VIETNAM: SUSTAINABLE COFFEE DEVELOPMENT

Bui Ba Bong
Ministry of Agriculture and Rural Development

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VIETNAMESE AGRICULTURE

Achievements in Food Security – Poverty Reduction

Export orientation:

Crop commodities exported
- Rice: No. 2 in the world
- Coffee: No. 2 in the world
- Cashew nut: No. 1 in the world
- Black paper: No. 1 in the world
- Rubber:
- Tea:
- Fruits & Vegetables
MILESTONES IN COFFEE DEVELOPMENT IN VIETNAM

1857: Coffee trees first introduced to Vietnam
1900: Area about 2,000 ha
1987: Area reached 100,000 ha
1999: Area reached around 500,000 ha
2008: Production reached 1,000,000 tons
2008: Highest export value reaching US$ 2 Billion

ADVANTAGES OF COFFEE DEVELOPMENT IN VIETNAM

The Western Highland is the major coffee region of Vietnam with agro-ecological conditions which are ideal to grow robusta coffee:
- Basaltic red soil with high natural fertility and thick soil layers
- Altitude of 500 to 700 m
- Differences between temperatures of day and night are really high which is ideal for coffee, resulting in high quality and good aromatic flavor
- Yield potential of robusta coffee can reach 5 tons/ha.
## VIETNAM COFFEE INFORMATION (2003-2008)

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>1000 ha</td>
<td>510.0</td>
<td>503.2</td>
<td>497.4</td>
<td>488.7</td>
<td>506.4</td>
</tr>
<tr>
<td>Area under harvest</td>
<td>1000  ha</td>
<td>480.5</td>
<td>491.9</td>
<td>483.6</td>
<td>481.2</td>
<td>487.9</td>
</tr>
<tr>
<td>Yield</td>
<td>tons/ha</td>
<td>1.57</td>
<td>1.74</td>
<td>1.56</td>
<td>1.77</td>
<td>1.97</td>
</tr>
<tr>
<td>Production (beans)</td>
<td>1000 tons</td>
<td>755.1</td>
<td>834.6</td>
<td>752.1</td>
<td>853.5</td>
<td>961.2</td>
</tr>
<tr>
<td>Export volume</td>
<td>1000 tons</td>
<td>749</td>
<td>936</td>
<td>770</td>
<td>870</td>
<td>1194</td>
</tr>
<tr>
<td>Export value</td>
<td>Million US$</td>
<td>505</td>
<td>616</td>
<td>735.5</td>
<td>1101.0</td>
<td>1854</td>
</tr>
</tbody>
</table>

## VIETNAM COFFEE DEVELOPMENT TRENDS (2003-2008)

- **Area**: increased from 500,000 ha to 525,000 ha
- **Yield**: increased from 1.57 tons/ha to 1.99 tons/ha
- **Production**: increased from 755,000 tons to 1 million tons
- **Export value**: increased from US$ 505 million to US$ 2.1 million
**TOTAL COFFEE PRODUCTION IN THE WORLD (2008/09):**

128.2 M bags* (7.69 M tons)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>36%</td>
</tr>
<tr>
<td>Vietnam - ranked number 2</td>
<td>15%</td>
</tr>
<tr>
<td>Central America and Mexico</td>
<td>13%</td>
</tr>
<tr>
<td>Asia and Oceania</td>
<td>13%</td>
</tr>
<tr>
<td>Africa</td>
<td>12%</td>
</tr>
<tr>
<td>Colombia</td>
<td>7%</td>
</tr>
<tr>
<td>South America</td>
<td>4%</td>
</tr>
</tbody>
</table>

*Robusta 49.3 M (38%), Arabica: 78.9 M (62%)

**ROBUSTA COFFEE PRODUCTION IN THE WORLD (2008/09):**

49.3 bags (2.96 M tons)

**Vietnam is the largest robusta coffee production in the world, accounting for 35% of the world production**
VIETNAM COFFEE EXPORTS

Vietnam is ranked No. 2 in world coffee exports with a share of 18%*

95% of coffee production is exported

Export products: mainly green coffee (90%)

Major importing countries: Belgium, Germany, USA, Italia, Spain, Japan, Netherlands, Korea, France, UK.


COFFEE VARIETAL TYPES IN VIETNAM (2008)

<table>
<thead>
<tr>
<th></th>
<th>Variety</th>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Robusta</td>
<td>474,036</td>
<td>92.86%</td>
</tr>
<tr>
<td>2</td>
<td>Arabica</td>
<td>31,365</td>
<td>6.14%</td>
</tr>
<tr>
<td>2.1</td>
<td>Catimor</td>
<td>29,483</td>
<td>5.78%</td>
</tr>
<tr>
<td>2.2</td>
<td>Moka</td>
<td>1,370</td>
<td>0.27%</td>
</tr>
<tr>
<td>2.3</td>
<td>Se (Local)</td>
<td>506</td>
<td>0.1%</td>
</tr>
<tr>
<td>2.4</td>
<td>Catura</td>
<td>3</td>
<td>0.0%</td>
</tr>
<tr>
<td>2.5</td>
<td>Bourbon</td>
<td>3</td>
<td>0.0%</td>
</tr>
<tr>
<td>3</td>
<td>Excelsa</td>
<td>4,967</td>
<td>0.97%</td>
</tr>
<tr>
<td>4</td>
<td>Other types</td>
<td>49</td>
<td>0.01%</td>
</tr>
</tbody>
</table>
CHALLENGES OF COFFEE DEVELOPMENT IN VIETNAM

- Rapid expansion of area to unfavorable places that do not have water for irrigation in dry season and have poor soil fertility.

- Smallholder production (80% households having < 2 ha).

- Robusta occupies 92%, Arabica only occupies 6%.

- 70% area planted with plants developed from seeds, only 30% area planted with clonal varieties.

CHALLENGES OF COFFEE DEVELOPMENT IN VIETNAM (Cont.)

- 30% coffee fields/plantations are ageing.

- Most coffee fields do not have shade trees.

- Incorrect use of fertilizer, lack of adequate irrigation.

- Infection of diseases and insect pests.

- Effects of climatic changes (severe drought in dry season, erratic rains during flowering time of coffee).
CHALLENGES OF COFFEE DEVELOPMENT IN VIETNAM (Cont.)

- Low quality:
  + Lack of high quality varieties.
  + Harvesting mixed green and ripe beans.
  + Lack of drying facilities (increasing black beans) and processing facilities.
  + Low percentage of coffee production following certified system (UTZ Certified, 4C...).
  + Lack of standards applied to exported coffee.

- Intermediate export, Vietnamese coffee brand not yet established.

- Companies lack of capital for buying and storage to regulate price.

- Weak linkages among growers, processors and exporters.

- Weak relationship between exporters and importers.

- Fluctuations in prices.
HARVESTING COFFEE IN VIETNAM

PROBLEMS OF WATER MANAGEMENT FOR COFFEE

Lack of water for irrigation  ground surface irrigation
MAJOR DISEASES ON COFFEE IN VIETNAM

- Nematode infection on coffee trees
- Nematode damages roots
- Rust disease

SUN DRYING COFFEE IN VIETNAM

- Wet processing
- Dry processing
STRAEGIES AND MEASURES FOR SUSTAINABLE COFFEE DEVELOPMENT IN VIETNAM

Increasing production

- Strict zoning of coffee area: stabilized area: 500,000 ha.
- Increasing yield (to reach 2.5 tons/ha).
  - to breed and select new varieties.
  - to replace ageing plantations each year.
  - to grow shade trees – intercropping.
  - to prune coffee trees.
  - to apply GAP (proper use of fertilizers with more organic fertilizers and less chemical fertilizers, economical and timely irrigation, IPM to control pests).
- Increasing efficiency of household production (linkage of households, linkage of production and market).

STRAEGIES AND MEASURES FOR SUSTAINABLE COFFEE DEVELOPMENT IN VIETNAM (Cont.)

Increasing quality

- To consolidate production of arabica coffee.
- Harvest of ripe beans.
- Invest drying facilities (drying patios, mechanical dryers)
- Applying GMP in processing.
- Application of national standards (TCVN 4193 for exported coffee).
- Production of coffee following certified standards like UTZ, 4C, GAP.
- Meeting safety and hygiene standards (minimal pesticide residues).
STRAEGIES AND MEASURES FOR SUSTAINABLE COFFEE DEVELOPMENT IN VIETNAM (Cont.)

**Processing**
- Environmentally-friendly treatment in wet processing.
- Increasing roast and ground products.
- Increasing soluble coffee products.

**Consumption/Trade**
- Increasing domestic consumption of coffee.
- Developing Vietnam coffee trademark; geographic indication.
- Providing facilities and capital to store beans at peak harvest times to regulate prices.
- Direct export.
- Information systems and forecasting.

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STRAEGIES AND MEASURES FOR SUSTAINABLE COFFEE DEVELOPMENT IN VIETNAM (Cont.)

**Policy**
- Development of a modern coffee industry (competative, profitable and sustainable)
- Sector management and coordination
- Strong support for smallholder farmers (credit, technology, farmer organization, market access...).
- Infrastructure investment (irrigation, postharvest and processing, storage...)
- International cooperation.
NEW COFFEE CLONES (ROBUSTA) DEVELOPED IN VIETNAM

REPLACEMENT OF AGEING COFFEE FIELD BY NEW PLANTING

Ageing coffee field

New planting
## REJUVENATION OF OLD COFFEE TREES: CUTTING AND GRAFTING NEW CLONE

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Image Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old coffee tree</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
<tr>
<td>Cutting and grafting</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>40 days after grafting</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
<tr>
<td>6 months after grafting</td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>12 months</td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>42 months</td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
</tbody>
</table>

## COFFEE INTERCROPPING

![Coffee – Cocoa tree](image7.png)
COFFEE INTERCROPPING

Coffee – Durian

Coffee – Black pepper

Thank you