



# Human Resource Development Programmes for Africa and ASEAN in collaboration with UNCTAD

**NASU Yasutomo M.D., Ph.D.**

President

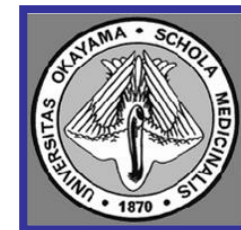
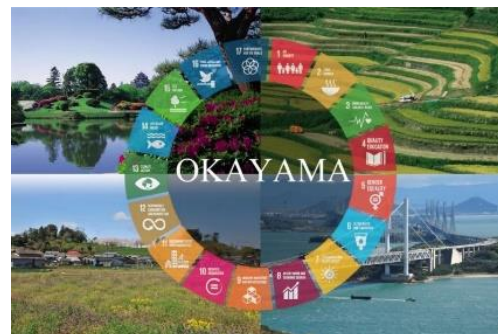
OKAYAMA UNIVERSITY

Japan



**unesco**

Chair



**Since 1870**

# Tangible Achievements of Okayama University in Partnership with UNESCO to advance the SDGs



2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

2017: The 10th anniversary of Okayama University as the UNESCO Chair (ESD)

United Nations Educational, Scientific and Cultural Organization

- UNESCO Chair on Research and Education for Sustainable Development Japan

Jun 2005

The first seven "Regional Centers for ESD" (RCE) composed of 250 organization

Okayama University became Asia's first UNESCO Chair (ESD)

Apr 2007



UNESCO World Conference on ESD

Oct 2014

UNESCO Learning City Award

Jan 2017

UNESCO / Japan ESD Award

Sep 2016

*A whole institution's approach towards achieving the SDGs*

Apr 2017~

**Japan SDGs Award**

(Special prize from the Government)

Dec 2017



# United Nations Conference on Trade and Development (UNCTAD)

Established in 1964. Located in Geneva, UNCTAD is the central United Nations agency that comprehensively addresses trade and development, finance, investment, technology, and sustainable development issues.

It aims to maximize trade, investment, and development opportunities for developing countries, assist developing countries in facing challenges arising from globalization, and integrate them into the world economy on an equal footing.





OKAYAMA  
UNIVERSITY



On January 9, 2020, Okayama University and UNCTAD concluded a memorandum of understanding (MoU) for comprehensive cooperation on the development of human resources in science and technology innovation for the Sustainable Development Goals (SDGs) (STI for SDGs), the first of its kind among universities around the world.

## 1. UNCTAD Short-term Researcher Acceptance Programme Young Female Scientist Programme in Japan

“Joint Research and Training Course for Young Female  
Researchers from Developing Countries”

## 2. UNCTAD Long-term Program (At the Graduate School of Environmental and Life Science and Interdisciplinary Science and Engineering in Health Systems)

“Doctoral degree program for young researchers from  
developing countries”



# Young Female Scientist Programme

Science, Technology and Innovation (STI) are key drivers to achieve the Sustainable Development Goals (SDGs) but STI capabilities in developing countries are still limited. Also, there is a lack of young women scientists in developing countries and closing the gender gap will be key to accelerate progress in harnessing science, technology and innovation for truly inclusive and sustainable development for all communities and all countries.

### Objective

To improve STI capabilities in relation to the achievement of the SDGs, the Young Female Scientist Programme was launched and implemented in the context of the [United Nations Commission on Science and Technology for Development](#).

The aim of this Young Female Scientist Programme is to build human capital in STI-related fields in developing countries through educational programmes and contribute to the achievement of Sustainable Development Goals.

### Activities

The programme offers the opportunity for eligible young female scientists from ASEAN and African countries to engage in cutting-edge research activities at Okayama University in Japan for 14 to 30 days.

### Intended Outcomes

Participants can gain hands-on research experience in their respective STI fields (many of them are health-related) with the help of top-class faculty at the university. Participants are expected to contribute to the achievement of SDGs in their own countries building on their research experience in Japan.



**Partners**  
Okayama University

**Beneficiaries**  
Gambia, South Africa, Tanzania, the Philippines, Egypt, Ethiopia, Botswana, Cameroon, Madagascar and Thailand.

**Duration**  
2020-2024

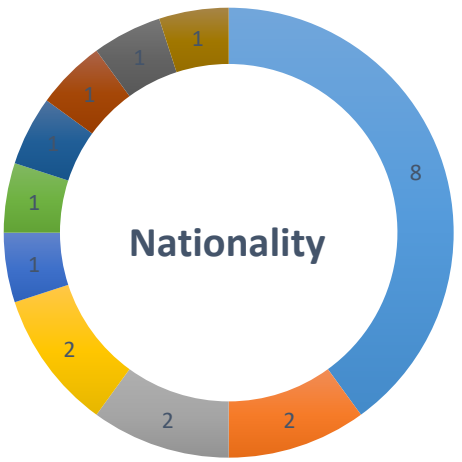
© UNCTAD : <https://unctad.org/topic/science-technology-and-innovation/young-female-scientist-programme>

## 20 participants from 10 countries:

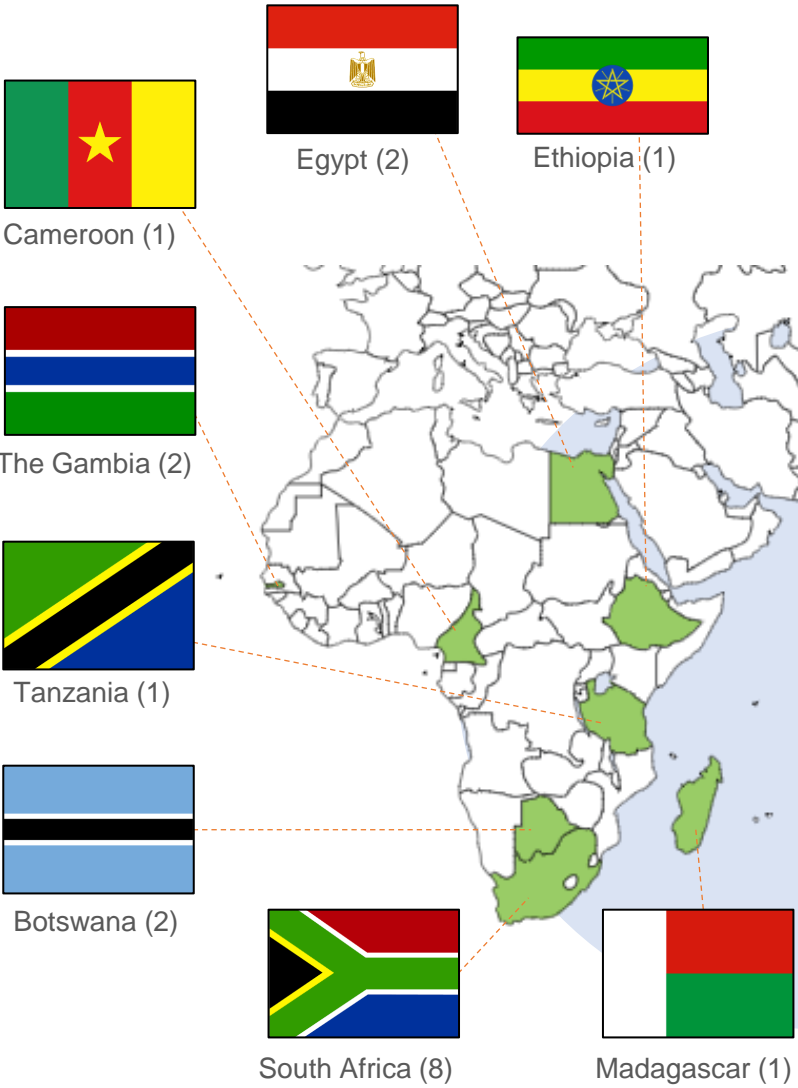
# Republic of Botswana, Cameroon, Egypt, Ethiopia, Madagascar, South Africa, Tanzania, Thailand, The Gambia, The Philippines

# Program Participant Details

20 participants from CSTD member countries of Africa and ASEAN region



- South Africa
- Botswana
- Egypt
- The Gambia
- Cameroon
- Ethiopia
- Madagascar
- Tanzania
- Thailand
- The Philippines



The Philippines (1)



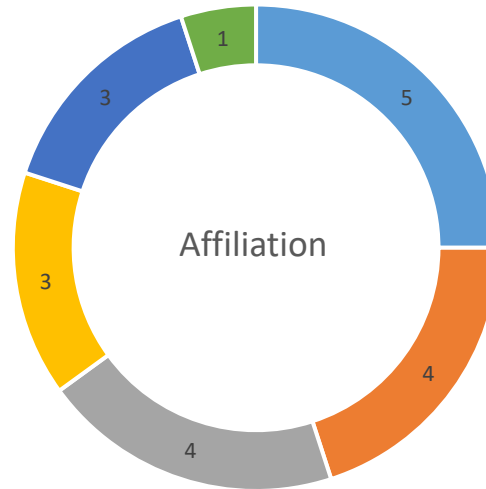
Thailand (1)

## Background of the participants

Young female researchers from diverse backgrounds participated in this program

### Examples of Institutional Affiliations

Nelson Mandela University, University of Cape Town, Rhodes University, Tshwane University of Technology, University of the Philippines Manila, National Science and Technology Development Agency, Ministry of Health Directorate of Health Research, Zewail City of Science and Technology, Yaounde Central Hospital

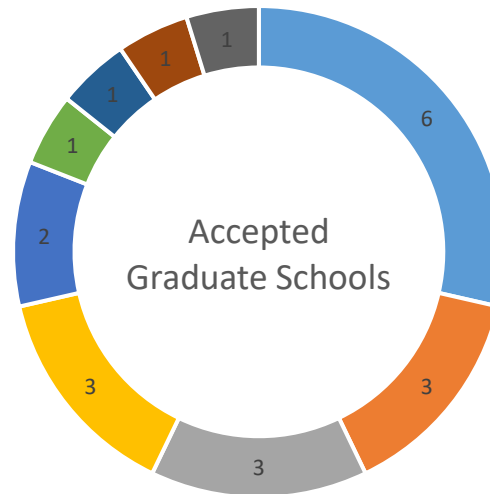


- University (Faculty)
- Ministry
- University (Graduate Student)
- Research Institute
- University (Researcher)
- Hospital

## Research Areas

A wide variety of graduate schools at Okayama University accepted the researchers

Humanities and Social Sciences /  
 Natural Sciences and Technology /  
 Health Sciences /  
 Medicine, Dentistry and Pharmaceutical Sciences /  
 Environmental, Life, Natural Science and Technology /  
 Interdisciplinary Science and Engineering in Health Systems



- Environmental and Life Science
- Interdisciplinary Science and Engineering in Health Systems
- Medicine, Dentistry and Pharmaceutical Sciences
- Natural Science and Technology
- Health Sciences
- Dynamics of Civilizations
- Education
- Neutron Medical Research
- Plant Science and Resources

# Research Activities at Okayama University



**Dr. Zamaswazi Tshabalala (South Africa)**  
Postdoctoral Research Fellow,  
University of the Free State  
Research Subject "Study the Electronic band  
structure and catalysis of the organometallic  
complex for gas sensing applications"



**Ms. Thandiswa Nqowana (South Africa)**  
Lecturer, Rhodes University  
Research Subject "Water quality monitoring using  
biosensors: A study of analysis for stimulus-response  
coupling in aquatic organisms"



**Ms. Phebian Ina Grant-Sagnia (The Gambia)**  
Principal Health Research Officer, Ministry of Health,  
Directorate of Health Research  
Research Subject "Implementation and Public Health  
Research"



**Dr. Menattallah Elserafy (Egypt)**  
Assistant Professor, Center for Genomics, Zewail City  
of Science and Technology  
Research Subject "Investigating the tolerance  
mechanisms of stalled Topoisomerase 1 cleavage  
complexes"



# Women scientists from developing countries at the forefront of cutting-edge research

09 February 2023

Participants of UNCTAD and Okayama University's Young Female Scientist Programme are breaking the glass ceiling in science, technology, engineering and maths.



“  
I am exploring sending  
Filipino graduate  
students to Okayama  
University for possible  
sandwich research  
programmes  
to further strengthen the  
collaboration.”

**Ms. Fresthel Climacosa, the Philippines**

# Interaction among Young Female Researchers

During their stay at Okayama University, participants have the opportunity to interact with young female researchers at Okayama University, as well as to experience traditional Japanese culture and the atmosphere of Okayama with other participants in the program.

## WTT Faculty at Okayama University

Okayama University aims to achieve world-class research in the academic field and position ourselves as a global research base. In order to realize this, developing a diverse research environment is positioned as one of the most important tasks. The **“Woman Tenure Track (WTT) System”** was established in FY 2009 to promote recruitment and foster excellence in female faculties.



## Young Female Scientist

“The Young Female Scientist Programme in Japan” invites female researchers under the age of 40 from CSTD member countries in Africa and the ASEAN region. This program lasts 14 to 30 days and brings together female scientists from various backgrounds, including university faculty, researchers, government employees, and graduate students. Researchers who are raising children are also actively participating.



# Ripple effect after the Program



## Continuity

Alumni of the program encourage their colleagues to apply for the program. Creating the Human Resource Development Eco-system



## Cooperation

Alumni of the program return to their home institute and started to discuss student and faculty exchange by signing the MoU with Okayama University



## Collaboration

Alumni of this program continue their co-research with Okayama University faculties, and several ongoing research, as well as co-publications, are under the review



UNCTAD-Okayama University Special Lecture

Technology × SDGs



# Catching technological waves: Innovation with equity

Language English (with Japanese simultaneous interpretation)

2023. 1.31 Tuesday 15:30-16:20



Venue Okayama Visionary Commons, Okayama University Tsushima Campus  
3-1-1 Tsushima-naka, Kita-ward, Okayama City, Okayama

Capacity 150 (First-come-first-served basis) Applications will be closed when capacity is reached.

Free of charge

### Profile of Lecturer

Dr. Shamika N. Sirimanne is the Director of the Division on Technology and Logistics of United Nations Conference on Trade and Development (UNCTAD). She leads UNCTAD's work on Science, Technology and Innovation (STI), including e-Commerce and the digital economy, and manages the research for two of UNCTAD's flagship publications: Technology and Innovation Report, and Digital Economy Report.

### Registration

Please register from the QR code or the link below



Application deadline Tuesday, January 24, 17:00  
<https://forms.gle/j1qhWFKG2yQM4cvT6>



Shamika N. Sirimanne

Organizer Okayama University in cooperation with United Nations Conference on Trade and Development (UNCTAD)





## 岡山大学

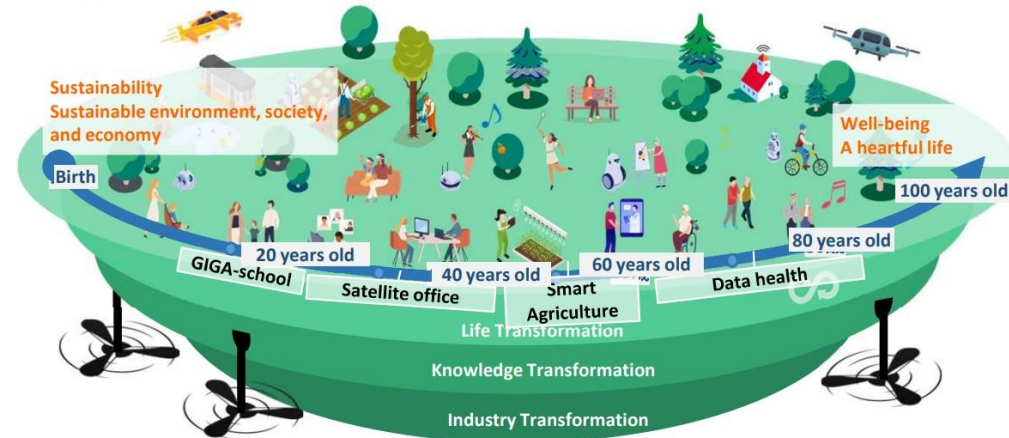
OKAYAMA UNIVERSITY

Young Female Scientist Programme was selected as one of the  
leading Initiatives by the United Nations!  
The report was displayed at the United Nations  
New York in May 2023



# Crystalizing Vision for a Digital Garden City Nation

- Unleashing the full potential of digital technology, “developing the character and abundance of the local areas,” and “being equal or more productive and convenient than the city areas,” crystalize the “Vision for a Digital Garden City Nation.”
- And achieve “Well-being” & “Sustainability in environment, society, and economy.”



## Basic concept for vision for a Digital Garden City Nation

To the extent that it follows the Digital principles and promotes the development of open data infrastructure, the government will support local activities that collaborate with multiple businesses and citizens to figure out the social issues.

## Main efforts for a Digital Garden City Nation

- (1) Developing digital infrastructure that supports local areas
- (2) Deploying digital services that solve local issues
- (3) Fostering digital human resources & Enhancing the new influx to local areas
- (4) Revitalizing local industries and foster startups for digital technology
- (5) Exporting the Digital Garden City Nation model to the world

## Setting clear goals

Require to set clear goals and to report to the supporter the progress and the results by monitoring all activities for a Digital Garden City Nation.



*A Research University that Together Creates and Nurtures a Bright Future*

Thank you for your attention!

**NASU Yasutomo M.D., Ph.D.**

**President**

**OKAYAMA UNIVERSITY**

