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## **Food Security Policies in APEC: Executive Summary**

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**Asia-Pacific  
Economic Cooperation**

# **Food Security Policies in APEC (Executive Summary)**

**APEC Policy Support Unit**  
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**Advancing** Free Trade for Asia-Pacific **Prosperity**

## EXECUTIVE SUMMARY

The aim of this study is to complement APEC's ongoing work towards a comprehensive and unified Food System approach that promotes food security throughout the region. Because of the sharp rise in food prices in 2007-08 and again in 2011 as well as increased food price volatility, food security has become a major concern among many APEC economies. Rising food prices have resulted in intense discussions at both regional and domestic levels, and have resulted in new policy responses that have tried to address their negative impacts on vulnerable sectors of society. It is only by understanding what is taking place on the ground, and doing cross-country analyses that APEC can formulate a unified approach at a regional level that will address food security more effectively. APEC economies are among the world's largest food exporters and importers, reflecting a dynamic flow of traded food and agricultural commodities. While it recognizes the challenges of ensuring food security in the region and acknowledges the political and cultural sensitivity of food, APEC is therefore well positioned to help improve regional and global food security.

There are at least five reasons why APEC, a major forum for economic cooperation, has an important role to play in helping to improve regional and global food security. First, while APEC's member economies have reduced the region's undernourished by 24 per cent in the last two decades, there is still about one quarter of the world's hungry residing in the region. Second, APEC accounts for 53 per cent of global cereal production and almost 70 per cent of fish production. Third, APEC consists of major players in global agricultural trade. Together, APEC economies generated around 34 per cent and 36 per cent of global agricultural exports and imports, respectively, in 2009 and also accounted for a significant share in the trade of key agricultural commodities. Four, APEC economies are vulnerable to food security risks throughout the food chain as exemplified by a number of protests and riots that occurred during the food price crisis in 2007-08. Finally, the region is frequently exposed to natural disasters that temporarily disrupt food supply, damage the food production base, disrupt livelihoods, displace people and reduce access to food.

Given the complexity of factors affecting food security, a generalized concept of food security consisting simply of supply and demand is no longer adequate for planning anticipatory and response strategies. A more comprehensive approach is required, one that is broader in scope and one that takes into consideration all four basic dimensions of food security: availability, physical access, economic access and utilisation. Thus, a multi-methods approach purposely built around these four dimensions was employed to achieve the project's objectives. It included the administration of a survey instrument to appropriate contacts in each economy, a literature review of secondary sources, and interviews with relevant stakeholders. Our analysis produced the findings presented below. For ease of understanding and for convenience, they are presented in an annotated form and grouped under four categories:

### **FINDINGS**

#### *Food security in APEC*

- All APEC economies experience some form of food insecurity to some degree or another. While many are food secure at the macro level in terms of food availability, the picture is different at the household level.

- Agriculture and food security are now firmly back on the development and political agendas for most APEC economies, with some even identifying food security as of national strategic importance.
- Economies with common attributes vis-à-vis agriculture share common concerns across all four food security dimensions.
- In several APEC economies, food security is equated to rice self-sufficiency. Thus, many national policies are biased towards rice production or at least towards stabilizing domestic rice prices.

#### *Policy responses*

- APEC economies have responded to the various food security concerns by either reinforcing existing policy instruments or by introducing new ones. However, the policy focus has been biased towards increasing food availability and lowering food prices as well as cushioning the impact of higher prices on their populations.
- Common farmer-oriented policies have focused on reduced taxes, producer credit or financial support services, seed and fertiliser subsidies, producer price subsidies or building reserves, all aimed at increasing productivity and total production.
- Economies have also introduced trade policy measures to curtail price increases and ensure adequate supplies in domestic markets. Responses have depended to a great extent on whether the economies in question are net importers or exporters of food.
- Because of the devastating impact of extreme weather events on the agricultural sector in the last few years, a number of APEC economies have streamlined their frameworks for disaster assistance, climate change and green growth.
- Many APEC economies are increasing the size of their grain reserves, thus raising concerns about tighter international grain markets.
- Within the APEC region, a number of economies have increased their pro-biofuel policies resulting in an expansion of their biofuel industries. These are potentially in conflict with the region's food security objectives.
- Farmland expansion and acquisition are new food supply strategies in a number of economies.
- To address the 'economic access' dimension of food security and in particular rising food prices, economies have tried to cushion the impact of higher prices on more vulnerable sectors of society by a combination of food price controls, food price subsidies, imposition of safety nets, releasing stocks to stabilize prices, and food assistance and distribution.
- After decades of neglect, government expenditure in agriculture is now on the rise again in a number of APEC economies.
- Infrastructure leading to improved physical access to food is still in much need of investment, particularly in developing economies.
- Having been routinely neglected by governments and the donor community for many years, nutrition is now more explicitly recognized as being closely associated to food security and economies have begun to step up interventions in this area.

#### *Governance of food security*

- Potential conflict exists between food security objectives and those of other sectors.
- Multiple agencies or departments are involved in dealing with the diversity of issues related to food security and this often results in disconnected policy making and miscommunication.

- In addition to their commitments to food security initiatives within APEC, member economies are also taking part in other regional and global initiatives by bodies such as the G20, G8, ASEAN, the United Nation's High Level Task Force on Food Security, the Committee on World Food Security, the World Economic Forum, the CGIAR, etc. Thus, there is potential for overlap.

*Issues requiring additional attention*

- Noticeably overlooked in national policy discussions related to food security is the contribution of the fisheries and aquaculture sector.
- The role of reducing food losses is often underestimated in food security discussions.

Based on the above, 12 recommendations are presented below. They are not presented in order of importance.

**RECOMMENDATIONS**

**1. Food security should continue to be on top of the political and development agendas of APEC economies as well as of the international community.**

High and volatile food prices are likely to continue in the foreseeable future and may potentially be the 'new reality'. With a larger, more urbanised and affluent population continuing to increase, demand for more food but also a more varied, high-quality diet will grow which will require additional resources to grow. On the production side, the stronger linkages between agricultural commodity prices and oil prices will also have an impact on food price volatility and the further expansion of biofuels will place additional pressure on the system and compete with food crops for increasingly scarce resources. The effects of climate change which include higher and more variable temperatures, changes in precipitation patterns, and increased frequency of weather shocks will become increasingly apparent. Further, the world remains vulnerable to food price fluctuations because of low grain reserves and the fact that staple grains are exported by just a few economies.

**2. While food (rice) self-sufficiency has powerful resonance throughout the region, economies should be cautioned against the potential repercussions of such an approach. Policies that distort production and trade in agricultural commodities could potentially impede the attainment of long-term food security.**

The food system is more globalised and interconnected than ever before which itself has both advantages and disadvantages. For example, economic disruptions in one part of the world can quickly be transmitted to others but on the other hand, supply shocks in one economy can be compensated for by producers elsewhere. Trade is an excellent buffer for localised fluctuations originating domestically and therefore must be an essential component of any food security strategy. Not all economies can or should aspire to supplying all their own food needs. Doing so can be excessively costly (both financially and environmentally) and may reduce choice and quality, without providing the assurance of achieving food security. A general openness to trade, which APEC aspires to, will contribute to the robustness of each economy's capacity to address the challenges of food security.

Policy responses of some APEC economies during the 2007-08 crisis demonstrated that the actions of some economies at the domestic level, while entirely understandable in light of the

emergency situation, can compromise the food security objectives of other economies and contribute to the increased volatility of global food prices. In addition, the way in which some economies (particularly in the ASEAN region) responded not only undermined the promotion of regional solidarity but also the food security situation in the region.

**3. Economies should not lose sight of the fact that short-term policies or “coping” strategies (vs. “curing” strategies), particularly to increase food availability run the risk of countering the goal of addressing the longer-term determinants of food insecurity.**

During times of economic crisis, including food crises, the challenge to economies within APEC and elsewhere is getting the balance right between immediate policy responses to protect the most vulnerable, and medium- and long-term efforts to increase productivity in agriculture and sustain economic growth. Many of these short-term responses include agricultural supply-side policies that distort production and trade (e.g. production and input subsidies, food price controls, export restrictions, etc.) and therefore, have the potential to hamper efforts to achieve long-term food security. They lead to misallocation of resources domestically, they stimulate or conserve production in areas where it would not otherwise occur and they can distort the transmission of price signals to producers elsewhere.

**4. More inter-connected policy-making is needed to reduce policy conflicts between food and other sectors.**

The diversity of issues related to food security is currently dealt with by separate government agencies and departments. An integrated approach to food policy is therefore needed to address food security more effectively. Policies in other sectors outside the food system need to be developed in much closer conjunction with those for food. These areas include energy, water, land use, environment, labour, health, science and technology, infrastructure and transport etc. An example of such conflict highlighted in this study is that between food and biofuels. Conversely, policies in all areas of the food system should consider the implications for sustainability, climate change and hunger.

To encourage more interconnected policy making, governments should establish an inter-agency coordinating body to address the diversity of issues related to food security. A food-secure economy such as Australia is working to establish a National Food Security Agency that consists of all the major players relevant to food security. This body will coordinate the development and implementation of policies and programs targeted to improving Australia’s food security.

**5. APEC is encouraged to assess (both qualitatively and quantitatively) the robustness of each economy’s capacity to address the present and future challenges of food security. This would help to prioritise what urgent action needs to be taken at both the national and regional levels.**

Given that every economy in APEC experiences some form of food insecurity to some degree or another, it would be worthwhile for each economy to take stock of its food security system in relation to the four basic dimensions and measure how robust it actually is to withstand future challenges. There are existing indices that provide a quantitative estimation of how food secure an economy is from the perspective of supply and demand but there are few, if any, tools available to identify the factors that enable an economy to be food secure over time. An example of such a quantitative tool is Syngenta’s Rice Bowl Index (Syngenta,

2012). The Index does not describe an economy's actual state of food security but is intended to provide a means of assessing how robust its capacity is by considering the host of factors which will influence its state of food security. These factors are quantified on the basis of publicly available data and grouped into four rubrics: farm-level factors, environmental factors, policy and trade, and demand and price. Similarly, the Economist Intelligence Unit's newly launched Global Food Security Index (EIU, 2012), which is sponsored by Dupont, considers the core issues of affordability, availability, and quality across a set of 105 countries. The index is a dynamic quantitative and qualitative scoring model, constructed from 25 unique indicators, that measures the drivers of food security across both developing and developed economies.

## **6. Economies should recognise health and nutrition as being closely associated to food security and should intensify efforts to build a more food and nutrition conscious community.**

It is not enough to have more food available. Adequate nutrition is essential. Individuals must consume sufficient amounts of not only calories, but also protein, fats, vitamins, and minerals to support growth and development throughout their life. While significant progress has been made to increase food availability, some economies within the region continue to suffer from under nutrition and micro-nutrient deficiencies. This is a consequence of inadequate dietary diversity or a poor physical condition affecting an individual's capacity to properly 'utilise' food. Thus, food utilisation is determined by diet quality, education (particularly women's education), general childcare and feeding practices, food preparation and preservation, safe water, sanitation and access to general healthcare.

On the flip-side, the problem of over-nourishment is increasingly becoming apparent in many developed and emerging APEC economies and thus warrants more attention and focus.

## **7. Investment in all aspects of agriculture remains critical to sustainable long-term food security**

After decades of neglect, government expenditure in agriculture is now back on the rise. To assume its role as an engine of growth, development and poverty reduction, agriculture itself needs to grow. If developing economies are to follow a similar path to development as today's developed economies, they should create conditions for a gradual increase of investments in primary agriculture, up- and downstream sectors, research and innovation and rural infrastructure including roads and transportation. Research has shown that economies that performed best in terms of reducing poverty and hunger are also those that achieved higher net investment rates per agricultural worker. China stands out from other developing economies for assigning top priority to agriculture and in particular to innovation in agricultural science and technology in national economic development. China's annual growth rate of public spending on agricultural research and development in real terms increased from an average of 16 per cent from 2000-09 to more than 20 per cent in 2010-11 and is expected to grow in the coming years (IFPRI, 2012).

Forward planning and anticipatory action, particularly given future challenges of climate change and more frequent weather shocks, is required if food price volatility is not to be the new normal. This has to be supported by increased public and private sector investments in all four dimensions of food security.

**8. To protect the most vulnerable during emergency situations, the establishment and scaling-up of social protection programs, especially social safety nets should be accelerated.**

In economies lacking established safety net programs, governments should begin program development immediately, focusing on geographic areas that are extremely vulnerable to food price surges, and should draw on best practices from other economies. Where they are already in place, governments should ensure that scaling-up existing safety net programs is a viable option during times of emergencies by either adding new beneficiaries and/or by increasing transfers made to beneficiaries. The effectiveness of these programs will depend on the availability of government resources and administrative capacities, as well as proper targeting, design and implementation (Fan et al., 2011). More research is needed to determine the effectiveness of different forms of assistance, whether it be cash, food vouchers, or food. Each has its benefits and drawbacks.

**9. The contribution of reducing food losses should not be underestimated. Addressing losses across the entire food chain will be critical in any strategy to feed the region's growing and increasingly affluent and urban population.**

An oft-neglected strategy to improve food availability is the simple act of reducing waste. Inefficiencies across the entire food supply chain – from ‘farm to fork’ – result in significant food losses in both developing and developed countries. As much as 30 per cent of all food grown worldwide may be lost or wasted before and after it reaches the consumer. Reducing such waste could help to moderate the amount of increase in food production that is needed to meet growing food demand, which would alleviate the pressure on resources and help lower greenhouse gas emissions.

Regrettably, there are major data gaps in available knowledge of global food waste, especially with regard to the quantification of food losses by individual cause, and the cost of food loss prevention. Much of the data on losses have not been collected systematically and updated. In addition, there has not been much research on the impact of food waste in transitional economies such as Russia and China and other emerging APEC economies where food consumption patterns are changing dramatically. Therefore, there is an urgent need for more quantitative research on loss estimates for the food supply chains of developing economies and the rapidly evolving transitional economies.

**10. Given its importance socially and economically within the region, appropriate attention and investment should be given to the fisheries and aquaculture sector to meet present and future challenges.**

To continue to meet local, regional and global demand for fishery products, APEC economies should be able to overcome the challenges currently facing the sector with the same commitment and determination they have for the crops and livestock sectors. Urgent action and investment are needed in the following areas: R&D to improve wild fish stocks; R&D for sustainable aquaculture technology including fish health management; integrating small-scale aquaculture into the globalised market economy; appropriate institutional and regulatory frameworks and integration in development planning; compliance of small-holder farmers to food safety and product quality standards; and improvements in policy and governance.

**11. APEC should work collaboratively with existing food security initiatives.**



Since the food crisis of 2007-08, a number of food security initiatives have been set up by regional and international bodies many of which consist of APEC member economies. Thus, it is critical for APEC, given limited resources, to take stock of its own initiatives in the area to ensure synergies are built and that duplication does not occur. It should also be able to identify priority areas where it has comparative advantage over other international bodies.

**12. Economies and APEC as an organization should consider developing strategic communication strategies *vis-à-vis* food security issues that incorporate risk communication.**

It is vital for all economies that up to date and precise information on food security issues be provided to both internal and external stakeholders in real time and through all channels of communication, including social media. A prerequisite for these communication initiatives is information that is timely and accurate, promotes dialogue and addresses inherent risks. It is suggested that economies establish, within their food security agency, information gathering systems that closely monitor key information sources identified in this study.

*The Final Report of the “Food Security Policies in APEC” study will be made available on the PSU webpage in September 2012. [<http://www.apec.org/About-Us/Policy-Support-Unit/PSU-Research.aspx>]*