



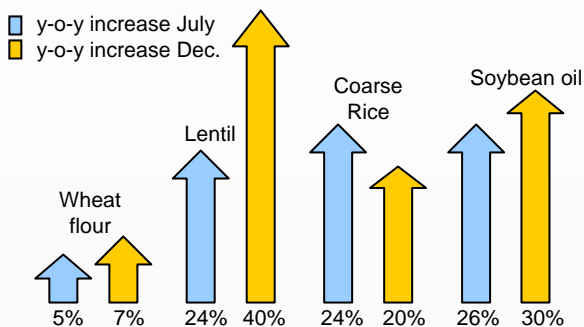
# 2008 Nepal Staple Food Market Review & Outlook for 2009

## Highlights

- 2008 was a year marked by unprecedented food price increases across the country. At peak prices, rice increased by 24 percent, oil by 30 percent, wheat flour by 18 percent, and musuro (lentil) by 40 percent compared to last year.
- The major causes of price increase during 2008 include: high reliance on imports during a year of rapidly rising global food prices, the 2007 Indian export ban on key food commodities, high transportation costs, reduced road access caused by natural disasters, civil unrest, and poor base stocks of food.
- Domestic cost drivers resulted in particularly high food prices, year-on-year food and beverage inflation in Nepal was approximately 17 percent, compared to approximately 10 percent food inflation in India.
- Eighty percent of households in Nepal experienced increased difficulty in purchasing food during 2008 due to higher food prices; yet, only 31 percent of households reported increased income.
- The most common coping strategies were: relying on less preferred foods, reducing meal portions, reducing spending on non-food items and spending savings/borrowing money for food purchases. Over 30 percent of households had skipped meals, or reduced portion sizes.
- Despite relatively strong agricultural harvests in 2008, food stock levels in both Nepal and Indian feeder markets are generally low and are not likely to be replenished soon. Therefore, the possibility of further sharp price hikes and continued price volatility through 2009 remains high.

## Market overview

**Chart 1. Year-on-year food prices increases July & December 2008**



2008 was a year marked by unprecedented food price increase across the country. This trend largely correlated with regional and global price hikes associated with the 'global food crisis' - and occurred despite relatively strong harvests.

At the beginning of 2008, due to a number of prevailing market factors, Nepal was particularly vulnerable to the global food crisis. Factors included: stagnating agricultural production with heavy reliance on seasonal rainfall, heavy reliance on food and oil imports, poor transportation infrastructure, and a high percentage of average household income - 60 percent - spent on food.

Peak prices for most key commodities occurred in the third quarter of the year, with seasonal adjustments resulting in marginal decreases towards the end of the year. Rice and oil were at their highest point in September, representing a year-on-year (y-o-y) increase of 24 percent and 30 percent respectively, the cost of wheat flour peaked in October (18 percent y-o-y). However, musuro (broken lentil) continued to increase through to December (40 percent y-o-y)<sup>1</sup>.

The rapid price increase of staple foods had a significant impact on the purchasing power of the poor. According to a WFP survey, 80 percent of households in Nepal experienced increased difficulty in purchasing food during 2008. Particularly effected were the 8 million Nepalese who were already living at or below the poverty line.

In January, 1.3 million people had been identified by WFP Nepal as requiring urgent food assistance. Because of high food prices, this number increased to 2.5 million by June, and again to 2.7 million people by December. In addition, an estimated 3.7 million people had been identified as vulnerable to high food prices and might need food assistance if prices increased further. This increased the total number of Nepalese, currently requiring assistance - or at high risk of requiring future assistance - to 6.4 million.

Reduced global demand for both food and fuel, combined with strong summer harvests across much of the country, and record harvests across the region, resulted in the price of staple foods reducing marginally towards the end of the year. By December the price of rice had fallen by 7 percent and wheat by 5 percent (following highs in September and October). However, this was less of a reduction than would normally be expected at this time of year following a good harvest<sup>2</sup>. For a number of reasons (as discussed in this report), decreases in Nepal were relatively small and slow to arrive when compared to (i) highly inflated base prices and (ii) significant regional price decreases.

### Food prices & inflation

The steep rise in food prices dramatically increased inflation across the country. The official y-o-y inflation rate for food and beverages was nearly 17 percent (compared to 7.1 percent in 2007 and 9.5 percent in India)<sup>3</sup>. Due to the high percentage of average income spent on food, overall y-o-y inflation increased to 14.1 percent from 5.7 percent last year. The rate of inflation in Nepal is now significantly higher than in India, and food prices are a key driver of this discrepancy. Domestic issues keeping food prices high are discussed in this report.

1. Markets included in this study are: Acham, Banke, Dhankuta, Jumla, Kailali, Kaski, Kathmandu, Morang, Parsa, Rolpa and Rupandehi (price increases were then checked and adjusted for consistency)

2. 10 -12% could be expected, source: Agribusiness Promotion Directorate, MoAC.  
3. Nepal figures: Nepal Rastra Bank, December 2008. India figure: Equity Bulls - food only.



# 2008 Key Market Drivers/ Events

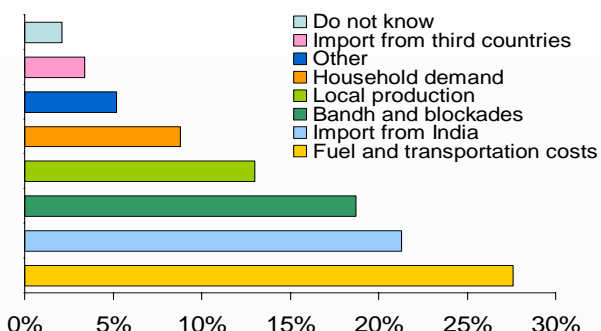
## Global supply & demand factors

The unprecedented food price increases experienced in Nepal during 2008 were largely caused by a set of complex and interrelated supply and demand factors which impacted markets worldwide. These factors had great impact on local markets despite relatively strong crop production in both Nepal and India. To a varying degree, these factors and events included:

- rapidly increasing energy/ fuel prices;
- a lack of investments in the agricultural sector;
- rapidly rising demand for food;
- trade distorting subsidies;
- growth of bio-fuel production replacing food; and
- recurrent bad weather / poor harvests;

Nepal was particularly susceptible to the factors which led to global food price increases due to a number of prevailing domestic market problems, such as relatively low levels of agricultural production, heavy reliance on Indian supply and typically high transportation costs (domestic factors are discussed in more detail below). Chart 2 shows the key determinates of price as perceived by traders.

**Chart 2. Trader perception of food price determinants, June 2008**



## Supply factors

### Agricultural production

In Nepal, paddy harvest increased by 17 percent compared to 2007 and wheat by 4 percent. However, production was still relatively low, and supply was met through heavy reliance on imports. In addition, parts of the Far- and Mid-Western Hills and Mountains suffered consecutive poor harvests - hit by drought, severe weather and pests.

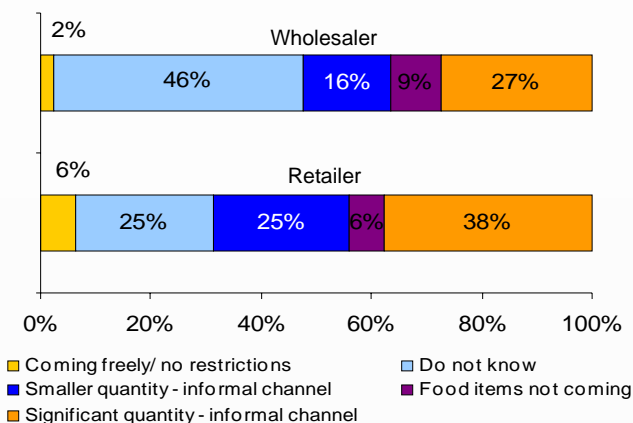
In India, cereal crop harvests were strong, and matched last year's high of 261 million tones. However, this was not enough to curb prices given rapidly increasing demand in both India and the broader region.

### Trade with India

Typically supply from India is a more critical price influencer than supply from local production (traders rated it as the second largest price influencer in 2008 – see Chart 2). In October 2007, India banned the export of non-basmati rice, wheat and lentils to Nepal and this correlated with sharp food price increases in Nepal from late 2007 through 2008. Nepal typically imports up to 600,000 metric tones of food each year, and this is predominantly through open borders with India.

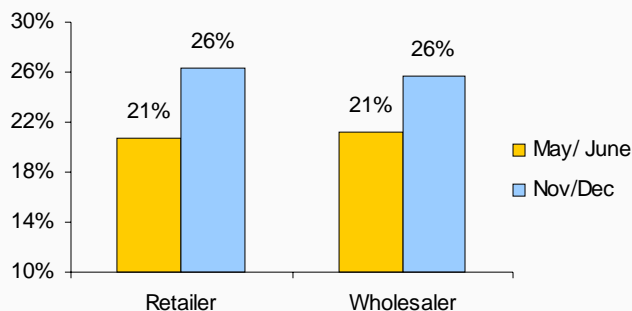
In July, higher prices for key commodities were observed in Nepalese border markets, than in Indian border markets, and this indicated that the ban had indeed contributed to increased prices in Nepal during 2008. However, considerable cross border movement of goods still occurred (see Chart 3).

**Chart 3. Supply from India, July to December 2008**



In October 2008 the total export ban was eased on non basmati rice with some regulated delivery allowed. However, a prevailing general ban on basic food stuffs is correlated with continuing high prices. This is particularly so for musuro, which continued to increase in price through to the end of the year.

**Chart 4. Proportion of rice stock from India**





# 2008 Key Market Drivers - Supply

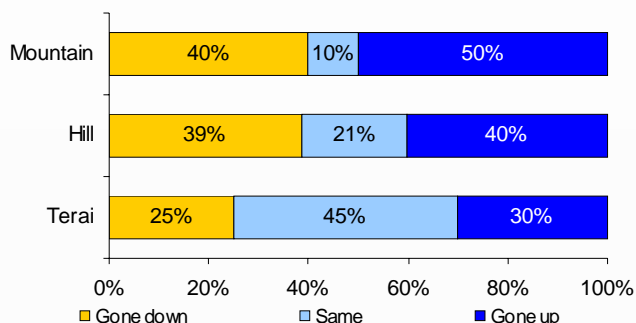
## Transportation costs

Transportation expenses were a major cost driver of food prices throughout the year. In July, traders rated this as the key factor affecting price, see Chart 2. In July, more than 73 percent of traders reported that the cost of transportation had increased considerably during the past 6 months. By December, 42 percent believed it had increased again - by an average of 30 percent.

The mountain and hill markets were generally worst affected by transportation price increases in the later half of the year, but least affected in the first part of the year. This is most likely because it took a longer time for price increases to be reflected in more remote markets.

However, in the second half of the year, many mountain and hill markets also benefited from new roads (see market access section) and re-opened roads after landslide, therefore prices also decreased in some of these areas.

**Chart 5. Trader transportation costs, October to December 2008**



## Fuel price increases & shortages

Transportation costs were largely linked to rapid fuel price increases in the first half of the year. International oil prices peaked at around \$147 US per barrel mid year. Nepal Oil Corporation (NOC) subsidies partially shielded domestic price increases in Nepal, but in June 2008, prevailing international increases lead the NOC to increase fuel price by around 25 percent. Despite this increase, the NOC was still incurring losses of NPRs 1.5 billion per month (compared to NPRs 2.62 billion per month prior to the price increase).

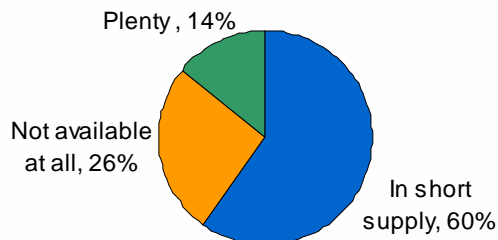
During the year the NOC accumulated considerable debt to the Indian Oil Company (IOC). This led to mass fuel shortages across the country in June and July when the IOC cut supply. Eighty-three percent of traders reported that their business was affected by lack of fuel during 2008.

In October a fall in international oil prices lead the NOC to start lowering domestic prices. However, as at the end of 2008 the full extent of international fuel price cuts had not been passed on. Nepalese press reported that this is the result of the NOC needing to recover liabilities of over NPR15 billion (USD \$194 million). As of December, prices were NPR 80.5/ltr for petrol, and NPR 59.5/ltr for diesel/ kerosene. Fuel prices were around 10 percent higher compared to the same time last year while international oil prices had fallen by 125 percent over the same period<sup>1</sup>.

1. Data taken from U.S Energy Information Administration, December 2008 crude oil price per barrel was USD \$ 38.7 compared to USD \$ 86.8 in 2007.

In addition, by the end of the year, transporters had not reduced the cost of transport fares in line with NOC fuel price decreases, artificially keeping food prices high across much of the country.

**Chart 6. Availability of petrol/ diesel, July to December 2008**

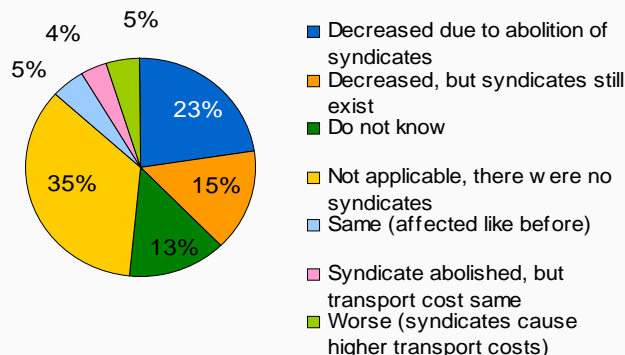


## Transport syndicates

It is widely believed that the syndicate system used by transport associations can complicate the movement of goods, and result in very high transportation costs when regional monopolies, oligopolies or price collusion by multiple parties exists. Syndicates were officially banned in 2001, but have continued to operate. In the last half of 2008, 10 percent of traders believed that syndicates were keeping their transport prices high, including 5 percent who believed syndicates were still increasing prices.

However, it appeared that efforts to abolish the system during 2008, had some success; 23 percent of traders believed that abolition of syndicates dropped their transport prices in the second half of the year.

**Chart 7. Trader perception of transport syndicates and prices, July to December 2008**





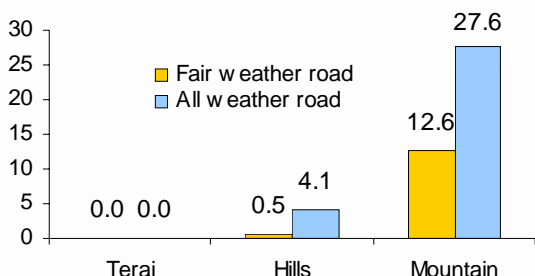
# 2008 Key Market Drivers - Supply

## Market access

### Transportation infrastructure

Lack of market access because of poor or non-existent roads is a systemic cause of high market prices in the mountain districts. This was the major business concern for the majority of mountain traders in 2008 (above rising food prices). Chart 8 shows the average distance of markets surveyed, to the closest road.

**Chart 8. Ave distance of market from road (hours)**



However, infrastructure development during the year noticeably reduced transportation and food prices in some districts. For instance, the opening of a new motorable road from Sallibazar to Chaurjahari lead to a 10 -15 percent decrease in food prices in Jajarkot between September and October.

### Natural disasters

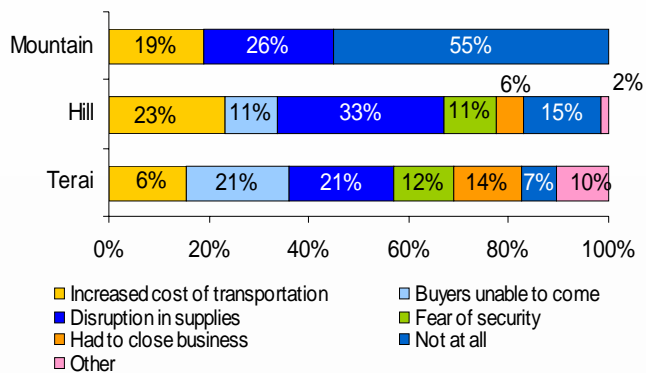
Natural disasters, including monsoon flooding and landslides, blocked key market access roads in various locations during the year. This increased prices in some districts and reduced prices in others. By August the closure of the East-West Highway in Sunsari and Saptari due to the Koshi River flood, had virtually stopped the supply of commodities from the Eastern Terai. This caused the price of perishable items to fall sharply in areas east of Koshi and increased prices in western and north eastern feeder markets. Similarly, the highway was impassable at some parts in the far-western Terai due to flooding in Kailali and Kanchanpur, this increased prices in key feeder markets such as Sanfegabar.

### Bandhs/ blockades

In addition to natural disasters, bandhs and blockades significantly hindered supply of commodities to certain markets throughout the year and added significant cost to business. Traders in the Terai identified bandhs as their number one business problem.

Food supply to markets in the Far-Western Hills and Mountains were particularly affected by a 26-day transportation strike during July/August in the regional market of Dhangadi. This affected districts in the Far West, including Doti, Achham, Bajura, Bajhang, Baitadi, Dadeldhura and Darchula . Due to this bandh the Sanfegabar market closed because of complete depletion of stock.

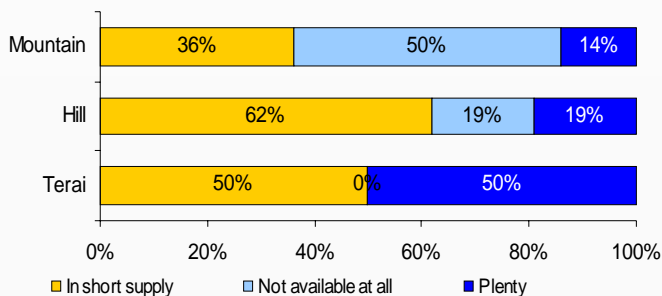
**Chart 9. Impact of bandhs on trade**



### Supply constraints & hoarding

Throughout the year supply constraints were most pronounced for kerosene and coarse rice. In July, 56 percent of traders indicated that supply of kerosene had reduced significantly during the first half of the year, and 47 percent indicated that rice had. By the end of the year, the supply situation of food commodities had generally improved , however 75 percent of traders reported insufficient kerosene supply during the final quarter of the year. See Chart 10.

**Chart 10. Availability of kerosene, October to December 2008**

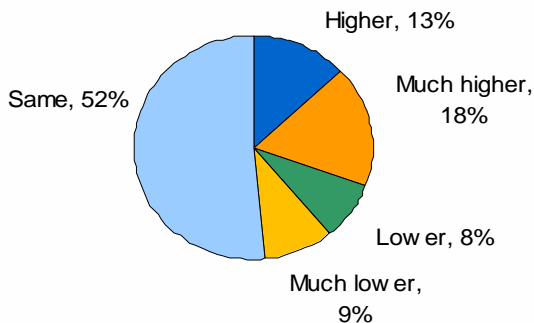


Supply constraints were a combined result of the Indian trade ban, increased demand – both locally and regionally - and transportation disruption caused by bandhs/ strikes and landslides. During the peak period of food price increases and supply constraint, prices were further elevated by some traders hoarding stock. In July, 37 percent of traders reported that they had increased their stock levels for use if supply was disrupted or for when prices increased further.



## 2008 Key Market Drivers - Demand

Chart 11. Household income this year compared to last



### Income and food expenditure

Ninety-eight percent of households reported that their expenses had increased during the year. For almost all households high food prices were an issue, and in 58 percent of households it was the major cause of increased expenditure, see Chart 13. During the same period only 31 percent of households increased their income, and for 17 percent income had decreased, see Chart 11.

When food prices were at their highest point during the middle of the year, households reported spending on average 67 percent of their income on food. The extreme poor and urban poor had the highest share of food expenditure, 78 and 70 percent respectively. As food prices reduced towards the end of the year and people started to harvest paddy, the average percentage of income spent on food also reduced to 63 percent, see Chart 12 below. A higher percentage of income was spent in the hill districts – where price increases had been the most severe.

Chart 12. Proportion of income spent on food (NPR), October to December 2008

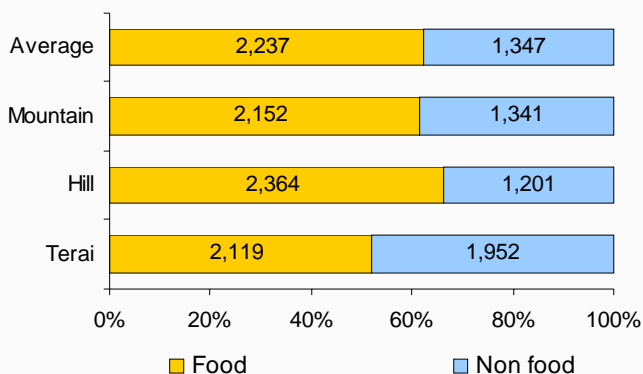


Chart 13. Household expenses this year compared to last

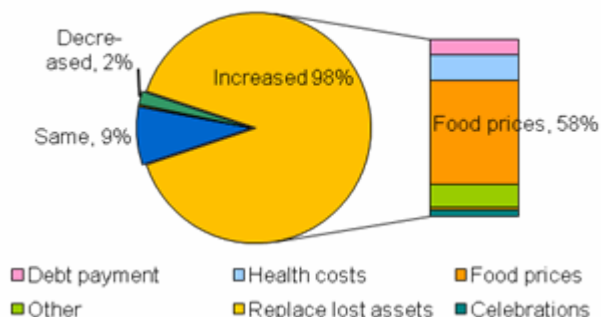
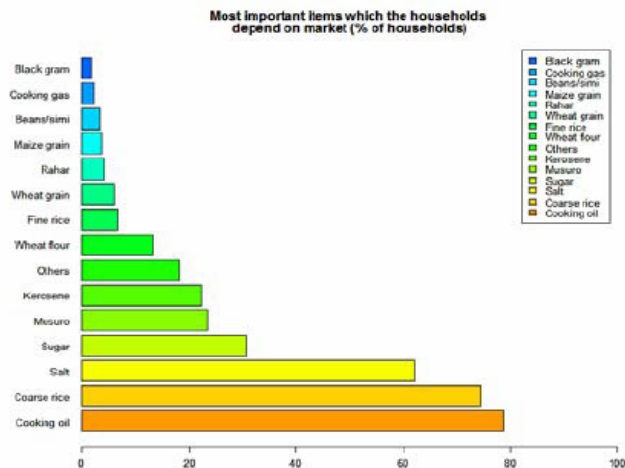


Chart 14 depicts the level of dependence households have on markets for providing various commodities. The chart shows that most households depend heavily on markets for the purchase of coarse rice, cooking oil and kerosene – these are also the items that experienced the largest price increases.

Chart 14. Market reliance for key food stuffs



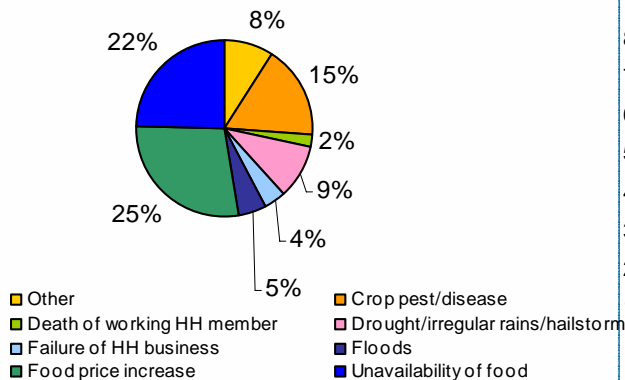
### Consumer behaviour

Changes in food prices led to altered consumption patterns throughout the year. The following page highlights food security concerns and altered consumer behaviour in response to the increase in food prices during the year. Buying on credit increased substantially, according to retailers as well as wholesalers, as did the spending of savings to purchase food. As expected, households also reduced consumption of food and/or shifted to cheaper food items.



# 2008 Market Price Increases – Impact on Livelihoods and Food Security

**Chart 15. Major household shocks, October to December 2008**

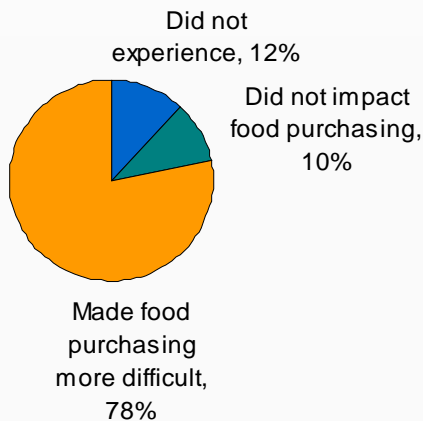


Analysis conducted by WFP earlier in the year found that approximately 80 - 85 percent of households in Nepal are net consumers of agricultural produce and therefore suffer when prices increase.

Indeed, food price increases and unavailability of food were the two most commonly incurred major household shocks during 2008. Chart 15 lists household shocks incurred during October to December, which show that food prices were still the major cause of shock during the later part of the year.

Eighty-eight percent of households experienced food price increase during the final quarter of the year – when regionally prices were reducing, see Chart 16. Ten percent of households were able to purchase food easily despite price increases, while 78 percent faced increased difficulty during this period, see Chart 16.

**Chart 16. Impact of rising prices on household purchasing, October to December 2008**



**Chart 17. Household coping mechanisms**

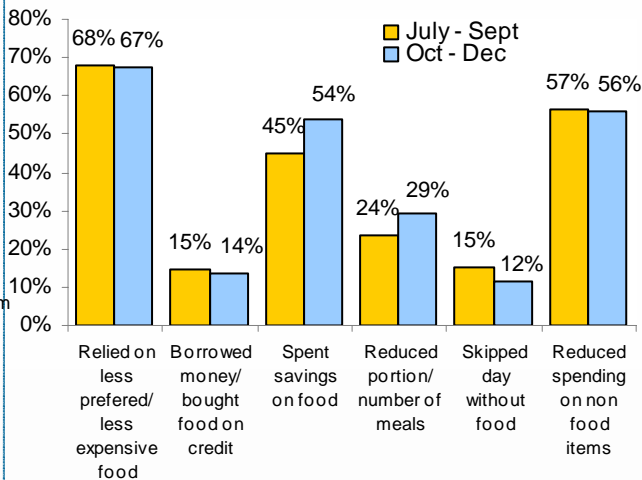
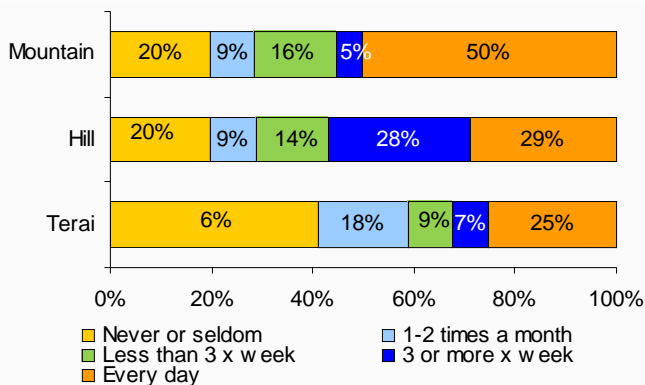


Chart 17 shows the percentage of households that adopted particular coping strategies during the past six months. The most common coping strategies were: relying on less preferred foods, reducing meal portions, reducing spending on non-food items and spending savings on food/ borrowing money for food purchasing.

A comparison of combined coping mechanisms indicates that households in the hills and mountains adapted the most severe coping mechanisms during 2008 as a result of rising prices (ave. indexed scores of 19 and 23 respectively) compared to in the Terai (ave. indexed score of 15)<sup>1</sup>. In comparison to July to Sept (ave. indexed score 23) when food prices were peaking, coping mechanisms undertaken between October and December (ave. indexed score 24) had increased – this was despite strong harvests during this period.

**Chart 18. Households which relied on less expensive food, October to December 2008**



1. The indexation used was designed by WFP Nepal, based on international WFP best practices, it involves indexation of coping mechanisms, such as those listed in Chart 17.



# 2009 Market Outlook

Easing international demand pressures, due to global economic slow down, provided some reprieve on fuel and food prices at the end of 2008 - particularly when the 2007 Indian export ban on various key commodities was lifted. This, combined with relatively strong 2008 harvests in both India and Nepal should keep prices controlled through at least the first half of 2009.

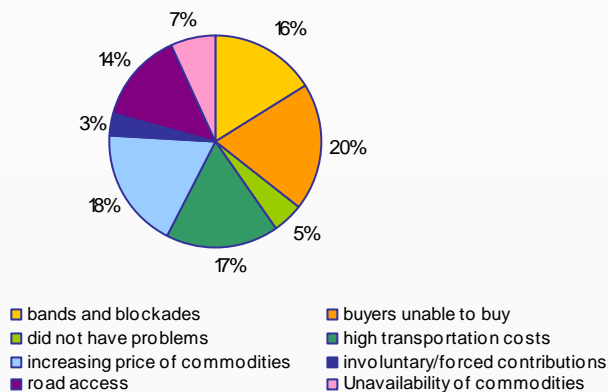
Nepal can expect some further price reprieve if the full reduction of global fuel prices is passed on through the NOC and transporters. Nepal did not experience as sharp a decline in food prices as other countries in the region during the final months of 2008 – and this was partially due to transportation costs remaining relatively high.

However, it is important to note that the global food crisis will largely persist through 2009 and the coming years. Despite reduced demand for food and fuel caused by economic slow down, the key demand pressures which were behind the 2008 price increases remain, i.e., growing use of bio-fuels and growing regional middle class.

In addition, despite relatively strong agricultural harvests in 2008, stock levels in both Nepal and Indian feeder markets are relatively low and not likely to be replenished soon. Therefore, the possibility of further sharp price hikes and continued volatility seems to be likely for the next few seasons – particularly in areas with limited road access prone to natural disaster.

The global financial crisis will likely make it harder for some households to cope with increased volatility. It is likely that there could be at least modest downturn in earnings and employment. This is particularly pertinent to the key coping mechanism of out-migration during times of hardship, which may become particularly challenging – and/or less lucrative as Indian and Nepalese demand for labour declines.

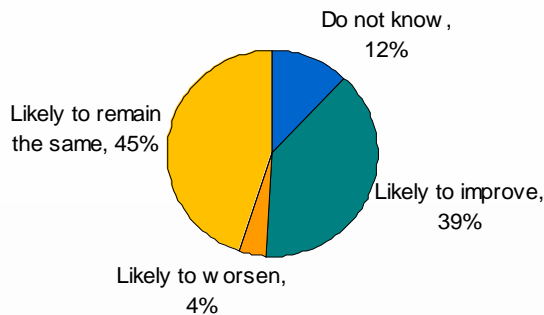
**Chart 19. Key market challenges – as perceived by traders**



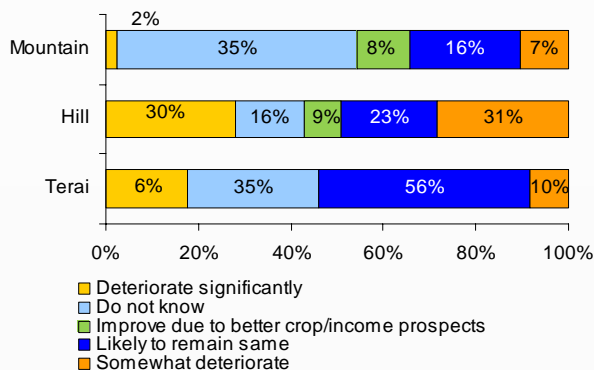
Nepal is unlikely to overcome in the near future the key challenge of increasing agricultural production, and reducing reliance on imports, which made the country particularly susceptible to rising global prices during 2008. Addressing this key issue needs to be made a priority in 2009 if food security is to be achieved in coming years.

Other key challenges, as identified by traders, are outlined in Chart 19. Chart 20 and 21 below provide an outlook for the first half of 2009 by traders and households. The majority of traders and households do not see their prospects greatly improving in 2009.

**Chart 20: Trader outlook – business prospects first 6 months of 2009**



**Chart 21. Household outlook - ability to purchase food first quarter 2009**



**Methodology**

This Report relies on 4 key information sources:

1. Pricing data, collected by WFP FSMAS and MoAc as part of routine Market Watch surveying
2. 2 x household surveys (~ 600 households each) which were carried out (July to Sept & Oct to Dec) using the standard FSMAS quarterly monitoring questionnaire adjusted to include a module on the impact of price rises on household livelihoods.
3. A market/ traders questionnaire which surveyed 127 wholesalers and retailers.
4. UN WFP & NDRI Market and Price Impact Assessment Nepal, July 2008

All information products produced by the FSMAS are available on the UN Nepal Information platform ([www.un.org.np](http://www.un.org.np)) or the wfp website ([www.wfp.org](http://www.wfp.org)). For more information please contact: Food Security Monitoring and Analysis Unit, United Nations World Food Programme, Patan Dhoka Road, Lalitpur, PO Box 107, Tel 5542607 ext 2420-5