

INTERNATIONAL WORKSHOP
ON
FOOD, WATER, ENERGY NEXUS
AND SUSTAINABILITY

February 20-21, 2025
El-Ain El-Sokhna, Egypt

ORGANISED BY

	<p>Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) New Delhi, INDIA</p>
	<p>Academy of Scientific Research & Technology of Egypt (ASRT) Cairo, EGYPT</p>
<p>CO-SPONSORED BY</p>	
	<p>Mai Sherif Association</p>
	<p>Value Creating Plastic & Rubber Products Company, Egypt</p>

	<p align="center">Industry & Renewable Energy Lead Factory Free Zone Alexandria</p>
	<p align="center">Techno Scientific Egypt</p>
	<p align="center">SCOOP</p>
	<p align="center">EARTH GUARDS ASSOCIATION Promising Sustainability</p>

INTRODUCTION

Climate change poses significant threats to livelihoods, public health & infrastructure; and water, food and energy security, especially in developing countries. Egypt and many other developing countries are affected due to climate change, despite its minimal contribution to global greenhouse gas emissions. The interconnectedness of water, food and energy means that any threats to one directly impact the others. There is a strong correlation and close interdependence between the water, energy and food sectors. Food production depends on both water and energy; clean water for human consumption requires energy and energy production requires water. These interconnections are becoming more pronounced due to increasing demands for resources as populations grow, consumption patterns change and climate change intensifies. The strong interdependencies among sectors can impact the achievement of three critical policy objectives: water security, energy security and food security. Interconnections mean that pursuing security in any sector depends on developments in the others. Consequently, it is essential to coordinate unified policy formulation across the three sectors, as well as climate change mitigation and adaptation. Therefore, traditional policy and decision-making in “silos” must give way to reducing trade-offs and building synergies across sectors. In other words, security in one sector should not be prioritized over the other two, but security in all three sectors can be achieved by fostering intelligent synergies and equitable trade-offs among them. The nexus among these three sectors represents a practical and integrated approach to reduce security risks, maximize opportunities, increase capabilities and enhance resource efficiency. The nexus approach not only emphasizes integration but also encourages stakeholder engagement and collaboration among various sectors and communities. By fostering dialogue between policymakers, local populations and industry leaders, diverse perspectives and knowledge can be considered in decision-making processes. This inclusivity is crucial for developing sustainable solutions that are tailored to local contexts and needs. Furthermore, investing in research and technology can drive innovation, leading to more resilient systems that can adapt to the challenges posed by climate change.

In order to deliberate on the above issues, the *Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre)*, New Delhi, India; jointly with the *National Committee for Environmental Issues (ESCOPE)*, Egypt, affiliated with the *Academy of Scientific Research and Technology (ASRT)*, Cairo, Egypt; with support from Mai Sherif Association; Value Creating Plastic & Rubber Products Company, Egypt; Industry & Renewable Energy (Lead Factory Free Zone), Alexandria; Techno Scientific, Egypt; SCOOP and Earth Guards Association, Egypt - organizing an International Workshop on “**Food, Water, Energy Nexus & Sustainability**” during **February 20-21, 2025 in El-Ain El-Sokhna, Egypt**.

OBJECTIVES

The Workshop aims to adopt the nexus approach, in order to enhance water, energy and food security and mitigate the negative effects of climate change. Participants will deliberate on current though processes in implementing the nexus approach, identifying best practices, share successful case studies and explore actionable strategies. The main objective of the workshop is to bring together representatives from various countries to share experiences and strategies on interlinking of the sectors for food, water and energy security under the challenges of climate change scenarios.

TOPICS TO BE COVERED

1. Importance of the water-food-energy nexus.
2. Key concepts and interdependencies between water, food and energy systems.
3. Strategies for integrated management of water, food and energy resources.
4. Case studies of successful nexus management practices.
5. Sustainable agriculture for achieving the water-food-energy nexus.
6. Water-food-energy nexus and its correlation with sustainable development goals.
7. Advances in technology for water conservation, clean energy & energy efficiency, and sustainable food production.
8. Overview of existing policies and regulations affecting the water, food and energy nexus.
9. Climate change impacts on the water, food and energy nexus.
10. Tools and methods for analyzing water, food and energy nexus interactions.
11. Approaches for involving local communities and stakeholders in water, food and energy nexus management.
12. Emerging trends and technologies shaping the future of the water, food and energy nexus.

IMPORTANT DATES

ACTIVITY	DATES
Dates of the Workshop	February 20-21, 2025
Submission of Application Starts	December 12 , 2024
Last Date for Submission of Applications along with Abstract of Paper to be Presented	January 15, 2025
Last Date for Submission of Full Manuscript	January 22, 2025

**English will be the official language for the Workshop.*

TENTATIVE PROGRAMME OF THE WORKSHOP

PROGRAMME	SESSION DETAILS	
	February 20,2025	February 21,2025
09.00 - 10.00 Hrs.	Inaugural Session	Technical Session - III
10.30 - 12.00 Hrs.	Keynote Lectures	Technical Session - IV
13.00 - 14:30 Hrs.	Technical Session - I	Poster Session
15:00 - 16.30 Hrs.	Technical Session - II	Adoption of Resolution and Concluding Session

Note: A detailed Session-wise Programme will be made available before the Workshop.

TARGETED PARTICIPANTS

Researchers, scientists, innovators, government officials, policymakers, legal experts and representatives from industry and non-government organizations, research and academic organizations from the NAM and other developing countries are invited to participate in this workshop. Participants engaged in fields related to management of “Food-Water-Energy” will find this workshop particularly beneficial. The diverse mix of attendees from various countries will facilitate the exchange of knowledge, ideas and experiences for global networking and collaboration.

RESOURCE PERSONS

Resource persons for the Workshop will comprise eminent experts and professionals in the relevant fields from Egypt as well as various NAM and other developing countries.

ABOUT THE ORGANISERS

THE CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&T CENTRE)

The Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) is an Inter-Governmental Organisation with a Membership of 47 countries spread over Asia, Africa, the Middle East and Latin America. The Centre was set-up in 1989 in New Delhi, India, based on decisions taken during various NAM Summits and is mandated to undertake a variety of programmes, including organization of international workshops, training programmes and training courses and implementation of multilateral collaborative projects. It also offers short-term fellowships programmes to scientists and researchers from developing countries in association with the Centres of Excellence in various countries. The Centre also brings out technical books, monographs and other scientific publications in different S&T subjects of interest to developing countries. The Centre's activities provide an opportunity for scientist-to-scientist contact and interactions; familiarizing participants on the latest developments and techniques in the subject areas; identification of the requirements of training and expert assistance; locating technologies for transfer between the Members and other developing countries and dissemination of S&T information etc. In addition, the Centre encourages Academic- R&D-Industry interactions in the developing countries through its “*NAM S&T-Industry Network*”. The Centre is giving special focus on helping the NAM S&T Centre Member Countries in their capacity building to achieve the UN Sustainable Development Goals – 2030. More details about the Centre are available at www.namstct.org.



ACADEMY OF SCIENTIFIC RESEARCH & TECHNOLOGY OF EGYPT (ASRT)

The Academy of Scientific Research & Technology (ASRT, <http://www.asrt.sci.eg/>) is a non-profit organization, established in September 1971 by the Presidential Decree No. 2405 as the national authority responsible for Science & Technology in Egypt. In 1998, ASRT was reorganized by the Presidential Decree No. 377 that defined its mission, function and activities. ASRT is the Egyptian House of Expertise. It brings together outstanding Egyptian scientists and experts from universities, research institutions, private sector, NGOs, policymakers and Prominent Egyptian Scientists in Diaspora to deliberate on problems being faced by the country, propose and carry out scientific studies and create future strategic basic plans to tackle these problems. ASRT adopts a comprehensive plan for developing Egyptian S&T to support relevant National ministries and research institutions in creating an integrated system of scientific research together for increasing the number of trained scientists in Egypt, and giving science a leading role in the country's development and knowledge based economy. ASRT also promotes and encourages female and youth participation in S&T and scientific leadership. The Academy of Scientific Research and Technology (ASRT) plays a crucial role in promoting scientific research and technological development, particularly in relation to sustainability. It often collaborates with various stakeholders to foster innovation and address environmental challenges.



Egyptian Scientific Committee for Problems in Environment (ESCOPE)

The *National Committee for Environmental Issues* is one of the Egyptian national committees of different scientific specializations under the umbrella of the Egyptian Academy of Scientific Research and Technology (ASRT)—Ministry of Higher Education and Scientific Research. It comprises an elite group of 15 Egyptian specialized scientists in environmental sciences from universities, research centers, and institutes, 25% of its members are young researchers. Most of its members are currently members of the corresponding international federations, committees, or associations related to environmental sciences and are involved in international collaboration in related fields.

The National Committee for Environmental Issues engages in communication with international unions that align with its area of expertise, and its members serve as Egypt's representatives in international environmental activities. It also helps in the implementation of policies and plans to enhance the link between the scientific community and Egyptian institutions with their international counterparts to exchange knowledge and experience in related fields. It organizes national, regional, and international scientific conferences, seminars, and workshops in its field of specialization. It also disseminates the latest developments in its field of specialization to the Egyptian scientific community. Its members work with ASRT to prepare specialized technical studies and provide technical advice in their field of specialization. Its members also assist in scientific publishing to introduce the national scientific community to local and international scientific journals in the field of specialization.

The National Committee for Environmental Issues also organizes and implements a number of scientific, cultural, and social activities to develop national awareness about environmental issues, climate change mitigation, green economy, sustainable development goals, carbon footprint, clean energy, water and energy conservation, and the application of AI in the environment sector.

SUBMISSION OF APPLICATIONS

Scientists and experts desirous of participating in the Workshop, **except those from Egypt**, should submit their applications **electronically** to the Director General, NAM S&T Centre, New Delhi at namstcentre@gmail.com, as early as possible but latest by **January 15, 2025 (Wednesday)**.

However, **applicants from Egypt** should submit their requests directly to **Mrs. Reham Sabry, Supervisor of the International Scientific Relations, Academy of Scientific Research & Technology of Egypt** at asrt.organizations@gmail.com.

The following documents must be submitted as e-mail attachments:

- a) Filled in **Application Form** (Blank form **enclosed**).
- b) An **Opinion** (a short paragraph; **in MS Word format**) on how the applicant qualifies to participate in the Workshop.
- c) A **Short Biography** (to be written in third person) highlighting the current engagement, area of expertise, major achievements, academic qualification and professional experience as succinctly as possible.
- d) An Abstract (**about 300 words, in MS-Word only**) of the Paper that would be presented at the Workshop.
- e) Copy of the **relevant pages of passport**.

Note: The documents (b), (c) and (d) above must be in **MS-Word format only; PDF or image files will not be accepted**. Hard copies of the Application Form and the above attachments are NOT REQUIRED to be submitted.

PRESENTATION OF PAPERS

Delegates/Participants are expected to present a Country Status Report and/or a research/scientific paper on any of the themes appropriate to the Workshop.

LOCAL HOSPITALITY AND TRAVEL

Hospitality including accommodation, meals and local transport will be provided by the Egyptian organizers free of cost to the foreign participants sponsored by the NAM S&T Centre from **19th February 2025 (noon) to 22nd February (noon)** [i.e. from one day before to one day after the completion of the Workshop]. The participants are requested to book their flights accordingly; otherwise, they will have to make their own arrangements of stay beyond these dates.

FINANCIAL ARRANGEMENTS FOR TRAVEL

The financial terms and arrangements for international travel of foreign participants nominated by the NAM S&T Centre will be conveyed to individual applicants on receipt of the Application Form and other documents.

REGISTRATION FEES FOR EGYPTIAN PARTICIPANTS

Egyptian participants will have to pay 750 LE for registration to attend the Workshop which includes **transportation only, without accommodation for two days**. Please contact Mrs. Nahla Saad (Ph. No. - 01060667753) at ASRT Office (fourth Floor) for further details.

ENTRY FORMALITIES AND IMMIGRATION

Participants of the Workshop must be in possession of a current passport or any other internationally recognized travel document, which must have a **period of validity of at least six months beyond the period of stay in Egypt** and must be endorsed for travel to Egypt.

Participants should have a valid visa for entry into Egypt. The Egyptian diplomatic mission located in the country of the participant should be approached for obtaining an entry visa. However, for a large number of countries, "Visa on Arrival" is applicable. The organizers will facilitate the issuance of visa by providing the participants with an official letter of invitation.

NOTE: *The governments / institutions of the selected participants will be required to bear the following costs:*

- ✓ All expenses in the home country incidental to travel abroad, including expenditure for passports, visa fee, required medical examinations, vaccinations and miscellaneous expenses such as internal travel to the airport of departure in the home country.
- ✓ Salary and other related allowances for the participants during the period of the Workshop.
- ✓ Cost of medical insurance to cover the period of participation in the workshop.

The organizers of this Workshop will not assume responsibility for the following expenditure in connection with the participant's attendance in the Workshop:

- ✓ Expenses incurred with respect to any insurance, medical bills or hospitalization fees.
- ✓ Compensation in the event of death, disability or illness of participants.
- ✓ Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.
- ✓ Other costs, including airport tax and excess baggage.

REQUIRED OTHER USEFUL INFORMATION

- The temperature in El-Ain El-Sokhna during the Workshop period would be around **20°C** with no heat and humidity, falling to **9°C at night**.
- Egyptian Standard Time is **+2 hours ahead of GMT**.
- The Egyptian pound (L.E) is the currency of Egypt. The present current exchange rate is **1 USD = 50 L.E**.

PUBLICATION OF PAPERS

A publication edited by one or more international experts and based on the papers presented by the participants during the Workshop and also containing papers contributed by other eminent experts in the field will be brought out in the form of a book as a follow-up of this scientific programme. Therefore, all participants are requested to submit the manuscripts of their full papers in MS-word format well in advance, latest by **January 22, 2025** (Wednesday).

SELECTION OF APPLICANTS

Selection of applicants will be made based on their academic and professional backgrounds. Successful applicants will be electronically informed about their selection.

SECRETARIAT AND ENQUIRIES

NAM S&T CENTRE

Dr. Amitava Bandopadhyay,

Director General,

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Other Developing Countries (NAM S&T Centre),

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E-mail: namstcentre@gmail.com

Website: <https://www.namstct.org>

Academy of Scientific Research & Technology of Egypt (ASRT)

Dr. Mona Elnaa

Vice President

Academy of Scientific Research & Technology of Egypt (ASRT)

Website: www.asrt.sci.eg

Mrs. Reham Sabry

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Egyptian Scientific Committee for Problems in Environment (ESCOPE)

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E-mail: ihassan2006@gmail.com

CENTRE FOR SCIENCE AND TECHNOLOGY OF THE NON-ALIGNED AND
OTHER DEVELOPING COUNTRIES
(NAM S&T CENTRE)

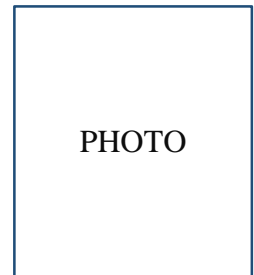
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APPLICATION FORM

PLEASE TYPE OR USE BLOCK CAPITALS (NO COLUMN SHOULD BE LEFT BLANK)

SECTION –A

(To be filled in by the Applicant)



1. First Name (Prof. /Dr. /Mr. /Mrs. /Ms.):
.....
Middle Name: Last Name:
..... (*As in Passport*)
2. Father's/Spouse Name:
3. Designation (Position held):
4. Nationality:
5. Date of Birth: Place of Birth (City) (Country).....
6. Passport No: Place of issue:
Date of Issue: Valid up to:
(*Please attach copies of the relevant pages of your Passport*)
7. Name of the Parent Institution (Employer):
Full Address (Office):
.....
Phone: E-mail:

8. Full Address (Home):

 Mob:
 E-mail:
9. Educational Qualifications: Highest Degree.
 Year of Award:
 University:
 Field of Study:
10. Brief Bio - data (CV):
 **(Maximum
 two pages, in MSWord)**
11. Abstract of your paper proposed to be presented in the
 Workshop. **(About 300 Words, in MSWord;** to be
 attached on separate sheet)
12. What in your opinion qualifies you for participation in this
 Workshop? (To be attached on separate sheet)
- Date: Signature:

SECTION –B:

ENDORSEMENT BY THE NOMINATING AUTHORITY

(Applicants from a Member Country of the NAM S&T Centre and NAM S&T – Industry Network Member must get the Nomination Form endorsed by the Focal Point of the Centre in their countries if they wish to take financial benefits extended to the official nominee of the country. For the list of member countries and names/addresses of the Focal Points please visit the Centre’s official website; www.namstct.org.)

Signature:
 Name (in full):
 Designation:
 Date:

SEAL

Enclosures:

- 1) A Write-up (a short paragraph) on what qualifies the applicant to attend the Workshop.
- 2) A Short Biography (to be written in third person) highlighting the current engagement, area of expertise, major achievements, academic qualification and professional experience as succinctly as possible.
- 3) An Abstract (about 250-300 words, in MS-Word document) of the Paper that is proposed to be presented by the applicant at the International Workshop.
- 4) Copy of the relevant pages of the passport.
