AGRICULTURAL MECHANIZATION DEVELOPMENT IN THAILAND

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Thailand is an agricultural country. Approximately 21 million ha or 40.9% of the total area is used for agricultural production.

Location: Thailand is located in the center of peninsular Southeast Asia. Myanmar is to the west, Laos to the north and east, Cambodia to the southeast, and Malaysia to the south. The south coast of Thailand faces the Gulf of Thailand.

Size Total of 514,000 square kilometers (51.4 million ha)
- 46.6% of population engage in agricultural sector.
- The world largest rice exporter
- Income 10.1% of GNP
Contribution for agricultural sector

- Crops: 61.8%
  - Rice: 49.8%
  - Field crops: 21.5%
  - Horticulture crops: 21.2%
- Other crops: 7.5%
- Fishery: 22.4%
- Livestock: 15.6%
- Forest: 0.02%
- Other: 0.18%
Mean Monthly Rainfall in Thailand (mm)
30-year period: 1971-2000

<table>
<thead>
<tr>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
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<tbody>
<tr>
<td>16.7</td>
<td>20.8</td>
<td>40.7</td>
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<td>252.7</td>
<td>184.0</td>
<td>103.5</td>
<td>46.0</td>
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Mean annual rainfall in Thailand from 1951 to 2011
Total population in Thailand during the last 50 years.

[Graph showing population growth from 2002 to 2012]
Thailand is a newly industrialized country. Its economy is heavily export-dependent, with exports accounting for more than two thirds of its GDP.

In 2012, Thailand had a GDP of THB11.375 trillion (US$366 billion). Per-capita GDP was $5,390. Thailand's agricultural sector produces 8.4 percent of the GDP.

The Thai economy grew by 6.5 percent, inflation rate of 3.02 percent. In 2013, the Thai economy is expected to grow in the range of 3.8-4.3 percent.
Major crops:
Rice, maize, sugarcane, soybean, cassava, rubber, horticulture crops, oil palm
MECHANIZATION
Relationship between energy input and crop production in Thailand during 1950-2005

\[ y = 13.462 \ln(x) - 19.904 \]

\[ R^2 = 0.9728 \]
Contribution of different energy inputs in crop production in Thailand during 1950-2005
Thailand has developed its own range of agricultural machinery and agricultural equipment to suit the special needs and pockets of its mainly agrarian population. Rice production is the foremost user of this equipment. Planting machinery, Rice threshers, tractors and walking ploughs and nowadays machines that help with the cultivation, caring and harvesting of other crops such as fruit, rubber and cassava.
Track tractor  175 Hp
2000- Rotary cultivator
1973 - IRRI Thresher
Thai thresher in Agrimach Exhibition
Maize combine harvester
Exhibition in Khon Kean province 2013