Transition of Farm Mechanization in Cambodia

CAMBODIA

Regional Roundtable of National Agricultural Machinery Association in Asia and the Pacific

28-30, October 2014
(Wuhan, China)

By Mr. Huot Sovann
I. Institution's Profile “CaSAMNet”

- Cambodia Society of Agricultural Machinery Network “CaSAMNet”
- Found in 2014.
- **Member:** Farm Machinery Importers, Farm Equipment Workshops, Manufactures, Distributors and Dealers Farm Machineries.
- **Objective:**
  - Expand networking, coordination to assist the agricultural machinery and tools.
  - Contribute to reduce cost, time, barrier of using agricultural machinery and tools.
Interchange to increase in knowledge, experiences and to promote innovative ideas to technical specialist of agricultural machinery;

Provide consultation services within its ability to the stakeholders;

Contribute to maintain and protect rural infrastructure, social order and environments;

Contribute to restore and reconstruct the country in line with the policy of the Royal Government of Cambodia for the development and social stability;
Structure of The Association Committee of “CaSAMNet”

- Board of Advisors
- Chairman
- Board of Honorable
  - 1st Vice Chairman
  - Secretary General
  - 2nd Vice Chairman
  - Treasurer General
    - Technical Component
    - Service Component
    - Administration and Account Component
Cambodia is located in South East Asian region and bordered with Vietnam, Laos and Thailand;
- Area: 181,035 km²;
- Total population: 15 millions;
- Agricultural Base
- Labor Force 7.9 Millions
- Rural residence 11 millions
- Export Rice 400,000 tons in 2012,
Agriculture is one of the main contributors to the economy of Cambodia, accounting for 34.8% (2013) of the Gross Domestic Product (GDP);
- Paddy is the main crop and occupies 90% of the cultivation land;
- Agriculture also employs almost 55.8% of the total population and provides the main source of income;
- The mechanization of agriculture in Cambodia is limited due to high cost of agricultural machineries; lack of agricultural credits; lack of well-trained operators and mechanics for agricultural machineries;
- However, the agricultural mechanization is progressively developed in the last few years.
II.3. Economic in Brief...

GDP Composition by Sector

- Agriculture: 41%
- Industry: 35%
- Services: 24%

Legend:
- Agriculture
- Industry
- Services
II.4. Economic in Brief...

Labor Force by Occupation

- 56% Industry
- 27% Agriculture
- 17% Services
### Data of Farm Machineries Registered in MAFF 2003-2013

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</thead>
<tbody>
<tr>
<td>1</td>
<td>Combine</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1,548</td>
<td>4,820</td>
<td>6,500</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Tractor</td>
<td>3,310</td>
<td>3,857</td>
<td>4,166</td>
<td>4,247</td>
<td>4,475</td>
<td>4,611</td>
<td>5,495</td>
<td>6,200</td>
<td>6,786</td>
<td>8,961</td>
<td>9,417</td>
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<tr>
<td>3</td>
<td>Thresher</td>
<td>4,967</td>
<td>6,220</td>
<td>7,338</td>
<td>7,795</td>
<td>8,036</td>
<td>8,237</td>
<td>13,798</td>
<td>14,390</td>
<td>14,390</td>
<td>15,210</td>
<td>16,067</td>
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<tr>
<td>4</td>
<td>Power Tiller</td>
<td>13,693</td>
<td>20,279</td>
<td>26,504</td>
<td>29,706</td>
<td>34,639</td>
<td>38,912</td>
<td>53,220</td>
<td>66,548</td>
<td>77,421</td>
<td>128,806</td>
<td>151,612</td>
</tr>
<tr>
<td>5</td>
<td>Milling Machines</td>
<td>32,945</td>
<td>36,531</td>
<td>38,606</td>
<td>38,618</td>
<td>38,680</td>
<td>39,429</td>
<td>47,620</td>
<td>48,217</td>
<td>48,217</td>
<td>48,753</td>
<td>54,328</td>
</tr>
<tr>
<td>6</td>
<td>Water Pumps</td>
<td>99,875</td>
<td>106,569</td>
<td>120,968</td>
<td>127,610</td>
<td>131,702</td>
<td>136,061</td>
<td>164,974</td>
<td>166,633</td>
<td>183,502</td>
<td>231,942</td>
<td>255,757</td>
</tr>
</tbody>
</table>

Source: MAFF Report 2013
III.2. Status of the Country’s Agricultural Machinery Industry

Data of Imported Four Wheel Tractor by Country MEF 2011-2013

<table>
<thead>
<tr>
<th>Country/Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belarus</td>
<td>217</td>
<td>445</td>
<td>386</td>
</tr>
<tr>
<td>China</td>
<td>191</td>
<td>164</td>
<td>148</td>
</tr>
<tr>
<td>India</td>
<td>131</td>
<td>396</td>
<td>95</td>
</tr>
<tr>
<td>Japan</td>
<td>639</td>
<td>1,283</td>
<td>1,102</td>
</tr>
<tr>
<td>Thailand</td>
<td>680</td>
<td>980</td>
<td>757</td>
</tr>
<tr>
<td>UK &amp; USA</td>
<td>184</td>
<td>175</td>
<td>220</td>
</tr>
<tr>
<td>Vietnam</td>
<td>557</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>740</td>
<td>919</td>
<td>380</td>
</tr>
<tr>
<td>Total</td>
<td>3,339</td>
<td>4,379</td>
<td>3,095</td>
</tr>
</tbody>
</table>

Source: MEF, Customs & Excise Department
IV.1. Distribution and Supply Chain of Agricultural Machineries

**Suppliers**
- Manufacturers
- Dealers

**Import**
- Machineries Traders/ Importers
- Distributors

**Local Supply**
- Four Wheel Tractor Assembly Plant
- Implement Manufacturers
- Lathe/Workshops

**Retailers**
- Local Dealers/Machineries Shops
- Distributor’s Branch “Showroom”
- Local Workshops
IV.2. Farm Machineries Showroom & Lathe Workshop

Ruesey Keo “Larano Lathe Workshop”
- 1996, Fabricates farm implement such as Plough, Seeder, Dozer, etc.

Kong Nuon Group Co., Ltd.
- Established 1991,
Importers/Distributor of:
- YANAMR Tractor
- YANMAR Power Tiller
- YANMAR Combine Harvester
- HITACHI Construction Equipment
- TOYOTA Forklift.
Mekong Agriculture Tractor Co., Ltd.
- 1993, Distribute Mahindra Tractor, and Implement import from Europe, China, and India.

Belarus Mekong LLC’s Showroom
- 2012 Dealers Four Wheel Tractor and implements.
Belarus-Mekong LLC, established 2013, Assemble MTZ-Belarus four wheel tractor and Hand tiller. The first assembly plant of farm tractor in Cambodia, targets to supply to Asian in 2015.
The Cambodian government’s Rectangular Strategy sets out a long-term vision for growth. With respect to agriculture, the strategy seeks to improve productivity and diversification. Agricultural Mechanization is almost covering these sectors; food security and nutrition, rural development, and forestry reform.

The government developed a policy on “Paddy Rice Production and Promotion of Milled Rice Export” in 2010, aiming to achieve a paddy rice production surplus of 4 million tones and milled rice exports of at least 1 million tones by 2015 by investing in irrigation facilities, encouraging private sector investment in paddy rice processing and export.

The government has formed water user communities across the country, expanding reservoir capacity to meet demand.
Cambodia Royal Government’s Policy towards Mechanization in Agriculture:

i. Strengthen the organization of the Provincial Office Agricultural Engineering;

ii. Data collection in-depth in actual market of agricultural machinery and equipment;

iii. Prepare laws, regulations and guidelines for the improvement of agricultural machinery;

iv. Research and Development implements to fit local requirement;

v. Training and promoting technical knowledge of farm machineries to users;

vi. Make availability technical literature;

vii. Facilitate to better relationship between importers/dealers/users/farmers.
V.2. Foreign Direct Investment in Agriculture

- Foreign investors have a strong interest in rubber, cassava, sugarcane, corn, and acacia. By number of projects, their engagement is seen mainly in Cambodia’s strategic area: North-East, North, North-West, and West.

- Foreigners cannot own land in Cambodia; however, the government offers three types of land concessions, in which State land is leased to domestic and foreign investors: (1) Social Concessions; (2) Economic Land Concessions; and Use, (3) Development or Exploitation Concessions.

- Economic Land Concessions (ELCs) permit beneficiaries to clear land for industrial or agricultural exploitation. The legal framework governing ELCs consists primarily of the 2001 Land Law. ELCs can be granted by the Ministry of Agriculture, Forestry and Fisheries for a maximum of 10,000 hectares, and no more than 99 years.
## Distribution of ELCs by Nationality

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SIZE (HA)</th>
<th>% OF TOTAL</th>
<th>MEAN SIZE (HA)</th>
<th>MINIMUM SIZE (HA)</th>
<th>MAXIMUM SIZE (HA)</th>
<th>NO. OF PROJECTS</th>
<th>NO. OF PROJECTS &gt;10,000 HA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unreported</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9</td>
<td>-</td>
</tr>
<tr>
<td>Cambodia</td>
<td>668,725</td>
<td>65</td>
<td>18,576</td>
<td>807</td>
<td>315,028</td>
<td>36</td>
<td>6</td>
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<tr>
<td>China</td>
<td>186,935</td>
<td>18</td>
<td>10,996</td>
<td>5,000</td>
<td>60,200</td>
<td>17</td>
<td>1</td>
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<tr>
<td>India</td>
<td>7,635</td>
<td>1</td>
<td>7,635</td>
<td>7,635</td>
<td>7,635</td>
<td>1</td>
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<tr>
<td>Korea</td>
<td>27,622</td>
<td>3</td>
<td>5,524</td>
<td>3,000</td>
<td>7,500</td>
<td>5</td>
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<tr>
<td>Malaysia</td>
<td>7,955</td>
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<td>7,955</td>
<td>7,955</td>
<td>7,955</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Taiwan</td>
<td>4,900</td>
<td>0</td>
<td>4,900</td>
<td>4,900</td>
<td>4,900</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Thailand</td>
<td>37,436</td>
<td>4</td>
<td>7,487</td>
<td>6,523</td>
<td>9,700</td>
<td>5</td>
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<tr>
<td>U.S.</td>
<td>36,203</td>
<td>4</td>
<td>9,051</td>
<td>7,000</td>
<td>9,820</td>
<td>4</td>
<td>0</td>
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<tr>
<td>Vietnam</td>
<td>47,228</td>
<td>5</td>
<td>6,747</td>
<td>2,361</td>
<td>9,380</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1,024,639</td>
<td>100</td>
<td>6,747</td>
<td>2,361</td>
<td>9,380</td>
<td>86</td>
<td>7</td>
</tr>
</tbody>
</table>

Source: MAFF Report 2012
The FDIs project is the leading of Agricultural Mechanization in actual. The projects have brought modern technology, equipment, and machineries which the local users have never been experienced.

Sugar Cane Factory established in 2012
VI. Challenge for Sustainable Agricultural Sector in Cambodia

- External support and cooperation with development partners is still missing;
- Lacking of cooperation between stakeholder;
- Inadequate information, data, and technical document;
- Not enough technician and technical support to users;
- Lacking of credit and finance;
- Limited market availability of agricultural output;
VII. Potential Role of the CaSAMNet

- Promote agricultural mechanization;
- Reduce the impact of mechanization;
- Act as a focal point between stakeholder;
- Data bank and information of Agricultural Machineries;
- Collective voice for a better attention from stakeholder;
Thank You