



**HLPF 2021 Online High-level Side Event Leveraging Science, Technology,
and Innovation to Build More Resilient Food Systems**

The case of the JUNCAO Technology

Permanent Secretary for Agriculture, Mr. Ritesh Dass

Representative from UN member States

Representative from UN Department of Economic & Social Affairs
(UNDESA) and other UN organizations

Representatives from Civil Society Organization

Representatives from the Private sector

Academia

Agriculture Food and Nutrition Experts

Fellow Panelists

Excellences

Distinguished Delegates

Ladies and Gentlemen

Bula Vinaka and Greetings from Fiji.



Thank you for the opportunity to participate in this important forum and for allowing me to provide an insight on achievements of implementing JUNCAO technology in Fiji, with a particular focus on transforming agriculture and promoting the implementation of the 2030 Agenda.

The Agriculture Sector remains the backbone of Fiji's economy since independence. Hence, its impact cuts across all sectors and individuals in our developing nation. The continuous increase of our total population and other factors such as climate change and rural urban migration puts more pressure on farmers and key stakeholders to perform in a sustainable manner than ever before.

The overall mandate of the Ministry of Agriculture is to provide food and nutrition security, income and employment through a modernized and resilient agriculture sector. These directions is guided by Strategic Priorities that ensures Food & Nutrition Security, Improved livelihood, Climate Smart Agriculture, Sustainable Land Management and Commercial Agriculture Development. Embedded in these priorities is the introduction and implementation of JUNCAO Program in Fiji.

The China-Fiji JUNCAO Technology Demonstration Center Project was initiated by both leaders of China and Fiji. The project was the outcome of an Economic and Technological Cooperation Agreement signed on 5th September 2011 between Fiji and the Government of People's Republic of China. Its subsequent contract was signed on April 29th, 2014. The current Mushroom program implemented by the Ministry is the outcome of this



engagement between the Ministry of Agriculture and JUNCAO team from China, with key objectives being:

- expand mushroom and JUNCAO production in Fiji;
- provide hands on training to interested farmers and technical staff;
- provide technical assistance; and
- Distribute mushroom starter boxes (10 substrates and Juncao cuttings) to interested stakeholders.

The aim of the project is to ensure that Fijians have access to Food and Nutrition Security and later venture into Commercial Agriculture. JUNCAO technology program in Fiji is implemented by the Ministry of Agriculture through organized training, practical demonstration that is shared through extension services. This project aims to provide employment opportunities, income generation, reduce inequality, protecting the environment and ensuring sustainability.

Distinguished Delegates, Ladies and Gentlemen, Fiji's JUNCAO Project was implemented in two phases. The first included the construction of the demonstration center from 2014 to 2016. The Ministry of Agriculture through this phase provided land and its clearing, installation of electricity and water source during the construction and accommodation for Technical experts and Consultants.

The Ministry was also actively involved in organizing and coordinating logistical processes ensuring all needed materials and equipment's from China



such as structural materials, training materials, JUNCAO planting materials, Mushroom germ plasm arrive safely into Fiji.

The second phase which began in December 2017, saw the arrival of 11 JUNCAO Technology experts from Fujian Agriculture and Forestry University of China. These experts assisted on establishment and maintenance of mushroom production, practically involved in expanding JUNCAO production, manage trainings on JUNCAO technology and provided equipment and materials for technical assistance.

Ladies and Gentlemen, distinguish delegates, the Fiji JUNCAO technology focuses on scientific and technological research and its successful demonstration. The project pursues the establishment of Mushroom Industry in Fiji by cultivating 2 ha and inter planting within Mango Orchards, cultivating 8 varieties of Mushroom. The Mushroom varieties introduced are; (*Ganoderma lucidum*, *Auricularia auricula*, *Pleurotus ostreatus*, *Pleurotus cornucopiae*, *Pleurotus sapidus*, *Pleurotus eryngii*, *Straw mushroom* and *Pleurotus Citrinopileatus*).

The successful varieties cultivated includes; *Oyster mushroom-Pleurotus sapidus* which can be planted outdoors and is conducive to Fiji's environment and *Oyster mushroom - Pleurotus ostreatus*. Cultivating and managing these two varieties are the basis of all 1700 Mushroom Farmers training conducted so far. Mushroom is a niche market product that targets high end consumers and this statement is always highlighted to interested farmers during any organized training.



The giant JUNCAO grass is also a product that has been developed extensively at the Centre and with the help of MoA Animal Health and Production Division, livestock farmers are identified and trained to plant and produce JUNCAO grass as nutritious feed that can be preserved for long and used during dry seasons. This grass has been planted in 8 Ha of land at our Legalega Research station in the Western Division for experimental observation and JUNCAO seedling breeding. Farmers are encouraged to plant this grass as it prevents soil erosion and is promoted as forage plant in the livestock industry. So far, more than 1000 acres have been utilized to plant JUNCAO grass.

Distinguished Delegates, ladies and gentlemen, since the project's inception, the center has distributed more than 100,000 mushroom tubers to potential farmers in the Central and Western Division who have undergone the relevant training and are interested in cultivating Mushroom. Fiji JUNCAO Center has also distributed 973, 510 JUNCAO cuttings to livestock farmers for feeds.

Ministry's mushroom ongoing development program, a total budget of \$230,000.00 was allocated to boost mushroom research, development and training on best farming practices for 2020-2021 financial year. The Ministry has also expanded the use of Juncao grass for establishing fodder to support livestock feed in dry areas of Viti Levu. So far, about 800 farmers have been supported in this program.

Also in the current financial year, (2020-2021), three (3) successful mushroom farmers were assisted with 20 feet storage container to assist them commercialize their mushroom farms . Fiji is also exporting mushroom to other Pacific Islands countries. The volume of mushroom exported in 2019



recorded 3509 kg as compared to 2284 kg which was exported in 2018, a 54% increase in 1 year.

Through the JUNCAO technology program, Mushroom farmers in Fiji are slowly evolving and expanding, raking in high returns from the sale of their mushrooms to local supermarkets, hotels and restaurants. Mushroom farming is also becoming very popular with women farmer cluster groups.

As a way forward for the Industry, the Ministry in collaboration with JUNCAO Technology Centre, aims to support at least 10 farmers per year. This can be enhanced if farmers grow JUNCAO grass themselves and have the accessibility to chaffing, bagging machines and inoculation box. This project will contribute to enhancing Food & Nutrition Security and allow farmers to cultivate Mushroom successfully.

Despite its advantages, mushroom farming requires delicate management. Therefore, only a few farmers can successfully continue with mushroom farming and the Ministry considers this constraint in its pursuit to further develop mushroom farming program.

Distinguished Delegates, ladies and gentlemen, to conclude, Fiji through the Ministry of Agriculture will continue to promote the use of JUNCAO Technology and Mushroom Farming. This growing Industry has supported women, men and youths including those that are physically challenged and vulnerable. The Industry and its growing interest will provide this vulnerable segment of our population with employment and income, help reduce inequality and provide sustainable livelihood.



Thank you, xie xie, vinaka vakalevu and dhaanvayaad.

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Mr. Ritesh Dass

Permanent Secretary for Agriculture, Fiji

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