Towards a Secure and Fast Recovery

Indonesia Economic Prospects, December 2020

Part B: Food Security

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COVID-19 has brought food security into focus, inviting a new perspective on agrifood policy

The pandemic generated...

• Temporary spike in household food shortages (up 33% in May)
• Some disruptions in local food supply chains
• Focus on mitigating impacts: additional social support programs

In the process it revealed...

• Food supply is robust
• Food insecurity is less about (rice) availability and more about food access and affordability
• Agrifood policy needs to focus more on nutrition and healthy diets
Global food situation has remained stable during the pandemic

Trends in Agriculture and Cereal Prices (nominal terms)
(Index Jan., 2020=100)

Global food price index remains below the levels of the 2007-08 and 2011-12 crises
(FAO Food and Cereal Price Indices (Jan 2000 – Nov 2020; nominal, 2014-16=100))

Source: World Bank Commodity Price Data
Source: FAO Monthly Food Price Index
Agriculture and food security policies have been dominated by rice and by self-sufficiency focus.

**Self-Sufficiency Ratios of Strategic Commodities**

- Maize
- Rice
- Sugar
- Soybean

Source: Own estimates, based on data from FAOSTAT, International Trade Center/UN COMTRADE
The level of agricultural support has been high but concentrated in a few areas

### Total Support to Agriculture as percent of Gross Domestic Product (%): Average 2005-07 vs 2019

<table>
<thead>
<tr>
<th>Country</th>
<th>2005-07</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Korea</td>
<td>1.49</td>
<td>2.51</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.91</td>
<td>0.99</td>
</tr>
<tr>
<td>Japan</td>
<td>0.62</td>
<td>0.88</td>
</tr>
<tr>
<td>UE 28</td>
<td>0.61</td>
<td>0.85</td>
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<tr>
<td>Russia</td>
<td>0.59</td>
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<td>0.49</td>
<td>0.76</td>
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<tr>
<td>Mexico</td>
<td>0.47</td>
<td>0.5</td>
</tr>
<tr>
<td>USA</td>
<td>0.34</td>
<td>0.51</td>
</tr>
<tr>
<td>South Africa</td>
<td>0.33</td>
<td>0.62</td>
</tr>
<tr>
<td>Canada</td>
<td>0.27</td>
<td>0.3</td>
</tr>
<tr>
<td>New Zealand</td>
<td>0.29</td>
<td>0.3</td>
</tr>
<tr>
<td>Chile</td>
<td>0.27</td>
<td>0.83</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.14</td>
<td>0.25</td>
</tr>
</tbody>
</table>

### Composition of Central Government Agriculture Spending: 2005-2021; IDR trillion

<table>
<thead>
<tr>
<th>Year</th>
<th>MoA</th>
<th>Irrigation</th>
<th>Fertilizer Subsidies</th>
<th>Other Agri Subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>2.5</td>
<td>3.2</td>
<td>6.3</td>
<td>15.2</td>
</tr>
<tr>
<td>2007</td>
<td>3.4</td>
<td>5.3</td>
<td>4.2</td>
<td>11.0</td>
</tr>
<tr>
<td>2009</td>
<td>5.2</td>
<td>5.1</td>
<td>7.1</td>
<td>16.0</td>
</tr>
<tr>
<td>2011</td>
<td>7.2</td>
<td>7.7</td>
<td>8.0</td>
<td>16.0</td>
</tr>
<tr>
<td>2013</td>
<td>9.4</td>
<td>8.0</td>
<td>8.0</td>
<td>16.0</td>
</tr>
<tr>
<td>2015</td>
<td>11.6</td>
<td>9.1</td>
<td>9.1</td>
<td>16.0</td>
</tr>
<tr>
<td>2017</td>
<td>13.8</td>
<td>10.2</td>
<td>10.2</td>
<td>16.0</td>
</tr>
<tr>
<td>2019</td>
<td>16.0</td>
<td>12.3</td>
<td>12.3</td>
<td>16.0</td>
</tr>
<tr>
<td>2021</td>
<td>18.4</td>
<td>14.6</td>
<td>14.6</td>
<td>16.0</td>
</tr>
</tbody>
</table>

Source: World Bank

Source: OECD
Growing expenditure on agriculture has not been matched by growing productivity.

Total factor productivity may be running out of steam.

Agriculture TFP, growth by decade, 1990–2016

Source: USDA
This has contributed to high **Indonesian** food prices and insufficient diversification ...

**Retail price of rice in selected Asian countries**, 2012-20 (USD/kg).

**Export and Import Value of Fresh Fruits and Vegetables** in Selected EAP Countries (USD billion);

Source: Own estimates based on FAO GIEWS; Own estimates from ITN/UN COMTRADE
... and significant nutritional gaps

Diet Diversity Index (range: 0 – 100)

- Malaysia
- Thailand
- Philippines
- Vietnam
- Indonesia

Human Capital Productivity Loss due to Food-Borne Diseases, (current US$ billion, 2016)

- East Asia Pacific
- South Asia

Source: 2019 Global Food Security Index, The Economist Intelligence Unit

Source: Jaffee et al. (2019)
Three shifts are recommended to address food security challenges and modernize the agri-food system:

1. **Broaden the food security approach** to address **affordability and nutritional adequacy** issues.
2. **Re-adjust food security policy goals and instruments**.
3. **Improve quality of public spending** to enhance productivity and innovation in the agri-food system.
Recommended adjustment to food security policy goals

1. Shift from exclusive focus on increasing output to **increasing productivity** of crops and livestock

2. Transition from protecting farmers of selected crops to enabling **structural transformation** towards a **diversified agriculture** that benefits all farmers

3. Move away from protecting the domestic market with import restrictions to supporting the improved **competitiveness** of agriculture, and open up vast **export markets** for domestic producers
Development of the agri-food system could also help advance other national priorities

Development and modernization of the agrifood system can help to:

- Boost agricultural **incomes**
- Grow agriculture and food **exports**
- Promote **nutritional adequate and healthy diets**
- Enhance economic **inclusion**
- Promote **environmental sustainability**
- Establish **lower and more stable agricultural prices**
- Increase agricultural **jobs**, especially in processing, trading and food-services
- Increase food **choice and convenience** for consumers
- Create a more **competitive agriculture** & enhance its longer-term **growth potential**