

#### MINISTRY OF AGRICULTURE ANIMAL INDUSTRY AND FISHERIES



#### UGANDA

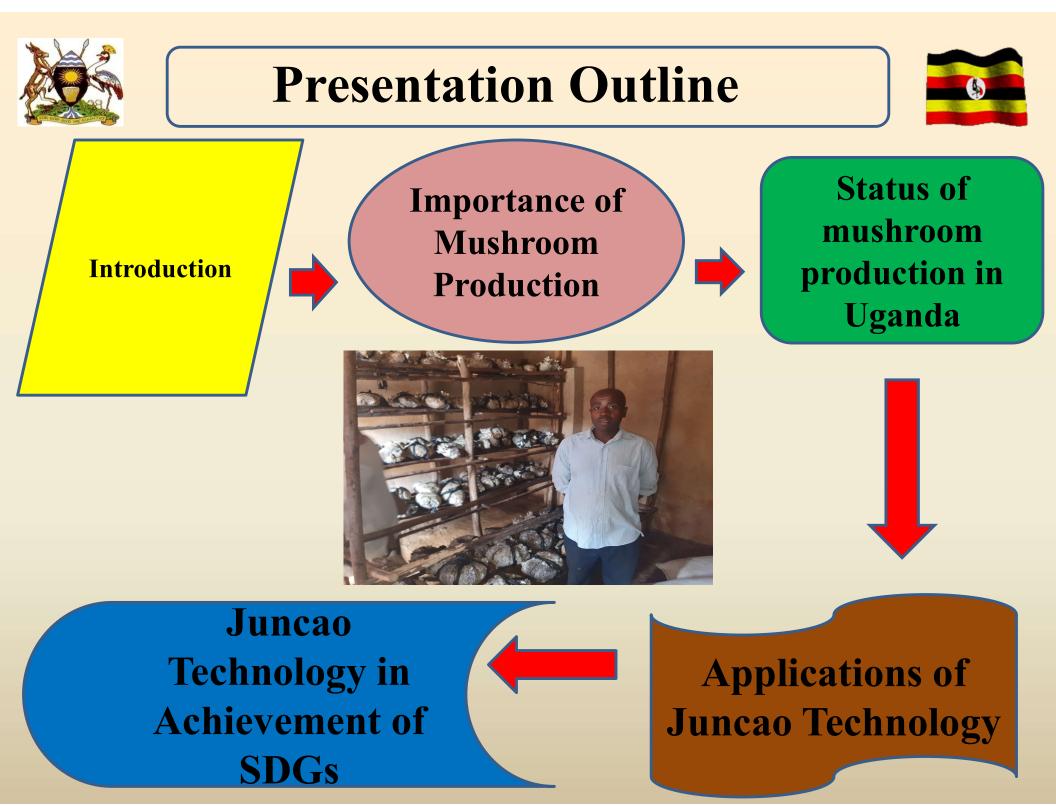
# *"Applications of Juncao Technology & its contribution to the achievement of Sustainable Agriculture & the Sustainable Development Goals"*





By Lydia Mugala Senior Agriculture Officer – Horticulture section, Crop Production Department, Crop Resources Directorate

Ethiopia : Addis Ababa 18<sup>th</sup> – 19th December 2023





### Introduction



- Agriculture Sector is pivotal in Uganda's Development agenda (contributes 72% of the total labor force, 25% to GDP and Approx. 50% share of export revenues).
- The crop sub sector which includes horticulture contributes 14.4% of the National GDP.
- 5.2 million farming households out of 7.2 million households are in agriculture
- The proportion of women engaged in agriculture activities is 83%. Women are thus significant contributors to Household Food security and Nutrition, but are adversely affected by food insecurity and malnutrition.





#### Importance of Mushroom Production



- Increase Household incomes
- Improve food basket; Food security & highly nutritious
- Improve malnutrition.
- Employment opportunities widen income sources (78% below 30yrs).
- Environmental protection
- Mushroom substrate used for livestock feed.
- Fertilizer Production
- Suitable for women and youth (Land unavailability).
- Ready market available at household level.
- Low labor requirement (PWD)

#### Mushrooms are:

- Fast & Easy to grow
- All year round production
- Low labor, limited capital investment, yet high value
- Vits D,B,C, niacin, riboflavin
- Immune boosting, anticancer potency, control of diabetes & hypertension, antitumor, tumor attenuating, anti-aging, anti-inflammatory, sexual energy boosting, microbial and viral properties as well as blood pressure regulating functions (FAO Stat-2009).







- Both nutritional and financial benefits for mushroom farmers.
- Employs over 35,000 mainly women without leaving their homes, PWDs & youth (78% are below 30yrs).
- Mushroom production dominates urban & peri-urban agriculture in many cities due to high unemployment rates (especially youth & women).
- Mushrooms are sold in fresh form but also processed into powder, porridge, soups, dried and sausages.
- Mushroom market size valued at 53.2 b in 2022, estimate CAGR of over 6.5% between 2023 and 2032
- ✤ Mushrooms in Uganda is one of the fastest growing home-based ventures.
- ✤ Due to high demand, mushrooms are still imported from Kenya & SA.
- Cotton husks as a substrate is rapidly phasing out due to the cost and unavailability. So juncao technology comes in handy (available & cheaper).
- Mushrooms increasingly considered as a substitute for meat (due to large population below poverty line).



#### Applications of Juncao Technology



 Readily available- with scarcity of other substrates, juncao technology comes in handy.

- 2) Economically more friendly than other mushroom substrates e.g cotton husks.
- 3)Environmental & ecological conservation benefits.
- 4) Spent substrate used as fertilizer/ manure and fungus fodder.
- 5) Grown for both substrate & animal feed.
- 6)Grown on slopes to stop soil erosion & desertification.

7) Used as a soil conservation measure to avoid soil degradation.







#### Juncao Technology in Achievement of SDGs



- 1. End Poverty in all forms everywhere by increasing household income levels and providing employment for all; especially women and youth.
- 2. End Hunger by increasing food security and improved nutrition. Reduces malnutrition.
- 3. Ensure Healthy lives and promote well being for all at all ages. Mushrooms are medicinal.





### THE END



## THANK YOU!

