

**RISING FOOD AND FUEL PRICES:
ADDRESSING THE RISKS TO FUTURE GENERATIONS**

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**Human Development Network (HDN)
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MAIN MESSAGES

- **While the rises in global food and fuel prices have moderated in recent months, domestic prices remain much higher than previous years and show few signs of abating.** Higher prices have pushed many more people into poverty, but the increase in the number of poor is only part of the emerging costs of the crisis. The more profound consequence is the impact of rising prices on households who were already poor. For those already struggling to meet their daily food and nutrient needs, the double shock of food and fuel price rises represents a threat to basic survival. The poorest households are reducing the quantity and/or quality of the food, schooling, and basic services that they consume, leading to irreparable damage to the health and education of millions of children.
- **The effects of the food and fuel crisis on malnutrition and schooling can undermine years of progress on the MDGs.** Early malnutrition, while preventable, has irreversible costs as malnourished children cannot develop into healthy adults. Estimates suggest that the total number of malnourished people worldwide could increase by up to 44 million in 2008 alone to reach 967 million, up from 848 million in 2003. This is a tragic loss of human and economic potential. Unhealthy, less-productive populations are less able to generate the growth needed to lift themselves and their country out of poverty. Iron deficiency alone is estimated to cause median losses of about 0.6 percent of GDP in developing countries. Progress in education is also being set back: evidence is mounting that poor children are missing school and families are cutting back on education spending as a result of the crisis.
- **Effective nutritional and social protection interventions can protect the most vulnerable from the devastating consequences of nutritional deprivation, asset depletion and reductions in education and health spending.** Policy responses need to balance political economy considerations that call for measures to help a broad swath of the affected population, with the urgency of protecting the very poor. The latter requires that top attention be given to scaling up interventions for the existing poor. Priority interventions, using quick and practical poverty indicators to target the most needy, would include: (i) expanding benefit levels and coverage of existing targeted cash (or near cash) transfer programs; (ii) use of targeted nutritional interventions focusing on infants and pregnant women; (iii) expanding 'in-kind' food distribution programs including school feeding and distribution of fortified calorically dense food; (iv) use of fee waivers, lifeline-pricing and other forms of targeted subsidies for poor users/consumers of basic food and energy products; and (v) introduction of additional measures to prevent children from dropping out of school such as fee waivers, subsidies for school inputs, or cash transfers.
- **In parallel to these short-term actions, countries must act to build sounder and more comprehensive social protection systems over the medium term.** Investing in better safety nets will protect the poor from the worst consequences of the rise in food and fuel prices and increase the range of options at governments' disposal to cope with future crises, regardless of their nature (e.g. financial, natural disasters). Prioritizing public expenditures will be essential to prune lower-priority spending and create the necessary fiscal space for effective social protection programs. There is also a gaping need to scale up global investments in nutrition, which have been suffering from gradual decline, and to build up the national nutritional monitoring systems essential to using resources in a cost-effective manner.
- **The global development community has a responsibility to act quickly and comprehensively in the face of this global threat to the human capital of the poor.** The costs to the global development community and national treasuries of responding to the crisis are much less than the potential costs of millions more undernourished and poorly educated children. Developing countries must make investments in effective nutrition and social protection systems a development priority. Industrial countries and the development community must help mobilize the financial and technical resources needed to aid these efforts.

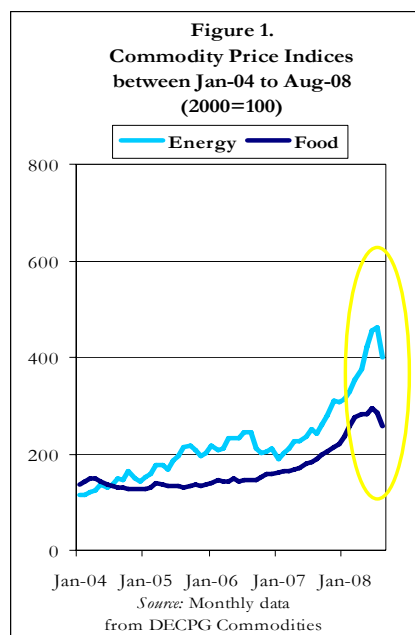
Rising Food and Fuel Prices – Addressing the Risks to Future Generations¹

I. INTRODUCTION

The moderation in global prices over the past few months is scant consolation to the millions who are still facing high domestic prices and have cut back on eating nutritious food and on investing in their child's schooling. While high food prices have pushed more people into poverty, the most serious long-term impacts may come from their effect on those already poor. The razor thin margins between daily earnings and spending has led to households eating less, switching to cheaper coarse cereals and reducing non-food spending such as on schooling. These sacrifices can lead to irreparable damage to the health and skill levels of millions of poor people worldwide. This is not only a crisis now, but a time bomb for the future, representing lost human and economic potential for poor people and countries.

Ensuring food security in the face of rapidly rising food prices requires a combination of effective safety nets and improving agricultural productivity. Adjusting to higher fuel prices will require again effective safety nets plus a combination of efficient energy use and diversification away from traditional fossil fuels. This paper focuses on the safety net interventions required to minimize the costs of the crisis to current and future generations—primarily through direct income transfers but also, importantly, through the reinforcement of basic health and nutrition, the provision of high-quality education services and measures to ensure access by the poor. Setting up these safety nets will also reduce the vulnerability of poor households to future shocks such as those arising from climatic conditions or changes in the global economy.

1.1 Price Trends – Food and Fuel



While fuel and food prices are moving away from their recent peaks they will remain high over the medium term. A number of factors propelled the sharp rise in food and fuel prices over the past 12-18 months (see Figure 1). Oil markets experienced increasing prices due to demand drivers and exacerbated by a slow supply response, leading to low spare capacity and tight market conditions. Falling real interest rates and the U.S. dollar depreciation also contributed to rising prices.² Crude oil prices, which peaked at \$147/barrel in July 2008, had declined by 30 percent from this peak by early September but remain highly volatile. Moreover, in real terms crude oil prices are more than double their peak during the 1970s oil crisis. Food prices have been driven by a combination of rising fuel costs, bio-fuels production, and unfavorable weather conditions, with trade restrictions boosting upward price pressures.³ Key grain prices have fallen in the past few months with Thai medium grade rice prices declining from a peak of \$1100/ton in May 2008 to \$730/ton in September. Nevertheless, rice prices remain double their average level in 2007, and prices for most major food crops are projected to remain well above 2004 levels through 2015.

These global price trends have fed into domestic prices in many countries. Median inflation in non-OECD countries rose from 5 percent in 2006 to 8.1 percent in 2008. Inflation increased by more than 5 percentage points in at least 21 countries, including many oil exporters, with significant surges in domestic food price inflation over the past year in countries such as the Kyrgyz Republic (32 percent), Vietnam (26

¹ This paper is a joint product of the Human Development Network (HDN) and the Poverty Reduction and Economic Management (PREM) Network in cooperation with colleagues from all Regions and SDN. Questions/comments to M. Grosh (ext. 39249), A. Revenga (ext. 89850), and H. Zaman (ext. 84168).

² 'Food and Fuel Prices - Recent Developments, Macroeconomic Impact, and Policy Responses', IMF (2008).

³ For more details see 'Double Jeopardy: Responding to High Food and Fuel Prices' (July 2008) World Bank.

percent) and Chile (16 percent). Figure 1 in Annex 1 shows that for the majority of countries sampled in Sub-Saharan Africa, mid-2008 food price inflation are higher than the 2005-07 average.

1.2 Increasing Income-Poverty

The increase in the number of poor due to the food crisis, while important, is only part of the story. The less visible but more profound impact relates to those already poor falling even more deeply into poverty, with long-term consequences for their health and education. There are converging estimates on the global increase in the number of poor due to the food crisis, averaging between 3-5 percentage points in global poverty rates and equivalent to around 100 million people. But recent estimates of poverty depth – measured by the gap in consumption between the average poor household and the poverty line – show that poverty is deepening, and that it is the really poor that are being hit hardest. Eighty-eight percent of the increase in urban poverty depth in the wake of rising food prices is from poor households becoming poorer and only 12 percent from households falling into poverty. This increase in poverty depth is roughly equivalent to 1 percent of GDP for a typical less developed country. This is consistent with evidence from the Indonesian financial crisis in the late 1990s where the impact on the poverty depth measure was higher than on the poverty headcount indicator. Policy responses ought therefore to prioritize the extreme poor whose very survival is threatened by these shocks, though political economy considerations will typically necessitate mitigating the impacts for a broader group.

The extent of poverty impact due to rising food prices varies significantly according to where people live inside a country. The urban poor are typically most affected as many rural households grow at least some of their food needs. Households located in conflict-affected areas within countries are particularly vulnerable, as illustrated by the current emergency appeal for humanitarian aid in Somalia and Ethiopia. The poorest areas are often those most at risk (e.g. the Far Western region of Nepal). However, in some countries (e.g. Ghana, Senegal, Vietnam) households in relatively prosperous areas have been severely hit. Policymakers thus require data from national household surveys to determine to what parts of the country and which household groups they should direct resources.

Higher food prices can lead to distress sales of assets which will aggravate chronic poverty. In the short run, households smooth their consumption by increasing their labor supply and drawing down their savings. However, when families have to disinvest in their livelihoods—eating their seed grain, selling their animals — they will be challenged to rebuild their earning capacities, increasing the risk of chronic poverty. Inadequate credit markets can exacerbate these constraints, as the poor are often forced to borrow from moneylenders at high rates of interest.

The direct poverty impact of rising oil prices is generally less than that of food prices, but their indirect effects can be significant. Although typical household budget surveys suggest that the share of modern fuels in household budgets is a great deal lower than that of food (Annex 2, Table 1), this understates the importance of increased fuel prices for at least two reasons. First, households consume fuel indirectly in other goods they consume. In very poor countries, indirect consumption can be much larger than direct consumption for the rural poor who consume little commercial energy (see Annex 2 for an illustration on Madagascar). Second, higher prices may cause households to move down the ladder of fuels, especially from other sources to biomass, with harmful consequences: women and children collecting fuel for longer hours; the risks of increased indoor air pollution; and risks of deforestation in densely populated rural areas.

1.3 Worsening Nutrition and Health Indicators

Eating less and switching to lower-cost coarse cereals will have irreversible nutritional consequences, especially for infants born since the food crisis began. As households face shocks to their real income, they eat less and switch from more expensive sources of protein such as fish, meat, and eggs to cheaper coarse cereals (see Figure 2). This switch will cause micro-nutrient deficiencies (in iron, iodine

and essential vitamins). The poor, moreover, may be forced to cut back on calorie intake, leading to weight loss and acute malnutrition. The most susceptible are children under 24 months of age, pregnant and lactating women, and those already suffering from malnourishment. There is ample evidence showing that gender disparities in the quantity and quality of food consumed increase during times of shortage. Mothers forego meals and in many countries boys get preference over girls. Hence, young girls in poor families and infants born since the crisis began are those most at risk of suffering irreversible damage to their physical and mental development.

Figure 2. Health and nutrition consequences of stages of household food security

Deterioration of household food security →								
Livelihood	Diversification/change in livelihood activities	Reduced expenditure on non-essential or luxury items and sale of non-productive or disposable assets	Children drop out of school and out-migration (rural to urban moves)	Increased use of child labor and borrowing and purchasing on credit, becoming indebted	Selling of productive assets	Selling of all assets	Reduced expenditures on essential items (food, water, etc.)	Engaging in illegal or hazardous activities as last resort coping
Food related	Change to cheaper, lower quality, and less preferred foods	Reduced diversity of food, poor nutrient intake and favoring certain household members over others for consumption	Reduced size and number of meals	Consuming wild foods, immature crops, and seed stocks, and sending household members elsewhere to eat (i.e. neighbors)	Begging for food	Skipping entire days of eating	Eating items not done so in the past or not part of normal diet (i.e. plants and insects)	
Consequences for Health and Nutrition								
Health outcome	Depletion of micronutrients and lowered immunity		Appearance of clinical symptoms of micronutrient deficiencies such as night blindness, anemia and increased morbidity		Underweight↑, Maternal Weight↓, Wasting↑		Early childhood mortality ↑	
Increased overall mortality →								

Source: Adapted from 'Nutrition in the Perfect Storm: Why Micronutrient Malnutrition will be a Widespread Health Consequence of High Food Prices' (Klotz et al., Food Prices and Malnutrition World Food Programme 2008)

There is clear evidence from past crises that children suffer long-term health consequences from short-term shocks. For example, a long-term study shows that a drought in Zimbabwe seriously affected the lives of infants. These children had significantly lower height during adolescence, delayed school enrollment, and reduced grade completion equivalent to a 7 percent loss in lifetime earnings for the affected children. The 1988-1992 Peruvian economic crisis is estimated to have led to 17,000 additional infant deaths, while the 1997-98 financial crisis in Indonesia increased infant mortality over 3 percentage points. Under-five mortality went from 126 per 1000 in 1991 to 152 per 1000 in 1998 during the economic crisis in Cameroon. Cutting back on essential medical expenses during crises is another factor leading to malnutrition and other long term health impacts.

Many of the countries exposed to rising global food and fuel prices are those with high pre-existing levels of malnutrition. Ranking countries most affected by malnutrition, we find that Burundi, Madagascar, Niger, Timor Leste and Yemen are among the ten most affected countries for both stunting and wasting indicators. All of these countries have experienced double-digit food inflation in 2007-08. Moreover as shown in Figure 2 of Annex 1, of the 60 countries with high malnutrition burdens, 44 countries have experienced negative terms-of-trade impacts of recent food price changes.

Some high growth countries also face serious challenges in addressing malnutrition. South Asia has half the world's underweight children and child malnutrition accounts for one-third of all deaths before the age of five. India, for instance, has double the rates of stunted children (47 percent) than Sub Saharan Africa (24 percent), and nearly five times that of China. According to UNICEF, 1.5 to 1.8 million more children in India are currently at risk of malnourishment, as households cut back on meals or switch to less nutritious foods due to rising food prices (average rice prices rose by 21 percent and wheat prices by 15 percent in

2007/08). In Vietnam, where 78 percent of the caloric intake of the poor comes from rice alone, the increases in prices could significantly affect the nutritional status of rural and urban poor alike.

Long run projections illustrate the severe impact of higher food prices on malnutrition and productivity. Globally, there has been marginal progress in reducing the share of underweight children (from 20 percent in 1992 to 17 percent in 2007). The FAO estimates that in 2007, 923 million people were under-nourished compared with 848 million in 2004. We estimate that by the end of 2008 up to 967 million people (or an additional 44 million people) will be under-nourished largely due to the rise in global food prices. Higher levels of malnutrition will impinge on future growth and productivity in developing countries. The median losses arising from iron deficiency alone in developing countries is estimated at 0.6 percent of GDP.

1.4 Risks to schooling

Higher food and fuel prices create pressures to pull children out of school, although countervailing effects also exist. Schooling imposes explicit and implicit costs on households, such as fees, transportation, and uniforms, so that when households become poorer, they may not be able to afford the costs and therefore withdraw their students from school. The same economic circumstances that cause increased poverty, however, sometimes decrease wages and thus the opportunity costs of children staying in school. Their impact on schooling thus depends on the balance of these effects and will vary from setting to setting. In general, the poorer the country, the more likely an economic shock will lead to adverse school impacts.

Evidence from previous real income shocks suggests that there is a significant risk to educational outcomes for the poor due to food price increases. Longitudinal data from Brazil shows that the sudden loss of a household head's job can lead to a 50 percent higher probability of a female youth leaving school to look for work. Evidence from Peru suggests that economic shocks affects the quality of education a child receives, due to reduced private spending on education. In Indonesia, the 1997 economic crisis was associated with significant declines in school enrolment among the poorest, particularly in rural areas where the percentage of 7-12 years olds not enrolled in school doubled from 6 percent to 12 percent.

There are emerging indications that children are missing school and families cutting back on education spending due to the current food crisis. Food price increases have been the most severe (and safety net alternatives the most limited) in some of the poor countries where past downturns have already reduced enrollment. Evidence from a recent survey in Bangladesh suggests that about half the households surveyed reduced spending on education to cope with rising food prices. Policy responses to minimize the potential effects of higher food and fuel prices on schooling are thus essential as even a temporary gap in attendance can impose serious costs in a child's educational attainment.

II. THE SOCIAL PROTECTION, EDUCATION, AND NUTRITION RESPONSES

Effective social protection, education, and nutrition responses are needed to ensure that rising food and fuel prices do not have lasting impacts on the human and physical capital of the poor. These responses must be based on careful country-specific diagnostics as some areas and groups within a country have been affected much more than others. Countries also differ widely in their capacity to respond to the crisis, with some countries operating safety net, education, and nutrition programs that can be scaled up quickly while others do not.

2.1 The Social Protection Response

In the face of rising food and fuel prices, social protection programs can play a key role in forestalling increases in poverty, with wider developmental, social and even political benefits. By helping to prevent increases in poverty, social protection programs help households maintain access to food, energy, and essential services. Social safety nets can also reduce the impact of economic shocks on health and education. Furthermore, when social protection programs are perceived as fair and compensatory, they can be important in maintaining social equilibrium and preventing social unrest.

Given the urgency of the crisis, the emphasis in the short run must be on scaling up existing programs, while avoiding measures that work against the development of a sound social protection system in the medium term. For good safety net programs, workable systems for enrolling beneficiaries, making payments, and monitoring are critical. They do not require a large amount of resources, but take time to develop and need an upfront investment. Setting up a sound safety net program from scratch usually requires at least four to six months, with a longer period for refinement. A country with a well-targeted safety net system can swiftly react to rising food and fuel prices by increasing the value and/or coverage of benefits. Countries without these key elements in place will have to scramble to start programs quickly and, in the interim, either leave needs unmet or use last-choice methods.

In the medium term, investing in a sound safety net is good protection not only for the food and fuel crisis but for all types of shocks even in fast-growing economies. Lacking social protection programs that can be scaled up to cover an adequate number of people and under pressure to address the worsening living standards of broad swathes of the population, many governments are using general price subsidies, export restrictions, or tax cuts—measures that can be regressive and expensive. In such cases, they should begin work on sounder systems in parallel with their short-run actions. They may need to initiate or reform existing programs—developing sound systems for household targeting, payments, management and monitoring, especially for programs that will remain in place in the long run. They may want to change their mix of programs, for example by increasing the role of targeted cash transfers relative to school feeding. Regular collection of household survey data will be important to develop targeting indicators, track the effectiveness of safety net programs and measure the impacts of crises. For all these activities, international assistance, including South-South learning, will be important.

2.1.1 Policy Options

Within the range of possible social protection responses, some programs offer distinct advantages over others. Although policy responses must be chosen based on country context, direct and indirect transfer programs can be loosely ranked as follows:

Direct Transfers

- **Targeted cash transfers of adequate coverage, generosity, and quality are the best option.** Targeted cash transfers are preferable to in-kind programs because they have lower administrative costs, are more amenable to payment systems that guard against diversion of benefits, and allow consumers to choose.
- **Increasing the benefits for non-earnings-linked social pensions, disability pensions, unemployment benefits, and the like can be helpful.** Even where programs do not have poverty as an entry criterion, recipients are often poorer than average, and those on fixed incomes will be greatly affected by food and fuel price inflation. Increasing such benefits is also administratively simple.
- **‘Near cash’ instruments such as food stamps or transport vouchers can be politically popular but have higher administrative costs than cash.** Food stamps have been successful in most of the small number of countries where they have been tried. To date, there is less experience with fuel or transport ‘stamps’ or vouchers.
- **In-kind food distribution is appropriate where markets are functioning poorly, where foreign assistance is only available in-kind, or where strategic grain reserves need to be rotated.** Such programs can include the following:
 - *Take-home rations* can be targeted at the household level. If they exist or can be scaled up with good targeting, they may be a good alternative or complement to cash programs.
 - *School feeding programs* can generally be targeted only at the school level, not the household level, so may have high errors of inclusion. They have high administrative costs relative to the value

- transferred. However, in many settings, school feeding is the largest or only direct transfer program so can be used for a quick response.
- *Distribution of fortified, calorically dense weaning food for children 6–24 months old*, especially as part of a nutrition education program, can be an important intervention.
 - *On-site feeding through health centers* is logistically complex and imposes high transaction costs on beneficiaries to come to the centers for meals. It is usually best reserved for severely or moderately malnourished children.
 - *Targeted market sales* can be used for more general income transfers when other programs do not exist.
- **Establishing new conditional cash transfer (CCT) programs may take too long and exclude the neediest where services are scarce, but where CCTs already exist, they can be part of the response.** CCTs can help foster increased use of health and education services but are more difficult to set up than unconditional programs. In countries where CCTs are already established, it may be appropriate to raise benefits or expand coverage.
 - **Public works programs rarely have coverage sufficient to constitute a complete response.** Rising food and fuel prices affect the working poor and near-poor as well as the unemployed, and to fruitfully employ so much labor may be difficult. Unless the work yields economic benefits in its own right, public works are less efficient than cash transfers.

Indirect Transfers

- **Lifeline pricing for electricity or natural gas networks can be appropriate under certain conditions.** Lifeline pricing will be most effective if the poor are connected to the network and have individual metering, if volume-differentiated tariffs are used, and if the subsidized block of service is consonant with electricity use of the poor.
- **Supply-side subsidies to bus transport are common but their impact on equity varies.** These subsidies have the risk of benefiting the transport provider more than the consumer, although in countries where the poor commute long distances, they can be beneficial. Moreover, pricing needs to reflect a complex mix of goals, so manipulating fares in the short run is difficult.
- **General food price subsidies are often regressive and hard to eliminate.** Whether subsidies are close to neutral or highly regressive depends on the commodity subsidized and consumption patterns.
- **General fuel subsidies tend to be even more problematic than food subsidies and should be avoided when possible.** Fuel may have a lower share in the budget of the poor compared to the better off, resulting in a regressive distribution of benefits. Most programs leave the government defending a set price with high upward risk for fiscal costs and political risks for price changes.
- **Increases in public sector wages are typically not pro-poor as the majority of those in the civil service are above the poverty line.** Nevertheless, a one-off incremental increase to those in the lowest ranks of the civil service, who may have become poor due to the sharp rise in prices, may be justified in certain cases and possibly necessary for political reasons. However, since public sector wages typically constitute a large share of public expenditures, such increases need to be carefully managed as they run the risk of crowding out targeted anti-poverty spending.

2.1.2 Targeting

Programs should be targeted, although targeting the population affected by higher food and fuel prices is not straightforward. The impacts of rising food and fuel prices vary significantly across households and geographical areas within countries. Targeting programs based on only one or two

parameters could result in large errors of inclusion or exclusion. Multiple targeting methods for each program may therefore be needed. For example, cash and in-kind transfers can be targeted at the household level using means tests or proxy means tests, or they can be targeted according to geographic area, demographic characteristic, and/or self-selection. Although targeting at the household level may be more accurate, sound systems for household-level targeting take time to develop, so countries may need to rely on other methods in the short run. Several countries have developed practical poverty proxies (e.g. a safety net program in Tajikistan uses female-headed households with children under five) which can be quickly derived from existing household level data. Notably, temporary food and fuel crisis response programs tend to be targeted much more widely than safety net programs in stable times. Because rising food and fuel prices affect everyone, the scale of political attention and mobilization is large in many countries and demands a wider target group.

2.1.3 Fiscal Costs

The fiscal costs of a well-targeted safety net for the poorest need not be unduly high, especially compared to the present and future costs of not having them in place. Even such large and generous CCT programs as those in Mexico and Brazil are only around 0.5 percent of GDP. For a large share of developing countries, spending on overall safety nets has been on the order of 1 to 2 percent of GDP in recent years. However, the costs of responses will differ according to the scope, generosity, and degree of targeting. For example, in Chile, where the response so far has been a very time-limited increase in targeted transfers, the cost has been a mere 0.04 percent of GDP. In Ethiopia, the total additional costs of lifting the value-added tax on food grains, raising the wage on the cash-for-work program, and distributing wheat to the urban poor at a subsidized price are likely to exceed 1 percent of GDP.

Fiscal space may need to be created to accommodate a permanent increase in the size of targeted safety nets. Food and fuel prices are expected to remain high over the medium-term. Thus, safety nets will play a larger role everywhere in the coming years. Many countries have inadequate safety nets and some are realizing that they have underinvested in these systems. They will continue the actions they are taking with urgency now or transform them into long-run programs, leading to a permanent increase in their safety net expenditures. Even countries that had broadly adequate safety nets heretofore may find that a somewhat larger safety net will be needed going forward. These expansions will be justified if the safety nets are designed and implemented well. A careful fiscal planning exercise will be needed in each country to protect critical growth-enhancing spending, prune low-priority expenditures and devise a medium-term fiscal sustainability strategy. For the poorest countries, international assistance will be essential.

2.2 *Education, Health, and Nutrition Responses*

Specific interventions are needed to prevent dropouts and help students who have dropped out get back into school. Social protection and demand-side transfers can help reduce pressures to pull children out of school by protecting household incomes and/or reducing schooling costs. For example, in response to the financial crisis of 1998, the Indonesian government put in place scholarships for poor schoolchildren. Evaluations have shown that service use fell less among recipient households than they would have without the program. Another possible intervention is to reduce or eliminate school fees, which has proven to be very effective in increasing school enrollments. In Ghana, for example, primary school enrollments rose by 14 percent after user fees were abolished in 2005 as part of a broader program to dampen the effects of fuel price reform. Linking transfers to school attendance as in conditional cash transfer programs and school feeding programs also has the potential to improve school attendance.

Effective health and nutrition interventions are also needed to complement social protection programs. For countries with limited capacity and financial resources, provision of targeted food supplements and micronutrients may be the most effective short-run nutrition interventions. Such interventions are usually affordable at scale because of their low cost per head and can easily be added to existing health programs and school feeding programs, which are one of the few safety net programs in place in many low-capacity countries. Where food aid is used, there will be a preference for distributing it in forms that are fortified - for example, fortified flour rather than whole unfortified grain. Given the long-term and

irreversible impacts of malnutrition on children under 24 months of age, nutrition interventions should be targeted at this group and pregnant women. If resources are focused on these groups and concentrated on the poorest families, total program costs will be relatively low. Beyond the crisis stage, countries should move toward a more comprehensive approach to nutrition and could use the capacity developed in implementing micronutrient programs as a basis for implementing other nutrition programs requiring greater administrative capacities.

Monitoring key health and nutritional indicators is an essential part of devising an appropriate response. Tracking prices and household intake and investing in nutritional surveillance systems are essential for knowing where and to whom interventions should be targeted. Key indicators to be monitored include dietary diversity, child underweight and hemoglobin levels, and maternal body mass index and vitamin A status.

III. COUNTRY ACTIONS

3.1 *Social Protection Responses*

A significant number of countries are mobilizing policy responses to rising food and fuel prices, with a broad range of measures, but tilted heavily to general subsidies or tax reductions rather than targeted safety nets. A poll of IMF country desk officers with responses for 146 countries showed that 84 countries had reduced food taxes and 29 had increased food subsidies. Thirty-seven had decreased fuel taxes and 29 increased fuel subsidies. In contrast, only 39 countries had expanded targeted safety nets. This tilt toward across the board tax reduction/subsidy measures is unfortunate as such measures are often regressive, distortive, costly, and difficult to reform. Fuel subsidies are usually markedly more regressive than food subsidies and have further environmental consequences in discouraging conservation measures.

There are two apparent reasons why across the board tax reduction or subsidies have been so common despite being the least preferred policies. First, many countries have not developed good safety net programs prior to the crisis and so have little choice of instrument in the short run. But even where there are more targeted and effective options available, governments sometimes choose to use a combination of targeted transfers and universal subsidies for political reasons – to signal to their constituents that they are acting aggressively in the face of rising food prices.

A common and simple response for countries with established programs is to increase program benefits. For example, Brazil increased the benefits of the Bolsa Familia conditional cash transfer, the Chilean government increased the level of the winter heating allowance, the Kyrgyz Republic increased the benefits of its Unified Monthly Benefit cash transfer program, Yemen doubled the value of its cash transfer benefit, and Egypt increased the ration of food it subsidizes, as did some states in India.

Such increases have generally been on the order of magnitude of inflation, but larger increases in benefits than maintenance of real values may be needed to maintain purchasing power. Larger increases may be justified since food has a higher share in the consumption basket of the poor than in the CPI and since transfer benefits are only a small share of household income. For example, in Spring 2008 the staff of Mexico's *Oportunidades* conditional cash program calculated that the benefit would need to increase by twice the rate of inflation to ensure that families could purchase the same food bundle as prior to the marked increase in food price inflation. The benefits of *Oportunidades* are adjusted for inflation twice yearly, so the June increase took care of part of the problem. But in addition, a temporary supplemental transfer of about US\$11 (about a fifth of average benefit levels) is being granted to participant households, delivered in a separate check to emphasize the message that it is a special, temporary benefit. Several others, including Chile and West Bank and Gaza, are granting time limited or special benefits. Where inflation continues, benefits may need to be adjusted more than once. Ethiopia increased the wage for the labor intensive public works portion of its Productive Safety Net program by a third in December 2007, to restore its purchasing power to the originally designed levels. Since then, however, local grain prices have increased by 96 percent.

A second common response is to increase the coverage of existing programs. In most cases these are programs that prior to the rapid rise in food and fuel prices were constrained by budget to serve a subset of those that would meet criteria for needing support. Thus the increase in program size is not just due to new people falling below the eligibility threshold, but to the crisis garnering political or budget support to serve the already needy. In Yemen, the social welfare fund's cash transfer program will increase its coverage by half. In the Dominican Republic, the Solidaridad CCT program is doubling the number of participants. In a few cases, countries are accelerating the rollout of programs already in the piloting or rollover phase. The El Salvador CCT program, for example, is being rolled out to the poorest 100 municipalities over two years instead of three. In the Philippines, rapid food price inflation was one among several factors in the decision to move its nascent CCT program from the pre-pilot of 9000 households to full rollout to 320,000 families more quickly than originally planned.

Many of the safety net programs are tied directly to schooling. Though any income transfer will make it easier for households to pay the direct and indirect costs of schooling, the link is particularly tight for programs tied to schooling, such as conditional cash transfers or school feeding. Increasing the benefits and coverage of CCTs has been the backbone of response in Latin America; expansion of school feeding is dominant in Africa, as is happening in Benin, Burundi, Cote d'Ivoire, Ghana, Guinea, Liberia, Lesotho, Mauritania, Mozambique, Senegal, and Sierra Leone.

A less common response has been to initiate new targeted programs to respond to rising food and fuel prices, though several countries have done so. Indonesia has initiated a time-limited cash transfer program to about a third of the population in order to cushion their adjustment to rising fuel prices. The program replicates a similar one year transfer program that ran from October 2005 to September 2006 for similar purposes. Liberia has initiated a labor intensive public works program run by the Liberian Agency for Community Empowerment. Similarly, Yemen has instituted a public works program through its Social Welfare Fund.

A few countries have taken less direct ways of alleviating hardship among poor households. In Vietnam, poor households are entitled to free health insurance cards, exemptions of education fees, and access to subsidized credit, among others. The eligibility threshold has been raised by 50 percent to increase the coverage of these programs in the face of price rises. The Philippines increased the coverage of its subsidized health insurance targeted to the poor. In Thailand, in addition to untargeted reductions in excise taxes and increases in subsidies for liquid propane gas, the government has instituted free transportation on non air-conditioned buses in Bangkok, free transportation on non-air conditioned trains for selected routes, and lifeline subsidies for electricity and water.

Comprehensive responses often include several lines of action. For example, Bangladesh scaled up participation in several of its ongoing safety net programs in rural areas, many of which are positively evaluated but provide low coverage relative to need. The government initiated a new program to provide cash transfers to farmers with less than 2.5 acres of land, to allow them to compensate for higher prices for diesel used in irrigation pumps. In urban areas, it reactivated its subsidized open market sales of low quality rice in urban areas.

Institutional capacity for safety net programs has been a major constraint on the extent and quality of social protection responses. In many cases, lack of capacity has determined the use of less desirable policy alternatives. But some countries have worked to overcome this constraint either through increasing their capacity or through using other agents to deliver programs. Yemen, for example, is rolling out a new proxy means testing system to underpin improvements in the targeting and benefit level of its cash transfer program. Liberia is using non-governmental organizations, small private firms or larger community based organizations to organize labor intensive public works projects. A number of countries are using the World Food Programme to deliver programs, especially school feeding. Togo will give students vouchers that they can use to purchase school lunches from local vendors.

These examples illustrate the range of potential responses and underscore the possibilities for taking constructive action, but perhaps disguise the sobering truth that many countries are not doing well

enough with respect to targeted safety nets. Too many are doing little beyond subsidies and tax expenditures. Moreover, the targeted safety net programs being used as responses to the food and fuel price increases cover the full spectrum of quality – some have proven track records of targeting, adequacy, efficiency and impact but many do not. Problems of coverage, of inadequate benefit levels and inadequate administrative systems are common.

3.2 Nutrition

Direct programmatic responses in nutrition have been less common. For example, among the 16 countries with projects approved through the GFRP (see Annex 3), five have included some sort of nutrition component for pregnant and lactating women or children under two. Several others with a nutrition component are in the pipeline. In ECA all three GFRP-approved projects include nutrition interventions. In LAC countries with pre-existing high malnutrition, most have strengthened their nutrition programs either through recent policy actions in some cases supported by the World Bank or other partners. The record is more variable in other regions.

A few responses focus on micronutrient intake. The Kyrgyz Republic, for example, is using GFRP funds to support fortification of its in-kind food distribution, vitamin supplements for children and post-partum mothers, and to develop and support a nationwide sustainable monitoring system for salt iodization and flour fortification.

Countries with community-based health nutrition programs for young children are expanding them. Honduras, is expanding its AIN-C program, which provides growth monitoring, nutrition education and referrals to curative care or programs for intensive recuperation for acutely malnourished children under age two. Senegal, whose community nutrition program provides similar services as well as micronutrient supplements and insecticide treated bednets, is moving more quickly than planned to scale the program up to reach 50 percent of children, focusing in districts with highest nutritional risk. Elsewhere in Africa, the responses are much smaller scale and less comprehensive. The Liberian GFRP project has a small component to provide food rations to 3300 pregnant and lactating women through clinics and hospitals in five counties and the Sierra Leone project supplies similar support to 5,300 women and children under age five, in both cases delivered by WFP.

In most countries the provision of nutrition services has not been improved in response to rising food prices, which is especially worrying in countries with a high malnutrition burden. As with safety nets, this is partly because it takes time to build good quality nutrition services and where they were absent there was little to scale up quickly. This adds to the already standing urgent calls to increase global action on nutrition, and to build a medium to longer-term response to the food crisis. As argued in the Bank's document on "Repositioning Nutrition" (World Bank 2006), malnutrition represents the non-income face of poverty. Though many countries are on track in improving income poverty (MDG 1a), less than a quarter are likely to achieve the nutrition MDG. Consequently, nutrition remains the "forgotten MDG."

IV. A CALL FOR CONTINUING ACTION

The urgency of responding to the food and fuel crises has not diminished, and there is still time to improve and expand the policy response to place much greater emphasis on nutrition and social protection instruments. A large number of countries have implemented or are implementing policy responses to the double food and fuel crisis. The analysis of these responses, however, suggests relatively little use of targeted safety nets and social protection interventions and even less use of nutrition responses. As the crisis evolves and its damaging consequences to the human capital of the poor become more apparent, revising and refining the policy response becomes more urgent.

Investing in better safety nets will protect the poor from the worst consequences of the present crisis and will also increase the range of options at governments' disposal to cope with future crises. Nowhere is this more important than in the poorest and most fragile countries where the capacity to implement a program from scratch is extremely limited. Ethiopia was able to respond quickly to rising food

and fuel prices because it had a working rural safety net in place. Similarly, the Kyrgyz Republic was able to rapidly top-up existing safety net and nutrition programs to protect the poor from the worse consequences of food/energy inflation. Other poor countries that did not have such systems had to rely on less effective measures such as food distribution (Tajikistan), targeted subsidies (Bangladesh) or general subsidies (Egypt) which are more costly, difficult to remove, and often have to be reintroduced in the face of a new crisis.

The costs to national treasuries and the development community of responding to the crisis are many multiples less than the potential costs of millions more undernourished children. Developing countries must make investments in effective nutrition and social protection systems a development priority, and integrate them into their national development plans, food security strategies, and poverty reduction programs. Industrial countries and the international development community must help mobilize the financial resources needed to aid these efforts, and also help provide the technical support and assistance necessary to support the response in low-capacity settings. In the short to medium term, there is also a clear need to scale up global investments in nutrition, which have been suffering from gradual decline, and build up the nutritional monitoring systems so essential to using resources in a cost-effective manner.

The World Bank will continue to support the responses to the food and fuel crisis through a multi-pillar approach that combines policy advice, expedited financial support, development of new products and research.⁴ A key element of this response is the GFRP – a rapid financing umbrella facility that is providing technical advice and access up to \$1.2 billion of financial support to countries affected by the food crisis and that includes explicit support for nutrition and social protection responses.⁵ Under the GFRP umbrella, the Bank aims to put in place a Vulnerability Financing Mechanism comprising two parallel multi-donor trust funds aimed at mobilizing donor resources and helping developing countries manage the immediate consequences of rising food and energy prices.

- The Food Price Crisis Response window can be used to support any of the components of the GFRP including support for safety nets, nutrition and improving access for small farms to seeds and fertilizers, under the same eligibility criteria as the umbrella operation. This multi-donor trust fund will also facilitate policy and operational coordination among development partners and help ensure that support to countries is both comprehensive and country-specific.
- The proposed Energy Price Crisis Response window will work in parallel with the social protection window of the FPCR and help finance measures that increase the income of the poor in the face of energy shocks or reduce their energy expenditures without resorting to inefficient or universal subsidies. These include, *inter alia*, targeted cash transfers, workfare programs, targeted public passenger transport vouchers, targeted measures that reduce expenditures by poor households, and technical advice to set up delivery mechanisms.

In parallel to the GFRP program, the Bank will also scale up its financial support to agriculture, nutrition and social protection in the next three years through its regular IDA/IBRD channels and provide enhanced support for the energy sector in partnership with other bilateral and multilateral donors via the Energy Projects Initiative.

⁴ See ‘Double Jeopardy: Responding to High Food and Fuel Prices’ (July 2008) World Bank.

⁵ In total, grant support of US \$110 million for 13 countries was approved by the end of August. In September, the World Bank expects to approve grants for Guinea, Somalia, Guinea Bissau, Benin, Southern Sudan, Mauritania, Nepal, Mozambique and Togo. A pipeline of projects based on need has been identified for additional grant support in Laos, West Bank and Gaza and Nicaragua.

ANNEX 1

Table 1: Share of food and fuel in the consumption of the poorest quintile		
Country	Food	Fuel
Bolivia	43	3
Jordan	38	17
Mali	53	3
Sri Lanka	64	3

Sources: For fuel, Coady et al., 2006; for food, USDA food balance sheets

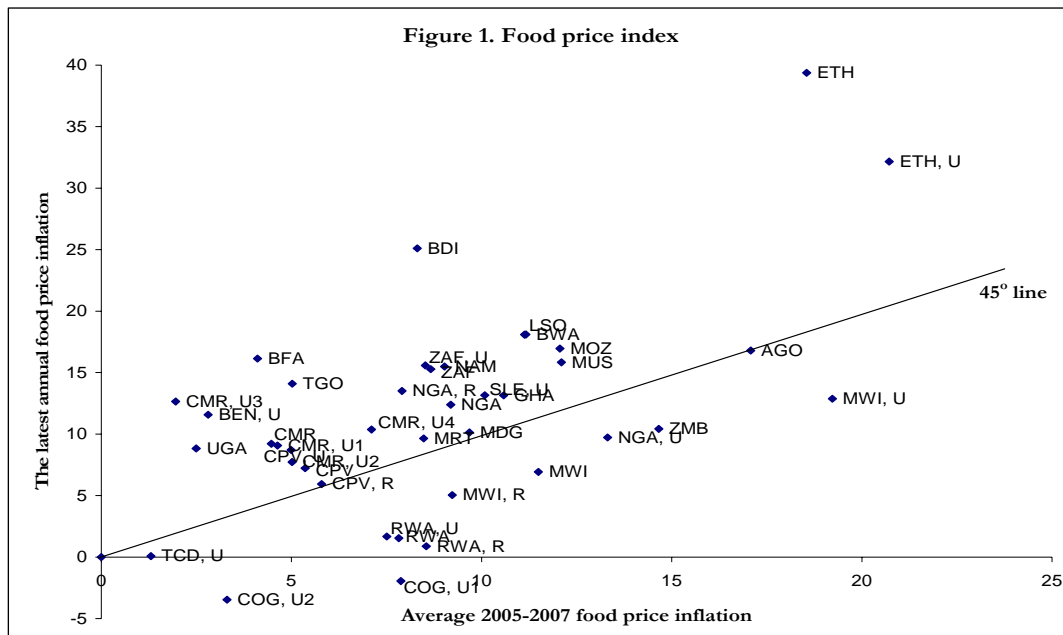


Figure 2. Malnutrition and Terms of Trade impacts of rising commodity prices

TOT Impact of Commodity Price Changes January 2007-May 2008: NEGATIVE				TOT Impact of Commodity Price Changes January 2007-May 2008: POSITIVE			
ECA	AFR	EAP	AFR	AFR	EAP	LAC	
Albania	Ghana	Cambodia	Rwanda	Benin	Angola	Indonesia	Argentina
Belarus	Lesotho	Lao PDR	Senegal	Botswana	Cameroon	Malaysia	Chile
Bosnia	Mauritius	Mongolia	Sierra Leone	Burkina Faso	Chad		Ecuador
Herz.	Seychelles	Philippines	Swaziland	Burundi	Congo, Rep.		Peru
Bulgaria	LAC	Solomon Is.	Tanzania	C. Afr. Rep.	Côte d'Ivoire		Brazil
Croatia	Belize	Thailand	Togo	Comoros	Guinea-Bissau		Mexico
Czech Rep.	Costa Rica		Uganda	Congo, D. R.	Sudan		Tri. & Tobago
Estonia	Dominica	HIGH MALNUTRITION BURDEN					AFR
Georgia	El Salvador	At or above World Average of 14% of Undernourished in Total Population					Gabon
Hungary	Guyana	SAR	LAC	Eritrea	Zambia		Mauritania
Kyrgyz Rep.	Suriname	Bangladesh	Dom. Rep.	Ethiopia	Zimbabwe		Nigeria
Latvia	Jamaica	India	Guatemala	The Gambia	LAC	EAP	South Africa
Lithuania	Uruguay	Nepal	Haiti	Guinea	Bolivia	Vietnam	MNA
Macedonia	MNA	Pakistan	Honduras	Kenya	Colombia		Algeria
Moldova	Jordan	Sri Lanka	Nicaragua	Madagascar	Paraguay		Egypt
Poland	Lebanon		Panama	Malawi	Venezuela		Iran
Romania	Morocco		ECA	Mali	ECA		Libya
Slovak Rep.	Tunisia		Armenia	Mozambique	Uzbekistan		Syria
Slovenia	EAP		Tajikistan	Namibia	MNA		ECA
Turkey	China			Niger	Yemen		Azerbaijan
Ukraine	Fiji						Kazakhstan
	Vanuatu						Russian Fed.

Source: FAO for undernourishment and PREM Trade for TOT impact

ANNEX 2

MADAGASCAR: CALCULATING DISTRIBUTIONAL EFFECTS OF ENERGY PRICE INCREASES 2005–2007

Higher energy prices imply real income losses due to higher prices for petroleum products *directly* consumed by households (*e.g.*, gasoline, kerosene, diesel and liquefied petroleum gas), but also *indirect* losses caused by higher prices of other goods that use energy products as intermediate goods in the production process. Estimates of the total effect can be made by combining information from an input-output matrix with household budget data. For Madagascar, Amendola and Vecchi 2008 use such techniques with a 2001 input-output matrix and the 2005 *Enquete Aupres des Menages* to estimate the impact of the changes in energy prices observed between 2005 and 2007, assuming that the price changes are fully passed through from input to output.

The top panel of the table shows household budget shares for electricity, gasoline, diesel, and kerosene. Overall, petroleum products absorb, on average, 2.6 percent of the household budget. However, the consumption of modern energy products differs significantly across households according to their expenditure levels, with poorer households spending a higher share of their consumption on energy, and kerosene accounting for most of the energy expenditure for the poorest quintile and less than half of the energy expenditure for the richest quintile.⁶ The results of the modeling of real income losses in the middle panel of the table are that, on average, 2.5 percent of total household expenditures (3.2 percent for low-income households, 2.3 percent for households in the top expenditure quintile). Approximately 40 percent of real income losses are due to the indirect effect, mostly via higher food, textile, and transport prices. The overall burden of the change of energy prices is skewed to the upper end of the income distribution. The results suggest that while petroleum price subsidies may represent an appealing tool for protecting the poor,

Per capita expenditure quintiles	Q1 (poorest)	Q2	Q3	Q4	Q5 (richest)	All
<i>Household Budget Shares (percent)</i>						
Electricity	0.06	0.10	0.21	0.45	1.17	0.48
Gasoline	0.02	0.00	0.00	0.02	0.27	0.08
Diesel	0.19	0.10	0.08	0.07	0.08	0.10
Kerosene	3.18	2.31	1.96	1.64	1.04	1.89
All	3.46	2.51	2.25	2.19	2.56	2.55
<i>Mean consumption of petroleum products (ratio to bottom quintile)</i>						
	1.00	1.08	1.16	1.34	3.10	1.69
Direct Welfare Effect (DWE)	2.26	1.62	1.39	1.24	1.10	1.45
Indirect Welfare Effect (IWE)	0.90	0.90	0.90	0.96	1.17	1.00
Total Welfare Effect	3.16	2.52	2.29	2.20	2.27	2.45
IWE as percent of total	28.48	35.71	39.30	43.64	51.54	40.57
<i>Share of the burden</i>						
Total Welfare Effect	9.3	12.3	14.7	18.9	44.8	100.0
<i>Note:</i> Estimation of the total welfare effect is based on price increases <i>observed</i> during 2005-7 (48.5 percent for gasoline, 60.5 percent for diesel, and 66.7 percent for kerosene). The change in price of electricity is assumed to be one-third of the average change in oil prices (19.5 percent); <i>Source:</i> Amendola and Vecchi (2008)						

they imply sizable leakages in favor of rich households.

⁶ While household surveys may undervalue bio-fuels in calculating energy expenses, they have fewer problems in collecting data on the sort of cash transactions used to purchase modern energy. Thus, distributional analysis of these expenditures is relatively sound.

ANNEX 3

FOOD AND FUEL RELATED SAFETY NET AND NUTRITION INTERVENTIONS FOR APPROVED GFRP PROJECTS⁷

Country	Approval Date/ Status	Grant In US\$ million	Direct Transfers	Indirect Transfers	Nutrition	TA/Capacity
Burundi	13-Aug	10 (new project)	Income support: sustaining or extending primary school feeding program (WFP), targeted for schoolgirls and most vulnerable in 2 of 17 provinces. Budget support for emergency humanitarian relief to cope with drought related risks. Near cash instruments to maintain transport costs	Subsidies: suspension of custom duties and domestic transaction taxes on 13 basic food items (beans, cassava, potatoes, banana, maize, meat, etc)		
Central African Republic	13-Aug	7 (new project)	Income support: school feeding, targeted for 135,000 primary and 8,000 pre-primary children across 5 prefectures (filling WFP financing gap)			M&E capacity for safety nets
Liberia	29-May	3 (existing project)	Cash for work program: dry-season employment to develop basic community infrastructure and implemented through existing community structures. Income support, targeted for 59,600 women and children, across 5 most vulnerable counties in south-east of country, includes school feeding, take home rations		Supplementary feeding: for pregnant or lactating women (3,300 beneficiaries)	
Madagascar	13-Aug	10 (existing project)	Cash-for-work; income support through school feeding	Subsidies: fiscal space to support temporary suspension of 20% VAT on rice		
Sierra Leone	13-Aug	4 (existing project)	Income support: food transfers across schools and hospitals. Cash for work program: additional financing targeted in rural, peri-urban and rural areas	Subsidies: fiscal space to support import duty reductions for petroleum and certain food items (e.g. rice, wheat, flour), reduced excise taxes	Supplementary feeding: for 5,300 (including pregnant or lactating women, children under 5	

⁷ GFRP Approved Projects do not include a Safety Net or Nutrition Component for Afghanistan, Rwanda, Niger, Honduras, Somalia

Country	Approval Date/ Status	Grant In US\$ million	Direct Transfers	Indirect Transfers	Nutrition	TA/Capacity
Kyrgyz Republic	12-Jun	6 (existing project)	Cash Transfers: increased benefits under established CCT's, increased by \$1 per month per family (avg benefit \$3.5) for 10 months from Oct 08		Nutritional supplements and nutrition education to 143,000 pregnant and lactating women, 500,000 children under 5	Develop rapid assessment tools, register vulnerable families, M&E Systems for targeted cash transfers
Moldova	07-Aug	7 (existing project)	Cash Transfer: to social institutions providing food to children, elderly , mentally or physically handicapped, during 08-09 winter season		Nutritional supplements for pregnant/lactating women, and children under 36 months	
Tajikistan	12-Jun	\$4 (existing project)			Vitamin A supplements and nutrition education for 200,000 women nationwide, iron and folic acid supplements for women in two oblasts, food packages for undernourished women receiving prenatal care, delivery or vaccination in primary health care centers in poorest areas	Growth monitoring equipment and national nutritional survey
Haiti	29-May	10 (existing project)	Cash Transfers: budget support to fill financing gap created by higher expenditures on social assistance. Income support: extension of feeding programs, 15,000 beneficiaries in school summer camps, 45,000 beneficiaries in Back to School Feeding scheme, 56,000 beneficiaries in family rations	Subsidies: fiscal space to support temporary food price subsidies		CCT Program Feasibility Work
Djibouti	29-May	5 (new project)		Subsidies: consumption taxes on 5 basic food items reduced to zero (rice, sugar, cooking oil, wheat, powder milk)		Support to explore expansion of SP schemes in place (school feeding, mother-child and workfare programs)
Yemen	26-Jun	10 (new project)	Cash for work program: community based, providing cash to 8,000-10,000 households			Capacity for Social Welfare Fund: national survey to enhance targeting system of cash transfers

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