## **INFORMATION NOTE**

41st International Vegetable Training Course on "Vegetable Breeding for the Tropics",
The World Vegetable Centre, Bangkok, Thailand,

Duration: 21 October-01 November 2024 (excluding dates of arrival and departure)

Venue/Host: WorldVeg, Bangkok, Thailand

Sponsoring Organizations: African-Asian Rural Development Organization (AARDO) &

Government of Republic of China (Taiwan)

## Background:

The successful cultivation of high-quality vegetables relies heavily on the use of superior seeds. In tropical regions, the criteria for seed quality differ significantly from those in temperate climates. Specifically, tropical vegetables require increased tolerance to heat and strong resistance to a variety of pests and diseases prevalent in the region.

The rapidly growing private vegetable seed sector in Africa and Asia is actively improving its capabilities to provide farmers with superior seed varieties. However, both companies and public research institutions have recognized a crucial need for training in vegetable breeding. This is particularly true for optimizing the use of genebank resources and implementing advanced breeding techniques such as pyramiding disease resistance genes and marker-assisted selection.

The purpose of this vegetable breeding course is to address these essential areas, providing participants with the knowledge and skills necessary for successful vegetable breeding in tropical environments.

<u>About the Training Course</u>: The training programmes aim at enhancing technical, scientific and managerial skills of the participants to contribute to sustainable development of their countries through increased production and consumption of health-promoting vegetables.

## **Course Objectives:**

The course will give participants hands-on experience and expand their technical knowledge in tropical vegetable breeding. It allows participants to expand their professional network to fellow breeders and recognized experts in the field.

Course subjects include:

- Plant genetic resources conservation and utilization
- Germplasm screening for pests and disease resistance
- Set up of seed production pipeline

- Breeding scheme of tomato, chili, and cucurbit crop Hybrid cultivar development using male sterility
- systems
- Statistical methods for plant breeding
- Marker-assisted selection

<u>Methodology:</u> The course is taught by experts from the World Vegetable Center and Kasetsart University (Thailand). The instruction will be in English. The training methods will be a blend of classroom lectures, hands-on exercises, and excursions to leading vegetable seed producers in Thailand.

Participants will go through an evaluation of their current knowledge by taking both a pre-test and a post-test. This will help us gauge their starting point and measure the progress they make in various areas, including Germplasm collection and conservation, establishment of a company gene bank or seed storage system, setting up a seed production pipeline, understanding the breeding schemes for tomatoes, chili, and cucurbit crops, developing hybrid cultivars using male sterility systems, applying statistical methods in plant breeding, and utilizing marker-assisted selection techniques.

Application Process: The nominees are required to click on the link: <a href="https://aardo.org/worldveg.html">https://aardo.org/worldveg.html</a> a link to the application form (In Editable Pdf) and guidelines will appear. The nominee needs to download the form, fill it, get the duly filled in and endorsed by the nodal ministry and forward it to AARDO through the email: <a href="mailto:cbdp@aardo.org">cbdp@aardo.org</a> along with the recommendation letter from AARDO's Nodal Ministry and a passport copy.

Deadline for Application: 26 July 2024

The form must be completed in all aspects. Incomplete/wrong information may lead to rejection of application.

<u>Selection Procedure</u>: The nominations received from the member countries, after due screening and finalization will be forwarded to WorldVeg for their consideration.

<u>Presentation of Country Report:</u> the participants will be required to give a presentation during the programme on the situation in their respective countries. The guidelines for preparation of country report will be provided to the selected candidates along with the letter of acceptance.

<u>Post Training Action</u>: on completion of the training course, the participants will be required to submit a brief report and evaluation of the training to the AARDO Secretariat.

## **Contact Persons:**

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