Country report on rice cultivation practice: Thailand

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Irrigated rice

Wassmann et al., 2009b
Rainfed rice

Wassmann et al., 2009b
Yield vs. Ecotypes

Rainfed rice

Irrigated rice

Rice planting area

Rice harvest area

Year

Paddy field area (1000 ha)

Yield (ton/ha)

Yield (ton/ha)

Year
Global rice exports

Million metric tons

Typical rice cultivation cycle in Thailand

1. Land preparation
   - Crop rotation
   - Straw management & Utilization
   - Variety selection

2. Seeding & Planting
   - Irrigation, fertilization, weeds & pest controls

3. Harvesting
   - Water drainage
1. Land preparation
Harrowing
Pre-germinated broadcasting rice:
96.47% in second rice and 28.85% in major rice (2009)
Parachuting
Rice variety: Major rice

<table>
<thead>
<tr>
<th>Variety</th>
<th>Major rice production in 2007 (ton)</th>
<th>Cultivation area of Major rice in 2007 (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jusmine rice</td>
<td>25%</td>
<td>31%</td>
</tr>
<tr>
<td>Kao-Kho 15</td>
<td>23%</td>
<td>27%</td>
</tr>
<tr>
<td>Official Varities 1</td>
<td>4%</td>
<td>Kao-Kho 6 6%</td>
</tr>
<tr>
<td>Official Varities 2</td>
<td>13%</td>
<td>Kao-Kho 6 3%</td>
</tr>
<tr>
<td>Supanburi</td>
<td>9%</td>
<td>Supanburi 1 5%</td>
</tr>
<tr>
<td>Supanburi 60,90</td>
<td>2%</td>
<td>Supanburi 60,90 2%</td>
</tr>
<tr>
<td>Klaung Loung</td>
<td>0%</td>
<td>Klaung Loung 0%</td>
</tr>
<tr>
<td>Patumtani 1</td>
<td>5%</td>
<td>Patumtani 1 3%</td>
</tr>
<tr>
<td>Local varities</td>
<td>9%</td>
<td>Official Varities 2 10%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Official Varities 1 4%</td>
</tr>
</tbody>
</table>

Please note that the percentages and tons/ha may vary slightly due to rounding.
Rice variety: Second rice

Cultivation area of Second rice in 2007 (ha)

- Supanburi 60,90 5%
- Kao-Kho 10 3%
- Kao-Kho ไม่ไว้แสง 8%
- Official Varities 2 20%
- Patumtani 1 12%
- Supanburi 1% 1%
- Chainat 1,2 19%
- Pisanuloke 1,2 2%

Second rice production in 2007 (ton)

- Supanburi 1 31%
- Chainat 1,2 18%
- Supanburi 60,90 5%
- Kao-Kho ไม่ไว้แสง 8%
- Official Varities 2 20%
- Pisanuloke 1,2 2%
- Supanburi 1%
- Patumtani 1 13%
# Fertilization

<table>
<thead>
<tr>
<th>Cultivation method</th>
<th>Basal Fertilizer Type or N-P-K (kg/ha), timing of applying fertilizer after planting</th>
<th>Topdressing Fertilizer Type or N-P-K (kg/ha), timing of applying fertilizer after planting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transplanting</td>
<td>16-16-8 (125)</td>
<td>AS (187.5), 20 days</td>
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<tr>
<td></td>
<td>CMP (630)</td>
<td>Urea (93.75), 64 days</td>
</tr>
<tr>
<td>Transplanting Seedling</td>
<td>Manure/Compost (5000) 16-16-8 (100)</td>
<td>16-16-8 (NA), 15 days</td>
</tr>
<tr>
<td>Planting</td>
<td>16-16-8 (156), -1-0 day or 15 days or AS (156) and KCl (30-60), -1-0 day or 15 days</td>
<td>Urea 46-0-0 (40), flowering or AS (21-0-0) (78.75), flowering</td>
</tr>
<tr>
<td>1) Photoperiod-sensitive</td>
<td>16-16-8 (187.5), -1-0 day or 15 days or AS (187.5) and KCl (3-6), -1-0 day or 15 days</td>
<td>Urea 46-0-0 (78), flowering or AS (21-0-0) (156.25), flowering</td>
</tr>
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<td>2) Photoperiod-insensitive</td>
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<tr>
<td>Broadcasting</td>
<td>16-20-0 (137.5), 15 days Urea (18.75), 15 days Urea (39), 57 days</td>
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<tr>
<td>Pre-germinated seed</td>
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<tr>
<td>broadcasting</td>
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</table>
lime is applied for 3 bags/rai (5 kg/bag, or 94 kg/ha)
3. Harvesting
Rice straw production,
DEDE 2009
Rotation crop

*Crotalaria juncea*

*Canavalia ensiformis*
Maize-Rice rotation
Socio-economic aspects

Cost of Major rice

Variable cost (baht/ha)
Fixed cost (baht/ha)
Total cost (baht/ha)

OAE, 2010
Farmer's Income

(BOI, 2008)
1. Land preparation
   - Variety selection
   - Crop rotation
   - Straw management & Utilization

2. Seeding & Planting
   - Irrigation, fertilization, weeds & pest controls
   - Water drainage

3. Harvesting