United Nations | Department of Economic and Social Affairs

# INTERNATIONAL STUDY TOUR ON JUNCAO TECHNOLOGY AND ITS CONTRIBUTION TO ACHIEVING SUSTAINABLE AGRICULTURE AND THE SUSTAINABLE DEVELOPMENT GOALS (SGDs)

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**Concept Note**

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## 1. Purpose of the study tour

The international study tour to be undertaken in Fujian Province, People's Republic of China is convened in the context of UNDESA's mission to build capacities of interested Governments on the ways and means of translating policy frameworks developed in UN conferences and summits into programmes at the national level. 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 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". 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.

In that regard, UNDESA 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 the imperative to get back on track and accelerate the implementation of the 2030 Agenda for Sustainable Development and the Sustainable Development Goal, in particular goals related to the of eradication of poverty, reduction of hunger, use of renewable energy, employment creation, empowerment of women and youth, protection of the environment and to climate change adaptation and mitigation.

The Juncao 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 edible and medicinal 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 boost household incomes and improve livelihoods. In addition, the technology can also be used for producing livestock feed, methane gas, minimize soil erosion and to combat desertification. Hence, the mobilization of capacity building and the transfer of environmentally sound technologies to developing countries such as the Juncao technology contributes to the achievement of the 2030 Agenda for Sustainable Development and the SDGs.

## II. Background

In September 2015, the General Assembly adopted resolution A/RES/70/1: *Transforming Our World: The 2030 Agenda for Sustainable Development.* The 2030 Agenda committed to ending poverty in all its forms and dimensions, including by eradicating extreme poverty and ending hunger and ensuring access by all people, the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round by 2030. The agenda also committed to devoting resources to developing rural areas and sustainable agriculture and fisheries, supporting smallholder farmers, especially women farmers, herders and fishers in developing countries, particularly least developed countries. This commitment was further reinforced by the Pact for the Future and the 2023 SDG Summit where world leaders underscored the imperative to accelerate actions to end hunger, food insecurity and all forms of malnutrition, and the realization of the right to adequate food, including through access to sufficient, safe and nutritious foods all year round, the promotion of sustainable and resilient agriculture and food systems, as well as safe, nutritious and healthy diets.

The Summit of the Future sought to catalyze innovative, forward-looking solutions that could address the most pressing global challenges, including food insecurity, climate change, and growing inequality. In that regard, the project draws inspiration from the vision of the *Summit of the Future* and its outcome document *Pact for the Future*, which emphasize the urgent need for stronger multilateral action and inclusive policy frameworks. By championing a people-centred approach and cross-sectoral alliances, the *Summit of the Future* sets the stage for transformative collaborations that empower local communities. The Juncao project aligns with these objectives by harnessing scientific advancements to build resilient livelihoods, accelerate environmental action, reduce global disparities in science, technology and innovation, strengthen social protection systems, and protect natural resources. In direct support of the *Pact for the Future*, it enhances beneficiary countries' capacities to implement integrated, sustainable agricultural

strategies that prioritize inclusivity, and ecological integrity, contributing not only to livelihood improvements but also to long-term goals of climate resilience and inclusive economic growth. It ultimately demonstrates how high-level global commitments translate into practical, community-based solutions.

Similarly, in 2023, the Secretary-General identified food systems as one of the six transformative entry points or key transitions as critical investment pathways to deliver the SDGs. According to the Secretary-General, "food systems transition can only take place if it fully and measurably redresses the food insecurity that is disproportionately experienced by women and people living in rural areas." And at the 2021 UN Food Systems Summit, calls were also made for innovative solutions and approaches to food systems transformation to help accelerate implementation of the 2030 Agenda for Sustainable Development. Transforming food systems can also have catalytic and multiplier effects across other SDGs such as energy access and affordability, jobs and social protection, and the planetary crisis of climate change, biodiversity loss and pollution.

In the resolutions on 'Eradicating rural poverty to implement the 2030 Agenda for Sustainable Development'(A/RES/77/183), the General Assembly reaffirmed that 'eradicating poverty in all its forms and dimensions, including extreme poverty, which is disproportionately high in rural areas, is the greatest global challenge facing the world today and is an indispensable requirement for sustainable development, particularly in Africa, in the least developed countries, in landlocked developing countries, in small island developing States and in some middle -income countries…" Further, the General Assembly in its resolution 75/230 "…encourages the international community to enhance international cooperation and to devote resources to developing rural and urban areas and sustainable agriculture and fisheries and to supporting smallholder farmers, especially women farmers, herders and fishers in developing countries, particularly in the least developed countries." Similarly, the Buenos Aires outcome document of the second High-level United Nations Conference on South-South Cooperation (A/RES/73/291) also recognizes that poverty reduction policies and strategies, in conformity with national conditions and circumstances, have enabled some developing countries to lift millions of their citizens out of extreme poverty. In that regard, the outcome document invited all relevant stakeholders to share their knowledge and experience, particularly homegrown development approaches, to intensify efforts towards the eradication of poverty in all its forms and dimensions through South-South and triangular cooperation.

To address some of these challenges, especially closing the technological gap in agriculture and boosting the contribution of agriculture to ending extreme poverty and hunger, and to shared prosperity, UNDESA and FAFU are promoting the transfer of Juncao technology to developing countries. In 2017, DESA launched a project on Juncao Technology under the framework of the 2030 Agenda for Sustainable Development Sub-Fund. The project focused on raising awareness of the potential of the technology at global, regional, and national levels. The focus of the first phase were selected developing countries in the African and the Asia-Pacific regions.

During the first and second phase of the Project, more than 4,200 participants including policymakers, technicians, and small-scale farmers have been trained. The technology has been successfully transferred to several developing countries in African, Asia-Pacific, Latin American

and Caribbean countries, including Albania, Cambodia, the Democratic Republic of Congo, the Central African Republic, Cook Islands, Eritrea, Fiji, Ghana, Kenya, Laos, Lesotho, Madagascar, Mozambique, Namibia, Nigeria, Papua New Guinea, Philippines, Rwanda, South Africa, Sri Lanka, Sudan, Surinam, South Sudan, Thailand, Tonga and Zimbabwe. Ethiopia, Jamaica, Nepal are currently considering implementing the Juncao technology in their countries.

In this context, an international study tour will be held in May 2025 in Fujian Province, with the participation of government officials from the Ministries of Agriculture, Livestock and Fisheries, researchers and academia from UNDESA Juncao Project countries. This international study tour is one of the planned activities of the project funded by the United Nations Peace and Development Fund.

## III. Objectives and Methodology

This international study tour provides an opportunity to equip policymakers, experts along the agri-value chain to learn more about the benefits of Juncao technology as well as enhance the capacities of these groups with the requisite know-how to transfer Juncao technology in their respective countries, adapting it to their specific circumstances. Hence, the study tour aims to enhance knowledge and strengthen national capacities of participating countries to improve their policies and programmes supporting sustainable agriculture and protecting the environment through the transfer of Juncao technology. 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.

## IV. Participants

The participants will include target beneficiaries of countries, including high-level policy makers, agriculture, food and nutrition experts, entrepreneurs, 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, and the United Nations.

## V. Expected outcome of the Capacity Building Workshop

At the conclusion of the study tour, it is anticipated that the participants will:

- Have been exposed to and learnt about the Juncao industry in Fujian Province, China, especially its contribution to poverty eradication, employment creation, and environmentally protection.

- 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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