No. U-11012/01/2020-IC (372416)
Government of India / (भारतसरकार)
Ministry of Rural Development / (ग्रामीणविकासमंत्रालय)
Department of Rural Development / (ग्रामीणविकासविभाग)
(IC Section)

Krishi Bhawan, New Delhi
Dated the 03.09.2024

To,
The Secretary
Deptt. of Rural Development
All State Government /UTs

Subject: Offline International Training Programme on "Agricultural Practices Using Drones: Plan, Design, Build and Fly Training Program" Indian Institute of Technology Kanpur, Uttar Pradesh, India, 13-23 November 2024

Sir,

I am directed to forward herewith a copy of letter dated 29.08.2024 (copy enclosed) received from African-Asian Rural Development Organization (AARDO) on the subject cited above and to say **that the nominations of willing and eligible candidate(s) for the programme, duly completed in all respect, may be sent to the undersigned, so that the same may be forwarded to AARDO Secretariat at the earliest.**

2.   The prospective nominee(s) must satisfy the following Essential Qualifications:

- Minimum a bachelor's degree or its equivalent with considerable working experience in planning and executing the programmes related to subject of the visit
- Must be subject enthusiast related to the programme and be willing to undertake an exposure visit in India.
- Proficiency in spoken and written English as the medium of instruction in English only and translation facilities into any other language would not be available.
- Must be below 50 (fifty) years of age with no participation in AARDO's offline programme over the last two years.
- Must be in good health both physically and mentally to undergo the course of the visist.

3.   The willing and eligible candidate is requested to apply online through (http://aardo.org/aardot.php). Scanned copy of the filled-in online application form duly recommended by the competent authority of their Department/Office, may be sent to the Ministry of Rural Development latest **by 10th October, 2024**, for further necessary action in the matter.

Yours faithfully,

Encl: as above.

(Vinod Kumar)
Under Secretary to the Govt. of India
Email: vinod.kumar15@gov.in
Tel: 011 2307 1326

Copy for needful action to:
(i) The Secretary of Ministry / Department – Government of India. (Through e-mail)
(ii) All Divisional Heads, Ministry of Rural Development, Krishi Bhawan. (Through e- office)
(iii) Director General, NIRD & PR, Rajendra Nagar, Hyderabad (Through e-mail)
(iv) Director of all SIRDs (Through e-mail)
(v) Principals of all ETCs (Through e-mail)
(vi) NIC, DoRD - with the request to upload the aforesaid training programme on the main website & dailysite of Ministry and Dashboard of e-office of the Ministry (Through e-mail: rural-dord@nic.in, eofficeadmn-mord@nic.in)

ORGANISATION
AFRICAINE-ASIATIQUE POUR LE
DÉVELOPPEMENT RURAL

AFRICAN-ASIAN
RURAL DEVELOPMENT
ORGANIZATION

المنظمـــة
الأفريقيـــة الآســـيوية
للتنميـــة الريفيـــة

Cooperation for Sustainable Development

OFFICE OF THE
SECRETARY GENERAL

مكتـــب
الأمـــين العـــام

No. IEC/TRG/IIT-K/2024

29 August 2024

H.E. the Minister of Rural Development & Panchayati Raj
Government of Republic of India
Krishi Bhawan, New Delhi
INDIA

Subject: Offline International Training Programme on
"Agricultural Practices Using Drones: Plan, Design, Build and Fly Training Program"
Indian Institute of Technology Kanpur, Uttar Pradesh, India
13-23 November 2024

Excellency,

I have the honour to inform your Excellency that AARDO, in collaboration with Indian Institute of Technology Kanpur (IIT-K), is organizing an Offline International Training Programme on "Agricultural Practices Using Drones: Plan, Design, Build and Fly Training Program", at IIT-Kanpur, India during 13-23 November 2024.

I wish to apprise Your Excellency that Indian Institute of Technology Kanpur, located in Kanpur, Uttar Pradesh, India, is a public research technical institute. 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 Kanpur Indo-American Programme (KIAP). The institute offers training and courses in various fields, including climate change, Sustainable Energy Engineering, and Environmental Engineering.

Excellency, the traditional agricultural practices and methods are often inefficient and labor-intensive, leading often to challenges like uneven crop growth, ineffective resource management, suboptimum productivity and low returns. Agricultural drones presently offer a viable solution by providing real-time data on crop health and soil conditions, enabling precise interventions such as optimized fertilization and pest control. The "Agricultural Practices using Drones" course aims to train participants in designing, building, and operating drones for these purposes, emphasizing practical skills in drone technology and data analysis for improved agricultural productivity.

This training program on drones in agriculture will cover all essential aspects from introduction and regulations to hands-on drone design, construction, flight operations, emergency procedures, and maintenance. Each day will focus on a specific topic, ensuring comprehensive training in both theoretical knowledge and practical skills necessary for using drones effectively in agricultural settings. The information about this programme is more fully described in the attached brochure.

The main objectives of the programme are to:

√   make the participants aware regarding the use of drones in agriculture;
√   educate the trainees regarding the planning needed for the use of drones in agriculture;
√   understand various methods of designing a drone;
√   have hands-on training on design and building a drone; and
√   train participants on flying and operating drones.

It is hoped that Excellency's esteemed Government will find the above-mentioned training programme useful and would consider nominating one suitable candidate for the programme.

Nominees must satisfy the following:

Essential Qualifications:

- Minimum bachelor's degree or its equivalent with considerable working experience in planning and executing programs related to the subject of the visit;
- Proficiency in spoken and written English as the medium of instruction is English only and translation facilities into any other language are not available;
- Must be in good health both physically and mentally to undergo the course of the visit;
- Must be below 50 (fifty) years of age, with no participation in any AARDO's offline training program over the preceding two years; and
- Must be subject enthusiast related to the program and be willing to undertake an exposure visit in India.

You will appreciate that the fellowship to attend the said training programme has expenditure inclusions and exclusions as highlighted in the following table:

S. No	INCLUSIONS (Covered jointly by AARDO & Institute)	EXCLUSIONS (to be covered by Candidate's nominating Country/Institution)
1	Workshop Participation Fee, Boarding & Lodging	**Pre-Workshop expenses:** Passport, Visa Fee, Vaccination, Airport Taxes etc.
2	Return Air Ticket by economy class (from Capital City)	Travel and Health Insurance Premium
3	Literature/Course Materials	Telephone Calls, Laundry
4	Study Visits during the programme	Medical Expenses
5	Pickup/Drop at the local airport	Extra Baggage Allowances (Above that provided by the Airline)
6	Daily Token Allowance (Subsistence)	**Post Workshop expenses:** any other expense after the event

Excellency's esteemed Government may wish to provide some allowances to their candidate, especially to meet the expenses which are excluded under this fellowship. The selected candidate would have to carry valid travel health insurance cover.

It is requested that the nominee may kindly be advised to apply online through **https://aardo.org/aardot.php** .The scanned copy of the application (submitted online), duly recommended by the competent authority, may kindly be forwarded to AARDO Secretariat through email: **iec@aardo.org** latest by **20th October 2024**. Nomination received after the closing date or received incomplete in any respect or without a copy of a valid passport is likely not to be considered.

The selection of candidates will be made in consultation with the host training institute, keeping in view the availability of training slots and response from the member countries. Preference would be given to candidates from countries that regularly pay their membership contributions.

Following the acceptance of the nominee(s), round-trip air tickets will be issued for the travel of the Candidate(s) to India and back.

Kindly accept, Excellency, the renewed assurances of my highest consideration.

Sincerely,

Dr. Manoj Nardeosingh
Secretary General

Encl.: As above

Copy forwarded to: -

The Secretary
Department of Rural Development
Ministry of Rural Development
Government of Republic of India
New Delhi

The Joint Secretary,
Ministry of Rural Development
Government of Republic of India
New Delhi

The Deputy Secretary
Department of Rural Development
Ministry of Rural Development,
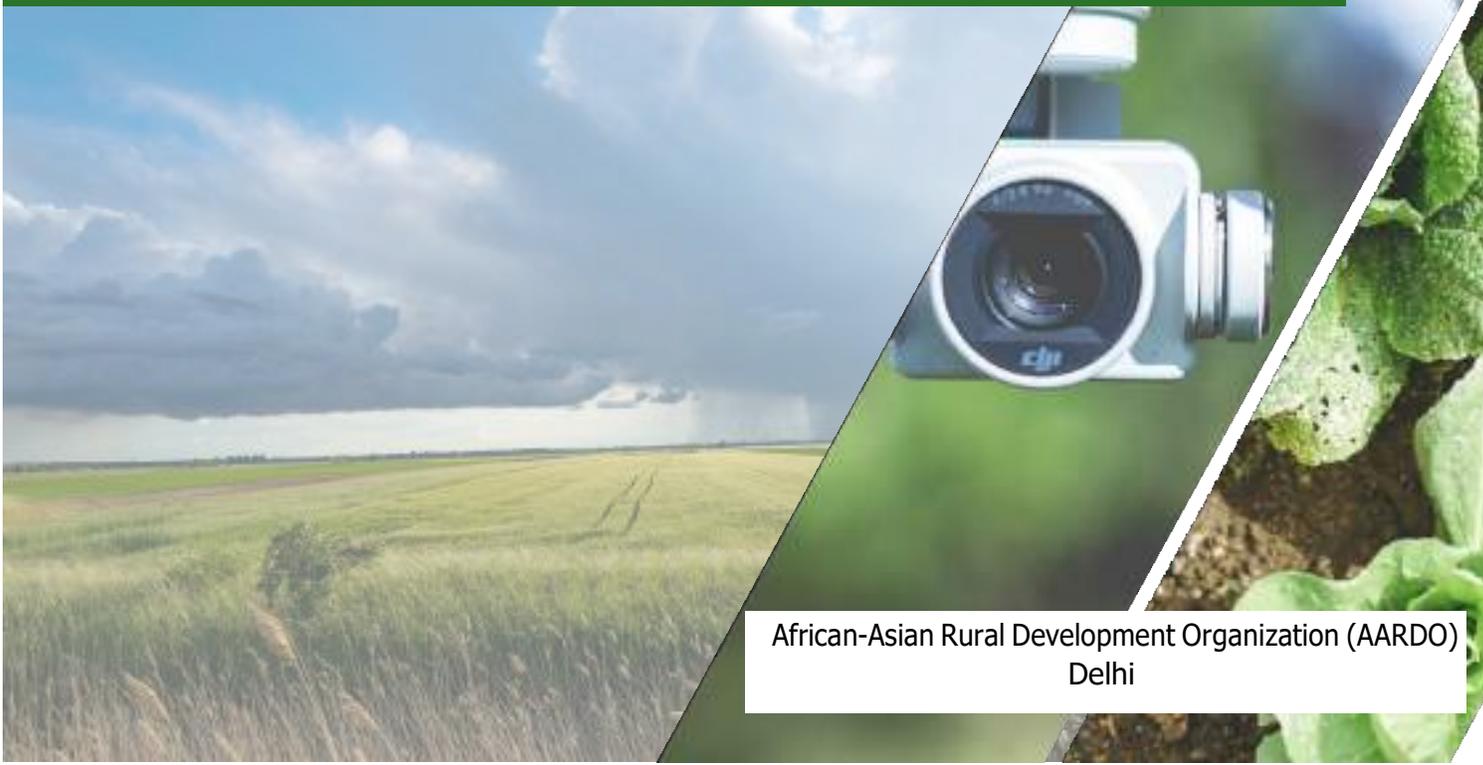Government of India
New Delhi, INDIA

INTERNATIONAL TRAINING PROGRAM

Agricultural Practices using Drones: Plan, Design, Build, and Fly Training Program

13 - 23 NOVEMBER 2024

INDIAN INSTITUTE OF TECHNOLOGY KANPUR

UTTAR PRADESH, INDIA

African-Asian Rural Development Organization (AARDO)
Delhi

INTRODUCTION

Theme of the programme	-	Agricultural Practices using Drones: Plan, Design, Build, and Fly Training Program
Sponsoring Organisation	-	African Asian Rural Development Organization (AARDO) www.aardo.org
Training Institute (Host)	-	Indian Institute of Technology Kanpur (IIT Kanpur) www.iitk.ac.in
Duration		13-23 November 2024
Deadline for Application	-	20 October 2024

BACKGROUND

The Indian Institute of Technology (IIT) Kanpur, a premier institution known for its technological research and educational excellence, has partnered with the African-Asian Rural Development Organization (AARDO) to offer a transformative course titled "Agricultural Practices using Drones: Plan, Design, Build, and Fly Training Program." This innovative collaboration aims to revolutionize agricultural practices in rural regions across Africa and Asia by leveraging advanced drone technology. Presently, traditional agricultural practices often rely on manual labor and conventional methods for crop monitoring, soil analysis, pest control, and resource management. These methods are typically time-consuming, labor-intensive, and sometimes inefficient, leading to suboptimal productivity and increased costs. Farmers face challenges such as uneven crop growth, delayed detection of diseases and pests, inefficient use of fertilizers and water, and a lack of precise data to make informed decisions.

The emergence of agricultural drones promises to address these challenges by introducing precision agriculture techniques. Drones, or Unmanned Aerial Vehicles (UAVs), can provide real-time, high-resolution data on crop health, soil conditions, and field variability. This data allows farmers to implement targeted interventions, such as precise application of fertilizers and pesticides, optimized irrigation, and timely harvesting, leading to improved crop yields and resource efficiency. The "Agricultural Practices using Drones" course is designed to equip participants with the skills to plan, design, build, and operate drones for various agricultural applications. The course will delve into the fundamentals of drone technology, including hardware components, software integration, flight dynamics, and data analysis. Participants will receive hands-on training in constructing drones, programming flight paths, and interpreting aerial imagery to make informed agricultural decisions.

ABOUT THE COURSE

OBJECTIVES OF THE PROGRAMME

• To make the participants aware regarding the use of drones in agriculture.

• To educate the trainees regarding the planning needed for the use of drones in agriculture.

• The various methods of designing a drone.

• Hands-on training on design and building a drone.

• Training on how to operate the drone.

LIST OF TOPICS TO BE COVERED

1. **Introduction, Drones in Agriculture: 1 day**

2. **Regulations and Ethics: 1 day**

3. **Designing of drone: 1 day**

4. **Building of drone: 1 day**

5. **Pre-flight Preparations: 1 day**

6. **Field Trip: 1 days**

7. **Flight Maneuvers: 1 day**

8. **Emergency Procedures: 1 day**

9. **Maintenance and Troubleshooting: 2 days**

DETAILS OF THE COURSE

ESSENTIAL QUALIFICATIONS

- A bachelor's degree and a minimum of five years of relevant field experience are required.
- Proficiency in spoken and written English is mandatory, as the medium of instruction is exclusively in English, and translation services into other languages are not provided.
- Applicants should have good physical and mental health to complete the training course successfully.
- Applicants should be below 50 years of age, with no participation in any AARDO's offline training program over the preceding two years.

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.

CERTIFICATE

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

COMMUNICATION

WhatsApp communication will be established among the participants, the host institute, and AARDO to enhance communication speed and information sharing.

VISA & AIR TICKETS

AARDO will facilitate the visa application process through the Indian Missions in the participants' respective countries. Air tickets will be provided by AARDO once the visa is confirmed, allowing the candidate(s) to attend the program. Upon the nominee(s) confirmation, round-trip economy class air tickets will be arranged for their travel to Lucknow/New Delhi and back.

HOW TO APPLY

Step 1: log on the link: https://aardo.org/aardot.php
Step 2: Fill up the details and submit. Take print out of the filled in application form.
Step3: 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 PROGRAM

ABOUT THE HOST TRAINING INSTITUTE (IIT-Kanpur)

The Indian Institute of Technology (IIT) Kanpur, established in 1959, is one of India's premier institutions for higher education and research in engineering, science, and technology. Located in Kanpur, Uttar Pradesh, IIT Kanpur is renowned for its academic excellence, cutting-edge research, and innovation. The institute offers undergraduate, postgraduate, and doctoral programs across various disciplines, fostering an environment of intellectual rigor and interdisciplinary collaboration. Equipped with state-of-the-art facilities, IIT Kanpur emphasizes hands-on learning and practical application of knowledge. Its faculty includes leading experts and researchers committed to advancing knowledge and solving real-world problems. IIT Kanpur's contributions to technology, industry, and society have earned it a reputation as a leader in education and a catalyst for technological progress in India and beyond.

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.
- 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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