, ICAR-ATARI, Patna
Dr. V. Venkatasubramanian, Director,
ICAR-ATARI, Bengaluru
Dr. Prem Chandra Chaudhary, Director,
Agriculture and Food Production, Govt of Odisha
Mr. Nikhil Pawan Kalyan, Director, Directorate of
Horticulture, Govt. of Odisha, Bhubaneswar

M/s. Dharitri, Seeds Pvt Ltd, Bhubaneswar, Odisha
M/s. Nirmal, Seeds Pvt Ltd, Bhubaneswar
M/s. Rajdhani Horticulture and Seeds Pvt Ltd,
Bhubaneswar
M/s. Paripurna Seeds Pvt Ltd, Bhubaneswar
M/s. Dharitri Agriculture Pvt Ltd, Bhubaneswar

LOCAL ORGANIZING COMMITTEE

Narmada Charitable Trust, Bhubaneswar
Dr. Prasanjit Mishra, Dean of Extension Education,
OUAT, Bhubaneswar
Dr. Sanghamitra Samantaray, Head, Division of Crop
Improvement, ICAR-NRRI Cuttack
Dr. Shyamaranjan Das Mohapatra, Head, Division
of Crop protection, ICAR-NRRI Cuttack
Dr. D. Ramajayam, Head, ICAR-IISWC, RC Koraput
Dr. K. Laxminarayan, Head IC, ICAR-RCCTCRI,
Bhubaneswar
Dr. S. K. Sadangi, Head, Division of Agronomy,
ICAR-CIWA, Bhubaneswar
Dr. A. K. Panda, Head, Division of Animal Nutrition,
ICAR-CIWA, Bhubaneswar
Dr. Arun Kumar Singh, Head, ICAR-RCER,
FSRCHPR, Ranchi
Dr. Meenu Kumari, Senior Scientist,
ICAR-RCER, FSRCHPR, Ranchi
Dr. S. C. Giri, Principal Scientist, ICAR-DPR Regional
Centre, Bhubaneswar
Dr. P. Srinivas, Principal Scientist, CHES, Bhubaneswar
Dr. Deepa Samant, Senior Scientist,
CHES, Bhubaneswar
Dr. Satyapriya Singh, Scientist, CHES, Bhubaneswar
Ms. Rina Pattanayak, AFAO, CHES, Bhubaneswar
Mr. Arun Kumar Barik, AAO, CHES, Bhubaneswar

ORGANIZING SECRETARIES

Dr. T. H. Singh, Principal Scientist, ICAR-IIHR,
Bengaluru & General Secretary, SPH, Bengaluru
Dr. G. C. Acharya, Principal Scientist & Head, ICAR-
IIHR-CHES, Bhubaneswar

CO-ORGANIZING SECRETARIES

Dr. M. V. Dhananjaya, Principal Scientist & CEO
BESSTHORT, ICAR-IIHR, Bengaluru
Dr. G. Karunakaran, Principal Scientist,
ICAR-IIHR, Bengaluru
Dr. Poonam Naresh, Senior Scientist, Division of
Vegetable Crops, ICAR-IIHR Bengaluru
Dr. A.V.V.Koundinya, Senior Scientist,
CHES, Bhubaneswar

Further Contact Details:

Prof. Tusar Kanti Behera
Director, ICAR-IIHR & President, SPH, Bengaluru
Tel. No: -080-23086100
E-mail: director.iihr@icar.gov.in

Dr. T. H. Singh, Principal Scientist,
ICAR-IIHR, Bengaluru & General Secretary,
SPH, Bengaluru, Mob. No: 9449658713/8197535761
E-mail: Singh.HT@icar.gov.in, sphiihr2005@gmail.com

Dr. G. C. Acharya, Principal Scientist & Head,
ICAR-IIHR-CHES, Bhubaneswar
Mob. No: 9439955433, E-mail: Gobinda.Acharya@icar.gov.in
seedchainmanagement.conference@gmail.com