



United Nations

Department of
Economic and
Social Affairs



Republic of Rwanda
Ministry of Agriculture
& Animal Resources



AFRICAN TRAINING WORKSHOP ON

“APPLICATIONS OF JUNCAO TECHNOLOGY: MUSHROOM PRODUCTION, LIVESTOCK FEED AND ENVIRONMENTAL PROTECTION”

▪ **Division for Sustainable Development Goals of DESA** ▪ **National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University of China** ▪ **Ministry of Agriculture and Animal Resources, Rwanda** ▪ **Rwanda Agriculture and Animal Resources Development Board**

Concept Note

31 July to 6 August 2024

Huye/ Kigali, Rwanda

Background

The Division for Sustainable Development Goals of the United Nations Department of Economic and Social, in collaboration with the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) of the People’s Republic of China, is implementing a project entitled “Enhancing capacity of developing countries to achieve sustainable agriculture through the transfer of Juncao technology for alleviating poverty and promoting productive employment”. This project is being funded by the UN Peace and Development Trust Fund. To support countries in achieving the Sustainable Development Goals and promote multilateralism and international cooperation, Chinese President Xi Jinping spearheaded a series of initiatives, notably the establishment of the China-UN Peace and Development Trust Fund, which encourages scientific and technological innovation and contributes to the work of the United Nations system and enhance the role of the United Nations. Hence, UNDESA’s Juncao Project addresses the capacity building needs of developing countries to support their national development aspirations, including eradication of poverty, reduction of hunger, use of renewable energy, promotion of employment, protection of the environment and responsiveness to climate change. The project fits the special conditions and needs of many developing countries and has the potential to help developing countries promote sustainable food systems, overcome development challenges and advance the implementation of the 2030 Agenda and the Sustainable Development Goals.

The 2030 Agenda for Sustainable Development recognizes that capacity-building forms part of the means of implementation for the SDGs (paragraph 41). Each SDG contains targets relating to means of implementation, including capacity- building. Moreover, SDG 17, which covers means of implementation and the global partnership for sustainable development, contains target 17.9 which aims to: "Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation”.



In that regard, UN DESA is collaborating with the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) to promote the adoption and use of Juncao technology in developing countries. This technology is being transferred through south-south cooperation and upon request from interested countries, allows countries to address major challenges such as soil erosion and environmental degradation. The technology also allows smallholder farmers, livestock keepers, and entrepreneurs in developing countries to grow several types of nutritious mushrooms from dried, chopped grasses, without cutting down trees and damaging the environment. Such an environmental-friendly technology can help small-scale farmers and farming communities to develop a low-cost, commercial-scale mushroom cultivation industry that can provide sustainable livelihood for thousands. In addition, the technology can also be used for producing cattle feed, methane gas and minimize soil erosion to combat desertification. In the long run, depending on local demand and the scale of production, it may also provide opportunities for exporting the mushrooms cultivated using the technology.

To build national capacities, UNDESA has partnered with FAFU to promote Juncao technology transfer, build and develop capacities across the three interlinked individual, organizational, and enabling environment dimensions using various strategies such as workshops and study tours organized at the national, regional and international levels. In that regard, success of the project will be measured by the number of smallholder farmers, livestock farmers, government experts, researchers and entrepreneurs who have acquired the necessary skills and knowledge to apply Juncao technology. This will enhance national ownership and project sustainability.

To further deepen the adoption of Juncao technology in developing countries, UNDESA and FAFU are organizing a capacity building workshop on “Applications of juncao technology: mushroom production, livestock feed and environmental protection” in Rwanda. The workshop will target participants from the project’s pilot countries, namely Nigeria, Tanzania and Zimbabwe as well as participants from Rwanda. The capacity building workshop is convened in the context of UNDESA’s mission to advise interested Governments on the ways and means of translating policy frameworks developed in UN conferences and summits into programmes at the regional level and, through technical assistance that helps build national capacities. Capacity building activities are also aimed at strengthening and maintaining the capabilities of States and societies to design and implement strategies that minimize the negative impacts of current social, economic and environmental crises and emerging challenges. As a cross-cutting entry point, capacity building activities promote the integration of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) into national sustainable development planning frameworks, sharing lessons learned and good practices through workshops and related events.

II. Objectives and Methodology

The workshop will facilitate the transfer of innovative agricultural techniques between China, Rwanda, and project countries in sub-Saharan Africa, adapting best practices to local conditions.



To ensure that the transfer of Juncao technology is a key to sustainable results at country level and ensuring that UNDESA's Juncao Project's efforts lead to lasting changes, this regional training workshop will primarily involve enhancing the knowledge and skills of smallholder farmers, livestock farmers, government agricultural experts engaged with agricultural extensions services, and researchers with skills in Juncao technology. Building and strengthening the capacities of these groups in Juncao technology is essential to driving sustainable change, transforming agrifood systems and achieving the Sustainable Development Goals, particularly goals related to ending hunger, eradicating poverty, creating jobs, empowering women and youth and protecting the environment.

Participants, comprising farmers, women, youth and experts from government and public institutions supporting agriculture will be introduced to various concepts, methods, and tools for applying Juncao technology in their national and local contexts. The seven-day capacity building workshop at the China-Rwanda Agriculture Technology Demonstration Center in Huye district, South Province, Rwanda will delve into several key areas critical for effective capacity development, including: Basic Knowledge of Edible Mushroom (Morphology, Ecology, Physiology); Mushroom Spawn Production Techniques; Mushroom Substrates Production & Sterilization Practice; Oyster Mushroom Cultivation Techniques and Models Practice; and Mushroom Tissue Culture Techniques Practice. In that regard, the workshop will build on national workshops organized in Nigeria, Tanzania and Zimbabwe, regional workshops held in Rwanda and Ethiopia and study tours organized in China and Fiji during the current second phase of the project.

III. Participants

The participants will include target beneficiaries of countries in the African region, including agricultural experts and farmers from the project countries, experts from the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) of the People's Republic of China, Ministry of Agriculture and Animal Resources, Rwanda, and the United Nations.

IV. Expected Outcomes

At the conclusion of the Capacity Building Workshop, it is anticipated that the participants will:

- Have acquired enhanced capability and a better understanding of the requirements for successful implementation of Juncao technology and its utility to support the realization of sustainable agriculture and the implementation of the SDGs.
- Be able to participate in ongoing and planned national Juncao activities to advance the Agenda and the SDGs' implementation.
- Be able to remain in a community of similar practitioners and experts to support one another in reaching the implementation of Juncao technology and sustainable agriculture.



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