

Rising Food Prices and Financial Crisis in India:

Impact on Women and
Children and Ways of
Tackling the Problem

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IHD - UNICEF Working Paper Series
Children of India: Rights and Opportunities
Working Paper No. 3

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2010



Institute for Human Development, India



United Nations Children's Fund, India

IHD - UNICEF Working Paper Series
Children of India: Rights and Opportunities

2010

Published by:

UNICEF

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New Delhi 110 003 India

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Foreword

Children below the age of 18 years account for nearly 40 per cent of India's population. It goes without saying that enabling all children to realize their full creative potential is critical for sustaining India's economic growth and accelerating human development. Not all children have benefited equitably from the remarkable progress and transformation that the country has witnessed in recent years. Tens of millions still face basic challenges of survival and healthy development.

Children are first and foremost individuals, born with indivisible and inalienable human rights. They also belong to families and communities that need to have access to resources and services, as well as capacities to ensure realization of their rights. Policy approaches are needed that address both the income and non-income dimensions of children's deprivations. Continued neglect of material, human and psycho-social dimensions of child well-being can prevent children from living a full life and from making informed decisions later on in their life. India too would miss out on the dividends that can accrue from a full expansion of children's capabilities.

The Institute for Human Development (IHD) and UNICEF are partnering to offer a platform for examining different dimensions of child rights. Experts and commentators were invited to explore the impact of development policies on children and women and suggest alternative approaches to the elimination of children's deprivations. They have explored how best to ensure that all children benefit from equal and non-discriminatory access to basic social services. They have looked at ways of capitalizing on the demographic dividend, creating fiscal policy space for investing in children and strengthening the legislative and institutional framework for protecting children.

These contributions are being brought out as IHD - UNICEF Working Paper Series *Children of India: Rights and Opportunities*. We hope that the series will contribute to enriching public discourse and strengthening public action to promote the rights of children.

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Rising Food Prices and Financial Crisis in India:

Impact on Women and Children and Ways of Tackling the Problem

S. Mahendra Dev*

Summary

The objective of this study is to examine the analytical issues that relate to the pathways leading to the impact of the rising food prices and the global financial crisis on households, particularly women and children. The study also outlines and discusses the desirable macro level, and sectoral and social protection policies and measures that would protect/improve the living standards of households in terms of nutrition, healthcare, education and child protection.

The poor and vulnerable were significantly lagging behind in terms of human development, and social and financial security even before the onset of the food and global economic crises, which have further undermined their food security and livelihoods. The coping strategies adopted by the affected people could also have an adverse impact on the food security and human development of women and children. India did well to insulate itself from the rise in global food prices during 2005-08. However, the volatility in food prices and the financial crisis can continue to pose a threat to the food and nutrition security of the country.

The pathways that lead to poor outcomes in terms of the nutrition, health and education of children due to an increase in food prices can be grouped

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into the following four heads: (1) impact on poverty; (2) macro-economic impact and its effect on employment and the social sector; (3) impact on nutrition and social protection programmes; and (4) impact on women's well being and intra-household decisions. The cumulative impact of all these outcomes is reflected in two ways: (a) rise in household poverty, and (b) effect on child-specific factors. The financial crisis is also likely to have a negative effect on agriculture and the food security of the country. It may be noted that social inequality is high across all the states in India. Poverty levels and vulnerability are especially high among the SCs/STs and Muslims as compared to the OBCs and other castes.

The study discusses the macro and sectoral level policies and social protection measures needed to protect children from the two crises and to improve their well-being. The Indian Government has taken several monetary and fiscal measures in order to reduce the impact of the financial crisis on the country. However, the stimulus package offered by the Government needs to be aimed at the agricultural sector and primary food producers. Another view is propagated by the NCEUS, which highlights the urgent need to protect the livelihood security, employment and income levels of the poor and vulnerable sections, which would also stimulate the overall economic growth.

Many social protection programmes are currently being implemented in India. Among these, the major schemes for the poor fall into the following four categories: (i) food transfer like the PDS and supplementary nutrition; (ii) self-employment; (iii) wage employment; and (iv) social security programmes for unorganized workers. Many women-specific programmes are also under implementation. Some of these social protection schemes, however, need to be scaled up and made more effective in order to reduce the negative effects of the food price rise and the financial crisis. Further, child-specific programmes are also needed. The social protection programmes discussed in this study, including those aimed at ensuring adequate nutrition, school feeding programmes, health and education for children can thus help the families cope with the twin crises.

Rising Food Prices and Financial Crisis in India:

Impact on Women and Children and Ways of Tackling the Problem

1. Introduction

During the last few years, there has been a significant increase in global food prices due to several structural and cyclical factors. The global cereal prices increased by 150 per cent during the period 2005 to the second quarter of 2008. Although there was a decline in food prices during the second half of 2008, these prices are still higher than those prevalent at the beginning of this decade. India is less exposed to the outside world in terms of the prices of foodgrains and other commodities. The increase in food prices in India was much lower as compared to the sharp increase in corresponding global prices due to various measures. Cereal prices in India increased by only 23 per cent as compared to the global price increase of 150 per cent during the period 2005–2008. However, the food prices prevailing during the last two years have been higher than those during the period from the mid-1990s to 2004. Presently, the inflation for food articles (at more than 10 per cent) is higher than the general inflation (at below 6 per cent). The volatility in food prices is likely to continue and would harm the poor.

Even before the food crisis, the poor and vulnerable were being significantly affected. Rising food prices would further undermine the food security and livelihoods of the most vulnerable populations by eroding their already limited purchasing power. Poor people spend 60 to 70 per cent of their income on food and they have little capacity to adapt as prices rise and wages may not adjust accordingly. Thus, the situation in India can still pose a threat to the food and nutrition security of the country.

Apart from the problem of rise in food prices, India has also been facing the adverse impact of the global financial crisis since the 3rd quarter of 2008. The current financial crisis originated in the financial sector of the United States and is being transmitted to countries around the world through several channels. The sub-prime mortgage lending and collapse of the housing market, and flawed regulatory systems have adversely affected financial institutions around the world. India has largely avoided the impact on the banking system. However, the

crisis has an adverse impact on the liquidity situation and economic growth in India. This, in turn, can have an adverse effect on the poor and food security of the country.

Although the underlying causes for the rise in food prices and the financial crisis are different, they are interconnected through their implications on financial stability, food security and political security (Braun, 2008). At the global level, the capital was diverted from the collapsing housing market to speculation in agricultural futures. Speculative activities were partly responsible for the rise in global food prices. The food crisis increased general inflation and the consequent impact on macro-economic policies. Similarly, the financial crisis can have an impact on employment, poverty, agriculture investment and social sector expenditures. Therefore, both the food and financial crises may have an adverse impact on the food and nutritional security of India, and undermine the poverty reduction efforts and gains made in this direction over the last several years if large sections of the population are not able to cope with these crises. These two crises could further exacerbate the existing vulnerabilities in India for the poor and disadvantaged groups including women and children, thereby adversely affecting both their food security and human development.

The objective of this study is to examine the analytical issues that could help identify the pathways for dealing with the effects of rising food prices and the financial crisis on households, particularly women and children. It also outlines the desirable macro and sectoral policies and measures, particularly in relation to social protection, which would mitigate the negative effects of the crises and effectively protect households against them through a special focus on the issues of nutrition, health, education and enhancement of child protection.

Specifically, this study would provide answers to the following questions:

- (a) What are the macro policy/structural issues underpinning the price rise and financial crisis? (Section 2)
- (b) What are the pathways whereby these shocks affect households, particularly those leading to poor outcomes for children? (Section 3)
- (c) What are the coping mechanisms of these households that would adversely impact women and children?
- (d) What are the macro and sectoral level policies and social protection measures needed to protect the vulnerable sections of the population from these two crises?

2. Macro policy issues relating to the rise of food prices and the financial crisis

2.1 The global situation

There are five major drivers of rising global food prices. They are: (a) long-term supply problems; (b) rise in oil prices; (c) changes in demand due to the use of bio-fuels; (d) depreciation in the dollar and low interest rates in the US, and speculative activities; and (f) export restrictions of the developing countries. Thus, the surge in food prices is both a real and a monetary phenomenon and both market-driven and policy-induced (Lustig, 2008, p. 3).

Some of the structural factors like long-term supply problems, oil prices and the changes in demand due to the use of bio-fuels could be responsible for the rise in food prices¹. It may be noted that monetary and other factors have also been responsible for the increase in food prices at the global level. The depreciation of dollar is one of these factors. However, the food price increase has been noticed even with respect to the Euro or other currencies. Therefore, other factors have also played in an important role in fuelling the food price increase. Low interest rates in the US led to the shifting of portfolios away from interest-bearing instruments into other assets including commodities. The post-2007 increase in food prices could particularly be a largely monetary policy phenomenon resulting from global inflationary pressures. Rising food prices pose significant macro-economic challenges for the developing countries. This is because the overall global inflation also led to an increase in oil prices and not just the prices of food commodities. The sub-prime crisis also led to the shifting of funds to commodities as speculation activities. The rise in food prices accelerated further by policy interventions such as export restrictions, price controls, etc. These measures curtailed the supply of some commodities in the world market.

The reasons for the global financial crisis are well known. The crisis in the financial sector originated in the US and was transmitted to other countries. The financial sector in the US is largely unregulated. In this environment, mortgage lending to sub-prime borrowers rapidly expanded in the US since the advent of the twenty-first century. It is known that by definition,

1. On the rise in global food prices, see ADB (2008), Ahmed (2008), ODI (2008), IFPRI (2008), Oxfam (2008).

the sub-prime borrowers either have a prior default history or incomes to qualify for the loans they seek in the prime market. Lenders could sell the mortgages they issued to other financial institutions like Lehman Brothers. These financial institutions, in turn, packaged a large number of the mortgages into a mortgage-backed security and issued bonds of varying risks and returns backed by it. Bonds with the highest value would carry the highest risk. Financial institutions and individuals around the world invested in these instruments. As long as the US housing market boomed, mortgage default rates remained low and remained attractive. But once the housing market collapsed, it impacted the balance sheets of financial institutions that had invested in the mortgage-backed securities and their derivatives, which turned toxic following large-scale defaults in the US housing market. The financial crisis affected liquidity and economic growth in many countries. The US and European countries had to announce bailout plans. The US has since been suffering from recession.

2.2 The Indian situation

The global food, oil and financial crises have affected India also though the impact is much lower here than in some of the other countries².

(a) Trends in food prices

Three patterns have been noticed in the trends in food prices in India as compared to the global food prices. The first pattern is that inflation in food prices in India increased over the period 2005-06 to 2006-07 when global prices increased. Of course, the rate of increase was much lower in India than globally. The second pattern is that inflation in food prices declined in 2007-08 as compared to 2006-07, when global prices rose significantly. As per the third pattern, global prices declined but inflation in food prices in India started increasing since the third quarter of 2008. These patterns show that the impact of global price trends on India is limited because of less exposure of the Indian economy to global factors.²

The FAO food price index indicates that it increased by more than 80 per cent during the period 2005-08. The wholesale price index in India for food articles (foodgrains+non-foodgrains) increased by 21 per cent over this period (see Figure A1 in the Appendix).

2. On the rise in Indian food prices, see CENTAD (2008), Dev (2008a).

Cereal prices in India rose by only 20 per cent as compared to a 170 per cent increase in the corresponding global prices during the period 2005-08 (see Figure A2 in the Appendix). Similarly, wheat prices in India rose by only 21 per cent as compared to a corresponding 170 per cent increase at the global level (see Figure A3 in the Appendix). Rice prices in India increased by only 16 per cent as compared to a 230 per cent increase in the corresponding global prices during the same period (see Figure A4 in the Appendix).

In the case of India, the increase in food prices was higher in 2006-07 as compared to 2007-08. The inflation in prices of foodgrains, food articles and wheat in 2006-07 was 10.2 per cent, 7.8 per cent and 13 per cent, respectively. As compared to this, the inflation in the prices of the same commodities in 2007-08 was 4.7 per cent, 5.5 per cent and 4.3 per cent, respectively.

India has been almost insulated from the global impact of the whopping price rise in wheat and rice. This does not mean that the increase in the prices of these two commodities in India is insignificant. Wheat prices increased significantly during the year 2006-07 by about 13 per cent. There are several reasons for the increase in wheat prices during the period January 2006 to January 2007. The decline in wheat output to 69.4 million tonnes in 2005-06 coincided with a bad international wheat year. The world wheat production was estimated to be around 587 million tonnes as against a production of 628 million tonnes in 2004-05 (corresponding to India's agriculture year of 2003-04), leading to sharp increases in international wheat prices. This is one of the reasons for the higher wheat prices globally. The Indian Government has taken several measures to stabilize the price of wheat such as: (i) the release of adequate quantities under the targeted public distribution scheme (TPDS) and other welfare schemes, (ii) increasing domestic supplies through the Open Market Sales Scheme, (iii) ensuring adequate stocks in all the regions in the country together with supplementing the domestic availability with an import of 5.5 lakh tonnes through the State Trading Corporation (STC), and (iv) permitting private traders to import at zero duty. However, higher international prices continued to push the landed cost of imported wheat in each successive tender (GOI, 2007a).

Due to the perceived supply-demand mismatch and private traders offering prices above the minimum support price (MSP), Government procurement was lower than the target fixed for 2006-07. The stock of wheat at 6 million tonnes in November 2006, was lower than the 10.3 million tonnes recorded in October 2005. The upward trend in the year-on-year

inflation in wheat prices commenced in August 2006 (at 12 per cent) and reached 20 per cent in November 2006. In 2007-08, there was a record production of wheat at around 78.4 million tonnes. India also achieved a record production of 22.6 million tonnes the same year. As a result, the prices were low during the year 2007-08.

In contrast to wheat, the price increase in rice was very low at 2.9 per cent during the year 2006-07. The price of rice increased by around 7 per cent only in 2007-08 and the increase hovered at around 5 to 8 per cent in 2008-09. The price increase in India was very low as compared to the rise in global rice prices. The inflation in the prices of pulses in India was 30 per cent in 2006-07 but showed an absolute decline (-4.5 per cent) in 2007-08.

As compared to other commodities, oilseeds and edible oils recorded higher inflation in 2007-08. Oilseeds showed a 24 per cent increase in prices in 2007-08, and the increase was still high in 2008-09 though it declined over the preceding year. The continued increase in oil prices was on account of the higher demand, and lower estimated production of the rabi crop as well as rising global prices. The global prices of oilseeds rose by 70 to 90 per cent in March 2008 over March 2007. The surge in demand including the demand for bio-fuels, low stocks, and higher oil prices contributed to the price rise. The prices of soybean seeds showed an increase of 78.6 per cent at the global level in March 2008 over March 2007. In India, soybean seed prices recorded a 30 per cent inflation in 2007-08, and this price rise continued in 2008-09. In spite of a record production of 10 million tonnes, soybean prices showed high inflation, partly because of high global prices.

The domestic consumption of edible oils is estimated at over 10 million tonnes per year, while domestic production has been hovering at around 6 million tonnes. The import of edible oils (mainly soybean and the palm group of oils), which bridges the gap between domestic supply and demand, was 4.7 million tonnes and 4.3 million tonnes in 2004-05 and 2005-06, respectively. There was a decline in the domestic production of edible oils from 27.98 million tonnes in 2005-06 to 24.28 million tonnes in 2006-07. As a result, imports increased to 4.7 million tonnes. Due to higher global edible oil prices, domestic prices also increased in 2006-07. The same situation continued in 2007-08. The global inflation was 100-106 per cent higher in March 2008 over March 2007. The inflation in the prices of edible oils in India was 14 per cent and 20 per cent, respectively in March 2007 and March 2008. Thus, the price increase in India has been much lower than the increase in global prices. In the case of food products under manufactured goods, the inflation in the prices of oil cakes

and dairy products was high in 2007-08. The price rise in oil cakes was nearly 40 per cent in 2007-08. The increase in the price of oil cakes led to a rise in the prices of dairy products.

The trends in food prices in India and at the global level show that the impact of the global rise in food prices on India has been limited. Domestic production shortfalls in wheat and maize, and dependency on the imports of pulses and edible oils transmitted the international price shocks to domestic prices. However, the increase in food prices in India was much lower as compared to the sharp increase in global prices. Food prices in India, particularly for wheat and pulses, were higher in 2006-07, which was much before the sharp increase in global prices in 2007-08. In fact, inflation in the prices of foodgrains and food articles was lower in 2007-08 in India as compared to that in 2006-07. In the case of oilseeds and edible oils, the impact of global prices on India seems to be much more than in the case of other commodities.

It is true that during the past few months, the prices of major cereals at the global level have fallen by about 30 to 40 per cent as a result of the economic slowdown and favourable weather conditions. In the case of India, the food price inflation started increasing in the fourth quarter of 2008. The consumer price index for agricultural labourers and industrial workers has also increased in recent months.

(b) Reasons for the lower rise in food prices in India

The policy of the Government in India has been to attempt an insulation of domestic prices from the high world prices by combining different measures such as high subsidies, lower tariffs and export restrictions.

First, one of the reasons for the global price increase was an increase in oil and fertilizer prices. Indian subsidies on oil and fertilizers have insulated the Indian market against the global transmission of prices. Only a small part of the actual diesel prices have been passed on to farmers and consumers. Second, there was a 16 per cent increase in foodgrain production from 198 metric tonnes (mt) to 231 mt over three years from 2004-05 to 2007-08. Third, large-scale imports took place mainly in the case of edible oils and, to some extent, in pulses. Wheat was also imported in 2006-07 (5.5 million tonnes) and 2007-08 (1.8 million tonnes). Simultaneously, India was exporting rice ranging from 3 to 5 million tonnes per year till 2007-08. Fourth, import duties for wheat, pulses and edible oils were either reduced or permitted at zero duty. Fifth, some administrative measures were also undertaken. There was a ban on the export of rice, wheat, edible oil and pulses. A ban was also imposed on futures

trading in eight commodities, viz., rice, wheat, pulses (urad, tur, chana), potato, rubber and soy oil. Limits were imposed on food stocks under the Essential Commodities Act from August 2006 onwards. State governments have also been given powers to take effective action against the hoarding of food stocks.

Apart from the above measures, India's policy of procurement, maintenance of buffer stock and public distribution have also had the impact of insulating the Indian market against global prices. In order to provide incentives, the Government increased the minimum support prices (MSPs) significantly in recent years. There was only a marginal increase in the MSP of wheat and paddy during the period 2000-01 to 2004-05. On the other hand, there was a more than 50 per cent increase in the MSP of wheat during the last three years (2005-06 to 2007-08). In the case of paddy, there was a nearly 50 per cent increase over the three-year period from 2006-07 to 2008-09. The procurement was low in 2006-07, but it increased significantly in 2007-08. There was a record procurement of 22 million tonnes of wheat in 2007-08 as compared to only 9 million tonnes in 2006-07. In spite of some weaknesses, the public distribution system (PDS) has been able to contain prices and help the poor. The Central Issue Price of rice and wheat for the PDS has not been revised since 2002.

(c) General inflation in India

The general inflation in India was 4.4 per cent, 5.4 per cent and 4.7 per cent, during the years 2005-06, 2006-07 and 2007-08, respectively. It, however, started increasing significantly from January 2008 onwards. It increased from 8.0 per cent in April to nearly 13 per cent in September before declining to below 6 per cent in December 2008. The high general inflation also affects the poor and vulnerable sections of the population.

What are the reasons for the increase in general inflation in India? The increase in global crude oil prices was one of the main reasons for the increase in general inflation in India. Global crude oil prices increased by 150 per cent during the period February 2007 to August 2008. The recent decline in inflation in India was mainly due to a decline in crude oil prices to less than US \$40. The increase in inflation to around 13 per cent in the middle of 2008 was on account of supply side pressures such as the one-off increase in domestic petrol and diesel prices, the continuous hardening of prices of petroleum products that were not administered, the rise in prices of wheat and oilseeds, adjustment in steel prices, and increased demand side pressures (RBI, 2008a). The prices of non-administered petroleum products increased in the

range of 19-56 per cent over end March-2008. Apart from fuel prices, the intermittent but sharp increase in the prices of basic metals in line with international trends, along with iron ore prices, were the other major factors that contributed to inflation during the year 2008-09. Inflation in the prices of manufactured products rose to 11 per cent in August/September 2009, which, apart from a rise in the prices of metals, was due to an increase in the prices of edible oils and oil cakes as well as the recent firming up of textile prices.

Due to concerns over the slowdown in growth as opposed to earlier expectations of higher growth, central banks in many developed countries reduced their policy interest rates. As a result, there was higher liquidity in search of higher yields. India, with its strong macro fundamentals, attracted large capital flows during 2007-08, which were driven by external commercial borrowings, portfolio flows and foreign direct investment (FDI) inflows. Capital flows that were significantly higher than the current account deficit and the rise in inflation necessitated pre-emptive monetary policy actions to dampen excessive demand pressures. A number of fiscal and supply-side measures were undertaken by the Indian Government. The RBI undertook monetary measures in the form of an increase in the Cash Reserve Ratio (CRR) and policy interest rates in response to the evolving macro-economic, monetary and liquidity conditions to stabilize inflationary expectations.

(d) The financial crisis in India

Even before the financial crisis, there were problems regarding economic growth including the growth of industry and services, partly because of a tight monetary policy, which was due to higher inflation. The global financial crisis has had an indirect impact on India in terms of liquidity problems and lower economic growth. Developments, on both the international and domestic fronts, particularly from mid-September 2008 onwards, have impacted domestic liquidity conditions. The bankruptcy/sell-out/restructuring of some of the world's largest financial institutions beginning from mid-September 2008 brought some pressures on the domestic money and foreign exchange markets, in conjunction with temporary local factors such as advance tax outflows (RBI, 2008b).

The global financial environment deteriorated with the number of troubled financial institutions rising, the stock markets weakening and the money markets coming under stress. Central banks in several major advanced and emerging market economies responded to these extraordinary developments through synchronized policy actions, including measures

for achieving liquidity infusion. The RBI has acted swiftly to augment liquidity in the system by reducing the CRR, SLR (Statutory Liquidity Ratio) and the repo rate (the rate at which the RBI lends to banks). These measures started in September 2008 and continued till January 2009. During the period October 2008 to January 2009, the repo rate was reduced from 9 per cent to 5.5 per cent, signifying a decline of 3.5 percentage points.

Presently, the problem of general inflation has come down. Inflation was expected to drop to less than 5 per cent by March 2009. However, the consumer price index and prices of food articles continue to show higher inflation. As seen in the following sections, the global financial crisis will have a significant impact on the economic growth, employment and food security of the poor in India³.

3. Pathways that lead to poor outcomes for women and children

The Director-General of Food and Agricultural Organization (FAO), Jacques Diouf noted recently that the financial crisis, following hard on the heels of the soaring food crisis, which threw an additional 75 million people into hunger and poverty in 2007 alone, may well deepen the plight of the poor in developing countries. He said that “last year it was the pain” and “next year could be the fire”. He further said, “Commodity prices are currently dropping, mainly on expectation of favourable crop prospects but also because of a slowing world economy, among other factors. This could mean a cutback in plantings followed by reduced harvest in major exporting countries. Given continuing low grain stocks, this scenario could lead to another turn of record food prices next year— a catastrophe for millions who by then would be left with little money and no credit,” (FAO, 2008a).

Both the food and financial crises would affect the conditions of women and children. Following is a discussion on the pathways leading to poor outcomes for these vulnerable groups.

3. On the impact of the global crisis on India, see Chandrasekhar and Ghosh (2008).

3.1 Pathways that lead to poor outcomes due to rise in food prices

There are several pathways that lead to poor outcomes in the nutrition, health and education of children due to an increase in food prices. They can be grouped into the following four heads: (1) impact on poverty; (2) macro-economic impact and its effect on employment and the social sector; (3) impact on nutrition and social protection programmes; and (4) women's well-being and intra-household decisions.

(a) Impact on poverty

The impact of soaring food prices in any country depends on various factors, including: (a) the extent that the world market prices are passed on to domestic prices; (b) the initial poverty line and the number of people clustered around the poverty line; (c) the number of net buyers or net sellers of the commodities; (d) the share of poor people's budgets devoted overall to food and in particular, to staples; (e) the extent of own-consumption relative to market purchases; and (f) the effect of food price increases on the real wages of poor people (World Bank, 2008a).

A recent study in eight countries estimates that the rise in food prices between 2005 and 2007 increased poverty by 3 percentage points, on an average. Extrapolating these results globally suggests that as a result of the rise in food prices, the total world poverty may have increased by 73-105 million people (World Bank, 2008b).

FAO's food insecurity numbers in 2007 show that 75 million more people were added to the total number of under-nourished persons, relative to 2003-05. The rising prices have increased 41 million hungry people in Asia and 24 million hungry people in sub-Saharan Africa. India has a population of around 231 million undernourished persons.

High food prices would have different effects on net sellers and net buyers. However, there are a large number of net buyers, including all urban poor and a majority of the rural poor. It is true that net sellers are likely to benefit from rising food prices. However, the constraints on agriculture may prevent farmers from responding in the short run. Some of the small producers who have a marketable surplus could become worse off with higher prices. This is because a small producer usually sells the surplus immediately in the post-harvest season when the prices are low, and buys food when the prices are high. In India, the rising food prices would have an adverse impact on the poor as: (a) the poor spend a large share of their

total expenditure on food; and (b) many more poor households are net buyers of staple food than net sellers.

The poor typically spend 50 to 70 per cent of their total expenditure on food. In India, the share of food in the total expenditure declined over time (see Table 1). However, the bottom 30 per cent of the population still spends 66 per cent of its total expenditure on food in the rural areas. The share of cereals in the total expenditure has declined over time. Here again, the poor spend nearly 30 per cent of their expenditure on cereals (see Table 2). They still get more than 60 per cent of their calories from cereals. Thus, cereal consumption would be important for the poor in future also.

The increase in food prices erodes the purchasing power of the poor. The incomes of the poor will fall and those who are near (and above) the poverty line are likely to become poor. This would also affect the progress towards achieving the Millennium Development Goals

Table 1: Percentage Budget Share of Total Food by the Bottom 30%, Middle 40%, and Top 30% of the Population

Year	Rural				Urban			
	Bottom 30%	Middle 40%	Top 30%	All	Bottom 30%	Middle 40%	Top 30%	All
1970-71	84.4	81.04	71.29	76.67	79.96	75.01	62.48	68.87
1990-91	73.71	70.41	59.40	65.51	70.69	64.58	48.05	56.55
1993-94	69.83	66.47	52.61	59.99	66.35	59.78	43.78	51.82
2004-05	66.07	61.98	47.48	55.18	59.87	50.40	34.50	42.52

Note: The shares are at 1993-94 constant prices.

Source: NSS Consumer Expenditure Surveys, Government of India.

Table 2: Percentage Budget Share of Cereals by the Bottom 30%, Middle 40%, and Top 30% of the Population

Year	Rural				Urban			
	Bottom 30%	Middle 40%	Top 30%	All	Bottom 30%	Middle 40%	Top 30%	All
1970-71	53.65	43.65	29.49	38.15	38.85	28.19	13.37	21.58
1990-91	39.37	30.68	18.22	25.93	27.55	19.13	9.49	15.12
1993-94	35.68	27.87	15.72	22.95	25.59	17.14	8.18	13.32
2004-05	29.34	22.04	12.49	18.28	20.59	13.29	6.29	10.21

Note: The shares are derived from the expenditures at constant prices (1993-94 prices).

Source: NSS Consumer Expenditure Surveys, Government of India.

(MDGs) pertaining to poverty and hunger for some time to come. The impact of the rise in food prices on the poor would be manifested in the following four ways: (i) adverse effect on the nutrition status of pregnant and lactating women, and of pre-school children; (ii) decline in the health status of women and children; (iii) increase in child labour and withdrawal of children from school; and (iv) the distress sale of productive assets. All these have a potential long-term impact and would reduce the ability of individuals and households to combat poverty. It is true that an increase in agricultural production would benefit the poor in terms of an increase in wages and employment. However, the impact of the adjustment in wages, employment and capital flows to agriculture and the rural areas will take time to reach the poor. Apart from a reduction in food consumption, the purchasing power of the poor would decline, which, in turn, would considerably reduce the purchase of goods and services that are essential for maintaining the health and nutrition of women and children, such as water, sanitation, education, lighting, and healthcare, among others. The persistence of high food prices could thus lead to an irreversible damage to the human capital of the poor, and a significant reversal in the progress made towards achieving the MDGs.

(b) Macro-economic impact and effect on employment and the social sector

The rise in food, commodity and oil prices has led to an increase in the general inflation, which is also likely to hurt the poor and vulnerable sections. While India does not rely extensively on foodgrain imports, its reliance on petroleum products and other commodities like edible oils is significantly large. Consequently, given the sharp increase in oil and commodity prices worldwide, it has experienced losses in the terms of trade, and an adverse impact on current account balances, which has negative socio-economic implications for the poor. Earlier, the loss of income in terms of trade used to be compensated by remittances and the export of services. In the current situation, however, the global financial crisis will affect these external flows to the country.

General inflation could rise further due to higher food prices. If wages also rise as a consequence, inflation could spiral, causing inflationary expectations with the general level of prices rising further. Higher food prices can reduce economic activity in the country as inflation would reduce consumption, savings and investment. The combined effect of all these activities would lead to a slowdown in the aggregate demand. Due to higher inflation in India, the Reserve Bank of India (RBI) has tightened its monetary policy, resulting in high interest rates, which would lead to reduced aggregate demand and slowing down of the

economy. The economic slowdown may, in turn, reduce employment and have an adverse effect on the poor households, thereby impacting vulnerable constituents of the population like women and children the most.

On the other hand, an increase in food prices may provide opportunities for farmers to increase agricultural production. It may also raise household and women's employment, which would benefit children. At the same time, an increase in the employment of women may also reduce the time they devote for childcare (including breastfeeding and preparation of weaning foods for infants) (Plan and ODI, 2008). The rise in the demand for agriculture may also increase child labour. However, since an increase in agricultural production would lead to lower prices, women and children may benefit as a consequence.

Reduced economic activity due to a rise in food prices and general inflation would affect components of the social sector like education and health. At the macro level, a reduction in economic growth would lead to a reduction in the tax/GDP ratio, which would have an adverse impact on social sector expenditures. Even if there is no decline in growth, the increase in food prices and the resultant increase in subsidies and tax concessions, among other reductions, could limit the capacity of governments to raise social sector expenditures, which would have a negative outcome in terms of healthcare and education for women and children.

(c) Impact on nutrition and social protection programmes

The rise in food prices would worsen the nutrition situation, especially among infants (0-24 months), and pregnant and lactating mothers. Children suffer long-term consequences from short-term shocks. Countries that are the hardest hit by the food crisis already have the highest pre-existing malnutrition rates. The malnutrition situation would thus worsen further with an increase in food prices.

The rise in food prices would also affect the food consumption of households, which, in turn, reduces the food consumption of women and children. Besides, the high prices may compel households to spend more on cheaper, high-calorie staples and less on more expensive foods rich in proteins and vitamins such as meat, fish, dairy products, fruits and vegetables, thereby reducing the quality of their diet. This would have significant negative consequences in terms of morbidity, mortality, cognitive abilities and growth.

According to Bouis (2008), the above conclusion can be arrived at on the basis of the following four factors:

“(i) Expenditures on non-staple foods by poor consumers comprise 40-60 per cent of the total expenditures on food.

(ii) The demand for food staples (such as rice, wheat, maize, etc., depending on the geographical region and culture) is highly inelastic. The income and price elasticities for food staples in the aggregate are low.

(iii) In diets, minerals and vitamins are concentrated in non-staple foods; energy is concentrated in staple foods.

(iv) The current intakes of vitamins and minerals are already very low, resulting in high prevalence rates of micronutrient deficiencies. Even a modest decrease in the current intakes of minerals and vitamins would drive these prevalence rates significantly higher, with severe consequences for the nutritional status of the poor and public health” (p.1, Bouis, 2008).

Micronutrient malnutrition would, therefore, be a widespread health consequence of high food prices. According to Klotz, et al. (2008), increased staple food prices around the world are forcing households to reduce their consumption of micronutrient-rich foods, which would have a wide range of health consequences, depending on the pre-existing nutritional status of a population. They also indicate that “the manifestation of high food prices will be observed in terms of micronutrient-deficiency-induced morbidity and mortality, a potential ‘lost generation’ of unhealthy children, and irreversible economic loss” (p. 12).

The rise in food prices would also affect the social protection programmes, particularly the food-based schemes. For example, India has food supplementation programmes such as the Integrated Child Development Scheme (ICDS) and the Mid-day Meal Scheme for primary schoolchildren. The Government of India provides subsidized foodgrains and bears the cost of converting foodgrains into hot cooked meals by including pulses, oils and vegetables. These social protection programmes benefit large segments of the vulnerable sections.

General inflation and the rise in food prices would affect these programmes in two ways. Firstly, it would lead to a macro-economic decline due to inflation. The expenditures on these programmes would be affected in the same way that those on education and health

are affected. Secondly, the cost of these programmes would increase because of the rise in food prices. If the government does not increase the expenditures, the quality of these food-based schemes will be diluted. For example, the quality of foodgrains may be diluted and the quantity of vegetables and oils in the meal may be reduced. Thus, a decline in the quality of these schemes would adversely affect the nutrition situation of women and children.

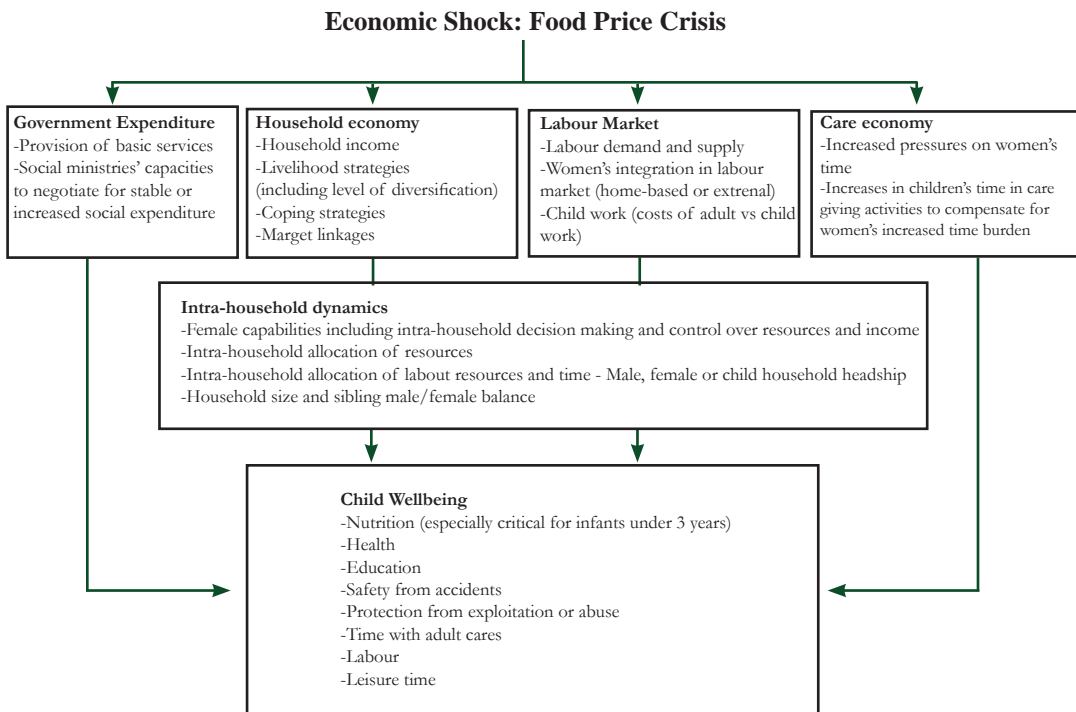
(d) Women's well-being and intra-household decisions

High food prices have different impacts on women consumers and producers. The rise in food prices could increase incentives for producers. But due to constraints on input supplies and other factors, past evidence suggests that higher prices may not necessarily stimulate production by female farmers (Quisumbing, *et al.*, 2008). At the household level, the time burden of women may increase with a rise in food prices, as they try to manage their household budgets in the face of increasing expenditure on food and/or paid employment, thereby affecting their children's nutrition and reducing the time they devote to the care of their children. It is important to know about these intra-household dynamics in order to assess the impact of the rise in food prices on children. The intra-household allocation of resources to children depends on several factors such as women's empowerment and education, the household wealth and asset base, and the nature and extent of social protection measures reaching the household, among other things (Plan and ODI, 2008). One of the mechanisms employed by households to cope with the rise in prices relates to decisions about children's activities and time. In some cases, children may be withdrawn from school to take up paid work activities. In other cases, children may have less time for study and leisure activities because of their involvement in paid or unpaid work. The impact of the rising food price shock on children's well-being is given in Figure 1.

Impact of high food prices on children: A study entitled 'Young Lives' (an international study of childhood poverty) indicates that high food prices would have an impact on children in two ways (Dercon, 2008). The first is the short-run impact on family budgets. The constraint on family budgets would not only result in less food being available or cheaper food being purchased but also in the reduction of funds allocated for non-food items such as health and education within the household. Secondly, it would have a long-term impact on children's health, and their psychosocial well-being and educational achievements.

The project Young Lives, which was undertaken for four countries, reveals interesting results regarding the impact of poverty and stunting on children. Poverty was seen to have a significant impact on learning and achievements in India. A comparison of the educational and psychosocial indicators for average children from the poorest quintile with those from the richest quintile shows that the writing skills were substantially lower among India's poor children as compared to the rich children (see Table 3). The reading skills, and grade aspiration gaps are lower for the poorest quintile. Similarly, the educational and psychosocial indicators are lower for the stunted children as compared to the non-stunted children in the case of India (see Table 4).

Figure 1: Linkages between Food Price Shocks and Children's Well-being



Source: Plan and ODI (2008).

Table 3: Educational and Psychosocial Indicators (Comparing Average Children from the Poorest Quartile with the Average Children from the Richest Quartile)

	India	Ethiopia	Peru	Vietnam
Grade deficit (in years) between poorest and richest quartile	-0.3*	-0.8*	-0.9*	-0.6*
Writing skills: Percentage of children that write without difficulty (deficit in percentage points)	-24.7*	-10.7*	-14.2	-14.3*
Reading skills: Percentage of children that can read without difficulty (deficit in percentage points)	-11.2	-10.8	-7.1*	-9.3
Sense of shame/embarrassment index (deficit in percentage points)	-5.1*	-4.3*	-18.8*	-9.4*
Grade aspiration gap (in years)	-1.2*	-0.7*	-0.7*	-1.4*

Notes: The richest and poorest 25 % of the households are defined in terms of the total household consumption per capita.

*Denotes statistical significance of spending power to explain outcomes, at 10% or less.

Source: Table modified from Dercon (2008).

Table 4: Educational and Psychosocial Indicators Comparing (Average) Stunted and Non-stunted Children

	India	Ethiopia	Peru	Vietnam
Grade deficit (in years) between stunted and non-stunted children	-0.3*	-0.9	-0.5	-0.4
Writing skills: Percentage of children that write without difficulty (deficit in percentage points)	-7.0	-18.1	-13.4	-6.8
Reading skills: Percentage of children that can read without difficulty (deficit in percentage points)	-2.5	-15.6	-2.3	-5.4
Sense of shame/embarrassment index (deficit in percentage points)	-3.0*	-0.6	-10.3*	-2.4
Grade aspiration gap (in years)	-0.4	-0.4*	-0.4	-0.7*

Note: *Denotes statistical difference at 5%.

Source: Table modified from Dercon (2008).

Table 5: Estimated Impact of the Food Crisis on Mortality and Nutrition Indicators (If Unaddressed)

Indicators	Increase after Crisis (%)
Maternal Anaemia	10-20
Low Birth Weight	5-10
Stunting	3-7
Wasting	8-16
Child Mortality	3-15

Source: Bhutta, *et al.* (2008).

Table 6: Estimated Impact of Food Price Crisis and Insecurity on Health and Nutrition Outcomes

Nutrition and Mortality Indicators	Excess following Crisis (%)	Estimated Impact in Lowest Income Quintiles (%)	Estimated Impact in Upper Income Quintiles (%)
Maternal Anaemia	10.5	12.0	8.4
Low Birth Weight	35.7	45.0	19.6
Stunting	22.4	8.0	9.7
Wasting	49.0	79.0	25.3

Source: Bhutta, et al. (2008).

East and South-east Asian experience during the financial crisis: Experience of the East and South-east Asian financial crisis in 1997 indicates that the crisis did affect a range of indicators such as micronutrient status, immunization coverage rates and healthcare expenditures (Bhutta, et al., 2008). A study on East and South-east Asia (Bhutta, et al., 2008) estimated the potential impact of the food crisis and the current global financial crisis on nutrition and health indicators in the region. It shows that the incidence of maternal anaemia could increase by 10 to 20 per cent if left unaddressed (see Table 5). Similarly, incidences of malnutrition and child mortality could also increase. It could also have a significant impact on health and nutrition outcomes. Table 6 provides the differential impact on the lowest quintiles and upper income quintiles. For example, the impact on wasting could be 79 per cent for the lowest income quintiles as compared to only 25 per cent for the upper income quintiles.

3.2 Pathways that lead to poor outcomes due to the financial crisis

The financial turmoil, which started in the US financial system as a result of defaults of sub-prime mortgage loans, has blown into an unprecedented financial crisis all over the world. It has affected the international money, credit, equity and foreign exchange markets. The global situation deteriorated massively after mid-September 2008 following the collapse of Lehman Brothers, one of the top five investment banks in the US. There has been a massive choking of credit since then and a global crash in stock markets. The slowdown that was expected in the global economy became much worse with the US, Europe and Japan moving into recession. A crisis of this magnitude in industrialized countries is bound to have an impact on India.

The financial crisis that originated in the US is being transmitted to other countries through three principal channels (Panagariya, 2008). First, it has directly affected the financial institutions all over the world due to investments in mortgage-backed securities and their derivatives turning toxic following large-scale defaults in the US housing markets. Second, the financial crisis has created a liquidity problem. The US firms that needed liquid resources withdrew their funds from stocks and bonds in other countries. The decline in the prices of stocks and bonds had an impact on local investors who pulled back from the market. This led to the choking of credit all over the world. The third source of transmission of the financial crisis is the impact on the real sector. The financial crisis led to a recession in the US. This, in turn, led to a decline in the demand for goods from other countries in the US, which has affected the exports of developing countries.

While India has largely escaped the first transmission, it has not been able to avoid the other two channels. The direct exposure of the Indian banking system to the sub-prime market abroad is almost absent, and there may be very limited investment by a few Indian banks in the collateralized debt obligations which had underlying entities with sub-prime exposures. However, the indirect impact of the crisis, transmitted through capital flows, financial markets and trade (real sector), would affect India. The foreign exchange reserves have declined in India and created a liquidity crisis both due to the global crisis as well as the tightening of the monetary policy earlier. This would also affect exports from India.

The growth rate of the GDP in India declined to 6.7 per cent in 2008-09 as compared to a growth rate of 9 per cent in 2007-08. This is partly due to the financial crisis and partly due to the tight monetary policies, which, in turn, were implemented in response to the high inflation. The GDP growth rate is expected to decline further to less than 6 per cent in 2009-10. Lower growth may also affect the employment prospects, and may have an adverse impact on social sector expenditures as the tax/GDP ratio may decline with lower growth.

More importantly, the impact of the financial crisis is likely to have negative effects on the agricultural sector and food security. The pathways through which the agricultural markets will be affected are on both the demand and supply sides (FAO, 2008b). The slowing down of economic growth would affect the demand for agricultural commodities. The prevailing uncertainty and consequent negative market expectations could further dampen demand, and the falling demand may put further downward pressure on agricultural commodity

markets. In general, lower food prices are good for consumers but reduce incentives for producers to enable them to make the necessary investments, which would improve food security in the medium term. However, the decline in food prices would not be sufficient to compensate the consumers against the reduction in household incomes due to recession, fall in employment and remittances from abroad.

On the supply side, the reduction in agricultural prices may result in a cutback in agricultural production. Although oil and fertilizer prices have declined, in general, input prices can be volatile and would affect the supply of agricultural commodities. The financial crisis is likely to have a negative impact on agricultural credit, which is widely regarded as a major constraint to agriculture in the developing countries. Farmers who have taken advantage of rising agricultural prices to invest in increasing production may find themselves unable to pay off their debts because of falling output prices. As banks cut lending because of the financial crisis, it would be difficult for small farmers to make new investments. The financial crisis may reduce agricultural investment at the macro level and lead to a cutback on social protection expenditures. The combination of falling agricultural prices, reduction in agricultural investment and access to credit may have a negative effect on agricultural production, which, in turn, would have serious implications for food security. Poverty reduction efforts may also be stalled because of low employment and volatility in food prices. The negative impact on household income would thus affect the well-being of women and children.

4. Vulnerabilities and coping mechanisms for households and the impact on children

The term ‘vulnerability’ refers to the relationship between poverty, risk and efforts/ability to manage risk. Risks and the inability to effectively manage these risks could push the poor below the poverty line and those who are already living below the poverty line, could be thrust deeper into poverty. On the other hand, reducing vulnerability through effective and efficient risk management may significantly contribute to poverty reduction. Therefore, any effort towards poverty eradication/reduction needs to be based on a good understanding of

the risks, constraints and opportunities faced by the poor. Further, these efforts should help people manage risk and avoid falling into poverty.

There is enough evidence to suggest that the poor and poorest of the poor households are vulnerable to a range of risks affecting individuals, households or entire communities, which can have a devastating affect on their livelihoods and well-being. They have higher exposure to a variety of risks at the individual or household level. Some of them are: (a) health shocks such as illness, injury, accidents, and disability; (b) labour market risk, as many people work in the informal sector and face a high risk of unemployment and under-employment; and (c) harvest risks, lifecycle risks, social risks and special risks for vulnerable groups. In addition, they face community risks such as droughts, floods, cyclones, and structural adjustment policies, among other things.

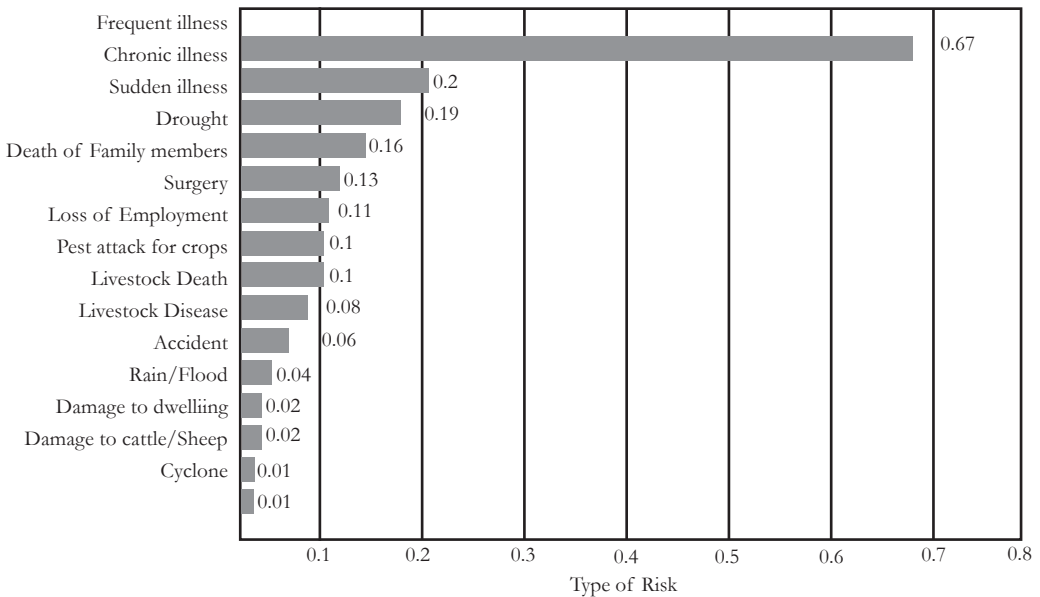
Some evidence from Andhra Pradesh shows that among the individual risks, health risk dominates over all the other risks (see Figure 2). The second highest idiosyncratic shock is the death of family members followed by a loss of employment, and pest attack on crops. In the case of collective risks, drought is the dominant shock in the state.

A village level study in three states, viz. Orissa, Karnataka and Madhya Pradesh, for the year 2006 shows that drought was the dominant risk followed by sudden health problems, cyclones/floods, and pest attack (Dev, *et al.*, 2006)⁴ (see Figure 3). When all idiosyncratic risks for all states are considered together, the incidence of sudden health problems dominates as the principal risk for all quartiles (see Table 7). Under covariate shocks, drought dominates other risks followed by cyclones/floods for all quartiles. The percentage of households reporting drought risk is about the same for the bottom two quartiles but increases for the top two quartiles. As for health risks, the proportion of households reporting this risk is substantially higher for the poorer two quartiles as compared to the top two quartiles. Further, among the top two quartiles, the proportion of households reporting drought risks is much higher than those reporting health risks. For the poorer two quartiles, drought and health risks are followed by the death of a family member or a livestock epidemic. For the richer two quartiles, the percentage of households reporting cyclones/floods, and pest attack is also high.

4. A major part of this section is drawn from Dev, *et al.* (2006).

According to this study, there are state level differences in the level of risks. In the relatively more developed states like Karnataka, the incidence of health risk is about one- half of the incidence of drought (which is not surprising because Karnataka has a large arid zone), whereas in a relatively poorer state like Orissa, health risk dominates (which is also not surprising given the preponderance of malaria) alongside covariate risks. Madhya Pradesh lies somewhere in between these two states—here, the health risk is about two-thirds of the weather-induced covariate risks. Another interesting difference is that in Orissa, the health risk is hitting not only humans but also livestock, as the highest proportion of households experienced epidemics of livestock in Orissa in comparison with the other two states.

Figure 2: Frequency of Shocks in Andhra Pradesh (an example from AP)



Source: District Poverty Initiative Project, Andhra Pradesh (CESS, 2007).

4.1 Coping mechanisms

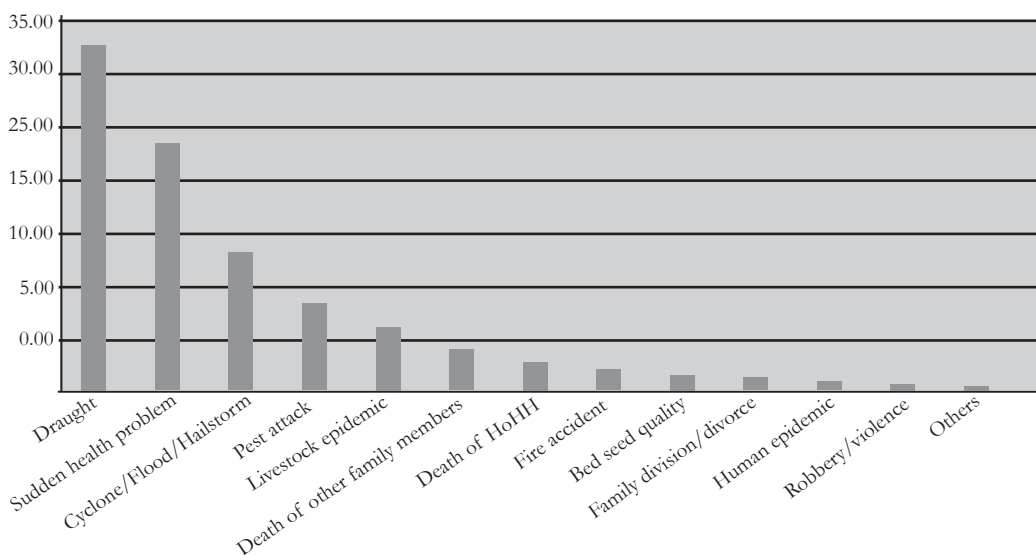
Most of the coping mechanisms followed by households are: borrowing, sale of assets, spending from savings, assistance from relatives and the government, expanded labour supply, child labour, bonded labour, reduction in consumption, migration, etc. In South Asia, borrowing seems to be the leading coping mechanism. However, excessive borrowing leads to disastrous consequences. It is known, for instance, that suicides by farmers and handloom weavers in Andhra Pradesh have been primarily due to their indebtedness.

Table 7: Percentage of Households Reporting Risk Events by the Type of Risk Events and by Quartiles: 2006

State	Total of Three States				
	Q1	Q2	Q3	Q4	Total
Drought	27.91	26.19	34.62	39.64	32.08
Cyclone/flood/hailstorm	5.81	10.42	16.57	18.64	12.83
Pest attack	1.74	4.46	16.86	19.53	10.62
Bad seed quality	0.00	0.60	2.96	3.25	1.70
Livestock epidemic	2.62	8.04	6.51	7.10	6.05
Fire accident	1.45	1.19	2.07	2.37	1.77
Robbery/violence	1.45	0.89	0.59	0.59	0.88
Human epidemic	0.87	1.49	0.59	1.18	1.03
Death of head of the household	2.91	3.27	2.96	2.37	2.88
Death of other family members	3.49	2.98	5.03	3.55	3.76
Sudden health problem	28.78	23.81	18.64	18.64	22.49
Family division/divorce	1.16	1.19	2.07	0.59	1.25
Others	0.29	0.30	0.00	0.00	0.15

Note: Q1 refers to the lowest quartile while Q4 refers to the richest quartile based on the wealth index.
Source: Dev, et al. (2006).

Figure 3: Percentage of Households Reporting Different Risk Events (Total of Three States)



Source: Dev, et al. (2006).

The above-mentioned study on three states (Dev, *et al.*, 2006) also provides some evidence on coping mechanisms. In all the states taken together, making adjustments in the labour market (which include an increase in the working hours, and women and children joining the labour market) seems to be the dominant coping strategy (seen in 32 per cent of the respondents), followed by borrowing (seen in 24.8 per cent), for the bottom quartile for all states (see Table 8). For the richest quartile, financial adjustment is higher than labour market adjustment.

The study also highlights the variation in the coping strategy across states (not given in the Table). In Orissa, borrowing is the dominant coping mechanism, followed by changes in the labour market, possibly reflecting low employment opportunities in the state. The opposite pattern is noticed for Madhya Pradesh, where the dominant coping strategy is in the labour market. In Karnataka, a high proportion of the households in the bottom two quartiles are coping with shocks by making both labour market adjustments and financial adjustments. For the richest two quartiles, asset depletion appears to be the dominant coping strategy.

A study on Andhra Pradesh reveals the vulnerabilities of the poor in three regions of the state, viz. Telangana, Rayalaseema and coastal Andhra Pradesh (SERP, 2001). The findings of this study are summarized in Box 1.

Table 8: Percentage of Households Using Different Coping Strategies

	Q1	Q2	Q3	Q4	Total
Asset depletion	2.22	8.07	9.19	8.82	7.41
Adjustment in labour market participation	31.48	28.42	22.43	19.40	24.66
Financial adjustments	24.81	24.21	20.00	27.71	24.21
Intra-household adjustments	1.85	1.75	3.78	6.30	3.71
Dependence on aid	5.93	6.32	7.30	4.03	5.82
Others	7.04	4.56	8.92	4.53	6.28
None	26.67	26.67	28.38	29.22	27.91
All	100.00	100.00	100.00	100.00	100.00

Source: Dev, *et al.* (2006).

Box 1: Summary of findings on a study in Andhra Pradesh

1. Across the regions, health risks have been the highest, with the other risks being nature-related, death and accidents. Health risks constitute 50 per cent of the total number of household level risks reported.
2. The health risks reported were the highest among the Scheduled Castes (SCs) and Scheduled Tribes (STs). The Backward Classes (BCs) reported both health and nature-related risks, while the Other Castes (OCs) mostly reported nature-related risks. The reporting of risks appear to be linked to the primary livelihood option.
3. A large number of risks were reported in 1998. Both household and community level risks were high during this year. This is because health risks are possibly related to the community level risks.
4. Loss of work/wages and ill-health has been the most common impact of risk on the livelihoods.
5. Almost all households responded to risk by borrowing, thus falling into the debt trap. The adoption of reduction and mitigation strategies was almost nil for household level risks.
6. Lack of awareness/information results in the non-adoption of reduction and mitigation strategies.
7. All the social groups showed a preference for allopathic private healthcare in response to health risks.
8. Community level risks vary across regions. The Rayalaseema and Telangana regions report droughts while cyclones/floods are common in the coastal Andhra region.
9. The results of the study suggest that the sequence in which livelihood assets should be built must take into consideration the livelihood strategies of the group, and the consequent risks to which they are most vulnerable.

Source: SERP, 2001.

4.2 Vulnerabilities and impact on children

The vulnerabilities lead to both short-term and long-term impacts on children. A decline in food consumption and expenditures on health would have an impact on the nutrition of children. As mentioned earlier, the other major effects of rising food prices are: reduction of expenditure on non-food items like healthcare and education, the selling of productive assets by the family, children dropping out of school, increased use of child labour, and rise in indebtedness among the affected households.

The study on Andhra Pradesh shows that the most significant impact of risks was increased indebtedness, as the total borrowing that took place from moneylenders and rich farmers was as high as nearly 90 per cent (SERP, 2001). Increased indebtedness is not only a short-

term burden, but can also limit the ability of poor households to invest in future income-generating activities including those for children.

An assessment of the responses of the different groups indicates that some SCs, STs and BCs had to revert from wage labour to attached labour. The increase in migration among these groups also adversely affected their children's education and health. Interestingly, dependency on family and friends was most popular among the BCs, was limited among the SCs, and not reported at all by the STs, reflecting on the poverty status of these groups, in general, who are little able to assist each other financially (SERP, 2001).

Rising food prices and household responses

The World Bank conducted a Rapid Price Impact Survey in Bangladesh in 2008 to identify the household responses to the price rise (Viswanath, 2008). Around 1200 rural and 800 urban households were interviewed in this survey. The results of the survey are given in Table 9. It shows that around 43 per cent of the households in rural areas reduced their educational expenses while 9 per cent of the rural households took their children out of school.

Table 9: Household Responses to the Food Price Increase (%): Bangladesh

	Urban	Rural	Total
Reduce quantity of food intake	72.3	77.9	75.7
Switch to lower quality food	86.9	87.8	87.5
Reduce non-food expenditures	86.0	86.5	86.3
Spend savings/sell belongings	43.5	46.5	45.3
Take out loans	46.3	59.9	54.5
Gift/help from community members	0.9	9.3	6.0
Take children out of school	6.5	8.8	7.9
Decrease education expenses	32.5	43.2	39.0
Work more/increase production	24.6	39.8	33.8
Stop loan payment	3.1	6.1	4.9

Source: Viswanath (2008).

Hunger index in India

The vulnerabilities across states in India can also be examined by studying the hunger index of the International Food Policy Research Institute (IFPRI). The hunger index shows that relatively developed states like Gujarat, Maharashtra and Karnataka have higher ranks on the hunger index as compared to states like Uttar Pradesh and Rajasthan, and are closer to states

like Orissa and Chhattisgarh (see Table 10). It shows that poverty and hunger are not strictly correlated and that the vulnerability of children is high even in developed states like Gujarat, Maharashtra and Karnataka.

Table 10: Hunger Index and Components in India: States

State	Prevalence of Calorie Under-nourishment	Proportion of Under-weight among Children <5 years	Under-five Mortality Rate, Reported as Deaths per Hundred	India: State Hunger Index Score	India Hunger Index Ranking
1	2	3	4	5	6
India	20.0	42.5	7.4	23.31	
Andhra Pradesh	19.6	32.7	6.3	19.54	3
Assam	14.6	36.4	8.5	19.85	4
Bihar	17.3	56.1	8.5	27.30	15
Chhattisgarh	23.3	47.6	9.0	26.65	14
Gujarat	23.3	44.7	6.1	24.69	13
Haryana	15.1	39.7	5.2	20.01	5
Jharkhand	19.6	57.1	9.3	28.67	16
Karnataka	28.1	37.6	5.5	23.74	11
Kerala	28.6	22.7	1.6	17.66	2
Madhya Pradesh	23.4	59.8	9.4	30.90	17
Maharashtra	27.0	36.7	4.7	22.81	10
Orissa	21.4	40.9	9.1	23.79	12
Punjab	11.1	24.6	5.2	13.64	1
Rajasthan	14.0	40.4	8.5	20.99	7
Tamil Nadu	29.1	30.0	3.5	20.88	6
Uttar Pradesh	14.5	42.3	9.6	22.17	9
West Bengal	18.5	38.5	5.9	21.00	8

Source: IFPRI (2008a).

It may be noted that social disparities overwhelm regional disparities where poverty and vulnerability, and the incidence of malnutrition are concerned. For example, the figures in Table 11 show that SCs/STs and Muslims suffer from more poverty and vulnerability as compared to the Other Backward Classes (OBCs) and other castes. The incidence of malnutrition (chronic energy deficiency) among women is the highest in the case of SCs/STs, followed by OBCs and Muslims. Malnutrition among women is much lower in the case of the OCs than the other castes. This is true of all the states in India.

**Table 11: Incidence of Malnutrition among Women
(Chronic Energy Deficiency): 2005-06**

State	Total Population	SC/ST Population	OBC Population	Muslim Population	Others
1	2	3	4	5	6
India	35.6	42.7	36.0	35.1	27.5
Andhra Pradesh	33.5	38.4	37.0	27.6	22.2
Assam	36.5	34.5	30.4	46.0	31.4
Bihar	45.1	58.4	43.3	49.6	31.4
Chhattisgarh	43.4	46.6	44.8	28.9	26.2
Gujarat	36.3	48.0	40.5	37.0	22.9
Haryana	31.3	36.4	33.1	49.0	26.6
Jharkhand	43.0	44.6	45.3	47.3	26.5
Karnataka	35.5	41.8	34.9	26.9	31.7
Kerala	18.0	24.1	18.6	15.6	18.0
Madhya Pradesh	41.7	48.7	42.2	37.4	27.7
Maharashtra	36.2	43.6	36.1	23.8	34.5
Orissa	41.4	50.6	39.6	63.5	30.7
Punjab	18.9	26.7	18.0	22.5	14.4
Rajasthan	36.7	44.1	33.3	36.1	32.3
Tamil Nadu	28.4	36.1	26.8	20.7	8.3
Uttar Pradesh	36.4	43.6	35.4	36.4	28.3
West Bengal	39.1	45.2	39.2	37.4	31.5

Source: Compiled from Kannan (2008). The data is from NFHS-3 data.

5. Possible ways of tackling the adverse impact on children

This section delineates the policies at the macro and sectoral levels, and the social protection measures needed to protect the vulnerable households from the two types of crises and to improve the well-being of children. It is clear that the food price rise and financial crises have a number of potential implications for the well-being of children and that policy and programming should seek to minimize the negative impacts of the crises. In this context, it

is important to ensure the implementation of both measures aimed at alleviating household poverty as well as specific child-focused policies.

5.1 Macro policies

The macro policies should be pro-poor and people-centric. Both the growth and equity objectives should be pursued simultaneously rather than the 'growth first and equity next' approach. Here, the central concern is with policies that mitigate household poverty in order to reduce the negative impacts on women and children, and to improve their well-being.

Several governments have responded in varying ways and degrees to contain the rise in prices as well as to mitigate the adverse effects of this price hike on the poor. As mentioned above, the Indian Government too has introduced several policies to contain prices. Hitherto, the policies implemented by the Government in the first round were aimed at stabilizing food prices. It has used instruments like trade bans, administrative controls on private trade, import tariffs, and subsidies, among others, to contain food prices. However, the Government's medium to longer-term agenda should be to enhance agricultural productivity and improve the working of social protection programmes.

The recent decline in prices should not be taken to mean that the problems of hunger and poverty have been solved. The impact of the financial crisis will continue to be felt at the macro level, with potentially negative effects on employment, food security, and the agricultural sector.

In order to reduce the impact of financial crisis, India has taken several monetary and fiscal measures. The Reserve Bank of India (RBI) has taken several measures to address the issue of rupee liquidity and foreign exchange liquidity. They include, inter alia, reducing the CRR in phases from 9.0 to 5.0 per cent, lowering the repo rate from 9.0 to 5.5 per cent, and cutting the SLR (statutory liquidity ratio) by one percentage point to 24 per cent. The RBI has pumped 1,80,000 crores of liquidity in the market. The public and private sector banks are expected to reduce interest rates in order to improve liquidity and the credit situation in the country.

The Government has also taken fiscal measures to improve demand in the economy. In the first stimulus package, the Government reduced excise taxes and announced a Rs. 20,000 increase in government expenditure on infrastructure. In the second stimulus package announced on 2 January 2009, the following measures were introduced: ECB (External Commercial Borrowings) access, further liberalization of approval norms, hiking of the foreign institutional investors' (FIIs) investment limit to \$15 billion from \$6 billion, offering of Rs. 25,000 crore liquidity support to non-banking financial corporations (NBFCs) through special purpose vehicle (SPV), announcement of a Rs. 20,000 crore recap plan for public

sector banks over the next two years, and allowing states to raise an amount of Rs. 30,000 crores through market borrowing and provision of incentives to exports.

The monetary and fiscal measures announced by the RBI and the Government are in the right direction for improving liquidity and investor confidence in the economy. However, there are different views regarding the policies that need to be taken to help India come out of the financial crisis. One view is that demand should be increased through direct fiscal action by the government. The objective of the larger government spending must be the reversal of the squeeze on the living standards of the people. “In short, the new paradigm must entail inter alia a foodgrain-led growth strategy (on the basis of peasant, not corporate, agriculture), sustained through larger government spending, which simultaneously rids the world of both depression, and the financial and food crises” (Patnaik, 2008). In other words, the stimulus package has to be aimed at the agricultural sector and primary food producers.

Another view is offered by the National Commission for Enterprises in the Unorganized Sector (NCEUS). According to the NCEUS, immediate attention has to be given “to protect the livelihood security, employment and income of the vast majority of the people who are either poor or vulnerable and in doing so also stimulate overall economic growth”. The high growth of the Indian economy witnessed during the last 20 years bypassed 77 per cent of the people in the country. Most of them are illiterate or have had only primary level education, and suffer from malnutrition and ill-health. Most of them are also unemployed or belong to the working poor, or self-employed unorganized workers. Among the farmers, 84 per cent are marginal and small farmers operating not more than two hectares of land. The total number of agricultural labourers, who constitute the bottom layer of the occupational structure, and include a majority of SC and ST workers, is around 89 million. The smallest segment of the unorganized sector (with an investment of below Rs. 5 lakh in plant and machinery) gets less than 2 per cent of the net bank credit while an investment below Rs. 25 lakh gets 4.3 per cent of the formal sector credit.

The NCEUS believes that an urgent response is needed to combat the impact of the global financial meltdown on the economy, particularly on the poor in the country. The Commission advocates a major fiscal stimulus comprising: (a) programmes to boost pro-poor public investment in physical and social infrastructure; (b) programmes/schemes which protect and promote incomes of the poor; and (c) expansion in scope and coverage of social security schemes of the unorganized workers.

In general, there is need for pro-poor macro policies to reduce household level poverty. These policies are delineated below⁵.

5. These are taken from Dev (2008a).

- First, equity is important for its own sake and for higher growth. If personal, rural-urban and regional disparities are reduced, growth would increase. There is no trade-off between growth and equity if equity is defined in terms of empowerment and an increase in the participation of the poor.
- Second, agricultural development should be accorded priority to stimulate pro-poor growth.
- Third, macro-pro-poor policies should be implemented to bring about an increase in employment. The trade, fiscal, financial and monetary policies being followed so far have not been pro-employment. Thus, priority should be given to policies that help improve both the quality and quantity of employment growth. Priority needs to be given to public investment in physical infrastructure (including irrigation, roads, communications, transport, electricity, etc.) as also human infrastructure (health, education, etc.) for improving the quality of employment. In addition, priority to rapid growth in agriculture and the rural non-farm sector is important for reducing poverty.
- The fourth proposed policy, which is related to the third policy, is that any structural change in the economy should follow an agriculture-industry-service sequence. In GDP shares, India jumped from agriculture to services without concentrating on manufacturing. The share of employment in manufacturing in Malaysia is 50 per cent, in Korea, 62 per cent, and in China, 31 per cent. In India, however, the share of employment in manufacturing in India is only 12 per cent, while the share of agriculture is more than 55 per cent. This skewed proportion needs to be rectified.
- Fifth, it is important to ensure equality of opportunities. Even if there is no equitable distribution of assets, everyone should at least get equal opportunity to access better education, healthcare, sanitation facilities and potable water. At the national level, the poor in all states, especially in states where they are traditionally denied opportunities for development such as Bihar, Madhya Pradesh., Chhattisgarh, Jharkhand, Uttar Pradesh and Orissa must be given opportunities for improving their education, health and income levels.
- Sixth, the South-east Asian and East Asian experience shows that globalization under better initial conditions has helped increase employment and incomes for workers, and led to a reduction in poverty. Developing countries should draw lessons from China on various issues like agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is thus quite significant.
- Seventh, the development of technology is important for inclusive growth. For example, the spread of the Green Revolution to the poorer states in India shows its potential for reducing regional disparities in development. Also, small farmers have benefited from technology because the gains from technology are widely distributed. Similarly, the experience with information technology is equally encouraging and offers the prospect of raising productivity in both agriculture and industry.

- Eighth, the focus of reforms can now be shifted to the more efficient delivery of public services. It has been recognized that better governance is very important for pro-poor development, and for the better implementation of sectoral policies and social protection programmes.
- Ninth, the economic and social empowerment of women is important for achieving pro-poor growth.
- Tenth, all over the world it is recognized that decentralization in terms of transferring power to local councils is important for development. For many state governments in India, decentralization means devolution of power from the Centre to states. The experience of decentralization in terms of greater devolution of functions, finances and powers to the Panchayati Raj institutions (PRIs) and urban local bodies in many states has not been satisfactory. This situation needs to be dealt with to facilitate greater decentralization at the state level.
- Lastly, the adoption of a rights-based approach plays an important role in improving implementation for development programmes. By exercising their rights to food, healthcare, education, employment, and information, citizens can put pressure on the government to deliver services to them more effectively and efficiently. Basically, there is a need to go beyond the supply side and focus on the demand side of these services. Social pressures are thus needed to instigate public action. Better monitoring systems must also be developed at the Central, state, district and village levels to enable citizens to realize their rights.

The above macro pro-poor policies are expected to help increase the incomes of the poor households and reduce the negative effects of higher food prices and the financial crisis. Improvements in household incomes can, in turn, lead to positive effects on the well-being of women and children

5.2 Sectoral policies

The various sectoral policies that need to be implemented for tackling the rise in food prices and the financial crisis in terms of achieving growth in agriculture, the rural non-farm sector, health and nutrition, and women's empowerment are discussed below.

(a) Raising agricultural growth

Increasing agricultural growth is one of the important components for resolving the food price crisis and financial crisis. The onset of the financial crisis has slowed down economic growth, which, in turn, is likely to have cascading effects for investment and productivity, leading to a direct impact on food prices and food security (Braun, 2008).

The IFPRI examines the following two recession scenarios during the period 2005 to 2020 at the global level (Braun, 2008):

Scenario 1: Economic growth is reduced by 2 to 3 percentage points, depending on the various world regions, but agricultural productivity and investments are maintained by following a wise policy.

Scenario 2: Economic growth is reduced as in Scenario 1, but agricultural investment and productivity also decline, in line with the reduced economic growth.

Food prices would increase significantly under Scenario 2. Poor people are likely to consume less calories due to recession. Globally, 16 million more children will be malnourished in 2020 as compared with the baseline scenario. However, if the developing countries can maintain agricultural productivity and investments under a recession (Scenario 1), the negative effects of the financial crisis can be avoided. Under this Scenario, the rise in cereal prices and the number of malnourished people will be lower and the anticipated per capita calorie consumption would be much higher by 2020.

The analysis by IFPRI at the global level indicates the importance of agricultural growth on the food security of households, women and children. This indicates that India too should increase its focus on achieving greater growth in the agriculture sector.

The growth of agriculture in India decelerated from 3.5 per cent during the period 1981-82 to 1996-97 to around 2 per cent during the period 1997-98 to 2004-05, though there have been signs of improvement in recent years (with the growth figure being more than 3.5 per cent during the last three years). The yield growth has also declined. Suicides by farmers have continued, even increased in some states. Farming is becoming a non-viable activity, and there are other problems too. Any further scope for an increase in the net sown area is limited. Land degradation in the form of depletion of soil fertility, erosion and waterlogging has increased. There has been a decline in the surface irrigation expansion rate and reduction in the groundwater table. Other problems include the exposure of domestic agriculture to international competition, volatility in prices, and increase in disparities in productivity across regions and crops, and between the rainfed and irrigated areas. Long-term factors like a steeper decline in the per capita land availability and shrinking of farm size are also responsible for the agrarian crisis. Further, land-related issues such as the creation of special economic zones (SEZs), land going to non-agriculture, and alienation of tribal land are also assuming importance.

The Steering Committee report on agriculture for the Eleventh Plan (GOI, 2007b) has identified the possible reasons for deceleration in agriculture since the mid-1990s. According to the report, the major sources of agricultural growth are: public and private investment in

agriculture and rural infrastructure including irrigation, technological change, diversification of agriculture, and use of fertilizers. Apparently, progress on all these fronts has slowed down since the mid-1990s.

Due to demographic pressures, there has been a significant increase in small and marginal farm holdings. The farmers managing these holdings have had to face the challenges of globalization. Risk and uncertainty have also increased as cultivation has spread to marginal lands. The diversification of agriculture has also raised concerns on food security.

What are the challenges to be faced for achieving growth and equity worth 4 per cent in agriculture? The supply and demand side constraints have to be removed to raise growth. Support systems need to be geared up for improving the productivity and incomes of farmers, with special emphasis to be laid on small and marginal farmers and dry land areas. One of the differences between the Green Revolution in the 1960s-1970s and the present Second Green Revolution is that the risk is higher in the latter approach as it has to concentrate more on the dry land areas. Trade liberalization has also raised the risk and uncertainty levels for farmers. Thus, the proposed policies must take into account the increasing risk in agriculture. Agriculture policies also need to be gender-sensitive as the share of women in this sector is increasing. Simultaneously, it is important to achieve cost reduction in agriculture in order to enable the country to compete in a globalized world. Since the crop sector may not be able to grow at the targeted rate of 4 per cent per annum, it is important to ensure that horticulture and allied activities like dairying, poultry and fisheries grow at the rate of 6 to 7 per cent to achieve the requisite 4 per cent growth in agriculture.

Basically, the following six areas need to be focused on in the short and medium terms in order to address the above issues: (a) infrastructure; (b) land and water management; (c) research and extension; (d) inputs including credit; (e) marketing including price policy; and (f) diversification and development of the rural non-farm sector. There is a need to develop institutions for resolving the concerned issues in all these areas.

Investment in irrigation and rural infrastructure is important for agricultural growth. It is known that public investment in agriculture is lower than the requirements needed for achieving 4 per cent growth. The Bharat Nirman programme is a step in the right direction but the progress has to be much faster.

The decline in growth of productivity is attributed, among other things, to a deterioration in soil quality and water shortages including groundwater depletion. Therefore, land and water management should be accorded top priority. Both investment and efficiency in the use of water are needed, while land issues too need to be taken into account. Water management includes investment in irrigation, watershed development, and water conservation by the

community. In order to improve soil quality, the Government can restructure the fertilizer subsidies in such way as to reduce the consumption of nitrogen (N) and encourage the use of phosphatic (P) and potassic fertilizers.

As pointed out by the National Commission on Farmers, there is a knowledge gap in existing technology. Therefore, extension becomes crucial for improving agricultural productivity. In view of the high variability in agro-climatic conditions, particularly in the unfavourable areas, research must become increasingly location-specific.

It is true that there have been some improvements in the flow of farm credit in recent years. However, four distributional aspects of agricultural credit are important. These are: (i) lack of significant improvement in the share of small and marginal farmers; (ii) decline in the credit-deposit (CD) ratios of rural and semi-urban branches; (iii) increase in the share of indirect credit in total agricultural credit; and (iv) significant regional inequalities in credit.

The most important problem being faced by farmers is that of output price fluctuations. There is a big gap between producer prices and consumer prices. For example, farmers sometimes get only 50 paise per kg. of tomatoes sold while the consumers pay Rs. 15 per kg. in urban areas. There is need to set up a price stabilization fund in order to protect farmers from national and international price volatility. There are different models for facilitating collective marketing by the small and marginal farmers. These include the self-help group (SHG) model, the co-operative model, small producer co-operatives, and contract farming.

It is thus obvious that Indian agriculture faces many policy level challenges. Both the price and non-price factors are important. The various differences between the periods of the original Green Revolution and the Second Green Revolution are as follows: (i) globalization challenges, and volatility in prices; (ii) shrinking farm size; (iii) dry land farming challenges; and (iv) environmental stress. Small farmers are certainly going to remain in India for the next decade or more. The main goals of agriculture are: (i) raising agricultural growth; (ii) achieving a rise in productivity; (iii) moving towards high-value and rural non-farm agriculture; (iv) maintaining food security; and (v) attaining sustainable and shared growth (including growth for small farmers, lagging regions, and women. Agriculture in India faces the following six deficits: (i) investment, credit and infrastructure deficit; (ii) research and extension (technology) deficit; (iii) market deficit; (iv) diversification deficit; (v) institutions deficit; and (vi) education/skill deficit. The other major problems confronting the agriculture sector in India are the deficiency in rural infrastructure, and the shortage of a professional human resource component as members of the younger generation do not want to join this occupation. While a group approach is needed for ensuring the flow of inputs and facilitating marketing efforts, small farmers too can respond positively by contributing to the creation of infrastructure. Simultaneously, there is need for a massive increase in the outlays for agriculture and rural infrastructure for improving the delivery systems.

(b) Rural non-farm sector

It is difficult to end poverty in India with 55 per cent of its workforce being concentrated in the agricultural sector. There is thus a need to promote the rural non-farm sector. India currently produces about 50 million tonnes of fruits and 90 million tonnes of vegetables, but only 2 per cent of these fruits and vegetables are processed as against the corresponding figures of 23 per cent in China, 78 per cent in the Philippines, and 83 per cent in Malaysia. Half of those engaged in agriculture in India are still illiterate and just 5 per cent have completed higher secondary education. Even in 2004-05, around 60 per cent of the rural male workers and 85 per cent of the rural female workers were either illiterate or had been educated only up to the primary level, implying that education and skills are the main constraints in the agriculture sector. India can derive some lessons from China, where the State has played a decisive role in bringing about rural transformation through land reforms and the building up of its physical and social infrastructure. These reforms in China have been successful in ushering in agricultural growth, rural non-farm employment, public investment and human development. The impact of growth on poverty reduction is also quite significant (Rao, 2005). China started with agricultural reforms, which helped it achieve high agricultural growth. Economic and institutional reforms also helped create space for the rural non-farm sector (including TVEs and others) Thus, diversification towards the rural non-farm sector has been one of the important factors responsible for reduction in rural poverty in China, which is estimated to be only 3 per cent.

(c) Sectoral intervention on nutrition and health

Economic growth alone cannot help meet the nutrition and health needs of women and children, for which sector-specific interventions are also required. For example, a package consisting of expanded child and material immunization, ante-natal care coverage, nutritional supplementation (including the promotion of exclusive breastfeeding) and home-based neonatal services (including treatment of pneumonia), could bring about a significant reduction in both infant mortality and child malnutrition (Deolalikar, 2004). There is also a need to establish synergy across sectors, and between the processes directed at improving drinking water facilities, sanitation, public hygiene, access to elementary education, nutrition and poverty alleviation, on one hand, and the processes that improve access to public health and medical services, on the other.

(d) Women's empowerment and impact on child well-being

An advancement in the status and well-being of women would also have a positive spillover impact on child well-being. A comprehensive review of the linkages between women's empowerment and child well-being has clearly shown that there are four mechanisms

for transmitting the effects of women's empowerment to child well-being, including maternal education, economic empowerment, intra-household decision-making power and community level empowerment (Jones, *et al.*, 2007). . The education of mothers is positively associated with better child education, health and nutrition outcomes. Greater economic empowerment of women, that is, greater access to financial resources not only improves the status of women within the household but also leads to better investment in their children because mothers are likely to advocate the interests of their children in intra-household bargaining, more so than their male partners. Finally, greater empowerment at the individual and household levels may also increase the empowerment of women at the community level, thereby enabling them to play a more active role in demanding and even providing better child-related services (Jones, *et al.*, 2007).

5.3 Social protection measures

Comprehensive social protection programmes are required to mitigate the negative effects of the food price crisis and the financial crisis. The social protection measures are basically non-contributory targeted transfer programmes aimed at the poor and vulnerable groups. The three main motivations for social protection, which are broadly complementary, are: protection (ex-post) motivation; insurance (ex-ante) motivation; and other considerations like poverty alleviation and income distribution, to aid growth promotion (Subbarao, 2003). Often, these motivations overlap. For example, a programme with protection motivation could also help alleviate poverty.

Concentrating on the market and the attainment of growth alone cannot help tackle the issues of risk and inequality. Certain redistributive policies could also prove to be good for growth. The implementation of social protection measures can help maintain an acceptable minimum floor for social cohesion while also preventing the irreversible losses of human capital during periods of adversity. The State has a primary role to play in helping the poor in times of insecurity and in ensuring minimum levels of growth and livelihood to those who are unable to benefit from the growth process. Government interventions could blend the elements of both redistribution and insurance (World Bank, 1990). Recent theory “offers a new perspective on social protection policies in poor countries, suggesting that there is scope for using these policies to compensate for the market failures that perpetuate poverty, particularly in high-inequality settings” (Ravallion, 2003).

Many social protection programmes are currently being implemented in India. Among these, the major schemes for the poor fall into the following four broad categories: (i) food transfer like the PDS and supplementary nutrition; (ii) self-employment; (iii) wage employment; and (iv) social security programmes for unorganized workers. There are also many programmes directly aimed at the development of for women (see, GOI, 2004-05). Some of the social

protection schemes need to be scaled up and made more effective in order to reduce the negative effects of the food price rise and financial crisis on the targeted beneficiaries.

The Public Distribution System (PDS) and nutrition programmes can help improve the food security of households and children.

(a) Public Distribution System (PDS)

This is one of the instruments for improving food security at the household level in India. The PDS ensures the availability of essential commodities like rice, wheat, edible oils and kerosene at below market prices to the consumers through a network of outlets or fair price shops (FPSs). With a network of more than 462,000 FPSs distributing commodities worth more than Rs. 300 billion annually to about 160 million families, the PDS in India is perhaps the largest distribution network of its kind in the world. The Targeted PDS (TPDS) was introduced in 1997 and under this scheme, special cards were issued to families below the poverty line (BPL) and foodgrains were distributed at a lower price to these families as compared to above the poverty line (APL) families.

The main problems in the TPDS are highlighted in two recent documents: (1) Report of the High Level Committee on Long-term Grain Policy (GOI, 2002) and (2) Performance Evaluation of the Targeted Public Distribution System (TPDS) (Planning Commission, 2005)⁶.

According to these documents, the four main problems plaguing the present TPDS are: (i) high exclusion errors; (ii) non-viability of the FPSs; (iii) lack of fulfilment of the price stabilization objective; and (iv) leakages. The leakages especially vary enormously between states. In Bihar and Punjab, for instance, the total leakage exceeds 75 per cent, while in Haryana and Uttar Pradesh, it ranges between 50 and 75 per cent.

The basic problem in the PDS is the lack of public accountability, which is one of the important components of the principles involved in a rights perspective. The Sixth Commissioner's report on the PDS makes several recommendations for addressing the problems in TPDS. As regards large exclusion errors, the report points out that the groups that have been excluded because of misidentification should get universal coverage under Antyodaya Anna Yojana (AAY)/BPL, and that it is the responsibility of the state governments to proactively identify all these categories and ensure their coverage under the recommended schemes.

The Report also makes the following recommendations on accountability and transparency:

6. For problems in PDS and targeting, see Swaminathan (2000).

- (i) Any appeal by the BPL/AAY cardholder or person claiming to be eligible for a BPL/AAY card should be settled within a period of 60 days.
- (ii) The 'action taken' report on any vigilance committee report should be submitted to the vigilance committee members and the Panchayat and Gram Sabha within a period not exceeding 60 days.
- (iii) The Central Government and the states should print the requisite information on all ration cards such as the rates and quantities of subsidized foodgrains and locations where the cardholders can file complaints.
- (iv) The specified fee for any BPL ration cardholder, to obtain extracts from the records of an FPS owner should, in no case, be higher than 50 paise per copy and the time frame of 15 days for providing the extracts of records should be strictly followed.
- (v) The list of names and addresses of BPL and AAY cardholders should be displayed in public in order of eligibility in every FPS and panchayat building⁷.

In the Eleventh Plan, some schemes have been proposed for strengthening the PDS. These are: (i) issuance of food credit cards/computerization of PDS operations; (ii) curbing of leakages/diversion of foodgrains meant for the TPDS; (iii) generating awareness amongst TPDS beneficiaries about their entitlements, the redressal mechanisms available to them, and monitoring of training; and (iv) Creating awareness about the of negotiable warehouse receipt system.

(b) Nutrition programmes

ICDS: The Integrated Child Development Services (ICDS), launched in 1975, aims at the holistic development of children of up to six years of age with a special focus on children of up to two years, in addition to expectant and nursing mothers. This is done through a package of six services—health check-ups, immunization, referral services, supplementary feeding, non-formal pre-school education, and advice on health and nutrition. In spite of its expansion during the last three decades, however, the impact of the ICDS on child nutrition and protection of the rights of children is quite limited.

Thus the ICDS, which has been in existence for over three decades, has clearly failed to fulfil its objective of addressing the problem of child and maternal malnutrition, besides also suffering from the problem of limited coverage. Child malnutrition has barely declined at all in a decade-and-a half, while the incidence of anaemia among women and children has actually risen. It has also been found that one-third of all adult women were under-nourished at the end of 1990s as also in the year 2005–06. The answer thus lies in increasing

7. Also see Saxena (2008) for the problems in PDS.

the coverage of the programme to ensure rapid universalization, changing its design, and meticulously planning its implementation (GOI, 2008a).

The ICDS in its current form also does not focus on children in the age group of 0–3 years, which is a critical period because malnutrition that sets in *in utero* is likely to intensify during the 0–3 year period, if not addressed in time. In fact, this window of opportunity never returns in the lifetime of the child, and a child who is malnourished during these years will be marred for life. It is thus imperative for the design of the scheme to address this problem upfront.

Malnutrition among mothers also has a cascading effect on child malnutrition. Exclusive breastfeeding is necessary for six months in order to prevent the baby from contracting unnecessary infections, to develop the baby's immunity, and to ensure his growth. The baby must also begin to receive solid, mushy food at the age of six months along with breastfeeds so as to continue to grow in the way nature intended. The ICDS accordingly needs to be restructured in a manner that addresses these weaknesses. The programme must also effectively integrate the different elements impacting nutrition and reflect the varying needs of children in different age groups (GOI, 2008a).

In addition to the above conclusions, the preliminary findings of the FOCUS (Focus on Children under Six) survey conducted in May-June 2004 in six states also highlight some of the problems and regional disparities in the working of the ICDS (Dreze, 2006). This study shows that Tamil Nadu scores over the northern states in terms of infrastructure, the quality of pre-school education, immunization rates, perceptions of mothers and the quality of anganwadi workers.

Saxena (2008) offers several recommendations for bringing about an improvement in the ICDS. According to this study, the ICDS has managed to reach barely 12.5 per cent of the children in the age group of six months to six years. The Eleventh Five Year Plan aims at cut down the incidence of malnutrition to half its prevalent rate and to reduce anaemia among pregnant women and children to under 10 per cent. These objectives can be achieved only if the ICDS is restructured and granted higher fund allocations in order to ensure its effective implementation at all levels.

Mid-day meal scheme: The mid-day meal scheme (MDMS) has been revised and universalized at the primary level from 1 September 2004 onwards. It has also been extended to upper primary schools from 1 October 2007 onwards. The MDMS has been slated to cover about 18 crore children by 2008–09.

The MDMS, however, faces problems regarding financial allocations and quality of the scheme. The Sixth Report of the Commissioner appointed by the Supreme Court also

highlights the existence of an inadequate infrastructure for the distribution of mid-day meals. Of the 16 states that sent data to the Commissioner in this regard, 13 revealed that less than 45 per cent of the schools had a separate kitchen.

The Eleventh Five Year Plan has identified the following action points for improving the performance of the MDMS (GOI, 2008b):

- (1) The scheme should be managed by the local community and PRIs/NGOs, rather than being contractor-driven: civic quality and safety should be the prime considerations.
- (2) There is a need to sensitize teachers and others involved in nutrition, hygiene, cleanliness, and safety norms to rectify the observed deficiencies in the scheme.
- (3) Nutrition experts should be involved in planning a low-cost nutrition menu and for periodic testing of samples of the prepared food.
- (4) Efforts should be made to promote locally grown nutritionally rich food items by setting up kitchen gardens in the schools and through other such measures.
- (5) The functionaries of the scheme should revive the School Health Programme, and disseminate and replicate the best practices adopted by the states.
- (6) Drinking water facilities should be provided in all the schools on an urgent basis.
- (7) The status regarding supplies, funds, norms, weekly menu, and coverage in schools should be displayed in each school to ensure transparency.
- (8) Central assistance for meeting the cooking cost should be based on the actual number of beneficiary children and not on the enrolment figures.
- (9) There is a need to promote social audit of the scheme.
- (10) Online monitoring of the scheme should be carried out.

Other child-specific measures: The ICDS and mid-day meals are child-specific programmes. The household responses to the food price rise and the financial crisis are that children are often engaged in other work leaving them with less time to study or spend in school or they drop out of school. The short-term measure to meet these responses can be to increase funding to school feeding programmes so that the number of children attending school is not affected (Plan and ODI, 2008).

The long-term measure to counter the above responses is to provide financial and other incentives to enable the children to continue in school and to improve the quality of education in general. As mentioned above, social protection programmes for households too can raise household income and reduce child labour. Since increased pressure on women due to employment may affect the children adversely, the government must ensure continued funding for the existing childcare services and also provide more such facilities at the community level. Another coping mechanism adopted by the households to deal with the twin crises is a reduction in spending on basic services like health and education, which

is bound to affect children adversely. The government must also, therefore, allocate more finances for meeting the healthcare needs of children.

(c) Self-employment programmes

The focus of self-employment programmes is on the provision of productive assets to households in the target group, or the provision of credit meant to finance the purchase of assets. The Swarnajayanti Gram Swarozgar Yojana (SGSY) is a major self-employment programme being implemented by the Government in rural areas. In fact, apart from SGSY groups, the SHG movement has, in general, been spreading all over the country. For example, there are 2 to 3 million lakh SHGs under NABARD's SHG-bank linkage programme and more than 3 crore SHGs are accessing credit. Similarly, the Small Industrial Development Bank of India (SIDBI) and Department of Women and Child Development, through the Rashtriya Mahila Kosh, Swayamsidha and Swashakti schemes, also provide micro-finance to the poor.

There are two important models in the country on poverty alleviation for the self-employed. One is the Kerala Model, while the other is the Andhra Pradesh model. The Kudumbashree programme in Kerala has made significant progress in reducing absolute poverty among its members. This programme's interventions and processes have resulted in a sustained process of empowerment of its women members. Similarly, the government of Andhra Pradesh is implementing a state-wide rural poverty eradication programme based on the social mobilization and empowerment of rural poor women. This programme is popularly known as 'Velugu' or Indira Kranthi Pathakam (IKP). Under this programme, the District Poverty Initiatives Project (DPIP) was introduced in six districts and extended to other districts under the Rural Poverty Reduction Programme (RPRP).

The DPIP project of Andhra Pradesh provides important lessons on the social and economic empowerment of women. The adoption of the group approach to self-employment programmes is a step in the right direction in the country. Earlier findings on interventions in Andhra Pradesh show that the poorest of the poor are not participating in the existing SHGs. It is thus imperative to adopt a repayment schedule suitable for the poorest of the poor. Another solution for tackling the problems of the poorest sections is effecting improvements in the skill base of these people. The other measures in this direction include proper livelihood planning, bulk purchases of inputs and the collective marketing of outputs, which would help the poorest of the poor organize their economic activity effectively. Thus, the disbursement of micro-credit alone cannot address the problems of the poorest. Interventions in commodity markets and steps to make the existing groups sustainable over time are also needed. The low growth of the economy and existing class relations are creating constraints for the relatively better-off among the poor in improving their well-being (Galab and Rao, 2003). Further, the process of empowerment of women cannot be sustained unless their livelihood concerns are aptly addressed. This necessitates

the adoption of viable economic activities, which can help enhance incomes much faster. It may, however, be noted that the SHGs have certainly empowered women to a notable extent in several parts of the country.

(d) Wage employment programmes

By now it is well recognized that rural works programmes (RWPs) have become important instruments in the strategies for alleviating poverty and hunger in many developing countries. The enactment of the National Employment Guarantee Act was one of the key electoral promises of the previous ruling coalition at the Centre under the Common Minimum Programme (CMP). The concerned bill was passed by the Parliament in August 2005 and became the National Rural Employment Guarantee Act, 2005 (NREGA). This is a step towards the legal enforcement of the right to work, as an aspect of the fundamental right to live with dignity.

This Act provides at least 100 days of guaranteed wage employment in a year to at least one adult member of every rural household at the stipulated minimum wage. It is an obligation for the government to provide employment for those who seek work. Panchayats participate in planning and monitoring of the scheme. Social audit is one of the important aspects of NREGA. Initial reports on the working of the National Rural Employment Guarantee Scheme (NREGS) have been positive though there are problems at the ground level.

The NREGA provides a great opportunity to generate employment and create productive assets. If these schemes are linked to overall development, the need for such schemes in future would be reduced. If the NREGS is implemented effectively, it could become be the biggest social security programme for unorganized workers in the country.

The social protection programmes discussed above can help the concerned families cope with the double crisis of the rise in food prices and the global financial meltdown. These programmes also include child-specific policies like ensuring adequate nutrition, school feeding programmes, healthcare and education for children.

At the international level, there are many examples of good social protection programmes. Cash transfers are preferred to food or other in-kind transfers as cash increases the purchasing power of the households (see Rashid, 2008). Conditional cash transfers that have worked well include the food-for-education programme in Bangladesh, Mexico's PROGRESA programme and the Bolsa Escola in Brazil.

5.4 Social security programmes for unorganized workers

It is well known that only organized workers, who constitute less than 10 per cent of the total workers in India, get all the social security benefits. In other words, more than 90 per cent of the Indian workers who belong to the unorganized sector do not have any contingent social security benefits. The social security problems of the unorganized workers can be divided into two categories. The first one is that of capability deprivation in terms of inadequate employment, low earnings, low health and educational status, which are related to the general deprivation of the poorer sections of the population. The second one is adversity in terms of the absence of adequate fallback mechanisms to meet contingencies such as ill-health, accidents, death, and old age (NCEUS, 2006).

At present, the Central Government, state governments and NGOs provide social security benefits to some unorganized workers. But these initiatives cover less than 10 per cent of the unorganized workers. The National Commission for Enterprises in the Unorganized sector (NCEUS, 2008) has proposed a universal but minimum level of social security for the unorganized workers, covering: (i) sickness and maternity, (ii) disability and death, and (iii) old age security in the form of a national pension for those belonging to BPL households and a contributory provident fund for those belonging to APL households. The NCEUS proposal is estimated to cost only half a per cent of the GDP to the government for all the unorganized workers.

(a) Measures of fiscal stimulus and social protection to reduce negative effects of the financial crisis

As mentioned above, the NCEUS has proposed several urgent measures and the provision of a fiscal stimulus to protect the informal economy. These measures are delineated below.

- (i) Enhance pro-poor public investment: This includes expansion of the rural infrastructure consisting of rural infrastructure, roads providing connectivity, housing, drinking water, sanitation and rural production infrastructure.
- (ii) Strengthen and expand the NREGP: With a few exceptions, the employment generated under NREGA is less than 100 days. The NCEUS provides suggestions for strengthening and expanding the NREGA.
- (iii) Introduce an urban employment guarantee programme: In order to complement the NREGA, an urban employment guarantee programme needs to be introduced. The activities under this programme can include low-income housing, especially for slum-dwellers, electrification, water supply, slum improvement, and low-cost waste management, among others.

- (iv) Strengthen and expand self-employment programmes: A number of measures need to be taken to convert micro-finance into livelihood finance. These measures should assist both farm and non-farm workers who are likely to face reduced prospects of employment in the wage market.
- (v) Introduce special programmes for marginal and small farmers: The process of providing institutional credit to small and marginal farmers needs to be improved. Special programmes covering land improvement, minor irrigation, capacity building, and training, can be implemented for these farmers.
- (vi) Enhance access to credit for micro-enterprises: In times of financial crisis, the small producers are usually rationed out of the credit market. Steps need to be taken to increase credit to micro-enterprises in the unorganized sector.
- (vii) Create a national fund for the unorganized sector: A national fund for the unorganized sector has to be established in order to step up credit and developmental efforts for this sector.
- (viii) Initiate a programme for skill development in the informal economy: The Government has introduced measures to expand skill training but they are mostly confined to the organized workers. There is thus a need for initiating a programme for imparting on-the-job training in unorganized enterprises. This scheme is aimed at workers who have primary but less than secondary level education.
- (ix) Ensure a national minimum social security for informal workers: As mentioned above, the NCEUS has proposed a universal but minimum level of social security for all the unorganized workers in the country.
- (x) Strengthen and expand investment in human development of the poor and vulnerable: The families of workers in the informal economy, especially their children, suffer from capability deprivation. Given the conditions of poverty and vulnerability and low human capabilities faced by these workers, there is a need to strengthen and expand programmes that improve the human development of these workers' households, such as Sarva Shiksha Abhiyan (SSA), National Rural Health Mission (NRHM), PDS and ICDS.

In order to save the informal sector from an economic collapse, the NCEUS has sought a special package worth Rs. 58,000 crore to implement all the above programmes. If implemented, these programmes would create about 57 million additional jobs over the next five years.

5.5 Governance

The focus of reforms can now be shifted to the more efficient delivery of public services. It has been recognized that better governance is very important for equitable development, which, in turn, is imperative to ensure the effective implementation of sectoral policies and social protection programmes. There is a need for social mobilization, community participation and adoption of a decentralized approach in this regard. It may, however, be noted that governance has to be contextualized in relation to the existing socio-economic environment. Appropriate institutions are also needed for facilitating the better implementation of policies and programmes. For example, rural institutions covering various spheres like land, water, the marketing of agricultural and non-agricultural products, provision of credit, technology and infrastructure are needed for better governance. Similarly, people-centric programmes and institutions are also needed for ensuring the effective execution of social protection schemes. Finally, the adoption of a rights-based approach plays an important role in improving the implementation for development programmes, as various rights such as the rights to food, to health, to education, to employment, and to information exert pressure on the governments to deliver better services to citizens.

6. Concluding observations

The objective of this study is to examine the analytical issues relating to the pathways leading to the impact of the rising food prices and the global financial crisis on households, particularly women and children. It also outlines the desirable macro level, sectoral and social protection policies and measures that would mitigate the negative effects and would protect/improve the living standards of households in terms of nutrition, healthcare, education and child protection.

The poor and vulnerable were significantly lagging behind in terms of human development, and social and financial security even before the two crises. The rising food prices and the financial crisis have further undermined the food security and livelihoods of the most vulnerable sections of the population by eroding their already limited purchasing power. Poor people spend 60 to 70 per cent of their income on food, and they have little capacity to adapt to the rise in prices as their wages do not increase accordingly. The food crisis has increased general inflation and has had an adverse impact on macro-economic policies. Similarly, the financial crisis has had an impact on employment, poverty, agricultural investment and social sector expenditures. These two crises can, therefore, potentially exacerbate the existing vulnerabilities of the poor and disadvantaged groups in India, including women and

children, if appropriate steps are not taken to combat them. The coping strategies adopted by the affected people to face these crises could also have an adverse impact on the food security and human development of women and children. India has done well to insulate itself from the global food price rise, and the increase in food prices in India has been much lower as compared to the sharp increase in corresponding global prices due to the adoption of various measures in the country. Cereal prices in India increased by only 23 per cent as compared to the global price increase of 150 per cent during the period 2005 to 2008. However, volatility in food prices and the financial crisis can pose a threat to the food and nutrition security of the country.

The pathways that lead to poor outcomes in terms of the nutrition, health and education of children due to an increase in food prices can be grouped into the following four heads: (1) impact on poverty; (2) macro-economic impact and its effect on employment and the social sector; (3) impact on nutrition and social protection programmes; and (4) impact on women's well being and intra-household decisions. The cumulative impact of all these outcomes is reflected in two ways: (a) rise in household poverty, and (b) effect on child-specific factors. The financial crisis is also likely to have a negative effect on agriculture and the food security of the country.

The combination of falling agricultural prices, and reduction in both agricultural investment and access to credit may have a negative effect on agricultural production, which, in turn, would have serious implications for food security. Low economic growth would also have an impact on the financial reserves of the country, thereby leading to an adverse impact on social sector expenditures and social protection programmes. Poverty reduction efforts could also be stalled because of low employment and volatility in food prices. The negative impact on household income would thus affect the well-being of women and children.

This study also documents the vulnerabilities of and coping mechanisms adopted by for the households affected by the two crises, and the consequent impact on children. The vulnerabilities lead to both short-term and long-term impacts on children. The decline in food consumption and expenditures on healthcare due to a rise in food prices would adversely affect the nutrition of children. The other effects of the crises would be: reduction in expenditure on non-food items like healthcare and education, the sale of productive assets by the family, rise in incidences of children dropping out of school, increased use of child labour, and rising indebtedness among the affected families. The hunger index across states shows that poverty and hunger are not strictly correlated and that the vulnerability of children is high even in developed states like Gujarat, Maharashtra and Karnataka.

It may be noted that social inequality is high across all the states in India. Poverty levels and vulnerability are especially high among the SCs/STs and Muslims as compared to the OBCs and other castes. This is true of almost all the states. Malnutrition among women is also high

among SCs/STs, OBCs and Muslims as compared to the other castes. Thus, the prevalence of social inequality is a more pressing problem than regional inequality.

The study also discusses the macro and sectoral level policies and social protection measures needed to protect children from the two crises and improve their well-being. The macro policies should be pro-poor and people-centric. policies. It is imperative to pursue growth and equity objectives simultaneously rather than adopting a 'growth first and equity next' approach. The macro policies should try to mitigate household poverty in order to reduce its negative impacts on women and children, and help improve their well being.

The Indian Government has taken several monetary and fiscal measures in order to reduce the impact of the financial crisis on the country. However, the stimulus package offered by the Government needs to be aimed at the agricultural sector and primary food producers. Another view is propagated by the NCEUS, which highlights the urgent need to protect the livelihood security, employment and income levels of the poor and vulnerable sections, which would also stimulate the overall economic growth. The beneficiaries of stimulus package proposed by the NCEUS also include the unorganized or informal sector.

Sectoral policies must concentrate on not only agriculture and the rural non-farm sector, but also nutrition and healthcare. Comprehensive social protection programmes are also required to combat the negative effects of the food price rise and financial crises.

Many social protection programmes are currently being implemented in India. Among these, the major schemes for the poor fall into the following four categories: (i) food transfer like the PDS and supplementary nutrition; (ii) self-employment; (iii) wage employment; and (iv) social security programmes for unorganized workers. Many women-specific programmes are also under implementation. Some of these social protection schemes, however, need to be scaled up and made more effective in order to reduce the negative effects of the food price rise and the financial crisis. Further, child-specific programmes are also needed. A study on East Asia and South-east Asia has shown that social protection and other intervention programmes can reduce the adverse impact of the two crises on the health and nutrition of the poor and vulnerable. The social protection programmes discussed in this study including those aimed at ensuring adequate nutrition, school feeding programmes, health and education for children can thus help the families cope with the twin crises.

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Fig A1

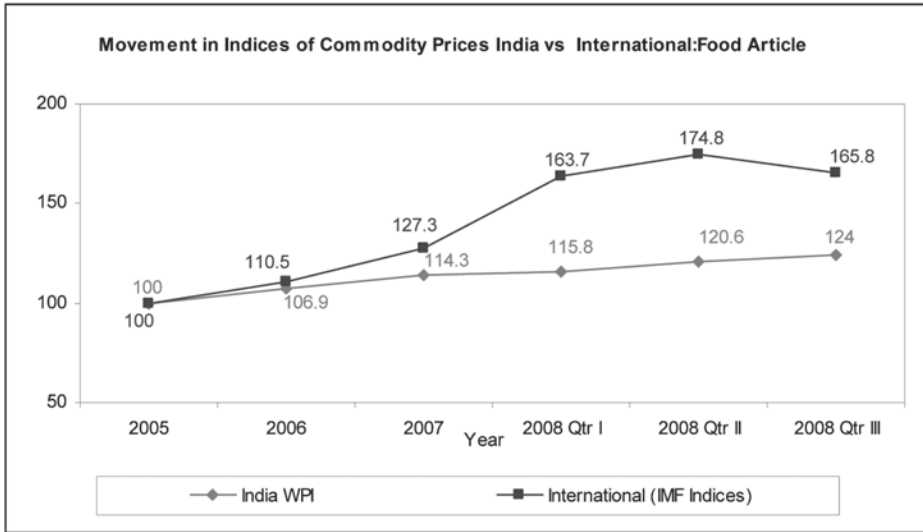


Fig A2

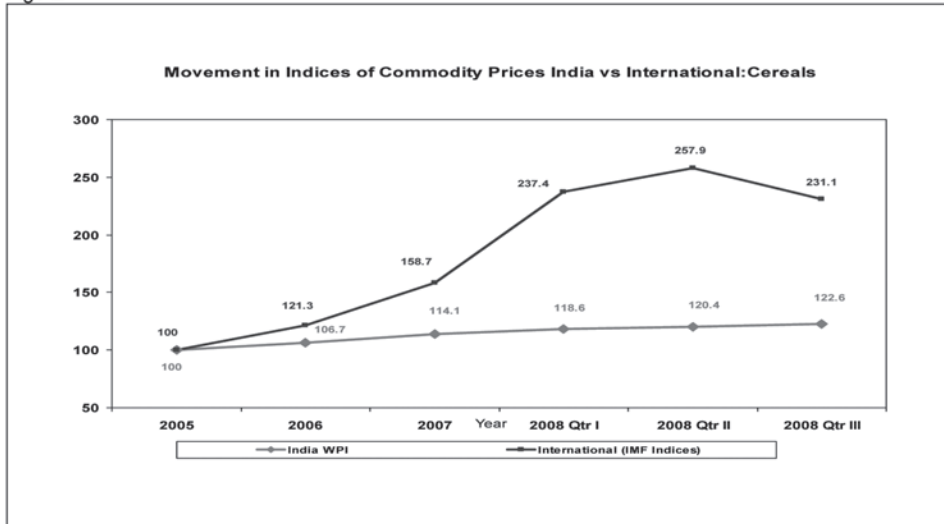


Fig A3

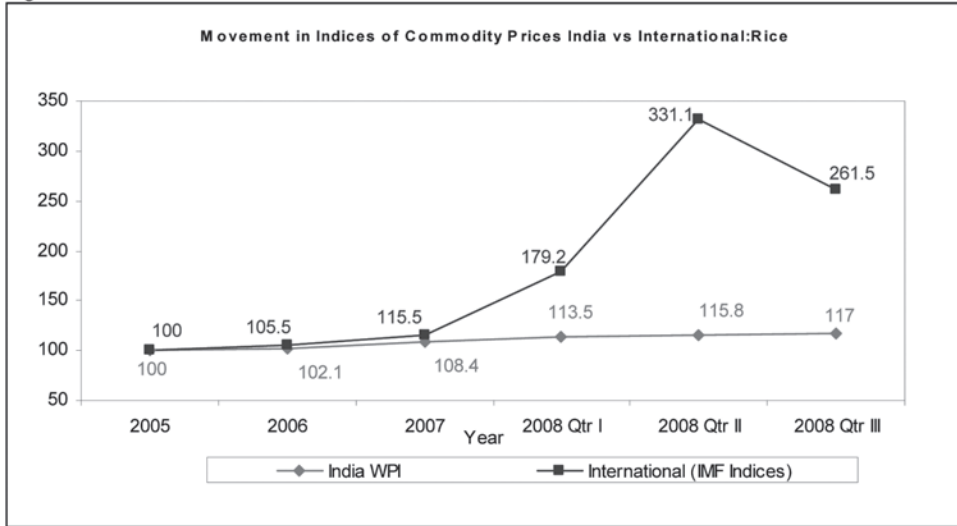
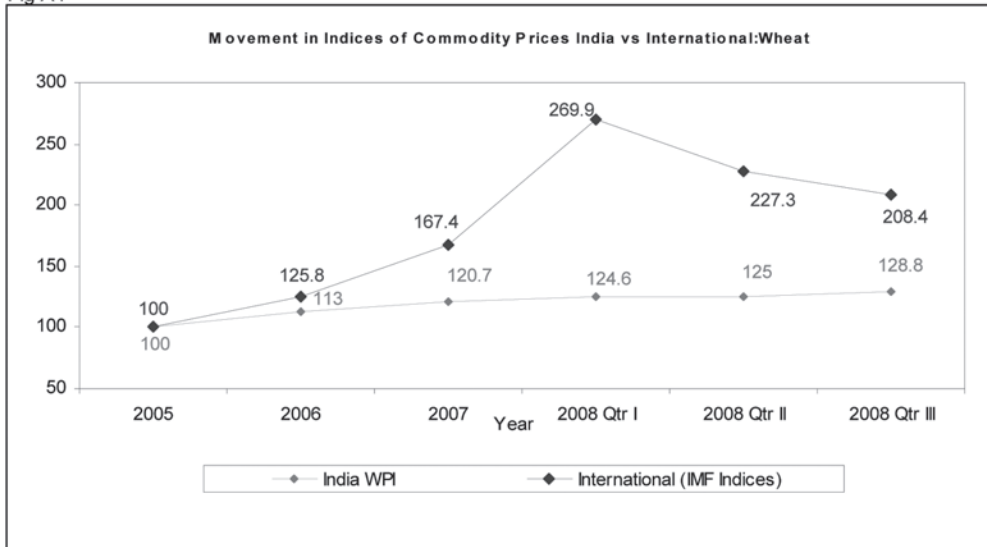


Fig A4



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