



# 2<sup>nd</sup> INTERNATIONAL TRAINING PROGRAMME ON EMERGING TRENDS IN AGRICULTURAL TECHNOLOGIES



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR, INDIA

FROM: 17<sup>TH</sup> -26<sup>TH</sup> NOVEMBER 2024

IN COLLABORATION WITH
AFRICAN-ASIAN RURAL DEVELOPMENT
ORGANIZATION (AARDO)

Title of the
Programme
EMERGING TRENDS IN
AGRICULTURAL
TECHNOLOGIES

Sponsoring
Organization
African-Asian Rural
Development
Organization
(AARDO)
(www.aardo.org)

Organizer/Training
Institute
Indian Institute of
Technology
Kharagpur (IITKGP)

Duration
17<sup>th</sup> -26<sup>th</sup>
November 2024

Session Timings 9:30 to 16.30 hrs (IST GMT+5.30)

<u>Deadline for</u>
<u>Application</u>
20<sup>th</sup> October 2024

# **INTRODUCTION**

In collaboration with AARDO, IIT Kharagpur aims to conduct the 2<sup>nd</sup> International training **'EMERGING TRENDS** program on AGRICULTURAL TECHNOLOGIES' at the IIT Kharagpur from 17<sup>th</sup> - 26<sup>th</sup> November 2024. The course is specially designed for the representatives of AARDO member countries, including the middle senior-level and executives from government departments, agriculture scientists. ministries. and engineers engaged in precision agriculture, especially mechanization. The course content will also emphasize policy formulation, and its proper implementation and planning for affordable technologies innovative and developed at IIT Kharagpur for the reduction of drudgery, and upliftment of the lifestyle of the rural population

# **BROAD COURSE COMPONENTS**

- Drone and its application in agricultural produces.
- Electronics and automation in agricultural technologies.
- Mechatronics in Agriculture.
- AI/ML and blockchain technology in agriculture.
- Low and affordable technologies for Rural India.
- Developing Institutions for Rural Technologies.
- Intellectual Property Rights (IPR) and Technology Transfer

### **OBJECTIVES**

- ✓ Promoting precision and sustainable Agriculture implementation.
- ✓ Advocate agriculture efficiency attainment strategies and farm produce quality improvement.
- ✓ Promote innovative affordable rural technologies for improving the social economic status of rural communities.
- ✓ Developing policy framework for effective transfer of technologies to AARDO member countries.

#### **PARTICIPATION**

The training programme will be attended by experts, senior officials and individuals working in the relevant field in AARDO member countries. Resource persons from the host Institute (IIT KGP) and other institutions having rich experiences on the subject will be invited to share their experiences and expertise with the participants.

## **ESSENTIAL QUALIFICATIONS**

- ✓ Bachelor Degree in Sciences/or its equivalent with a considerable working experience in planning and executing programmes related to the subject of the training;
- ✓ Must be subject enthusiast related to the programme;
- ✓ Applicants should be below 50 years of age, with no participation in any AARDO's offline training programme over the preceding two years

#### **MEDIUM OF COMMUNICATION**

The medium of communication is English only. The participants are expected to have a good working knowledge of English.

#### **CERTIFICATE**

Certificates authenticated with the signature of H.E. Secretary General, AARDO, and IITKGP authorities will be provided after the successful completion of the training program.

#### TENTATIVE SESSIONS SCHEDULE

Day-1	17 <sup>th</sup> November, Sunday	Arrival of Participants
Day-2	18 <sup>th</sup> November, Monday	Registration of guests and Inauguration Ceremony and 1st Lecture on AI/ML-based agricultural technologies
Day-3	19 <sup>th</sup> November, Tuesday	Mechanization of cost-effective machines for rural sectors
Day-4	20 <sup>th</sup> November, Tuesday	3D Agriculture and Advanced Aquaculture Technologies
Day-5	21 <sup>th</sup> November, Wednesday	Challenges and Engineering aspects of Post-harvest processing of food
Day-6	22 <sup>st</sup> November, Thursday	Modern food processing Industries
Day-7	23 <sup>rd</sup> November, Friday	IP Challenges and technology transfer issues in Agriculture
Day-8	24 <sup>th</sup> November, Saturday	Field Visit
Day-9	25 <sup>th</sup> November, Sunday	Field Visit
Day-10	26 <sup>th</sup> November, Monday	Interaction session and Closing ceremony

#### **HOW TO APPLY**

Step 1: Log on to the link:

https://aardo.org/aardot.php

#### Step 2:

Fill up the details and submit. Take print out of the filled in application form.

## **Step 3:**

Applicants are required to sign their applications and send them along with the

recommendation
letter of the Nodal
Ministry of
AARDO/Centre of
Excellence to our
Email: iec@aardo.org

# ABOUT THE ORGANIZING INSTITUTION (IIT KGP)

Indian Institute of Technology Kharagpur (IIT Kharagpur), established in 1951, is the first IIT to be recognized as an Institute of National Importance by the Government of India. In 2019 it was awarded the status of Institute of Eminence by the Government of India. The institute was initially established to train engineers after India attained independence. However, over the years, the institute's academic capabilities diversified with offerings in management, law, architecture, humanities, etc. IIT Kharagpur has an 8.7-square-kilometer (2,100-acre) campus and has about 22,000 residents.

Considering the importance of agriculture in ensuring food and nutritional security, the Agricultural Engineering department had been incepted at the Indian Institute of Technology, Kharagpur, in 1952 according to the recommendation of the Dhar committee appointed by the Board of Governors. Subsequently, with the upgradation of its academic programs, the department was re-christened as the Agricultural & Food Engineering department in 1994. Among 23 IIT institutes, IIT Kharagpur has the sole distinction of having an Agricultural & Food Engineering department, which comprises six disciplines Farm Machinery and Power, Land and Water Resources Engineering, Agricultural Biotechnology, Food Process Engineering, Agricultural Systems Management, and Aquacultural Engineering, respectively. Sponsored research projects and development activities dealing with Integrated Rainwater Management, Soil Tillage, Utilization of Fly ash, Ergonomic Database for Agricultural Equipment, Integrating Remote Sensing Data with Distributed Hydrological Models, Model Pilot Plant and koji room facilities for the production of industrial enzymes, etc. The department has filed several patent applications and transferred many technologies to industries and various stakeholders based on its innovative research.

#### PROGRAMME COORDINATOR

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