Department of BioTechnology, Government of India

सत्यमेव जयते

DBT-CTEP Sponsored

One Day National Symposium On

Gene-Edited Rice in India: Impact on Food, Environment & Society

GENE-EDITED RICE IN INDIA — IMPACT ON FOOD, ENVIRONMENT AND SOCIETY

Chairpersons:

Prof. A. N. Lahiri Majumder
FNA; FASc ; FNASc ; FNAAS
Sister Nivedita University, Kolkata

Prof. Sampa Das
FNA, FNASc,
Department of Genetics, University of Calcutta

Prof. Anup Sinha
Director, Heritage Business School
Former Prof. of economics, IIM, Kolkata

Dr. Anupam Paul
Former Additional director of Agriculture (P)
Directorate of Agriculture, Govt. of West Bengal

Sessions:

- *Biotechnology in Agriculture*
- *Agriculture, Food & Environment*
- *State, Policies & Agriculture*
- *Agroecology & Food Sovereignty*

Speakers:

Prof. K. C. Bansal
FNAAS, FNASc, former Director NBPGR (ICAR), Pusa, New Delhi

Prof. Rajeshwari S. Raina
International Relations & Governance Studies, Shiv Nadar University

Dr. Atanu Kumar Raha
IFS Retd., Former Principal Chief Conservator of Forests, W.B, Director and Emeritus Professor, Techno India University

Jacob Nellithanam
Convenor
Bharat Beej Swaraj Manch

Dr. Kutubuddin Ali Molla
Senior Scientist, Crop Improvement Division, ICAR-CRRI (Cuttack)

Mr. Soumik Banerjee
Independent Researcher, Seed Conservationist

Prof. Ashok Sircar
Centre for Local Democracy Azim Premji University

Dr. Seema Purushothaman
School of Development, Azim Premji University

Organised by

Dr. Avishek Banik
Institute of Health Sciences, Presidency University, Kolkata

Dr. Niloshree Bhattacharya
Department of Sociology
Presidency University, Kolkata

Dr. Malay Das
Department of Life Science
Presidency University, Kolkata

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PRESIDENCY UNIVERSITY
KOLKATA

P. C. Mahalanabis Auditorium, Presidency University, Kolkata, India

17th November, 2025

Submit Your Abstract For Poster Presentation

Get yourself registered by: 16th October, 2025

https://forms.gle/nGcajNC7Q5TxVMos7

One Day National Symposium on

"Gene-Edited Rice in India: Impact on Food, Environment and Society"

at

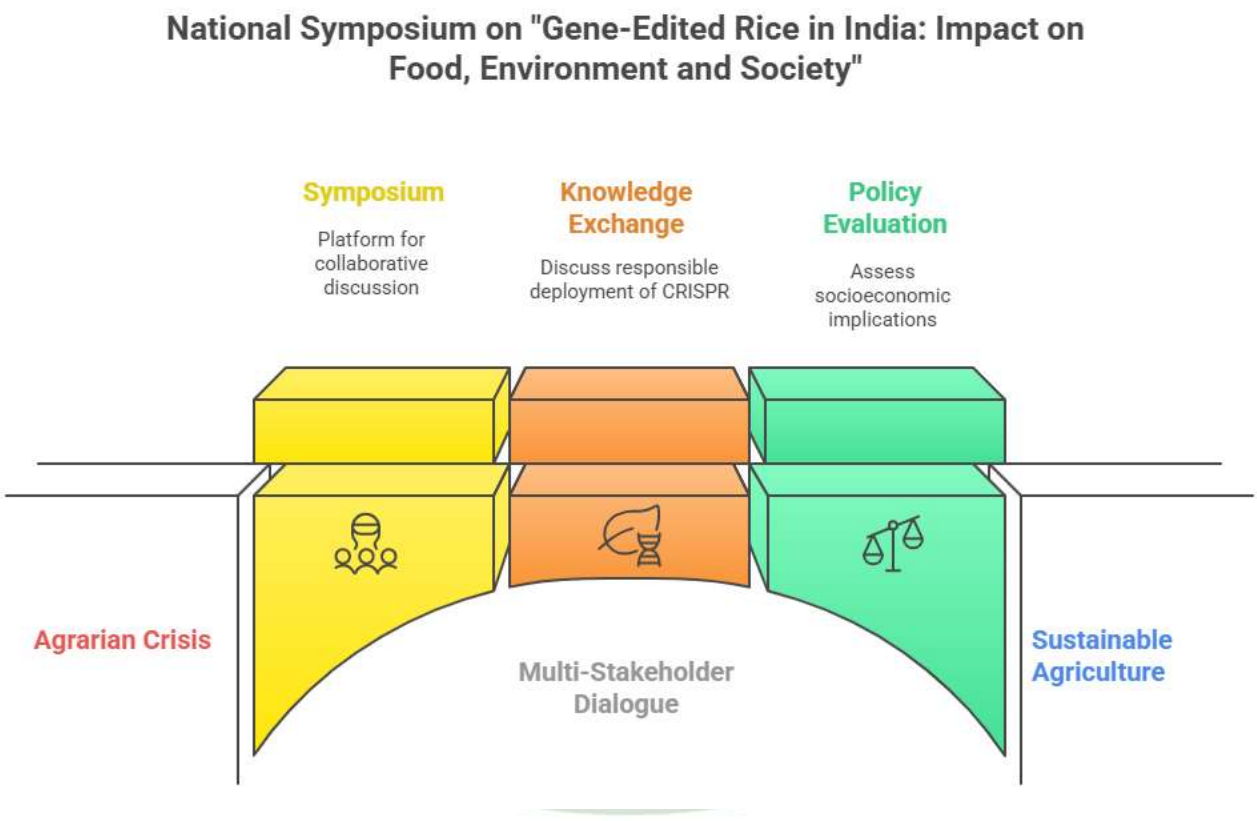
P. C. Mahalanabis Auditorium, Presidency University, Kolkata, on 17th. November 2025

Programme Schedule

9-00 –10.00	Registration and Inauguration
10.00–11.15	**Session 1: Biotechnology in Agriculture** Chairperson: Prof. A. N. Lahiri Majumder, FNA; FASc; FNASc; FNAAS, Sister Nivedita University, Kolkata **Speaker 1:** Prof. K. C. Bansal, FNAAS, FNASc, former Director, National Bureau of Plant Genetic Resources (ICAR), Pusa, New Delhi **Speaker 2:** Dr. Kutubuddin Ali Molla, Senior Scientist, Crop Improvement Division, ICAR-Central Rice Research Institute, Cuttack
11.15–11.30	Tea Break
11.30–1.00.	**Session 2: State, Science and Policies** Chairperson: Prof. Sampa Das, FNA, FNASc, Department of Genetics, Univ. of Calcutta **Speaker 3:** Dr. Atanu Kumar Raha, IFS Retd., Former Principal Chief Conservator of Forests, WB; Director and Emeritus Professor, Techno India University, W.B. **Speaker 4**: Prof. Rajeshwari S. Raina, International Relations and Governance Studies, Shiv Nadar University
1.00–1.45	Lunch Break
1.45-2.15	Poster Presentation by Participants
2.15- 3.45	**Session 3: Agriculture, Food and Environment** **Chairperson:** Prof. Anup Sinha, Director, Heritage Business School, Former Prof. of Economics (IIM Calcutta) **Speaker 5:** Prof. Ashok Sircar, Centre for Local Democracy, Azim Premji University **Speaker 6:** Prof. Seema Purushothaman, Adjunct Senior Fellow (Ashoka Trust for Research in Ecology and the Environment) and Former Professor (Azim Premji University)
3.45-4.00	Tea Break
4.00- 5.30	**Session 4: Agroecology and Food Sovereignty** Chairperson: Dr. Anupam Paul, Former Additional Director of Agriculture (P), Directorate of Agriculture, Government of West Bengal **Speaker 7:** Jacob Nellithanam, Convenor, Bharat Beej Swaraj Manch **Speaker 8:** Mr. Soumik Banerjee, Independent Researcher and Seed Conservationist
5.30–5.45	Vote of Thanks

Concept Note

India has developed two varieties of gene-edited rice using CRISPR-Cas9 technology which have been approved for release in May 2025. As we know, there have been concerns raised in the past about the use of genetically modified seeds by civil society actors, consumers, scholars, environmental activists and farmer's rights groups. In India, only Bt cotton is cultivated, and an indefinite moratorium was placed in 2010 on the release of Bt brinjal, a food crop. GM mustard, developed by University of Delhi was approved for release in 2022, but the Supreme Court has temporarily halted the release, as environmentalists filed an appeal against the approval. In this context, gene-edited rice has been released on the grounds that genome editing is a different technology from modification and hence, it is not under ambit of GEAC. Genome editing entails modifications in the plant's DNA without introducing foreign genes. Scientists highlight that gene-edited rice has been developed to address agricultural challenges, such as drought, soil salinity and low yields.



Gene-edited rice is considered as a positive step towards building sustainable agriculture, and marks a new phase in the field of scientific research and innovation. However, there are several concerns being raised about the long-term implications and regulatory oversight. Social scientists and activists have pointed out with regard to genetically modified crops that these technologies do not address problems of hunger and poverty, instead, the multinational agribusiness companies benefit

at the cost of the lives of farmers. The problems plaguing the agrarian sector are not just about yield, but about land use, depletion of ground water, degradation of soil health, lack of institutional credit, an ageing farming population among others. With these new technologies, farmers will lose their seed sovereignty and these new technologies take the already unsustainable model of agriculture one step further, which will aggravate agrarian crisis. Critics also point out the adverse effects of corporatization of agriculture and the need for policies that will support the scaling up of agroecology. Andhra Pradesh, a state which has extremely high incidence of farmer suicides, has implemented natural farming, as a way of addressing agrarian and climate crisis.

Thus, to address agrarian crisis amidst difficult ecological conditions, there are different solutions informed by different perspectives, and disciplinary lenses. While scientists are developing new seeds that are climate resilient, social scientists point out the multiple aspects of agriculture, arguing that developing climate resilient seeds is not the solution. The ruling government has promoted organic and natural farming as they are agroecological practices based on local knowledges, and has also enabled corporatization of agriculture, and biotechnology in agriculture. Farmer's movements and civil society organizations have resisted the cultivation of GM seeds, as it effectively means the loss of seed sovereignty of the farmer, and there are several kinds of agroecological practices that are an alternative to the existing model of agriculture, which takes into account farmer's livelihoods, local knowledges, soil health, seed sovereignty and food safety without a decrease in yield. With the release of gene-edited rice, there is a need to revisit these debates and create platforms where scientists and social scientists can contribute collaboratively, and understand the implications of this new technology on food, agriculture and environment in India.

We, at Presidency University, Kolkata, are organizing a one-day symposium and hope to bring together scientists, social scientists, policy makers and representatives of the state bodies, activists and representatives of farmer's rights networks, to understand different aspects and perspectives. We intend to discuss:

a. **Biotechnology in Agriculture**: What is the difference between gene-edited and gene-modified seeds and whether and how it addresses the concerns already raised with regard to genetically modified seeds?

b. **Impact on Agriculture, Food and Environment:** How will it address problem of interlinked agrarian and ecological crisis, the availability and accessibility of nutritious food? Is this technology appropriate for agriculture in India?

c. **Science, Law and Policies:** What kind of agrarian policies are required to address problems in the agrarian economy, and how can scientists and social scientists contribute with their research?

d. **Agroecology and Food Sovereignty:** What is agroecology and why is seed sovereignty important for the agrarian economy?

Registration details

Participate registration and abstract submission: https://forms.gle/nGcajNC7Q5TxVMos7

Registration fee: ₹750/-

How to Pay Registration Fees?

1. Click the following Link:
https://www.onlinesbi.sbi/sbicollect/icollecthome.htm?corpID=469266

2. Click Education Institute

3. Choose State: West Bengal

4. Choose / Type Educational Institute : Presidency University

5. Choose Payment Category: Symposium Gene-Edited Rice

6. Fill the details and pay the amount.

7. Keep the DU reference number for future use.

Last Date registration: 16th October, 2025

Selected participants will get an opportunity to present their poster in front of distinguished audience.

Note: All participants will receive an e-certificate

Contact E-mail: avishek.dbs@presiuniv.ac.in; niloshree.soc@presiuniv.ac.in; malay.dbs@presiuniv.ac.in