

Fostering cooperation between Africa and Japan in the fields of Agricultural Innovation, Vocational Training, Extension, Research and Higher Education

Program: Creation of African Center of Innovation and Smart Agriculture (ACISA)

Organizer: Ministry of Agriculture, Water Resources and Fisheries: MARHP (www.agriculture.tn)

Co-organizers:

- Agricultural Extension and Training Agency: AVFA (www.avfa.agrinet.tn),
- Institution of Agricultural Research and Higher Education: IRESA (www.iresa.agrinet.tn)
- African Platform for Innovation and Networking: ITAUN(www.itaun.org).

1. Context

Africa has at least two major assets: its youth and its natural resources. To reap benefit of these assets, the agenda 2063 endorsed by African head of states and governments in 2015 put the emphasis on education, vocational training, creation of excellence centers for training and the enhancement of synergetic relations with the socio-economic world as well as the promotion of new generation of investment projects. Therefore, the capacity building, employability, entrepreneurship, social inclusion and sustainable stewardship of natural resources are at the heart of the aforementioned agenda. The role of the university and vocational training centers in the foundation of a society steered by knowledge and skills are clearly highlighted.

Agriculture is the backbone of the economy of most African countries. It contributes by almost 23% to the gross domestic product and provides 65% of jobs on the continent. Furthermore, while almost 60% of the world's arable lands are in Africa, the fact remains that the productivity and competitiveness of the agricultural products remain quite low because of the lack of professionalization, illiteracy, unskilled manpower and the weak leveraging of the research outcomes. Africa spent \$35 billion in 2015 to import food. It is expected that this bill will reach \$110 billion in 2025. According to the African development bank, the number of undernourished people will increase from 240 million in 2015 to 320 million by 2025.

It is worth to highlight that Africa has the capacity to fulfill the food and nutritional needs of its galloping population and seize the opportunity of the worldwide demographic boom to position itself as an exporting continent of agricultural and agri-food products. The scarcity of natural resources (water and land), climate change and the ensuing new biological threats (plant pests) plead in favor of smart agriculture.

Thanks to the support of the international cooperation, the African Union is deploying a tremendous effort to materialize the strategic orientations for Africa 2063. Many initiatives were undertaken in this prospect to boost South-South and triangular cooperation in matter of knowledge and capacity building (SIFA and PDDAA projects, etc.).

To stimulate this dynamic, civil society and public structures have organized many networking events. For instance, the African Innovation and Networking Platform (ITAUN) organized many African events (women researchers, African engineers' days, industry 4.0, training 4.0, etc.). The co-organizers of the present event, namely the Agricultural Agency for Extension and Training (AVFA), the Institution of Agricultural Research and Higher Education (IRESA) and the African Innovation and Networking Platform (ITAUN) organized between 21 and 23 June 2022 at the city of sciences, Tunis, the first African forum for agricultural training, higher education, and scientific research. More than 250 African stakeholders (trainers, researchers, startupper, extension experts, etc.) attended this event either in face-to-face or remotely. The presence of high personalities (three Tunisian ministers and the minister of agriculture from the Democratic Republic of Congo, ambassadors, presidents of universities, directors general, etc.) and international organizations (FAO, ILO), international cooperation highlights the importance accorded to this event.



In the framework of economic diplomacy, the Ministry of Agriculture, Water Resources and Fisheries organized on Friday, June 28, 2019, a meeting on the sidelines of the fourth session of the African Friendship and Partnership Days. The heads of African diplomatic and consular missions accredited in Tunisia, attended this meeting. The objective was the exploration of cooperation opportunities between African countries in the field of agriculture. A wide consensus emerged about the *prima facie* importance of agricultural training, higher education, scientific research, agricultural extension, and expertise in the fields of hydraulics and land management. Furthermore, the Islamic Development Bank and the Tunisian Agency for Technical Cooperation carried out a mapping of Tunisian resource centers that have the capacity to support international cooperation projects. Among 43 identified centers covering 13 priority sectors, six are under the authority of the Ministry of Agriculture, Water Resources and Fisheries, namely 14% of the total: Agricultural Extension and Training Agency (AVFA), Arid Regions Institute of Medenine (IRA Medenine), National Institute of Agronomic Research of Tunisia (INRAT), National Institute of Research in Rural Engineering and Forests (INRGREF), National Institute of Agronomy (INAT) and the Livestock and Pasture Office (OEP). The main criteria for selecting sectors relate to strategic alignment, scientific research and development, knowledge and know-how, previous experiences in terms of south-south and north-south cooperation. They give an image of Tunisia's ability to export and to share its expertise with other member countries of the Islamic Development Bank.

During his speech in the opening ceremony of the forum (from 21 to 23 June 2022), the Tunisian Minister of Agriculture, Water Resources and Fisheries proposed the creation of an African center for innovation and smart agriculture in the



framework of triangular cooperation between Tunisia, Japan, and African countries. He declared that Tunisia is ready to allocate the necessary land for building this center.

The organizers of this event are seeking the support from Japan for the technical assistance, the construction and equipment of this center to enhance triangular cooperation in the strategic domain of agriculture.

The Agricultural Extension and Training Agency (AVFA) and the Higher Institute of Professional Education of Matam-Senegal (ISEP-Matam) signed an agreement on June 22, 2022, to boost cooperation between Tunisia and Senegal in terms of capacity building in agricultural field. Another agreement was signed on February 28, 2020, between AVFA and APCA (Agency for the Promotion of Agricultural Advice in Niger).

On the other hand, several young Africans have followed higher education studies or professional training in the field of agriculture in Tunisia. Many others have benefited from short-term internships to improve their skills in agricultural specialties. The flow to African countries also exists. This cooperation was facilitated by international programs. There is great interest to structure this triangular cooperation, extend it to other fields such as innovation, scientific research and extension and perpetuate it.



2. OBJECTIVES

The present event aims to lay the groundwork for a structured and sustainable cooperation between Japan and African countries in the fields of innovation and climate-smart agriculture. Indeed, climate changes and the overexploitation of natural resources are forcing the recourse to a knowledge-based agriculture. The central idea revolves around the creation of an African center dedicated to expertise, innovation, and smart agriculture. Training, internship, innovation, and support activities for startups' creation will be carried out in this center for the benefit of African stakeholders. The goals are food security, agriculture resilience and sedentarization of youth in their territories.

The objectives are aligned with the Sustainable Development Goals, namely:

Goal 1: No Poverty.

Goal 2: Zero hunger (food and nutrition security).

Goal 8: Decent work and economic growth.

Goal 12: Responsible consumption and production patterns.

Goal 17: Partnership for the achievement of the sustainable development goals.



3. ORGANISATION AND FORMAT

The present event is organized by the Ministry of Agriculture, Water Resources and Fisheries. The Agricultural Extension and Training Agency, the Institution of Agricultural Research and Higher Education and the African Platform for Innovation and Networking are co-organizers. The event will be organized in a hybrid format.

Link to follow the meeting: https://us02web.zoom.us/webinar/register/WN_YvNvUoajQAiKbKg9HacbKA

4. EXPECTED RESULTS

The expected results of the project are:

- strengthen triangular cooperation between African countries, Tunisia, and Japan in the field of expertise, innovation, agricultural research, vocational training, extension, and higher education,
- foster the exchange of experience between African stakeholders,
- promote entrepreneurship and the creation of Agri-startups,
- strengthen the resilience of agriculture to climate change,



- wise stewardship of natural resources,
- improve the agriculture productivity and the standard of living of farmers,
- improve the attractiveness of the agricultural sector, particularly for youth and promoters,
- sedentarize youth in their homelands,
- make operational the triple helix model for innovation.

5. Participants and Target audience

The present event is aimed at all stakeholders of innovation: Agri-tech startupper, researchers, vocational trainers, agricultural extension agents, industrialists, farmers, professional organization, students, etc. Given the limited number of places in face-to-face mode (40), the organizers are eager to enlarge the access to the event to whom are interested via the video-conference system. Therefore, most participants will be from Africa and Japan.

Link for online participation: https://us02web.zoom.us/webinar/register/WN_YvNvUoajQAiKbKg9HacbKA

6. Conférenciers

The speakers are from various countries, organizations, and companies:

- Tunisia : Pr. Zayani Khemaies (DG of AVFA), Pr. Hichem Ben Salem (DG of IRESA), Dr. Chaker Essid (ITAUN, Faculty of Sciences), Moez Chafra (President of University Tunis El-Manar),
- FAO: Philippe Ankers, Head of the FAO Subregional Office for North Africa,
- Telnet: Anis Youssef, Chief Innovation Officer,
- Togo: Dr. Etchri Edeh Dona, e-agribusiness & sky IT SARL
- Senegal: Ms. Aminata Diasse-Sarr, Director of ISEP of Matam
- Maroc: Mr. Faissal Sahbaoui, Director General of AgriEdge, University Mohamed 6
- Niger: Mr. Bawa Gaoh Ousmane, Director General of APCA

7. Preliminary/Draft Agenda

Time	Title	Speakers
09h00-09h30	Welcome speech Opening speech	- Pr. Hichem Ben Salem, DG of IRESA on behalf of organizers (AVFA + IRESA + ITAUN)

		<ul style="list-style-type: none"> - Pr. Elies Mahmoud Hamza, Minister of Agriculture, Water Resources and Fisheries - Mr. Ryosuke OGAWA, Vice Minister for International Affairs, Ministry of Agriculture, Forestry and Fisheries, Japan
09h30-09h50	Presentation of the report of the first edition of the African Forum for Agricultural Training, Higher Education and Research – FAEFA	<ul style="list-style-type: none"> - Dr. Chaker Essid, President of African Platform of Innovation and Networking (ITAUN) on behalf of organizers (IRESA + AVFA + ITAUN)
09h50-10h10	Smart agriculture around the world and in Africa: state of play and outlook	<ul style="list-style-type: none"> - Philippe Ankers, FAO

10h10- 10h40	The floor to our sub-Saharan partners:	<ul style="list-style-type: none"> - Mme Aminata Diasse-Sarr, Director of ISEP-Matam (Senegal) - Mr. Bawa Gaoh Ousmane, DG of APCA, Niger - Dr. Etchri Edeh Dona, Sky IT SARL (Togo)
10h40-11h00	Coffee break	
11h00-11h20	Presentation of the project submitted by the organizers to TICAD8: Triangular cooperation in expertise, innovation, training, higher education, scientific research to enhance skills, smart agriculture, and startup creation in the field of agriculture.	Pr. Khemaies Zayani on behalf of organizers (AVFA, IRESA, ITAUN)

	Final goal : gradual approach until the creation of an African Centre for Innovation and Smart Agriculture.	
11h20-12h00	Technological innovation in agriculture	<ul style="list-style-type: none"> - Anis Youssef, Chief Innovation Officer, - Dr. Etchri Edeh Dona, Sky IT SARL (Togo), - Mr. Faissal Sahbaoui, Director General of AgriEdge, University Mohamed 6, Morocco
12h00-12h30	Tripartite agreement to promote partnership in innovation and smart agriculture.	<p>Moez Chafra, President of Tunis El Manar University,</p> <p>Zayani Khemaies, DG of AVFA</p> <p>Hichem Ben Salem, DG of IRESA</p>



12h30	Closing	
-------	---------	--