Rice production in Vietnam: achievements and future development

- Achievements
- Rice export management policy
- Future development

Ngoc Luan, Nguyen
Vietnam as a major rice producer/exporter

Population: 86 mil.
Total area: 33.1 mil. ha
Agricultural land: 9.4 mil. ha
Arable land: 6.54 mil. ha
Forestry land: 13 mil. ha

Red River Delta
Rice land: 0.6 mil. ha
0.1 ha < farm < 1 ha

Mekong River Delta
Rice land: 1.87 mil. ha
0.3 ha < farm < 2 ha

Rice land: 3.9 mil. ha
Sown area: 7.4 mil. ha
Yield: 42 mil. tons
**Largest rice exporters in the world**

Quantities in million metric tons

<table>
<thead>
<tr>
<th>No.</th>
<th>Largest exporters</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thailand</td>
<td>9</td>
<td>10.5</td>
<td>8.5</td>
</tr>
<tr>
<td>2</td>
<td>Vietnam</td>
<td>6.8</td>
<td>7.2</td>
<td>6.6</td>
</tr>
<tr>
<td>3</td>
<td>India</td>
<td>1.9</td>
<td>2.8</td>
<td>4.5</td>
</tr>
<tr>
<td>4</td>
<td>Pakistan</td>
<td>4</td>
<td>3.2</td>
<td>3.7</td>
</tr>
<tr>
<td>5</td>
<td>United States</td>
<td>3.5</td>
<td>3.4</td>
<td>3.1</td>
</tr>
<tr>
<td>6</td>
<td>Brazil</td>
<td>0.5</td>
<td>1.25</td>
<td>0.9</td>
</tr>
<tr>
<td>7</td>
<td>Uraquay</td>
<td>0.7</td>
<td>1</td>
<td>0.9</td>
</tr>
<tr>
<td>8</td>
<td>Myanmar</td>
<td>0.4</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>9</td>
<td>Argentina</td>
<td>0.5</td>
<td>0.6</td>
<td>0.7</td>
</tr>
<tr>
<td>10</td>
<td>Egypt</td>
<td>0.7</td>
<td>0.1</td>
<td>0.5</td>
</tr>
</tbody>
</table>

World’s total export: 31.2, 34.2, 32.8

Source: FAO Rice Market Monitor 2011, AgroInfo, VFA
Breakthrough from rice import to export began in 1989

- Land reforms began 1981 to introduce contract farming
- Trade liberalization after 1989

Source: FAOSTAT, General Statistics Office

Major policy reforms


1. Contract system
2. Land lease: 10, 15, 20 years
3. Free market in land use right
4. Privatization of output & input markets

Investment and credit policy:
- Large investment in infrastructure: transport & irrigation systems
- Financial support for rural road construction, machinery buying
- Setting up floor paddy prices to ensure a minimum profit margin of 30% for rice growers
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Rice market liberalization 1989

- Privat rice traders were allowed to deliver paddy rice out of the provinces.
- The milling facilities, nationalized a decade before, were returned to private owners, who re-entered milling business.
- The Vietnamese Food Association (VFA) was established in 1989 in order to support both state and private rice traders.

Top ten rice export companies in Vietnam and their share values:

- Vinafood II: 36%
- Vinafood I: 11%
- KTC: 6%
- Vinafood: 36%
- GENTRACO: 4%
- KIGITRACO: 2%
- TIGIFOOD: 2%
- ANGIMEX: 2%
- Long An food: 2%
- Vinh Long food: 2%
- Others: 31%

Source: IPSARD
Rice price series of Mekong delta, export price and Hanoi, 2009 - 2011

Source: AGROINFO
### Cost/benefit balance for winter-spring crop 2009-2010 in Mekong delta (data collected from 20 households/region)

<table>
<thead>
<tr>
<th>Expense /Income items</th>
<th>An Giang</th>
<th>Can Tho</th>
<th>HCM city</th>
<th>Dong Thap Muoi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed</td>
<td>51.8</td>
<td>50.6</td>
<td>54.0</td>
<td>44.6</td>
</tr>
<tr>
<td>Land preparation</td>
<td>52.5</td>
<td>41.1</td>
<td>40.8</td>
<td>29.4</td>
</tr>
<tr>
<td>Irrigation</td>
<td>34.8</td>
<td>17.5</td>
<td>17.4</td>
<td>29.9</td>
</tr>
<tr>
<td>Harvest</td>
<td>117.5</td>
<td>109.8</td>
<td>110.7</td>
<td>99.4</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>188.0</td>
<td>166.5</td>
<td>168.8</td>
<td>194.9</td>
</tr>
<tr>
<td>Pesticide</td>
<td>175.8</td>
<td>120.5</td>
<td>142.6</td>
<td>228.5</td>
</tr>
<tr>
<td><strong>Total expense (US D/ha)</strong></td>
<td><strong>620.5</strong></td>
<td><strong>506.0</strong></td>
<td><strong>534.3</strong></td>
<td><strong>626.8</strong></td>
</tr>
<tr>
<td>Labor (US D/ha)</td>
<td>90.7</td>
<td>54.3</td>
<td>74.5</td>
<td>74.5</td>
</tr>
<tr>
<td>Yield (tons/ha)</td>
<td>6.7</td>
<td>6.7</td>
<td>6.9</td>
<td>7.1</td>
</tr>
<tr>
<td>Paddy price (US D/kg)</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Gross revenue (US D/ha)</strong></td>
<td><strong>1481.5</strong></td>
<td><strong>1498.8</strong></td>
<td><strong>1540.9</strong></td>
<td><strong>1603.2</strong></td>
</tr>
<tr>
<td>Returns to home labor and land (US D/ha)</td>
<td><strong>861.0</strong></td>
<td><strong>992.9</strong></td>
<td><strong>1006.6</strong></td>
<td><strong>976.4</strong></td>
</tr>
</tbody>
</table>

Source: Angiang Plant Protection Joint-Stock Company
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Trend of rice sown area and production to 2020

- Rice land is limited and should be protected by law
  3.8 mil. ha → 380 m²/capita after 2020
- Yield per hectare is the main output driver

Source: FAOSTAT
Long term driving forces for food demand

- Population will peak at approx. 115 mil. in 2050 although a drastic slow-down in population growth.
- Economic growth and increased urbanization will drive up food consumption.

Source: esa.un.org/unpp, VN population bureau
Trend of rice and meat consumption

- Rice surplus is still to produce after 2020, but decreasing export
- Growing demand of meat $\Rightarrow$ increasing import of corn, soja etc.

Source: Calculated by the author from FAOSTAT & MARD (Ministry of Agriculture and Rural Development) data
Future measures to ensure rice-based food security

- Strictly control of rice land use
- Sustaining the growth of rice yield
- Reduction of post-harvest loss
- Rice export policy
Thank you for your kind interest