## CHAPTER 5

# RECENT PRICE MOVEMENTS IN KEY FOOD STAPLES IN CAMBODIA

As discussed, the welfare analysis is based on a hypothetical 10 percent price change. In this section, domestic price movements in Cambodia are analysed in order to establish general price trends and assess the degree to which domestic prices have been increasing<sup>4</sup> over the last few years.

Initially we look at international and national rice price movement. Secondly we focus on domestic rice prices analysing a number of different domestic rice varieties and assessing recent real price changes. Finally, trends in the price of maize. All prices are reported in Cambodian Riels and cover the period between 2000 and 2009. Prices have been adjusted for the effect of inflation and are in 2008 terms as this allows comparing all prices to the 2008 levels.

### **5.1 RICE PRICE MOVEMENTS IN CAMBODIA**

Analysing a longer time period allows to put price movements into perspective and understand if the recent price levels in Cambodia are comparatively high or low with respect to previous periods. In the case of a traded good, as is the case for rice and maize, it is also important to understand broadly how international prices are inter-connected with domestic prices. We get a general sense of this by plotting international and domestic prices over time.

### **5.1.1 DOMESTIC AND INTERNATIONAL RICE PRICE MOVEMENTS**

Figure 9 presents international and domestic rice price movements. The world price of rice is for Thai rice 5 percent broken. The figure also includes Thai rice 25 percent broken and Vietnamese rice 5 percent broken. The domestic Cambodian rice prices included are those of Somaly rice and mix rice. Rice mix is considered to be poor quality rice, and in the context of poverty analysis and vulnerable groups monitoring, it is the rice price of most interest. Somaly is a higher quality variety of rice.

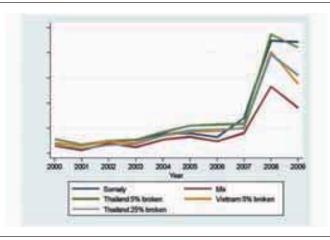
All rice markets seem to be integrated as the prices of rice all roughly follow very similar trends, see Figure 9. Following a decrease between 2000 and 2001, all rice prices have generally been following a steady upward trend. The price increase between 2001 and 2007 was relatively steady and continuous. In 2007 prices surged and more than doubled within a single year span.

<sup>4</sup> Price data were obtained from the Agriculture Marketing office of the Ministry of Agriculture, Forestry and Fisheries in Cambodia.

The price of mix rice, the lower quality rice, generally followed a similar trend too but the increase between 2007 and 2008 was slightly less. The Somaly domestic price of rice, the highest quality, very closely follows the international prices of rice, with the exception of the period between 2004 and 2006.

<u>Figure 8</u>

Domestic rice price changes between 2006 and 2009 in 2008 (Riels)



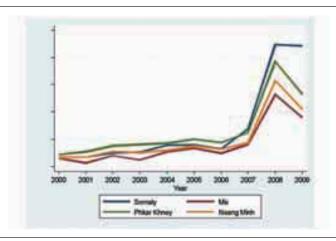
Source: Raw data from Ministry of Agriculture, calculations by the authors

### **5.1.2 DOMESTIC RICE PRICE MOVEMENTS**

Figure 10 illustrates recent domestic price movements between 2000 and 2009 and includes the price of Somaly rice, Phkar Khney rice, Neang Minh rice and rice mix. Neang Minh rice is a middle quality variety of rice and Phkar Khney is a higher quality variety of rice.

Figure 9

Domestic maize price changes between 2006 and 2009 in 2008 (Riels)



Source: Raw data from Ministry of Agriculture, Forestry and Fisheries, calculations by the authors

All domestic rice prices constantly increased in the period between 2000 and 2009. Between 2000 and 2007 prices steadily increased and between 2007 and 2008 prices shot up dramatically. Depending on the variety of rice, prices then stabilized or decreased between 2008 and 2009. Nonetheless, in 2009 price levels were still much higher compared to previous periods.

Table 8 illustrates some of the real percentage changes in the domestic price of rice over the last three years. The price of the mix rice increased by 22 percent between 2006 and 2007, by 101 percent between 2007 and 2008 and then decreased by 23 percent between 2008 and 2009. The price of Phkar Khnev rice increased by 20 percent between 2006 and 2007, by 115 percent between 2007 and 2008 and then decreased by 25 percent over the following year. Consequently, although domestic prices did decreases between 2008 and 2009, price levels remained much higher than in previous periods.

Table 8

Real rice price changes between 2006 and 2009 in Cambodia

Year interval/commodity  Year interval	Real percent change (%) 2006-2007	Real percent change (%) 2007-2008	Real percent change (%) 2008-2009
Rice Mix	22	101	-23
Rice Phkar Khney	20	115	-25

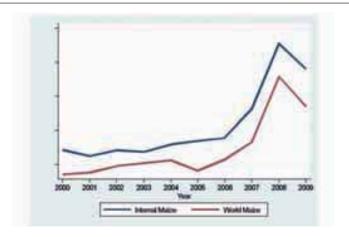
Source: Raw data from Ministry of Agriculture, calculations by the authors

While the rice price increases on international markets were very large, biofuel demand was not a key driver of these movements. Price increases of this magnitude certainly have a large welfare impact on the poor, however.

### **5.2 MAIZE PRICE MOVEMENTS IN CAMBODIA**

Figure 10 illustrates domestic and world maize price in 2008 real Riels over the period between 2000 and 2009. Overall between 2000 and 2009, the domestic price of maize closely followed trends in the international price of maize, with the exception of the years between 2004 and 2005. The trends suggest that generally the domestic Cambodian maize market is relatively well integrated with the international maize market.

Figure 10
International and domestic maize price between 2000 and 2009 in 2008 (Riels)



Source: Raw data from Ministry of Agriculture, calculations by the authors

The world maize price steadily increased between 2000 and 2004, declined between 2004 and 2005 and then rapidly increased until 2008. The price increase between 2005 and 2008 was dramatic. After 2008, the world price of maize declined.

Overall the domestic price of maize has been on an upward trend since 2000 with some initial fluctuation but then starting to rapidly increase since 2005. The initial price increase was slow and steady. Between 2006 and 2007 the domestic price of maize rose dramatically and prices increased by nearly 200 percent. As was the case for the world price, the domestic price decreased between 2008 and 2009, although prices remained high compared to the levels between 2000 and 2006. Table 9 illustrates some of the real percentage changes in the domestic price of maize over the last three years. The domestic price of maize increased by 31 percent between 2006 and 2007, by 53 percent between 2007 and 2008 and then declined by 14 percent between 2008 and 2009. Also for the case of maize, price levels in 2009 were higher compared to previous periods.

Table 9

Real maize price changes between 2006 and 2009 in Cambodia

Year interval/ Commodity	Real percent change (%)	Real percent change (%)	Real percent change (%)
Year interval	2006-2007	2007-2008	2008-2009
Maize	31	53	-14

Source: Raw data from Ministry of Agriculture, calculations by the authors

### CHAPTER 6 CONCLUSIONS

Price increases in key food staple crops can hinder domestic and household level food security depending on whether the country and households are, respectively, net-importers or exporters or net-producers or consumers of the food crop considered. This component of the Bioenergy and Food Security (BEFS) analysis allows identification of the foods for which the country is most vulnerable to price shocks and the segments of the population that are vulnerable to these shocks.

Rice is the main food staple in Cambodia and for most Asian countries. We show that in the case of Cambodia 2/3 of total calorie intake comes from rice. Due to this, the analysis presented has primarily focused on rice. Cambodia is a net exporter of rice and therefore the country as a whole can benefit from price increases in the price of rice.

In the analysis households are initially disaggregated by quintile and location, i.e. urban and rural. Based on the CSES 2004, 2.2 percent of the poorest quintile resides in urban areas, while 17.1 percent live in rural areas.

The analysis shows that, at the household level, increases in the price of rice are beneficial for all segments of the population. This is also the case when distinguishing between urban and rural poor, although the benefit accrued by the urban poor is marginal. When adding household characteristics such as land ownership and gender of the household head, we find that some segments of the poor are hurt by the price increase. In the case of land ownership, all landless poor are negatively impacted by rice price increases. In the case of the gender of the household head, the analysis shows that urban female headed households are hurt by an increase in the price of rice. Overall, land ownership status has a larger impact on welfare results compared to gender status.

The welfare analysis presented is based on a hypothetical 10 percent price change on the producer side which can be compared to recent price movements or price movements obtained from economic simulations. Recent price movements are also discussed in the paper. Key food staples' prices surged in Cambodia between 2007 and 2008 and then tapered off during 2009, although remaining at high levels compared to previous periods. Between 2007 and 2008 the price of rice mix, the low quality rice, increased by 101 percent.

In conclusion, from a food security perspective, the price of rice should be monitored closely for particular segments of the population as described in the analysis, although overall the increase in the price of rice can be beneficial for Cambodia.

