

CAMBODIA FOOD SECURITY AND NUTRITION QUARTERLY BULLETIN

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HIGHLIGHTS

- Above average precipitation and high water levels have contributed to favorable crop cultivation conditions in the first quarter of 2012.
- The dry season harvest for rice and some key subsidiary crops have increased significantly from the previous year's dry season.
- Rice prices have decreased from the previous quarter as the main wet season and dry season harvests have put downward pressure on prices.
- Diarrhea and dysentery levels are similar to seasonal norms. However, Cambodia Post-flood Relief and Recovery Survey results show that the negative impact of the previous quarter's floods was significantly worse for the poorest households.

Environmental Conditions and Disasters

Precipitation in the first quarter of 2012 exceeded the long-term average. This contributed to the river water levels in the Mekong and Tonle Sap rivers staying above their long-term average, which created favorable conditions for dry season crop cultivation. The Cambodia Post-flood Relief and Recovery Survey found that the negative impact of the floods – including household displacement, housing and assets damaged, livelihoods affected, indebtedness, etc. – was significantly worse for the poorest households.

Food Production

Both wet season and dry season rice harvests reached record highs in 2011/12. The dry season rice harvest was over 20% higher than the previous year's, primarily due to the increase in harvested area. The increased rice cultivation in the dry season was partially a response to the large crop damage caused by the floods in September/October 2011 and also due to the favorable planting conditions stemming from higher rainfall and increased irrigated areas. Additionally, the production of cassava and mung beans was higher in the current dry season compared to last year.

Food Prices

Rice prices have reverted back to historical levels after being

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abnormally high in October/November 2011 due to the floods. Rice prices are expected to decrease in April due to ongoing downward pressure from the dry season rice harvest. However, prices are projected to start increasing in May as the impact from the dry season harvest subsides. The recent increase in rice purchasing power was primarily due to decreases in rice price, but higher unskilled wage rates also contributed to this.

Health and Nutrition

Children afflicted by diarrhea and dysentery are at greater risk of becoming malnourished. Health center data shows that the incidence of diarrhea in the current dry season is similar to that of the 2010-2011 dry season. Hospital data suggests that there has been a steady decrease in dysentery since the 2010 outbreak. According to the Post-flood Relief and Recovery Survey, the nutritional status of children has not deteriorated from pre-crisis levels at the time of the survey in January 2012.

The Cambodia Food Security and Nutrition Quarterly Bulletin aims to provide decision makers with a regular overview of trends and emerging threats relating to food and nutrition security in Cambodia. It is a collaborative effort between the Council for Agricultural and Rural Development (CARD), the Ministry of Agriculture, Forestry and Fisheries (MAFF), the Ministry of Water Resource and Meteorology (MoWRAM), the Ministry of Health (MoH), the National Committee for Disaster Management (NCDM) and the National Institute of Statistics (NIS), with technical and financial support from UNICEF, the World Food Programme, the EC-FAO Food Security Programme and the World Health Organization, and with financial support from the MDG Achievement Fund for Children, Food Security and Nutrition.

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This bulletin consists of secondary analysis of government administrative data and publically available data on a list of standard indicators – from regularly collected government data – agreed upon in the terms of reference of the Food Security and Nutrition Data Analysis Team.

ENVIRONMENTAL CONDITIONS AND DISASTERS

Rainfall

During the first few months of the current dry season which began in November 2011, precipitation was generally near the long-term average in most regions of the country. However, during the first quarter of 2012, rainfall levels exceeded the long-term average.

The rainfall amount in the first quarter of 2012 was higher than that of 2011 and the long-term average. In the first quarter of 2012, the average monthly rainfall was 38.7 mm, 62.2% more than in 2011 and 29.9% more than the historical average (Table 1).

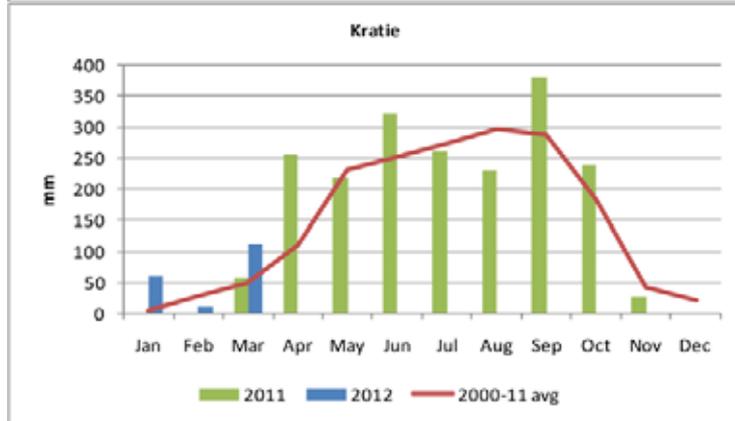
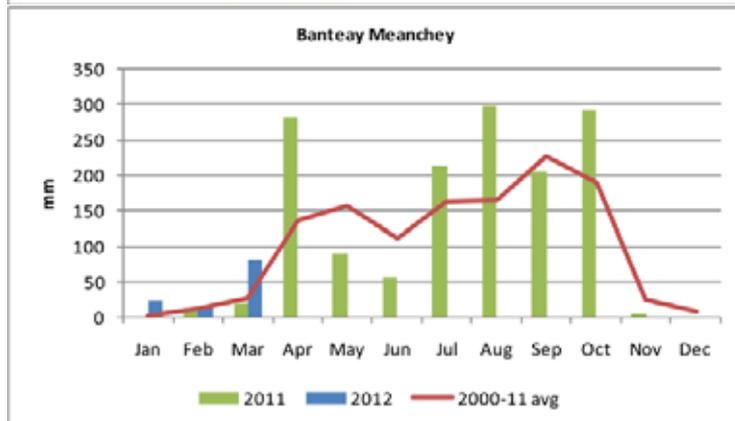
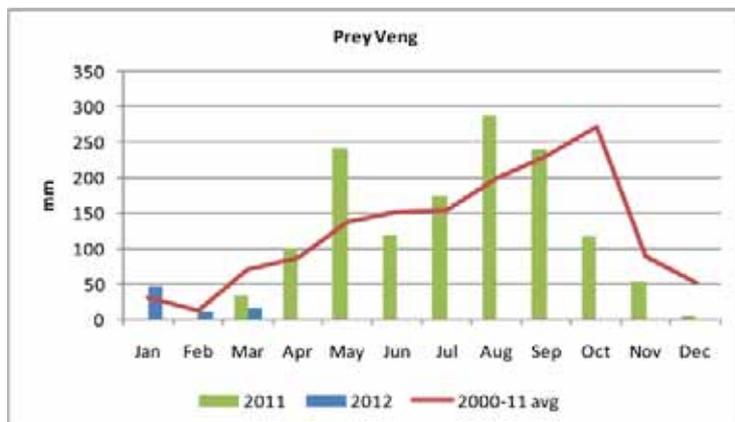
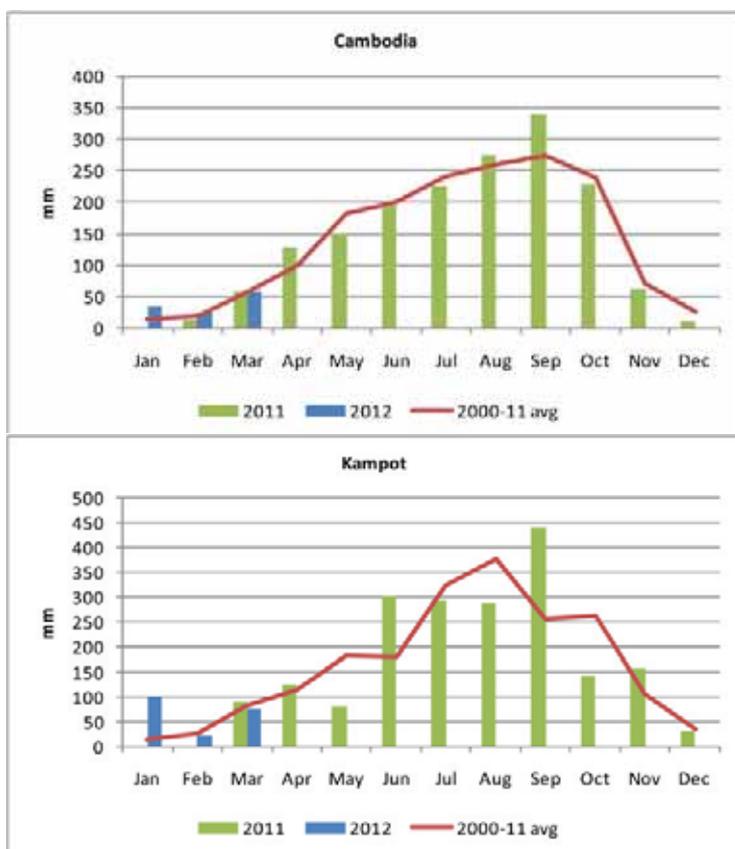
Table 1: Rainfall in Cambodia in July, August and September

	2000-11 avg (mm)	2011 (mm)	2012 (mm)
January	14.7	0.3	35.0
February	18.4	12.2	23.9
March	56.3	58.9	57.3
average	29.8	23.8	38.7

Source: Ministry of Water Resources and Meteorology

Rainfall patterns in four selected provinces¹ representing the main agro-ecological zones are reported in Figure 1.

Figure 1: Rainfall levels in Cambodia and selected provinces



Source: Ministry of Water Resources and Meteorology

In the beginning of the dry season in November 2011, precipitation was generally near the long-term average in most regions of the country. However, in January and February 2012, rainfall amounts exceeded the long-term average as national precipitation levels were 138.1% and 30.4% above the long-term average for the corresponding month, respectively. In March 2012, rainfall levels were back down to normal, 1.7% above the long-term average for the corresponding month and 2.7% below March 2011. The high rainfall amount in the first quarter of 2012, especially in January, was due the continued effect of La Nina.

Much of the crop in the current dry season is irrigated, but also is expected to have been aided by the above average precipitation in January and February, the main planting period for dry season crop cultivation.

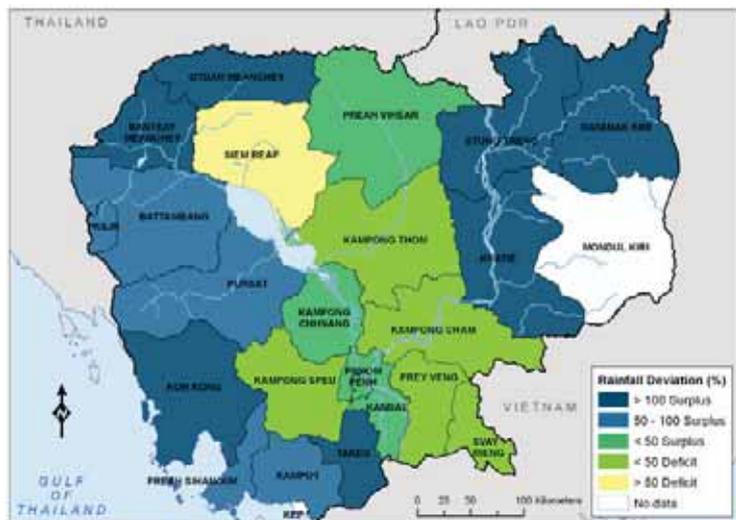
In Kampot and Prey Veng, precipitation in January 2012 was higher than the long-term historical average in January, but in February and March, rainfall levels were below that of the long-term average. In Prey Veng, the average monthly precipitation in March 2012 was 16.6 mm, 76.6% below the long-term average for March and 52.3% below March 2011. In Banteay Meanchey and Kratie, above average

1 Kampot is in the Coastal zone, Prey Veng in Plains zone, Banteay Meanchey in Tonle Sap zone, Kratie in Plateau/Mountain zone

rainfall levels continued in March 2012 as well. In March, the average rainfall amount in Banteay Meanchey and Kratie was 192.9% and 126.8% above the historical average for March, respectively.

The differential of the rainfall amount in the first quarter of 2012 to the historical average for each province is displayed below in Map 1. In the first quarter of 2012, all provinces located in the coastal and mountainous areas, except Kampong Speu, received rainfall amounts higher than the long term average. However, precipitation levels were lower than the long-term average in all the provinces in the plains regions except for Takeo.

Map 1: Rainfall surplus and deficit in first quarter 2012 compared to the historical average



Source: Ministry of Water Resources and Meteorology

River water levels

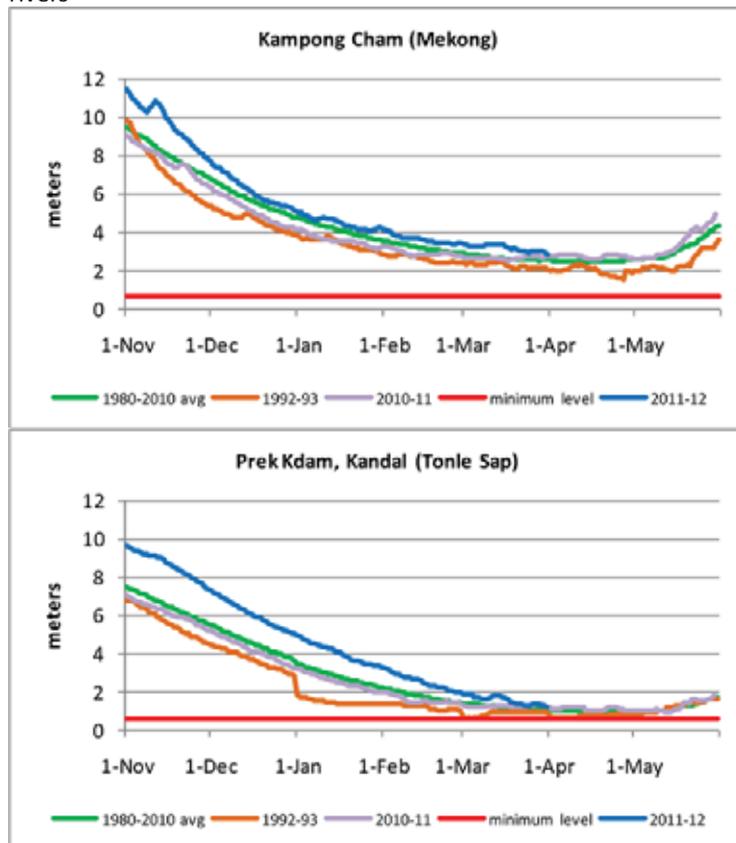
The higher river water levels observed in the first quarter of 2012 are due to high precipitation levels and the slow receding of flood waters during the wet season as well as above average rainfall in the current dry season. The higher river water levels in rivers (and reservoirs) will be beneficial to the dry season crop cultivation.

River water levels in both the Mekong and Tonle Sap rivers in the current quarter stayed significantly above their long-term average. In March 2012, the average water levels in the Mekong and Tonle Sap rivers were 19.5% and 29.1% above their long-term average, respectively (Figure 2).

In January and February 2012 the water level in the Mekong (as measured in the Kampong Cham station) was 24.8% higher than the corresponding period in 2011 and 11.4% higher than the historical average. At the end of March, the water level in the Mekong was at 2.94 meters, 14.5% above the 30-year average at the corresponding period.

The water level in the Tonle Sap river (as measured in the Prek Kdam station) in January and February 2012 was 60% higher than the corresponding period in 2011 and 42.9% higher than the historical average. At the end of March, the water level in the Tonle Sap was at 1.26 meters, 23.4% above the long-term average.

Figure 2: Water levels in selected stations in Mekong and Tonle Sap rivers



Source: Ministry of Water Resources and Meteorology

Disasters

In September/October 2011, following heavy rains, flooding directly affected 18 out of 24 provinces across Cambodia. At least 60,000 households in the 18 flood-affected provinces were made food insecure in the immediate and short term as a result of the floods².

Despite the floods, rice production reached record highs in 2011/12 and overall availability of rice at the national level is satisfactory. However, at the household level, access to a stable, sufficient and diverse diet remains a challenge and the situation was exacerbated by the impact of the floods. The Cambodia Post-flood Relief and Recovery Survey³ found that the negative impact of the floods – including household displacement, housing and assets damaged, livelihoods affected, indebtedness, etc. – was significantly worse for the poorest households.

Twenty percent of households in the poorest quintile reported having been displaced as a result of the flood; just 1% of households in the richest quintile were displaced due to the flood. Eight percent and 5% of all surveyed households experienced damage to their walls and roofs, respectively, due to the floods. Poorest households experienced significantly more damage as 24% had their walls damaged and 15% had their roofs damaged.

74.3% of the poorest households reported a decrease in income as a result of the floods and 62.8% of all households cited food assistance as a priority in the aftermath of the floods. Spending on food was also cited as the highest proportion of the poorest households' expenditure (49.4%), with 59.9% of the poorest households taking out loans mainly to buy food after the floods.

² According to rapid assessment findings from the National Committee for Disaster Management (NCDM) and WFP

³ WFP, Unicef, ActionAid, Asian Development Bank, DanChurchAid/ACT Alliance, Save the Children and Danish Red Cross, in collaboration with the National Committee for Disaster Management, conducted a representative survey of 2,500 household in 11 flood-affected provinces in January 2012.

FOOD PRODUCTION

Rice production

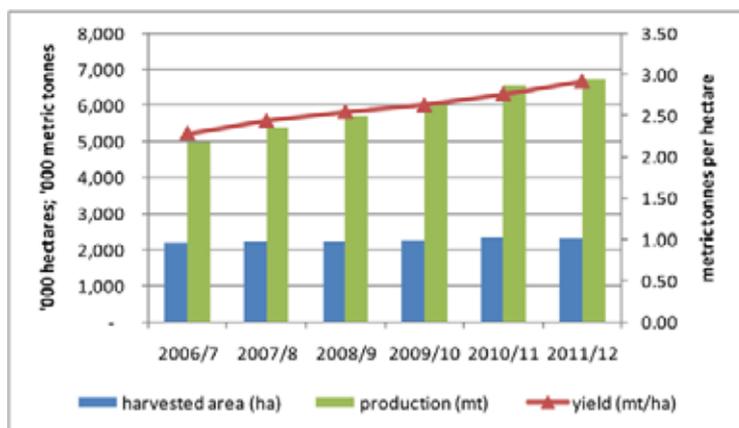
Both wet season and dry season rice harvests reached record highs in 2011/12. The wet season's aggregate rice production in 2011/12 was 6.7 million tonnes, 2.3% above the bumper crop of 6.55 million tonnes reached in the previous wet season (Figure 3(a)). Even though the total area harvested for wet season rice was reduced from the previous year due to the floods, the increase in yields (from 2.76 to 2.92 tonnes/hectare) more than compensated for the lower harvested area. Higher yields were achieved by the favorable rainfall throughout the country and increased use of fertilizer, improved seeds, and enhanced cultivation techniques.

The 2011/12 dry season's aggregate rice production was 2.1 million tonnes, 22.2% higher than in the 2010/11 dry season. In contrast to the wet season rice harvest, the increase in the harvested area was the main factor in the higher production in the dry season (Figure 3(b)). The rice harvested area was 16.6% higher than in the previous dry season. The yield, at 4.4 tonnes/hectare, also increased by 5.8% from the previous year, contributing to the higher production figure.

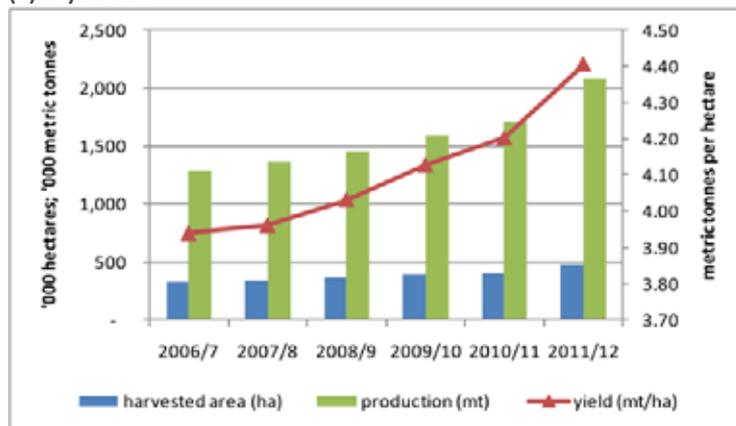
The increased rice cultivation in the dry season was a response to large destroyed areas due to the floods in September/October 2011, when over 10% of total wet season rice cultivated area was destroyed. More rainfall, higher river water levels, and more water in reservoirs in the current dry season, especially in January and February, contributed to more areas being cultivated. Higher yields for the dry season rice harvest could be partially attributed to enhanced soil fertility due to above average river silt as well as enhanced cultivation techniques.

The total paddy rice production in the 2011/12 wet and dry seasons is 8,779,365 million tonnes. MAFF calculates that the exportable surplus of milled rice, after taking into account seed reserve requirements, post harvest losses, the milling ratio and food requirements, is 2.78 million tonnes.

Figure 3: Harvested area, production and yield for rice



(b) Dry season



Source: Ministry of Agriculture, Forestry and Fisheries

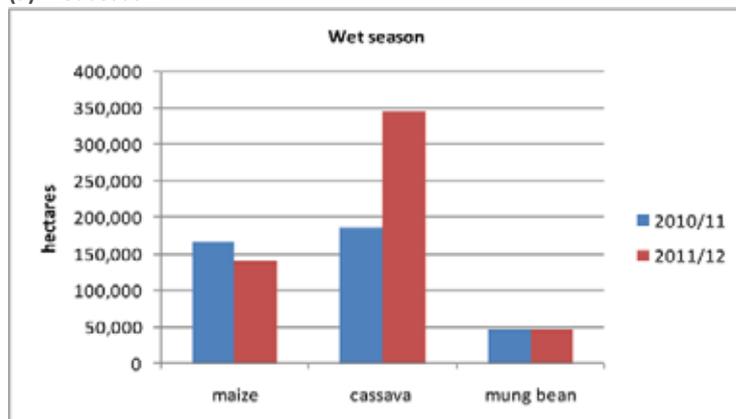
Subsidiary and industrial crop cultivation

Some of the key industrial and subsidiary crops are maize, cassava and mung bean. Figure 7 below compares the harvested area of three key industrial crops to the previous year, by season. In the wet season, the harvested area for maize and mung beans decreased by 14.6% and 2.5%, respectively, compared to the 2010/11 wet season (Figure 4(a)). However, for cassava, harvested area increased by 86% over the previous wet season.

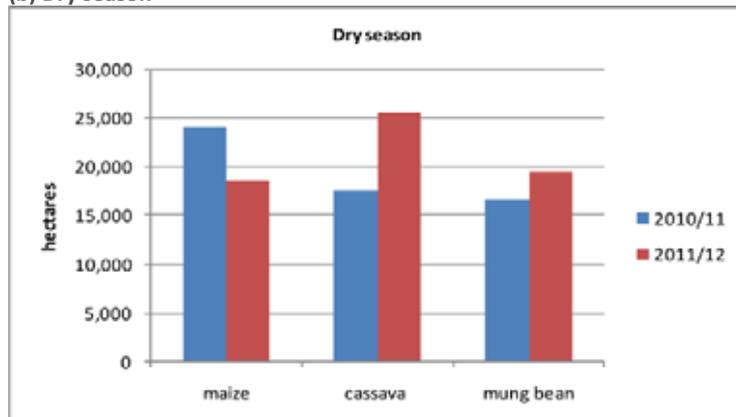
In the 2011/12 dry season, the harvested area for cassava and mung bean increased, while the harvested area for maize decreased compared to the previous year (Figure 4(b)). The harvested area for cassava and mung beans increased by 45.2% and 17.3%, respectively. For maize, the harvested area in the current dry season decreased by 22.7%.

Figure 4: Harvested area of key industrial crops

(a) Wet season



(b) Dry season



Source: Ministry of Agriculture, Forestry and Fisheries

The production figures of the same key industrial crops in Table 2 below confirm this trend for the wet season and dry season. In the wet season, the production of maize and mung bean was not substantially different from the previous year, though cassava production was 81.9% higher.

In the dry season, the production of all cassava and mung bean increased compared to the previous dry season, while the production of maize decreased. Notably, cassava production increased by 196.1%, nearly three times that of the previous dry season, 793,445 tonnes.

In the wet season, nearly 50% of the cassava production was from the Battambang and Kampong Cham provinces. For the dry season cassava production, 90% was from Pailin.

Table 2: Production of key industrial crops, metric tonnes
(a) Wet season

	Maize (mt)	Cassava (mt)	Mung bean (mt)
2010/11	672,124	3,980,964	49,667
2011/12	646,077	7,240,398	51,433
% change	-3.9%	81.9%	3.6%

(b) Dry season

	Maize (mt)	Cassava (mt)	Mung bean (mt)
2010/11	101,145	267,978	21,859
2011/12	71,111	793,445	24,763
% change	-29.7%	196.1%	13.3%

Source: Ministry of Agriculture, Forestry and Fisheries

FOOD PRICES

International and regional food and rice prices

The FAO Food Price Index⁴, measuring the international price level of a basket of key food commodities, averaged 215 points in March 2012, virtually unchanged from last month. Higher oil prices compensated for falling dairy prices, while cereals, sugar and meat prices remained at similar levels to the previous month. The index was 6.8% below its levels in March 2011 (Figure 5).

The International rice price index, at 231 points, increased by 0.9% month-on-month in March 2012 after decreasing for three consecutive months. The upward price pressure stems from higher Thai rice prices. Rice export prices of other key rice exporting countries decreased on a month-on-month basis primarily due to the harvest of secondary crops.

Figure 5: FAO Food and Rice Price Indices (100 = 2002-04)



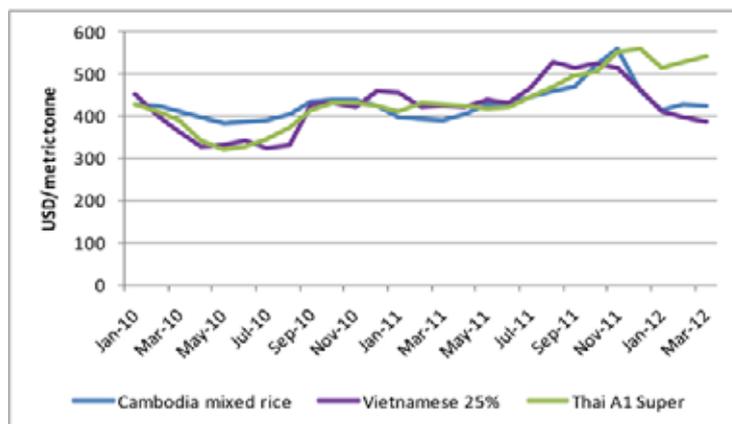
Source: FAO, <http://www.fao.org/worldfoodsituation/FoodPricesIndex/en/>

In March 2012, the f.o.b. prices⁵ of Thai A1 Super white rice (100% broken) and Vietnamese white rice (25% broken), two benchmark prices for Asia, were 542.8 USD/mt and 387 USD/mt, respectively (Figure 6).

The price trends of the Thai Super A1 and Vietnamese 25% rice were similar until the last quarter of 2011, when Vietnamese rice prices started to decrease with the beginning of the main harvest, but Thai rice prices continued to stay high. In January 2012, Thai prices dipped, but continued to increase in February and March, while Vietnamese rice prices decrease throughout the entire first quarter.

Thai white rice prices increased by 2.4% month-on-month in March, increasing continuously since June 2011, except for a temporary drop in January 2012. Thai white rice prices were 26.5% higher than the corresponding month last year. The price trend of Vietnamese white rice showed a different pattern in March 2012: prices decreased by 2% on a month-on-month basis and by 9.2% on a year-on-year basis.

Figure 6: Wholesale price of Thai, Vietnamese and Cambodian white rice



Source: FAO, <http://www.fao.org/es/esc/prices/PricesServlet.jsp?lang=en>

The high differential between the export price of Thai and Vietnamese white rice is due to the Thai government's ongoing rice pledging policy, which was extended to the end of June to cover the secondary paddy crops, which is putting significant upward pressure on Thai rice prices. This has resulted in Thai white rice being uncompetitive in the international rice market. In contrast, The Vietnam Food Association continued to lower its floor prices in order to increase rice exports and protect market shares from higher competition from India since India lifted its 3-year export ban on non-

⁵ Free on board (f.o.b.) price includes all charges up to the placing of goods on board a ship at the port of departure specified by the buyer.

⁴ The FAO Food Price Index consists of the average of commodity group price indices (i.e. meat, dairy, cereals, oils/fats, and sugar) weighted with the average export shares of each of the groups for 2002-2004.

basmati rice in September 2011.

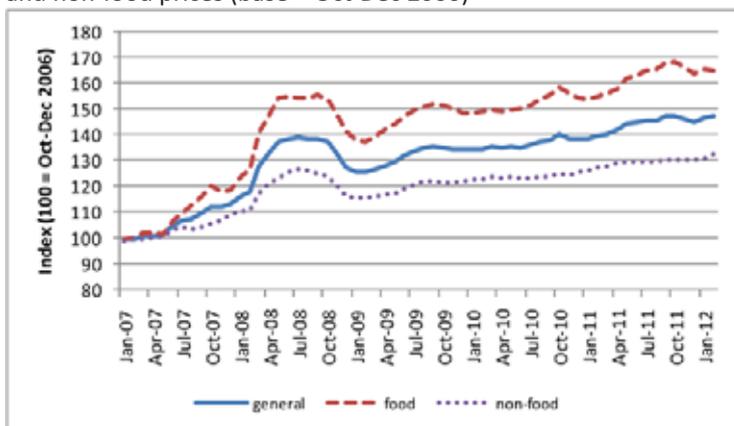
Local consumer price index and food price index

The general Consumer Price Index (CPI)⁶ measures the cost of a consumption basket composed of 259 items. Each item is weighted based on their importance in an average household's expenditure⁷. In February 2012⁸, the general CPI increased by 0.4% month-on-month, increasing for the second consecutive month. The inflation rate, as measured by the year-on-year increase in the consumer price index, was 5.4%.

The Food Price Index (FPI) measures the cost of the food items in the general CPI's consumption basket. Food items make up 50.4% of the total consumption basket. In February, food prices decreased by 0.3% month-on-month but increased by 6.7% year-on-year (Figure 7). The price of meats – which makes up 22.4% of the food price index – increased 14.1% on a year-on-year basis in February 2012.

Gasoline price levels increased by 5.2% month-on-month, increasing transportation costs for both food and non-food items. Gasoline prices were 14% above levels in the corresponding month last year.

Figure 7: Relative change in general consumer prices, food prices and non-food prices (base = Oct-Dec 2006)



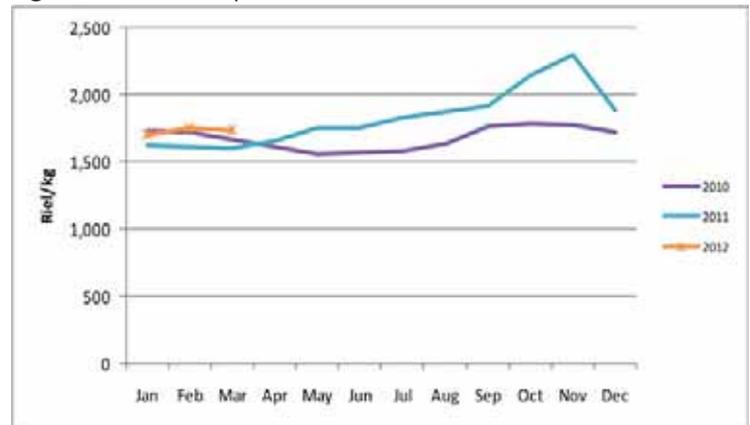
Source: National Institute of Statistics

Local wholesale and retail food commodity prices

Price reports from the Agricultural Marketing Office of the Ministry of Agriculture, Forestry and Fisheries (AMO MAFF) show that mixed rice⁹ wholesale prices in the first quarter of 2012 was lower than in the previous quarter. In January, February and March 2012 prices decreased by 9.5%, increased by 2.9%, then decreased by 0.8% on a month-on-month basis, respectively. The slight downward pressure on rice prices in March was due to the dry season harvest and decrease in regional prices, especially Vietnam. However, prices increased by 8.2% on a year-on-year basis (Figure 8). After adjusting for the annual inflation rate of 5.4%, wholesale rice prices increased by 2.8% year-on-year.

Prices in the current quarter were less volatile compared to the previous quarter, when mixed rice prices dropped significantly in December 2011 after rapid increases October and November.

Figure 8: Wholesale price of mixed rice¹⁰



Source: Cambodia Agricultural Market Information Service, MAFF

Price Monitoring and Forecasting

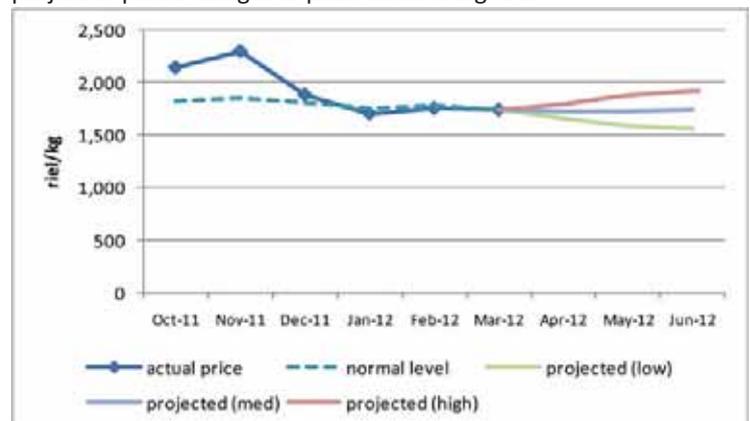
FAO's price monitoring tool compares recent actual wholesale prices from AMO MAFF with "normal" price levels. The normal price level takes into account historical price levels and adjusts for inflation and seasonal factors. A discrepancy between current actual prices and "normal" prices indicates that current prices are higher/lower than what would be expected based on historical price levels, inflation, and seasonal factors.

In March 2012, the discrepancy between the actual price of wholesale rice and the expected normal price was 0.2%¹¹, confirming that at a national level rice prices have reverted back to normal levels after being abnormally high in October and November 2011 due to the large floods.

The FAO price monitoring tool also projects prices based on the current price, current inflation rate and seasonal factors. The high and low bands are set so that actual prices will fall within the range 80% of the time.

Prices for the following quarter (April, May and June) were projected by the price monitoring tool using the March 2012 price, current inflation rate, and seasonal factors. Rice prices are expected to decrease in April due to ongoing downward pressure from the dry season rice harvest. However, prices are projected to start increasing in May as the impact from the dry season harvest subsides (Figure 9).

Figure 9: Comparison of recent wholesale prices with normal and projected prices using FAO price monitoring tool



Source: AMO, WFP, FAO

6 The CPI is collected and reported by the National Institute of Statistics (NIS).

7 Relative item expenditure weights are derived from the 2004 Cambodia Socio-Economic Survey and adjusted to October-December 2006 price levels.

8 The CPI data for March 2012 was not released by NIS at the time of publication.

9 Mixed rice is considered a low quality rice.

10 Wholesale rice prices are calculated with price quotes from urban markets or rice mills in the following provinces: Kampong Chhnang, Kampong Cham, Takeo, Siem Reap, Prey Veng, Phnom Penh, Kampot, Battambang, Banteay Meanchey.

11 2008 prices are excluded from the FAO price monitoring tool analysis as the food price crisis in mid-2008 distorts the seasonal factors.

Food Purchasing Power of Vulnerable Households

The daily wages of unskilled workers engaged in rice and non-rice farming and construction work are monitored by Provincial Department of Agriculture staff on a monthly basis since September 2011 in six provinces¹².

In the current quarter, unskilled wage were relatively stable. In January and February 2012, the unskilled wage rate increased by 2.2% and 2.5%, respectively, on a month-on-month basis, while in March, unskilled wage rates slightly decreased by 0.8% month-on-month (Table 3). The unskilled wage rate decreased in December 2011 with the end of the main wet season rice harvest, but increased again in the current quarter due to increased labour demand from the dry season rice cultivation.

Terms of trade (ToT) is used to assess the food purchasing power of households that are dependent on wages from unskilled labour by using the ratio of the daily wage rates of unskilled laborers and the retail price of lowest quality rice in the market. This gives an indication of the amount of rice that an unskilled wage labourer can purchase with a daily wage.

After dropping by 6.7% month-on-month in December 2011, the ToT for unskilled labour and low quality rice increased by 15.1% and 6% on a month-on-month basis in January and February 2012, respectively. The increases in ToT in January and February were primarily due to decreases in rice price, but also from increases in unskilled wage rates. In March 2012, the ToT slightly increased by 0.5% on a month-on-month basis as the drop in rice prices outweighed the drop in unskilled wage rates.

Table 3: Terms of trade of unskilled labour and low quality rice

	Dec 2011	Jan 2012	Feb 2012	Mar 2012
Unskilled wage (riel/day)	14,042	14,354	14,708	14,583
Mixed rice (riel/kg)	2,106	1,871	1,809	1,785
Terms of Trade (kg/day)	6.7	7.7	8.1	8.2

Source: Cambodia Agricultural Market Information Service, MAFF

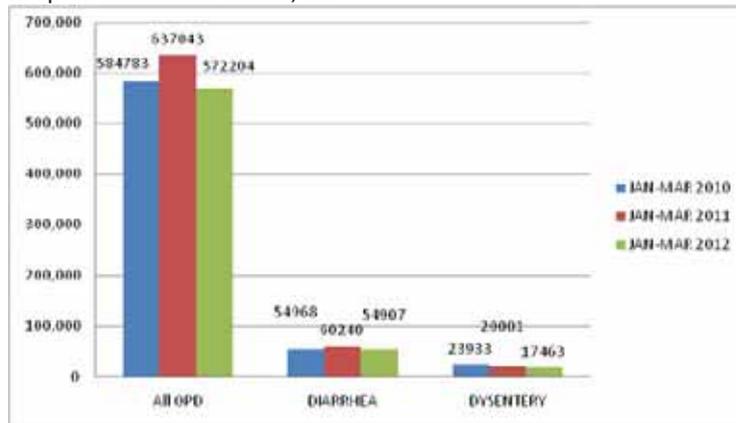
HEALTH AND NUTRITION

Diarrhea and dysentery cases

Children afflicted by diarrhea and dysentery are at greater risk of becoming malnourished due to their bodies' increased nutrient requirements to fight the disease and a reduced ability to absorb these nutrients from their diet during the disease.

In the first quarter of 2012 there has been a 10% drop in child outpatient cases on a year-on-year basis (Figure 10). This may be attributable to incomplete reporting for the month of March; delays in reporting are found to persist in the Health Information System (HIS). Quarter-on-quarter decreases from 2011 to 2012 for diarrhea and dysentery show similar trends, with a 9% and 13% drop, respectively.

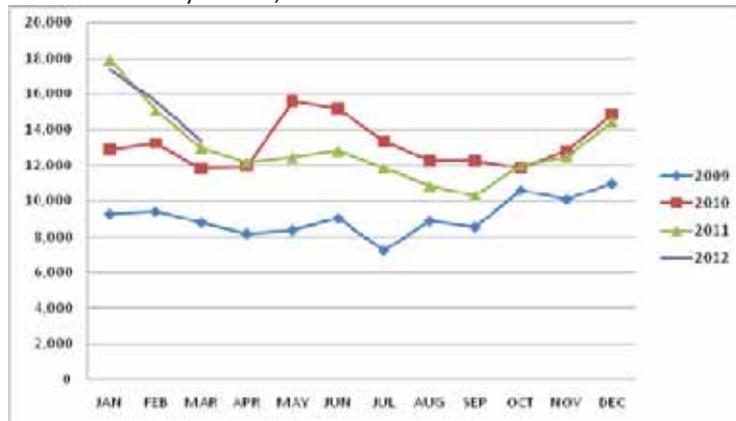
Figure 10: First quarter new outpatient cases in children 0-5 years in hospital and health center, HIS



Source: Health Information System, Ministry of Health

Health center data shows that the incidence of diarrhea during the 2011-2012 dry season (January to March) is similar to that of the 2010-2011 dry season. The dry season peak in diarrhea is evident. As was the case in previous years, diarrhea incidence is going down in the first quarter of 2012 (Figure 11). The only province where diarrhea incidence is not currently decreasing is Kampong Chhnang. A recent policy change allowing treatment of diarrhea by Village Health Support Group in the community may be the cause of continued increases in Kampong Chhnang. It needs to be verified if the increase is attributable to an outbreak or to better coverage of treatment.

Figure 11: New outpatient diarrhea cases in children 0-5 years at health centers by month, 2009-2012 HIS

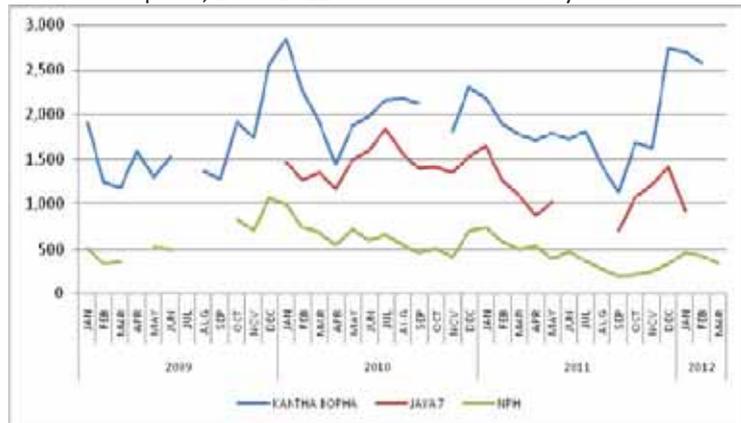


Source: Health Information System, Ministry of Health

Hospital data also clearly shows the dry season peak in diarrhea, but the highest incidence is seen in different years in the different hospitals (Figure 12). The cases admitted in National Paediatric Hospital (NPH) continue going down since 2010; this may be attributable to a change in management structure in 2011. The number of child malnutrition cases treated in the NPH also went down after the structural change. Parents may now be more likely to bring their child to Kantha Bopha, as free service continues at that hospital.

12 Battambang, Kampong Cham, Kampong Thom, Prey Veng, Pursat and Siem Reap

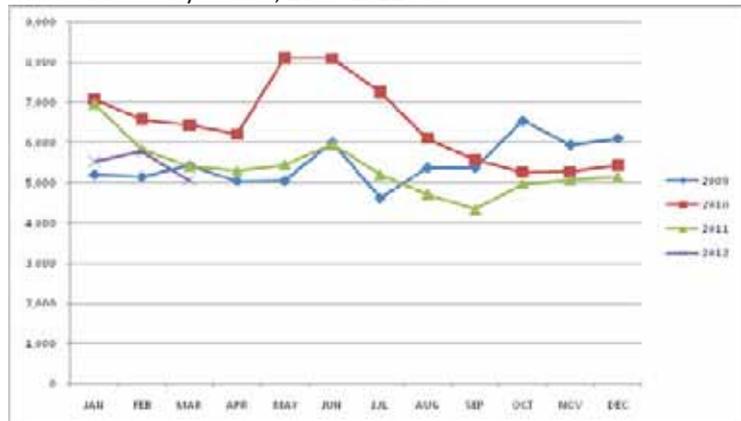
Figure 12: New outpatient diarrhea cases in children 0-5 years in selected hospitals, 2009-2012 Health Information System



Source: Health Information System, Ministry of Health

Health center data confirms the outbreak of dysentery during the May-July peak in 2010 and shows clearly that levels of dysentery have returned to normal and are now lower than the 2009 levels (Figure 13).

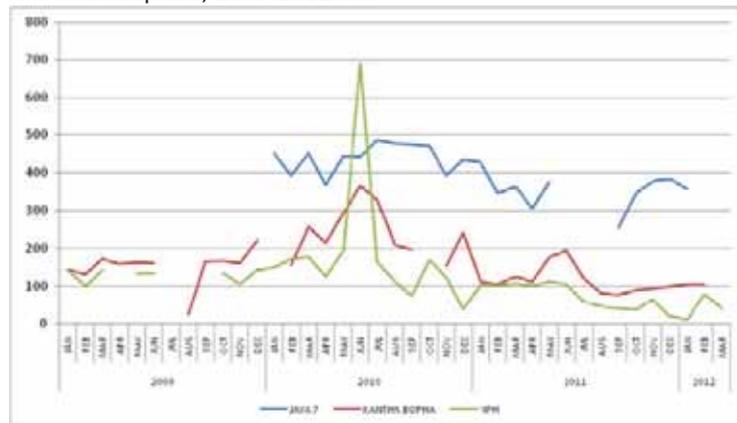
Figure 13: New outpatient dysentery cases in children 0-5 years at health centers by month, 2009-2012 HIS



Source: Health Information System, Ministry of Health

Hospital data confirms the outbreak of dysentery during May-July 2010 and shows clearly the same trend of outbreak in all three hospitals (Figure 14). Trends from the hospital suggest that there has been a steady decrease in dysentery since the 2010 outbreak. Interestingly, JAYAVORAMAN 7 hospital reports higher dysentery incidence than KUNTHA BOPHA hospital, while it is the opposite for diarrhea. This may be the result of different reporting protocol in the two hospitals or could show that dysentery is more common in Siem Reap and surrounding provinces.

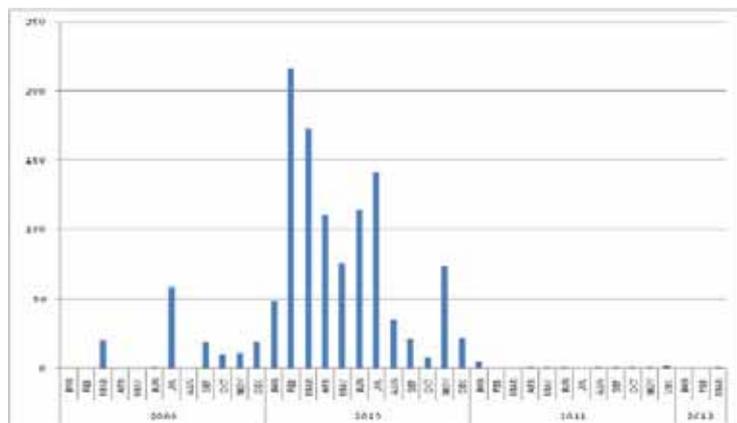
Figure 14: New outpatient dysentery cases in children 0-5 years in selected hospitals, 2009-2012 HIS



Source: Health Information System, Ministry of Health

The 2010 cholera outbreak has stopped and there is no reported widespread outbreak since that time (Figure 15). In 2012 there is only one case reported in Kralanh Referral Hospital in Siem Reap.

Figure 15: Inpatient discharge of cholera by month, 2009-2012 HIS



Source: Health Information System, Ministry of Health

Nutrition indicators

According to the Cambodia Post-flood relief and recovery survey, the nutritional status of children has not deteriorated from pre-crisis levels at the time of the survey in January 2012. The small increase in recent morbidity (e.g., diarrhea) appears to be seasonal. Although the situation has not gotten worse since the floods, child malnutrition remains a significant public health problem and ongoing efforts to address this issue should be strengthened and expanded.

While access to food and non-food assistance and credit are likely to have mitigated the impact of the flood on food consumption and nutritional status in the short term, these strategies are not sustainable and problems with household access to food will continue to have medium and long term consequences for the poorest households. These households are at risk of credit default or relying on negative coping strategies, such as reduced quantity and quality of food.