DATABASE OF AGRICULTURAL MECHANIZATION IN INDONESIA

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OUTLINE

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INTRODUCTION
INTRODUCTION

- New Government policy on food: Food surplus mainly (rice, maize and soybean) within 3 years then sugar and meat.
- Strategy to achieve food surplus:
  - Increase planting area 1 million ha through intensification and increasing crop index
  - Improve and revitalize of irrigation facility
  - Provide good quality of HYV seed at proper quantity, variety and time
  - Increase the number of agricultural machinery, improve the capability of operator and custom hiring
STATUS OF AGRICULTURE DEVELOPMENT IN INDONESIA (2014)

• Total paddy, maize and soybean area: 13.57, 3.78 and 0.61 million ha respectively.
• Size of farmland: (0.3-1.0 ha/farmer)
• Labor working in agriculture decreases from 31.17 mill in 2003 to 26.13 mill people in 2013
<table>
<thead>
<tr>
<th>Year</th>
<th>2 W Tractor</th>
<th>4W Tractor</th>
<th>Water Pump</th>
<th>Transplanter</th>
<th>Thresher</th>
<th>Combine Harvester</th>
<th>RMU</th>
<th>Dryer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>126.453</td>
<td>2.969</td>
<td>87.324</td>
<td>-</td>
<td>151.284</td>
<td>-</td>
<td>97.779</td>
<td>2.021</td>
</tr>
<tr>
<td>2010</td>
<td>126.016</td>
<td>2.969</td>
<td>87.801</td>
<td>-</td>
<td>201.241</td>
<td>-</td>
<td>97.881</td>
<td>2.436</td>
</tr>
<tr>
<td>2011</td>
<td>115.834</td>
<td>2.945</td>
<td>97.253</td>
<td>204</td>
<td>395.005</td>
<td>21</td>
<td>98.255</td>
<td>2.560</td>
</tr>
<tr>
<td>2012</td>
<td>121.397</td>
<td>3.153</td>
<td>107.876</td>
<td>360</td>
<td>397.255</td>
<td>221</td>
<td>98.219</td>
<td>3.311</td>
</tr>
<tr>
<td>2013</td>
<td>192.905</td>
<td>3.338</td>
<td>140.233</td>
<td>636</td>
<td>401.132</td>
<td>754</td>
<td>98.223</td>
<td>2.943</td>
</tr>
</tbody>
</table>
## Impact of Custom Hiring on food production

<table>
<thead>
<tr>
<th>Year</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PADDY:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total land (mil. ha)</td>
<td>12.299</td>
<td>12.669</td>
<td>12.870</td>
<td>13.204</td>
<td>13.446</td>
<td>13.569</td>
</tr>
<tr>
<td>Production (mil. ton dried)</td>
<td>60.326</td>
<td>64.399</td>
<td>65.150</td>
<td>65.757</td>
<td>69.056</td>
<td>71.291</td>
</tr>
<tr>
<td><strong>MAIZE:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total land (mil. ha)</td>
<td>4.002</td>
<td>4.161</td>
<td>4.134</td>
<td>3.865</td>
<td>3.958</td>
<td>3.786</td>
</tr>
<tr>
<td>Production (mil. ton dried)</td>
<td>16.317</td>
<td>17.630</td>
<td>17.845</td>
<td>17.643</td>
<td>19.387</td>
<td>18.506</td>
</tr>
<tr>
<td><strong>SOYBEAN:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total land (mil. ha)</td>
<td>0.591</td>
<td>0.723</td>
<td>0.672</td>
<td>0.622</td>
<td>0.568</td>
<td>0.601</td>
</tr>
<tr>
<td>Production (mil. ton dried)</td>
<td>0.776</td>
<td>0.975</td>
<td>0.905</td>
<td>0.851</td>
<td>0.843</td>
<td>0.780</td>
</tr>
</tbody>
</table>

### Number of custom hiring

<table>
<thead>
<tr>
<th>Year</th>
<th>Beginner</th>
<th>Developing</th>
<th>Professional</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>7,390</td>
<td>141</td>
<td>39</td>
<td>7,570</td>
</tr>
<tr>
<td>2007</td>
<td>7,543</td>
<td>409</td>
<td>65</td>
<td>8,017</td>
</tr>
<tr>
<td>2008</td>
<td>8,571</td>
<td>851</td>
<td>100</td>
<td>9,522</td>
</tr>
<tr>
<td>2009</td>
<td>8,145</td>
<td>1,783</td>
<td>318</td>
<td>11,103</td>
</tr>
<tr>
<td>2010</td>
<td>8,887</td>
<td>2,250</td>
<td>219</td>
<td>11,356</td>
</tr>
<tr>
<td>2011</td>
<td>8,801</td>
<td>2,693</td>
<td>453</td>
<td>11,947</td>
</tr>
<tr>
<td>2012</td>
<td>9,485</td>
<td>2,136</td>
<td>423</td>
<td>12,044</td>
</tr>
</tbody>
</table>
# AGRICULTURAL MACHINERY INDUSTRY

<table>
<thead>
<tr>
<th>COMPANY NAME</th>
<th>PRODUCT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT YAMINDO</td>
<td>4 WHEELS TRACTOR , 2 WHEELS TRACTOR , TRANSPLANTER, CULTIVATOR, POWER WEEDER, REAPER, POWER THRESHER, RMU</td>
</tr>
<tr>
<td>PT KUBOTA INDONESIA</td>
<td>DIESEL ENGINE SINGLE CYLINDER, GENERATOR</td>
</tr>
<tr>
<td>PT AGRINDO</td>
<td>4 WHEELS TRACTOR , 2 WHEELS TRACTOR , REAPER, RMU, DRYER, SEPARATOR, HULLER, RICE POLISHER, PADDY CLEANER, DIESEL ENGINE, WATER PUMP</td>
</tr>
<tr>
<td>CV KARYA HIDUP SANTOSA</td>
<td>2 WHEELS TRACTOR , POWER THRESHER, GENSET, RMU, WATER PUMP, SPARE PART</td>
</tr>
<tr>
<td>PT PURA BARUTAMA</td>
<td>DRYER, BURNER, RMU, CORN SHELLER, PADDY CLEANER, POWER THRESHER, GRANULATOR, COMPOST SIEVING MACHINE</td>
</tr>
<tr>
<td>COMPANY NAME</td>
<td>PRODUCT</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>PT. TRAKTOR NUSANTARA</td>
<td>DISTRIBUTOR OF 4 WHEELS TRACTOR MF</td>
</tr>
<tr>
<td>PT. BINA PERTIWI</td>
<td>DISTRIBUTOR OF 4 WHEELS TRACTOR KUBOTA</td>
</tr>
<tr>
<td>PT. ALTRAK 1978</td>
<td>DISTRIBUTOR OF 4 WHEELS TRACTOR KUBOTA</td>
</tr>
<tr>
<td>PT. SATRINDO MITRA UTAMA</td>
<td>DISTRIBUTOR OF 4 WHEELS TRACTOR JOHN DEERE</td>
</tr>
</tbody>
</table>
III

PROBLEMS AND CONSTRAINTS
PROBLEMS AND CONSTRAINTS OF AGRICULTURAL MECHANIZATION DEVELOPMENT

- Agricultural sector generate smaller income to the people compare to other sectors
- Small farming size → too many levee in the field
- Farm road is very limited
- Price of agricultural machinery is high
- Low capability custom hiring to operate agricultural machinery
- Low capability operator of agricultural machinery and custom hiring.
- Poor access to the data and information of agricultural machineries
THANK YOU