AARDO-MARDI
Joint Online Training Programme on

# Agricultural Nanotechnology: Catalyzing Food Security and Sustainability

## 01-05 July 2024

**AFRICAN ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)**

## Background of the Programme

Recent scientific data indicate that nanotechnology has the potential to positively impact the agrifood sector and at the same time minimizing adverse problems of agricultural practices on environment and human health. These factors will eventually improve food security and productivity (as required by the predicted rise in global population), while promoting social and economic equity. A wide range of potential nanotechnology applications has been envisaged in agriculture, leading to the intensification of research at both academic and industrial levels. Moreover, the high surface-to-volume ratio in addition to unique properties of materials at nanoscale make them suitable candidates for the design and development of novel tools in support towards sustainable agriculture. Nanotechnology also lends itself well in diverse application such as fertilizers, sensors, filtrations and pesticides to name a few.

Inspired by the capabilities of nanotechnology, Malaysia has developed for a National Nanotechnology Policy and Strategy (NNPS). This policy provides strategic direction and strengthens national nanotechnology sector which will drive Malaysia's high-tech nation aspirations.

Accordingly, Malaysian Agricultural Research and Development Institute (MARDI) has embarked and ventured on various researches pertaining to agriculture nanotechnology. This programme will highlight the achievement and recent trends of nanotechnology application in selected agriculture commodities.

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Programme Duration:
01-05 July 2024

Deadline to Apply:
15 June 2024

Duration:
1 Week/ 5 days
(Monday – Friday)

Session's Timing:
14:30 – 16:30 Hrs
(Indian Standard Time)
(GMT+05:30)

Organizing Institute:
Malaysian Agricultural Research and Development Institute
(MARDI)

Sponsoring Organization:
African Asian Rural Development Organization
(AARDO)

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## Aims and Objectives of the Program

The key objectives of the programme are:

1. to share the experiences and current state of Malaysia's Agriculture Biotechnology in addressing food security and sustainable future; and
2. to establish an efficient networking among participants from AARDO member countries for future research and technical collaborations.

## Approaches & Coverage of Programme

The programme will be interactive to and ensure maximum involvement of the participants. Important technologies and modules will be presented through lectures and discussions through virtual platform. It will be delivered through an online presentation. The course content will be divided into five (5) sessions that will run in 5 consecutive days:

Session 1: Overview of Agricultural Nanotechnology Research in MARDI.

Session 2: Nanotechnology for Improving Yield and Quality of Crops.

Session 3: Nanomaterials from Natural Resources for Agriculture Applications.

Session 4: Nanotechnology for Plant Disease Management and Safety Regulation.

Session 5: Nanotechnology for Future Digitalization of Agriculture.

The question-and-answer session will be conducted after each presentation session.

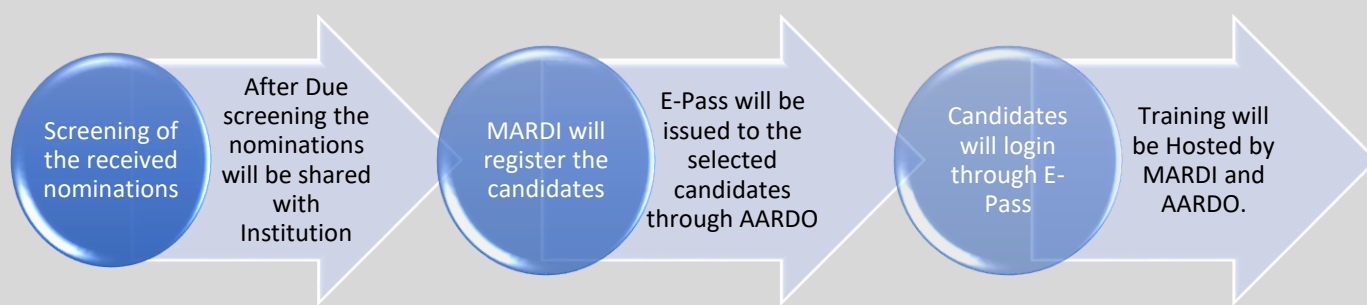Presentation materials (slides) will be eventually provided.

## About the Institution

Malaysian Agricultural Research and Development Institute (MARDI) was established Malaysia under the Ministry of Agriculture and Food Industry, Malaysia with the main objectives of generating and promoting new, appropriate and efficient technologies towards the advancement of the food, agriculture, food and agro-based industries. MARDI is managed and guided by the regulations and policies set by the MARDI Governing Board under the auspices of the Hon'ble Minister of Agriculture and Agro-Based Industry. The consent of the Minister of Finance in matters concerning finance is also obligatory. The Scientific Council ensures that MARDI technical programs attain the highest quality and level of competence. The MARDI leadership envisages capacity building, establishment of farming and cropping systems towards technology commercialization, total quality management and culture of excellence in attaining national and international recognition.

## How to Apply

Log on to the link: **http://aardo.org/formDD.php** Fill up the details and submit.

→ Take print out of the filled in application form.

→ Sign the application and get recommendation letter from Nodal Ministry

→ send it along with recommendation to our email: **cbdp@aardo.org** before **15 June 2024**

## Process

Screening of the received nominations → After Due screening the nominations will be shared with Institution → MARDI will register the candidates → E-Pass will be issued to the selected candidates through AARDO → Candidates will login through E-Pass → Training will be Hosted by MARDI and AARDO.

## Mode of Programme Delivery

✓ Programme would be conducted through online platform (Zoom) on real time basis
✓ Programme would be interactive based on participatory approach with audio/video aids throughout the sessions.
✓ The medium of communication would be English only.
✓ A guideline and e-Pass/ link to join the online programme will be provided by AARDO.

## Who can Apply / Requirements

- Middle/Senior level government official of the AARDO member countries working in the relevant fields.
- Bachelor's degree in Agricultural Sciences/Biotechnology or its equivalent with a considerable working experience; Must be subject specialist and related to the programme;
- Proficiency in English, as the medium of instruction is English only; and
- Must be conversant with ICT and willing to attend the online training programme.

- Due to the limitation of number of participants, only selected candidates would be intimated through the Nodal Ministry. The selected candidates will be required to attend all the live sessions of the e-training program.
- At the end of programme, all the trainees will be assessed/evaluated through a live interactive session, and their attendance will be considered for issuance of an e-Certificate.

**Programme Coordination**

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| **Dr. Khushnood Ali**<br>Programme Coordinator &<br>Head, Research Division<br>African-Asian Rural Development<br>Organization (AARDO)<br>New Delhi 110021, INDIA<br>Phone: +91 11 24100475<br>Email: cbdp@aardo.org<br>WhatsApp: +91-9818289159 | **Mr. Mohsin Ali**<br>Programme Facilitator<br>Capacity Building & Development<br>Projects (CB& DP) Division<br>African-Asian Rural Development<br>Organization (AARDO)<br>New Delhi 110021, INDIA<br>WhatsApp: +91-9179933435<br>Email: mohsinali@aardo.org |