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Clovis Freire, Aynul Hasan and M. Hussain Malik



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MPDD Working Papers
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High Food Prices in Asia-Pacific: Policy Initiatives in view of Supply Uncertainty and Price Volatility *

by Clovis Freire,¹ Aynul Hasan² and M. Hussain Malik³

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Abstract

The views expressed in this Working Paper are those of the author(s) and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate. This publication has been issued without formal editing.

High food prices have put increasing inflationary pressures across the Asia-Pacific region and threatened food security. Bad weather in important food-producing countries and speculation in commodity markets have affected global food supplies and added volatility to booming commodity markets that have been fueled in the long-term by increasing global demand. High food prices have threatened to slowdown economic growth, poverty reduction and inclusive sustainable development throughout the region. Countries of the region have taken various measures to address the risk of adverse effects caused by high international food prices. This paper outlines policy responses and interventions that governments in the region can make to counter the adverse impact of food inflation.

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Keywords: Food Prices, Inflation, Commodity, Food Security, Poverty Reduction, Food Policy, Economic Growth

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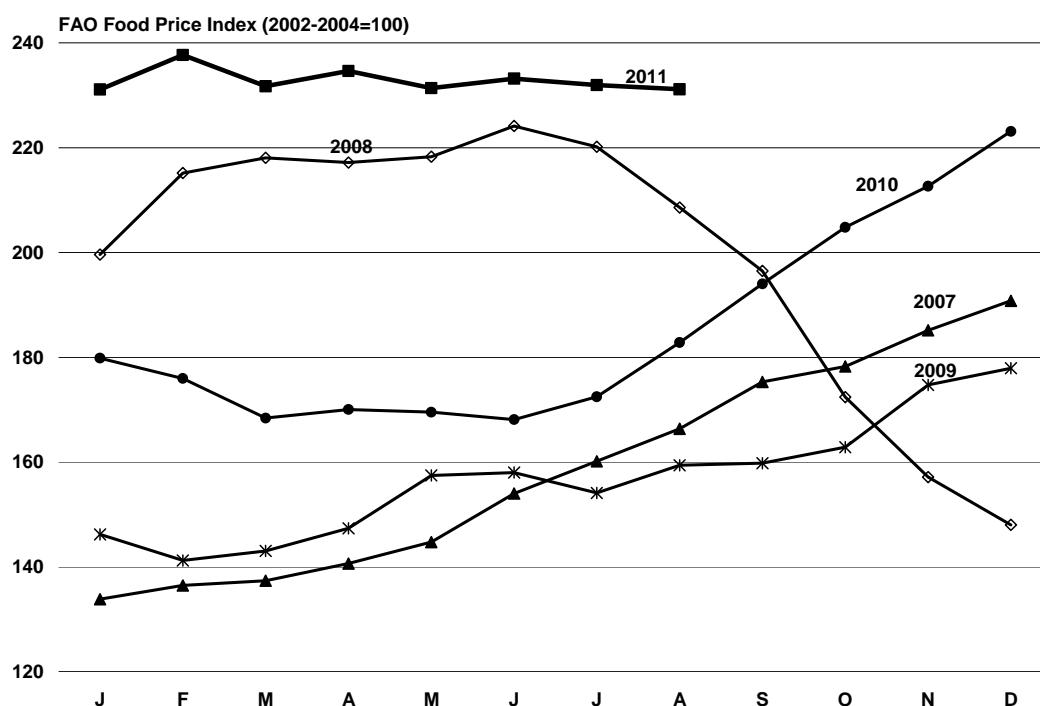
I. INTRODUCTION

The past five years have been like a rollercoaster ride for global food markets. First the dramatic increase in prices in 2007 - global food prices increased by 67 per cent in 2007 up to mid 2008. Then the sharp descent in the midst of the 2008 global financial crisis – prices dropped almost 40 per cent from June 2008 to February 2009. That was followed by a new boost in prices - they increased by 25 per cent until reach a plateau in the first half of 2010 and then boosted by another 41 per cent to reach record high levels in early 2011. Figure 1 illustrates such ups and downs as measured by the food price index of the Food and Agriculture Organization (FAO), which captures the monthly change in international prices of a basket of food commodities. It shows that global food markets have remained at high price levels since February 2011. It would be a mistake, however, to consider the new high plateau reached recently as a sign of quieter times ahead. There is considerable risk that prices will continue to increase if uncertainty about the Eurozone debt crisis is dispelled and if the recovery of the global economy gains traction again.

High inflation and food prices remain a major challenge across much of the Asia-Pacific region. These are threatening to slowdown economic growth, poverty reduction, achievement of MDGs and inclusive sustainable development. ESCAP (2011b) estimated that additional 19.4 million people in the region remained in poverty due to increased food and energy prices in 2010, and people in some South Asian countries were amongst the most affected.

Asia-Pacific countries have taken various measures to address the risk of adverse effects caused by high international food prices. They have reduced taxes on imports of food commodities, implemented measures to increase food supply, restricted exports, controlled prices, provided subsidies to consumers, and implemented social safety net programmes that included cash transfers, feeding programmes, food for works programmes and strengthening of existing public distribution systems.

This paper discusses the trends, drivers and prospects of high commodity prices and its impact on food security in Asia-Pacific region. It reviews the policies adopted by countries of the region to manage the rising prices in their domestic markets and outlines policy options at national, regional and global levels to mitigate their adverse effects. Section 2 of the paper analyses the changes in commodity prices in the past 50 years and argues that in the late 1990s and early 2000s there was a turning point on the previous trend towards increasing price in all categories of commodities. Section 3 lists some of the main drivers of the rising trend of food prices and the volatility of prices around the trend. Section 4 presents the impact of the high international prices of food in ESCAP region, including on growth, inflation and poverty reduction. Section 5 presents and discusses some of the policies implemented by countries to mitigate the adverse effects of rising food prices. Section 6 outlines a set of policy option at the national, regional and global levels to reduce the risk of the adverse effects of the increasing food prices. Final section presents a brief conclusion.

Figure 1. The ups and downs of global food prices, 2007-2011

Source: Food and Agriculture Organization, <http://www.fao.org/worldfoodsituation/wfs-home/foodpricesindex/en/>; (accessed 20 September 2011).

II. COMMODITY BOOM

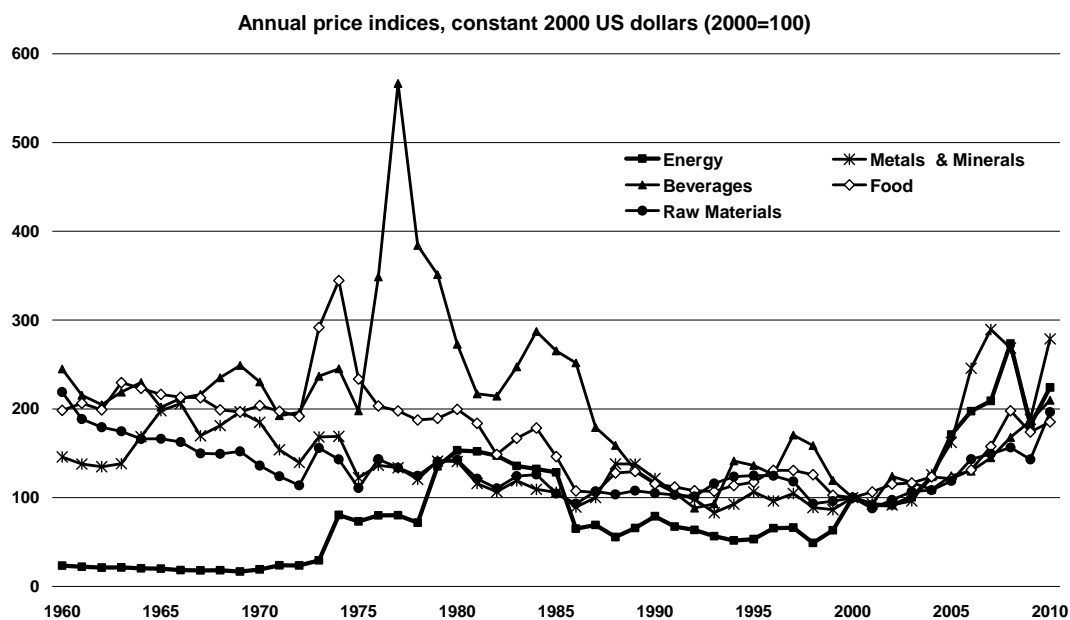
The ups and downs of commodity prices in the past five years have drawn general attention to the volatility of commodity markets but have left somewhat unnoticed a more remarkable phenomenon - the unprecedented boom in commodity prices. As illustrated in figure 2, which shows the levels of annual prices indices for five main categories of commodities (i.e. beverage, energy, food, metals and minerals, and raw materials), the beginning of the new century was a turning point for commodity prices. During the past century, most commodities prices followed a downward trend. The price of rice in 2001, near \$180 per metric tonne, was in real terms 40% of the \$450 price seen in 1960. The price of wheat in 1999 (\$94 per metric tonne) was 40% of the \$249 price in 1960.⁴ Similar long term decline in prices were seen in beverages, metals and minerals, and raw materials. Energy commodities had higher prices in late 1990s compared with mid 1970s but the big boost in prices came only after 1998.

What is clear from figure 2 is that commodity prices volatility is in a way a fact of life. All five categories of commodity markets have experienced many sudden and large changes in prices in the past 50 years. In fact, recent empirical work considering commodity prices changes since 1700 suggests that commodity price volatility has not increased over time and that commodities have always shown greater price volatility than manufactures (Jacks, O'Rourke,

⁴ Rice (Thailand), 5% broken, white rice (WR), milled, indicative price based on weekly surveys of export transactions, government standard, f.o.b. Bangkok. Wheat (US), no. 1, hard red winter, ordinary protein, export price delivered at the US Gulf port for prompt or 30 days shipment. Prices in constant 2000 US dollars. Source: World Bank Commodity Price Data, available from <http://go.worldbank.org/4ROCCIEQ50> (accessed 27 September 2011)

and Williamson, 2011). In this regard, any empirical work that tries to reach that far in the past is subject to many data problems, but, when looking at the long term series, the volatility seen in commodity markets in the past five years is clearly a rising trend punctuated by the sharp decline in prices caused by the global financial crisis.

Figure 2. The commodity boom



Source: Authors, based on data from World Bank Commodity Price Data, available from <http://go.worldbank.org/4ROCCIEQ50> (accessed 27 September 2011)

III. MAIN DRIVERS

Invariably, changes in international prices are driven by the fundamentals of supply and demand in global markets. For example, global cereal production in 2011 is expected to reach record level of 2,310 million tones, which is 3 per cent above the 2010 level, but cereal consumption is forecast to keep pace and markets are likely to remain tight, with stocks of cereals in 2011/12 at 20.8 per cent of world stock-to-use ratio close to the low 2007/08 level of 19.1 per cent (FAO, 2011a). Some factors have contributed to an increasing demand for commodities in the past decade, for which supply is trying to catch up. The problem is that increasing supply comes with a lag. It takes time for new investments in commodity sectors actually result in increased production, and during this times any excess capacity that exist is fully put into use causing stocks to go down, and consequently prices go up. Such tight commodity markets are characterized by low short-term demand and supply price elasticities and this adds to volatility of their market prices. Prices react sharply to news about events affecting present or future demand or supply. High liquidity in the Western economies coupled with increasing financialization of commodity markets can amplify both the speed and the magnitude of these price variations thus increasing price volatility.

It is important, therefore, to analyze the contributing factors to the different phenomena of long-term increasing trend in commodity prices and to the short-term volatility around the trend.

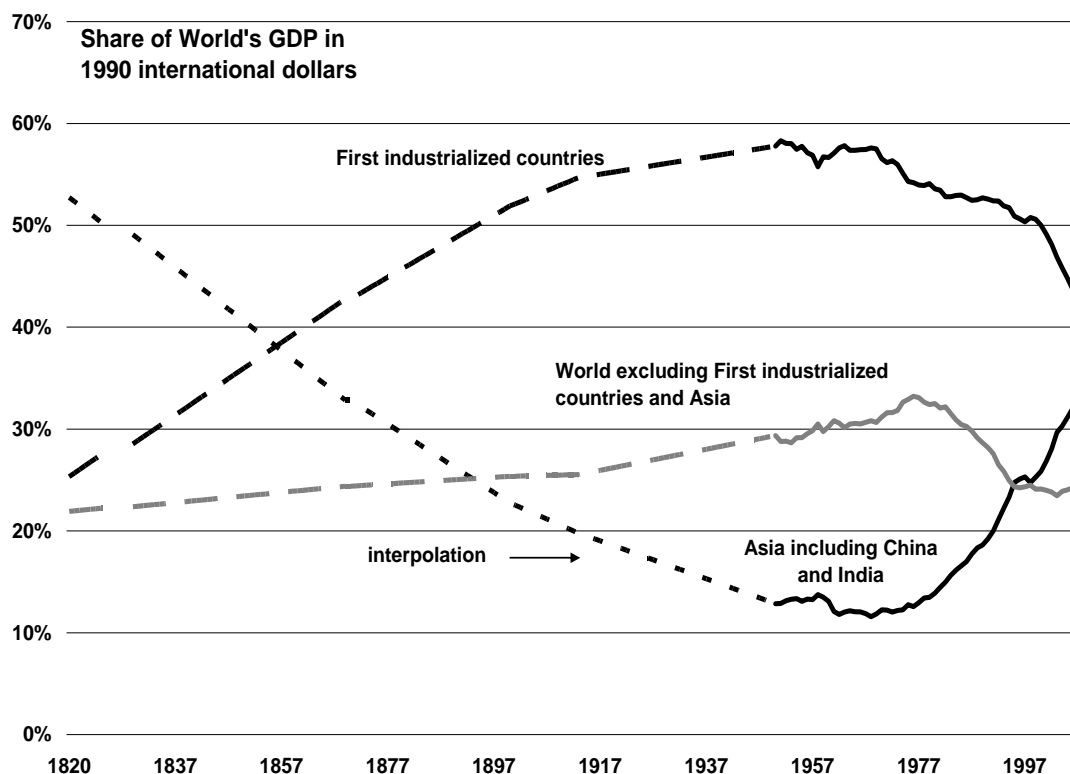
III.1 High food prices

Rise of Asia

The current boom in commodity prices is not really unprecedented. The rise of the Western Europe and their offshoots in the 18th century in the midst of the first globalization also created the conditions to a commodity price boom. Accelerated GDP growth rates associated with industrial revolution increased the demand for industrial intermediaries (e.g. fuel, fiber and metal). Prices of primary products soared with the increasing output from manufacturing production in those first industrialized countries. That was reinforced by their increase in GDP per capita and their high elasticity demand for luxury consumption goods of the time, including meat, dairy products, fruit, coffee, tea, and cocoa (Williamson, 2011).

Similar to what happened 190 years ago, in the late 1970s a group of countries, this time around from Asia, started to rise and increase its share in global GDP. This time, however, the rate of increase has been at least twice as fast. The share in global GDP of these Asian countries increased 20 percentage points in 30 years - from 13 per cent in 1979 to 33 per cent in 2008. The engines of such growth have been China and India. China's share in global GDP increased from 5 per cent in 1979 to 17 per cent in 2008. India's share in global GDP increased from 3 to 7 per cent in the same period. Their fast growth has also pushed many other Asian countries that were able to integrate themselves into their supply chains of manufacturing production. Once again, high GDP growth rates associated with the rise of industrializing economies have increased the demand for all sorts of commodities.

The rise of Asia has been the single most important development-related fact in the recent history. It has created the conditions for millions of people to get out of poverty, to have access to education, health care, clean water, sanitation, communication technologies, etc. In 1990, about half of the population of the Asia-Pacific region was living in extreme poverty on less than \$PPP 1.25 a day. By 2007 the incidence of poverty had fallen by about 50 per cent. In terms of absolute numbers, the number of poor came down from 1.55 billion in 1990 to 996 millions in 2007, despite the fact that total population of the region grew over the same period from 3.3 billion to 4 billion. By 2010, on the basis of a trend projection, the number of people living in extreme poverty in the region is estimated to have reduced by another 100 million. For sure there is still much progress to be done. Even now, disparities are huge within and across countries in the region. Because of its larger population size, on most indicators, the Asia-Pacific region has the greatest number of people who are still subject to a form or another of deprivation. The progress made, however, has been substantial and the millions of people getting out of poverty have boosted the demand for a variety of products.

Figure 3. The rise of Asia, share of global GDP (selected years)

Source: Authors based on data from Maddison (2009) "Historical Statistics of the World Economy: 1-2008 AD". Available at <http://www.ggdc.net/MADDISON/oriindex.htm>. Accessed September 2011.

Notes: First industrialized countries correspond to Western Europe (i.e. Austria, Belgium, Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland and United Kingdom), Western offshoots (i.e. Australia, New Zealand, Canada, United States), and Japan. Asia corresponds to China, India, Indonesia (including Timor until 1999), Philippines, Republic of Korea, Thailand, Taiwan, Bangladesh, Myanmar, Hong Kong, Malaysia, Nepal, Pakistan, Singapore, and Sri Lanka.

The increase in demand in Asia, however, is just part of the story. The export-led growth strategy followed in the region has caused a deep reduction in the price of manufactured goods. Cheap clothes, shoes, toys, electronic gadgets and all sort of manufactured goods found a highly elastic demand in developed economies. Global trade soared in the past decade pushing with it the demand for primary products.

Population growth and change in demographics

Global population has increased from 5.3 billion people in 1990 to 6.8 billion people in 2010, and 60 per cent of that increase was in Asia.⁵ Growing population and GDP per capita have, for example, boosted consumption of meat, dairy and other foods. While global average annual consumption of food per person has increased 0.5 per cent from 1990 to 2005, consumption of food in Asia-Pacific has increased even faster - 0.1 percentage point faster than

⁵ Authors based on United Nations, Department of Economic and Social Affairs. World Population Prospects, the 2010 Revision. Total Population - Both Sexes. Available at <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>. Accessed September 2011.

global average from 1990-92 to 2005-07, and 0.3 percentage point faster from 2000-02 to 2005-07.⁶

Not only there are more people to feed but they are also getting older. With ageing comes a shift in the distribution of caloric intake needs of the population. The share in global population of people older than 15 years of age has increased from 68 per cent in 1990 to 74 per cent in 2010. The increase was higher in Asia, from 67 to 75 per cent.⁷ Estimates of how much calories people of different age groups need shows that an average person in this growing group of over-15 years old needs 33 per cent more calories than the average children or teenager in the group of under-15 years of age.⁸ Adding up the growth in the population, the ageing factor and the differences in calorie needs by age groups, it is estimated that there was an increase of 30 per cent in global caloric intake need in the past 20 years.⁹

Conversion of food into biofuels

Another demand factor that may have contributed to higher food prices is the use of food crops for biofuels. Rising oil prices in the past five years have made viable the use of biofuels as a competing source of energy. First-generation biofuels, which are produced primarily from food crops such as grains (particularly maize), sugar cane and vegetable oils, have been increasingly questioned over concerns of displacement of food-crops. It does not seem, however, that its effect have been strong in reducing arable land suitable for food crops. Estimates show that only 1 per cent of the global arable land was required to supply the land demand for production of biofuel in 2004 (FAO, 2011b). That share has increased to 2 per cent in 2010 and it is expected to rise to up to 4 per cent in 2030.¹⁰

Nevertheless, mandatory blend and utilization targets to boost biofuel demand are expected to further increase the land demand for biofuel in the coming years. The European Union has set a target for renewable source in general of 5.75 per cent in 2010 and 10 per cent in 2020. In the US, 90 per cent of the 36 billion gallons of renewable fuels required by 2022 under the Energy Independence and Security Act of 2007 are expected to come from ethanol (UNCTAD, 2009). The current move of the industry towards a more efficient second-generation of biofuels may be able to act as counter balance effect. The second-generation of biofuels can be produced from cellulose, hemicellulose or lignin, and is expected to reduce the rate of land demand by increasing significantly the energy output per unit of land for some biomass sources – by 100 per cent in the case of sugar cane and eucalyptus (cellulosic ethanol) (UNCTAD, 2009).

⁶ Authors based on data from Food and Agriculture Organization of the United Nations. Food security data and definitions. Food consumption and population growth. Un-weighted average. Available at <http://www.fao.org/economic/ess/ess-fs/fs-data/ess-fadata/en/>. Accessed September 2011.

⁷ Authors based on United Nations, Department of Economic and Social Affairs. World Population Prospects, the 2010 Revision. Population by Age Groups - Both Sexes. Available at <http://esa.un.org/unpd/wpp/Excel-Data/population.htm>. Accessed September 2011.

⁸ Authors based on data from the United States Department of Agriculture. Available at http://www.choosemyplate.gov/foodgroups/downloads/MyPyramid_Food_Intake_Patterns.pdf. Accessed September 2011.

⁹ Authors based on data from United Nations, Department of Economic and Social Affairs. World Population Prospects and United States Department of Agriculture. Accessed September 2011.

¹⁰ Authors based on FAO - Climate change, biofuels and land, IEA - Technology Roadmaps - Biofuels (foldout) (Available at http://www.iea.org/papers/2011/Biofuels_foldout.pdf), and FAO ResourceSTAT (Available at <http://faostat.fao.org/site/405/default.aspx>). Accessed September 2011.

III.2 Food price volatility

Natural disasters

Disasters caused by natural hazards are a common cause of supply disruptions. In 2010 and 2011, droughts and floods in major producers of wheat in Asia-Pacific, who together are responsible for almost half of global production, have affected more than 233 million people and caused an estimated damage of more than US\$ 41 billion, which includes lost crops.¹¹ These disasters have affected food production and, given the shallow depth of global food markets, contributed to the increases in international prices of food. Floods are very frequent hazards in the ESCAP region. Between 1980-1989 and 1999-2009, the number of disaster events reported globally increased from 1,690 to 3,886. Over the whole period of 1980-2009, 45 per cent of these were in Asia and the Pacific region and 12 per cent in South Asian countries. One in every three of these disasters was caused by floods.¹²

However, in general disasters do not happen in all major food exporters at same time. Something close to a “perfect storm” happens from time to time, such as the drought in Central Asian countries and the floods in Pakistan in 2010, but usually disasters in some exporting countries are somewhat compensated by good harvests in other exporting countries. The recent floods in Thailand in the second half of 2011 provide a good example. Price of Thai rice reached a three-year high of \$650 a tonne in October 2011 but fell back to USD 630 a tonne one month later, which avoided panic buying, after India lifted a four-year-old export ban on sales of non-basmati rice and Vietnam, traditionally the world's second-largest exporter, harvested a relatively large crop.¹³ The bottom line is that natural disasters contribute to shortages and high prices in the short-term but are not the main drivers of long-term increases in food prices.

In the long-term, the threat posed by climate change adds to the supply uncertainties and countries in South Asian region may stand to be among the most affected given their high exposure to floods and tropical cyclones. Climate change influence risk of future supply shocks through the likely change in frequency and magnitude of weather-related hazards (e.g. floods, tropical cyclones, droughts, etc) that could threat areas previously not affected by such events, thus not prepared to cope with them. Areas currently used for food production may become unsuitable for agriculture or may require large investments (e.g. irrigation, weather-resistant seed varieties, etc) to continue productive, which could pose a threat to national food security.

¹¹ ESCAP based on ESCAP, 2011c and on data from United Nations Office for the Coordination of Humanitarian Affairs (OCHA) available from <http://reliefweb.int/>. Accessed on 17 October 2011.

¹² ESCAP and ISDR, 2010.

¹³ Blas, 2011.

Table 1. Droughts and floods in major staple food producing countries in Asia-Pacific

Country	Date	Disaster Type	Location	Total people affected	Est. Damage (US\$ Million)
Australia	December 2010 to January 2011	Floods	Queensland...	200,000	
	November to December 2010	Floods	Wagga region...	1,000	
	September 2010	Floods	Victoria state; Gippsland ...	10,000	
	February to March 2010	Floods	Brisbane, Charleville, ...		109
	February 2010	Floods	New South Wales		
China	July 2011	Floods and droughts	680 counties in 27 provincial regions	809,000	6,750
	June 2011	Floods	13 of China's 33 provinces	129,000	
	October 2009 to May 2010	Drought	Yunnan, Guizhou, Sichuan, ...	60,000,000	5,684
	June 2010	Floods	Haikou, Sanya, Qionghai, ...	130,000	6
	August 2010	Floods	Dandong city, Liaoning ...	64,000	
	August 2010	Floods	Longnam, Tianshui cities ...		
	August 2010	Floods	Jilin province	6,000,000	
	June to August 2010	Floods	Fujian, Sichuan, Guangxi ...	134,000,000	18,000
India	July 2011	Floods	West Bengal, Bihar, Kerala were the most affected	2,500,000	
	November to December 2010	Floods	Chennai, Cuddalore, Nagap	
	September 2010	Floods	Punjab, Haryana,...	12,500	
	September 2010	Floods	Almora, Naintial...	3,267,183	
	September 2010	Floods	Lakhimpur (Assam state)	30,000	
	August 2010	Floods	Leh Bus Stand, Cholglamsa ...	225	
	July 2010	Floods	Jhapa district	523,000	
	July 2010	Floods	New Delhi		
	May 2010	Floods	Andhra Pradesh	50,000	
	July 2010	Floods	Haryana's Ambala and Kuru ...	523,000	
Kazakhstan	March 2010	Floods	Tarbagarty, Abay, Kurchum ...	13,000	
	February to March 2010	Floods	Karaisai, Zhambyl, Ili, ...	16,200	35
Pakistan	July 2011	Floods	Gilgit-Balistan	5,000,000	
	July to August 2010	Floods	Khyber Pakhtunkhwa, ..	18,102,327	9,500
	July 2010	Floods	Barkhan district; Balochi ...	4,000	
	June 2010	Floods			
Russian Federation	February 2010	Floods	Swat, Shangla, Kohistan, ...		
	August 2011	Floods	Grozny	3,500	
	December 2010	Floods	Oural, Siberia, Moscow	11	
	April 2010 to August 2010	Drought			1,400
	June to August 2010	Floods	Moscow, Volgograd, Lipesk, ...		400
	January 2010	Floods	Moscow, St Petresbourg, ...		
	October 2010	Floods	Tuapsinskoye, Dzhubskoye, ...	45,214	
March 2010	Floods	Kividsensky, Novoannensky, ...	3,250		
Thailand	August to October 2011	Floods	19 Provinces	1,955,550	

Source: Authors based on ESCAP(2011c) and on data from United Nations Office for the Coordination of Humanitarian Affairs (OCHA). Available from <http://reliefweb.int/>. Accessed on 17 October 2011.

Export restrictions

In 2010, export restrictions in a variety of countries also have undoubtedly had an impact on global food supplies, primarily wheat and rice but also oilseeds and cooking oil. For example, in October 2010 Kazakhstan banned the export of certain types of oilseeds, vegetable oils and buckwheat, and in August 2010 Pakistan deferred the partial lift on wheat export ban after summer floods destroyed at least 725,000 tonnes of grain.¹⁴ These export restrictions were imposed to address the disruptions in their domestic food supply caused by disasters. However, when surplus food-producing countries impose restrictions on exports, global markets became smaller and more volatile, thus quickly pushing international food prices further up.

¹⁴ FAO Country Policy Monitoring available at http://www.fao.org/giews/countrybrief/policy_detail.jsp

Global liquidity and increasing financialization of commodity markets

Increases in global liquidity resulting from the policies of developed economies have also contributed to the rise in food and oil prices in 2010. As highlighted by ESCAP (2011, pp. 30-32), another important driver of these price rises since the outbreak of the crisis has been financial speculation fueled by liquidity resulting from monetary easing in developed economies. The main concern about speculation is that any price volatility due to real demand and supply factors would be exaggerated by the addition of speculative money.

Indeed the similar patterns of price change seen in food, oil and mineral markets point to a common cause, and the magnitude of the price swings suggests that speculation is playing an important role. However, not only institutional investors speculate. When international food prices increase fast, domestic intermediaries are often encouraged to hoard staples like wheat flour, rice, sugar and cooking oil, expecting that domestic food prices will also increase. To compound the problem, in such situations consumers may also indulge in panic buying, accentuating price upswings.

It is important to emphasize that there is nothing inherently wrong with speculation in commodity markets, nor is speculative activity a new phenomenon in these markets. Speculation in the futures markets, whether in financial assets or commodities, assists in the price discovery process and provides buyers with access to supplies according to their requirements spread over time at pre-determined prices. What appears to have happened of late is the much larger volume of funds being directed into commodity market speculation, a result of the massive increase in global liquidity emanating from the developed countries through monetary easing. Most market analysts are of the view that while speculation is not a driver of commodity prices in itself it is a factor that can accelerate and amplify underlying price movements.

IV. IMPACT OF HIGH FOOD PRICES

While increase in international prices of food are worrisome, their impact on individual countries varies according to the share of specific components of the index in countries' total foods consumption and to various transportation, logistic, and regulatory factors that affect the transmission from international prices to domestic prices. This is illustrated in table 2, which presents, for selected Asia-Pacific countries, the change in prices of rice and wheat – crops that represent in average almost half of the dietary energy supply in these countries.

During the high spike of prices from May 2010 to January 2011, international prices of Thailand rice 5% broken, a global benchmark, increased by 15 per cent from \$451 to \$517 per metric tonne and the price of US Hard Red Winter Wheat increased by 80 per cent from \$182 to \$327 per metric tonne. During the same period, the average price increases in the domestic markets in major cities in Asia-Pacific were 12 per cent (rice) and 37 per cent (wheat). The variation across countries in this period was 11 per cent in the case of rice and 36 per cent in the case of wheat. During the quieter period from December 2010 to June 2011, while prices in the international markets reduced by 3 per cent in the case of rice and increased by 6 per cent in the case of wheat, the average change in domestic markets were -4 per cent (rice) and 2 per cent (wheat), which variation of 8 per cent in the case of rice and 7 per cent in the case of wheat.

Table 2. Price change of staple foods in major cities of selected Asia-Pacific countries

Country	Rice			Wheat		
	% price change (in real terms)		% of dietary energy supply	% price change (in real terms)		% of dietary energy supply
	May 2010-Jan2011	Dec2010-Jun2011		May 2010-Jan2011	Dec2010-Jun2011	
Armenia				14	3	48
Bangladesh	17	-14	71			
Bhutan	16	-4	40			
China	6	4	27			
Georgia				69	12	50
Indonesia	16	1	51			
India	6	-5	30	6	2	21
Kyrgyzstan				31	9	49
Lao PDR	20	-13	64			
Mongolia				38	-7	42
Nepal	11	-2	34			
Pakistan	-2	12	7	-2	-7	37
Sri Lanka	-1	-4	39	29	1	15
Tajikistan				107	5	58
Viet Nam	34	-13	62			
Median	14	-4	40	30	3	45
Average	12	-4	43	37	2	40
Std	11	8	20	36	7	15

Sources: Authors based on data from Food and Agriculture Organization, Global Information and Early Warning System, available from www.fao.org/gIEWS/pricetool (accessed September 2011).

High food prices affect directly or indirectly several macroeconomic aggregates including consumption, investment, output, overall inflation, trade balance and fiscal balance. When food price rises pass through from the first-round impact on domestic prices to the second-round impact on wages, interest rates are usually raised to contain inflationary expectations. A rise in the interest rate would negatively impact investment. Also, a high inflationary environment creates uncertainties that would discourage new investment.

For food and fuel importing economies, increased import prices lead to deterioration in the terms of trade and the trade balance and consequent pressure for exchange rate depreciation and increased prices of other imported consumption goods and inputs for production. Many countries have already experienced such decline in terms of trade in the past decade. For example, the annual growth of net barter terms of trade during this period was -5.5 per cent in Bangladesh, -4.6 per cent in Pakistan, -2.8 per cent in Sri Lanka and -2.4 per cent in Nepal.¹⁵

Fiscal balance would also come under pressure when governments implement social protection measures or provide price subsidies to protect the poor. Increased use of government resources for managing the adverse impact of food and energy price rises would lead to reduced availability of government funds for other policies to support growth and poverty reduction. More importantly, however, food price increases directly impact on the livelihood of the poor and those in the lower income groups. Food inflation eats into real incomes and can undermine the gains from poverty reduction that developing countries have achieved over the past few decades.

¹⁵ Authors based on World Bank's World Development Indicators. Available at <http://data.worldbank.org>. Accessed September 2011.

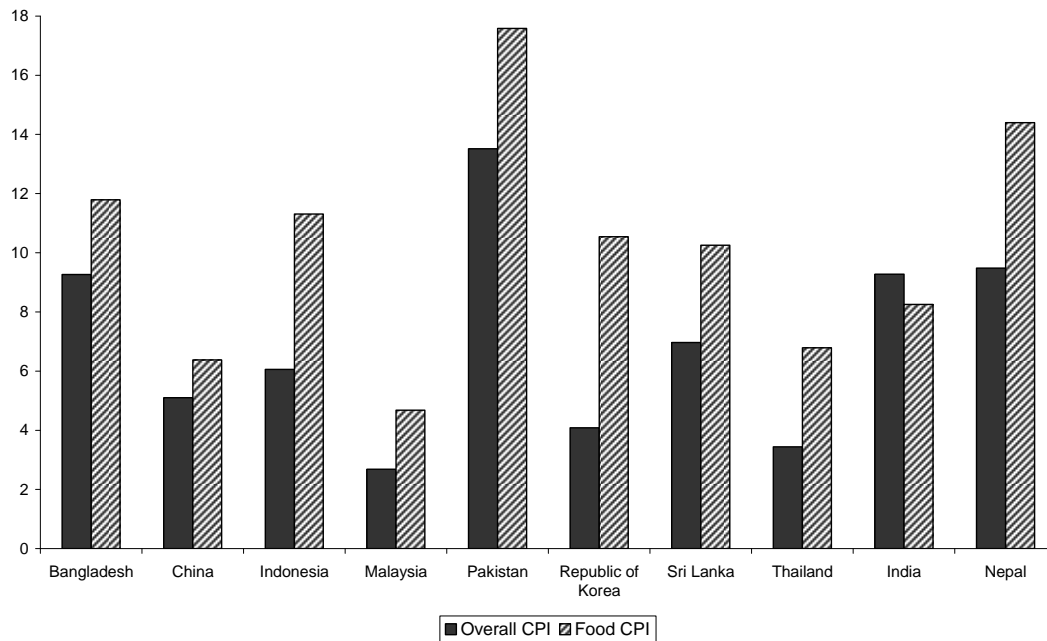
Inflation

Higher food prices exert an upward pressure on inflation particularly in low and middle income countries where such prices account for a major proportion of the inflation basket. For example, CPI weightings for food account for 58.8 per cent in Bangladesh, 46.2 per cent in India, 46.8 per cent in Nepal, 40.3 per cent in Pakistan, 41 per cent in Sri Lanka and 33 per cent in Thailand. In 2010/2011, rising food prices have exceeded headline CPI in many countries of the region representing a key factor in the rise in overall CPI (figure 4).

High inflation has been a major challenge particularly in South and South-West Asia where inflation has been in double digits in recent years. As inflation affects the poor disproportionately, it is a major cause of concern. Among other factors, high budget deficits in general are fuelling inflation. To make matters worse, when subsidies are slashed to contain budget deficits, for example on electricity and petroleum products, that also leads to higher inflation.

To contain inflationary pressures, during 2010-2011 many countries in the region have started tightening monetary policy mainly through raising policy rates. These rates were lowered earlier to stimulate the economies and help their recoveries in the wake of the global financial and economic crisis. Given that inflationary pressures in net commodity importing countries caused by increases in international food prices are more from the supply side, use of monetary policy alone as the main tool to combat inflation may not be appropriate. Rising international commodity prices can reduce aggregate demand in net commodity importing countries and tightening of monetary policy excessively under such circumstances could weaken growth. However, when supply side factors such as increases in global oil and food prices lead to higher wages and domestic prices of other commodities in the second round, use of monetary policy can help in curbing inflationary expectations. Tightening of monetary policy can help in appreciation of exchange rate and this can provide some insulation from imported inflation because of higher commodity prices. Countries in the region with exchange rate appreciation tend to have somewhat lower rates of domestic food and energy price increases.

Figure 4. Comparison between overall and food CPI in selected developing economies, August 2010 to August 2011, period average



Source: Authors calculations based on data from CEIC Data Company Limited, available from <http://ceicdata.com/> (accessed 29 September 2011).

Note: Data refer to July 2010 to July 2011 for India and Pakistan.

Impact on poverty

Rising prices of staple food affects the poor in two ways. Depending on their status as net sellers or net buyers of staple food, increases in prices of staple food would raise the income of households that are net sellers and add to the hardship of poor households that are net buyers. Hardship for the poor arises because they have to spend a larger share of their income on essential food and less is left to spend on other food items, which are important as complementary sources of energy and nutrients, and non-food items, including health and education. In general, unexpected rises of staple food have an immediate negative effect on the urban poor since most of them are net buyers. To a lesser extent the same is true even in rural areas – for example, studies of rural income generating activities found that 91% of the rural poor in Bangladesh in 2000 were net buyers of main staple food (FAO, 2008).

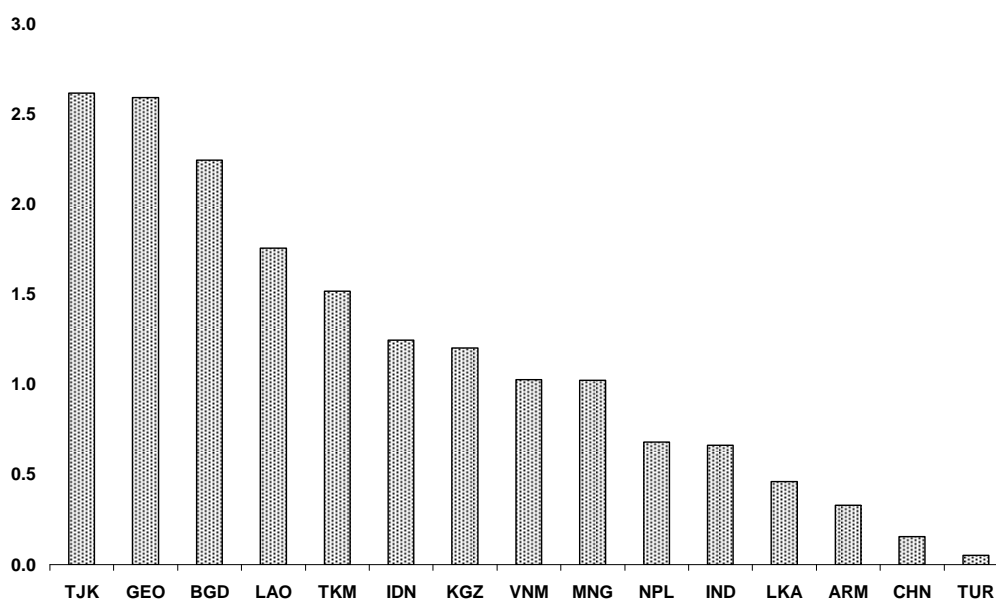
ESCAP (2011b) has estimated that, based on \$1.25 a day per capita poverty line, additional 19.4 million people in the ESCAP region remained in poverty due to increased food and energy prices in 2010. Out of these, high prices prevented 15.6 million people to get out of poverty and pushed other 3.7 million below the poverty line. Given the economic dynamism of the region, the actual number of poor decreased by 24.5 million people between 2009 and 2010, but if staple food prices had not increased above domestic rates of inflation, the number of poor would have decreased by 43.8 million people. Thus the main effect of the high staple food prices in 2010 was a significant slowdown of the pace of poverty reduction in Asia and the Pacific.

The share of the burden has varied across the region. The most affected countries in relative terms were Georgia and Tajikistan, where the high prices of food pushed up the poverty

rate by 2.6 percentage points (figure 5). Other countries where poverty rates have increased significantly in percentage points are Bangladesh (2.2), Lao People's Democratic Republic (1.8), Turkmenistan (1.5), Indonesia (1.2), Kyrgyzstan (1.2), Viet Nam (1.0), and Mongolia (1.0). These estimates show that the impact of high food prices may not be restricted to resource-poor countries; even in countries that have greatly benefited from the boom in commodity terms of trade, such as Mongolia, Uzbekistan and Turkmenistan, when faced with high food prices the vulnerable is at high risk of being kept in poverty.

The country in which most people were pushed into poverty was Bangladesh: 2.9 million people out of the 3.7 million for the whole Asia-Pacific region (figure 6). The country where most people were prevented from stepping out of poverty was India, where 8.0 million people were affected, slightly above half of the total for the region (15.6 million). Other countries where many people were prevented from stepping out of poverty were Indonesia (2.9 million), China (2.1 million), Viet Nam (0.9 million) and Bangladesh (0.8 million).

Figure 5. Impact of staple food prices increase in 2010 on poverty, selected countries (percentage of population)



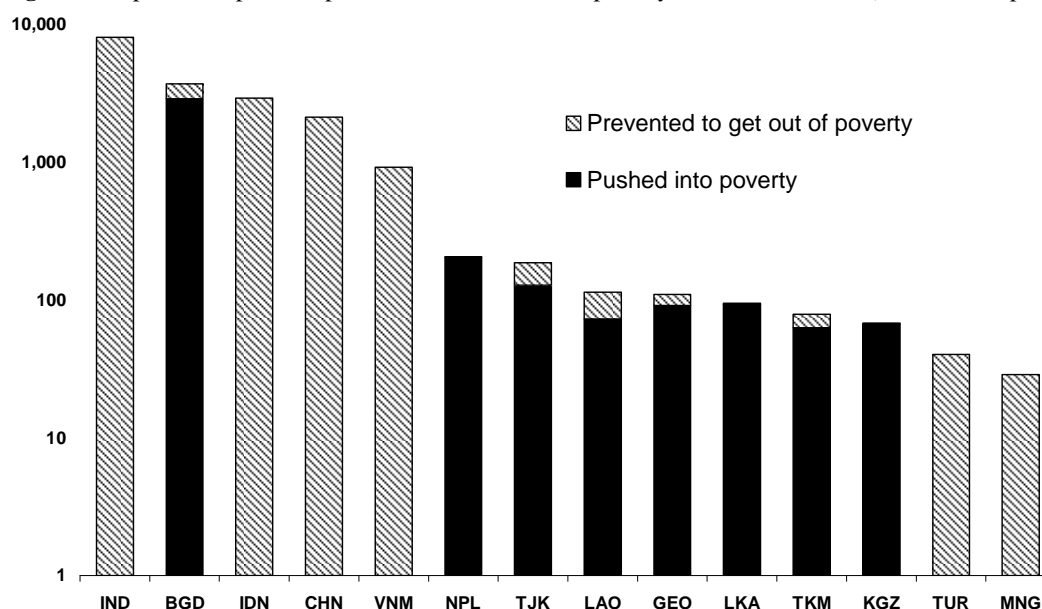
Source: Freire and Isgut, personal communication, 18 October 2011.

In countries in which the impact consisted only of people prevented to step out of poverty, the effect of high staple food prices was to slowdown the pace of poverty reduction. Meaning that the absolute number of poor in 2010, even under the effects of the high food prices, was in fact lower than the number of poor in 2009. Such effect was higher in India, Indonesia, Mongolia and Viet Nam, where the number of people affected represented 53 per cent to 88 per cent of the number of people who would have stepped out of poverty if there had been no increase in staple food prices. In contrast, such effect was smaller for China (13 per cent).

However, countries where there were people being pushed into poverty and people prevented to get out of poverty, the effect of high food prices was in fact an increase in poverty

between 2009 and 2010. The countries where the impact was higher, as measured by the number of extra people living in poverty because of the high food prices, were Bangladesh (2.8 million) and Nepal (0.3 million), which threatens to postpone by up to half a decade the achievement of the Millennium Development Goal on poverty reduction in these countries.

Figure 6. Impact of staple food prices increase in 2010 on poverty, selected countries (thousands of people)



Source: Freire and Isgut, personal communication, 18 October 2011.

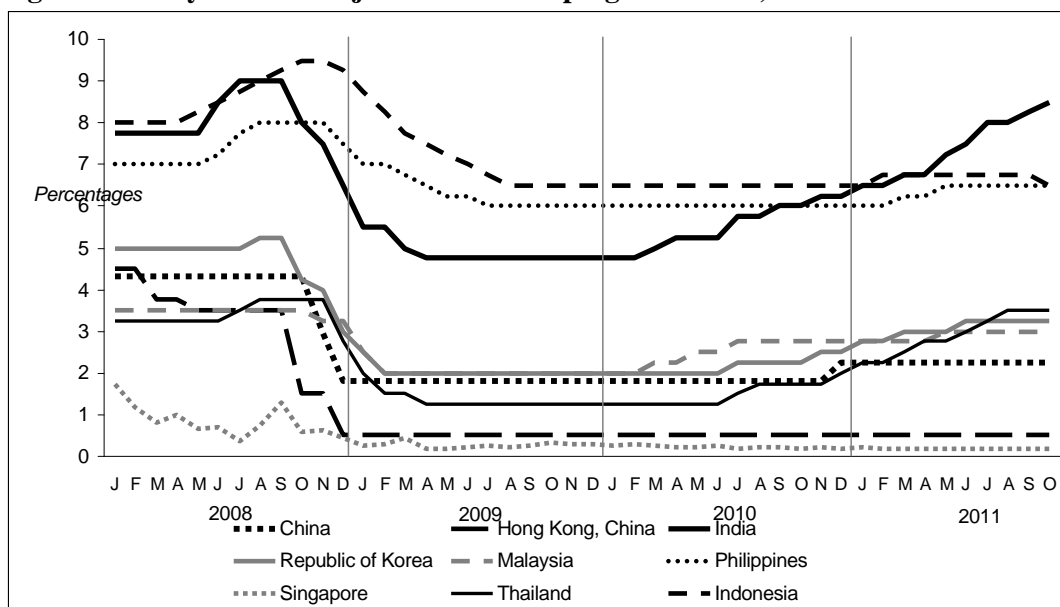
ESCAP (2011b) simulations show that, given different possible scenarios for food and fuel prices, from 9.8 to 42.4 million additional people could be prevented to get out of poverty in the ESCAP region in 2011. Given the low rate of change of staple food prices in the first half of 2011, the effect is more likely to be in the lower end. It is important to note, however, that even a halt in the rise of food prices in 2011 would still have an impact on poverty, as the poor would still have to contend with a substantially higher level of food prices than in 2010. The results show that spike in food prices in 2010 and 2011 could lead to the achievement of the Millennium Development Goal on poverty reduction being postponed by up to half a decade in many countries of the region, including least developed countries such as Bangladesh and Nepal.

V. RESPONSE TO THE RISING FOOD PRICES

To contain inflationary pressures, since early 2010 many countries in the region have started tightening monetary policy mainly through raising policy rates (figure 7). These rates were lowered earlier to stimulate the economies and help their recoveries in the wake of the global financial and economic crisis. India continues to tighten its monetary policy since the beginning of 2010 and policy rates have been raised by more than 10 times over this period. China, for instance, witnessed an easing in inflation for three consecutive months as of October 2011. In India, inflation has continued to remain high despite the Reserve Bank of India increasing the policy rates 13 times over the past 19 months while the tight monetary policy has

affected the country's growth momentum. The concerns about growth prospects and the somewhat more positive outlook for inflation have led some economies to hold off on further monetary policy tightening in recent months, while there are also the incipient signs of easing. Indonesia decreased its interest rate in October and November 2011, with other countries signaling possible moves in the near future.

Figure 7. Policy rates in major Asian developing economies, 2008-October 2011



Source: ESCAP calculations based on data from CEIC Data Company Limited, available from <http://ceicdata.com/> (accessed 24 November 2011).

Notes: The policy rates for each country include rediscount rate for China; discount window base rate for Hong Kong, China; Reserve Bank of India repo rate for India; Bank of Indonesia month end reference rate for Indonesia; Bank of Korea base rate for the Republic of Korea; overnight policy rate for Malaysia; repurchase rate for the Philippines; overnight repo rate for Singapore and the 1-day bilateral repurchase rate for Thailand.

Given that inflationary pressures in net commodity importing countries in Asia-Pacific region caused by increases in international food prices are more from the supply side, use of monetary policy alone as the main tool to combat inflation may not be appropriate. Rising international commodity prices can reduce aggregate demand in net commodity importing countries and tightening of monetary policy excessively under such circumstances could weaken growth. However, when supply side factors such as increases in global oil and food prices lead to higher wages and domestic prices of other commodities in the second round, use of monetary policy can help in curbing inflationary expectations. Tightening of monetary policy can help in appreciation of exchange rate and this can provide some insulation from imported inflation because of higher commodity prices. Countries in the region with exchange rate appreciation tend to have somewhat lower rates of domestic food and energy price increases.

In addition to monetary policy, Asia-Pacific countries have taken various measures to address the risk of adverse effects caused by high international food prices (table 3). They have reduced taxes on imports of food commodities, implemented measures to increase food supply, restricted exports, controlled prices, provided subsidies to consumers, and implemented social safety net programmes that included cash transfers, feeding programmes, food for works programmes and strengthening of existing public distribution systems.

Table 3. Main food-related policies adopted by selected countries, 2010-2011

Reduced taxes on imports of food commodities to manage shortages		
Kazakhstan	01-Mar-11	The custom union cancelled the 5 per cent import duty on wheat rye and oats till 30 June 2011.
Republic of Korea	28-Feb-11	Import tariffs removed on maize, soymeal and 32 other items to ensure supply and control of inflation.
Turkey	25-Feb-11	The Government suspended the 130 percent import tariff on wheat and oat, until May 1 2011.
India	22-Dec-10	Import tariff (5 percent) on onions suspended. Eliminated the 4% countervailing duty on onions.
Indonesia	16-Dec-10	Temporary duty exceptions for rice import.
India	28-Nov-10	Duty free import of rice, introduced in October 2009, extended to 30 September 2011.
Philippines	30-Sep-10	Duty-free import of wheat extended for another six months.
Bangladesh	15-Jul-10	Import quota of 400 000 tonnes of wheat allowed in order to stabilize market prices.
India	01-Apr-10	Duty-free imports of rice, wheat, pulses, edible oils and raw sugar extended until 31 March 2011.
China	23-Feb-10	(extended until 31 May 2010) reduction of import tariff on wheat by 50 per cent; exemption for maize flour; reduction on sesame seed
Thailand	09-Feb-10	Duty-free import of broken rice under the ASEAN Free Trade Agreement only for the food-manufacturing industry (May to June and
Sri Lanka	07-Jan-10	an import quota of 25 000 tonnes of rice for the festive season, high quality varieties (Basmathi and Ponni Samba) duty free. Import tax
Kazakhstan	01-Jan-10	Custom union formed by Russia, Kazakhstan and Belarus set common sugar import tariff pegged to the sugar prices in New York.
Import of food commodity to manage shortage		
India	22-Dec-10	Arrangements for new imports of onion.
Bangladesh	01-Apr-10	Import of 25 000 tonnes of rice from Myanmar by the end of April to meet the domestic demand.
Increased taxes on imports to promote domestic production		
Indonesia	24-Jan-11	Temporary suspension of 5% import duty on wheat, soybean, flours and feed products until December 2011, following protests from the
Indonesia	22-Dec-10	Import duties increased for wheat, soybean, flours and feed products from the zero rate, effective since 2008, to five percent.
Sri Lanka	22-Jun-10	Import tariff of 15 percent on wheat reimposed. The tax was waived in November 2009 to facilitate the use of wheat flour as a substitute
Sri Lanka	22-Jun-10	Import duty of LKR 10 (USD 0.09) per kilogram set on wheat.
Afghanistan	21-Jun-10	Import duty on wheat and flour has been increased to support domestic production.
Sri Lanka	25-Mar-10	Rice import tariff has been reinstated.
Indonesia	01-Mar-10	Rice import ban, in place since 2007, is extended until the end of 2010.
Subsidies		
Kazakhstan	20-Apr-11	Allocation of KZT 88.2 bln as financial assistance to agricultural producers and provision of diesel at subsidized prices for 2011 spring
India	01-Mar-11	Measures to create additional storage capacity for foodgrain in the rural sector, incl. subsidies to storehouses and financial support to
Bangladesh	05-Feb-11	Government sold food grains at subsidized prices to 300 000 fourth class civil servants.
Bangladesh	01-Nov-10	Fair price cardholders programme resumed, targeting 1.12 million of low income card holders who can buy up to 20 kg of rice/pm at
Bangladesh	03-Oct-10	The Open Market Sale (OMS) of rice at BDT 24 (USD 0.34) per kg extended to the upazila (sub district) level
Japan	02-Sep-10	Subsidy of JPY 80 000 (USD 989) per hectare to farmers, in order to increase food self-sufficiency ratio.
Viet nam	15-Jul-10	Interest free loans to domestic firms to buy 1 million tonnes of rice - 15 July and 15 September 2010 to stabilize local market prices.
India	06-May-10	Wheat and rice sold through ration shops at a price of INR 8.42 (USD 0.18) and INR 11.82 (USD 0.25) per Kg, respectively.
India	01-Apr-10	A subsidies to support mix of nutrients and integrate the use of urea with other nutrients. Before, urea subsidies only, making it cheaply
China	16-Mar-10	Allocation of CNY 133.5 billion (USD 19.55 billion) to subsidize agricultural production in 2010, with a year-on-year increase of CNY 6.04
India	01-Mar-11	Create additional storage capacity for foodgrain in the rural sector, including subsidies to storehouses and financial support to private
Bangladesh	11-Feb-10	USD 107 million input subsidy programme introducing the Agriculture Input Assistance Card : rice producers to open receive cash
Pakistan	05-Feb-10	Allocation of PKR 260 billion (about USD 3 million) as credit subsidies for farmers.
Pakistan	05-Feb-10	A subsidy of PKR 500 (USD 5.79) per 50 kg bag potash has been granted to support farmer's use of the fertilizer.
Bangladesh	03-Feb-10	The Open Market Sale of rice extended to all Divisional capitals and the three labour intensive districts. BDT 22/kg (USD 0.32/kg)
Indonesia	07-Jan-10	The allotment of 13 kg of rice per family per month increased to 15 kg, increasing the subsidy from USD 1.2 billion to USD 1.4 billion.
Kazakhstan	01-Jan-10	33 million USD have been allocated to subsidise the high transport cos of grain exports to make them compete on the global market.
Export ban		
India	22-Dec-10	Ban on exports of onion until January 15, 2011
Pakistan	07-Dec-10	Export licenses granted to the private sector for one million tonnes of wheat, after export plans were suspended in August 2010 due to
Pakistan	07-Oct-10	Private sector allowed to export 1 million tonnes of wheat. Earlier export were deferred in August after floods destroyed around 725 000
Pakistan	01-Aug-10	Planned exports of 2 million tonnes of wheat suspended after summer floods.
China	15-Jul-10	Export tax rebates on 406 products, including fertilizers and corn flour, removed.
Bangladesh	30-Jun-10	Rice export ban extended until December 2010.
Bangladesh	01-Jan-10	Rice export ban extended until June 2010.
Bilateral export arrangements		
China	26-Oct-10	The Government signed an agreement with Cambodia to increase rice import from that country.
India	09-Aug-10	The Government partially lifted its export ban by allowing the export of 300 000 tonnes of non basmati rice and of 200 000 tonnes of
India	14-May-10	An export quota of 400 000 tonnes of wheat and 100 000 tonnes of rice to Bangladesh have been approved.
India	12-May-10	Approval of an export quota of 200 000 tonnes of non-basmati rice to Sri Lanka.
India	10-Feb-10	Export of 250 000 tonnes of wheat to Nepal.
Pakistan	13-Apr-10	Wheat export ban partially lifted - export of 2 million tonnes of wheat. In August 2010, measure deferred after floods destroyed at least
Philippines	10-Apr-10	Agreement is reached with Thailand to import Thai rice with a 40 per cent tariff until January 2015. Plans to buy around 360 000 tonnes

Source: Authors based on FAO Country Policy Monitoring. Available at http://www.fao.org/giews/countrybrief/policy_detail.jsp. (Accessed October 2011)

Table 3 (continuation). Main food-related policies adopted by selected countries, 2010-2011

Use of buffer stocks		
China	02-Mar-11	Sale of 1.1 million tonnes of wheat from government reserves in two auctions, due to a strong demand from flour mills.
China	28-Feb-11	The major state-linked grain buyers suspended purchases in order to slow inflation in the grain market.
Republic of Korea	21-Feb-11	Wheat, soybeans and maize have been included in state reserves, in addition to rice, to secure a stable supply of these commodities.
India	28-Dec-10	Release of 2.5 million tonnes of wheat and rice from the federal reserve stocks, to poor population, USD 0.092/Kg of wheat and USD
China	03-Dec-10	An amount of 25 million tonnes of grain and oil have been released on the market from the Grain Reserve, to ensure market supplies
India	15-Nov-10	Plan to release 2.5 million tonnes of wheat by June 2011 from federal stocks - USD 0.14/Kg of wheat, and USD 0.18/Kg of rice (less
Thailand	27-Jul-10	Additional 457000 tonnes of food grain (182000 tonnes of rice and 274000 tonnes of wheat) distributed to above poverty line (APS)
India	01-Jul-10	Release of 5 million tonnes of wheat and rice from state reserves planned under the Open Market Scheme by March 2011.
China	13-Apr-10	80 percent of 1 million tonnes of state maize reservessold at prices between USD 228 and USD 297 per tonne to reduce rising domestic
Viet nam	23-Mar-10	Vietnam Food Association requested members to stockpile 1.5 million tonnes of rice from the main winter-spring crop harvest
India	03-Mar-10	An amount of 500 000 tonnes of wheat from government reserves sold to small processors in order to stabilise local prices.
Thailand	23-Feb-10	Auctioned 0.5 M tonnes rice to exporters from state reserves. Plan to sell up to 2 M tonnes by April 2010 to reduce the storage and
Government procurement and minimum support price		
India	21-Apr-11	Government procurement price of wheat increased by 4.5 percent to USD 264 per tonne, in order to support farmers' incomes following
Republic of Korea	01-Apr-11	Set up of an international grain procurement company in an effort to secure supply of staple farm products, including wheat, beans and
Sri Lanka	06-May-11	After a hefty 2.6 million ton bumper rice harvest, new tax of 10 cents per kilogramme of wheat to ensure rice farmers did not suffer
Pakistan	04-Feb-11	The wheat procurement target set at 6.5 million tonnes for 2011 in expectation of a bumper crop, with a minimum support price of Rs
Philippines	08-Dec-10	The National Food Authority (NFA) increased procurement price for rice from USD 0.54 to USD 0.58 per kilogram. Retail price increased
Thailand	03-Dec-10	Income guarantee programme extended (rice, maize and cassava). Farmers receive the difference between the market and reference
Kazakhstan	10-Nov-10	State Grain purchasing prices fixed at USD 223 per tonne for 3 grades soft wheat prices; USD 183 for 4 grade soft wheat and USD 168
Pakistan	03-Nov-10	Ministerial committee to review wheat purchase policy (guaranteed procurement and issued prices). State may be limited to purchases
India	20-Oct-10	Minimum procurement price of wheat increased by 1.8 percent to INR 11 200 (USD 252) per tonne, for the 2011/2012 marketing year
Pakistan	19-Oct-10	Minimum procurement price of wheat increased by 2.6 percent to PKR 975 per 40 kilograms (USD 285 per tonne).
China	12-Oct-10	Minimum support price of white wheat increased by 5.5 percent to CNY 1 900 (USD 285) per tonne.
Thailand	14-Sep-10	Approved guaranteed price for rice for the 2010/2011 crop season, from THB 9 500 (USD 308) to THB 15 300 (USD 497) per tonne.
India	18-Jun-10	Minimum support price for wheat for the 2010/11 marketing year has been set at INR 11 000 (USD 238) per tonne, up from INR 10 800
India	27-May-10	Minimum support price for rice increased by (USD 210/tonne) common grades to (USD 224/tonne) for superior grades.
Iran	13-May-10	Minimum support prices for wheat and barley lowered from USD 727.42 to USD 550 and from USD 385.11 to USD 556.26 per tonne,
Thailand	09-Mar-10	Government, under the new Direct Purchase Programme, started to buy white rice directly from farmers (USD 280.64), 2.5 percent
Republic of Korea	24-Apr-10	The Government will buy 200 000 tonnes of rice in the coming months to facilitate local market price stabilization.
India	01-Apr-10	Minimum support price for wheat 2010/11 (April/March) has been increased to USD 247 per tonne. Plans to buy 24 million tonnes of
Pakistan	18-Mar-10	The minimum support price for wheat has been confirmed at PKR 950 (USD 11.30) for 40 kg, as of September 2009.
Thailand	27-Feb-10	Government bought 290 000 tonnes of paddy rice directly from farmers in view of falling rice price.
China	26-Feb-10	Minimum purchasing price of white and red wheat increased to USD 13.22 and USD 12.63 per 50 kg bag. 3.3 and 3.6 percent
China	22-Feb-10	Minimum purchasing price for short grain rice variety increased (USD 15.37/50 kg) 10.5 percent higher than in 2009.
Indonesia	01-Jan-10	Minimum support price for unprocessed paddy and unhusked rice increased 10 percent, to USD 0.28 and USD 0.35 per Kg respectively.
Price controls		
Sri Lanka	09-Dec-10	Government fixed Samba rice maximum retail price at USD 0.63/kg and Nadu, White, and Red rice maximum retail price at USD
Sri Lanka	27-Oct-10	The Government lifted price control on rice: the price cap of LKR 70 (USD 0.63) per kilogram in market sales imposed in April 2008 has
Sri Lanka	27-Oct-10	Price control on rice lifted: the price cap of LKR 70 (USD 0.63) per kilogram in market sales imposed in April 2008 has been removed.
Promotion of domestic production		
Thailand	07-Apr-11	Intention to eliminate 3rd planting to improve rice quality and to combat the hopper. Plan may reduce annual exports by 2 million metric
Sri Lanka	09-Nov-10	Ban on sale of flour based food items in canteens and start of a programme to promote rice flour based products to support domestic
Cambodia	18-Aug-10	To boost the rice export by 2015 Cambodian government said it will guarantee 50 percent of commercial bank lending to rice producers.
Viet nam	12-Jul-10	Minimum Export Price for rice has been set at USD 300 per tonne, 14.28 percent lower than the one set in April 2010.
Australia	19-Mar-10	A five years programme 'Bridging the Yield Gap' to sharply boost yields of winter crops and add 2 million tons in output. AUD 3 million in
Republic of Korea	14-Mar-10	Announcement of an increase in the support of local rice processing industry for 2010, by providing KRW 60 billion (USD 53.1 million)
Cambodia	02-Feb-10	Allocation of USD 310 million to improve rice irrigation infrastructure over the next two years in order to increase rice exports.
Viet nam	08-Apr-10	Export price of the 25 percent broken rice has been reduced to USD 350 per tonne to boost rice exports and to reduce domestic stocks.
Kazakhstan	30-Jan-10	The government has simplified the requirements to qualify grain exports and the licence obtaining the process.

Source: Authors based on FAO Country Policy Monitoring. Available at http://www.fao.org/giews/countrybrief/policy_detail.jsp. (Accessed October 2011)

The majority of these measures were implemented in the second half of 2010, when the international prices of food were going over the roof. During that period, governments implemented policies to avoid the disappearance of food in the domestic markets, due to the tendency of producers and traders to keep stocks to put them in the market only when price rise even further. For example in South Asia, where the impact of the high food prices on the poor was extremely high, India facilitated imports of food by suspending tariffs and extending duty free privileges. Such measures increase the availability of food in the domestic markets and help to avoid price increases. Even the simple announcement of these measures may trigger the immediate increase in availability of food in local markets if shortage was created by producers and traders keeping their stocks to speculate. India and Pakistan increased the minimum support price of wheat to reassure that it would be brought to the market at affordable prices while supporting local farmers. India also released buffer stocks of wheat and rice to keep domestic markets prices down and distributed wheat and rice to targeted poor families. These measures have proven effective to tame domestic prices of staple food. While the price of wheat in international markets increased by 72 per cent from May 2010 to January 2011, domestic prices

in India increased by only 6 per cent and they actually reduced in Pakistan by 2 per cent.

Regional cooperation has also played a role. In August 2010, India lifted export restrictions and allowed exports of 300,000 tonnes of rice and 200,000 tonnes of wheat to Bangladesh. Between February and May 2010, India had already approved exports of 400,000 tonnes of wheat and 100,000 tonnes of rice to Bangladesh, 200,000 tonnes of rice to Sri Lanka and 250,000 tonnes of wheat to Nepal. Pakistan had also allowed exports of two million tonnes of wheat in April 2010 but it had to suspend the measure in August 2010 due to the catastrophic impact of the summer floods.

VI. POLICY OPTIONS TO CONTAIN FOOD INFLATION AND MINIMIZE ADVERSE IMPACT ON POOR

Agricultural productivity: Sustained efforts should be made to enhance agricultural productivity. Higher agricultural productivity is especially important because, as stated earlier, food prices have been proven to be a critical inflation trigger. Higher productivity increases the real wage and exchange rates compatible with low inflation, thus breaking down the inflation propagation mechanism. Strategies to accomplish such goal depend on the country's stage in structural transformation. Poorer countries, those with low urbanization rate, large labor surplus in the agricultural sector, and large share of agricultural employment, should continue to diversify their economies and to increase the productivity of their agricultural sector by expanding productive employment out of agriculture and increasing the domestic market for agricultural products. That can be accomplished through: industrial policy, including infant industry protection policies, Investing in infrastructure to support new productive activities, technology upgrading, and growth-oriented stable macroeconomic policies that objective expanding productive employment. Countries that are moving faster with their structural transformation (i.e. increasing urbanization rate, decreasing share of agricultural employment) should provide continued support for crop and rural development, instituting a new, knowledge-intensive Green Revolution. That can be accomplished by the use of modern technology, new seed varieties and better financial systems for provision of credit to farmers.

South-South cooperation to enhance agricultural productivity: Vast gaps exist in agricultural productivity in terms of crop yields across countries and regions in the world. These gaps can be reduced through South-South and triangular cooperation on knowledge and technology transfer. This will help in accelerating the introduction and adoption of higher-yielding varieties as well as the delivery of new post-harvest technologies to reduce losses. Existing endeavors on cooperative agricultural research should be promoted and their results should be made available across countries. In this regard, it is useful to note that the system of institutes of the Consultative Group on International Agricultural Research (CGIAR), which includes the International Rice Research Institute (IRRI) in the Philippines and the International Crop Research Institute for Semi-Arid Tropics (ICRISAT) in India, have generated new knowledge and technology in agriculture and made it available to national agricultural research systems for adaptation to their geoclimatic conditions. South-South and triangular cooperation in the area of agriculture can play an important role in fostering the second green revolution in Asia and the Pacific.

Buffer stocks of food grains: Buffer stocks of food grains at the national level should be established and utilized in a countercyclical manner to moderate the price volatility. However, establishment and management of national food stocks can be very costly, especially for small countries. For this reason, establishment of food stocks at the subregional and regional levels for

managing price shocks is a better option. An example of such a scheme is the rice reserve initiative of ASEAN+3, which is planned to be formally established by the member countries in October 2011. Another positive initiative is the agreement to establish the South Asian Association for Regional Cooperation (SAARC) Food Bank, which would maintain food reserves and support national as well as regional food security through collective action among member countries.

Social protection policies: Without social protection programmes, high inflation and food price increases leave the poor with limited, often harmful coping mechanisms – such as reducing the number of meals, selling live-stock and other assets, or taking children out of school. Some of these coping mechanisms may alleviate hunger temporarily, but they may over a longer period also lead to malnutrition, harm livelihoods, and put children’s future at risk. The coverage of basic social protection programmes is generally very low in developing countries of the Asia-Pacific region. For example, only 20 per cent of the population has access to health care assistance; 30 per cent of the elderly receive pensions; and 20 per cent of the unemployed and underemployed have access to labour market programmes such as unemployment benefits, training, or public works programmes, including food for work programmes (ESCAP, 2009). Strengthening social protection programmes can help the vulnerable sections of the society to cope with crises such as spiraling food prices. Therefore, social protection should be strengthened through distribution of food vouchers to the needy or targeted income transfer schemes to minimize the adverse impact on the poor who usually have higher expenditure on food. Mid-day meals schemes in schools as implemented in certain parts of the region are important for minimizing malnourishment of children. Moreover, public distribution systems should be strengthened to protect the vulnerable sections of population from rising prices of food items.

Global response: Given the seriousness of the problem, measures to contain inflationary pressures at the national and regional levels may not be sufficient. Global cooperation is needed as well. ESCAP has been advocating decisive action by G20, as a major forum for global economic cooperation, to moderate the volatility of oil and food prices that are highly disruptive to the process of development (ESCAP, 2011b). To contain the volatility of commodities prices, regulation of commodity markets should be stepped up to curb speculation. Global markets where commodity-based financial derivatives are traded and priced should be more closely supervised so that speculative bubbles do not develop. Legislation at the national levels for this purpose may not be enough. Therefore, financial speculation in international commodity prices should be addressed through international cooperation. Global legislation on regulation of speculative activities can be carried out through fora such as the United Nations or G20. To restore the proper operation of commodity markets, tighter regulation should be introduced, including imposition of position limits and banning proprietary trading by financial institutions that are involved in hedging the transactions of their clients (UNCTAD, 2011). To curb food price volatility, G20 could also agree on regulations concerning the conversion of cereals into biofuels, implementing the so-called L’Aquila Food Security Initiative, which includes provisions for financing mechanisms to assist developing countries to attain food security.

VII. CONCLUSIONS

Given the strong link between food price inflation and overall inflation in the chain of causation the single most important policy initiative that developing countries in the region can adopt is to give priority to boosting productivity in the agriculture sector in the years ahead. Such an approach will not only increase the output of food and non-food crops but, as a bonus, reduce

poverty as well.

It was also observed that a prosperous rural economy depends not only on agriculture but also on rural non-farm- and urban- economic activities, including industries, commerce and other services. Such activities provide additional sources of demand for agricultural products, and raises urban wages attracting surplus labour from agricultural sectors in countries that are in the early stages of their structural transformation. Increasing food production is a fundamental objective not only to contain inflation in the short- and medium-terms but also for long-term sustainable development.

Finally, when faced with a temporary supply shock countries should avoid actions that meet national needs but make the problem worse for other countries. At the regional level, it is necessary to support mechanisms for improving emergency access to food through stock sharing and fewer restrictions, on the release of stocks to other countries under emergency conditions.

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