



United Nations

Department of
Economic and
Social Affairs



**Ministry of Livestock and
Fisheries**



NATIONAL CAPACITY BUILDING WORKSHOP ON APPLICATIONS OF JUNCAO TECHNOLOGY AND ITS CONTRIBUTION TO THE ACHIEVEMENT OF SUSTAINABLE AGRICULTURE AND THE SUSTAINABLE DEVELOPMENT GOALS IN TANZANIA

- Division for Sustainable Development Goals of DESA ▪ National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) of China ▪ Ministry of Livestock and Fisheries, Tanzania

Dar es Salaam, Tanzania

8-11 March 2022

I. Purpose of the workshop

The Division for Sustainable Development Goals of the United Nations Department of Economic and Social Affairs (DSDG/UNDESA), in collaboration with the National Engineering Research Center for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) of China and the Ministry of Livestock and Fisheries, Tanzania, is organizing a Capacity Building Workshop on “Applications of Juncao Technology¹ and its Contribution to the Achievement of Sustainable Agriculture and the Sustainable Development Goals in Tanzania” from 8-11 March 2022.

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 country 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.

The 2030 Agenda 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

¹ Juncao technology has been developed by the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU) of China. The technology has a multi-faceted approach of cultivating mushroom and fungi for food and medicinal purposes while at the same time addressing soil erosion for maintaining the volume of arable land and also supporting livestock feed development.

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) of the People's Republic of China, under the UN Peace and Development Trust Fund, on 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 linked to issues that are important to developing countries, including eradication of poverty, reduction of hunger, use of renewable energy, promotion of employment, protection of the environment and responsiveness to climate change. It fits the special conditions and needs of many developing countries in Asia and Africa and has the potential to help developing countries overcome development challenges and advance the implementation of the 2030 Agenda and the SDGs.

This technology, which is being transferred to developing countries through south-south cooperation and upon request, allows farmers 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.

Hence, the mobilization of capacity building and the transfer of environmentally sound technologies to developing countries such as the Juncao technology contributes to achievement of the 2030 Agenda for Sustainable Development and the SDGs. DESA, in partnership with FAFU will continue to work with the Government towards ensuring that poor rural women and unemployed youth have sustainable livelihoods and decent employment through support to capacity-building efforts aimed at promoting agriculture. When successfully implemented, the Juncao technology will contribute to addressing poverty, employment and environmental concerns in rural areas.

The High-Level Political Forum on Sustainable Development (HLPF) that has the central role in overseeing follow up and review in implementing the Goals and targets at the global level has also underlined and reiterated the importance of supporting developing countries in their efforts

to implement the SDGs and advance the implementation of the 2030 Agenda for Sustainable Development.²

II. Background

Progress on ending hunger and eradicating poverty has either stalled or reversed as a result on the impact of the COVID-19 pandemic over the past two years. Job losses from the pandemic as well as lockdown measures that disrupted trade and agricultural activities have exacerbated poverty and food insecurity, dashing hopes of achieving the Sustainable Development Goal of ending extreme poverty and hunger. The number of people living in extreme poverty globally is projected to decrease slightly to 876 million in 2022 but is expected to remain well above pre-pandemic levels. Poverty and hunger are forecast to further increase in the world's most vulnerable economies, particularly in Africa, where the absolute number of people in poverty is anticipated to rise through 2023.

These challenges will also impact the United Republic of Tanzania. In 2020, the GDP growth rate slowed to an estimated 2.0 percent, as the COVID-19 pandemic negatively impacted sectors such as tourism and manufacturing. GDP growth in Zanzibar slowed to an estimated 1.3 percent, due to a decline in tourism activity.³ Prior to the COVID-19 pandemic, Tanzania had recorded sustained strong income growth and a persistent decline in poverty over the past decade. The proportion of people living on less than \$1.90 a day declined from 34.4 per cent in 2007 to 26.4 per cent in 2018.⁴ Similarly, according to the 2019/20 Zanzibar Household Budget Survey, the percentage of people living below basic needs poverty line declined from 30.4 percent in 2015 to 25.7 percent in 2020. However, poverty was not reduced as much as the population grew, resulting in an increase in the absolute number of poor people. In 2018, about 14 million people lived below the national poverty line of TZS 49,320 per adult equivalent per month. Using the \$1.90 per person per day international poverty line, the absolute number of poor people grew from 13 million in 2007 to about 26 million (about 49 per cent of the population) Vulnerability is also high, with 3 out of 4 Tanzanians who moved out of poverty, falling back into it.

Although most of the reduction in poverty was witnessed in rural areas, levels of poverty remain particularly high in rural areas. The underlying causes of poverty in rural areas include low

² UN, Ministerial Declaration of the 2017 High-Level Political Forum on Sustainable Development, convened under the auspices of the Economic and Social Council on the theme eradicating poverty and promoting prosperity in a changing world, Doc. # E/2017/L.29-E/HLPF/2017/L.2, 14 July 2017.

³ World Bank. Tanzania Economic Update. Transforming Tourism: Toward a Sustainable, Resilient, and Inclusive Sector. July 2021, Issue 16

⁴ <http://documents1.worldbank.org/curated/en/431111575939381087/pdf/Executive-Summary.pdf>

investment, inadequate infrastructure, low productivity growth of the agriculture sector (averaging 3.3 per cent over a decade), worsened by unequal access to resources, land degradation and the ongoing impacts of climate change and natural disasters. The consequences of climate change for agriculture and food security are also serious because of the country's reliance on rain-fed agriculture. In addition to being rural in character, poverty has mostly affected women, with about 60 per cent of Tanzanian women living in extreme poverty.⁵

These challenges are complex and multidimensional, requiring innovative solutions that are home-grown, sustainable, replicable, and scalable. Some of these solutions are also provided through South-South and Triangular cooperation as exemplified by the Juncao technology that was developed by Fujian Agriculture and Forestry University and is implemented in over 100 developing countries, including in the United Republic of Tanzania where agriculture is the backbone of the economy. The sector supports about 80 percent of rural livelihoods and produces close to 95 percent of the country's food requirements. Therefore, addressing food insecurity and malnutrition remains one of the country's most pressing challenges.

The country's agriculture sector is vastly diverse (including the cultivation of crops, livestock production, forestry, and fisheries) and contributes significantly to national gross domestic product (GDP).⁶ In 2017, it accounted for 28 percent of GDP.⁷ However, during 2011-18, the agricultural sector contribution to GDP grew much slower than the rest of the economy, averaging 4.4 percent a year or 1.4 percent per capita. With a large proportion of the poor dependent on agriculture for their livelihoods, agricultural sector growth is crucial for poverty reduction. Hence, the government recognizes agriculture as central to realizing its objectives of socioeconomic development, which are outlined in the Tanzania Development Vision 2025 and its supporting five-year development plans as well as the Zanzibar Medium Term Development Strategy (2021 – 2025). The Agriculture Sector Lead Ministries in Tanzania that include the Ministry for Livestock and Fisheries Development; Ministry of Agriculture; Ministry responsible for Industries Trade and Marketing; and Prime Minister's Office-Regional Administration and Local Government have a vision of providing policy guidance and services to a modernized, commercialized, competitive and effective agriculture and cooperative systems by 2025. Similarly, the main goal of the Revolutionary Government of Zanzibar in the agricultural sector is to achieve the four-fold objective of increasing productivity of agricultural land, export revenue, local production of healthy foods by environmentally sustainable practices, and enhancing eco-

⁵ United Republic of Tanzania, 2015. Gender Economics of Women and Poverty Eradication Report

⁶ FAO, The United Republic of Tanzania Resilience Strategy 2019-2022, paras v, 1

⁷ World Bank. 2019. Tanzania Mainland Poverty Assessment. World Bank, Washington, DC. © World Bank. <https://openknowledge.worldbank.org/handle/10986/33031> License: CC BY 3.0 IGO.

tourism through preservation of the country's unique biodiversity. The Juncao technology contributes to these objectives.

III. Objectives and Methodology

This capacity building workshop aims to enhance knowledge and strengthen Tanzania's national capacities to improve its policies and programmes supporting sustainable agriculture through the transfer of Juncao technology in order to eradicate poverty, and promote productive activities, income generation and entrepreneurship especially among the poor, smallholder farmers, women, youth and to effectively contribute to the achievement of the Sustainable Development Goals. In the context of the 2030 Agenda for Sustainable Development, the workshop will highlight the benefits of South-South and Triangular Cooperation as a means of enhancing access to science, technology and innovation, knowledge sharing as well as capacity building and to effectively contribute to the achievement of the Sustainable Development Goals (SDGs).

To accomplish these objectives, national experts will be drawn from various line ministries, academia, research centers, the United Nations Country Team, and civil society organizations engaged in improving rural livelihoods. Smallholder farmers and livestock herders, who are the intended beneficiaries of Juncao technology will be invited to participate in the national workshop. Juncao technology experts from Fujian Agriculture and Forestry University will make presentations on various aspects of the Juncao technology. The meeting will allow a robust exchange of ideas among national agricultural experts, government officials, representatives from the United Nations system, smallholder farmers and civil society. This interaction will help sharpen policies as well as shape the national debate on how Tanzania and its development partners can speed up progress towards reducing hunger and eradicating extreme poverty.

IV. Expected outcome of the Capacity Building Workshop

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.

V. Contacts

Ms. Ang Chen

Sustainable Development Officer
Division for Sustainable Development Goals
Department of Economic and Social Affairs
United Nations
New York, NY 10017 USA
Email: chena@un.org

Dr. LIN Dongmei

Vice Director of National Engineering Research Center of Juncao Technology
Fujian Agriculture and Forestry University
Fuzhou, Fujian, P.R. China
Email: 982245079@qq.com

Ms. Ruoshi Geng

National Strategies and Capacity Building Branch
Division for Sustainable Development Goals
Department of Economic and Social Affairs
United Nations
New York, NY 10017 USA
E-mail: ruoshi.geng@un.org