Cambodia
Poverty and Social Impact of the Global Economic Crises: Using the Past to Plan for the Future

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Executive Summary

Main Findings

From early 1990s to 2007, Cambodia achieved considerable gains in living standards including a significant reduction on poverty incidence. These achievements occurred in both urban and rural areas and were experienced by rich and poor men and women. Poverty in Cambodia as a whole declined from 45-50% in 1994 to 35% in 2004 and to 30% in 2007; in the rural area it went from 39% in 2004 to 35% in 2007. The conclusion that poverty has fallen is indicated not only by the increased consumption and wealth but also by improvements in health and education outcomes. Households, including those in the poorest groups, have improved their housing quality; increased ownership of motorbikes, televisions and mobile phones; and are better able to access and afford schools and healthcare. Nevertheless, challenges on this front remain. Poverty is still pervasive in the rural areas and a multi-dimensional approach is needed to tackle it. The gap in income and opportunities remains wide between the rich and the poor, the urban and rural regions and more importantly, within the rural areas themselves.

While the country was exploring a range of policies and measures to address these poverty challenges, rapid global rising fuel and food prices started early in 2008 and continued until the last quarter of the year. Being a net importer of fuel and food, excluding rice, the rise in prices was immediately felt in Cambodia. The rural and urban poor, who had fewer means to cope with the surge in prices, were especially vulnerable and as a result, the overall level of poverty was expected to increase.

However, the situation was not as bad as people perceived it. Labor market in both urban and rural areas responded positively to the rising prices. Almost no one lost their job. For those who relied primarily on wage labor, such as the urban population who accounted for 20% of the total population and the rural landlessness who accounted for 10-20% of the rural households, the average hourly wage in constant terms declined only 1.3% allowing them to partly offset the price surge. Over one third of rural households (27% of total population) who owned more than one hectare of land benefited from the surge in rice prices. Many farmers also received benefits from higher prices of cassava, maize and soybeans. Other factors boosting the wellbeing of household during 2008 include previously accumulated wealth and borrowing, booming in property values across the country, increased private and public spending for the July 2008 national election and a highly mobile work force able to join in and out of different informal activities.

As a result, living standards continued to improve as revealed by information from the 2008 Cambodia Socio-Economic Survey. Analysis of data reported by 3,600 households indicated that while overall per capita consumption increased 2.4%, it increased 6% in the rural areas which accounted for 80% of the entire population and 90% of all the poor. Non-monetary indicators also confirm a rise in consumption expenditure. Households continued showing improvements in housing quality, increase ownership of motorbikes, televisions and mobile phones, with no signs of setbacks in major education and health indicators. With the consumption growth pattern that favored the rural population, poverty was
reduced by 9 percentage points to 21%. Without this new consumption growth pattern, simulations show that the poverty rate would have only been reduced by 2 percent points to 28%.

Nevertheless, there is no room for complacency with this sharp drop in poverty. Many households who managed to climb out of poverty are facing a higher risk of falling back because their capacities to cope with major shocks have been stretched mainly by reduced savings, limited lending capacity and lack of alternative jobs providing adequate returns. In other words, many households have now become more vulnerable to another shock. The high degree of vulnerability could be observed on the elasticity of poverty to consumption (percentage change on poverty due to one percentage change in consumption.) For over half of the population in Cambodia poverty elasticity is above 2.0, the average for developing countries in the region. Therefore, for a large share of households, small changes on their wellbeing can move them in or out of poverty. Another dimension of high vulnerability was reflected by the high proportion of transient poor. A study by the Cambodia Development Resource Institute to track movement of living standards of 1,000 households in 9 rural villages showed that 40 – 45% of sample households were falling in and out of poverty from 2001 to 2008.

It is clear that Cambodia has a serious nutrition problem which is only partially related to economic conditions. Malnutrition is prevalent among the bottom four income quintiles and no improvements were observed between 2008 and 2008 in Acute Malnutrition (changed from 8.4 to 8.9 percent), or in Underweight (changed from 28.2 to 28.8 percent). Poor quality water and deficient sanitation practices are good examples of why malnutrition remains a problem, even for the wealthiest households. Not only how much food is taken is important, but so is its quality. The ability of the body to absorb nutrients and make full use of the food intake is limited by health conditions. Problems like diarrhea, parasites and infectious diseases do have a negative effect on nutritional outcomes, even when enough calories are being consumed.

In short, there is enough evidence supporting that poverty actually declined sharply in 2008. However, this sharp decline was likely a onetime gain and could result unsustainable because of the following reasons. First, the rising cost of living and producing export products could threaten the country’s competitiveness in the garment and tourism sectors. Second, wage increases are unlikely any time soon. Third, gains in constant rice price are uncertain due to high price volatility and the increase of input costs. Fourth, wealth and other means to cope with further shocks have been depleted.

The increased level of household vulnerability by end of 2008 was exacerbated by the effects brought about by the global financial crisis. Full impact of the crisis was felt throughout 2009. Unlike 2008, labor markets could no longer shoulder the negative impacts. As a consequence, hundreds of thousands of jobs in the garment, construction and tourism-related services, were cut or affected due to closures of garment factories and hotels. The property sector bubble burst, and jobs in construction were hit by postponing or cancelling major investment projects. Data from the Cambodia Socio-Economic Survey showed that average monthly wages during the first six months of the year decreased 15% from 2008 to 2009. Workers adjusted to this economic situation to avoid extreme consequences and over two million new secondary jobs were created in the agricultural sector, mainly by women. More people were part
of the labor force, more people were working in agriculture, and more people had more than one job; however in the end, they were working less hours and their wages were drastically reduced. Constant rice prices were falling since April 2009 and continued decreasing during the rest of the year and, with an increased input cost, farmers margins were shrinking. This, together with lower wages, made the agricultural sector an alternative that only provided partial protection against the crisis impacts. The reduction in well-being is corroborated by the little or no improvement in housing quality and the smaller ownership of durables like motorbikes, televisions and mobile phones. This implies that the poverty reduction gain of 2008 was partly reversed in 2009.

During the crisis period of 2008 and 2009 the government and development partners continued with existing social programs and in some cases, like in the food programs, increased their coverage. Also in response to the crises, the RGC implemented a series of actions to improve the general economic conditions of several sectors of the economy. These policies were aimed at improving the health of the banking system, reducing the tariffs and taxes for the garment, agricultural and tourism sectors and promoting training programs for displaced garment workers. It is difficult to measure the effectiveness of individual policies but it is certain that the financial sector did not collapse and by 2010 was considered in good standing. Agriculture continued to grow during the food, fuel and financial crisis, and the tourism and garment sector experienced significant contractions in 2009 but have rebounded by 2011.

Like in many countries, the design of response measures was probably challenged by timeliness or unavailability of real-time and systematic information. The crisis also revealed the lack of an adequate information system able to provide the necessary information to better design responses to unexpected shocks.

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**Box 1. Important findings**

1990s-2007
- Cambodia made significant progress in almost all social indicators including health, education and poverty. However, this progress had a very low base, leaving much room for improvement.

2008
- Constant food prices did not increase for rural but did so for urban households (nominal food and fuel prices increased for everybody).
- In 2008, during the food and fuel crisis, consumption for the lowest three quintiles increased around 13% and overall conditions improved for the poor.
- Wasting and underweight were not related to the socioeconomic conditions of households.

2009
- Workers were highly mobile and during the first half of 2009 more than 2 million new jobs were created; unfortunately almost all of them were non-paid family farm activities by women holding a second job.
- Education provided partial protection against the 2009 financial crisis.
- Several quick surveys designed during the crisis provided information on the general impact on households and special groups. However, their scope and coverage was limited and were not enough to provide an appropriate picture the country or to guide policy decisions to deal with new and emerging problems on a timely manner.
POLICY RECOMMENDATIONS

The food, fuel and financial crises highlighted different strengths and weaknesses on people's ability to adapt to hard times. On the positive side, Cambodians had a high degree of job mobility especially between agricultural and non-agricultural activities. This was clearly illustrated by the significant share of women joining the labor market and/or taking a second job during the financial crisis. Also, the high concentration of people in the rural sector and their engagement in farming, shielded most of the rural population against the negative impact of the food price increase during 2008. However, the events also showed some of weaknesses that characterized many Cambodians, including their high dependency on low paid, informal jobs; lack of a solid social protection system able to respond quickly to unforeseen events; and low cash or in-kind savings to work as cushion for events lasting more than a few months. A high degree of vulnerability was another uncovered characteristic, were small changes in income, and therefore reductions in consumption, can move large shares of the population into poverty.

Policy recommendation are presented in two groups: those that are appropriate during an actual crisis, requiring more immediate and targeted responses, and those addressing structural issues to better prepare the country for unexpected events in the future. Probably the best strategy for individual households is a combination of both sets of recommendations suited for their specific conditions.

Short Term Policy Recommendations

Human Capital: Targeted training

During the financial crisis, workers in the garment, tourism and construction sectors were among the most vulnerable to changes in employment opportunities and struggled the most to retain their jobs or income levels. Workers in these sectors, especially garment and tourism, are not among the poorest in Cambodia; their incomes are above the national average, even among urban dwellers where most of them live. At the same time these workers are highly vulnerable to changes in their employment and, with very few alternative income sources and little savings to cushion even short periods of unemployment, losing a job can very quickly move them into poverty.

These vulnerable workers cannot be identified a priory and programs providing some relief should include self targeting characteristics to select beneficiaries, address the main problem (unemployment or underemployment) and facilitate their rapid integration into the work market. Towards that end, two types of short term targeted trainings are recommended: sector specific training and general skills (soft skills) training.

Sector specific training is recommended when an industry has shed part of the workforce but is expected to recuperate in the short run (within 18 months or less). Training should aim at improving some already acquired basic skills and this will help select the beneficiaries. Some design characteristics, like the time of the training (during standard work hours) will also discourage people already holding a job from joining the program. Some minimum stipend should be considered to compensate/cover for food and transportation expenses.
“Behavioral soft skills” training is recommended when workers have been displaced from several sectors and there is uncertainty about future sector specific job opportunities. Behavioral soft skills are necessary in any job and include communication, work attitude, team work, self discipline, perseverance, and the ability to negotiate conflict and manage risks (World Bank, 2006). Improvement in soft skills is expected to also raise workers productivity, further increasing their chances of finding a new job. Both trainings should be short term training programs planned and executed jointly with private sector counterparts, with a flexible design able to adapt to changing conditions over time.

**Social Programs**

Limited saving or alternative sources of income have been identified as a major problem during the crises. To help workers during short periods of time, it is recommended to design and implement a modest unemployment insurance or savings plan. For example, a plan to provide an income supplement for up to six months (equivalent to three month salaries) can make a substantial difference and extend the ability of workers in the formal sector to have some minimum resources until a new job is found. Such schemes are usually comprised of both employee and employer contributions and these should be “portable” from one job to another.

To help informal workers, the Government of Cambodia could consider the establishment of self-targeted Public Work Programs. By paying an amount close to the reservation wage, only the unemployed or the severely under-employed would have a strong motivation to join the program. In order to cover as many people as possible, participation in the program should be limited to a maximum number of months. Also, by selecting projects valuable to the communities, the benefits of such programs could be enjoyed by a wider share of the population beyond the direct beneficiaries, promote local organizations and create stronger community relationships.

Food distribution programs have been already established in Cambodia. Several studies showed that during the food, fuel and financial crises, these types of programs were the most popular and appreciated by beneficiaries and the population in general. Also, during the crisis, several food distribution programs were able to expand and to cover a wider share of the population. It is recommended to keep the food distribution programs in place and to continue improving the mechanisms used to target the poorest and vulnerable. During 2008 food and fuel crisis, food prices in Cambodia’s urban areas increased faster than inflation; at the same time, nutritional studies provided strong indication of increased nutritional problems in the urban areas. It is recommended to put attention to areas of the country were food prices increase faster than overall inflation due to the tendency of households to decrease food consumption in favor of other goods and services under such circumstances with negative impacts on nutrition.

**Economic facilitation**

During the 2008 food and fuel crisis a common strategy used by households in trouble was to borrow money from formal and informal lenders. Before households were able to repay the loans, the financial crisis impacts were felt in Cambodia and households were struggling to find new sources of money and repay previous acquired loans. The bigger loans were used for production purposes, but the most frequent type of loans were partially used to complement households’ income and bust their
consumption. Regardless of the loan size, the instruments of the financial institutions were not
designed to accommodate one crisis after another and, more importantly, were not flexible enough to
adapt to the changing conditions.

The recommendation is for the Government of Cambodia to design an appropriate mechanism to
provide support through the established financial institutions, in case a similar situation arises in the
future. At this point is not clear what the best way is to promote the introduction of more flexible
lending mechanisms and options; government-supported loan insurance or guarantee provider should
be analyzed and considered.

**Information systems**

**Establishing a continuous employment survey providing timely information on the conditions and
characteristics of the labor force can be a very useful tool for policy makers.** Current information on
labor conditions in Cambodia is available only for a small share of the labor force concentrated on the
garment industry. Albeit the importance of the garment segment, it only represents around five percent
of the total labor force and does not include the poorest workers. A continuous labor survey can also
provide early warnings to emerging problems and detect unexpected changes. As one of the main users
of such a survey, the National Employment Agency should be involved on its design and help provide
linkages between these data and policy makers.

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**Box 2 Short Term Policy Recommendation**

**Abstract**

**HUMAN CAPITAL**

Establish a joint Public-Private sector small scale training program to improve sector specific skills and general
behavioral soft skills of workers. The small scale program should work as the basis for a more extensive operation
in the case of future crisis and provide targeted training to displaced workers in vulnerable sectors.

**SOCIAL PROGRAMS**

Set up a savings/unemployment scheme to increase formal workers ability to weather out short periods of
unemployment. For informal workers, especially in the rural areas, a public works programs can provide similar
relief during short periods of time to the unemployed or seasonable unemployed.

Secondary message: keep the existing food distribution programs and keep improving mechanisms to reach the
poorest and most vulnerable, paying attention to areas of the country with possible food shortages and with food
prices increasing faster than inflation.

**ECONOMIC FACILITATION**

Promote more flexible type of lending mechanisms that take into consideration changing conditions in the face of
generalized crisis in the country. No specific recommendation is made beyond exploring the alternatives to be
prepared for possible future crises.

**INFORMATION SYSTEMS**

Design a continuous employment survey with current information on the conditions of the labor force in Cambodia
and provide early warnings during a crisis.
Long Term (Structural) Policy Recommendations

Human Capital
Increasing human capital through formal education is one of the best long term strategies to improve the socioeconomic conditions of the people. Access to primary education in Cambodia significantly increased reaching 86.7 percent of children six to eleven years old in 2008. Even for children in the poorest quintile, access increased to 82.5%. During the financial crisis, formal education was one of the few characteristics that partially shelter workers from major wage reductions.

Efforts to expand primary education access should concentrate in rural areas. Almost all children not attending school (93.1 percent) live in rural areas and efforts to make primary education a truly universal service in Cambodia needs to promote school attendance or provide better access to rural households. More attention should be given to the age of children at graduation from primary education. Given the high coverage levels in primary education, the government of Cambodia should start looking at other issues, mainly aspects related to children finishing the first six years of education on time: entry age, promotion and dropout rates.

Secondary education has two almost equally important limiting factors in Cambodia: access and age of students. Indeed, 56.5 percent of children 13 to 17 years old are not attending secondary, but not all of them are out of the school system: half are in primary education. Access and education levels at ages 13 to 17 are especially low for the poorest three quintiles in urban households and for the poorest four quintiles in rural areas. The over aged students attending a specific grade is a problem that has to be addressed at the primary education level; any improvement at that level will benefit secondary education performance. To address the economic reasons for not going to secondary school, expansion of the scholarship programs and/or a Conditional Cash Transfer program for education is recommended. To improve access to secondary education, two issue need to be addressed: discouraged students mentioned by almost a quarter of children not in school, and economic reasons, mentioned by almost 62 percent of the time. Unexpectedly, there is almost no difference between males and females in reporting “contributing to household income” or “helping with household chores” as the main reason for not attending school.

Social Programs
Targeting of social programs was one of the most important recommendations on the Social Protection Strategy prepared by the government of Cambodia in 2010. Targeting does promote the use of limited resources on a rational and fair manner, allocating them where they are needed the most: the poor and the vulnerable.

Social programs aimed at the poor and vulnerable have to be directed at rural households with only small interventions on urban areas outside Phnom Penh. Even after taking the vulnerable into consideration, around 90 percent of the poor are in the rural areas and only about 8% live in the urban

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1 Access to education is defined here as the percentage of children attending school for a given age range.
2 The only other characteristic associated with smaller wage reductions was people living in urban areas.
areas outside Phnom Penh. Resource allocation for social programs should reflect the high concentration of the poor living in the rural side of the country.

**Targeting mechanisms in social programs should include not only the poor but a much bigger segment of the population.** The socioeconomic conditions of Cambodian households are especially vulnerable to change; for example, an increase of 30 percent in the poverty line would translate in doubling the number of poor. Furthermore, half of the households in the country -the poorest- have similar characteristics including land assets, access to housing services, education, and family size. Any social program aiming at the poor and vulnerable in Cambodia needs to consider how similar households are and include a much larger than usual share of the non-poor as potential beneficiaries. This recommendation should be considered not only to establish social programs but also new programs like the Cash Transfer program being piloted in 2011.

The evidence base analysis in Cambodia indicates that other factor beyond total food intake play an important role in the nutrition conditions of the population; but the role of those factors is not well understood: how much do water quality, food handling, sanitation and cultural practices influence nutritional outcomes? Further analysis is needed on causes of malnutrition, including reasons behind increases in child wasting. International evidence suggests that implementing a comprehensive package of community-based and facility-based nutrition interventions can have a significant impact on child malnutrition, but such interventions have not yet been scaled up in Cambodia.

**Monitoring and evaluation should be an integral part of any social program in Cambodia.** Monitoring and especially evaluation of social programs is not a common practice. Unfortunately, not doing so limits the ability to identify strengths and weaknesses on most programs making it difficult to modify them and maximize the impact of interventions. The government of Cambodia has a lot to gain by requiring a well-defined plan for monitoring and evaluation of the social programs including financial and administrative processes, implementation, service delivery, and impact.

**Promoting agricultural activities**
Farming, and especially rice cultivation remains not only the main activity for rural households but also the single most important item of consumption in Cambodia. During the food and fuel crisis, farmers were able to capture the benefits of higher rice prices and more than compensated for the negative impact with significant increases in their per capita consumption. The rural sector also provided partial protection against the financial crisis by providing almost all the new jobs created during that period.

**To benefit the poor and vulnerable, agricultural policy should promote yields’ increase by encouraging a more intensive use of inputs targeted to small size farms.** In 2008, Cambodian rice productivity of 2.6 tons per hectare remained very low compared to that of other countries in the region; for example, the average yields in tons per hectare were 3.5 in Laos and 4.9 in Vietnam, countries with similar agro-ecological conditions to Cambodia. Better yields can be achieved by infrastructure investments (mainly irrigation), an increased use of inputs such as improved seeds, fertilizers, herbicides, etc., and the use of better practices necessary to take full advantage of a more factor intensive model of production. Facilitating a more intensive use of the land has to take into consideration that nine out of ten land plots
used by farmers are smaller than three hectares; technology promoted by extension services including light machinery, tools and farming techniques, as well as financial instruments (loans), inputs packaging, and others has to be tailored to meet the needs of these relatively small farms.

**Facilitate the creation of small scale processing industries to capture the full benefits of agricultural products and provide job diversification in rural communities.** Around a third of rural households has very small plots of land, less than a fifth of a hectare, or has no land at all. For such households job opportunities on the farming sector are mainly seasonal and do not provide a continuous source of income during the entire year. The creation of small scale processing industries would take advantage of the local knowledge and the proximity to the raw materials, add value to the local agricultural products, diversify the local economy and provide an alternative source of income for rural households.

**Information systems**

Taking full advantage of information sources already available in the country requires making them more accessible on a timely fashion and adopting better analytical practices to help bridge the gap between data producers and users. Information used as a tool for policy guidance has to be accessible, current and relevant. The degree of accessibility and the time it takes from collecting the data to presenting the results can be substantially improved by changing the design of the data gathering and the data entry processes. This is not an issue of working faster but of working in a different manner, including these principles among the already set objectives of the institutions collecting the information. Making the information more relevant to public policy in Cambodia requires a significant increase of communication between data producers and data users and a design of flexible data gathering instruments to adjust for emerging issues and changing conditions in the country.

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**Box 3. Long Term/Structural Policy recommendation abstract**

**HUMAN CAPITAL**
Concentrate efforts to ensure timely completion of primary education by promoting early entry, grade promotion and reduction of dropout rates.
Secondary message: provide economic incentives to increase secondary education participation.

**SOCIAL PROGRAMS**
Expand the use of targeting mechanisms used by social programs to include not only the poor but a much bigger segment of the population within rural households. Include the principle not only on existing programs but also in new ones like the Cash Transfer program to be piloted in 2011.
Conduct further analysis on causes of malnutrition on Cambodia and plan for implementing a comprehensive package of community-based and facility-based nutrition interventions.
Secondary message: require monitoring and evaluation of social programs as a standard practice looking into processes, service delivery and impact of the programs.

**AGRICULTURAL SECTOR**
Facilitate and promote a more intensive use of the land (i.e. more inputs, improved farming techniques, etc.) tailored to farmers with less than three hectares of land. Concentrate on rice, maize and cassava farmers.
Secondary message: promote and facilitate the creation of small scale processing industry of agricultural products on rural communities.

**INFORMATION SYSTEMS**
Strengthen the link between data producers and data users to provide relevant information for policy makers on a timely manner.
**The Early years 1990’s-2007**

**INTRODUCTION**

To be able to understand the impact and responses to the crisis, it is important to distinguish three periods in time: first, a period of high growth and significant reduction in poverty from the early 1990’s to 2007; second, 2008, the year of food and fuel price increases; and third, the period where the financial crisis hit Cambodia the hardest, the early 2009 and later on. This report is organized following these three periods and pays special attention to the different issues that characterized each of them. A final section providing an overall view is presented the end. There are some cross cutting themes, but they are mostly the underlying characteristics of the country and represent by far most of the dynamics, responses and lessons learned, useful to draw conclusions for future changes over time. Also, the timing of the events does not perfectly fit the periods chosen; the best cutting points were selected taking into consideration data availability. The document will mention especial cases when important shifts were observed during any period. The policy recommendations from the note were put forward in the executive summary and will not be summarized in the main text.

*Figure 1. GDP Growth in Cambodia, 1995-2009*

![GDP Growth in Cambodia, 1995-2009](graph.png)

While high economic growth is common in many countries, keeping such levels for long periods of time is rare. Cambodia experienced a long period of high economic growth from 1995 to 2007. It ranged from 5.0 percent of Gross Domestic Product (GDP) in 1998 to a high 13.3 percent in 2005 (*Figure 1*), with an impressive yearly average of 8.5 percent for the thirteen year period (6.4 percent using per capita GDP). The rapid growth improved real purchasing power by more than doubling income per capita, from US$285 in 1997 to US$593 in 2007.
MACROECONOMIC CONDITIONS

This rapid growth can be viewed as the product of three dimensions: (i) History and Geography including the peace dividend following the previous decade’s end of a multi-decade conflict, overall global growth in a dynamic East Asia region, and a transition to democracy; (ii) Use of Natural Resources including forests, fisheries, land (real state/construction) and touristic sites; and (iii) Improved Governance of Sector Specific Activities, specifically of the garment sector by providing the appropriate business environment in association with private enterprises, supervised by international organizations and in cooperation with export partners (World Bank, 2009).

The fast growth experienced during this period also had an impact on the structure of the economy. With 44.7 percent share of GDP, agriculture was the most important sector of the economy in 1995. By 2007 agriculture was displaced to third, behind Industry and Services\(^3\). Most of the decrease in the agricultural share was captured by Industry, and more specifically by the garment sector, substituting low productivity activities in the agricultural sector with higher productivity jobs in industry (Table 1).

Table 1. Shares of GDP by Sectors

<table>
<thead>
<tr>
<th></th>
<th>Agriculture</th>
<th>Industry</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>44.7%</td>
<td>15.1%</td>
<td>35.9%</td>
</tr>
<tr>
<td>2007</td>
<td>26.7%</td>
<td>28.2%</td>
<td>38.3%</td>
</tr>
<tr>
<td>Change</td>
<td>-18.0</td>
<td>13.1</td>
<td>2.4</td>
</tr>
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</table>

Source: NI of Cambodia, 2007

In assessing the changes experienced in this period, it is important to take into consideration that the starting point was very low. In 2005 Cambodia’s per capita GDP (in constant 2005 PPP) was only $796, barely above the $713 average for all low income countries in the world (Figure 2). After 2000,

\(^3\) Agricultural share decreased by 40.3 percent, while Industry almost doubled its 1995 shares (increased by 86.8 percent).

Cambodia per capita GDP increased faster than the low income countries and Lao PDR but the gap with Vietnam and developing nations in the region increased over time.

**Welfare Changes**

Despite the limitations of the economic growth experience during the 1994-2007 period, the improvement of living conditions for Cambodian people were substantial. Comparison of poverty estimates using data from 1993/94 and 2004 Socio-economic Surveys showed that poverty level declined from 45-50 percent to 35 percent or 1 – 1.5 percentage points per year. The reduction of poverty was clearly evidenced by an increase in real per capita consumption - a common indicator to measure standard of living - by 32 percent. As consumption growth between 2004 and 2007 became stronger than in the earlier period, poverty indeed continued to fall and at a faster rate. With real consumption increasing 21 percent in only three years, poverty dropped to 30.1 percent in 2007, suggesting that during this period, poverty was reduced by 1.6 percentage points per year (Figure 3).

Evidences supporting the claim of poverty reduction were reinforced by remarkable improvements in non-consumption indicators showing that between 1994 and 2007 people in Cambodia had better housing, more assets, and improved access and affordability to clean water and sanitation, health centers, and schooling. As a result, positive outcomes in health and education were possible.

The improvements in 2004-2007 also reached the poor in Cambodia. For example, the poorest 20% of the population increased ownership of motorbikes by 50 percent, television sets by 60 percent, and bicycles by one third. Also, important improvements were experienced by the same group in (i) access indicators such as distances to: all-weather road (decreased by 46 percent), health center (-36 percent), and primary school (-71 percent); and (ii) improved use of public services: net primary enrollment rate improved 19 percent and use of health care for the sick or injured increased by 16 percent.

Despite these remarkable improvements, Cambodia needs to continue working on a number of development priorities. Land is increasingly in the hands of the richest group (Rushdy, 2009), poverty is still widespread in the rural areas and a number of human development aspects - basic education,

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5 The 1993/94 and 2004 surveys are not fully comparable. The 1993/94 household survey only represented 59% of the country’s total villages. The comparisons are based in comparable sub-samples and are given to provide an idea of the evolution of poverty during the period. The CSESs from 2004, 2007, 2008 and 2009 were designed and implemented to allow comparisons over time.

6 Motorbikes are especially important in Cambodia due to very limited public transportation system, including in the urban centers.
maternal health, and environment – are likely to get the country off-track the Millennium Development Goal targets unless they are immediately intervened. In 2007, one in three persons still lived under the poverty line, which made the rural area a place where 90 percent of the total number of the poor resided.

During 2004-2007, the urban and the rich households benefited more than the rural and the poor. Population in Phnom Penh and other urban areas increased their real per capita consumption by more than twice compared to the rural population. Similarly, real per capita consumption of the richest quintile was almost three times higher than that of the poorest group (Figure 4).

As the trickle-down effect from growth was small and the procedures to redistribute benefits of growth were still weak, consumption inequality in Cambodia was high compared to its neighbors during the period of similar stage of development. The most commonly used measure of consumption inequality, the Gini coefficient, was 0.43 in 2007 up from 0.39 in 2004. This level of inequality was slightly lower than Thailand during its early development 1980’s but much higher than Viet Nam during 1990’s and Lao during 2000’s (Figure 5).
Contrary to perceptions, most of the inequality in 2007 as well as its rise were not due to differences between the urban and rural households. The widening gap among rural households was primarily responsible for the increasing of the country’s overall gap. The inequality measure known as the Theil index can distinguish between changes due to differences within regions and differences among regions. In 2007, differences among rural households accounted for over half the total inequality in Cambodia. Also, between 2004 and 2007, the Theil index showed that the increase in inequality within regions accounted for two-thirds of the increase in total inequality. Among the regions, the increase in gap within rural areas accounted for 41% of the total increase in inequality while differences among the regions accounted for one third (Figure 6).

**Figure 5.** Gini inequality in Cambodia and Neighboring Countries

**Figure 6.** Shares of Theil index for 2007 and for 2004-2007 changes
The Turning Point: 2008

Cambodia felt the adverse impact of the global financial and economic crisis in last quarter of 2008. The crisis was preceded by rapid rising fuel and food prices in early and mid 2008 combined with various transcontinental epidemic diseases, namely SARS, bird flu, and H1N1. While the country was coping with the negative impact of multiple crises, the situation in some part of the country - particularly in the North and Northeastern provinces – was exacerbated by typhoon Ketsana and flash floods. The typhoon damaged houses, rice crops, and livestock. The typhoon brought $132 million in total damage and loss to Cambodia (Cambodia Post Disaster Needs Assessment).

It is very difficult, if not impossible, to analyze the net impact of each crisis on poverty and human development because they came one after the other and at the same time. However, the consensus would be that these crises have diverted the reduction of poverty Cambodia has had in the past. Also, the crises did not happened in a vacuum: the effects came on top of existing processes of medium- to long-term social and economic change making it hard to distinguish secular trends from the effects of the crisis. These underlying trends include (i) a demographic transition that brings around 250 thousand young Cambodians into the labor market each year; (ii) environmental change and increasing privatization of what were traditionally open-access natural resources; (iii) increasing concentration of landholding; and (iv) the increasing commoditization of rural economic relations which in the past were based upon principles of inter-household reciprocity and a degree of social assistance.

ECONOMIC GROWTH

To help understand how the crises affected Cambodia, it is helpful to distinguish who was influenced and when the effects were felt. As mentioned before, it is almost impossible to differentiate the impact of each event that took place in 2008, but at least we can identify who was more likely to bear the consequences of changes during the year and their effect on poverty and welfare in general.

As Cambodia is a net importer of fuel and consumer of food despite being a net rice producer, it was believed that rapid rising of fuel and food prices would have wide distributional impacts on households. In addition, the fact that people panicked due to uncertain and unpredictable rising cost of living, made the prediction of increasing poverty likeliness a valid argument.

It has been pointed out that economic growth was drastically reduced in 2008. Indeed, per capita GDP growth decreased from 8.4 percent in 2007 to 5.0 percent in 20087 (Figure 1), but that is hardly a drastic reduction. For example, from 2000 to 2003, part of the period of economic expansion, average per capita GDP growth in Cambodia was 6.1 percent and included one year with a lower growth than that of 2008 (4.9 percent in 2002). Even by international standards, per capita GDP growth of 5.0 percent is considered robust and is not associated with hard times or macroeconomic crises.

Why was then 2008 perceived as such a bad year and, for example, 2002, with a lower GDP growth rate was not? There are two major differences between the two years that can help us understand the

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7 For welfare analysis per capita GDP growth is used here. Nevertheless, total GDP growth evolution is very similar reaching the same conclusions.
negative perceptions of 2008: first, 2002 was preceded and followed by higher economic growth rates making it easier to compensate over time for the slow down; after 2008 the economic growth was negative, having a compounding effect and making it much more difficult to smooth conditions over time; second, most of the economic slowdown in 2008 occurred in the fourth quarter of the year, leaving a lasting impression that reflected more the conditions of the last part and not of the entire year. Third, inflation in 2008 was 43.6%

2, increasing a sense of vulnerability and bringing about rapid changes not common in Cambodia (see Inflation and Prices section).

**LABOR MARKETS**

Most of the labor conditions changed only marginally in 2008. Indeed, unemployment rate and hours worked per week experienced only small decreases in 2008 (Table 2). Small reductions were reported for real hourly wages averaging two percent and for the share of people holding more than one job increasing by 1.3 percent with only minimum variations between the three main regions of the country. Only urban households outside Phnom Penh experienced important reductions on their wages.

**Table 2. Labor Changes in Cambodia 2007-2008**

<table>
<thead>
<tr>
<th></th>
<th>Year</th>
<th>Change 2007-08</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>2008</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Cambodia</td>
<td>0.7%</td>
</tr>
<tr>
<td></td>
<td>Phnom Penh</td>
<td>49.4</td>
</tr>
<tr>
<td></td>
<td>Other urban</td>
<td>42.4</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>38.9</td>
</tr>
<tr>
<td></td>
<td>Cambodia</td>
<td>40.1</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Phnom Penh</td>
<td>3,039</td>
</tr>
<tr>
<td></td>
<td>Other urban</td>
<td>1,853</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>1,386</td>
</tr>
<tr>
<td></td>
<td>Cambodia</td>
<td>1,710</td>
</tr>
<tr>
<td>Average hourly wages in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant Riel</td>
<td>Phnom Penh</td>
<td>4.2%</td>
</tr>
<tr>
<td></td>
<td>Other urban</td>
<td>15.5%</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>16.9%</td>
</tr>
<tr>
<td></td>
<td>Cambodia</td>
<td>13.5%</td>
</tr>
<tr>
<td>More than one job</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| a percentage points; b percentage.

Source: World Bank Staff calculations based on 2007 and 2008 CSES surveys (NIS Cambodia)

Regardless of only small changes in labor indicators, the perception is that in 2008 labor conditions worsened. Some of the perceived deterioration can be explained by the increased instability reflected in the high number of layoffs and hiring experienced in the second half of 2008 and the beginning of 2009. According to Ministry of Commerce official estimates, over 70 thousand garment workers lost their jobs after October 2008 as a result of about 70 factories closing. More official estimates indicated a decrease in the actual number of garment workers by over 28 thousand or 6.8 percent in 2008.

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8 Inflation reported here is based on information from the 2007 and 2008 CSES. Official inflation in 2008 is around 20%.

A second reason for the negative perception in the labor market is related to changes in real wages for specific sectors. From 2007 to 2008, real wages behaved very different depending on the sector. Decreases in real wages were experienced by garment sector workers (-5.8 percent) and workers in the tourism sector (-3.3 percent) (Table 3). On the other hand, construction workers’ real wages increased by 4.6 percent and agricultural workers experience and increase of 15.7 percent on their real wages. This factor alone helps to explain a lot of the dynamics experience in Cambodia in 2008, where garment and tourism workers, concentrated in the urban areas, saw their purchasing power decrease; while agricultural workers, representing around half of the workers main occupation and living in the rural and poorest areas of the country, saw real wages significantly increase.

Since no panel data is available to track movements of workers between the different sectors, it is not possible to identify the impact of higher salaries in one sector over the others. Nevertheless, among the four sectors in Table 3, low skill construction and agricultural workers have the closest profiles and possibly the higher agricultural wages attracted people previously engaged in construction, reducing the labor supply and preventing a reduction of construction wages. It is common in Cambodia for people living in rural areas to wait until construction jobs are available and temporarily migrate into the urban areas. It is certain that higher wages in the rural areas will reduce such migration.

### Table 3. Change in Hourly Wages 1st. and 2d. Job, Cambodia 2007-2008

<table>
<thead>
<tr>
<th>Sector</th>
<th>Riels/hour</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Garment</td>
<td>-83.81</td>
<td>-5.8%</td>
</tr>
<tr>
<td>Construction</td>
<td>71.09</td>
<td>4.6%</td>
</tr>
<tr>
<td>Tourism</td>
<td>-62.28</td>
<td>-3.3%</td>
</tr>
<tr>
<td>Agriculture</td>
<td>147.50</td>
<td>15.7%</td>
</tr>
</tbody>
</table>

Source: World Bank Staff with 2007-2008 CSES

### HOUSEHOLD WELFARE

To assess changes in households’ welfare in 2008 two national sources of information are used: the Cambodian Socio Economic Survey (CSES), providing information at the household level on multiple socio economic aspects; and the Commune Database (CDB), based on annual statistic reports from data book records at the village level collected by village chiefs and commune/sangkat clerks.¹⁰

In 2008, average consumption improved in Cambodia. From 2007 to 2008 the daily average real Per capita consumption increased 2.4 percent from R. 5,798 to R. 5,938 (Figure 7) with important variations according to the region where the household was located. Rural households, where most of the poor are located, reported the biggest relative increase (5.9 percent), followed by people living in Phnom Penh (3.3 percent), but very different from the 14.4 percent decrease in other urban areas.

At the same time important distributional changes took place in 2008. The increase in consumption was higher for households in the lower quintiles (as a proportion of their consumption levels). In other words, the consumption growth was pro-poor, increasing consumption for the lowest quintile by 14.9 percent and decreasing consumption for the richest quintile by 5.7 percent. The data suggest that most of the negative effects of the 2008 crises were felt by the better-off part of the population (Figure 8).

¹⁰ Information collected each December, nationally representative since 2006, and includes several indicators related to local socio-economic conditions.
The final impact in poverty rates was a reduction of extreme (food) poverty of 6.2 percentage points and of overall poverty of 8.8 percentage points. While most of the reduction was in rural areas, important changes also occurred in urban areas outside Phnom Penh, with a reduction of overall poverty from 21.3 to 16.2 percent \(^{11}\) (Table 4). Initial decomposition analysis of the change in poverty shows that, without the redistribution changes, overall poverty would have decreased only by 1.9 percent in Cambodia (compared to 8.8 percent), and Urban poverty outside Phnom Penh would have increased by 9.3 percent (Knowles, 2009).

### Table 4. Poverty Evolution in Cambodia 2007-2008

<table>
<thead>
<tr>
<th></th>
<th>Extreme (Food) Poverty</th>
<th>Overall Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007(^{12})</td>
<td>2008</td>
</tr>
<tr>
<td>Phnom Penh</td>
<td>0.1%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Other Urban</td>
<td>13.0%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Rural</td>
<td>19.9%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Cambodia</td>
<td>17.3%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

\(^{a}\) In percentage points. Source: (Knowles, 2010)

There is enough evidence within the CSES and other sources supporting a poverty decrease, but it is believed the estimated values overstate such a reduction. The size of both surveys is small and confidence intervals are substantially wider than the bigger 2004 and 2009 rounds. Within the confidence intervals headcount, reduction could have been as small as 1.7% points (extreme poverty)

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\(^{11}\) Phnom Penh poverty levels are already close to zero and no reduction is expected to occur.

\(^{12}\) 2007 poverty estimates were revised to better take into account rates of inflation over the year.
and 3.0% points (overall poverty). Also, 2008 was a year of high inflation in Cambodia and the country was not prepared to accurately measure changes in purchasing power averaging 3.3% per month\textsuperscript{13}.

Improved conditions in 2008 also reached the poor. For the poorest 20 percent of Cambodians, having a cell phone more than doubled, motorbike ownership increased by over half reaching 20%, and use of video player increased by a third. Modest improvements were also experienced by this lower quintile of the population in net enrollment rates in primary (from 78.5 to 79.9 percent) and secondary education (from 12.5 to 13.1 percent). Some housing characteristics also improved, especially access to electricity (from 40.5 to 44.7 percent). Birth rates in health facilities improved substantially for the poorest households from 20.6 percent in 2007 to 29.4 percent in 2008, an increase of almost half. At the same time other health indicators deteriorated in 2008 like vaccination cards (-5.9 percentage points) and children under two with three DPT doses (-6.1 percentage points) (source 2007 and 2008 CSES).

**Figure 9.** Socioeconomic Indicators from the Commune Data Base, Cambodia 2006-2009

<table>
<thead>
<tr>
<th>a. Children 6-14 years Old Out of School</th>
<th>b. Access to Water for Rural Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Graph" /></td>
<td><img src="image2" alt="Graph" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>c. Under Five Mortality Rate</th>
<th>d. Civilian Casualties per 100,000 People</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Graph" /></td>
<td><img src="image4" alt="Graph" /></td>
</tr>
</tbody>
</table>


The Commune Database (CDB) relates community information with household level characteristics. By tracking information at the community level every year, an estimate of household characteristic is produced. One of the advantages of using the CDB is that it reflects the opinion of community members and how they perceive the conditions on their own village, therefore incorporating real changes as well.

\textsuperscript{13} The average 3.3 percent monthly inflation is estimated using the 2008 CSES unit values information from food purchases reported by households and from community questionnaires for non-food purchases. The average shares of food and non-food items for all Cambodians were used: 40 percent food and 60 percent non-food.
as expectations, fears, vulnerabilities, and overall sentiments otherwise not included in alternative measures.

Similar to the CSES household surveys, the CDB shows improved conditions in 2008 in a range of areas, including school attendance, access to water by rural populations, and under five mortality rates (Figure 9.a, b, and c) among other indicators, all showing better conditions in 2008 with the exception of civilian casualties (Figure 9.d).

**Vulnerable Households**

The slowdown of the economy in 2008 concentrated among three “vulnerable” sectors: garment manufacturing, construction, and tourism. Within these sectors, the shares of jobs are higher in the urban areas, 14 percent, compared to only 7 percent in rural households. Garment jobs are concentrated in Phnom Penh, construction jobs have the highest concentration in other urban areas, and tourism is distributed in all urban areas\(^\text{14}\). Rural households have low shares of jobs in any of these three sectors.

Richer households in Phnom Penh have the highest share of “vulnerable” jobs of any other group including poor households or households in other urban or rural areas. According to the 2007 Cambodia Socio-Economic Survey, households with a majority of jobs within the “vulnerable sector” were more common in the richest quintile (almost eight out of ten) than in the poorest quintile (around three out of ten households).\(^\text{15}\) “Agricultural income is a relatively important source of income in poorer households, while both business income and other sources of income (including remittances and transfers) are relatively more important in richer households (Knowles, 2009). Rural households were marginally affected by changes in the “vulnerable jobs” sectors and were also able to benefit from increased commodity prices. Urban areas were especially impacted by the slowdown in economic activity, with households in Phnom Penh better prepared for it: a more dynamic economy to find alternative income sources, lower poverty, and higher consumption levels than households residing in other urban areas.

In general, vulnerable households are those with a high probability of a negative shock and low capacity to compensate for it. It is usual for poor or near poor households to use most of their resources to meet some basic food and non-food needs and to have very limited resources to face new and unexpected adversities. Savings, in cash or in kind, are not particularly high in Cambodia and neither is the capacity of community organizations to provide help in case of needs. At the same time, it does not take that much for near poor households in Cambodia to become poor: small changes in the level of consumption by households near the poverty line will result in becoming poor. Indeed, using the 2008 CSES survey,

\(\text{14}\) The “tourism sector” includes, among others, hotels, restaurant services, and the travel and transportation sector which are highly concentrated in the urban areas.

\(\text{15}\) 2007 was chosen to reflect the conditions before the crises impacted Cambodia and to be able to differentiate the actual economic structure resulting from the effects of the crisis.
the elasticity of poverty to changes in consumption was estimated at 3.1, meaning, for example, that a decrease of consumption by one percent will lead to an increase of poverty by 3.1 percent.\(^{16}\)

Compared to other countries, Cambodia’s poverty elasticity is very high. In 2004, the Asian Development Bank estimated the elasticity of 51 developing countries to be around 1.5 (Asian Development Bank Institute (ADBI), 2009). In the same study the average elasticity for countries in East, Southeast, and South Asia was estimated at 2.0, a value considerably lower than the Cambodian 3.1 poverty elasticity. The level of vulnerability is not only used for households with consumption values around the poverty line. Using the 2008 CSES, the elasticity of poverty to consumption was estimated at several points in the distribution and a line was fitted (Figure 10). The results show high elasticity values for the majority of the population; for example, for more than half of the population the elasticity value is above the regional average of 2.0 (developing countries in Asia).

With high elasticity values, poverty statistics are going to be very sensitive. Small changes experienced by households and imprecision inherent in the estimate of wellbeing can have a much bigger effect than expected in Cambodia’s poverty numbers. Researchers and policy makers should be aware of this and be able to interpret changes over time more cautiously than usual. Use of other indicators to track wellbeing over time is highly recommended, especially those that tend to be more stable or structural. Also, some of the characteristics of poor households are not different from those of a significant share of the population. In 2008, poor households’ size of around six persons was only half a person larger than the national average. Even families in the deciles four to ten were only half a person or less smaller than the national average (Table 5). The percentage of people who owned or operated land is also very similar for the first 7 deciles in Cambodia: 75 to 85 percent.

Table 5. Household Size and Land Use in Cambodia, 2008

<table>
<thead>
<tr>
<th>Decile</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate or owns land</td>
<td>79%</td>
<td>83%</td>
<td>76%</td>
<td>83%</td>
<td>85%</td>
<td>79%</td>
<td>75%</td>
<td>67%</td>
<td>54%</td>
<td>30%</td>
<td>71%</td>
</tr>
<tr>
<td>Household Size</td>
<td>6.4</td>
<td>6.1</td>
<td>6.0</td>
<td>5.4</td>
<td>5.2</td>
<td>5.2</td>
<td>5.1</td>
<td>5.0</td>
<td>5.0</td>
<td>5.2</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Similarities between the poor and important shares of the non-poor are also present in housing services and education attainment. Sanitation, access to electricity and water, cooking with gas, kerosene or

\(^{16}\) Not to be mistaken by an increase of 3.1 percentage points. For example, for the 2008 poverty value of 20.7%, an increase of 3.1 percent is equivalent to an increase of 0.6 percentage points for a total incidence of 21.3%.
electricity, and school attainment for 7 to 18 years old are virtually the same for the poorest forty percent of the population (Figure 11 and Figure 12). For some specific characteristics, the similarities are extended to a wider share of the population: 50 percent for “Piped Water in Property”, 60 percent for “School Attainment”, and an impressive 80 percent for families “Cooking with Gas, Kerosene or Electricity”\textsuperscript{17}.

\textbf{Figure 11.} Housing Characteristics by Decile, Cambodia 2008

Given the high elasticity of poverty and the similarities between poor and many non-poor households in Cambodia, it is important for policy makers to pay special attention to questions like: when is it valid to target the poor and when should a program be aimed at a wider audience? How difficult is it to differentiate the poor when targeting is recommended? How functional is the poverty classification currently used in Cambodia? One could argue that if there are only small differences between the poor and other groups of the population, it does not make much sense to target only the poor and a different approach should be taken.

\textbf{Figure 12.} Years of Education Completed by Age and Quintile, Cambodia, 2008

\textsuperscript{17} Similarities in Figure 11.a are identified by how flat is each individual line. For Figure 11.b, similarities are identifies by the distance between each of the quintile lines.
**Inflation and Prices**

Rapid inflation in 2008 was mainly caused by increasing world demand of cereals, and to some extent local demand as well, due to high growth during the preceding years. At the same time, supply contracted or was more costly due to increasing fuel costs. It is hard to determine the causality, but demand-supply factors were key in pushing up rapid prices in 2008.

As mentioned earlier, 2008 was a year with high levels of inflation averaging 3.3 percent/month with important differences between regions. Food inflation was similar in all three regions of the country with values around 45 percent, but non-food inflation was significantly higher for rural households (47.7 percent\(^{18}\)) than urban households (21.1 percent) (**Table 6**). High inflation rates are by themselves a detriment for household welfare especially for the poor, because they increase uncertainty to an already vulnerable sector of the population and require new strategies to cope with rapid changing conditions, including relative prices.

The increase in food prices creates an incentive for households to reduce food consumption, or at least to substitute for cheaper, lower quality food items, having significant adverse effects on people’s nutrition, especially that of children and the elderly. This was the case for urban households in 2008 when food products became more expensive compared to non-food items. The 2008 Cambodia Anthropometric Study supports this idea by showing that the urban region may have been especially more sensitive to the relative food price increase than rural households\(^{19}\). “In urban areas consumption of nearly all food groups (12 of 14) has decreased and mean food group consumption has dropped from 5.4 to 4.8. Consumption of meat and fish has dropped 14 percentage points. Perhaps the most alarming finding is that the percentage of wasting among urban has risen from 9.6 percent in 2005 to nearly 16 percent in 2008.” (National Institute of Statistics, 2009)

But evidence also suggests that if there was a change between 2007 and 2008, it was related to other factors beyond wealth. Wasting (Weight for Height) is the most responsive indicator to short term changes in children dietary practices; as such, values observed in 2008 should reflect, up to certain extend, changes observed during the previous period. In 2008, prevalence of wasting in Cambodia was 8.9 percent with only small variations among wealth quintiles; for example, for the highest wealth quintile, wasting was estimated at 8.9 percent, compared to 8.6 percent for the lowest quintile. More important, the 8.9 percent rate in 2008 was slightly higher than the 8.4 percent rate reported in 2005.

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\(^{18}\) “Clothing and Footwear” and “Housing and Utilities” represent almost half the basket used to measure non-food inflation. The inflation rates for these two groups were around 60% in 2008, and together accounted for 33.8 percentage points of the total 47.7 percent inflation rate.

\(^{19}\) No definitive statement can be made since the information compares results from 2005 with 2008.
Underweight (Weight for Age), with a prevalence rate of 28.2 percent in 2005 did not improve by 2008: 28.8 percent and is somehow related to wealth status. Nevertheless, even children in the wealthiest quintile have high incidence rates of 19.3 percent, around seven times higher than those in healthy populations. Stunting (Height for Age) did show remarkable improvement from 2000 to 2005 (79.7 to 43.2 percent), but only a modest reduction after that reaching 39.5 percent in 2008.

It is clear that Cambodia has a serious nutrition problem which is only partially related to economic conditions. Some of the nutritional indicators are independent of household’s wealth and, even when nutrition improves with the socioeconomic status, serious problems remain for the country as a whole, including the richest 20 percent of the population. Poor water and sanitation has been associated with increased malnutrition (Age-specific determinants of stunting in Filipino children, 1997) while access to better water quality and sanitation can reduce the risk of nutritional problems (Risk factors for wasting and stunting among children in Metro Cebu, Philippines. Am. J. Clin. Nutr. 63, 966–975., 1996). Not only how much food is taken is important, but also its quality. The ability of the body to absorb nutrients and make full use of the food intake is limited by health conditions. Problems like diarrhea, parasites and infectious diseases do have a negative effect on nutritional outcomes even when an appropriate diet is in place.

Despite improvements in water over the previous years, by 2008 only 42.2% of Cambodians had piped water and 61.5 percent had no access to toilet facilities. Less than half of the poorest 40 percent has access to electricity. These factors, as well as overall household customs (hand washing, food preparation, presence of animals and insects, etc.) are probably keeping malnutrition incidence rates higher than expected in Cambodia.

**RICE PRICES**

Among the different agricultural crops produced in Cambodia, rice is by far the most important for several reasons: it accounts for the largest area planted in 2008 (around 80 percent), has the largest crop value (around 77 percent of all crops), and is the most common food item in the country. An example of rice importance in Cambodian culture can be found in the language; for example the word “kitchen” is composed by two words: room and rice, and the word for “dining room” is the combination of two words: room and rice.

Rice prices in Cambodia significantly increased in 2008. Indeed, the price of No.1 quality rice (Phaka Kanhey) increased from values close to Riel 1,500/Kg. in 2007 to around Riel 3,000 in 2008 (May to October). Even after taking into account inflation rates, rice constant price increased at least 24 percent, and as much as 61 percent between May and December 2008, a period including harvests and most of the sales done by farmers (Figure 13). It is reasonable to conclude that farmers in the rural

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20 This includes people reporting the use of “Open Land” or having no toilet at all.

21 Most of the rice is harvested during this period and the majority of sales take place shortly after harvest.

22 Year on year comparisons. To deflate over time, the 2007 and 2008 CSES unit value and price information for Phnom Penh was used for real price increases in 2008. For 2009, the Food CPI from NIS was used. Both used the same weight (44.8 percent) for food components.
areas were able to capture part of the benefits from the increased rice real prices, explaining in part the real wage increase in agriculture reported earlier.

The increase productivity in the rural areas also fueled the real estate boom already under way in Cambodia. Prices for agricultural property increased from 22.4 to 75.0 percent depending on the type of land (World Bank, 2010).

**Figure 13. Rice (No.1 quality Phaka Kanhey) Prices in Phnom Penh, Cambodia 2007-2010**

![Figure 13](image)

*Source: Consumer Price Index, National Institute of Statistics*

**OTHER FACTORS IN 2008**

During 2008, private spending on building rural roads, pagodas, schools, and irrigations and other charity activities were higher than the total budget allocated by the Government and Development Partners at the commune and district level. A nationally representative survey conducted in July-August 2010 by the Cambodian Economic Association showed that total private spending had been US$66 million in 2007 and US$55 million in 2008; of these amounts, around one third came from political parties - US$22 million in 2007 during the elections to choose commune council and US$18 million in 2008 during the elections to choose parliamentarian and new government. This spending was much higher than the

**Figure 14. Private and Public Expenditures at the District and Commune Levels**

![Figure 14](image)

*Source: CEA’s Off-budget Study for WB (2010)*
government and donor fund transfer to commune and district authorities and its share was around 3-5 percent of total Government spending (Cambodia Economic Association, 2010).

Variations among different villages are not detected on average regional estimates and hence, sectors of the population that have not benefited as much by the overall improvements or that have even experienced a downturn of their socioeconomic conditions can be hiding. Evidence of the variations in performance can be found in a study tracking nine villages in 2001, 2004, and 2008 (CDRI, 2010). Using quantitative and qualitative methods the study classifies the villages in strong performer (six villages) or poor performers (three villages). All strong performers reported poverty decreases averaging 18 percentage points between 2004 and 2008, while all poor performers had poverty increases averaging 5.1 percentage points\(^{23}\). Among strong performance villages poverty rates ranged from 8 to 23 percent while for the poor performance villages the range was from 47 to 75 percent. Also, for 2008 the strong performance villages had their major source of income related to the land: for three villages, land sales were the major source of income; for two other villages it was rice and crops; and for the last one, it was community property resources, normally associated with forest and other common land assets. Interesting enough, for the poor performance villages, no single source of income stands out in 2008\(^{24}\).

\(^{23}\) For the entire 2001-2008 period, strong performers’ poverty reduction was 21.6 percent on average whereas poor performers decreased poverty by only 1.8 percentage points.

\(^{24}\) The eight income sources were: rice and crops, livestock, self-employment, wage labor, community property resources, remittances, land sale, and other.
The Crisis Year and Beyond: 2009 and Later

By 2009 overall conditions in Cambodia were deteriorating and the impact of the financial crisis was being felt in several fronts. For once, constant per capita GDP experienced the first contraction in over 14 years: a 3.7 percent reduction in contrast with the 6.3 percent positive average growth of the previous 13 years (Figure 1). Important drivers of growth such as the garment sector experienced a reduction of 7.8 percent in January 2009 (year to year), tourist arrivals by air also decreased 8.8 percent, and number of construction projects approved in Phnom Penh decreased to less than 40 (from a yearly average of 60 in the previous three years) (World Bank, 2009). Also Foreign Direct Investment, accounting for three quarters of the capital, contracted by 50 percent in 2009. With an annual growth rate of 5.4 percent, agriculture was the only sector able to maintain growth rates similar to 2008 (5.7 percent) and to the 2001-2007 period (6.2 percent) (National Institute of Statistics, 2009).

Changes in the Labor Market

The financial crisis of 2009 was characterized by important changes in the labor market that included an increase in the share of workers in agriculture, an elevated number of job losses and new jobs created, increased labor participation by women, more than doubling the share of workers with two or more jobs, and a drastic reduction on hourly wages during the first part of 2009. The net impact was mostly negative for Cambodians and the changes suggest that workers were adjusting to economic shifts more as an option of last resort than as a free choice. In other words, people were not looking to improve their conditions (compared to 2008) as much as finding a way to avoid extreme consequences.

After several years of declining agricultural shares in the labor market, they increased to 60.3 percent in 2009 (a gain of 7.7 percentage points) (Figure 15.a). At the same time, services (including trade) had a 6.6 percentage point reduction of work share participation between 2008 and 2009, accounting for most of the increase reported in agriculture. The garment industry net work force was further contracted by over 43 thousand jobs or 13.2 percent (over half of the job reductions in 2008) (Ministry of Commerce Official Statistics, 2010) with a total of 34 thousand net job loss specifically reported in the months of February and March.

The crisis period was characterized by elevated numbers of job losses and new jobs created. Indeed, in 2009, around 720 thousand net jobs were lost, with services and trade accounting for most of the losses (78.8 percent); at the same time, an impressive 2.28 million net jobs were created, mostly in agriculture.

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25 In 2009, construction expanded 5.0 percent, a similar value as that of 2008 (5.8 percent), but well below the 25.0 percent reported in the 2001-2007 period.
26 Comparisons including 2009 information are based on the first six months of the year due to data limitations at the time.
27 The term net job losses refers to an initial classification for each sector as a net job gainer or as a net job looser (each sector has to be in one and only one of those two groups). For the total net job changes, values of both groups are added. As such, the real total number of jobs created and destroyed is understated; for example, for a
Looking only at the total number of jobs created does not provide a complete picture of the labor conditions in 2009. By disaggregating the characteristics of the net total jobs created, it is clear that the quality and types of jobs are mostly alternatives taken by households in response to worsening conditions: more than 100 percent of total jobs created were non-wage jobs in the agricultural sector\footnote{Values above 100 percent are possible because there were net total reductions of wage jobs (-9 percent) and urban jobs (-14 percent)}. Also the new jobs are not the main activity for individuals but represent almost entirely (99 percent), secondary jobs (Bruni Lucilla, 2010).

\textbf{Figure 15.} Labor Markets Indicators in Cambodia 2004-2009

The total increase in jobs observed in 2009 came from three different sources: increase in the labor force (population growth), increase in the labor force participation and, most important, increase in the share of workers with two or more jobs. From 2008 to 2009, labor force participation increased from 77.4 to 82.0 percent with women leading the change, namely 6.9 percentage point increase compared net job looser sector, the number of jobs reported here is the product of a higher number of actual jobs lost, minus the actual number of jobs created.
to only 2.1 percentage point increase by men (Figure 15.b). But the biggest share of new jobs came from secondary activities of people already working. The share of workers with a second or third job jumped from 18.2 percent in 2008 to 39.7 percent in 2009, with very similar growth rates between males and females (Figure 15.c). The influx of workers to the rural areas engaging in unpaid family activities and into paid agricultural work represented a temporary measure which included people already in the rural areas and also the return of previous migrants from the urban centers.

More people were working and more people had a second or third job, but total hours worked per week decreased from 38.8 to 36.8 (a two hour reduction). While urban households slightly increased hours worked, rural households accounted for all the reduction observed, with similar cutbacks for both male and female workers (Figure 15.d). Fewer total hours worked in the face of increased number of jobs can be explain by a reduction of hours worked in the primary activity that were not fully compensated by taking new secondary jobs. Qualitative studies show a decrease of overtime in some sectors, especially at the end of the year. Also, the increased labor force participation might include substantial number of part time workers entering the job market.

At the same time, workers’ salary experienced a drastic reduction on their hourly wages, averaging 41.1 percent for all Cambodia (when comparing the first six months of 2008 with the first six months of 2009). The reduction of 2009 real hourly wages was much deeper for women and workers with no education, with a cutback to around half the 2008 levels. Also rural household experienced sharper reductions (37.8 percent) than urban households (11.7 percent). Education provided partial protection, with hourly salary reduction of 34.7 for primary educated workers and 27.3 percent for workers with secondary education (Table 7).

### Table 7. January to June Hourly Wage for 15 Years And Older in Cambodia (2009 Riel) 

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>1,698</td>
<td>1,000</td>
<td>-41.1%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1,800</td>
<td>1,114</td>
<td>-38.1%</td>
</tr>
<tr>
<td>Female</td>
<td>1,522</td>
<td>799</td>
<td>-47.5%</td>
</tr>
<tr>
<td>Area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>2,456</td>
<td>2,169</td>
<td>-11.7%</td>
</tr>
<tr>
<td>Rural</td>
<td>1,361</td>
<td>846</td>
<td>-37.8%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1,355</td>
<td>755</td>
<td>-44.3%</td>
</tr>
<tr>
<td>Primary</td>
<td>1,524</td>
<td>995</td>
<td>-34.7%</td>
</tr>
<tr>
<td>Secondary</td>
<td>2,326</td>
<td>1,690</td>
<td>-27.3%</td>
</tr>
<tr>
<td>Selected Sectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>1,088</td>
<td>716</td>
<td>-34.2%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>1,362</td>
<td>966</td>
<td>-29.1%</td>
</tr>
<tr>
<td>Construction</td>
<td>1,629</td>
<td>1,014</td>
<td>-37.8%</td>
</tr>
<tr>
<td>Transportation</td>
<td>2,094</td>
<td>1,244</td>
<td>-40.6%</td>
</tr>
<tr>
<td>Services</td>
<td>2,141</td>
<td>1,661</td>
<td>-22.4%</td>
</tr>
</tbody>
</table>

*For 2008, wages from 1st and 2nd job; for 2009, wages derived from all jobs. Selected sectors represented over 93 percent of waged work force in 2009. Selected Source: Background estimates for (Bruni Lucilla, 2010)*

**IMPACT ON HOUSEHOLDS**

In contrast with 2008, average inflation in 2009 was close to 0 (-0.4 percent). People’s perception of raising prices as the number one problem reported in 2008 was mentioned by less than one percent of households in 2009 (Cambodia Economic Association, 2010). Compared to 2008, the 2009 price of rice decreased, remaining above the 2007 levels (Figure 13). From April to November 2009, the price of rice decreased by an average of 10.0 percent compared to the previous year. Lower prices and higher input costs, labor included, are expected to result in a reduction of net profits for rice farmers. During the first nine months of 2010 rice prices in real terms were fairly stable with a small decreasing tendency. The
decreasing tendency in real rice prices since 2009 is eroding the favorable terms of rice product in Cambodia and should be taken into consideration when making public policy decisions.

Given the rapid changes in input and product prices, as well as the composition of the labor force in agricultural activities, a more in-depth analysis of this sector should performed. The CSES is an excellent source of information, which has not been fully used, for more serious and comprehensive analysis of the dynamics involving Cambodian agricultural activities. Future analytical work should make better use of all information available in the country to improve our understanding of long term dynamics and the short term changes related to farm activities.

The impact of the financial crisis in household welfare was mixed. On one hand, the number of households reporting difficulties increased and agricultural net income decreased. However, other welfare indicators such as ownership of durable goods, quality of housing materials and primary education enrollment rates remained basically unchanged from 2008.

To measure the impact of the economic crisis, a study focusing on the impacts on household at the community level was carried out. It collected information from 1,070 households in June 2008 and July 2009. Information was provided by women and key informants in each village. (Cambodia Economic Association, 2010). The results showed that, by July 2009, significant impacts on households concentrated on poor urban, tourism dependent, and cash crop villages. Households reporting difficulties in the last six months not only increased but there was an important shift on problem rankings: first, in 2008 job loss or decreased income was mentioned by less than one percent of respondents while in 2009 it represented 27.8 percent of problems reported (mainly reduced income); and second, high food prices accounted for over half of the problems reported in 2008 but only 7.3 percent of the cases in 2009. Sickness and health expenses continued having a high proportion among problems reported in both years: over one quarter of the cases in 2008 and almost one third in 2009.

While agricultural activities remained profitable, net income decreased in 2009, especially for farmers engaged in the production of maize (-56 percent), cassava (-32 percent), wet season rice (-32 percent), and fishing villages (74 percent of households reporting income reductions). Overall, half of the households reported a reduction of income from agricultural activities by July 2009.

Foreign remittances did not change between 2008 and 2009 while one quarter of households reported decreases in domestic remittances (the rest reported no changes or increases). Ownership of the most common durable goods (assets) did not change or increased in 2009. Ownership of televisions and motorbikes did not change between 2008 and 2009 but ownership of cell phones increased substantially, reaching 50 percent of households in the 14 villages included in the study (an increase of almost 12 percentage points). (Cambodia Economic Association, 2010)

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29 The same 14 villages were included in both years. In 2009, a fifteenth village in Siem Reap was added to the study.
Primary school dropout rates do not seem to have changed in 2009\textsuperscript{30}. Although 5 percent of households reported members dropping out of school in the last nine months, the numbers are not statistically different from the 2008 statistics. The main reasons reported for dropping out of school were distance and lack of safety. Also, households almost never mentioned lack of money to pay for child education as a first or second problem in the household. (Cambodia Economic Association, 2010)

Housing conditions and access to services remained basically unchanged in 2009. Initial comparisons of the 2008 and 2009 CSES household surveys shows only small improvements in housing materials and access to piped water, improved sanitary facilities, and access to public electricity. Similar housing conditions and access to services tend to be more “sticky” and are determined by factors not directly related to household welfare. For example, the type of roof will not change from one year to the other even when income or consumption has dropped. More likely, repairs and improvements would be put off for a later date, but it is not possible to capture these changes in behavior with the information available. Also, access to services is contingent upon public programs such as the expansion of electricity coverage or water projects, which can be a product of past investments.

<table>
<thead>
<tr>
<th>Table 8. Housing Conditions in 2008 and 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Roof hard materials/Good quality</td>
</tr>
<tr>
<td>81.7%</td>
</tr>
<tr>
<td>Wall hard materials/Good quality</td>
</tr>
<tr>
<td>62.7%</td>
</tr>
<tr>
<td>Floor hard materials/Good quality</td>
</tr>
<tr>
<td>16.3%</td>
</tr>
<tr>
<td>Owns the House</td>
</tr>
<tr>
<td>94.5%</td>
</tr>
<tr>
<td>Piped water</td>
</tr>
<tr>
<td>42.9%</td>
</tr>
<tr>
<td>Flush toilet or pit latrine with slab</td>
</tr>
<tr>
<td>33.3%</td>
</tr>
<tr>
<td>Public electricity</td>
</tr>
<tr>
<td>24.2%</td>
</tr>
<tr>
<td>2008</td>
</tr>
<tr>
<td>81.7%</td>
</tr>
<tr>
<td>62.7%</td>
</tr>
<tr>
<td>16.3%</td>
</tr>
<tr>
<td>94.5%</td>
</tr>
<tr>
<td>42.9%</td>
</tr>
<tr>
<td>33.3%</td>
</tr>
<tr>
<td>24.2%</td>
</tr>
<tr>
<td>2009</td>
</tr>
<tr>
<td>83.8%</td>
</tr>
<tr>
<td>65.7%</td>
</tr>
<tr>
<td>16.8%</td>
</tr>
<tr>
<td>94.2%</td>
</tr>
<tr>
<td>44.6%</td>
</tr>
<tr>
<td>34.7%</td>
</tr>
<tr>
<td>25.6%</td>
</tr>
<tr>
<td>Change \textsuperscript{1}</td>
</tr>
<tr>
<td>2.1%</td>
</tr>
<tr>
<td>3.0%</td>
</tr>
<tr>
<td>0.5%</td>
</tr>
<tr>
<td>-0.3%</td>
</tr>
<tr>
<td>1.7%</td>
</tr>
<tr>
<td>1.4%</td>
</tr>
</tbody>
</table>

\textsuperscript{1} in % points


**The Impact on Poor and Vulnerable Workers**

Following reports of difficult situations during the first half of 2009, conditions by the end of 2009 were slightly improving for a group of six rural villages with the exception of motorcycle drivers (no change) and unskilled construction workers (worse off)\textsuperscript{31}. Three factors were identified as the main channels for improvements: overall economic recovery experienced in the region and in the country, natural conditions favorable for farming activities, and more work available (on-farm and off-farm) (CDRI, 2009).

By November 2009 people’s perceptions were positive, in part because favorable rainfall patterns were expected to provide high rice yields and in part due to improved seasonal fish caught in the rice fields.

\textsuperscript{30} The study included 900 children 6-12 years old.

\textsuperscript{31} To assess the impact of the economic crisis on the poor and vulnerable in Cambodia, a qualitative study including 17 focus group discussions (FGD) in six rural villages was conducted. The study visited the same groups in May, August, and November 2009 and again in February 2010.
improving food consumption and reducing out of pocket food expenditures. Increased farm job availability was reported in several villages as well as increased on-farm demand for harvesting related activities. Primary school dropout did not increase in spite of children joining agricultural activities during the vacation period. On the other hand, the most common problems mentioned in the Focus Discussions Groups were limited access to new loans, lack of resources repaying previous ones, increase costs of agricultural inputs, and small businesses reduction on the profit margins (Cambodia Economic Association, 2010).

For vulnerable workers, conditions by the end of 2009 were mixed. Signs of recovery were found for garment workers and waiters, and while construction workers in general were less affected than the rest of vulnerable workers, conditions were likely to deteriorate for motor taxi drivers, cyclo drivers, and rice field workers and no clear conclusions can be drawn for scavengers, porters, and vegetable traders.

For the non-garment vulnerable workers, the average daily consumption decreased 12 percent from 2008 but the pace of reduction was declining at the end of 2009 and first months of 2010; for example, the reduction in consumption from May to August 2009 was 25 percent but from August to November it only decreased 2 percent. Garment workers reported increases in real daily earnings of 18 percent with a gradual increase of the proportion reported overtime from 15 percent in February to 27 percent in November 2009. Male and female earning differential was basically unchanged from the 2007 levels with males earning on average a third more than females workers (CDRI, 2009).

2010 income expectations for non-garment workers gradually and slowly improved during 2009 (by 5 percentage points); the major change occurred for garment workers with a reduction of lower income expectations from 21.5 percent to 5.7. The fourth round of interviews conducted in February 2010 shows a continuation of the tendencies observed in November 2009, reinforcing the direction of changes observed before; the majority of the vulnerable worker groups were recovering from the 2009 crisis and other groups were almost reaching their pre-crisis level (CDRI, 2010).

By February 2010, the garment and tourism sectors show further signs of improvement while the construction sector shows signs of recovery. Wellbeing for workers and their families in these three hardest hit sectors has shown sustained improvements. Low income and job availability remain important constraints for unskilled construction workers, cyclo drivers, restaurant works and migrant workers (CDRI, 2010)

32 Since 2000 a mostly urban, quarterly survey was conducted in five provinces: Phom Penh, Kandal, Kompong Speu, Siem Reap and Battambang. The survey included 480 persons from ten groups of vulnerable workers. The information is not statistically representative but indicative of income and consumption in the groups.
33 These groups reported earnings increases/decreased from 2007 to 2008 and decreases/increases from 2008 to 2009.
Coping Strategies

Some of the households’ responses to the crisis were observed at the end of 2008 but, by far, the intensity and number of strategies performed increased considerable in 2009. Since many strategies were adopted by different households, the majority of them can be found in small proportions of the population and are not necessarily captured by national surveys. On the other hand, qualitative studies including focus groups and targeted surveys provide a good indication of the different actions taken by households, which in their totality represent important mechanisms to deal with deteriorating conditions, especially for specific groups in the country. Results from specific studies are only representative of the selected populations or groups, mostly the poor and vulnerable, and can’t be extrapolated to the entire country.

The main coping strategy to deal with the 2009 crisis was the reallocation of labor, mainly by increasing labor participation and taking up unpaid secondary jobs in the rural areas. Women proved to be the more flexible to implement this strategy but men also accounted for an important share of the labor shift. Despite the labor changes, all evidence indicates incomes dropped in 2009, forcing households to change their behavior to accommodate or compensate for the earnings reduction.

Income Generating Strategies

To compensate for reduced income, four strategies adopted by households were commonly mentioned as income generating activities: migration/remittances; borrowing; selling assets; and use of forest for wood, hunting, and foraging. Each strategy has different characteristics and most of them had undesirable side effects.

Despite fears of important reductions on migrations and/or remittances, migration to Rural Thailand doubled in 2009 and households were able to maintain their income from remittances (Cambodian Economic Association, 2010). The fact that most Cambodian migrants into Thailand tend to engage in “difficult, dirty and dangerous” jobs that are not wanted by Thai workers, help explain the resilient migration to that country. Nevertheless most information is partial and preliminary at best and no definitive conclusions can be made.

Migration within Cambodia significantly increased from 15 percent in 2008 to 24 percent in 2009. For those households experiencing worsening conditions, migration was mentioned even more as a coping mechanism, namely 62 percent in 2009 compared to only 33 percent in 2008 (Cambodia Economic Association, 2010). Unfortunately, the increased migration is not expected to improve remittances; especially remittances sent from the urban centers to the rural areas are estimated to decrease US$30-45 million (United Nations, 2009).

Lending from microfinance institutions and from family and friends was a common strategy to solve income reductions from other sources in 2008. In 2009, 71 percent of households had borrowed money, with the biggest increases reported on cash crop villages (25 percentage points) and poor urban villages (15 percentage points increase). Around half of the loans reported were for business expansion and agricultural activities (Cambodia Economic Association, 2010). By the end of 2009, borrowing from
microfinance institutions appeared stagnant, leaving relatives, neighbors, and friends as the only source for future loans. More importantly, households were having problems repaying previously acquired loans. Households facing problems to repay loans to the microfinance institutions were hard pressed to find money from local lenders, even at high interest rates, or from family members or friends with only limited lending capacity and, in a few instances, were forced to sell assets to avoid losing their house or land (CDRI, 2009).

Use of forests for wood, hunting, and foraging is one of the “hidden” strategies used by households to deal with difficult times. One of the reasons is the lack of regulation for the use of forests (for wood and hunting) with no clear classification of which activities are permitted or prohibited. In cases with community property resources openly accessible to the people, income from this activity is remarkably high. In a study including nine villages it was found that income from the community property resources represented an average of 20% of total income with shares as high as 40 percent (CDRI, 2010). In 2007 the income from forestry, hunting and foraging was higher than either livestock or fishing/fisheries for the poorest half of Cambodians (Knowles, 2009).

Consumption Reducing Strategies

Even after taking into consideration the different “income generating” strategies, total income was not enough to cover basic needs for many households. These households were confronted with decisions on how to reduce expenditures/consumption. As such, households can reduce consumption of food items or non food items and services.

Reduction of food consumption can be achieved by switching to cheaper and lower quality products and by reducing the amount of food intake. Using cheaper food products was the most common strategy selected by households but cases of intake reduction especially by women were also mentioned. Food intake is also highly correlated with rice harvest season, quality of harvest, and availability of fish and vegetables. By April 2009, 75 percent of the population reported consumption of cheaper food with rates going up as much as 85 percent for the poorest rural villages (Cambodia Economic Association, 2010). By February 2010, reduction of food consumption was no longer a leading strategy to deal with the crisis, but reducing non-food consumption remained an important reaction to economic hardship. Similarly to the 2009 results, consumption of non-food items was kept to a minimum to reduce expenditures in households: clothes, make-up, travelling, recreation, and social gatherings were minimized. (CDRI, 2010).

Social Protection

Overall budget on social programs has not changed too much over time and remains well below the regional average. By 2009, total social expending on Health and Education by the Government of Cambodia was estimated around 3.8 percent of GDP, with the biggest share allocated to education (1.6 percent of GDP) and health (1.2 percent of GDP). Expenditure in other social programs was estimated around half a percentage point. This value is considerably lower than the regional average; for example, public spending in education alone accounted for over four percent of GDP in 2005 in the region.
Information on disaggregated national budget data and clear definitions of categories are not available in Cambodia. The information available regarding national budgets is presented in grouping activities without clear definition of what is included. For example, almost all government agencies report expenditures labeled as social interventions while not all have social agenda activities\(^\text{34}\) (World Bank, 2009). The social intervention category includes general administration budgets for the supreme and appeals courts, the national audit authority, and the senate. Defense and interior security are also included in the group. Even within social administration the secretariat of civil aviation, water resources, and meteorology, and post and telecommunications include budgets accounted for as social interventions. Providing better definitions of categories and making available disaggregated information to be able to match budgets with specific sectors are important improvements that should be considered in the way national accounts are managed in Cambodia.

The majority of the social protection spending targets civil service pension and veterans benefits; retired or disabled civil servants, veterans and their widows and orphans are entitled to a pension. Civil servants are also entitled to invalidity, maternity, and dead of the breadwinner benefits but are not covered in cases of accidents while working or health care problems outside work. The system remains non-contributory and is administered by the Ministry of Social Affairs, Veterans and Youth Rehabilitation (World Bank, 2010).

Most of the existing safety net programs in the country are in the health/nutrition and education sectors and include (i) the Health Equity Fund, managed among the government, donors, and local NGOs, targeting the poor according to the ID Poor project, covering all costs of hospitalization and other medical expenses, and providing resources for transportation and food to access the services; (ii) Mother and Child Health program providing food rations to poor pregnant and lactating women and children in food vulnerable communities; (iii) the National Social Security Fund providing coverage to around a quarter of a million government employees; (iv) a Pre-paid health insurance scheme in the pilot stages with participation of the government and several NGOs; (v) Food for Work providing food rations to approximately one quarter of a million persons in exchange for work in infrastructure projects and targeted to the poor in food-insecure communes; (vi) school feeding programs covering around half a million students and providing food for mothers and children and; (vii) targeted scholarship programs mainly for poor girls in secondary education and covering around 30 thousand students (Hossein Jalilian, 2009).

Government and NGOs interventions appear coordinated, with NGOs concentrated in the poorest rural and land abundant villages and government focused on the poorest rural and dry season rice villages. NGOs reported higher participation rates providing assistance to 93 percent of the households receiving any benefit, and government programs reaching 40 percent of aid-recipient households\(^\text{35}\) (Cambodia Economic Association, 2010).

\(^{34}\) Social interventions were defined in the new 2007 budget structure and included under chapters 64 and 65.

\(^{35}\) The percentages add up to more than 100 percent because of households receiving aid from government and NGOs at the same time.
**Government Response**

The Government of Cambodia announced in February 2007 a new stimulus package to mitigate the negative effects of the financial crisis. Some of the measures included reducing four percentage points on banks’ reserve requirement for loans (from 16 to 12 percent); increasing by three fold the minimum capital for commercial banks; introducing a 15 percent limit on real estate lending; reducing manufacturing costs; increasing public investments in agriculture, transportation and safety nets; and increasing credit availability for rice millers, farmers associations, and input suppliers (see Box 4 for a detail description).

Since October 2008 and as a response to high food prices, the Government of Cambodia in partnership with the Asian Development Bank implemented a food emergency program with a total budget of US$ 40 million. Almost half of the resources (US$19 million) were used to improve social protection programs and the rest to increase food productivity and government capacity. Most of the assistance was concentrated around the Tonle Sap Lake and in the first face around 342 thousand people had received rice rations (35 Kg) (Hossein Jalilian, 2009).

Other social programs also benefit Cambodians, but most of them were not a response to the food or financial crisis and only reached a small group of people. Nevertheless they are an important part of the socioeconomic conditions, especially for the poor and vulnerable and should be taken into consideration to understand the impact of the financial crisis and to provide insights on improving the social protection system in the country.
**Box 4. Actions Taken By RGC During 2008 To 2010 In Response To The Financial And Food And Fuel Crisis**

**Monetary Policies**

**July 2008:** increased reserve requirements to be maintained at the National Bank of Cambodia (NBC) by the commercial banks from 8 to 12 percent (originally to 16 percent), and limiting real estate lending from commercial banks at 15 percent (until February 2009).

**Nov. 2008:** two Prakases were introduced to strengthen the health of its banking sector, (i) Prakas on Governance in Banks and Financial Institutions and (ii) Prakas on Fit and Proper Regulatory Requirements for Applying Entities and Licensed Banks and Financial Institutions.

**Jan. 2009:** new NBC $100 million short-term loan fund for local banks was created to ensure sufficient liquidity.

**July 2009:** MEF introduced a pilot program by using banking system for revenue collection and expenditure at two provinces, namely Kandal and Banteay Mean Chey.

**Dec. 2010:** increased minimum capital requirement for Commercial banks from 50 billion Riels (US$12.7 million) to 150 billion Riels (US$36.5 million).

**Agricultural Policies**

**First half 2008:** the Rural Development Bank (RDB) provided a special credit line of US$12 million with 5% annual interest rate (compared to 14% market rate) to the Cambodian National Rice Millers Association in use for purchasing rice from farmers during their harvest.

**In 2008:** customs tariff rates on farm machinery were reduced. Customs duty rates of 634 tariff lines were reduced of which 252 were reduced to zero (i.e. oat, gravel, precious stones, etc.)

**In 2008:** increased government earmark for irrigation building/improvement expenditures from 51.8 billion riels in 2007 to 70.4 billion Riels (projection) in 2008.

**Jan. 2009:** introduction of a Budget Law amendment to provide an additional US$18 million credit to the Cambodian National Rice Millers Association to continue the scheme activities.

**May 2009:** tax holiday on agriculture and industry investments was extended by three years.

**Oct. 2009:** creation of the Cambodia-Vietnam Foods Company to provide US$33 million credit to the Rural Development Bank at the rate of 7% for lending to rice miller borrowers at the rate of 10%.

**Garment Industry Policies**

**2008-2012:** new tax exemption policies were introduced: (i) extended 20 percent corporate profit tax holiday on garment and textile factories (2005-2010); (ii) suspension of 1 percent (Advanced Profit Tax or APT) monthly profit tax (2008-2012) for garments and footwear industries; (iii) zero percent VAT rate (%) applied for garment supported industry (2008 to 2010); (iv) 0% VAT rate for 40 industries or contractors supplying products or services to serve for exporting of the garment, textile, and footwear industries.

**May 2009:** provision of $7 million in special scholarships to provide short vocational training courses to 40,500 garment workers who had lost their jobs at garment factories.

**May 2009:** a US$7.7 million Special Prime Minister Fund was set up in 2009 aimed at training courses for workers and unemployed youth affected by the crisis.

**June 2009:** the Ministry of Labor and Vocational Training earmarked US$1 million in financial aid for garment workers made redundant by the downturn in the sector, enabling them to apply for small loans to help them kick start small businesses of their own.

**2009-2010:** Government to cover 0.3 percent of the total 0.8 percent Payment of the Occupational Risk Contribution by the Garment and Shoe Enterprises and Establishments

**Tourism Sector Response Packages**

Travel requirements reduced for Vietnamese and Lao citizens and their tourists. The Sihanoukville Airport was declared an international airport. A new international checkpoint in Kep was opened to attract visitors from the Mekong Delta and island of Phu Quoc. As of the end of 2009, Cambodia has visa waivers in place for citizens of Laos, Malaysia, Singapore, the Philippines, and Vietnam.

Angkor Wat passes period extended for tourists (3 day pass over 7 days, 7 day pass over 14 days). During 2009, travel to Cambodia was promoted under the slogan of “Cambodia; the Kingdom of Wonder”. Tourism law was adopted on April 29, 2009.
The entire period

In 2009 Cambodians felt most of the negative impacts of the crises which originated in 2008. By 2009 conditions deteriorated for significant segments of the populations and the ability of households to compensate were diminished by events on the previous year. Taking a longer term approach at conditions in Cambodia provides a very different picture than that of the crisis period and in general it yields positive results. This is true for the macro economy, integration to international markets, salaries, labor conditions, education, health, and poverty, all areas showing important progress since the 1990’s.

According to the World Bank WDI indicators, by 2010, the GDP per capita in constant dollars had increased by two and half times since 1993. Comparisons with more recent periods are also impressive; for example, GDP per capita has more than doubled in the last twelve years since 1998. But the GDP in 1993 was only US 317 per person (in 2009 US$) and the increase by two and a half times by 2010 is equivalent to only US$ 794 per person (in 2009 US$). Exports to the United States, one of Cambodian major partners, increased from one million dollars in 1993 to $826 million in 2000, $1,767 in 2005, and US$ 2,265 million in 2010 (U.S. Census Bureau, 1993-2010)\textsuperscript{36}. Implemented Foreign Direct Investment (FDI) increased from US$ 139 million in 2002 to around US$ 800 in 2008, and even with sharp decreases during 2009, FDI is expected to recuperate by 2011 (United Nations, 2009).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{composition_of_economy_cambodia.png}
\caption{Composition of the Economy in Cambodia (Share of GDP)}
\end{figure}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{hourly_wage_salaries_constant_riel.png}
\caption{Hourly Wage Salaries in Constant Riels (,000), Cambodia 2004-2007}
\end{figure}

Agriculture share of GDP decreased from representing half of the economy in 1995 to just over one third in 2009. During the same period, the industry share increased from 15 percent of GDP to almost one quarter and that of services reached 42 percent of GDP in 2009 (\textbf{Figure 16}). Labor conditions have also changed over time reflecting the increased role of industry and services in the economy. Unfortunately, labor statistics were not available before 2000 and it was not until 2004 that more comprehensive

\textsuperscript{36} Values are nominal US dollars. Values for November and December 2010 are estimates averaging the previous ten months.
measures were collected and distributed in the country. From 2004 to 2009 monthly wage salaries increased 62 percent from R. 182 thousand to R. 295 thousand, showing a positive trend over time (Figure 17). This is true not only on average but also specifically for urban and rural households and for workers in the agricultural sector (similar patterns were observed in all other sectors of the economy). Labor force participation has increasing over time, mainly by women joining the labor force for the first time. Unemployment has been traditionally low in Cambodia with values around 1 percent, even during crisis years. Total hours worked have remained around 37 per week and only temporary changes have been observed.

Secondary education enrollment rates more than doubled from 1997 to 2007, but since the original level was around 17 percent, the values for 2007 remained fairly low at 40.4 percent for gross enrollment rate and 34.1 percent for net enrollment rate. Enrollment in primary education was already high in 1997 and a modest improvement of 10 percent in the last 12 years achieved an 88.6 percent net enrollment rate. Health indicators have also improved from 1995, for example improved access to sanitation facilities more than doubled but only reached 29.0 percent in 2008. Mortality rate under 5 (per 1,000) was reduced by 31 children but remained high at 87.5 (per 1,000) in 2009. Other indicators, like DPT immunization were already in better shape in 1995 and moderate improvements achieved better results: 94 percent of children 12-23 months of age had received DPT immunization in 2009. Women fertility has been steadily declining since 1992 reaching 2.9 births per women in 2008 (World Bank WDI). Household conditions are also improving over time with important reductions of poverty; however, the sharp decrease observed in 2008 will not last. Some increase in poverty by 2009 is likely (Figure 18); the question of how much poverty bounces back in 2009 remains, but the long term reduction trend is expected to be maintained.

**Figure 18.** Percentage of poor people in Cambodia,

Expectations are an indication of total economic performance in Cambodia during 2009 and 2010. Source: CSES

Government sponsored social protection has traditionally been limited in Cambodia. More recently, the government has increased efforts to provide more coverage of social programs and to adopt a more
coordinated approach by means of a Social Protection Strategy. Actions for the near future stress the importance of better targeting and increased harmonization of limited resources to increment coverage of the poor and vulnerable. Improving and expanding coverage in health protection, education, child nutrition, and public works together with a new program of cash transfers to the extreme/chronic poor are also recommended to be implemented in the near future. The strategy also calls for actions aimed at improving the abilities to implement programs in general by supporting CARD’s role as a coordinator, improving the financial sustainability of the programs, and evaluating and improving the existing targeting systems.

During the crisis period of 2008 and 2009 the government and development partners continued with existing social programs and in some cases like the food programs increased coverage. Also in response to the crises, the RGC implemented a series of actions to improve the general economic conditions of several sectors of the economy: (i) monetary policies including increases in reserve requirements by the National Bank of Cambodia and by commercial banks, banking reforms to strengthen the health and regulation of the banking sector, and provision of funds for local banks to ensure their liquidity; (ii) agricultural policies providing special credit lines or new credit institutions mainly to support rice producers and millers, earmarking of funds for irrigation projects, reduction of custom tariffs on farm equipment and inputs, and tax breaks for agricultural and industrial investments; (iii) industrial policies including the reduction of several taxes and tariffs for garments and footwear industries as well as for industries or contractors supplying products or services to the garment sector and the support of several training programs and scholarships to train displaced workers from the garment sector and facilitate their involvement in other activities or improving their skills for when joining the sector in the future; and (iv) tourism policies reducing visa requirements for some visitors, improving airports facilities and classifications to become more accessible for international travellers and international promotion of Cambodia as a tourist destination (see Box 4 for a more detailed description).

After taking a long term look at the socioeconomic conditions in Cambodia, the overall impression is one of good performance at low levels. In other words Cambodia has come a long way since the early 90’s with important improvements for its people, but the starting point was very low two decades ago. This is the case not only for the economy in general but also for access to services and households’ wellbeing. In areas where conditions were already improving at the beginning of the 1990’s, primary education and some vaccination programs for example, the levels reached by 2009 are quite satisfactory. On the other hand, for those indicators with very low values during the 90’s, access to sanitation, GDP per capita and secondary education for example, the improvements achieved were not enough to reach satisfactory levels by 2009.

It is clear that Cambodia has made substantial improvements in the information systems available to guide public policy including: (i) regular information sources such as a continuous LSMS style survey to measure poverty and living conditions, CPI to track inflation over time, local and international/export price information for important commodities, regular population censuses, commercial establishments census (by 2011), commune socioeconomic information system, etc; (ii) multiple year surveys executed by the CDRI such as the Vulnerable Workers Study, Rapid Assessment on the Impact of the Financial
Crisis, and the Poverty Dynamic Study; (iii) “one time” exercises aiming at answering more specific issues; (iv) better targeting for social programs or ID-poor; and (v) improved access to information from national accounts. The next step is to improve coordination among the information sources and develop a national information system that allows for the combined use of information and the setting of priorities based on an assessment of needs and existing gaps in the country. NIS has taken steps in this direction with a National Statistical Plan and its efforts should be supported. The quality of the information varies significantly between sources and surveys and in many cases some data collected is underutilized, if used at all. To address these problems, an evaluation of the quality, relevance and use of information produced in Cambodia is necessary in order to establish standards and identify areas of improvement.
Bibliography


