



وزارة الزراعة

14804

الرقم تدريب /

التاريخ 2025/10/15

الموافق

مساعد الامين العام

مدير مديرية

مدير وحدة

أرفق طياً صورة عن كتاب المنظمة الأفريقية - الاسيوية للتنمية الزراعية (اردو) رقم ميرو/345/25/1 تاريخ 2025/10/15 والمتعلق بالبرنامج التدريبي الدولي عبر الانترنت حول تطبيق نظم المعلومات الجغرافية والتقنيات الناشئة في رصد المياه الجوفية وتقييمها وادارتها خلال الفترة الواقعة مابين 2025/11/13-10 .

أرجو تزويدي بأسماء مرشحيكم الراغبين بالمشاركة بتعبئة الطلب الكترونياً من خلال موقع الوزارة الرسمي وبموعد اقصاه 2025/10/20 ، ممن تنطبق عليهم الشروط الواردة بالكتاب المرفق حرفياً.

مؤكداً على ضرورة الایعاز لمرشحيكم بتعبئة نموذج معلومات الایفاد حسب الأصول، علماً بأنه لن ينظر في أي ترشيح يرد من غير النموذج أو مخالف للشروط أو بعد التاريخ المحدد ، وفي حال عدم وجود مرشحين يرجى الرد خطياً وفي موعده.

وتفضلوا بقبول فائق الاحترام

وزير الزراعة

د. صائب عبد الحليم الخريسات
مدير مديرية
الموارد البشرية والتطوير المؤسسي
خليلون محمد ملكاوي

المملكة الأردنية الهاشمية

هاتف: ٥٦٨٦١٥١ ٩٦٢ ٦ فاكس: ٥٦٨٦٣١٠ ٩٦٢ ٦ ص.ب: ٢٠٩٩ عمان ١١١٨١ - الأردن. البريد الإلكتروني: agri@moa.gov.jo



AFRICAN - ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)
Middle East Regional Office
Amman, Jordan

Letter No: MERO/ Online Course /25/345

Date: 15/October / 2025

مكتب الشرق الاوسط

عمان - الاردن

وزارة الزراعة

الموضوع : برنامج تدريب دولي عبر الإنترنت حول تطبيق نظم المعلومات الجغرافية والتقنيات الناشئة في رصد المياه الجوفية وتقييمها وإدارتها ، الهند، خلال الفترة من 10 - 13 /11/ 2025.

تحية طيبة وبعد،،،

أرفق بطيه نسخة من كتاب سعادة أمين عام المنظمة الأفريقية الآسيوية للتنمية الريفية الخاص بدعوة المملكة الأردنية الهاشمية الموقرة لتقديم الترشيحات لحضور برنامج التدريب الدولي عبر الإنترنت حول "تطبيق نظم المعلومات الجغرافية والتقنيات الناشئة في رصد المياه الجوفية وتقييمها وإدارتها" ، الذي تنظمه المنظمة الأفريقية الآسيوية للتنمية الريفية (AARDO) وبالتعاون مع معهد راجيف غاندي الوطني للتدريب والبحث في مجال المياه الجوفية، رايبور، الهند، خلال الفترة من 10 - 13 /11/ 2025. مرفق كتيب/نشرة اعلانية عن البرنامج محتويا على المعلومات اللازمة عن البرنامج و المتطلبات اللازمة للترشيح .

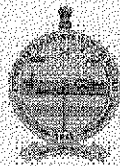
أرجو التلطف بالإيعاز لمن يلزم لتعميمها على من ترونه مناسباً ، مع ضرورة قيام الراغبين بالترشح بالإطلاع على كافة التفاصيل والشروط الموجودة بالبروشور ، وتعبئة الطلب الكترونياً عبر الرابط الالكتروني (<http://aardo.org/formDD.php>) . وإرسال اسماء المرشحين للمكتب الإقليمي للشرق الأوسط في جدول يحتوي الهاتف والايمل في موعد أقصاه 2025 /10/ 28.

وتفضلوا بقبول فائق الاحترام ،،،

الممثل الإقليمي للمنظمة الأفريقية الآسيوية للتنمية الريفية
السيد محمد منصور الحوامده



نسخة للملف



Government of India
Ministry of Jal Shakti
Department of Water Resources, River Development & Ganga Rejuvenation
CENTRAL GROUND WATER BOARD
RAJIV GANDHI NATIONAL GROUND WATER TRAINING & RESEARCH INSTITUTE
(RGNGWTRI)

**Online
Training Program
on
APPLICATION OF GIS AND EMERGING TECHNOLOGIES FOR
GROUND WATER MONITORING, ASSESSMENT AND
MANAGEMENT
10 – 13 NOVEMBER 2025
for**



AFRICAN ASIAN RURAL DEVELOPMENT ORGANIZATION (AARDO)
MEMBER COUNTRIES

RGNGWTRI

Sector 23, Atal Nagar, Nava Raipur,
Chhattisgarh, India

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[https://cgwb.gov.in/en/training-and-capacity-
building](https://cgwb.gov.in/en/training-and-capacity-building)

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BACKGROUND

Groundwater is rightly considered the backbone of water security, as it sustains billions of people around the world, particularly in arid and semi-arid regions where surface water resources are limited or seasonal. It plays a vital role in meeting drinking water needs, supporting food production through irrigation, and driving economic growth by serving industrial demands. However, this critical resource is increasingly under threat. Rapid and unsustainable extraction to meet growing population pressures, combined with the effects of climate variability, declining natural recharge, and widespread contamination, has led to serious concerns about long-term availability and quality. These challenges highlight the urgent need for improved groundwater management practices that are forward-looking, evidence-based, and adaptive to changing environmental and socio-economic realities.

In response, the integration of Geographic Information Systems (GIS), Remote Sensing, modelling tools, and other emerging technologies has created new pathways for strengthening groundwater governance and informed decision-making. These technologies enable accurate mapping of aquifers, continuous monitoring of extraction and recharge trends, and predictive modelling to assess future risks under varying development and climate scenarios. By leveraging such tools, stakeholders can design policies and strategies that ensure efficiency, equity, and sustainability in groundwater use. This training programme has therefore been structured to equip professionals with the knowledge, skills, and practical tools to address groundwater challenges comprehensively. Through interactive sessions, case studies, and hands-on exercises, participants will learn how to integrate technological solutions with socio-economic and policy considerations, enabling them to craft strategies that safeguard this invisible lifeline for present and future generations.

OBJECTIVE

The purpose of this training is to introduce modern tools and techniques like remote sensing, GIS, heli-borne surveys, mathematical modelling etc. used for exploration, monitoring, assessment and management of groundwater resources. Principles and practices of application of these tools and techniques will be introduced. The training will also cover relevant examples especially from India.

MAIN COURSE CONTENT

- **Introduction to the science of groundwater:** Occurrence and Movement of groundwater, Aquifers and their characteristics, Groundwater Recharge, Groundwater Use, Groundwater Issues and Management alternatives.
- **Principles and Concepts of Remote Sensing and GIS:** Principles of Remote Sensing, , introduction of Geographic Information Systems, Geospatial Data Processing, Global Datasets.
- **Ground Water Exploration and Assessment:** Aquifer Mapping, Geophysical exploration, heli-borne surveys for groundwater exploration, exploratory drilling, Quantification of availability and use of groundwater.
- **Ground Water Monitoring:** Water Table and Piezometric Levels, Monitoring Wells, Digital Water Level Recorders (DWLR) and High frequency water level monitoring, Flowmeters, Measuring spring discharge etc.
- **Groundwater Modeling and Decision Support Systems:** Groundwater Flow modelling, contaminant transport modelling, databases, decision support systems
- **Groundwater Quality Assessment and Management:** Types and sources of common contaminants. Sampling and analyses of contaminants. Water Quality Standards. Groundwater quality issues and their management.
- **Groundwater Management:** Artificial Recharge, Rainwater Harvesting, rooftop Rainwater Harvesting, Demand management measures, increasing water use efficiency, regulation and control of groundwater extraction.

TARGET GROUP

The programme is intended for mid and senior-level officials, researchers, and practitioners working in the field of groundwater, water resources, and environmental management in AARDO Member countries.

ESSENTIAL QUALIFICATIONS

- Bachelor's Degree in relevant field.
- Professional experience in water resources management.
- Working proficiency in English and ICT skills.
- Commitment to participate actively in all online sessions.

DURATION & TIMING

- The training is planned as an acquaintance and appreciation course and will be delivered in a total of 8 hours.

- Designed for working professionals, it will be delivered over a period of 4 days- 2 hours per day.

Duration	:	4 Days	Timing	:	2 – 4 PM(IST) – GMT +05:30 Hrs
Dates	:	10 – 13.11.2025	Mode	:	Online(Zoom / Google Meet)

APPLICATION PROCESS, SELECTION AND CERTIFICATION

Selection Process	• Participants will be nominated and selected by AARDO and RGNGWTRI. • Selected participants will receive login credentials for accessing the training platform.
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 on or before 30.10.2025 • Print, sign, and forward it with the recommendation of the Nodal Ministry / Centre of Excellence to: tec@aardo.org
Certification	• An E-Certificate jointly signed by Secretary-General, AARDO and Regional Director, RGNGWTRI will be awarded upon successful completion of the training.
Whatsapp Group	• A dedicated WhatsApp group will be created for participants, trainers, and organizers for smooth communication and real-time updates.

Due to limitation on participation only selected candidates will be intimated through AARDO

Selected participants have to actively attend all e-training sessions to be eligible for course completion e-certificates

ABOUT THE HOST INSTITUTE



Rajiv Gandhi National Ground Water Training and Research Institute (RGNGWTRI) is the premier capacity-building and research institute of the Central Ground Water Board (CGWB), Ministry of Jal Shakti, Government of India, located at Naya Raipur, Chhattisgarh. Since 1997, the institute has been engaged in training professionals, sub-professionals, and stakeholders across India and

abroad in the field of groundwater management. RGNGWTRI specializes in hydrogeology, aquifer mapping, modelling, and integrated water management, disseminating innovations developed by CGWB. The institute has trained experts from several foreign countries, contributing to global groundwater governance capacity.

PROGRAMME CO-ORDINATORS

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