Meeting Food Security Goals with Good Policy Regional Dialogue

Medan, Indonesia June 26-27, 2013

Meeting Food Security Goals in the Philippines

Lessons and Policy Directions

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Los Baños
Philippine Situation on Population

Additional 217 Filipinos after 45 minutes

13,900 additional mouths to feed after our 2-day meeting

Question of food security, if not properly handled

Additional 208,000 persons after 1 month!

2010 = 93M
2012 = 98M
But wait, the issue is beyond population growth!

There is transformation going on . . . . .

- there are good signs of increases in household disposable income, hence, increase in demand for food especially for meat and dairy products

- Philippine economy continues to show robust performance

- Per capita GDP growth rates
  - 2010 (Annual) : 5.8% (www.knoema.com)
  - 2012 (Annual) : 4.8% (www.knoema.com)
  - 2013 (Q1) : 6.1% (www.thestar.com)

many Filipinos are still in the lower rungs of food intake (in terms of quantity and other considerations such as food quality, safety and nutritional values)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>1990</th>
<th>2000</th>
<th>2009</th>
<th>Growth Rate (1990-2009)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (milled equivalent)</td>
<td>94.2</td>
<td>104.2</td>
<td>123.3</td>
<td>1.43</td>
</tr>
<tr>
<td>Pork</td>
<td>11.6</td>
<td>16.0</td>
<td>18.3</td>
<td>2.43</td>
</tr>
<tr>
<td>Poultry Meat</td>
<td>3.9</td>
<td>7.5</td>
<td>10.0</td>
<td>5.08</td>
</tr>
<tr>
<td>Beef</td>
<td>2.2</td>
<td>4.8</td>
<td>4.4</td>
<td>3.72</td>
</tr>
<tr>
<td>Mutton and goat meat</td>
<td>0.4</td>
<td>0.4</td>
<td>0.6</td>
<td>2.16</td>
</tr>
<tr>
<td>Other Meat</td>
<td>0.2</td>
<td>0.2</td>
<td>0.3</td>
<td>2.16</td>
</tr>
<tr>
<td>All Meat</td>
<td>18.4</td>
<td>28.9</td>
<td>33.6</td>
<td>3.22</td>
</tr>
<tr>
<td>Eggs</td>
<td>3.2</td>
<td>3.8</td>
<td>4.4</td>
<td>1.69</td>
</tr>
<tr>
<td>Fish, seafood</td>
<td>36.3</td>
<td>29.0</td>
<td>36.4</td>
<td>0.01</td>
</tr>
<tr>
<td>Vegetables</td>
<td>68.2</td>
<td>62.5</td>
<td>62.2</td>
<td>-0.48</td>
</tr>
<tr>
<td>Fruits</td>
<td>115.0</td>
<td>94.5</td>
<td>121.8</td>
<td>0.30</td>
</tr>
<tr>
<td>Cereals (excluding beer)</td>
<td>135.5</td>
<td>140.0</td>
<td>153.9</td>
<td>0.67</td>
</tr>
<tr>
<td>Milk (excluding butter)</td>
<td>20.7</td>
<td>22.0</td>
<td>13.2</td>
<td>-2.34</td>
</tr>
</tbody>
</table>

Source of Basic Data: FAOSTAT 2013

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural Population</th>
<th>Urban Population</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>61,628,672</td>
<td>31,771,445</td>
<td>93,260,805</td>
</tr>
<tr>
<td>2000</td>
<td>77,309,976</td>
<td>34,804,721</td>
<td>112,114,697</td>
</tr>
<tr>
<td>2010</td>
<td>93,260,805</td>
<td>41,996,024</td>
<td>135,256,829</td>
</tr>
</tbody>
</table>

Source of Basic Data: http://www.indexmundi.com/facts/philippines/rural-population

...... rapid urbanization

Population to continue to grow at a relatively high rate.

Urbanization expected to intensify in the future.
income growth and urbanization will continue to catalyze growth of modern and/or high end markets across the country

diverse food requirements and quality demand based on increasing purchasing power

- transparency in food chain “from farm gate to food plate”
- increasing consumer discern from food availability towards quality, safe and nutritious food
- expected change in the food basket
the on-going revolution in food retailing will have a significant ramifications in the country’s food system

- better supply chain management would be inevitable
- adoption of better and safer production and marketing practices to reduce cost is no longer a choice
- modern supermarkets have to broaden their geographic range of suppliers
Meeting **food security**: An evasive objective?

**Definition of food security**

“availability and affordability of food to all”

(World Bank, 1986)

“. . . meeting the food requirements of the present and future generations of Filipinos in substantial quantity, ensuring the availability and affordability of food to all, either through local production or importation, or both, based on the country’s existing and potential resource endowment and related production advantages . . .

(AFMA, 1999)
“This is our investment in the future: to secure the food of our people. With the changing world food markets and climate, food is too important to be left to elements beyond our reasonable control”.

– President Benigno S. Aquino III

“Anchored on a vision of a food-secure society where farmers enjoy decent and rising standards of living, the goal of the FSSP 2011-2016 is to achieve self-sufficiency”.

FOOD STAPLES SUFFICIENCY PROGRAM 2011-2016
Enhancing Agricultural Productivity and Global Competitiveness
What has been done?

**Hardware**
infrastructures; production, processing & trade facilities, etc.

**Orgware**
implementation and operation; procedures and protocols; stakeholder network; consortium building, etc

**Software**
knowledge management; capacity building; team development, etc.
Food Security: Some Facts About the Philippines

Agriculture:

- declining contribution to GDP but continues to play substantial role:
  - creates jobs and income
  - generates foreign exchange earnings
  - provides food
  - supplies raw material
  - forward and backward linkages in the input and output value chain

Growth rate of AFF:

- 1990-2000 = 1.9%
- 2000-2012 = 2.84%

GDP Growth: 4.86%
Average annual growth rates (%) of crops by type, Philippines, 2000-2012.

<table>
<thead>
<tr>
<th>Crop</th>
<th>Growth Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palay</td>
<td>3.25</td>
</tr>
<tr>
<td>Corn</td>
<td>4.57</td>
</tr>
<tr>
<td>Sugarcane</td>
<td>3.62</td>
</tr>
<tr>
<td>Pineapple</td>
<td>3.67</td>
</tr>
<tr>
<td>Coconut</td>
<td>1.98</td>
</tr>
<tr>
<td>Crops Total</td>
<td>2.82</td>
</tr>
<tr>
<td>Others</td>
<td>1.54</td>
</tr>
<tr>
<td>Mango (Cross-)</td>
<td>(0.64)</td>
</tr>
</tbody>
</table>

Contribution to GVA (2000-2012) = 49% to 51%

Favorable policies on production:
- certified seeds
- fertilizer application
- adequate water supply
- FMR
- Favorable weather
Constraints:

- inadequate provision of irrigation infrastructure
- low adoption of technology
- ineffective rural infrastructure systems, including agricultural logistics and various facilities such as farm-to-market roads (FMR), post-harvest and information systems (NEDA 2011)
- inadequacy of aftersales services
- vulnerability to natural disasters
30.3% of the GVA in agriculture in 2012

Drivers: strong and resilient demand for meat, eggs and dairy products

buoyed up by the outcomes of significant changes in the organization of production, procurement of supplies, processing, and the improved distribution of meat products

Share (in %) in the value of livestock and poultry production by type, Philippines, 2000 - 2012.
Average annual growth rates (%) of livestock & poultry by type, Philippines, 2000-2012.

- Livestock
  - Cattle: 0.52
  - Swine: 2.23

- Dairy: 5.10

- Poultry
  - Chicken: 3.40
  - Chicken eggs: 4.71

Growth Rate (%)

Commodity
Annual growth rates of the livestock and poultry industries, Philippines, 2000 - 2012.
Constraints (IDEA 2012):

- large investment and working capital requirements
- barriers to entry among aspiring investors
- feared market saturation and pressures from imports and smuggling activities
Average annual growth rates (%) of the fisheries subsector by type, Philippines, 2000-2012.

Growth Rate (%)

- Fishery: 3.13
- Commercial: 0.93
- Municipal: 2.62
- Aquaculture: 5.69

Constraints:
- poor access to capital, technology and markets (Garcia and Rodriguez 2011)

Average share to GVA in agriculture
- 1990-2000 = 19.4%
- 2000-2012 = 18.2%

Institutional and infrastructure developments; favorable weather
Top agricultural exports in 2011
(Department of Agriculture, 2013)

- coconut oil (26%)
- fish like tuna, seaweeds, shrimps and prawns (19%)
- fresh banana (9%)
- centrifugal sugar (7%)
- pineapple and products (6%)
In general, domestic production of most food items - fairly sufficient

Slack in domestic supply - more reliant on importation

Total agricultural imports (2000-2011)

9.59% a year

Top agricultural import products in 2011
(DA 2013)

wheat (12%)
milk and cream products (9%)
soya bean oil/cake meal (7%)
rice (5%) in
Percent share in the value of total agricultural imports by major group, Philippines, 2000 - 2011.
SELF-SUFFICIENCY RATIOS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>1990</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
<th>2009</th>
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</thead>
<tbody>
<tr>
<td>Rice (milled equiv.)</td>
<td>91.59</td>
<td>91.15</td>
<td>90.77</td>
<td>83.86</td>
<td>85.06</td>
<td>85.38</td>
</tr>
<tr>
<td>Pork</td>
<td>99.86</td>
<td>97.84</td>
<td>97.12</td>
<td>99.16</td>
<td>99.08</td>
<td>96.97</td>
</tr>
<tr>
<td>Poultry Meat</td>
<td>100.00</td>
<td>97.60</td>
<td>96.06</td>
<td>96.27</td>
<td>95.34</td>
<td>93.55</td>
</tr>
<tr>
<td>Beef</td>
<td>89.93</td>
<td>71.63</td>
<td>69.46</td>
<td>67.75</td>
<td>68.25</td>
<td>71.46</td>
</tr>
<tr>
<td>Mutton and goat meat</td>
<td>100.00</td>
<td>97.14</td>
<td>94.29</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Other Meat</td>
<td>100.00</td>
<td>100.00</td>
<td>93.33</td>
<td>93.33</td>
<td>100.00</td>
<td>56.67</td>
</tr>
<tr>
<td>All Meat</td>
<td>98.59</td>
<td>93.80</td>
<td>92.77</td>
<td>93.75</td>
<td>93.56</td>
<td>92.28</td>
</tr>
<tr>
<td>Eggs</td>
<td>99.55</td>
<td>99.38</td>
<td>99.43</td>
<td>99.26</td>
<td>99.27</td>
<td>98.88</td>
</tr>
<tr>
<td>Fish, seafood</td>
<td>88.06</td>
<td>87.61</td>
<td>95.98</td>
<td>93.30</td>
<td>98.31</td>
<td>96.81</td>
</tr>
<tr>
<td>Vegetables</td>
<td>99.73</td>
<td>97.88</td>
<td>98.82</td>
<td>97.84</td>
<td>97.93</td>
<td>97.54</td>
</tr>
<tr>
<td>Fruits</td>
<td>117.00</td>
<td>132.75</td>
<td>129.02</td>
<td>127.38</td>
<td>125.81</td>
<td>116.20</td>
</tr>
<tr>
<td>Cereals (excl beer)</td>
<td>80.09</td>
<td>75.66</td>
<td>76.71</td>
<td>77.53</td>
<td>80.24</td>
<td>75.75</td>
</tr>
<tr>
<td>Milk (excl butter)</td>
<td>1.87</td>
<td>0.72</td>
<td>0.69</td>
<td>1.01</td>
<td>1.06</td>
<td>1.11</td>
</tr>
</tbody>
</table>

Source of basic data: FAOSTAT 2013; SSR are author's calculations
PRICES
Price Differentials

Prices, rice, Philippines, 2000 - 2011
International & Local Rice Price Volatilities

Domestic and international prices of rice, Philippines, Jan 2000-May 2013

Source of Basic Data: FAO
Retail price of well milled rice (PhP/kg), Philippines, 2006-2008.


- Tight world supply - depleted world stockpile in 2007-2008

Rice Price Volatilities

Effects of distortionary trade policies on food security and poverty points of view?
Prices, corn, Philippines, 2000 - 2011
Sources of inefficiencies across the value chain?

Prices, pork, Philippines, 2000 - 2011
Sources of inefficiencies across the value chain?

Prices, chicken, Philippines, 2000 - 2011
GOOD FOOD SECURITY POLICIES
Favorable policies on agricultural production

Area – related policies
Yield – related policies

Disposable Income – IGAs; poverty alleviation; conditional cash transfer
Commodity prices - price stabilization (S & D sides)

Food & Nutrition Management – RDA; HACCP; GAPs; GMPs

Availability

Accessibility

Utilization
DIRECTIONS OF REFORMS

**ESSENTIALS**

- Local procurement of buffer stock

- Front-loading of investment in public goods (irrigation, concreting of farm-to-market roads and other rural infrastructure)

- Research on and dissemination of flood- and drought-tolerant varieties and improved farming systems (including organic farming)

- Multi-agency approach to production credit, loan guarantees, and crop insurance

- Farm mechanization and postharvest facilities
ESSENTIALS . . .

- Improved yields in rainfed and upland areas (through deployment of Rice Sufficiency Officers; construction of shallow-tube wells and small farm reservoirs)

- Non-rice staples production (i.e., assistance to farmers planting white corn, cassava, sweet potato, bananas, and other food crops that serve as staples)

- Partnerships with Local Government Units, Civil Society Organizations, and private sector

- Transparent and accountable agriculture governance (direct communication with farmers, LGUs and CSOs close to them; geo-tagging to show the location of farm-to-market roads and irrigated areas)
IMPLICATIONS

1. Massive investments in terms of financial resources; policy attention necessary to raise agricultural productivity; agriculture sector to figure prominently on the national agenda.

2. Food insecurity and mass poverty in agriculture cannot be solved within the sector alone; dynamic link between agriculture, industrial and services sectors.
Changes in rhetorics over time (Falcon 1995):

"Can the world produce enough food?"

"Can the world produce enough food at reasonable prices?"

"Can the world produce enough food at reasonable prices and provide access to food by the poor?"

"Can the world produce enough food at reasonable prices, provide access to food by the poor, and not destroy the environment in the process?"

Proper stewardship of the natural resources is also of equal requisite to food security.

Sometimes, adverse impact of natural disasters on food supply is human-induced.
Thank you very much
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