

# Subsector analysis of straw mushroom in the Mekong Delta, Vietnam

Ngo Thi Thanh Truc<sup>1\*</sup>, Duong Minh Toan<sup>1</sup>, Duong Que Nhu<sup>1</sup>  
and Pham Quoc Hung<sup>1</sup>

<sup>1</sup>: College of Economics, Can Tho Univeristy

\*Email: ntttruc@ctu.edu.vn

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*Project: Scalable straw management options for improved livelihoods, sustainability,  
and low environmental footprint in rice-based production systems*

# Introduction

- Straw mushroom (*Volvariella volvacea*) can both mitigate greenhouse gas emissions and generate income for farmers
  - one option that can reduce open burning in the Mekong Delta
- Straw mushroom production has only developed in some clusters in the Mekong Delta, scatter and small scale
  - still not yet replaced open burning rice straw
- Changes - introduce combined harvesters, straw balers, improved outdoor and in-door growing techniques, high demand in mushroom (with safe and healthy issues)
  - Need update information for recommendations or interventions to expand straw mushroom production and reduce open straw burning practice



# Objective

*Identify interventions for upgrading the value chain or the subsector of straw mushroom in the Mekong Delta, Vietnam.*



# Methodology

## Data collection

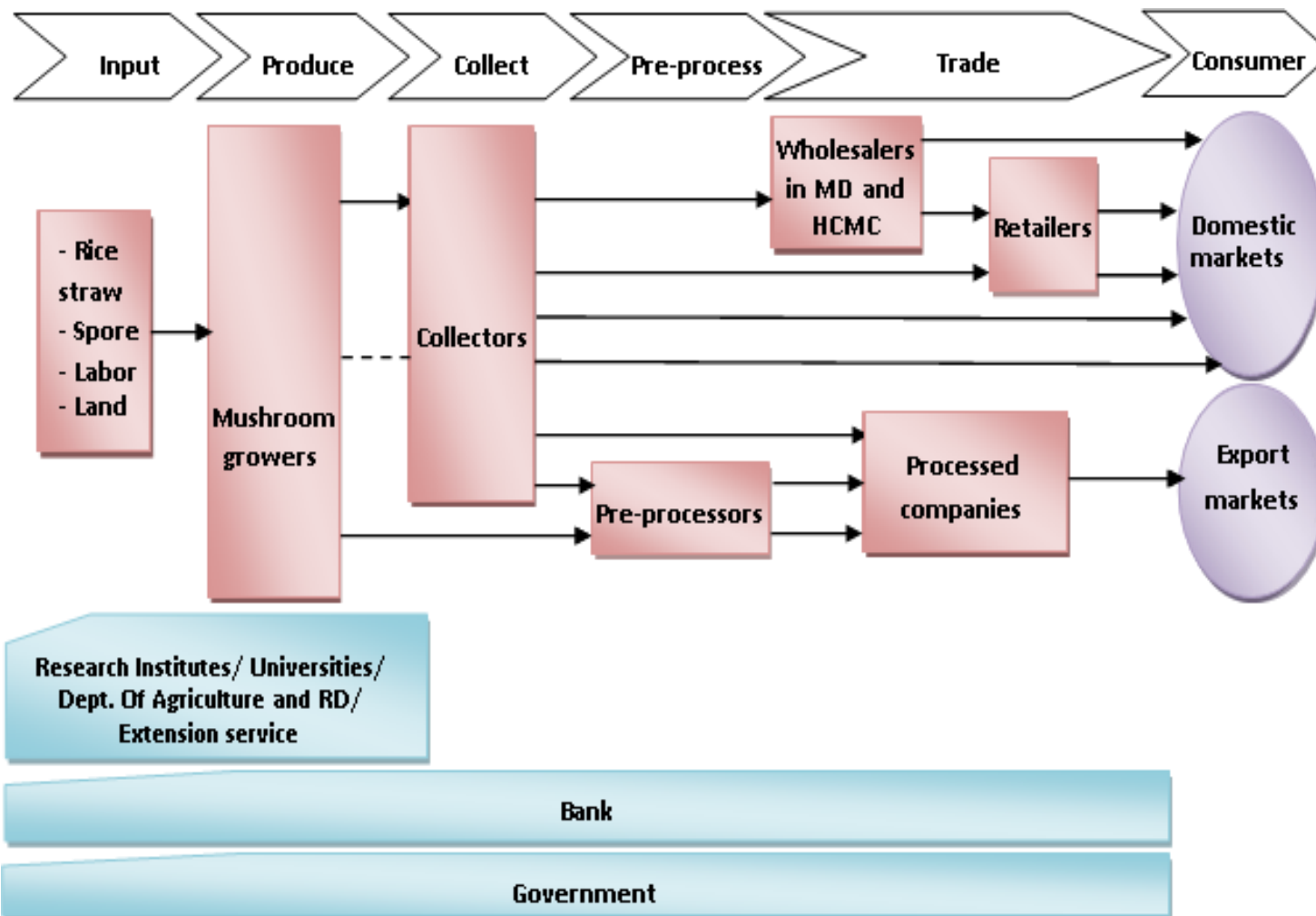
- Apply qualitative approach
- Review from literature in production and consumption of straw mushroom
  - Share with other projects (IRRI – CCAFS<sup>1</sup>, Toan's master thesis and pilot research on upgrading value chain of straw mushroom from Can Tho University)
- Key informant interviews of data gaps from literature

## Data analysis

- Descriptive analysis, value chain mapping, ranking constrains and interventions, stakeholder analysis



*Note: <sup>1</sup>IRRI – CCAFS: Including gender and value chain analysis to develop straw mushroom production in the Mekong Delta: Case study in Vinh Loi District, Bac Lieu Province, Vietnam*



~ 60 – 70%  
Price fluctuation

~ 30 – 40%  
Stricter requirements from exporters

## Value chain of straw mushroom in the Mekong Delta

Source: IRRI – CCAFS, Toan’s master thesis and IRRI – BMZ

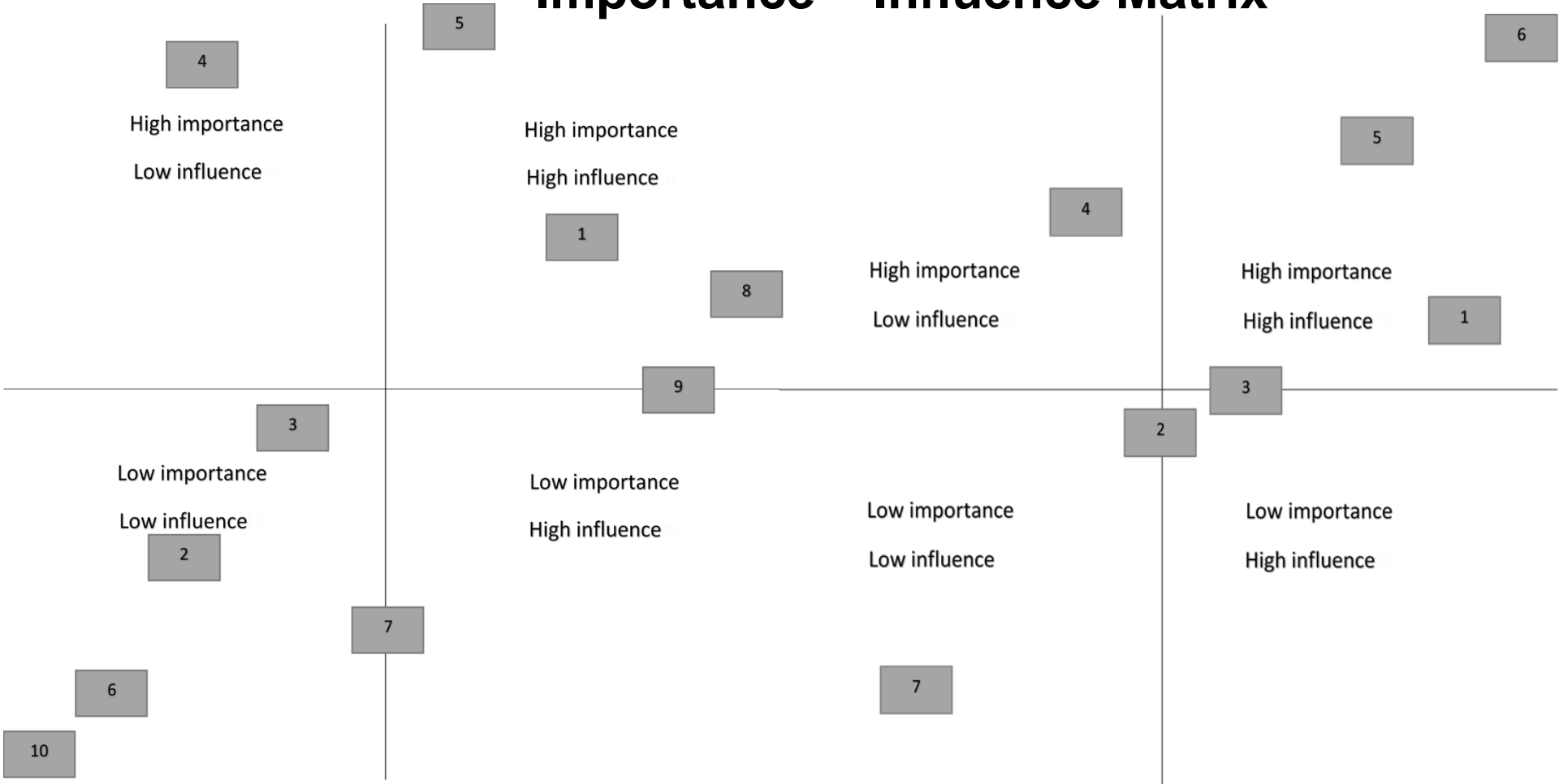


# Most constrains

- Straw mushroom growers – low yield (old technique), risky from not sustainable input supplies and selling fresh mushroom (quantity, quality and price)  
→ higher cost and lower return
- Input suppliers (straw and spore) – more competitive and lack of pure source of spore
- Collectors, wholesalers, retailers, transporters – lack of equipment for proper transportation (fresh mushroom)  
→ Sell all fresh mushroom within one day.
- Pre-processors and processors – risky from quality of mushroom inputs, more competition and stricter requirements from end users of the export markets.
- End users (domestic and export markets) – not much study/ information
- External actors – inactive
- Lack of linkage among the internal and external agents/stakeholders in the value chain



# Importance – Influence Matrix



## Fresh straw mushroom

**Note:**

- 1. Mushroom growers
- 2. Spore suppliers
- 3. Rice straw suppliers
- 4. Collectors
- 5. Wholesalers
- 6. Transporters
- 7. Retailers
- 8. Individual consumers
- 9. Institutional consumers
- 10. Extension workers

## Processed straw mushroom

**Note:**

- 1. Mushroom growers
- 2. Spore suppliers
- 3. Rice straw suppliers
- 4. Collectors
- 5. Pre-processors
- 6. Processors
- 7. Extension workers

# Lessons learned and suggestions

- Conduct in-depth study on the value chain of straw mushroom in the Mekong Delta.
- More research on the demand of fresh and processed mushroom in both domestic and export markets.
- Research and technologies transfer to the whole chain from the straw collecting system, spore production, straw mushroom cultivation techniques, pre-serving techniques, pre-processing and processing.
- Mushroom growers → apply improved out-door or in-house growing procedures with good and safe practice; cost efficient?
- More collaboration to the whole subsectors/value chain including internal and external agents.

