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Rising Food Prices and Food Security: Impact of the 2008 Food Crisis on Asia

The trend of rising food prices has made this basic human need inaccessible to an increasing number of people. The impact on vulnerable groups, especially the poor, is immense. Food price rise has implications for individuals, households as well as the state as a whole. This Insight delves into the drivers behind the 2008 food crisis and the impact on Asia.

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One of the most significant components of human security identified by the United Nations Development Programme (UNDP) 'Human Development Report 1994' is food security (Jolly and Basu Ray, 2006). Food insecurity has a negative impact on other aspects of human security such as health and education. The goal of the World Food Summit 1996 to reduce 'the proportion and number of people suffering from hunger and malnutrition by half by 2015', and the first Millennium Development Goal target to halve the proportion of people suffering from hunger between 1990 and 2015, seem to be a difficult proposition if current statistics on various facets of food security are anything to go by. According to the Food and Agriculture Organization of the United Nations (FAO), the number of undernourished people increased from 848 million to 1,020 million between 2003–05 and 2009 due primarily to the food and financial crisis (Von Grebmer et al., 2009).

The food crisis of 2008 overlapped with the larger worldwide financial crisis which only complicated and magnified the situation – from the viewpoints of both donors and recipients. While the crisis meant unemployment and lesser incomes for people as recipients, it restricted the capacity of donors to route funds towards social security.

The issue of high food prices persists even today despite prices having decreased from 2008 levels. There are reports replete with

warnings of another impending food crisis, this time as the fallout from rising wheat and barley prices following a severe drought and wildfires in Russia. Even though this situation is not perceived to be as severe or as widespread as the 2008 crisis, there is serious concern brewing, especially in the face of export bans put in place by countries such as Russia.

Of several variables, food price is one of the most significant in determining the state of food security in the world – at the individual, household and state level. Food price rise has shaken all pillars of this basic human security component. Not only does the availability and adequacy of food suffer with price rise due to fallouts such as export curbs and hoarding; but the maximum damage is in terms of accessibility of food, or the availability of sufficient resources to obtain appropriate food for a nutritionally balanced diet, which particularly affects vulnerable groups such as the urban and rural poor, and women and children. The urban poor are more exposed to the crisis, being more connected with the global system. Women and children suffer from the impact of rising expenditure on food, with difficulties ranging from paying for school to having to buy less nutritious food. Developing countries are greatly affected because they are now highly integrated into the global marketplace.

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Food Price Rise and Its Consequences

There has been at once a speedy and simultaneous rise in prices for all food crops – soyabeans, corn, wheat, rice and oilseeds – even though prices have fallen from their 2008 peak. According to the FAO (2010) 'Food Outlook – Global Market Analysis 2010', the cost of a typical food basket is about 80 per cent higher than it was in 2002–04. While the impact of spiralling food prices varies across countries as well as social groups, some common outcomes can easily be delineated, more so amongst vulnerable groups which face universal problems arising from poverty and social systems.

Table 1: Index of projected real food crop prices (2004=100)

	2007	2008	2009	2010	2015
Maize	139	175	165	155	148
Wheat	154	215	191	166	140
Rice	130	243	208	183	160
Soyabeans	119	156	147	139	115
Soyabean oil	136	187	173	160	110
Sugar	133	157	167	176	182

Source: World Bank (2008a:3).

Individual Level

At the individual level, a hike in food basket bills translates into different impacts on constituent members of a family. In most cases, individuals falling into the at-risk bracket are women and girls. There is a domino effect with lifelong impact on children born to expectant and lactating mothers who go through food deprivation. Older children are also likely to be impacted if there is a need to divert funds from education and preventive healthcare to food for sustenance. Every individual from the lower-income group who has to compromise on the number of meals and a nutritious diet (quality of food grains in their diet becomes lower) due to higher cost of food is on the receiving end. This in turn translates into increasing physical vulnerability to diseases. Socially, this also means early age marriages for girls, for instance, in parts of South Asia where they are considered a 'burden' on the family. In extreme cases, individuals might resort to unlawful and criminal activities. A recent NDTV news report from a village in Madhya Pradesh (India) is perhaps witness to such 'crimes of compulsion' – a daily wage tribal labourer was

Poverty and Starvation



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pushed to commit theft of a sack of wheat from his neighbour to which he remarked, 'There was nothing to eat, I stole in desperation' (Madhya Pradesh, 2010). All these consequences of the food crisis will coalesce to increase the number of food-insecure individuals, that is, those consuming less than the nutritional target of 2,100 calories a day (United States Department of Agriculture, as cited in The Chicago Council, 2010). The poor fall further into the mire of poverty.

Household Level

Food security of the household as a unit relies on variables such as price of food consumed, income and size of the family. Income in turn is affected by other factors such as taxes payable to the government. The impact of the food crisis encompassed compromises on the dietary intake of women and girls, in the form of an overall less nutritious and diversified diet, and diversion of funds from sectors such as sanitation, education, clean water and health. An International Food Policy Research Institute (IFPRI) study entitled 'Global Food Crises: Monitoring and Assessing Impact to Inform Policy Responses' notes that much also depended on the kind of household analysed (Benson et al., 2008). While a food-selling household might actually gain from a price rise, the hardest hit were food-buying households, whose income might not have kept pace with the price rise. Impoverishment and the compelling need for food – even though it had become more expensive – might also lead poor households to sell off assets such as houses, cattle and even their land (which increases in value giving them greater incentive to sell with rise in food prices) to feed the family. In many cases, households also obtained loans from moneylenders at high rates of interest, thus entering the vicious circle of poverty and debt. Indebtedness has often led poor farmers to commit suicide, leaving families without an earning member. This situation was reported in East Kenya recently, where nearly 2,000 farmers committed suicide in the wake of poor harvests caused by drought. Some even killed their families to save them from suffering after their land was taken away (Njeru, 2010).

National Level

At the national or state level, several challenges emerge. Of course, the first direct effect can be seen in the rise of domestic prices of food in tandem with a global increase in prices. In the case of food exporting countries which may impose export bans to secure their own markets, there is less revenue earned. Governments will also have to deal with the increased costs of developing new social security mechanisms and bolstering existing ones to cushion the impact of rising food prices on the population. The ordeal for developing, low-income and food importing countries will be far greater, as they have to grapple with an inflated import bill. There is an overall decline in the quality of human resource available in the country due to reduction in critical inputs such as robust health and literacy. Social unrest and demonstrations stemming from high food prices disturbed smooth governance in many places from Bangladesh to Indonesia. There was also an augmented tendency towards migration to cities and urban areas following landlessness.

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The 2008 Food Crisis: A Case in Point

The period up to the last decade (apart from a hiccup in 1973–75) was relatively favourable in terms of food pricing, in keeping with the positive impact of the Green Revolution which began in the 1950s. The beginning of the 2000s, however, brought about a gradual hike in food prices which accelerated around 2006. The crisis which surfaced around 2005 started with an increase in the prices of wheat. This was followed by a rise in price of maize, and then rice. Similarly, prices of dairy products, poultry and beef also shot up. The magnitude of the crisis is shown in an United Nations Conference on Trade and Development (UNCTAD) G-24 Discussion Paper which stated that wheat prices increased 127 per cent and rice a whopping 170 per cent, making a cumulative increase of 83 per cent in global food prices (Mittal, 2009). According to FAO (2009) estimates in 'The State of Food Insecurity in the World 2009', rising food prices and high unemployment have pushed the number of undernourished to a pinnacle of 1.02 billion in 2009.

What multiplied the recent debacle manifold was the financial crisis. Not only did the crisis shrivel the resources which could otherwise have been pumped into the agricultural sector, but rising unemployment and reduction in wages also clearly diminished the already limited capacity of the poor to sustain their livelihood. Remittances from migrant workers to their home countries also fell. South Asian countries have high dependence on these remittances as do countries such as the Philippines where as many as 17 per cent of households survive on them. Joachim von Braun (2008a) of IFPRI succinctly noted, 'Although the food and financial crises developed from different underlying causes, they are becoming intertwined in complex ways through their implications for financial and economic stability, food security, and political security.' The ones suffering were developing countries which faced high domestic food price inflation due to their economies being increasingly interwoven with the international economy.

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The Drivers of the 2008 Food Crisis

This begs the larger question of what pushed the world to the brink of such a catastrophe. Before attempting to delineate the drivers, it would be imperative to mention that not only are these drivers many and complicated, but analysts have also allocated diverse weightage to each one of them. Some basic issues such as population growth and changes in consumption patterns are commonly agreed upon, but there were other specifics painting the picture red. Some of the major drivers of the price rise are enumerated below.

The first critical factor was a rise in oil and energy prices, which had an impact in primarily two ways. One, both are essential components of fertilisers which ended up absorbing the cost hike, and two, they are also an integral part of the mechanised agriculture system as well as

the food processing and transportation systems of today. The moment this increase in production costs of agricultural products occurred there was an automatic transfer of costs to food commodities.

There is also the related factor of increasing demand for biofuels, also known as agro-fuels, spurred by the ever-increasing cost of fuels such as petroleum. Biofuels are primarily derived from agricultural products such as grains and oilseeds, for example, maize is used for the production of ethanol and palm oil for diesel. Other food crops also used to produce biofuels include sugarcane, soya and canola. Usage of crops for fuel results in both less land and crops for food. The US and the European Union (EU) have been tagged as culprits by analysts in such diversion of crops for fuel. Both have subsidies and tax incentives in place for the production of biofuels. There have been estimates pointing towards the possibility of nearly one-third of US corn production being diverted towards production of ethanol over the next decade. Considering that the US is the both the largest producer and exporter of corn, this would have an impact on the maize available for consumption as food as well as the price of this corn.

The third factor to which price rise can be attributed is an overall decline in the growth rate of agricultural production. An UNCTAD discussion paper cites the fact that the annual growth rate of production of aggregate grains and oilseeds was 2.2 per cent per year in the period 1970–90, falling to about 1.3 per cent thereafter, with predictions for 2009–17 standing at 1.2 per cent (Mittal, 2009). Apart from this, there are problems stemming from natural calamities, deforestation, less cultivable land due to development, and construction.

Speculation in financial markets and hoarding within states due to corrupt practices have had an impact on the price rise as well. Due to the financial crisis on the global front, speculators found it more comforting to turn to commodities which were experiencing rising prices. Climate change and natural disasters have contributed directly towards the problem. For example, in Australia, there were unusually high temperatures and forest fires. Similarly, the cyclones Sidr and Nargis wreaked havoc in Bangladesh and Myanmar respectively. According to Oxfam Canada (2008), Cyclone Sidr killed over 1 million livestock, destroyed shrimp enclosures and decimated 2 million acres of crops. Financial speculation and hoarding when combined with poor stocks of food grains have had a cumulative effect on price rise.

Domestic barriers put in place by different governments at the national level – as a result of the price rise and as a means to ‘secure’ domestic markets – have had an unfavourable impact on the already spiking prices. Countries such as India, Pakistan, Vietnam and Russia responded to the crisis by imposing export restrictions on grains such as rice. According to a World Bank working paper by Donald Mitchell (2008) which cites the United States Department of Agriculture (USDA), there was a noticeable and distinct increase in rice prices following the Indian and Vietnamese bans. Such bans led to less supply worldwide. There was also panic buying by countries such as Hong Kong and Vietnam. The Philippines imported 1.3 million tons of rice in January–April 2008, which was more than they had imported in the whole of 2007. Hoarding of food grains only added to the problem.

Changing food consumption patterns all over the world, and especially amongst countries such as China and India, have also had an impact on food prices. There is an increasing demand for meat and poultry amongst the growing middle-class, which in turn means an added demand for commodities such as soyabeans and corn used to feed these animals. The fact that it takes as much as 7 kilogrammes of grain to produce 1 kilogramme of beef explains the phenomenon.

Finally, the devaluation of the US dollar at the time of the food crisis contributed to an increase in food prices. There was also overall less aid and investment at the international level as economies were hard hit by the financial crisis.

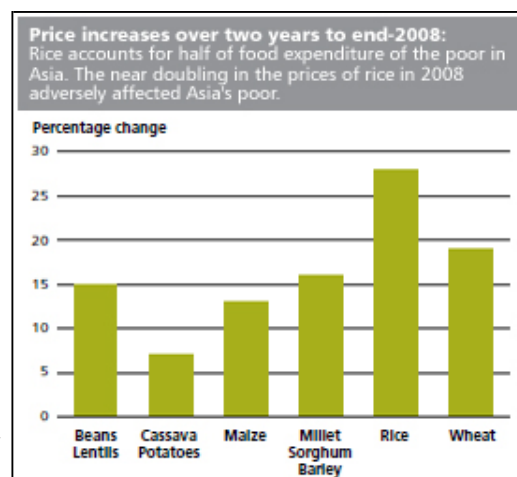
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Impact of the Crisis on Asia

According to the FAO (2008b) ‘The State of Food Insecurity in the World 2008’ statistics on the number of additional undernourished in the world as a result of rising prices, it was evident that in regional terms, besides sub-Saharan Africa, Asia was the most impacted, with an additional 41 million people going below the hunger threshold. The Asia-Pacific region is home to over half of the world’s population and an unenviable 63 per cent of the world’s undernourished. This was in part because most regional countries are increasingly linked to trade at the global level, while others are members of the low-income food deficit countries, even as the region is home to a formidable population. Even food exporting countries within Asia did not remain insulated from the crisis.

In analysing the impact of the food crisis on Asia, it has to be remembered that the two food commodities most affected by the cancerous price rise were the staples of rice and wheat. Rice is the staple food of over 2 billion Asians while wheat is the staple for 1 billion people according to the Asian Development Bank (ADB, 2008). On the production parameter, the Asia-Pacific produces 90 per cent of the world’s rice. These

Figure 1: Price increases over two years to end-2008



Source: ADB (n.d.)

statistics are both critical pointers to as well as variables in understanding the mammoth impact of the price rise and the food crisis on the region as a whole. In many ways, the current ongoing scare over wheat price rise has something in common with the 2008 crisis.

Table 2: 2009 Global Hunger Index (GHI) by severity and overall vulnerability to the global downturn (some Asian countries)

	Severity				
	Less than 4.9 (Low)	5.0 to 9.9 (Moderate)	10.0 to 19.9 (Serious)	20.0 to 29.9 (Alarming)	More than 30.0 (Extremely Alarming)
High Vulnerability			Lao PDR Vietnam		
Medium Vulnerability			Sri Lanka	Bangladesh Cambodia India Pakistan	
Low Vulnerability			Myanmar Nepal		

Source: 2009 Global Hunger Index (Von Grebmer et al., 2009:18).

Note: Vulnerability data are from IMF (2009) as cited in the 2009 Global Hunger Index. For the 2009 GHI, data on the proportion of undernourished are for 2003–05, data on child mortality are for 2007, and data on child malnutrition are for the latest year, that is, 2002–07, for which data is available. Table includes only countries for which both 2009 GHI and IMF vulnerability data are available.

Social Impact

The first social impact was related to the vicious cycle of poverty, rising food prices and food insecurity. The urban poor and migrants were the ones to feel the heat from the price rises as they were more affected by global price rise being that they were also consumers of processed food (which began to incorporate higher prices of oil) and ingredients of processed food such as wheat for bread. A large chunk of the middle-class in Asia felt the tremors, with those bordering on poverty falling further into the trap. For instance small farmers and poor agriculturalists in Cambodia felt the pressure from the rising oil prices. This contrasted with relatively well-off countries like Singapore where people spend only about 8 per cent of their income on food. A World Bank (2008a) study entitled 'Double Jeopardy' also reveals that spiking food prices have not only increased poverty, but has raised the Gini index of inequality by 5 per cent in countries such as Bangladesh.

Malnutrition, a phenomenon which already plagues Asia, was aggravated, increasing in sync with the rise in food prices. Countries such as India which otherwise experienced high economic growth had to deal with double the rate of stunted children, which at 47 per cent was five times that of China. There was a change in consumption patterns as well as quantity of food consumed in India as prices of wheat and rice inflated by 15 and 21 per cent respectively. According to case studies of countries affected by the economic crisis in the FAO (2009) 'The State of Food Insecurity in the World 2009' report, households in Bangladesh had to resort to eating fewer and low-quality meals, slashing expenses on health and making a shift towards new income sources such as casual labour.

Reports of food riots and social unrest arising out of mounting food prices came from various quarters in the region – Pakistan, Indonesia and Malaysia. In Pakistan in January 2008, troops had to be called in to guard vehicles transporting food (Pakistan Army, 2008). There was also widespread panic in countries such as Vietnam where stockpiling and hoarding led to an unprecedented four-hour live broadcast by the Prime Minister and other leaders to allay fears (Arnst, 2009). In the Philippines, the National Bureau of Investigation was called in to conduct raids on traders suspected of hoarding rice. The Agricultural Secretary of the Philippines Arthur Yap instructed food chains such as KFC to reduce by half the rice served per meal to avoid wastage. In Indonesia, the rise in price of soyabeans brought forth sharp protests (FOMCA, 2008).

In sum, all of these meant a fall in human resource quality as well as the food security of Asians. The impact of self-regulatory and government-initiated steps to ameliorate the situation meant that people had to trade off good quality food, healthcare and education for the basic inputs of survival. A World Bank (2008b) study cites the case of Bangladesh where a recent survey revealed that about half of all

households reduced spending on education to cope with the rise in food prices. Such a fall in terms of health, education, etc., considered essential for development means that the young workforce and children lost out on these integral inputs.

Economic Impact

The most damaging impact on Asian countries was the rapid rise of domestic food prices leading to inflation. An ADB (2008) Special Report points out that Asian countries such as Bangladesh, China, Vietnam, Indonesia and Pakistan experienced double-digit inflation. This trend cuts across both exporting and importing countries.

Inflation of food prices pushed overall inflation higher in countries such as China, India, Indonesia and Vietnam. For instance, the inflation rate in Cambodia touched 20 per cent in 2008 (CDRI, 2008). According to the Central Bank of Indonesia (2008), annual inflation growth in Indonesia touched 8.17 per cent in March 2008. This meant that basic food commodities went out of the reach of not just the poor, but also the marginally middle-class. Primary food importing countries such as the Philippines struggled to obtain supplies of rice. Bills of food importing countries such as Lao PDR went up. There was an increased pressure on regional governments to respond by increasing food subsidies and undertaking other social security measures to salvage the situation. In Indonesia the government increased allocation for food support by US\$290 million. Similarly, in the Philippines President Arroyo made efforts to ensure that there was enough subsidised rice for the poor.

Countries considered major exporters of food produce such as India and Vietnam placed export restrictions. Indonesia banned the export of popular medium grade rice till national stocks were more than 3 million tons and domestic prices low. China imposed price controls on certain food items such as grain, cooking oil and eggs; and India banned the export of all rice except basmati. This might have been done to secure domestic supplies and prices, but also had the simultaneous negative impact of discouraging agricultural produce and trade. There was also a loss in terms of the opportunity to earn foreign exchange. The domestic situation in food exporting countries was also not entirely positive. For instance, even though the rice-producing farmers in Cambodia benefitted from the price rise, there were other sections of the population which responded to the situation by reducing expenditure on goods and services. Also, livestock and fish production declined due to a shift in focus towards rice production.

Food for All



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Political Impact

There was significant fallout from price rises on the domestic and regional political stages of Asia. Amongst the worst hit was of course war-ravaged Afghanistan which bore not just the brunt of political problems but also faced natural disasters. The price of wheat which is the staple food grain in Afghanistan rose sharply during the period as did other commodities such as cereals, oils and fats. According to the USDA 'Food Security Assessment 2008–09' (Shapouri et al., 2009), grain production declined by 37 per cent due to a drought in 2008. This only added to public discontent and strife in daily life there.

Elsewhere, *The New York Times* cited a survey conducted by the Merdeka Center in the post-election period in Malaysia (Fuller, 2008). The voters clearly cited rising food and fuel prices as 'the most important problem in the country', and nearly voted out the ruling coalition party in the elections. President Arroyo of the Philippines threatened to throw hoarders into jail in the face of threats of food riots.

At the regional level, the food price rise exposed the weaknesses of Asian regional mechanisms in handling and finding a remedy for such crises. The Association of Southeast Asian Nations (ASEAN) mechanism proved to be ineffective, and efforts to form a 'rice cartel' following a proposal by Thailand to form an Organization of Rice Exporting Countries were quashed due to fears that it might create bad blood amongst ASEAN members. The crisis has spurred these countries to work towards evolving a safety valve mechanism as well as strengthening existing ones. Examples of such mechanisms are the ASEAN Integrated Food Security Framework and the Strategic Plan of Action on Food Security in the ASEAN Region.

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Response

Food insecurity arising out of rising food prices has eaten into the very sacrosanct concept of human security in the world, especially in developing countries, and even more so in Asia. The world of course responded to the crisis in myriad ways and at different levels. Individual countries responded at one level. The United Nations (UN) Secretary-General set up a High Level Task Force on the Global Food Security Crisis which produced a Comprehensive Framework for Action. The G-8 called for greater investment in the agricultural sector.

Countries such as Cambodia, China, Indonesia and Korea imposed price controls and introduced consumer subsidies, while others such as Bangladesh, Indonesia and India distributed food rations and stamps. At the regional and multilateral levels, several steps were taken. The World Bank set up the Global Food Crisis Response Program while the ADB initiated a plan of assistance and financial help for the poor impacted by rising food prices which included food subsidies, incentives for agriculture and investments in improving infrastructure. In addition, food aid was pledged and social safety nets strengthened as well as efforts made to bolster agricultural produce.

However, much needs to be done in terms of alleviating the discomfort and struggle of several poor and vulnerable groups. At the national level, governments have to handle problems such as hoarding and corruption which are rampant in many parts of the world. Also avoidance of wastage of food is essential, as is having effective storage facilities for food grains. At the regional level, more coordinated efforts are needed to ride through such a crisis in the future. An effective response may come not just from sub-regional groupings such as ASEAN, ASEAN+3 or the South Asian Association for Regional Cooperation (SAARC) but also effective interaction and coordination amongst these groupings. At the international level, the multilateral donors which pledge funds and assistance have to also ensure that these are effectively implemented and do not go to waste. Food security can only be achieved if food becomes available and accessible to the most vulnerable sections of society.

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