Agriculture and fertilizer market in the Philippines: current situation and outlook

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Content

- Agriculture and economic context
- Fertilizer demand situation
- Fertilizer supply situation
- Factors affecting demand and the outlook
- Conclusion and recommendations
### Economy and population

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (M persons)(^1)</td>
<td>90.5</td>
<td>92.2</td>
<td>94.0</td>
<td>95.6</td>
<td>97.0</td>
</tr>
<tr>
<td>GDP real growth rate (%)(^2)</td>
<td>3.7</td>
<td>1.1</td>
<td>7.3</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Share of agriculture in total employment (%)(^3)</td>
<td>35.3</td>
<td>34.3</td>
<td>33.2</td>
<td>30</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: \(^1\)NSO, \(^2\)WEO, 2011; \(^3\)BAS
Feeding the world: challenges for the fertilizer industry

Agricultural Situation

Agricultural area and utilization

- Per cent
  - Grassland: 1%
  - Others: 1%
  - Forest: 3%
  - Arable land: 51%
  - Permanent crops: 44%

Agricultural area: 11.8 Mha
Irrigated land: 1.5 Mha

Crop area planted/harvested* ('000 has)

- Others: 1,115,90
- Fruits and vegetables: 905,60
- Sugarcane: 354,9
- Coconut: 3,575,90
- Corn: 2,499,00
- Rice: 4,354,20

Source: Country STAT

Production of major crops by area

Per cent

- Luzon
- Visayas
- Mindanao

Source: BAS
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### Cereal production and nutrient use

<table>
<thead>
<tr>
<th></th>
<th>Ave. nutrient consumption (kg/ha)</th>
<th>N:P:K ratio</th>
<th>Average Yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Wheat</td>
</tr>
<tr>
<td>Philippines</td>
<td>92</td>
<td>7.5:1.4:1.0</td>
<td>none</td>
</tr>
<tr>
<td>China</td>
<td>289</td>
<td>4.9:1.7:1.0</td>
<td>4.3</td>
</tr>
<tr>
<td>World (ave.)</td>
<td>150</td>
<td>5.2:1.7:1.0</td>
<td>2.9</td>
</tr>
</tbody>
</table>

Source: BAS, IFA-FUBC, FAOSTAT

### Historical fertilizer consumption, rice production and area harvested

- Fertilizer consumption (Mt nutrients)
- Average yield (t/ha)
- Area harvested (Mhas)

Source: 1IFADATA, 2AFSIS

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Fertilizer use by crop (2008)

- Rice: 38%
- Corn: 19%
- Sugar: 15%
- Fruits and vegetables: 7%
- Other crops: 21%

Source: AFC

Nutrient use by crop (%) 2008

- N: Rice 40, Corn 16, Oil palm 20, Fruits & veggies 3, Sugar 2
- P2O5: Rice 30, Corn 17, Oil palm 12, Fruits & veggies 6, Sugar 6
- K2O: Rice 15, Corn 5, Oil palm 6, Fruits & veggies 10, Sugar 14

Source: IFA
### Agriculture and fertilizer market in the Philippines: current situation and outlook

#### Consumption by product type

**11 year average (1997-2007)**

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Total ('000 tonnes product)</th>
<th>Source: FPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urea</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-0-60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-14-14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-20-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-0-0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-46-0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Fertilizer supply (all grades) by source in the Philippines

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Supply ('000 mt)</th>
<th>Production ('000 mt)</th>
<th>Production to Total Supply (%)</th>
<th>Imports ('000 mt)</th>
<th>Imports to Total Supply (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>1,799.3</td>
<td>287.1</td>
<td>16</td>
<td>1,512.2</td>
<td>84</td>
</tr>
<tr>
<td>2009</td>
<td>1,929.8</td>
<td>196.1</td>
<td>10.2</td>
<td>1,733.7</td>
<td>89.8</td>
</tr>
<tr>
<td>2010P</td>
<td>2,172.2</td>
<td>44.4 p</td>
<td>2.0</td>
<td>2,127.8</td>
<td>98</td>
</tr>
</tbody>
</table>

Source: BAS and FPA

P = preliminary
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Fertilizer production facilities

- **Soiltech Agricultural Products Corp.**
  - San Fernando, La Union
  - Product: NPK

- **AFC Fertilizer & Chemical**
  - Toledo, Cebu
  - Products: NP, NK and NPKs

- **Universal Harvester**
  - Laguna
  - Products: SOP

- **Philphos Isabel, Leyte**
  - Guiguinto, Bulacan
  - Product: SOP

Source: FPA, 2011

Fertilizer production

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>% change</th>
<th>2009</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>97.0</td>
<td>41.0</td>
<td>-57.7</td>
<td>49.0</td>
<td>+19.5</td>
</tr>
<tr>
<td>P2O5</td>
<td>75.8</td>
<td>42.1</td>
<td>-44.4</td>
<td>54.4</td>
<td>+29.2</td>
</tr>
<tr>
<td>K2O</td>
<td>6.2</td>
<td>6.4</td>
<td>+3.2</td>
<td>3.0</td>
<td>-53.0</td>
</tr>
<tr>
<td>Total</td>
<td>179</td>
<td>89.5</td>
<td>-50</td>
<td>106.4</td>
<td>+18.8</td>
</tr>
</tbody>
</table>

(*000 t nutrient)

Source: FPA, IFADATA

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Agriculture and fertilizer market in the Philippines: current situation and outlook

Fertilizer importations in 2010

- **China**: 32%
- **Japan**: 18%
- **Canada**: 8%
- **S. Korea**: 8%
- **Israel**: 8%
- **Others**: 26%

Source: FPA

Urea imports in 2010

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Per cent share</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>42.39</td>
</tr>
<tr>
<td>Indonesia</td>
<td>21.47</td>
</tr>
<tr>
<td>Malaysia</td>
<td>14.97</td>
</tr>
<tr>
<td>Qatar</td>
<td>12.48</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>4.04</td>
</tr>
<tr>
<td>Others</td>
<td>4.64</td>
</tr>
</tbody>
</table>

Source: BAS

Source: IFADATA

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**Marketing and distribution set-up**

- Importers/Manufacturers
- Area distributors
- Plantation Accounts
- Cooperatives
- Distributors/dealers
- Cooperative growers/Growers Associations
- Farmers
- Dealer
- Farmer members
- Farmers

**Agricultural policies**

**Rice sufficiency by 2013**
- QTA – rice ratooning program
- Plant now-pay later scheme
- Increase credit and crop insurance facilities

**Promote food staples**
- Increase production and consumption: white corn grits, saba (cooking banana), sweet potato, cassava, taro and adlai (Job’s tears)

**Increase irrigation facilities**
- 24.7 billion pesos budget for 2012: 250,000 hectares for the wet season and 150,000 hectares for the dry season
Fertilizer policies

- No fertilizer subsidy (since 1998)
- Deregulation of fertilizer trade
- VAT exemption for fertilizer imports by direct users
- Fertilizer assistance to typhoon affected rice farms
- Increase use of organic fertilizer

Drivers of Philippine fertilizer demand

- 1. Growing population,
- 2. Increasing income
- 3. Increase production of high value crops
- 4. Agricultural intensification
- 1. Industrialization
- 2. Decreasing rural population and employment in agriculture
- 3. Increased use of organic fertilizer and recycling of nutrients,
- 4. Poor government policies
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Philippines fertilizer consumption trend
Short to medium-term forecast

Source: IFADATA/Country Reports

Fertilizer use constraints

1. Lack of credit facilities
2. Food prices; inappropriate fertilizer to food crop ratio
3. Increasing poverty
4. Inappropriate government policy and regulation; lack of fertilizer incentives
5. Weak distribution/marketing system; lack/ or poor infrastructures
6. Weak communication and extension services

Source: IFA survey
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Key challenges

- Ensure availability and affordability of necessary nutrients to farmers
- Develop fertilizer grades suitable to changing crop and soil needs
- Limit cost of production with increasing fuel, raw materials and distribution costs
- Effective last-mile delivery to farmers