

FOOD SECURITY AND ITS IMPLICATIONS TO DEVELOPING ECONOMIES

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Agriculture sector has not progress as fast as the non-agriculture sector. Food consumption has been growing at a faster rate than production. Food security situation, especially in developing economies, is vulnerable (the food crisis, as it has become known) to changes in supply and demand factors. So the questions are: What are the issues in the supply and demand sectors? How is the food situation in the developing economies, especially Asia? And what are strategies to address the food security?

Global population and income increase are driving demand for key agricultural produce. Historical trends and estimates indicate that despite the increase in global demand for agriculture, production growth rate has been declining, higher energy prices, increasing demand from emerging economies, underinvestment in agriculture and policy favoring export crop rather than food. With decreasing production growth, developing countries will be more dependent on food imports. Inelasticity of supply and demand causes large fluctuation in prices. Global food crises due to changes in the fundamentals and hence food equation. Supply sector constraints are imminent because of underinvestment in agricultural productivity & technology - limited investment in agricultural R&D - % of Agri. GDP: Malaysia (1.58%), Australia (3.38%), Japan (3.62%), Korea (1.73%), USA (2.65%); small scale farms with low level of technology; declining stock level; climate change and environmental concern and the contribution of agriculture to the problem; stronger linkages with oil – input (transportation, machinery & fertilizer) and output (biofuels – food vs energy); depleting resources – particularly arable land and water. Demand sector is booming because of income increase that led to changing lifestyle and diet; population growth; and growing concern on food safety.

Food security has four major dimensions: (1) availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports; (2) access by households and individuals to adequate resources to acquire appropriate foods for a nutritious diet; (3) utilization of food through adequate diet, water, sanitation, and health care; and (4) stability (availability + access). For availability, self-sufficiency level is low, so dependency on food imports is high. There is deficit food trade for most Asian. Hence, with low purchasing power made vulnerable to global fundamentals. For accessibility,

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poverty remains high, so capability to acquire higher income is low. Low income level is translated into high proportion on food expenditure, hence little margin for adjustment should food prices increase. For utilization, access to food utilization for some economies needs to be improved. Dietary consumption in the developing countries are lower than the developed countries.

Implications to developing economies need a policy framework such as twin track approach that is rural development/productivity enhancement and direct and immediate access to food. Most policy frameworks only deal with production. But, food security is not only a production issue. It must also include consumption, processing and marketing issues. Therefore, requires both sustainable production and consumption. The scope of agriculture has changed from production oriented to supply-value chain oriented. The performance depends on the socio-economic and political environment as well as agro-climatic and ecological environment. Multifunctional agriculture covers commodity and space. Commodity concerns with production of food and fiber. Non-commodity/space concerns with environmental preservation, rural employment, biodiversity, bio-fuel, soil and water health, ecotourism & recreational, preservation of rural landscape, rural community and food quality/safety. A policy diamond for a transforming economy: (1) *Safety nets - rural non-farm economy & skills development*: Provide safety nets by promoting rural non-farm economy to confront rural employment problem; enhance skills to give access to jobs offered by the growth of rural non-farm economy; (2) *Sustainable consumption* : Promote efficient post-harvest, processing, marketing & consumption activities; (3) *Sustainable production*: (a) Innovation, more investment in R&D & intensify TOT to improve productivity; (b) Entrepreneurship, commercial farming practices; (4) *Environmental services*: Recognize the multi-functionality of agriculture - payments for environmental services to promote production and conservation incentives (e.g. green technology).