



Food Value Chain: Lesson from Japan

Japanese Factory Visit Tour for Development of Food-Value-Chain in ASEAN

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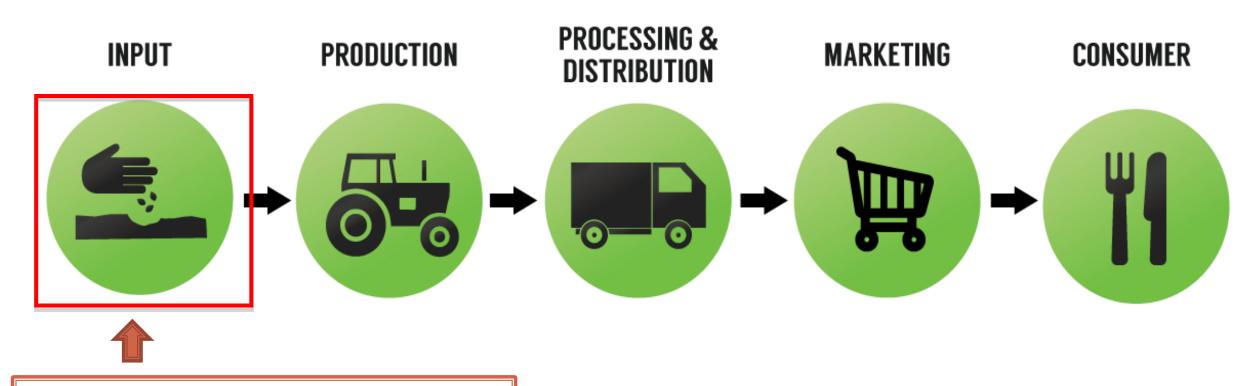
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Food Value Chain



Seed & Planting Materials



Malaysian Seed Industry: An Overview

Seed Trade Value:

- •Import → USD 3.8 million (China, Taiwan, Thailand, Japan)
- •Export → USD 0.7 million

Certifying body:

- Department of Agriculture Malaysia
 - Banana (var. Berangan) J29
 - Mango (var. Harumanis) MA128
 - Coconut (var. Matag Green) CN13



R&D:

•Malaysian Agricultural Research and Development Institute (MARDI)



Seed Industry Development (Entry Project Point 14) 2014

➤ Anchor Company (Green World Genetics)





Malaysian Seed Industry: Current Scenario

Disease occurrence



BANANA (Moko Disease)



PAPAYA (Dieback Disease)



COCONUT (Red Palm Weevil)

- •Insufficient seeds and planting material supplies
- •High dependence on import of seed, seedlings and fruits



Malaysian Seed Industry: Challenges

1- Supply

- Low and inconsistent supply
- Food security
- 2- Research & Development
 - Development of novel varieties (yield/ disease resistance etc.)
 - Seed technology innovation
- 3- Regulatory mechanism
 - National Seed Act (i.e. protection of Intellectual Property rights)
 - Seed Certification Scheme



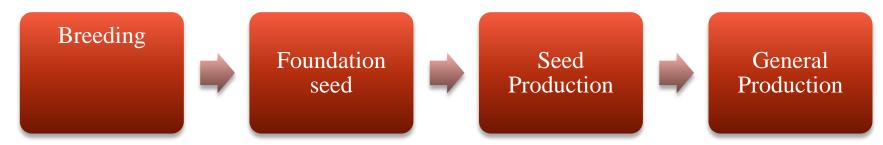
Japanese Seed Industry

Seed trade value

- •Import → USD 56 million
- •Export →USD 70 million

Seed supply system

- •Major agricultural crops
- •Fruits
- Vegetables





Japanese Seed Industry

Key features:

- •Effort in meeting farmer/consumer demands
- Processing & quality control
- •Partnership with foreign partners at each stage
- Seed production abroad
- •Large production scale: supplying seeds in Asia and the world





Case study

Takii Seeds (Japan)



Green World Genetics (Malaysia)





Takii Seed



Established since 1920 (> 96 years)

2000 varieties developed

Seed Quality:

- •Germination Test
- •Seed Health Test
- •Biochemical Test Laboratory
- •Seedlings Test Laboratory

<u>Technical Specialties</u>:

- •Molecular Breeding
- •Technology DNA markers
- •Canna Laser Treatment



Green World Genetics (Malaysia)

- •Established since 2010 (7 years)
- •Focusing on R&D to develop new varieties
- •Well integrated food value chain
- •Products:
 - Commercial seeds
 - Melons, maize, cucumber, chili, tomatoes, rice
 - Home Garden
 - Vegetables and flower seeds
 - Fresh produce
 - Vegetables and fruits











What can we learn?



High production standard (% germination, seed vigor, seed health, etc.)

Production Scale

Skilled workers (HR)

Locational trial to export seeds



Consideration

Feasibility studies

- Cost- Benefit Analysis (CBA)
- Expertise
- Resources (labor, land, etc.)



Conclusion

Challenges in Malaysian seed industry

- Supply
- R&D
- Regulation

What can we learn?

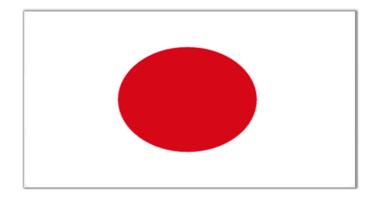
- Quality Assurance
- Production scale
- Expertise

Feasibility studies required



Terima kasih!





Arigatou gozaimasu!

