

### 3. Price and Supply Situation

#### Overall Consumer Price Index

- 3.1 According to the mid-term review of monetary policy, average consumer price inflation has been revised to 6.6 percent against estimate of 6.0 percent as per the monetary policy during FY 2006/07. During the first 8-month period of FY 2006/07, point-to-point based overall consumer price inflation touched 6.2 percent mark compared to 7.7 percent in the review period of last year. Food item prices soared against the expectation in this period because of the adverse weather conditions, affecting agricultural production. Price of fruits and vegetables remained under pressure due to frequent strikes in the Terai region in the months of February/March of the current fiscal year. Due to the lower production of agricultural products because of adverse weather condition, the prices of agricultural commodities have been significantly increased. Price index of food and beverages group is also under pressure due to the increase in prices of spices, lentils among the items imported by India. Price index of non-food items and services remained relatively under less pressure as the impact of petroleum price hike in February-March, 2006 was less than expected. These are the underlying reasons behind the estimate of inflation rate of 6.2 percent during the review period. Revised annual average consumer price inflation will remain at 6.6 percent this year based on the assumption that the impact of petroleum product price increase in February-March, 2006 will stabilize and that food item prices will remain at the present level.

#### Box 3 (A) Factors Affecting Price Inflation in Nepal: A Study

Nepal Rastra Bank has completed a study on factors affecting price inflation in Nepal in FY 2006/07. According to the Nepal Rastra Bank Act, 2001 and its Strategic Plan (2005/06-2009/10), Bank has a role to play in price stabilization that in order to fulfill this objective, this study was done with a view to develop a short- and long-term price projection tool. On the basis of theoretical and empirical analysis, the study has come out with theoretical hybrid model which is suitable for Nepal, is as follows:

$$\dot{p} = f(\dot{m}, \dot{v}, \dot{y}, r, \dot{w}, \dot{exr}) \dots \dots \dots (i)$$

In the model, m means money supply, v stands for velocity of money supply, y for real GDP, r for interest rate, and exr for exogenous factor. The dots over the alphabets indicate logarithmic growth rates. There are six equations in the model including narrow and broad money supply and their velocity, and fixed deposit interest rates of commercial banks and Nepal Rastra Bank's refinancing rates. According to all the above equations, a short- term inflation equation has been developed as below:

$$\Delta I_n P_N = -0.03 + 0.18 * \Delta I_n M_I + 1.13 * \Delta I_n P_{IN} \dots \dots \dots (ii)$$

t-value (-1.5) (1.92) (5.73)

R<sup>2</sup> = 0.61 Durbin Watson = 2.63

The long term inflation model has also been developed by using the cointegration test and correction model (ECM), according to this, a long term Cointegration Equation is as follows:

$$I_n P_N = -0.49 + 1.09 * I_n P_{IN} \dots \dots \dots (iii)$$

And for Nepal, Error Correction Model (ECM) equation is as below:

$$I_n P_N = -0.05 + 0.2 * \Delta I_n M_I + 1.37 * \Delta I_n P_{IN} - 0.31 EC (-1) \dots \dots (iv)$$

t-value (2.295) (6.7) (-2.52)

Source: Nepal Rastra Bank

- 3.2 Overall Urban price index (point-to-point based) with 1995/96 as base year increased by 6.2 percent in the review period of the current fiscal year compared to high increase of 7.7 percent during mid Feb-March 2006. By geographic region, prices in the Katmandu Valley rose by 5.5 percent, in the Hills by 7.6 percent and in Terai by 9.0 percent in last year mid Feb-March. Prices during the above period of 2007 increased by 6.4 percent, 5.2 percent and 6.5 percent in the respective regions.

**Table 3(A): Urban Price Index (point to point based)**  
(Base Year 1995/96=100)

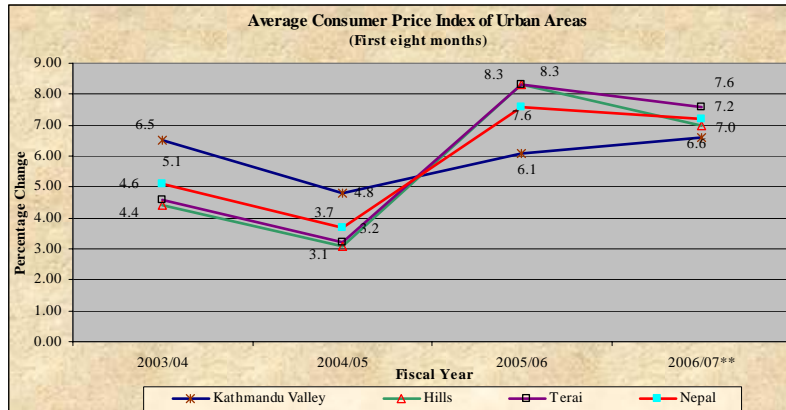
Region	Weightage (percentage)	Fiscal year			
		2003/04	2004/05	2005/06	2006/07**
Kathmandu Valley	30.80	2.30	6.10	5.50	6.40
Hills	18.80	-1.00	6.60	7.60	5.20
Terai	50.40	-1.10	5.20	9.00	6.50
Nepal	100.00	-0.10	5.70	7.70	6.20

\*Change from mid February-March

\*\*unrefined

Source: Nepal Rastra Bank

- 3.3 Urban price index in the review period has remained at 7.2 percent against the 7.6 percent increase in the first 8-month of FY 2005/06. By geographical region, index values last year for Kathmandu valley, Hills and Terai were 6.1 percent, 8.3 percent, and 8.3 percent respectively. Corresponding values in the review period of this year are 6.6 percent, 7.0 percent and 7.6 percent.



**Table 3(B): Average Consumer Price Index of Urban Areas**  
(Base Year 1995/96=100)

Areas	Weightage (percent)	Fiscal year			
		2003/04	2004/05	2005/06	2006/07
Kathmandu	30.8	6.5	4.8	6.1	6.6
Hills	18.8	4.4	3.1	8.3	7.0
Terai	50.4	4.6	3.2	8.3	7.6
Nepal	100.0	5.1	3.7	7.6	7.2

+Average price increase of first 8months \*\* Unrefined

Source: Nepal Rastra Bank

### Food and Beverages

- 3.4 Group-wise analysis of price index reveals that the index related to Food and Beverages which occupies 53.2 percent share rose by 9.2 percent in the first 8 month of the FY 2006/07. Last year, this increase during the review period was limited to 6.2 percent. Higher increase this year was mainly due to high increases in the prices of component items such as spices (26.8 percent), vegetables and fruit (18.4 percent) lentils ((17.9 percent), fish, meat and eggs (12.0 percent), edible oil and refined butter (10.9 percent), and food grains and processed food items (7.8 percent). Increases during the same period last year is compared as follows: lentils (12.4 percent), vegetables and fruit (1.5 percent), and spices (2.4 percent). Prices of some items, such as, edible oil and refined butter had diminished by 3.0 percent, fish, meat and eggs by 1.2 percent. Price of sugar and sugar based products, however, diminished by 12.2 percent during the review period against the increase of 5.3 percent during the month of mid Feb-March of the calendar 2006. Increase of price of beverages and restaurant-served food sub group remained minimal of 3.1

percent and 2.9 percent during the period under review while compared to 10.4 percent and 3.3 percent respectively during the similar period last year.

**Table 3(C): Point to Point based National Urban Consumer Price Indices**  
(Base Year 1995/96=100)

(Percentage Change)\*

Consumer Items	Weightage (percent)	Fiscal Year +			
		2003/04	2004/05	2005/06	2006/07 **
Total (A+B)	100.0	4.4	5.7	7.7	6.2
<b>A. Food and Beverages</b>	<b>53.2</b>	<b>3.1</b>	<b>4.7</b>	<b>6.2</b>	<b>9.2</b>
Food grain and food grain-based	18.0	-0.8	5.8	13.2	7.8
Rice	(14.16)	0.8	5.5	14.8	3.4
Lentil	2.7	3.7	3.6	12.4	17.9
Vegetables and fruit	7.9	1.2	4.0	1.5	18.4
Spices	1.9	7.9	-4.9	2.4	26.8
Fish, meat and eggs	5.2	5.6	9.1	-1.2	12.0
Milk and Milk Products	4.0	1.6	0.0	5.1	6.9
Oil and Ghee	3.1	19.7	-7.5	-3.0	10.9
Sugar and Sugar related products	1.2	6.5	25.5	5.3	-12.2
Beverages	2.3	-0.7	3.2	10.4	3.1
Restaurant served Food	6.9	6.1	7.4	3.3	2.9
<b>B. Non-food items and Services</b>	<b>46.8</b>	<b>5.7</b>	<b>6.8</b>	<b>9.1</b>	<b>3.2</b>
Textile and ready-made garments	8.9	1.5	2.5	2.9	2.4
Textile	(2.28)	1.9	2.7	2.2	1.2
Ready-made garment	(5.75)	0.4	2.1	3.0	2.5
Shoes	2.2	-0.1	1.3	2.8	6.1
Household items	14.9	8.8	12.3	14.1	3.1
House furnishing and household					
Rent	(4.2)	3.9	4.5	4.5	4.1
Cleaning	(1.3)	2.0	1.8	2.5	9.5
Fuel, light and water	(5.9)	15.6	20.4	22.8	1.4
Transport and Communication	4.0	11.1	14.1	21.2	0.5
Drugs and Personal Care	8.0	4.1	1.1	3.0	2.4
Education, education materials and	7.1	4.7	4.6	4.8	6.1
Tobacco and its products	1.7	1.5	2.5	3.8	6.4

\*Mid-February-mid-March to mid-February-mid-March point to point based prices

+ First 8 month

\*\*Unrefined

Source: Nepal Rastra Bank

### Non-Food and Services Group

3.5 Non-food and Services Group carries 46.8 percent weight-age in the price index. Point to point based index of this group registered a minimal increase of 3.2 percent during mid-February-mid-March of calendar 2007 compared to the increase of 9.1 percent during the similar month last year. Relatively small increase this year is explained by the fact that last year's increases in the prices of constituent items were much larger. Price of transport and communication items, for example, hiked by 21.2 percent due to the petroleum product price increase, price of electricity and water soared by 22.8 percent. Household goods and services items followed the trail with 14.1 percent price rise. Because there was no increase in price of petroleum products in this year's review period, and that the base effect of last year's price rise had all been absorbed, increases in prices of above mentioned items were smaller, for instance, transport and communication price increased by

0.5 percent, that of electricity and water items increased by 1.4 percent and household goods and services price by 3.1 percent. Price of tobacco and its products, however, increased by 6.4 percent compared to 3.8 percent rise last year. Education, educational materials and recreation sub group price increased by 6.1 percent compared to 4.8 percent rise last year. House rent subgroup price increased by 4.1 percent against 4.5 percent rise last year. House furnishing and housing goods subgroup price also went up by 5.9 percent compared to 3.7 percent increase last year.

### **Regional Consumer Price Index**

- 3.6 By analyzing price index regionally, Kathmandu Valley price index increased by 6.4 percent in the month of mid-February-mid-March of calendar 2007 compared to 5.5. Percent increase of same period last year. Group-wise, index of food and beverages increased by a high rate of 8.4 percent compared to the increase of 2.2 percent during similar period last year. High price increases of this group is accounted due to the high increase of prices of its constituent items, such as, spices (19.8 percent), vegetables and fruit (18.8 percent), lentils (18.4 percent), fish, meat and eggs (15.0 percent) and edible oil and refined butter (12.3 percent). Likewise, increase in index price of non-food items and services group, however was 4.3 percent compared to 8.7 percent increase during the month of last year under review. Lower increase this year is, as also explained earlier, due to the absence of the base effect of the last year's price rise of petroleum products, whereas the price indices of some of its constituent sub group had increased at high rates of 23.7 percent (fuel, electricity, and water), and 22.1 percent (transport and communication) mainly due to price rise of petroleum products at full play last year.
- 3.7 In Terai, price index during the month of calendar 2007 under comparison increased by 6.5 percent compared to 9.0 percent during such period last year. Group-wise, food and beverages price index registered an increase of 9.9 percent this year compared to 9.0 percent increase last year. Prices of all of its constituent items except sugar and sugar based products increased at a high rate this year. Non-food items and services group price had also increased by 8.9 percent last year whereas, this year, price fuel, lights and water, transport and communication, and household goods increased marginally. Hence the combined effect on index price was limited to 2.9 percent only.
- 3.8 In the Hills, price index went up to 5.2 percent during the month mid-February-mid-March of calendar 2007 against 7.6 percent increase in the same month of calendar 2006. Comparatively lower increase in 2007 was mainly due to the minimal increase of index price of non-food items and services group; for example, index value last year was 9.8 percent compared to 2.5 percent this year. Index of food and beverages, this year, climbed up to 8.00 percent compared to 5.3 percent rise last year. Prices of all the constituent items of this group like lentils, vegetables and fruit, spices, meat, fish and eggs, milk and dairy products, and edible oil and refined butter were under heavy pressure. Indices of all sub group items under non-food and services group registered normal increases.
- 3.9 Thus, it is obvious that the price rise was highest in the Terai, and lowest in the Hills in the calendar month of mid-February-mid-March, 2007 compared to the same month of calendar 2006. In the Terai, overall price increase this year is at 6.5 percent mark compared to that of the Hills at 5.2 percent mark although the price increases in both regions in the calendar month of 2006 under comparison were at 9.0 percent and 7.6 percent marks. In Kathmandu Valley, price increase in this year's calendar month reached at 6.4 percent compared to 5.5 percent in the last year's calendar month. By group, food and beverages price rise in Kathmandu valley is 8.7 percent, in Terai 9.9 percent, and in the Hills 8.0 percent. Non-food items and services price in Terai rose by 2.9 percent, in the Hills by 2.5 percent, in Kathmandu valley by 4.3 percent. In sum, high rate of increase in prices of all items under food and beverages group was responsible for the index price increase in all three regions.

### **Core Inflation**

- 3.10 At mid-February-mid-March of calendar 2007, core inflation on point-to-point basis is at the mark of 6.8 percent compared to 3.7 percent same month last year.

Analysis by commodity group reveals that price increased by 9.6 percent compared 3.8 percent of the same month last year. As regards to the non-food and services, price rise this year marginally up to 4.3 percent compared to 3.6 percent in the calendar month of 2006.

### Wholesale Price Index

- 3.11 Point-to-point based annual national wholesale price index (1999/2000=100) increased at a high rate of 12.2 percent by calendar mid-February-mid-March, 2007 compared to the rate increase of 6.2 percent such month last year. Responsible factors of such a high price inflation were, soaring price of lentils (24.0 percent, vegetables and fruit (41.0 percent), spices (27.7 percent) food grains (15.8 percent), animal products (13.3 percent), and of domestically produced construction materials (16.6 percent).
- 3.12 Whole price index of agriculture products in the first 8 month of FY 2005/06 had increased by 4.7 percent whereas the index value of the same period of FY 2006/07 went up to 19.9 percent mark. Upsurge in the index value during this period was mainly due to the upward pressure on prices of agriculture products, such as, vegetables and fruit (41.0 percent), spices (27.7 percent), lentils (24.0 percent), food grain items (15.8 percent), and animal products (13.3 percent). Relatively the rate of increase of cash crop this year dropped to 6.9 percent against 15.8 percent during the period under review of last year.
- 3.13 Index price of domestically produced items increased by 8.7 percent under which index of food products increased by 8.1 percent, beverages and tobacco products price increased by 5.4 percent, and that of construction materials increased by 16.6 percent. In the review period of calendar 2007 in comparison to that of calendar period of 2006.

**Table 3(D): National Wholesale Price Indices**  
(Base Year 1999/2000=100)

Group	Weight-age (percent)	Fiscal year			
		2003/04	2004/05	2005/6	2006/07**
Total	100.0	3.6	8.5	6.2	12.2
Agriculture products	49.6	-1.2	7.6	4.7	19.9
Domestically produced industrial products	20.4	7.8	4.3	3.5	8.7
Imported items	30.0	8.6	12.4	10.1	3.7

(Percent change)\*

\*Mid-February-mid-March to mid-February-mid-March point based price change

\*\*Unrefined

Source: Nepal Rastra Bank

- 3.14 Index of imported items under the national whole price index dropped to 3.7 percent in the calendar mid-February to mid-March 2007 compared to 10.1 percent of the same month of calendar 2006. Reason underlying the lower price increase is that the increase in prices of important items under this group was nominal, for example, price of electric and electronic goods increased by 0.6 percent, price of textile items by 1.3 percent, that of petroleum and coal products by 2.8 percent, chemical fertilizer and chemical products by 5.1 percent, transport means and machinery items by 2.6 percent, drugs by 1.0 percent, and the price of rest of the items under this group rose by 7.5 percent., thus, contributing to the overall price index increase of 3.7 percent

### National Salary and Wage Index

- 3.15 Annual point-based national salary and wages Index (2004/05=100) has increased to 10.1 percent by calendar mid-February-mid-March of 2007 in comparison to 4.3 percent by the same month of 2006. Under this index, salary index increased by 6.2 percent, and the wages index increased by 11.4 percent compared to last year's increases of 0.4 percent and 5.7 percent respectively. Increase in salary index is due to civil servant's allowance increase of 10 percent followed by the increases of the personnel of public enterprises, army, police, and teachers as well. Wage index jumped by 13.3 percent as a result of wage increases by various industries and construction agencies. Agriculture labor's wage index also went up by 10.9 percent due to the shortage of such labors in the rural areas in the wake of migration of youths to urban areas coupled with the continued

increase in number of foreign employment seekers. Construction labor's wage index also followed the suit with a jump of 7.5 percent. In totality, these were the causes of pressure on national salary and wage index.

**Table 3(E): National Salary and Wage Indices**  
(Base Year 2004/05=100)

(Percent change)\*

Groups/ subgroups	Weight-age (percent)	Fiscal year#		
		2004/05	2005/06	2006/07**
Overall Index	100.0	9.8	4.3	10.1
1. Salary index	27.0	8.6	0.4	6.2
1.1 Civil servant	2.8	20.0	0.0	10.0
1.2 Public enterprises personnel	1.1	11.4	4.4	6.7
1.3 Bank and financial institution employees	0.6	0.2	10.0	3.0
1.4 Army and Police	4.0	19.7	0.0	11.4
1.5 Teachers & Staffs	10.6	9.3	0.0	7.0
1.6 Private organizations	7.9	0.0	0.0	1.3
2. Wage Index	73.0	10.03	5.7	11.4
2.1 Agriculture labors	39.5	10.5	7.3	10.9
2.2 Industrial labors	25.2	10.5	5.1	13.3
2.3 Construction labors	8.3	8.7	0.3	7.5

\*Mid-February -mid March to mid-February-mid-March

\*\*Unrefined data

#First 8 month

Source: Nepal Rastra Bank

### Average Retail Price of Major Commodities

- 3.16 Average retail market prices of 10 major agricultural products have been taken for present review. Except ginger, prices of all items have been increased by mid-February-mid-March of calendar 2007 compared to that of same calendar month of 2006. On the price of food items, the price of wheat flour increased by 20.95 percent, black lentils by 29.16 percent, potato by 21.72 percent, dry onion by 62.80 percent, broken peas (urhad) by 17.37 percent and mustard oil by 14.05 percent. Meat price, however, did not fluctuate. Relatively prices of coarse rice and refined butter increased at a normal pace of 9.87 percent and 4.76 percent while that of ginger dipped by 37.23 percent.
- 3.17 Region-wise price analysis of the calendar month mid-February-mid-March of 2006 and 2007 revealed that dry onion price shot up by 119.29 percent, black lentil's by 45.57 percent. Price of wheat flour also went up by 21.88 percent, mustard oil price by 17.54 percent, broken pea (urhad) lentils by 14.64 percent and that of mutton by 10.23 percent in the month under review of calendar 2007 against that of 2006. But the, price of ginger went down by 26,35 percent. Among the selected commodities registering normal retail price increases were coarse rice (2.63 percent), potato (8.32 percent) refined butter (7.42 percent). Prices in the Hills by the same calendar month, by selected items increased as follows: dry onion by 38.85 percent, potato by 30.86 percent, broken peas (urhad) lentil by 20.05 percent, wheat flour by 20.32 percent, black peas lentil by 15.43 percent, coarse rice by 15.02 percent, mustard oil by 10.97 percent, and refined butter by 1.89 percent. Prices of ginger and goat meat, however, decreased by 42.43 percent and 8.11 percent respectively.
- 3.18 Analysis of monthly national average retail price of 10 major agriculture products by the first 8 month period of FY 2005/06 and 2006/07 is as follows: prices of black lentils increased by 38.49 percent, wheat flour's by 20.67 percent, potatoes by 18. 21 percent, broken pea (urhad) lentils by 11.63 percent, coarse rice's by 7.09 percent, mutton's by 5.20 percent refined butter's by 4.99 percent, and that of mustard oil by 3.10 percent compared to those prices prevailing in the

previous fiscal year. Ginger and dry onion prices, however, decreased by 27.45 percent and 0.45 percent respectively.

### **Supply Situation**

- 3.19 During the first 8 months of the FY 2006/07, supply of diesel as one of the POL products, increased by 4.71 percent to a total of 181,494 kilo liters (KL), whereas that of kerosene diminished by 17.37 percent to a total of 121,191 KL from the total of 173,333KL and 146,667 KL supplied last year. Supply of petrol, however, increased from 53,533 KL of previous year's supply to 62,180 KL, which is an increase of 16.15 percent. LP Gas supply also decreased by 27.14 percent to a total of 59,032 metric tons against last year's supply of 81,025 metric tons. Furnace oil supply also decreased by 35.71 percent to a total of 2,636 KL as against total supply of 4,100 KL last year. Light diesel oil supply was limited to 100 KL only with a decrease of 75.0 percent compared to 400 KL last year. Lastly, the supply of aviation fuel, which also diminished by 10.16 percent to a total of 41,326 KL, compared to 46,000 KL last year.
- 3.20 Nepal Government started to fix the wholesale prices (including VAT) of POL products by locations of Nepal Oil Corporation's depots or by customs check points Accordingly, POL products are distributed at wholesale prices at Biratnagar, Birgunj, Amlekhgunj, Kathmandu, Pokhara, Bhairawa, Nepalgunj, Surkhet, Dhangadi, Dipayal, Mahendranagar and Janakpur. Wholesale and retail prices may differ accordingly locationwise. for example, wholesale price at Birgunj depot is Rs 62,991.96 whereas at Dipayal, it is Rs 66,138 per kilo litter. In the Kathmandu Valley, average retail price/litter of petrol is Rs 67.25, that of diesel is Rs53.15, kerosene's is Rs 47.65, LP gas price is Rs 900/ cylinder.
- 3.21 Food grain is being supplied by surface as well as by air to 30 remote hill districts as per the government policy of providing transport subsidy to remote districts.. In FY 2005/06, a total of 7,626 metric tons of food grain was transported and supplied against the target of 6,595 tons. In the first 8 months of the current fiscal year, a total of 5,191 metric tons of food grain has already been transported and supplied against the target of 4,266 metric tons. This year's annual target of supplying 7,110 metric tons of food grain is expected to be met.

### **Challenges**

- 3.22 Agriculture continues to play an important role in economic development of Nepal. This sector is still monsoon rain dependent which, therefore, gives rise to high price increase of agricultural products at times of adverse weather led production lag. In this context, viable options for improving this situation are orientation of agriculture to commercial crops instead of traditional crops, continued efforts for commercialization of agriculture adoption of suitable modern technology based practices, enhancement of productivity and marketing.
- 3.23 In the absence of adjustment of POL product prices in the domestic market vis-à-vis world market prices on regular basis, the Nepal Oil Corporation's losses are mounting day by day. As it owes large amount in arrear to the Indian Oil Corporation, POL product supply irregularities have become a regular feature. Not only people in general greatly suffer from this situation but also it causes the adverse impact on the economy which hardly can be overlooked for long time. It is, therefore, indeed a high time to take a look at the appropriate options to face this challenge.
- 3.24 As presented in earlier sections, national consumer price index is continuously on the rise for the last two years particularly the price index of food and beverages as one of its important constituents. Due to the open border, agricultural products like potato; onions are taken to adjacent Indian market for storage facilities, which, in turn, are returned with added costs on prices. In this context, the important task ahead is to regularize supply of essential items by setting up appropriate buffer zones for storage facilities for these and other basic items under the government or private sector's initiatives.