

## **Juncao Grass Green Barrier**

### **Ecological Control and Industry Development by Juncao Technology**

**12:30 - 13:45, Thursday, 11 November 2021, Glasgow Time**

**Virtual Side Event, SDG Pavilion at COP26**

#### **Concept Note**

Despite progress in reducing the number of undernourished persons and the prevalence of undernourishment in recent decades, people living in rural areas have been left behind, with many continuing to face grinding poverty and hunger. In particular, smallholder farmers in remote and mountainous areas, drought and desertification- affected regions, and small island developing states encounter constant challenges for growing crops, putting them at risk of poverty and hunger.

The socio-economic impacts of the COVID-19 pandemic has further compounded these challenges, adding urgency to the call to galvanize action and delivery of the SDGs and the eradication of poverty and hunger, particularly in rural areas. Inadequate land use patterns and lack of sufficient arable land, land degradation, and desertification compound the perennial problems of poverty and hunger in many developing countries.

To support countries in achieving the SDGs, Chinese President Xi Jinping spearheaded a series of initiatives, notably the establishment of the China-UN Peace and Development Trust Fund. The Fund aims to promote scientific and technological innovation in the developing world and contribute to the work of the UN and multilateralism. Sponsored through the Fund, the UN Department of Economic and Social Affairs (UN DESA), in collaboration the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University, launched an SDG project on poverty alleviation and sustainable agriculture through using Juncao technology in several developing countries.

Juncao Technology refers to the techniques that utilize Juncao grass as raw material, through the decomposition, promotion and symbiosis functions of fungi, to produce mushrooms, functional food, feed, fertilizer, biomass energy, biological materials, and to be applied in environmental protection and ecological treatment. Juncao grass has also been applied to ecological management, such as soil erosion control, desertification control, saline-alkali soil management, improvement and regulation of microclimate, wind prevention

and sand fixation, rehabilitation of obsolete mines, water conservation, air purification, carbon fixation and oxygen release (absorption of carbon dioxide and release of oxygen).

There have been rich experiences in building Juncao grass ecological barriers in various ecologically fragile areas in China, which have been extended to other developing countries.

In the Yellow River basin, Qinghai-Tibet Plateau and some arid and semi-arid areas of China, a few Juncao grass species are applied as pioneer plants. After 100 days, one node of giant Juncao grass will grow into a clump with about 10-20 tillers, and the root system can fix sand in surrounding 15 square meters space. In Rwanda and Lesotho, Juncao grass was planted to control soil erosion, compared with the local corn planting field, the soil loss reduced by more than 97%, and the water loss reduced by more than 80%.

Through the transfer of technology and capacity building, the Juncao project has improved the availability and access to productivity-enhancing technology, benefiting smallholder farmers. To date, the Juncao technology demonstration centers and bases have been established in 13 countries by FAFU and around 8,000 agricultural officials and experts from developing countries have been trained. By supporting mushroom cultivation and animal feed, this technology contributes to boosting food security and the transition to a green economy through environmentally friendly technology, more sustainable agriculture, and green jobs, which is the foundation for sustainable and inclusive development.

Through south-south cooperation, this initiative aims to enhance knowledge and strengthen national capacities of developing countries to improve their policies and programmes by supporting sustainable agriculture, promoting productive activities, income generation and entrepreneurship, contributing to getting back on track and accelerating global efforts to achieve the SDGs. In particular, the project is addressing rural poverty and hunger, decent job deficits, and inequality as key levers to getting back on track to achieve the SDGs.

The Juncao technology would contribute to the achievement of the following SDGs and targets:

- By 2030, achieve full and productive employment and decent work for all women and men, including young people and persons with disabilities, and equal pay for work of equal value.

- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

In September 2021, UN Secretary-General António Guterres stated in his letter to the Forum on the 20th Anniversary of Juncao Assistance and Sustainable Development Cooperation that eradicating poverty in all forms and dimensions, including extreme poverty and hunger, is the greatest global challenge facing the world today. “It is therefore critical to enhance knowledge and strengthen national capacities of developing countries to improve their policies and programs, supporting sustainable agriculture and environment through the transfer of Juncao technology,” he said.

In this context, on 11 November 2021, Division for Sustainable Development Goals, United Nations Department of Economic and Social Affairs, is co-organizing a COP 26 virtual tour on “Juncao Grass Green Barrier: Ecological Control and Industry Development by Juncao Technology,” in collaboration with the National Engineering Research Centre for Juncao Technology of the Fujian Agriculture and Forestry University (FAFU), and Fujian Juncao Development Engineering Association.

This side event will share the current situation of Juncao ecological barrier construction in different site types such as coastal areas, desertification areas, saline-alkali land and mines, to provide countries with a sustainable development plan that closely integrates ecological governance and industrial development.

### **Objectives and Expected Outcomes**

- To raise the awareness of policymakers, national agricultural and environmental experts, and small-scale farmers and build the capacities of Juncao beneficiaries and equip them with the knowledge and understanding of Juncao technology that will enable them to expand the amount of arable land by addressing soil erosion and desertification related challenges.

- To 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 SDGs.
- To showcase the achievements of the Juncao Technology Project, share experience, and expand the partnership for the coming years and to additional countries.

## **Participation**

The Member States, representatives from UNDESA and other UN entities and international organizations, the public, civil society organizations, the private sector, academia, agriculture, food and nutrition experts, and entrepreneurs will participate in the virtual event.

The virtual tour is conducted by a combination of live broadcast and recorded video. To ensure the viewing effect, good access to the internet is necessary.

## **Language**

English

## **Registration Link**

<https://forms.office.com/r/6VbaUWHwVB>

*Participants are kindly requested to register participation online. Should we have upcoming events on the same topic, we will contact you accordingly.*

## **Meeting Link**

Join Zoom Meeting

<https://zoom.us/j/91515236452?pwd=NzF4a2gva1VuQWw1Zjk1aENoT0FXdz09>

Meeting ID: 915 1523 6452

Passcode: 865270

## **PROGRAMME**

*Moderator: Ms. Dongmei Lin, Vice Director, National Engineering Research Center of Juncao Technology, FAFU, China*

### **Session I – Opening Session**

- Opening Remarks, Mr. Amson Sibanda, Chief, National Strategies and Capacity Building Branch, DSDG/UNDESA
- Opening Remarks, Mr. Lin Zhanxi, Chief Scientist, National Engineering Research Center of Juncao Technology, Fujian Agriculture and Forestry University, China
- Video footages from Heads of State, beneficiary countries of Juncao Technology

### **Session II - Videos on the Juncao Technology**

- What is Juncao Technology? What is Juncao Grass Green Barrier?

### **Virtual Tour on Juncao Ecological Control and Industry Development Sites**

Juncao Green Barrier: Island and Beach

1. Juncao Green Barrier: Desertification Area
2. Juncao Green Barrier: Rocky Desertification Area
3. Juncao Green Barrier: Saline and Alkaline Area
4. Juncao Green Barrier: Soil Erosion Area
5. Juncao Green Barrier: Mining Area
6. Juncao Green Barrier: River Bank

### **Session III - Presentation on the Potential of Juncao Technology to Cope with Climate Change: Disaster Prevention, Disaster Reduction, Production Recovery**

### **Session IV – Questions and Answers**