“Applications of Juncao Technology & its contribution to the achievement of Sustainable Agriculture & the Sustainable Development Goals”

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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.
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, anti-cancer 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).

- 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)
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).
1) 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.
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!