FERTILIZER SUBSIDY
POLICY AND IMPLEMENTATION IN INDONESIA

By:
Koeshartono (Marketing Director PT Pupuk Indonesia Holding Company)

1 CURRENT CONDITION OF INDONESIA AGRICULTURE
HARVESTED AREA AND PRODUCTIVITY ON PADDY & CORN

AGRICULTURAL LABOR IN INDONESIA (ABOVE 15 YEARS)

Source: Indonesia Statistic Bureau
Koeshartono, Fertilizer Subsidy in Indonesia
INCREASING THE COMMERCIAL VALUE
ON FERTILIZER SUBSIDY

VISION, TARGET & POLICY OF AGRICULTURE

Sustainable Excellence Industrial Agriculture
- Sustainable self-sufficiency
- Food security and nutrition
- Increasing added value
- Improve the welfare of farmers
- Excellence industrial agriculture system

Mayor Policy
- Enhance production and productivity
- Fertilizer Subsidy
- Improve efficiency in distribution
- Increasing added value

Support Policy
- Supply of Fertilizer
- Subsidy
- The expansion of new land
- Investment

Source: Ministry of Finance, Indonesia Statistic Bureau
Koeshartono, Fertilizer Subsidy in Indonesia
AGRICULTURE CONSTRAINTS

1. Limited water resources
2. Ongoing conversion and fragmentation on land
3. Increasingly unpredictable climate
4. Low soil fertility
5. Production target is continue to increase as demand for food consumption

Technology must be put forward through:
- Use of superior seeds,
- Use of fertilizer as recommendation and
- Mechanization

POLICY OF FERTILIZER SUBSIDY
BACKGROUND

Three Pillar of Food Security
1. Availability
2. Physical & economical affordability
3. Stability stock and price

POLICY OF FERTILIZER SUBSIDY

- Distribution
- Requirement (type and quantity/volume)
- Price
- Cost of Goods Sold
- Budget & Fertalizer Subsidy Disbursement
- Standardization product
- Guidance by fertilizer industry
- Supply & distribution
- Allocation per Producer
- Area of responsibility
REQUIREMENT MECHANISM OF FERTILIZER SUBSIDY

The Ministry of Agriculture discuss the governor’s proposal, involving the head of the Provincial Department of Crop and related agencies

Calculation of the Provincial Department of Crop proposed by the Governor to the Minister of Agriculture

Governor regulation of the requirement of fertilizer at district level

Calculation of subsidized fertilizer requirement of district level proposed by the Regent / Mayor to the Governor

Regulation of regent/mayor of the requirement of fertilizer at sub district level

Regulation of Minister of Agriculture, max retail price of subsidized fertilizer (type, volume, monthly schedule) at province level

PUBIC determines the responsibility of each producer on zone and allocation, producer set the territory and allocation for its distributor

Distributor determine the Kiosk responsibility on zone and allocation

Kiosk distribute subsidized fertilizer to farmers based on RDKK

RDKK: Requirement of fertilizer to farmers, through farmer groups

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REQUIREMENT OF FERTILIZER SUBSIDY

Requirement of fertilizer subsidy (volume, price & type) for the farmers are regulated by ministry of agriculture.

Requirement of fertilizer subsidy 2013:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>VOLUME (TON)</th>
<th>MAX RETAIL PRICE (HET) (IDR./Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td>4,100,000</td>
<td>1,800</td>
</tr>
<tr>
<td>SP-36</td>
<td>850,000</td>
<td>2,000</td>
</tr>
<tr>
<td>ZA</td>
<td>1,000,000</td>
<td>1,400</td>
</tr>
<tr>
<td>NPK</td>
<td>2,400,000</td>
<td>2,300</td>
</tr>
<tr>
<td>Organik</td>
<td>900,000</td>
<td>500</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9,250,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

Note:
1. Distribution of subsidized fertilizer based on RDKK (The Definitive Plan of Farmers Group Requirement)
2. RDKK: The requirement (fertilizer, seed, tool, machine & capital) for one planting season, which is arranged based on deliberation.
3 IMPLICATION THE IMPLEMENTATION OF FERTILIZER SUBSIDY
Gross Domestic Product grew by 17.4% per year.
Gross Domestic Product from Agriculture sector grew 17.7% per year.
Contribution of Agriculture to Total GDP average of 14.26% per year.

The Influence of Fertilizer on Increasing Paddy Production (Yield):

- Urea: 0.9% pa
- NPK: 40.5% pa
- Organic: 100.9% pa

3.2% pa
THE INFLUENCE OF FERTILIZER ON INCREASING CORN PRODUCTION (YIELD)

PADDY PRODUCTIVITY

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Ton/ha</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>5.0</td>
<td>5.1</td>
<td>0.1</td>
</tr>
<tr>
<td>China</td>
<td>6.6</td>
<td>6.7</td>
<td>0.1</td>
</tr>
<tr>
<td>India</td>
<td>3.2</td>
<td>3.6</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: FAO
### CORN PRODUCTIVITY

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2012</td>
</tr>
<tr>
<td>Indonesia</td>
<td>4.2</td>
<td>4.9</td>
</tr>
<tr>
<td>China</td>
<td>5.3</td>
<td>6.0</td>
</tr>
<tr>
<td>USA</td>
<td>10.3</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Source: FAO

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### THE EXCHANGE RATE FARMERS

Source: Statistic Indonesia Bureau
4 THE DEVELOPMENT OF FERTILIZER SUBSIDY POLICY

Value of Price Subsidy is calculated from the difference between Cost of Goods Sold + Cost of local transportation and handling + Financial Cost + Profit and Maximum Retail Price
5 THE CONSTRAINT IN FERTILIZER SUBSIDY

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THE CONSTRAINT IN IMPLEMENTATION FERTILIZER SUBSIDY

1. Raw material availability (Gas, Phosphate & Potash)
2. The Amount of fertilizer subsidy budget
3. The accuracy of RDKK
4. Determination of cost of goods sold (HPP) of subsidized fertilizer
5. Number of institutions who are involved with the preparation process of subsidized fertilizer
<table>
<thead>
<tr>
<th>YEAR</th>
<th>Max retail price (IDR/Kg) (HET)</th>
<th>Government purchase price (IDR/Kg) (HPP)</th>
<th>Ratio HPP/HET</th>
<th>International Market Price of Urea USD/Ton</th>
<th>Disparity (IDR/Kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>1,050</td>
<td>1,725</td>
<td>1,64</td>
<td>149</td>
<td>994</td>
</tr>
<tr>
<td>2004</td>
<td>1,050</td>
<td>1,725</td>
<td>1,64</td>
<td>201</td>
<td>1,536</td>
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<tr>
<td>2005</td>
<td>1,050</td>
<td>1,765</td>
<td>1,85</td>
<td>241</td>
<td>2,104</td>
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<tr>
<td>2006</td>
<td>1,200</td>
<td>2,280</td>
<td>1,90</td>
<td>238</td>
<td>1,819</td>
</tr>
<tr>
<td>2007</td>
<td>1,200</td>
<td>2,575</td>
<td>2,15</td>
<td>319</td>
<td>2,578</td>
</tr>
<tr>
<td>2008</td>
<td>1,200</td>
<td>2,800</td>
<td>2,33</td>
<td>524</td>
<td>4,767</td>
</tr>
<tr>
<td>2009</td>
<td>1,200</td>
<td>3,000</td>
<td>2,50</td>
<td>274</td>
<td>2,567</td>
</tr>
<tr>
<td>2010</td>
<td>1,600</td>
<td>3,300</td>
<td>2,06</td>
<td>305</td>
<td>2,114</td>
</tr>
<tr>
<td>2011</td>
<td>1,600</td>
<td>3,300</td>
<td>2,06</td>
<td>443</td>
<td>3,260</td>
</tr>
<tr>
<td>2012</td>
<td>1,800</td>
<td>4,150</td>
<td>2,30</td>
<td>431</td>
<td>3,187</td>
</tr>
</tbody>
</table>

1) Price of Urea Prill, Midle East (FERTECON)

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VALUES & ALLOCATION OF FERTILIZER SUBSIDY

% Fertilizer Subsidy of Total Subsidy

Source: Finance Report 2013 (APBN)

The estimate of Indonesia population 2025: 261.4 million people (average growth 4%).

Increasing population has consequence in rising the food.
FERTILIZER REQUIREMENT OF AGRICULTURAL SECTOR

Million Ton

Food Production

- 120,00
- 100,00
- 80,00
- 60,00
- 40,00
- 20,00
- 0

2010 2015 2020 2025

PADDY 66,47 77,57 84,47 100,62
CORN 18,33 21,82 28,41 45,80
UREA 3,35 3,57 3,70 3,89
NPK 1,39 1,61 1,87 2,16
ORGANIC 8,02 8,22 8,43 8,64

Source:
Ministry of Agriculture

CONCLUSION

- Agricultural development in Indonesia in achieving food self-sufficiency by providing policy and some technological breakthroughs.

- The achievement of increased productivity has been supported by the application of balanced fertilization technology/method, although still needs to be improved.

- In the future the requirement of fertilizer in Indonesia will increase significantly, for subsidy and non subsidy.

- Fertilizer subsidy policy is needed by farmers and strategically able to overcome the weakness of farmers.

- Subsidy policy on fertilizer is remain necessary for the next few years:
  - The increasing cost of material (Gas, phosphate, potassium) cause increase in the cost of goods sold of subsidized fertilizer
  - Industry sector has not been able to accommodate the surplus labor from agricultural sector, so that the welfare of the agricultural sector needs to be improved.