# Development initiatives on mango quality and marketing in Thailand

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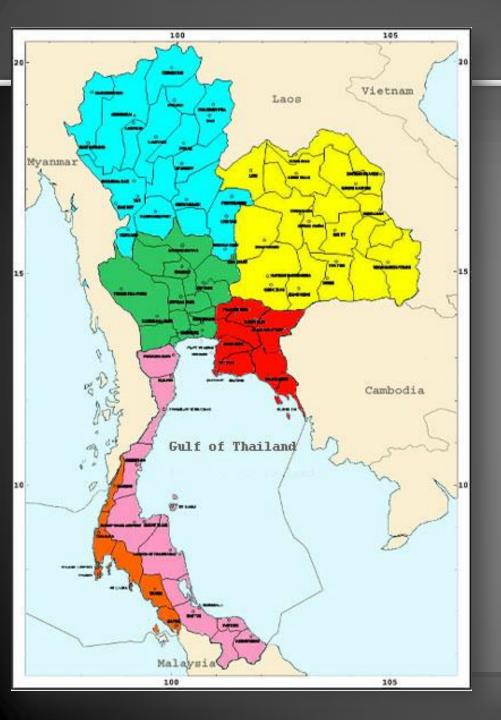
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#### Overview

- Variety and Region of growing
- Production Process
- Postharvest Process
- Marketing and Branding
- Quality assurance measures

# Variety and Region of growing

- ❖ 305,000 ha of mangoes in 2008.
- ❖ 2.3 million tones of fruit.
- 12, 22, 9 and 9 million dollar for fresh, canned, dried and frozen mango respectively.
- Nam Dok Mai No.4, Nam Dok Mai Si Thong and Mahachanok are the main variety.



- > The main production area is spread throughout the country.
- ➤ Linking area approach are used to make a production plan starting from central, northeastern, northern and southern respectively.



- \* Most of the fruit is sold in the main domestic markets but about 2% is exported overseas.
- Mainly to Singapore, Malaysia, China, Japan, South Korea and EU.

# Commercial variety







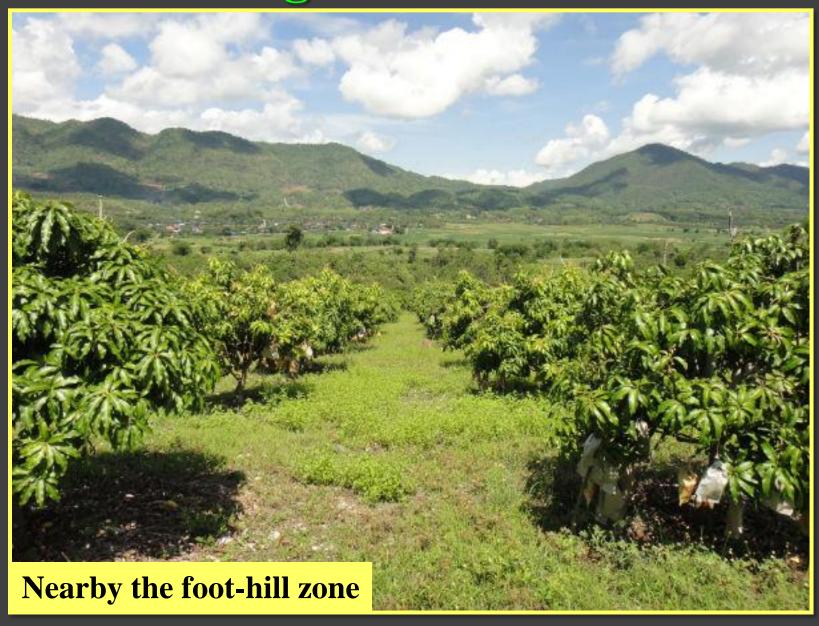


# **Production Process**

# Central region



# Northern region



# Northern region



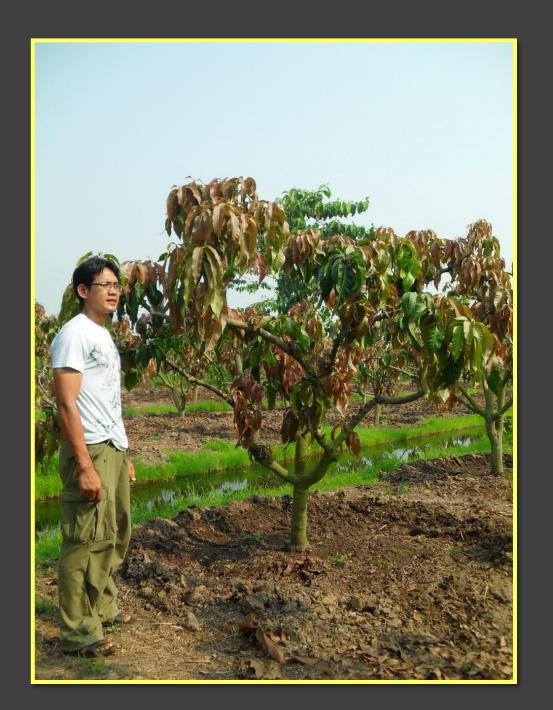
### Northeastern region



Dwarf tree







# Tip pruning





#### Synchronization

- □ Allows all of the stems in the canopy to be in the same physiological stage of maturity.
- □ Tip pruning causes a uniform flush of growth throughout the canopy.
- $\square$  Removes growth and flower inhibiting factors in stems derived from the previous season's flowering and fruiting panicles.
- □ Tip pruning also stimulates lateral shoot development forming 5 to 10 times the original number of productive stems.



# **Considerations for the flowering program**

- Harvest of the previous season's crop
- **\*** Timing of the dry and wet seasons
- **❖** High susceptibility of flowers and fruit to disease during rainy seasons

# **Thinning**





□ Allows each remaining fruit to develop to its maximum size.

□ Fruit thinning also reduces alternate bearing.

# Bagging



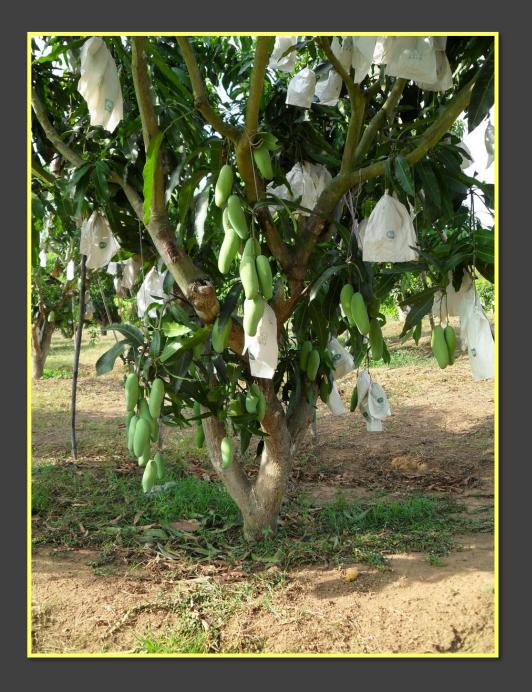


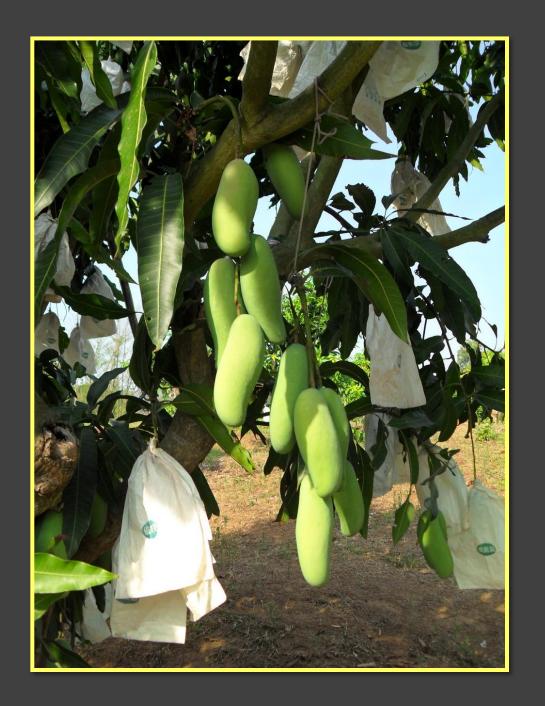
- □ Bagging are used to prevent laying egg from oriental fruit fly.
- □ There are two types of bag. One is carbon bag, another is white bag.
- □ Should be done at about 45 days after fruit set or after natural thinning or dropping when the mangoes are about the size of a chicken egg.

Increasing yield



Mango shoots were grafted onto the mother plant to increase yield.





#### **Postharvest Process**





#### Grading

- > Mangoes are typically graded into various classes that are distinguished by the levels of minor defects on the fruit.
- An allowance is the amount of defect allowed on a piece of fruit not more than 5%, 10%, and more than 10% for class A, B, and C respectively.

#### **Packing**

#### For EU market

SIZE W	EIGHT IN GRAMS
ХL	380-450
Large	330-379
Medium	280-329
Small	250-279

- Individual packing
- \* 2, 3, 5 and 10 kilogram per box









## Storage conditions





The temperature between 18 to 22°C stimulus the ripening.





# Marketing and Branding

- **❖** The fresh fruit marketing system is increasingly focused on adding value and decreasing costs.
- **❖** There needs to be a commitment to reform production processes throughout the supply chain.
- **❖** Focus on branding would add value to mango exports.

**Brand loyalty** consists of a consumer's commitment to repurchase products or services.

#### Branding for Thai mango; Mango Talk

- >True to type shape
- **≻** Very good taste and smell
- > Fresh produce
- > Enrich in nutrition and vitamins
- Good packaging design
- > Reasonable price





### Quality assurance measures

The traceability system is the first step in ensuring an effective food safety quality program.

Aspects of farm management such as the following should be closely monitored:

- Sources of seeds and seedlings
- Pests and weed elimination
- Pesticide application
- Dates and amounts of fertilization
- Harvesting or post-harvesting treatment
- Basic information regarding the individual farmer

A traceability system is vital to ensure the accuracy of all information from farm to table.

#### **Important aspect**

- ☐ Agrochemical residues
- ☐ Hygiene
- ☐ Pest control







