




# INTERNATIONAL WORKSHOP

ON

## RESEARCH & DEVELOPMENT AND TECHNOLOGY TRANSFER FOR SUSTAINABLE AGRICULTURE AND FOOD SECURITY IN LOW-INCOME COUNTRIES

May 8-9, 2024  
Lusaka, Zambia

	<p>CENTRE FOR SCIENCE &amp; TECHNOLOGY OF THE NON-ALIGNED AND OTHER DEVELOPING COUNTRIES (NAM S&amp;T CENTRE) NEW DELHI, INDIA</p>
	<p>NATIONAL INSTITUTE FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (NISIR) LUSAKA, ZAMBIA</p>
 <p><b>Ministry of Technology and Science</b></p>	<p>MINISTRY OF TECHNOLOGY AND SCIENCE (MOTS) LUSAKA, ZAMBIA</p>

## INTRODUCTION

Agriculture is given priority status in developing countries. According to the World Bank, agriculture is on the way to reducing poverty by 75%, contributing 30% to national GDPs, improving nutrition and boosting food security in developing countries. However, concerns about climate change present risks and uncertainties that need to be addressed to make agriculture more sustainable and protect vulnerable farming systems in low-income countries. Specifically, in low-income countries, the frequency of extreme weather events such as unpredictable rainfall, high temperatures, and fluctuations in pest and disease populations, are already affecting agricultural productivity & yield, thereby threatening food security in these regions. Consequently, there is a need to intensify research & development to identify south-specific barriers to sustainable agriculture and recommend suitable adaptation methods to facilitate affordable distribution of food and maintain people's livelihoods even amidst climatic & other uncertainties.

The United Nations' Sustainable Development Goal (SDG-2) focuses on ending hunger by leveraging sustainable agriculture to improve the global supply of food, reduce food loss and wastage, and ensure year-round access to adequate food. Achieving this goal, however, requires significant investment in technology, infrastructure, policies, and capacity for research & development especially in low-income countries. Investment in Research & Development and Technology Transfer plays an important role in identifying threats, developing and adopting new technologies, improving yield, and establishing best practices. Investment in research & development also means having human resources equipped with relevant scientific & technical knowledge and skills. Such milestones cannot be accomplished by individual countries without a conversation about collaborations.

International collaboration is important in achieving sustainable agriculture and building more food-secure countries. However, over the years, inequalities have been observed between North-to-South collaborations while South-to-South collaborations leave room for significant improvement. This situation has necessitated advocacy for stronger South-to-South cooperation to harness, adopt, and adapt strategies that will fast-track the attainment of socio-economic development in low-income countries. The South-to-South collaborations are being encouraged at multiple levels including capacity building for human resources and sharing technical strategies. The Centre for Science & Technology of Non-Aligned and Other Developing Countries (NAM S&T Centre) realizes the importance of these conversations and has since been regularly providing strategic platforms for experts from developing nations to meet, share experiences and best practices, and to adopt resolutions that drive change.

It is against this backdrop that the NAM S&T Centre in partnership with the National Institute for Scientific and Industrial Research (NISIR), Lusaka, Zambia and the Ministry of Technology and Science (MoTS), Lusaka, Zambia is organizing an International Workshop on **'Research & Development and Technology Transfer for Sustainable Agriculture and Food Security in Low-Income Countries'** during **May 8-9, 2024** in Lusaka, Zambia to share an overview of research & development, challenges in technology transfer, other experiences and best practices in the area.

## WORKSHOP OBJECTIVES

The objectives of this Workshop are:

- ✓ To assess the status of human resources capacity for research & development and technology transfer in low-income countries in the area of sustainable agriculture.
- ✓ To identify successful strategies and best practices for enhancing capacity for research & development in the agricultural sector.
- ✓ To facilitate knowledge exchange and collaboration among scientists, researchers, policymakers, government officials and human resource managers.
- ✓ To provide actionable recommendations for improving human resources capacity in the context of sustainable agriculture and food security.

## TOPICS TO BE COVERED

- Research & Development in Agriculture
- Sustainable Agriculture – Research and Practices
- SDGs and Food Security
- Technology Transfer Models and Practices
- Capacity Building
- Policy Frameworks for Research & Development
- Food Security Programs
- Climate-smart Agriculture: Innovation for Sustainability
- Role of Industry and Society in Sustainable Agriculture
- Women's Involvement in Sustainable Agriculture
- Climate Change and Agricultural Eco-system
- Role of Agriculture in Low Income Countries
- Food Security Problems in Low Income Countries
- Challenges to Sustainable Agriculture in Low-income Countries due to Climate Change and Frequent Climatic Hazards
- United Nations Efforts to Boost Sustainable Agriculture in Low-income Countries and Need to Improve Food Security
- Deficiency of Research, Development and Translation Capacity in Low-income Countries
- South-to-South Collaboration: A Roadmap for Bridging the Gap

## IMPORTANT DATES

ACTIVITY	DATES
Date of the Program	May 8-9, 2024
Submission of Application Starts	March 8, 2024
Last Date for Submission of Applications along with Abstract of Paper to be Presented	April 3, 2024
Last Date for Submission of Full Manuscript	April 22, 2024

## TENTATIVE PROGRAMME OF THE WORKSHOP

PROGRAMME	SESSION DETAILS	
	May 8, 2024	May 9, 2024
10.00 - 11.00 Hrs.	Inaugural Session	Plenary Sessions
11.00 - 13.00 Hrs.	Keynote Lectures	Technical Session - III
14.00 - 15:00 Hrs.	Technical Session - I	Technical Session - IV
15:15 - 17.30 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, technocrats, innovators, government officials and policymakers, legal experts and representatives from industry and non-government organizations, research and academic organizations from the NAM and other developing countries - who are engaged in the fields related to Sustainable Agriculture - are invited to participate in this Workshop. The combination of participants from various developing countries will allow the exchange of knowledge, ideas and experiences as well as opportunities for global networking and collaboration.

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

## RESOURCE PERSONS

The resource persons for the Workshop will comprise eminent experts and professionals in the relevant fields from Zambia, India and other countries.

## ABOUT THE ORGANISERS

### 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 the 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 fellowship 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](http://www.namstct.org).

### NATIONAL INSTITUTE FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (NISIR), ZAMBIA

The National Institute for Scientific and Industrial Research (NISIR), Zambia is a statutory body established by the Science and Technology Act No. 26 of 1997 through Statutory Instrument (SI) No. 73 of 1998. NISIR's goal is to strengthen R&D capacity in Science and Technology to meet the needs of agriculture, manufacturing, health, water, ICT, energy, and environment industries/sectors.



NISIR is Zambia's largest government-owned research and development institution, renowned for its unwavering commitment to scientific excellence, innovation and industrial growth. NISIR has a proven track record of successfully transitioning innovative ideas into solutions, and offering technical scientific guidance to the community, industry and government. NISIR's contributions across sectors, including agriculture, renewable energy, and healthcare, also underscore the important collaborations that it holds locally, regionally, and internationally.

## MINISTRY OF TECHNOLOGY AND SCIENCE (MOTS), ZAMBIA

The Ministry of Technology and Science (MoTS) of Zambia is responsible for formulating and reviewing Technology and Science policies to contribute to economic growth. It collaborates with industry and the wider private sector in developing relevant innovations; coordinates Research to promote investment in Science and Technology; and promotes the advancement of knowledge and skills in Science and Technology to accelerate transformation into the digital economy. Furthermore, the Ministry conducts Science, Technology, and Innovation impact assessment and monitoring and evaluation. The Ministry derives its mandate from Government Gazette Notice 1123 of 2021.



**Ministry of  
Technology and  
Science**

## SUBMISSION OF APPLICATIONS

Scientists and experts desirous of participating in the Workshop, **except those from Zambia**, should submit their applications **electronically** to the Director General, NAM S&T Centre, New Delhi at [namstcentre@gmail.com](mailto:namstcentre@gmail.com) as early as possible but latest by **April 3, 2024**.

However, applicants from Zambia should submit their requests directly to the Director/Chief Executive Officer, National Institute for Scientific and Industrial Research (NISIR), Zambia at [hkambafwile@nisir.org.zm](mailto:hkambafwile@nisir.org.zm) with cc to [getrudepemba@gmail.com](mailto:getrudepemba@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 you qualify to participate in the Workshop.
- c) A short CV in the **attached** Format (**maximum two pages; in MS-Word format**).
- 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 the 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

Local hospitality in Lusaka including accommodation, meals and local transport for the foreign participants sponsored by the NAM S&T Centre will be provided from **7<sup>th</sup> May 2024 (noon) to 10<sup>th</sup> May 2024 (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 will be conveyed to individual applicants on receipt of the Application Form and other documents.

## 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 Zambia** and must be endorsed for travel to Zambia.

Participants should have a valid visa for entry into Zambia. The Zambian 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 participant.
- Loss of personal belongings or compensation for damage caused to them by climatic or other conditions.
- Other costs, including visa fee, airport tax and excess baggage fee, etc.

## OTHER USEFUL INFORMATION

- The temperature in Lusaka during the Workshop period would be around 25°C with no heat and humidity, falling to 11°C at night
- Zambian Standard Time is +2 hours ahead of GMT.
- The Zambian Kwacha is the currency of Zambia. The currency code for Kwacha is ZMW, and the currency symbol is ZK. The present current exchange rate is 1 USD = 23 ZMW

## PUBLICATION OF THE 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 only well in advance, but latest by **April 22, 2024**.

## 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,

Centre for Science & Technology of the Non-Aligned and other Developing Countries

(NAM S&T Centre),

Core - 6A, 2<sup>nd</sup> Floor,

India Habitat Centre, Lodhi Road,

New Delhi –110003, India

**Tel:** +91-11-24645134, 24644974

**E-mail:** [namstcentre@gmail.com](mailto:namstcentre@gmail.com)

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

### NATIONAL INSTITUTE FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (NISIR), ZAMBIA

**Dr. Henry Kambafwile,**

Director/Chief Executive Officer,

National Institute for Scientific and Industrial Research,

KK International Airport Road,

P.O. Box 310158, Chelstone,

Lusaka, Zambia

**Tel:** +260 211 281 013

**E-mail:** [hkambafwile@nisir.org.zm](mailto:hkambafwile@nisir.org.zm)

**Mob:** +26 097 744 0060

### MINISTRY OF TECHNOLOGY AND SCIENCE (MOTS), ZAMBIA

**Dr. Brilliant Habeenzu,**

Permanent Secretary,

Ministry of Technology and Science,

Maxwell House,

Los Angeles Boulevard,

P.O. Box 50464,

Lusaka, Zambia

**Tel:** +260 211 252082

**Fax:** +260 211 252077

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

## INTERNATIONAL WORKSHOP

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### Research & Development and Technology Transfer for Sustainable Agriculture and Food Security in Low-Income Countries

May 8-9, 2024  
Lusaka, Zambia

#### APPLICATION FORM

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

PHOTO

#### 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**; to be prepared in enclosed Format)
  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**

(The Applicant in 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 his/her country if he/she wishes 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](http://www.namstct.org).)

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

**SEAL**

**Enclosures:**

- 1) A Brief CV (maximum two pages, as per **attached** format; in MS Word only).
- 2) An Opinion (in MS-Word format only) on what qualifies you to attend the Workshop.
- 3) An Abstract (in MS-Word only) of the Paper that would be presented at the Workshop.
- 4) Copy of the relevant pages of the passport.

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Lusaka, Zambia**

**CURRICULUM VITAE**

1. Personal Details:

Name: (Prof./Dr./Mr./Mrs./Ms.)

Designation: Position Title

Present Employer: Full Address (Office)

City/State/Province:

Country:

Nationality:

Date of Birth: dd/mm/yyyy

Proficiency in English Language:

Permanent Address: Full Address (Home)

Gender:

Contact: Mobile:

Telephone Office:

E-mail:

Alternative e-mail:

2. Academic Qualifications: In chronological order

Qualification Awarded Degree/Diploma/Certificate	Major Subject	University/ Institution	Year (From-To)

3. Professional Experience: In chronological order

Organisation/ Institution	Position Title	Year (From-To)	Nature of duties

Total number of years of relevant experience –

4. Research Experience: In chronological order

Research Title	Duration	Status

5. Administrative Experience: Not more than 100 words

6. Experience with respect to the title of the Workshop:

7. Details of Awards/Recognitions (if any):

8. Any other information: Not more than 50 words

9. Recent Publications: Only five recent publications to be mentioned

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