

AARDO - IIT KANPUR

# DESIGN THINKING FOR SUSTAINABLE AGRICULTURE

MAY 06 - 09, 2024 | WEBINAR
AFRICAN-ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)
DELHI



### INTRODUCTION





Theme of the Design Thinking

programme for Sustainable Agriculture

Sponsoring African Asian Rural Development Organization (AARDO)

Organization www.aardo.org

Training Indian Institute of Technology Kanpur (IIT Kanpur)

Institute (Host) - www.iitk.ac.in

**Duration** - 06 - 09 May 2024

Deadline for - 30 April 2024 Application

#### **BACKGROUND**

Design thinking, a methodology deeply rooted in human-centric innovation, is increasingly finding application within the agricultural sector, particularly in the domain of sustainable agriculture. By incorporating design thinking principles into agricultural education, students are equipped with the necessary tools to bridge theoretical knowledge with practical solutions in real-world agricultural contexts. This educational approach nurtures students' capacity to innovate within the agricultural sector, empowering them to address pressing challenges with creativity and empathy. In the agricultural context, applying design thinking entails comprehending the needs and experiences of farmers, agricultural workers, and other stakeholders. By empathizing with these end-users, students can develop solutions that not only meet technical requirements but also align with cultural and environmental considerations. This usercentric approach serves as a catalyst for driving meaningful change and fostering sustainable agricultural practices.

The integration of design thinking into agricultural education empowers students, particularly those aspiring to become agricultural engineers and agronomists, to confront complex challenges such as resource management, crop optimization, and environmental conservation. Through practical experiences like hands-on activities and fieldwork, students learn to generate ideas, create prototypes, and refine solutions that cater to the diverse needs of agricultural systems.

Ultimately, the integration of design thinking into agricultural education empowers students to become catalysts for change in the pursuit of sustainable agriculture. It fosters a mindset of innovation, collaboration, and stewardship, which are essential for addressing the intricate challenges confronting global food systems while ensuring environmental integrity and social equity.

## ABOUT THE COURSE





#### **OBJECTIVES OF THE PROGRAMME**

- Enhance Sensitivity to User Behaviour: Develop students' sensitivity towards user behavior and attitudes to gain deeper insights into their needs, facilitating empathic design solutions for sustainable agriculture.
- Master Design Specification and Prototyping: Equip students with the skills to identify design specifications for new agricultural products and create low-fidelity prototypes. Encourage critical evaluation of these prototypes against industrial practices to benchmark design readiness.
- Analyze Trade-offs for Sustainability: Enable students to identify trade-offs necessary for the sustainable development of agricultural products, considering technical, environmental, and social perspectives.
- Apply Design Thinking Tools and Techniques: Provide students with key tools and techniques of the design thinking process to effectively identify, define, specify, and create agricultural products that fulfill customer needs whilepromoting sustainability.

#### **COURSE CONTENTS**

- Introduction to Design Thinking and Case Studies
- Empathy and User Engagement
- Defining Agricultural Problems
- Ideation Techniques for Agricultural InnovationPrototyping
- Strategies in Agriculture Stakeholder Engagement in
- Agricultural DesignApplying Design Thinking in Agriculture

#### **MEDIUM OF COMMUNICATION**

The medium of communication is primarily English. Participants are encouraged to have a proficient working knowledge of English to facilitate effective communication and engagement.

#### **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 conversant with ICT and willing to undertake an online training course.

#### **SELECTION OF PARTICIPANTS**

Selection of participants for the training program will be conducted jointly by AARDO &IIT Kanpur.

#### **HOW TO APPLY**

Step 1
Visit the following link - https://aardo.org/formDD.php
Step 2

Complete the necessary details and submit the form. Ensure you generate a printed copyof the filled application form.

Step 3

Applicants should sign their applications and forward them, along with the recommendation letter from the Nodal Ministry of AARDO/Centre of Excellence, to our email address: <a href="mailto:iec@aardo.org">iec@aardo.org</a>.

#### **CERTIFICATE**

Upon successful completion of the training program, participants will receive a certificatebearing the signatures of both AARDO and IIT Kanpur, providing authentication.

## ABOUT THE PROGRAM





#### **ABOUT THE HOST TRAINING INSTITUTE (IIT-Kanpur)**

Indian Institute of Technology Kanpur, located in Kanpur, Uttar Pradesh, India, is a public research university. It holds the Institute of National Importance status as declared by the Government of India under the Institutes of Technology Act. Established in 1959, it stands as one of the pioneering Indian Institutes of Technology, founded with the support of a consortium of nine U.S. research universities as part of the KanpurIndo-American Programme (KIAP). The instituteoffers training and courses in various fields, including climate change, Sustainable Energy Engineering, and Environmental Engineering.



It's the goldmine of engineering & and research in India. These programs have been provided to officials from numerous countries, sponsored by organizations such as AARDO, FAO WAAPP, KEPHIS (Kenya), and the Government of India. For more detailed information, please visit its website at iitk.ac.in

#### **IMPORTANT NOTE**

- Applications not accompanied by a recommendation from the participant's country's AARDO Nodal Ministry or Center of Excellence will not be considered.
- Completed applications must be submitted to the AARDO Secretariat on or before the closing date of 30 April 2024
- Due to limitations in the number of participants, only selected candidates will be notified through their Nodal Ministry and AARDO's Centers of Excellence.

#### **PROGRAM COORDINATORS - IIT KANPUR**

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#### PROGRAMME COORDINATORS - AARDO

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