SUSTAINABLE FOOD SECURITY DEVELOPMENT IN INDONESIA: POLICIES AND ITS IMPLEMENTATION

by:
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I. INTRODUCTION
“Food, energy and climate. For the first time in history, these three are closely linked. Without an understanding of this new reality, countries and the international community lack the basis for the most fundamental policy decisions – decisions that affect access to food for millions of people” (FAO AT WORK, 2007-2008)
FOOD SECURITY AND ITS DIMENSIONS

- "Food security" is defined as a state of affairs where all people at all times have access to safe and nutritious food to maintain a healthy and active life (FAO).
- Food security has three dimensions:
  - **Availability** of sufficient quantities of food in appropriate quality, and supplied through domestic production or imports;
  - **Accessibility** of households and individuals to appropriate foods for a nutritious diet; and
  - **Affordability** of individuals to consume food according to their respective socio-economic conditions, cultural backgrounds, and preferences.
AGRICULTURE AND FOOD SECURITY IN DEVELOPING COUNTRIES

The agricultural sector is the centre of the states’ economies. This sector contributes a large share of GDP, employs a large proportion of the labor force, represents a major source of foreign exchange earnings, supplies the basic food, and provides subsistence and other income for the large rural populations.

Special attention needs to be given to research in food and agriculture.

The agricultural sector is the starting point for finding sustainable solutions to overcome the current food crisis. This relates to agricultural productivity, as well as, to policy frameworks for combating hunger and poverty.
THE CONSTRAINTS FOR AGRICULTURAL DEVELOPMENT IN THE DEVELOPING WORLD

- Inappropriate production technologies utilization, especially for smallholder farming
- Inadequate provision of support services
- Less access to official financial sources
- Poor governance leading to weakened farmer institutions
- High cost of farm inputs
- Depressed commodity prices in the world market
- Inadequate rural infrastructure
- Limited access to international market
- Small budget allocation for agricultural research
Issues on the global food, economic, fuel crisis, and climate change have become a major concern in sustaining our world food security.

- The fossil fuel crisis has led to the rising price of food, transportations, and agricultural inputs.
- The food price hike will consequently reduce the consumption quality of poor households.
This multidimensional crisis will directly hit the poorest and neediest of the world and in turn decrease their already low quality of life.

This situation, coupled with the global climate change and the recently emerged financial crisis would complicate the future problem in achieving food security in the developing countries, or even in the global terms.
Indonesia has committed to achieve its MDG’s and sustain its policy to put agriculture as one of our important development agenda.

Indonesian Government gives high priority to the efforts of achieving sustainable food security.

The Government promotes the optimal utilization of the local resources and culture, and the promotion of innovative technology and market opportunities.
We also share our view that the recent global food security situation will challenge and add burdens in achieving the 1996 World Food Summit and the Millennium Development Goals.
ASEAN Ministers of Agriculture and Forestry (AMAF) and AMAF Plus Three (China, Korea and Japan) meetings in Ha Noi, October 2008: **Member countries expressed their deep concern on food security issues and their willingness to work closely to address those issues.**

ASEAN countries formulated an Integrated Food Security Framework and Strategic Plan of Actions that aimed at securing and stable food supply as well as household access to food.
ASEAN Food Security Framework:
- sustainable food production,
- agricultural innovations,
- conducive markets,
- agro-based investment,
- emergency relief,
- adapting to climate change and
- avoiding the adverse impact of bio-energy development on food security.
II. FOOD SECURITY SITUATION IN INDONESIA
<table>
<thead>
<tr>
<th>Year</th>
<th>Number (Million)</th>
<th>% of total population</th>
<th>% rural poor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>1998</td>
<td>49.5</td>
<td>31.9</td>
<td>24.2</td>
</tr>
<tr>
<td>2000</td>
<td>38.7</td>
<td>26.4</td>
<td>19.1</td>
</tr>
<tr>
<td>2002</td>
<td>38.2</td>
<td>25.1</td>
<td>18.2</td>
</tr>
<tr>
<td>2004</td>
<td>36.1</td>
<td>24.8</td>
<td>16.7</td>
</tr>
<tr>
<td>2006</td>
<td>39.1</td>
<td>24.8</td>
<td>17.8</td>
</tr>
<tr>
<td>2007</td>
<td>37.2</td>
<td>23.6</td>
<td>16.6</td>
</tr>
</tbody>
</table>

Population in 2007: 225 million
Source: CBS, Indonesia
### Food Availability and Consumption, 2007

<table>
<thead>
<tr>
<th></th>
<th>Energy (Kcal/caput)</th>
<th>Protein (Gram/caput)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>3035</td>
<td>80.33</td>
</tr>
<tr>
<td>Recommended</td>
<td>2200</td>
<td>57.00</td>
</tr>
<tr>
<td>Consumption</td>
<td>2015</td>
<td>57.65</td>
</tr>
<tr>
<td>Recommended</td>
<td>2000</td>
<td>52.00</td>
</tr>
</tbody>
</table>

- At National level food availability is more than enough (sufficient).
- At micro level, $\pm$ 20% households consumed less than dietary recommended.
- Problem: distribution and affordability.
### Food Production in 2007

<table>
<thead>
<tr>
<th>Items</th>
<th>Volume (MT)</th>
<th>Growth (%/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paddy</td>
<td>57.16</td>
<td>4.96</td>
</tr>
<tr>
<td>Corn</td>
<td>13.29</td>
<td>14.45</td>
</tr>
<tr>
<td>Cassava</td>
<td>17.99</td>
<td>1.42</td>
</tr>
<tr>
<td>Sugar</td>
<td>2.45</td>
<td>1.33</td>
</tr>
<tr>
<td>CPO</td>
<td>17.40</td>
<td>5.68</td>
</tr>
</tbody>
</table>

*Source: MOA, Indonesia*
# Food Import Dependency, 2007

<table>
<thead>
<tr>
<th>Items</th>
<th>Production (million ton)</th>
<th>% Import of Total Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPO</td>
<td>17.40</td>
<td>0.0</td>
</tr>
<tr>
<td>Rice</td>
<td>32.37</td>
<td>4.0</td>
</tr>
<tr>
<td>Maize</td>
<td>13.30</td>
<td>8.1</td>
</tr>
<tr>
<td>Sugar</td>
<td>2.45</td>
<td>13.5</td>
</tr>
<tr>
<td>Beef</td>
<td>0.36</td>
<td>28.0</td>
</tr>
<tr>
<td>Soybean</td>
<td>0.59</td>
<td>61.8</td>
</tr>
<tr>
<td>Wheat</td>
<td>0.00</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: MOA, Indonesia
## Rice Production, 2004 - 2008

<table>
<thead>
<tr>
<th>Year</th>
<th>Harvested Area (M Ha)</th>
<th>Yield Rate (Qu/Ha)</th>
<th>Production (M Ton)</th>
<th>Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>11.92</td>
<td>45.41</td>
<td>54.09</td>
<td>3.74</td>
</tr>
<tr>
<td>2005</td>
<td>11.84</td>
<td>45.74</td>
<td>54.15</td>
<td>0.12</td>
</tr>
<tr>
<td>2006</td>
<td>11.79</td>
<td>46.20</td>
<td>54.45</td>
<td>0.56</td>
</tr>
<tr>
<td>2007</td>
<td>12.15</td>
<td>47.05</td>
<td>57.16</td>
<td>4.96</td>
</tr>
<tr>
<td>2008*)</td>
<td>12.39</td>
<td>48.65</td>
<td>60.28*)</td>
<td>5.45</td>
</tr>
</tbody>
</table>

*) Third Forecast  
Source: CBS, Indonesia
### Rice Supply and Demand in Indonesia, 2005 - 2008

(Million ton)

<table>
<thead>
<tr>
<th>Food Balance</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production (Paddy)</td>
<td>54.15</td>
<td>54.45</td>
<td>57.16</td>
<td>60.28</td>
</tr>
<tr>
<td>Production (Rice)</td>
<td>30.67</td>
<td>30.84</td>
<td>32.37</td>
<td>34.14</td>
</tr>
<tr>
<td>Consumption</td>
<td>30.59</td>
<td>30.99</td>
<td>31.50</td>
<td>31.70</td>
</tr>
<tr>
<td>Import</td>
<td>0.19</td>
<td>0.44</td>
<td>1.30</td>
<td>-</td>
</tr>
<tr>
<td>Ending Stock</td>
<td>2.04</td>
<td>2.32</td>
<td>4.49</td>
<td>6.93</td>
</tr>
</tbody>
</table>

*) Estimate (third round)

Source: MOA, Indonesia
The Share Of Indonesian Rice Production in The ASEAN Region

- Indonesia contribute 30% of the ASEAN rice production
- Paddy productivity in Indonesia was 20% higher than the average paddy productivity in ASEAN

<table>
<thead>
<tr>
<th>Member Countries</th>
<th>Production (mil ton)</th>
<th>Productivity (ton/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASEAN</td>
<td>182.29</td>
<td>3.98</td>
</tr>
<tr>
<td>1. Indonesia</td>
<td>57,16</td>
<td>4.71</td>
</tr>
<tr>
<td>2. Vietnam</td>
<td>35,79</td>
<td>4.98</td>
</tr>
<tr>
<td>3. Myanmar</td>
<td>31,43</td>
<td>3.92</td>
</tr>
<tr>
<td>4. Thailand</td>
<td>30,11</td>
<td>2.94</td>
</tr>
<tr>
<td>5. Philippines</td>
<td>16,24</td>
<td>3.79</td>
</tr>
<tr>
<td>6. Cambodia</td>
<td>6,73</td>
<td>2.61</td>
</tr>
<tr>
<td>7. Malaysia</td>
<td>2,38</td>
<td>3.45</td>
</tr>
<tr>
<td>8. LAO PDR</td>
<td>2,38</td>
<td>3.56</td>
</tr>
<tr>
<td>9. Brunei D</td>
<td>1,00</td>
<td>1.13</td>
</tr>
<tr>
<td>10. Singapore</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Domestic food prices were more stable than those in international markets.
Trend of Selected Food Prices in Domestic Market
III. FOOD POLICIES AND ITS IMPLEMENTATION
Access to food is the most basic human right, hence a solid national policy on food security is required.

Indonesia has more than 220 million people with 1.3% growth per year.

To secure food availability, a sustainable food production growth more than 2% per year is needed.

Without reformatory action, this can lead to food scarcity, hunger, and starvation for millions of Indonesians.
APPROACHES

- Strengthening food supply by maximizing available resources in a sustainable manner.
- Improving food distribution system to guarantee a stable food supply and public access to food.
- Encouraging diversified food consumption.
- Preventing and resolving food scarcity.
A. POLICY ON SUPPLY SIDE:

- Set timetable for achieving food self sufficiency on five most important food commodities:
  - Rice (2005)
  - Corn (2008)
  - Soybean (2012)
  - Sugar (2009)
  - Beef (2010)

- Apply “promotion and protection” approach:
  - Promote investment and growth in food production through efficiency and competitiveness
  - Protect agriculture/farmers from hostile international markets through tariff and subsidy (import of stopple foods is the last resort)
Implement **Five Efforts Principle (PANCA YASA)** as a strategic set to revitalize agriculture development:

i. Development & rehabilitation of agricultural infrastructure (i.e. rural irrigation, farm roads)

ii. Empowering farmers’ groups/organizations, especially in their ability to access and adopt recommended technology
iii. Revitalization of agricultural extension; especially in delivering technology and information related to agribusiness development

iv. Improving availability of agricultural finance and farmers accessibility to rural capital sources/institution

v. Improving market access for farmers, for both inputs and outputs
B. POLICY ON FOOD ACCESSIBILITY:

Twin Track Strategy:

- Promote sustainable rural and agricultural development to create job opportunity and generate income
- Distribute food aid for the poor and at the same time support and empower their capacity to develop their food security at household/community level
Expanding total agricultural area with minimal environmental impact.
Conserving and rehabilitating existing agricultural land.
Management and maintenance of water supply systems.
Introducing improved varieties and cultural practices.
Improving post-harvest technology.
Strengthen extension systems and promote collaboration between farmers.
Encourage investments and develop a conducive financing system.
A. PROGRAM ON FOOD PRODUCTION INCREASE

Empowering farmers to implement recommended technology on farming practices through:

- Increasing efficiency in technology and information delivery
  - Research-extension-farmer linkages
  - Field school on IPM and ICRM
- Improving accessibility and affordability of farm inputs
  - Subsidy on fertilizer (N, P, K), organics fertilizer, seeds (in selected area)
- Promoting better post harvest handling
- Providing output price incentive, through government procurement price for rice.
  (BULOG buys 2.0-2.5 million mt of rice annually. Procurement price is set usually higher than market price during peak harvesting season)
- This program was designed as “a movement” conducted at various level of governments and stakeholders.
Directed toward three clusters of target group:
(SSN and PNPM/Community Empowerment)

i. Direct Assistance (provide “fish”)

Target group: 19.1 million households

- Rice for the poor (RASKIN): 15 kg/month at subsidized price of Rp 1600/kg (± 1/3 of market price)
- Community Health Assistance (JAMKESMAS)
- School Operational Assistance (primary and junior high, BOS)
- Special assistance for 3.9 million of very poor households
ii. Self-help Community Empowerment (to provide “hook” and teach how to use it)

- Covering 5,270 sub districts (of total >7000)
- Provide Community Direct Assistance (BLM), Rp 3.0 billion/location/year to generate rural economy activities

iii. Micro and Small Scale Enterprise Empowerment

- Target Group: Micro and Small Scale Entrepreneurs
  - To promote economic growth and create job opportunity and source of income of the lower income class at village level
  - Provide micro credit (KUR) as working capital for micro and small scale economic activities, < Rp 5.0 million/person
  - Program designed by Ministry of Agriculture: Rural Agribusiness Development (PUAP) in 11,000 villages, provide working capital Rp 100 million/village
C. SHORT TERM ASSISTANCE : DIRECT CASH AID (BLT)

- This program was implemented as a compensation scheme for the poor to cope with possible adverse impact from fuel price increase.
- It was done twice (in 2005/2006 and in 2008) when the government increased administered fuel prices.
- Target beneficiaries in 2008: 19.2 million households, given Rp 100,000/month for 7 months.
- This program was effective in the short term. Based on evaluation result of the first DCA implementation, the money was used mainly to buy rice and kerosene.
IV. CONCLUDING REMARKS
CONCLUDING REMARKS

- Oil and food prices hike had a significant impact on the poor and food security.
- Due to the declining of CPO’s international price, Indonesia is seeking opportunities in expanding export, as well as, domestic markets for CPO.
- International rice price hike in very short period of time in early 2008 did not significantly affect Indonesian rice economy.
- Rice availability from domestic production was able to filter the international rice price instability being transferred to domestic market.
Indonesia has already had a sound policy and program for promoting sustainable food production growth and improving food security for the poor.

In the long run, challenge to improve food security:

- Better land and water management
- Improve rural and agriculture infrastructure
- Refocus agriculture research on productivity and efficiency
- Revitalize farmers’ organization and extension services
- Improve capacity in responding to climate change through anticipation, adaptation and mitigation capabilities

Continued...
Thank You
(Terima Kasih)