

## SECOND INDIAN RICE CONGRESS-2023

*An International Event on*  
**TRANSFORMING RICE RESEARCH:  
RECENT SCIENTIFIC  
DEVELOPMENTS AND GLOBAL FOOD CRISIS**

FEBRUARY 11-14, 2023

*Organized By*



Association of Rice Research Workers  
Cuttack, Odisha, India



Venue: ICAR-National Rice Research Institute, Cuttack, Odisha, India

## IN BRIEF

### CLOSING DATES

Submission of Participation Form	: September 30, 2022
Receipt of Extended Summary	: October 31, 2022
Issue of Acceptance Letters	: November 30, 2022
Receipt of Registration fee (without late fee)	: December 15, 2022
Request for Accommodation	: December 31, 2022
Submission of Accommodation charges	: December 31, 2022
Willingness for field visit/Tour	: December 31, 2022

### PROGRAM

Registration	: February 10-11, 2023
Inauguration	: February 11, 2023
Congress	: February 11-14, 2023
Poster session	: February 11-14, 2023
Valedictory session	: February 14, 2023
Field visit	: February 15, 2023

### CONTACT DETAILS

**Dr. Sanjoy Saha**

Organizing Secretary, 2nd Indian Rice Congress &  
Secretary, Association of Rice Research Workers (ARRW),  
ICAR-National Rice Research Institute, Cuttack – 753 006; Odisha; India  
Phone : 91-671-2367777-282 (Office)  
E-mail : organizingsecretarysirc@gmail.com

**Dr. Prashantkumar Hanjagi,**

Co-Organizing Secretary, 2<sup>nd</sup> Indian Rice Congress  
ICAR-National Rice Research Institute, Cuttack – 753 006; Odisha; India

**Dr. Guru Pirasanna Pandi G,**

Co-Organizing Secretary, 2<sup>nd</sup> Indian Rice Congress  
ICAR-National Rice Research Institute, Cuttack – 753 006; Odisha; India

# Invitation



Rice (*Oryza sativa*) is an ancient crop and is classified as most important cereal in terms of ecology and economy. It is the staple food for many people around the world especially in Asia where half of the global population exists. Globally, the crop is planted in about 160 million hectare with production of 493 million tons of milled rice. On the other side, world population is expected to increase by 9.2 billion in the middle of this century and in that situation it will be extremely challenging to provide enough food for all the people. To meet the global demand, rice production will have to be increased to 771.1 m tonnes by 2030. Furthermore, total global arable land area has not considerably changed in the last 50 years and significant increase is improbable in the future too due to increased salinity, desertification and urbanization. A drastic change of food price has occurred in international markets due to world food crisis during 2007-08. In India, rice plays a major role in diet, economy, employment, culture and history. It is the staple food for Indian population and playing a pivotal role in the food and livelihood security of people.

Increase in productivity and profitability of rice on a sustainable basis is possible through novel technological inputs that can address various challenges, including those arising from climate change. Scientific advances in high throughput genotyping-phenotyping and genomics-assisted breeding provide opportunities to explore and embed genes for improving yield and quality. Cutting-edge research enables opportunity to break the yield ceiling and breed new generation of climate-ready rice varieties. Management of soil, nutrient and water has assumed greater significance with the emerging changes in economic and environmental scenario. Improvement in sensors, processing, communications, and nanotechnology offer the potential to increase the use efficiencies of water, fertilizer and plant protection chemicals.

To ensure food and nutritional security for the ever-growing population in the face of impending adversities due to limited land resources, climate change, insect pest problems, disease pressure and declining availability of water and labour. These changes in ecological, social and economic conditions of rice cultivation call for a transformation in rice research to comply with current and future developments. Hence, the congress “Transforming Rice Research: Learning From Recent Scientific Developments And Global Food Crisis” was planned to analyzes the major and emerging problems, revisit the achievements and identifies research and development needs for sustainable rice farming.

We consider it our privilege to extend you a warm invitation for your active participation in the Symposium to accomplish its objectives.

Looking forward to meet you in the Congress at Cuttack.

## **Dr. Sanjoy Saha**

Secretary, ARRW  
& Organizing Secretary, SIRC  
ICAR-NRRI, Cuttack, Odisha; India

## **Dr. Pawan Kumar Agrawal**

President, ARRW & Chairman, SIRC  
ADG (Coordination, ICAR),  
New Delhi; India

## **Dr. (Mrs.) Padmini Swain**

Director, ICAR-NRRI  
& Convener, SIRC  
Cuttack, Odisha; India



## ORGANIZING COMMITTEES IN BRIEF

Chief Patron	Dr. T. Mohapatra	Former Secretary (DARE) & DG , ICAR, New Delhi, India
Patron	Dr. H. Pathak	Secretary (DARE) & DG , ICAR, New Delhi, India
Patron	Dr. Jean Balie	DG , IRRI, Metro Manila, Philippines

### INTERNATIONAL ADVISORY COMMITTEE

Chairperson	
Dr H. Pathak	Secretary (DARE) & DG , ICAR, New Delhi, India
Members	
Shri Manoj Ahuja	Agricultural Secretary, GOI, New Delhi, India
Dr R.B. Singh	Former President, NAAS, New Delhi, India
Dr John C. De Leon	Executive Director, PhilRice, Los Banos, Philippines
Dr Md. Shahjahan Kabir	DG, BRRI, Dhaka, Bangladesh
Dr Ajantha de Silva	DG, Agriculture, Colombo, Sri Lanka
Dr Rewati Raman Poudel	DG, Dept of Agriculture, Patan, Nepal
Dr Arvind Kumar	DDG (Research), ICRISAT, Hyderabad, India
Dr T.R. Sharma	DDG (CS), ICAR, New Delhi, India
Dr S.K. Chaudhari	DDG (NRM), ICAR, New Delhi, India
Dr G.S. Khush	University of California, Davis, USA
Dr Swapan K Datta	VC, Biswa Bangla Biswabidyalay, Shibpur, West Bengal, India
Dr A.K. Singh	Director, ICAR-IARI, New Delhi, India
Dr Sudhanshu Singh	Director IRRI-SARC, Varanasi, India
Dr (Mrs.) Padmini Swain	Director, ICAR-NRRI, Cuttack, Odisha, India
Dr R.M. Sundaram	Director, ICAR-IIRR, Hyderabad, India
Dr Ranjitha Puskur	IRRI-India, New Delhi, India
Dr Ismail A Bagi	IRRI, Metro Manila, Philippines
Dr R.K. Singh	ICBA, Dubai, UAE
Dr P.K. Agrawal	President, ARRW & ADG (TC), ICAR, New Delhi, India

## NATIONAL ADVISORY COMMITTEE

### Chairperson

Dr (Mrs) P. Swain, Director, ICAR-NRRI, Cuttack, Odisha

### Members

Prof S.K. Sopory	Former VC, JNU, New Delhi, India
Prof B.S. Mahapatra	Vice Chancellor, BCKV, Mohanpur, West Bengal
Dr S.K. Chakrabarti	Vice Chancellor, UBKV, Pundibari, West Bengal
Dr B.C. Deka	Vice Chancellor, AAU, Jorhat, Assam
Dr O.N. Singh	Vice Chancellor, BAU, Ranchi, Jharkhand
Dr Krishna Kumar	Vice Chancellor, RPCAU, Pusa, Bihar
Dr V. Geethalakshmi	Vice Chancellor, TNAU, Coimbatore. Tamilnadu
Dr S. Rajendra Prasad	Vice Chancellor, UASB, Bengaluru, Karnataka
Dr R. Basavarajappa	Vice Chancellor, UASD, Dharwad, Karnataka
Shri Sanjeev Chopra	Vice Chancellor, OUAT, Bhubaneswar, Odisha
Dr A. Vishnuvardhan Reddy	Vice Chancellor, ANGRAU, Guntur, Andhra Pradesh
Dr Girish Chandel	Vice Chancellor, IGKV, Raipur, Chattishgarh
Dr R.K. Singh	ADG (FFC), ICAR, New Delhi
Dr D.K. Yadav	ADG (Seed), ICAR, New Delhi
Dr Ashutosh Upadhyaya	Director, ICAR-RCER, Patna, Bihar
Dr S.K. Swain	Director, ICAR-CIFA, Bhubaneswar, Odisha
Dr R.K. Panda	Director, ICAR-IIWM, Bhubaneswar, Odisha
Dr Anil Kumar	Director, ICAR-CIWA, Bhubaneswar, Odisha
Dr Azad Singh Panwar	Director, IIFSR, Modipuram, Uttar Pradesh
Dr B.N. Singh	Former Director, ICAR-NRRI, Cuttack, Odisha
Dr S.R. Das	Former President, ARRW, Cuttack, Odisha
Dr V.V. Sadamate	Former Advisor, Agri. Planning Commission, GOI, New Delhi
Dr Mukund Variar	State Coordinator, IRRI-Odisha, Bhubaneswar, Odisha
Dr S.K. Agrawal	Regional Coordinator, ICARDA, New Delhi
Dr B.C. Patra	Head, CID, ICAR-NRRI, Cuttack, Odisha
Dr A.K. Nayak	Head, CPD, ICAR-NRRI, Cuttack, Odisha
Dr G.A.K. Kumar	Head, SSD, ICAR-NRRI, Cuttack, Odisha
Dr P.C. Rath	Head, CPT, ICAR-NRRI, Cuttack, Odisha
Dr M.J. Baig	Head, CPBD, ICAR-NRRI, Cuttack, Odisha

### STEERING COMMITTEE

Chairperson	Dr. P.K. Agrawal & Dr. (Mrs) P. Swain	President, ARRW & ADG (TC), ICAR, New Delhi, India Director, ICAR-NRRI, Cuttack, Odisha, India
Convener	Dr. Sanjoy Saha	Secretary (ARRW), ICAR-NRRI, Cuttack, Odisha, India

### LOCAL ORGANIZING COMMITTEES

Chairperson	Director, ICAR-NRRI, Cuttack, Odisha		
Co-Chairperson	Dr (Mrs) A. Poonam & Dr (Mrs) Lipi Das		
Committee	Chairperson	Co-chairperson	Convener
Program & Publication	Dr AK Nayak	Dr Anjani Kumar	Dr P Hanjagi
Invitation, Reception & Registration	Dr A Poonam	Dr S Munda	Dr N Basak
Floor Management	Dr MJ Baig	Dr R Tripathi	Dr NN Jambhulkar
Poster Session	Dr SK Pradhan	Dr AK Mukherjee	Dr K Molla
Exhibition, Press & Media	Dr GAK Kumar	Dr B Mondal	Dr (Mrs). S Sethi
Finance & Accounts	Dr S Samantaray	Dr P Sanghamithra	Dr RL Verma
Transport & Accommodation	Dr RP Sah	Dr Raghu S	Dr Basana Gowda
Food & Refreshment	Dr BC Marndi	Dr LK Bose	Dr Guru P Pandi, G
Cultural Program	Dr SK Lenka	Dr (Mrs) S Sarkar	Dr Sivashankari M
Site Tour/Field Visit	Dr SK Dash	Dr Md Shahid	Dr D Chatterjee
Health Services	Dr SD Mohapatra	Dr J Pani	Mr AK Nayak
Side Events	Dr Lipi Das	Dr K Chakraborty	Dr Sudipta Paul

### EXECUTIVE COUNCIL OF ARRW

Dr. PK Agrawal, President; Dr. A. Poonam, Vice President; Dr Lipi Das, Vice President; Dr. Sanjoy Saha, Secretary; Dr. Anjani Kumar, Editor-in-chief; Dr. P. Sanghamithra, Treasurer

### ORGANIZING SECRETARY

Dr. Sanjoy Saha; Secretary, Association of Rice Research Workers  
ICAR-National Rice Research Institute, Cuttack - 753 006, Odisha, India

## THEME & SUB-THEME IN BRIEF

### Theme I: Enhancing the genetic potential of rice for stress tolerance and nutritional quality

- Evaluation and utilization of rice genetic resources
- Recent approaches in modernizing breeding program for higher genetic gain
- Understanding the physiological, genetic and molecular basis of stress tolerance and their application in rice improvement
- Biofortification and improvement of physico-chemical and nutritional properties of rice grain
- Breeding hybrid rice for stress tolerance and yield

### Theme II: Ecological and sustainable management of rice-based production systems

- Enhancing resource use efficiency in rice-based system by precision water and nutrient management.
- Direct seeded rice and conservation agriculture.
- Enhancing Resilience of rice based production system to climate change.
- Energy efficient customized farm mechanization for small & marginal farmers.
- Prospects natural farming and organic farming for rice-based system.

### Theme III: Biotic stress management in rice: recent scientific advances

- Host pest interaction and utilization of resistant germplasm
- Recent development in population dynamics of rice insect pest, diseases, nematodes and weeds
- Emerging technologies for detection, monitoring and management of rice pests.
- Novel molecules in rice pest management.
- Integrated management approaches against key and emerging biotic stresses

### Theme IV: Socio-extension approaches in rice farming to address global food security issues

- Modern tools & techniques to assess global food security challenges
- Social and governance issues for global food balance and trade
- Innovative extension approaches to transform towards sustainable agriculture and food systems
- Equity & gender perspective in access and distribution of resources and output in rice farming

## PRESENTATION FORMAT

**PLENARY LECTURE :** World renowned scientists, policy makers and administrators will be invited to deliver plenary lectures. They would present overviews of the various themes of the symposium. Speakers will be requested to provide 3-4 pages write-up of their talk for inclusion in the proceedings. Plenary lecture will be of 30 minutes duration.

**INVITED LECTURE :** These would offer an insight into the various themes. Technical Committee constituted for each theme will identify 5-6 speakers. Each speaker will be given 20 minutes for the lecture followed by discussion.

**POSTER PRESENTATION :** All the delegates will get an opportunity to present their research papers in the poster session. Poster presentation will be arranged theme-wise. This would provide an opportunity to the participants to present their work in a more informal manner with personalized interaction with other participants. Materials for the display of posters will be provided by the organizers. Guidelines for poster preparation are given separately in the circular.

**SPONSOR PRESENTATION :** Limited sponsored presentations will be arranged to provide an opportunity to sponsors to highlight their product profiles and share experiences.

**EXTENDED SUMMARY :** Delegates will submit extended summary of their research papers before the last date for receipt of extended summary. These extended summaries will be scrutinized and published in Pre-Congress Proceedings. Delegates are requested to adhere to guidelines while preparing the extended summary.

## GUIDELINES FOR PREPARATION OF EXTENDED SUMMARY

- The Extended Summary should not exceed 2 double space typed A<sub>4</sub> size pages, including illustration and references. The title should be short, specific and phrased to identify the content of the article. Heading should be in capital letter.
- It should be typed in Times New Roman with normal fonts. Font's size for different parts of extended summary are Title-14 points bold, Authors-12 points, Institute name – 11 points italic, Content-11 points. The Extended Summary should include the author(s) name(s) and place of work including the name of the university/ organization, State, pin code and the country. In case, the present address of any of the author is different, it should be given with complete address as footnote.
- The extended summary should begin with brief introduction and objectives, followed by methodology, results, conclusion and references (maximum two only) and illustration (one). Heading of Methodology, Results, Conclusion and References may be given in capital letters. No heading for introduction is required. The guidelines is also available at Society website: [www.arrworyza.com](http://www.arrworyza.com)

## GUIDELINES FOR POSTER PRESENTATION

- For each Theme, there will be a poster session to encourage detailed discussion with the presenters. The papers contributed for each poster session will have a convener. The convener will prepare and present summary of the poster session in the respective Congress. The posters are to be prepared in the standard form.
- Poster preparation : The title at the top should include in addition to title (in capitals), name(s) of the author(s) and their affiliation. The text of the poster may be divided into Objective (two to three sentences), Methodology, Results (including tables, charts/graphs) and Summary/Conclusions.
- Lettering : The lettering for the title should be 36 points in bold capital while that of name of authors in 28 point bold lower case and institution in 24 points bold italics lower case may be followed. All additional lettering should be 20 points normal. The heading namely, Objectives, Methodology, Results and Summary/Conclusion should be in 20 points bold lower case.
- Script : Table and figure headings and text should be bold face lettering of 20 points. The numerals and letters included in the figures and tables should be 16 points normal.
- The size of the poster should not exceed 2.00m (height) and 1.00m width.
- Remember, a lot of people will read or study your poster, while you are away, in such a case make sure that message is clear and simple.
- Extended summaries schedules for presentation will be grouped Theme-wise, numbered and listed in the final program. Posters will be evaluated by the Committee for awards.

# EXHIBITION & SPONSORS DETAILS

## EXHIBITION

An exhibition will be organized at ICAR-NRRI during the Congress. The exhibition area will be the focal point of the Congress and the program is structured to maximize the opportunity for delegates to visit the area. It has limited access to non-delegates also. Space for exhibition can be reserved by contacting the organizers. Exhibitors will get 3mx3m space within the exhibition area, having three side wall, carpet, 1 table, 2 chairs, one standard electric power point, two spotlight and dustbin. Space can be reserved by contacting the organizers. Charges for the exhibition stall is Rs. 40,000/-.

## SIDE EVENTS

Separate side events will be organized at ICAR-NRRI during the Congress. Leading researchers from different international organization will deliver lectures during event.

## SPONSORS

Organizers will be delighted to have you as sponsor for this International Event. This is an unique opportunity to promote your organization on the world stage. Sponsors of this Congress will get marketing exposure to extensive on site visibility to post-event coverage. Sponsoring the Congress is the ideal way to reach a huge gathering of scientists, administrators, policy and decision makers and consumers. This will provide an excellent opportunity for cost effective marketing. In order to provide maximum flexibility to the sponsors, we have different sponsorship levels, detail of which along with other information is available at the ARRW website: [arrworyza.com](http://arrworyza.com). Sponsors may contact the organizers to negotiate various combinations in order to maximize their opportunities.

### 1. Platinum Sponsor (Rs. 4,00,000)

Name/logo of sponsor to be displayed at prominent places including dais/website.

Presentation opportunity during the workshop.

Advertisement in souvenir back page (full page color, cover/special insertion).

Free stalls (2)

Complementary registration for 3 delegates.

### 2. Diamond Sponsor (Rs. 3,00,000)

Name/logo of sponsor to be displayed at prominent places including dais/website.

Presentation opportunity during the workshop.

Advertisement in souvenir inside of the back page (full page color, cover/special insertion).

Free stalls (1)

Complementary registration for 2 delegates.

### 3. Gold Sponsor (Rs. 2,00,000)

Name/logo of sponsor to be displayed at prominent places including dais/website.

Advertisement in souvenir (full page color).

Free stalls (1)

Complementary registration for 1 delegate.

### 4. Silver Sponsor (Rs. 1,00,000)

Advertisement in souvenir (half page color) and to be displayed in website.

### 5. Sponsor (Rs. 50,000)

Advertisement in souvenir (full page black and white) and to be displayed in website.

## EXTENDED SUMMARIES

The extended summaries of all the contributory papers will be published and provided to the delegates during the Congress. These must reach the Secretary, ARRW in the prescribed format latest by October 30, 2022. Please ensure your registration by December 15, 2022 for inclusion of your 'Extended Summary' in the Pre-Congress proceeding. Extended summary prepared without following the style and format, and guidelines will not be accepted for publication. A soft copy of the extended summary prepared in Microsoft Word should be uploaded in the google form: <https://forms.gle/IQ38CGV9vUW2xX986>. Any further queries related to submission may be emailed to Organizing Secretary: [organizingsecretarysirc@gmail.com](mailto:organizingsecretarysirc@gmail.com).

## REGISTRATION FEES DETAILS

### Registration fees

#### Foreign Delegates

Scientist/Researcher: US \$ 300

Students/Researchers Scholars: US \$ 200

Accompanying members: US \$ 100

#### Indian Delegates

Participants: ₹8000 (After due date ₹9000)

Student participants: ₹3000 (After due date ₹4000)

Industry & Private Organizations: ₹15000 (After due date ₹16000)

**Accompanying members: ₹5000**

### Instruction for Delegates

- Congress will be open to registrants only.
- The registration fee for the participants will cover participation in all scientific sessions, the proceedings and other printed materials of the meeting, welcome reception, lunch & dinner, tea/coffee during lecture breaks. It does not include charges for accommodation.
- Registration is through google form: <https://forms.gle/IQ38CGV9vUW2xX986>
- Fees for Foreign delegates are in US dollars or equivalent in Indian Currency.



## ACCOMMODATION DETAILS

### Accommodation

Accommodation is available at various hotels, especially for the congress delegates at discounted rates. Contact the organizers early as demand for rooms is very high during the conference period. The registration fee does not include accommodation charges. The participants are encouraged to make their own arrangements for stay. Delegates are requested to inform the organizers in advance for booking of accommodation.

Indian delegates interested in accommodation are requested to intimate the organizers preferably by December 31, 2022, for advance booking of accommodation in hotels, as limited accommodation is available in hotels.

### Hotel Accommodation

Name of the Hotel	Distance from Congress venue
Mayfair Lagoon, Bhubaneswar	30 kms.
Ginger, Bhubaneswar	30 kms.
Grand Residency, Cuttack	08 kms.
Pramod Convention & Club Resort, Cuttack	12 kms.
Hotel Bombay Inn, Cuttack	06 kms.
Mahabir Galaxy, Cuttack	10 kms.
Hotel Ashoka, Cuttack	06 kms.
Hotel Ambika Residency, Cuttack	08 kms.
Benson & Blue, Cuttack	04 kms

## FIELD VISIT, EXCURSION AND TOUR

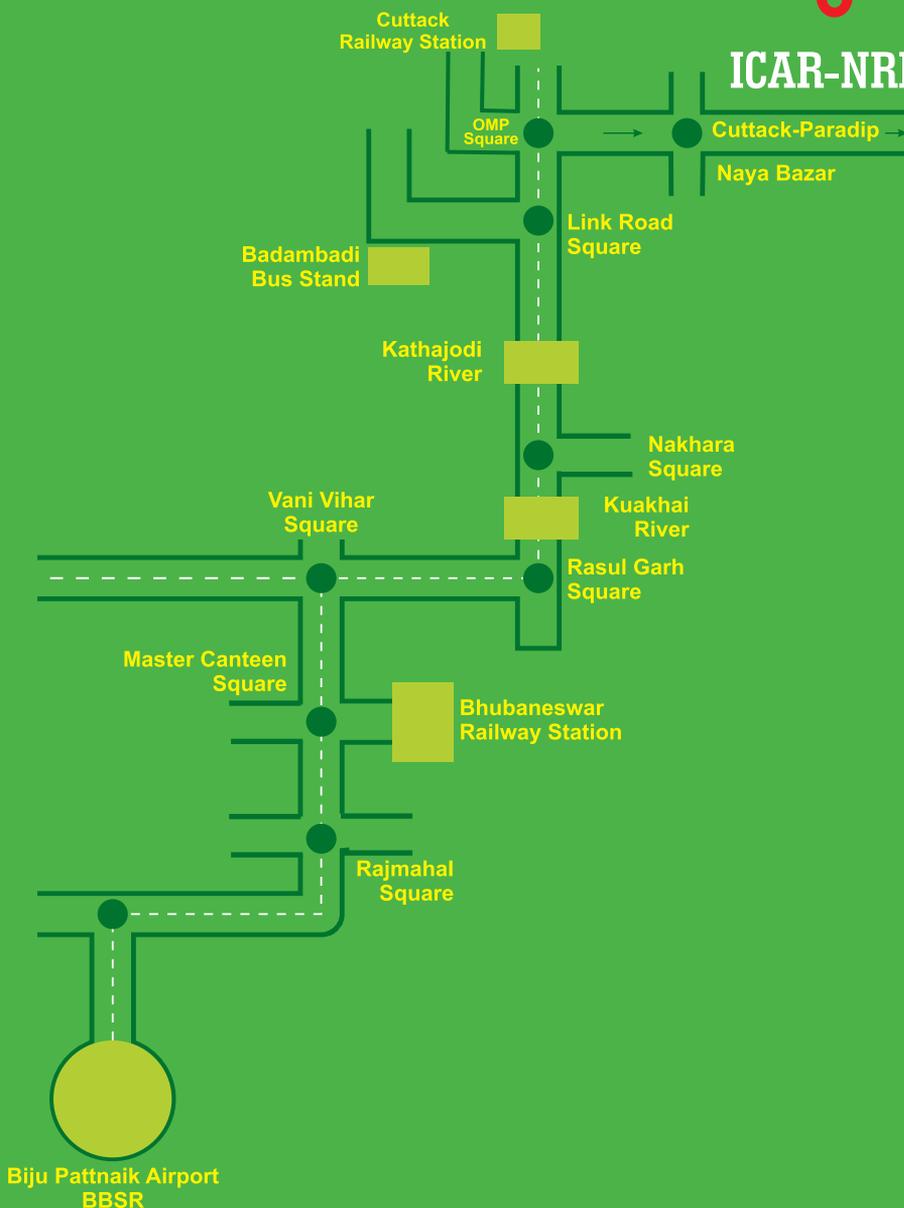
Organizers will arrange visits to experimental fields and Research Institutes at Cuttack, Bhubaneswar, Puri on February 15, 2023. Delegates are requested to indicate their willingness to join the field visits, excursion and tours during registration

1. Visit to Cuttack and Bhubaneswar based Experimental Fields, Museum and Research Institutes
2. Visit to Puri and Konark based Experimental Fields, Monuments and Research Stations.

Final programme of these field visits will depend upon the willingness received from the delegates. All these visits will be arranged on payment basis by the delegates



**ICAR-NRRI**



**ADDRESS FOR CORRESPONDENCE**

**Dr. Sanjoy Saha**

Secretary, Association of Rice Research Workers  
ICAR-National Rice Research Institute, Cuttack – 753 006, Odisha, India

Phone : 91-671-2367777-282 (Office)

E-mail : [organizingsecretarysirc@gmail.com](mailto:organizingsecretarysirc@gmail.com)