CHAPTER

10 Prices and Cost of Living

You would have heard people talking of the rising prices of commodities and the difficult situation they face because of price rise. Why do people appear agitated and worried with rising prices? Does this happen for most commodities or only for a few things? Does it affect everyone in a similar way? These are some of the issues discussed in this chapter.

Family Budget

Your parents earn their income by doing some work – be it farming, construction work, selling vegetables or groceries, working in an office, shop or factory etc. They buy things for the house and spend money on household requirements. At times, they have to borrow from somebody. There's always some plan for the expenditure and how they would buy what is required with the money they have. This balancing of expenditure to income is called a Budget.

Every family makes a budget – it could be written down, or done mentally. Let us take the budget of a family that sells vegetables in the vegetable market.

Table-1 Subbamma's Budget for January 2013

Receipts		Expenditure	
Earnings in a month	Rs. 10,000	Food items	Rs. 3000
Amount borrowed from relatives	Rs. 2,500	Rent	Rs. 2000
		School fees	Rs. 1500
		Medicines and doctor fees	Rs. 2500
		Bus and auto expenses	Rs. 1500
		Electricity, mobile and other expenses for daily needs	Rs. 2000
Total Receipts	**Rs. 12,500**	**Total Expenditure**	**Rs.12,500**

In the above table, you can, see the income received as earnings by Subbamma's family is shown on the left hand side of the account, and their expenditure on the right hand side. If you add up their expenditure it comes to Rs.12,500 - which is more than their earnings Rs.10,000! So they had to borrow money from their relatives (Rs.2500) to cover an extra expenditure when their daughter fell ill and money was needed for medicines etc. This is shown in the second row on the left. In the same way, thousands of households prepare their budgets and adjust their consumption on the basis of the income they earn.

How changes in prices affect family budget?

Let us look at Subbamma's family budget once again. Supposing next month, their house-owner increases the rent to Rs.2500. At the same time, bus fares and petrol prices also increase, so her family now has to spend Rs.2000 per month on transport. With the new prices, their cost of living has now increased by another Rs.1000. How can her family manage this, if there is no increase in their earnings? If they have some savings, they can use that. Otherwise, they are compelled to borrow from friends or relatives. But they also have to repay them with interest isn't it?

It could also be true that if Subbamma borrows from close relatives, she need not have to pay interest. If they borrow from a money lender, she will have to repay the borrowing with some interest. If the interest Rs.3 for every Rs.100 is Rs.3 or 3% per month, Rs.75 would have to be added every month as interest. Suppose Subbamma's family is able to repay only after six months, this means, they would have to repay Rs.2500 plus Rs.450 i.e. Rs.2950.

One way for them to adjust their budget is to reduce some of their expenditure. If they cut down the number of trips in auto or reduces the purchase of some food items, money spent on mobile phone and so on, they can adjust their expenditure to their earnings with the new prices. Because they have reduced their consumption of many goods, their standard of living would fall. This is due to the increase in the cost of living.

People with fixed incomes such as pensioners or daily wage earners, manual workers, small vendors, workers in small enterprises and in private low income jobs etc. are all badly affected by continuous rise in prices over a period – called inflation. The income of these people does not change when there is inflation. So they are forced to cut down their own consumption of resources. Their standard of living is already very low; now, inflation will further reduce their consumption, which pushes them further into poverty.

People are always worried about the rise in prices because when prices increase, it affects their consumption and they have to pay more for everything. For example petrol prices increase, bus and auto fares increase, price of groceries, vegetables and milk increase, doctor's fee increase and so on.

- Tomorrow is teachers' day. Your classmates give you Rs.200 and send you to the market to buy some sweets and biscuits to celebrate this day with your teachers. When you go to the shop, you find that the price of a sweets packet is Rs.60, and a biscuit packet is Rs.20. If you buy 2 sweets packets, how many biscuit packets can you buy with the remaining money? How much should you pay?
- When you come to school, your classmates say, "Why did you buy such few packets? You should have brought 5 of each." They are surprised when you tell them the prices of sweets and biscuit packets. "Last year, we paid Rs.30 for a sweets packet and Rs.10 for a biscuit packet," one of them say.
- What has happened in the last one year? Prices of both items have gone up, and for the same amount of money, i.e. Rs.200, you can buy lesser amounts of these commodities.
- Suppose your classmates asked you to buy 5 packets of both sweets and biscuits this year also. How much would you have to pay then?
    - For 5 packets of sweets = Rs.________________
    - For 5 packets of biscuits = Rs. ________________
    - Total amount you pay = Rs.________________
    - How much more do you have to pay compared to last year?
- The actual number of goods and services that money can buy is called the purchasing power of money. During inflation, real income or purchasing power of money falls. From the above example, last year you could pay Rs.200 for five of each item, but now you have to pay more to buy the same items. Or you have to buy less of both items. So:
- Last year: Rs.200 = 5 packets of sweets + 5 packets of biscuits.
- This year: Rs.200 = 2 packets of sweets + 4 packets of biscuits.
- In other words, the purchasing power or the value of money of Rs.200 has fallen, because you can buy less of both items with the same money, due to the increase in their prices.

When people receive fixed income, they cannot afford to buy the same number of goods as earlier. They have to reduce their consumption, buy lesser of these goods and services. This affects their standard of living. Standard of living refers to the quantity of material goods and services that ensures a comfortable life.

The standard of living will of course differ from one type of family to another, from one type of profession to another, from one income group to another, and from one country to another. For example, having a car, television and mobile phone may not be considered as a high standard of living in United States of America but people owning these things in India would certainly be considered as people having better standard of living.

Not everyone is affected by rising prices. For some groups, this rise in price levels is compensated.

- People working in Central and State Government offices and in some organisations get an additional payment called "Dearness Allowance" or DA. When prices rise by a certain percentage, their salary also increases because the government now pays them more DA. Therefore their income also increases, along with inflation.
- People doing business activities recover the higher cost of living by increasing the prices of goods they sell. For example, if price of sugar increases, the *mitaiwallah* will increase the prices of sweets, the *chai-wallah* will increase the price of a cup of tea.
- People providing services such as dry cleaners, barbers, lawyers or doctors increase their fee when prices increase. They charge more for their services from their customers, clients or patients.
- Extremely rich people and those working in corporate sector are less affected by rising prices.

Not all working people get compensated easily for the rise in price of essential goods. For instance, it is common to see agricultural labourers, construction workers or factory workers demand their employers to raise their wages when prices increase. Sometimes, their trade unions are compelled to go on strikes to pay higher wages. On those occasions, government intervenes and negotiates with employers and workers to increase the wages. For many occupations, government also regularly fixes wages and revises them periodically after considering the changes in price of essential goods (except daily wage workers and hired workers).

How Inflation is measured?

Earlier, we had mentioned that continuous rise in prices of goods is known as inflation. But you may have observed that while some prices have increased, others have fallen. For example, the prices of mobile phone have been falling, other prices are rising. So overall, can we say that there is inflation in the country or not?

Again, supposing the price of match box increases. Does it really reduce your cost of living? Compare this with the impact of an increase in house rent, or the price of petrol or rice. Supposing the price of compact disk used in computers to save data falls, how does it affect the budget of a manual worker who may never use a computer? If the price of an industrial machine increases, how does it indirectly affect the budget of a large number of people?

- Write down the names of some goods or services that are regularly bought by your family. Find out their price today and the price last year. What is the difference? You can ask your parents or teachers for help.

Sl.No.	Goods/Services	Price last year	Price this year	Difference
1				
2				
3				
4				

Price Index Numbers

Change in price is measured with the help of a statistical device referred to as 'price index'. Change in prices of one good does not affect all goods and services in the same way. So how do we measure the overall change in prices? One way is by using an Index Number of Prices. It is constructed in the following way:

The average price of all the goods and services selected in the first year, which is considered as the base year, is given the number 100. If, on an average, all the prices of selected goods and services rise by 25 per cent over the previous year, the price index for the second year will be 125. If, in the next year, prices of these items rise by 20 per cent of the previous year, the price index will now stand at 150 (20% of 125 + 25 = 150).

Let us understand this through an example. The following table shows the price of rice and cotton as paid by government organisations as part of MSP. Read the table carefully and answer the questions that follow.

Table-2 Price of Cotton and Rice (per quintal) during 2005-2011

Crop	2005-06	2006-07	2007-08	2008-09	2009-2010	2010-2011
Rice	Rs. 600	Rs. 610	Rs. 775	Rs. 880	Rs. 980	Rs. 1030
Cotton	Rs.1980	Rs. 1990	Rs. 2030	Rs. 3000	Rs. 3000	Rs. 3000

(i) Calculate the index numbers of rice and cotton by assuming 2005-06 as the base year.

(ii) Draw a line diagram showing index number of rice and cotton. Keep the years in x-axis and index numbers on the y-axis. Discuss how the line goes up over the years.

Index numbers tell us about changes in the total of a set of items over time. They only compare these total items in one year, with the same items in another year. In this way, the price index number shows the percentage change in the prices of a set of goods from one time period to another. For instance, we can compare what has happened to our household budget this year or this month with last year or last month. The difference of price level of the two years shows the percentage by which prices have increased in one year.

It can also be used to compare the price level in one place to that of another place. We can compare the price level in Telangana with that of other states, like Karnataka, or Maharashtra.

Since there are thousands of goods and services in the economy, we have to choose which goods to include in the price index.

Price Index numbers are of different types, depending on which group of consumers we are looking at – for example, we have the Wholesale Price Index (WPI), the Consumer Price Index (CPI). While the WPI includes all goods (capital goods and consumer goods) and changes in their wholesale rates, the CPI measures only changes in prices of a few selected consumer goods at the retail price. In India, different CPIs are published by government:

a) CPI for industrial workers
b) CPI for Urban Non-Manual Employees
c) CPI for Agricultural Labourers

The reasons why there are so many CPIs is because the same set of goods are not consumed by different types of families. For example, the types and quantities of goods and services consumed by industrial workers in towns and cities will differ from rural agricultural labourers. Non Manual or White Collar employees working in offices, banks, or IT companies consume a different set of goods compared to agricultural labourers.

The CPIs are used to calculate the DA to be paid for government employees, to revise legal wage rates as part of Indian government laws and also to estimate the number of poor in India. Inflation is generally measured on the basis of changes in WPI.

How to construct a CPI?

Let us try to construct a simple Consumer Price Index for some items that you buy for your household consumption.

Let us take Table 3. Now, write down the amount of each of the items your parents purchased last month. Let us assume that they are buying the same amount this month also. But this month, prices have increased, so the same set of goods will be costlier.

In this table, we have taken four goods, and their prices and quantities purchased. We show this data for last month in the second and third columns. Then, we multiply the Price with the Quantity, to get the total expenditure on each item. Then, we add up the total expenditure for all items in the last row of column 4.

Table -3 Estimating Consumer Price Index						
This is an example of how CPI can be constructed. Let us assume that your family buys rice, onions, dal, and gas cylinder.						
1	2	3	4 = 2 x 3	5	6	7 =5 x 6
Goods/Services	Last month's Price Rs.	Last month's Quantity	Expenditure Last month	This month price	This month quantity	Expenditure this month
1. Rice per kg	Rs.30	25 kgs	Rs. 750	Rs.40	25 kgs	Rs. 1000
2. Onions per kg	Rs. 10	5 kgs	Rs. 50	Rs.20	5 kgs	Rs. 100
3. Dal per kg	Rs. 75	4 kgs	Rs. 300	Rs.85	4 kgs	Rs. 340
4. Gas cylinder	Rs. 400	1	Rs. 400	Rs.410	1	Rs. 410
Total Expenditure			**Rs. 1500**	**Total Expenditure**		**Rs. 1850**

In the same way in column 5, we show the price of the same items of this month, and in column 6 we show the quantities purchased this month. Let us keep these quantities the same as last month. Again we multiply each item with its price and show our expenditure on that good in column 7. Now, adding up column 7 gives us total expenditure on these 4 goods in this month.

What do you see in Table 3? Your family had purchased these four goods last month at Rs.1500. But, for the same set of goods, you now have to pay Rs.1850 this month, because prices of all goods have increased. Compared to the previous month they have increased by Rs.350 i.e. in percentage terms 350/1500x100=23.3%.

In other words, if one assumes Rs 100 was spent by the family last month, this month they would have to spend Rs.123.3. All families with similar consumption pattern have similar affect on their budget - they would face a price rise by 23%. The CPI is calculated in the same manner assuming the importance of various items of expenditure in a family's budget. This figure shows the extent of increase in your cost of living.

If the average price level of these four goods last month was 100, it has now increased to 123.3. That means, compared to last month, the price level of these 4 items of your household consumption has increased by 23.3% this month.

In the actual economy, there are thousands of goods and services being produced and whose prices have been increasing. The government estimates the amount by which the price level has increased in different time periods – mostly every month and every week.

Food Inflation

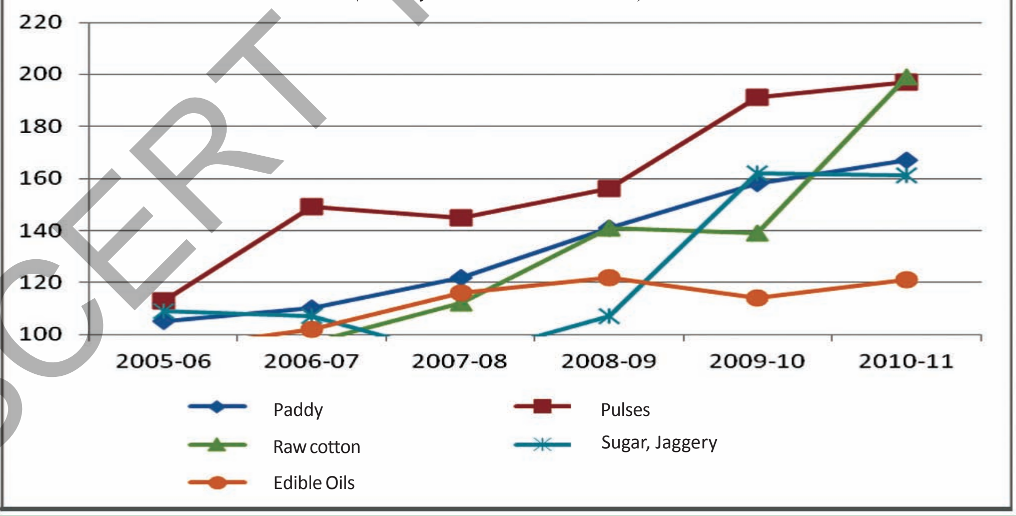
Since 2009, government began to estimate a new index - Food Price Index (FPI). This index is used to estimate rise in prices of food items called food inflation. The FPI consists of wholesale price of food materials such as rice, wheat, pulses, vegetables, sugar, milk, eggs, meat, fish and manufactured food materials such as edible oils. In 2011-12, edible oils accounted for higher food inflation. During that year, about 50 per cent of India's edible oil requirements were met through imports of crude palm oil sunflower oil, soyabean oil and refined palmolein. When the price of these items increased at the international level - in other countries from where we import, Indian consumers also had to pay higher prices. Since then, the government has to take measures to control the rising prices, many research studies were conducted. It was found that the change in the dietary pattern of people has changed considerably in such a manner that their consumption of vegetables, eggs, meat and fish increased recently. Any seasonal shortage causes a price rise since the demand for these products is quite high. People wish to consume them even at a higher cost. It has become a part of their regular diet.

Recent price increases

During 2009-11, prices of many essential goods went up. You can see this from the following figures. Look at the figure carefully and answer the questions that follow.

Agricultural Products Wholesale Price Indices

(Base year 2004-05 = 100)



- If the price of the paddy in 2005-06 is Rs.20 a kg, then how much it will cost in 2011.
- In which years did the price of pulses increase considerably?
- What is the percentage increase in the price of cotton?
- Which commodity price has been more or less stable?

You are aware that most of petroleum products such as petrol, diesel and kerosene are made from crude oil mostly imported from other countries. The increase in crude petroleum prices along with metal and chemical prices has led to inflation in India. Inflation means general increase in the price of goods and services over a long period. Since these are basically raw materials used to produce consumer goods in India, the increase in their price led to increase in the price of consumer goods.

Role of government in regulating prices

When there is general inflation - a rapid rise in wholesale price index, it is a great concern for industrialists. If there is a rise in food inflation - it will have a direct effect on the living standards of the common people. During high levels of inflation, it is not only the people with low income or fixed incomes who suffer and become poorer, other people would also tend to invest their savings by buying land, gold or some other unproductive purposes due to uncertainity and their perception that the value of their money is declining day by day.

There is always some inflation taking place in all economies. Due to this, the consumers have to pay a higher price. Since the benefits of the increased price will go to the workers who produce those goods, it is considered as good for the country.

At times, traders whose main aim is to earn profit, raise prices of many goods and particularly essential items in illegal ways. If there is no increase in wage for workers who are also consumers in the market, they cannot buy the goods. When these goods happen to be essentials such as wheat, rice, milk etc., this creates problem for the people.

This necessitates the need for regulation of traders and keeping a close watch on them by the government. The government is taking many initiatives in this direction. You may recall the chapter on Agriculture in which you have learnt how government helps farmers by procuring paddy and wheat through Food Corporation of India using Minimum Support Price. This policy helps not only farmers but is also used by the government to regulate the prices of paddy wheat in the market. Similarly, governments both at the central and state levels, fix price for sugarcane procured to make sugar in cooperative sugar mills. This is also one such measure used to regulate prices of sugarcane in the market.

You might have studied in class VIII about public distribution system. It is used as an important activity of the government not only to ensure food security to the people and particularly the poor ones, but also to regulate the prices of essential items. Under PDS, the government has assumed responsibility for the supply of essential commodities like wheat, rice, sugar, edible oils and kerosene. This scheme is implemented by state government with the help of many fair price shops. The prices of goods sold through Public Distribution System (PDS) are less than that of the market price and the difference in price – or subsidy is borne by the government. Apart from enabling the poor to buy goods from fair price shops, this system controls unscrupulous rise in prices of essential goods in markets.

For preventing hoarding and keeping the prices of essential commodities within reasonable levels and to facilitate their availability, the government fixes the prices and makes it mandatory for the traders to sell goods in the market at those price levels. Those who do not follow stipulated price levels are penalised by government through various laws. Goods such as kerosene, diesel, Liquid Petroleum Gas, Compressed Natural Gas and Piped Natural Gas are examples of goods whose prices are partly or solely subsidised by the government and sold under Administrative Price Mechanism.

Whenever there is price rise, the Reserve Bank of India, which is an apex body for all the banks in India, reduces the money circulation in the economy. This it does through regulating banks – asking banks to lend less or allow depositors to withdraw less. The RBI along with all the banks under its regulation controls the interest payments paid to depositors or received from the depositors. By controlling the interest rate, the amount of money circulated in the country declines. This results in people's tendency to consume less, which in turn reduces the demand for goods and thereby lowers the prices. However, it takes time to see the impact of steps taken by RBI. At times, when the inflation is caused by rise in the prices of raw materials, the measures or steps taken by RBI become difficult.

When the government decides to reduce the money in circulation, it imposes taxes on high-income groups and on many consumer goods. The intention of the government here is to reduce the purchasing capacity of the people. When people have less money to spend, their consumption will also fall, which leads to decline in prices.

Government also uses import-export policy to regulate the prices of essential goods. For example, when there is a rise in the price of food materials, exports of such goods are banned or the quantity of goods exported is restricted. When there is shortage of any material, government procure from other countries and distribute at below market prices through government organisations such as National Agricultural Cooperative Marketing Federation of India Ltd (NAFED) and other cooperatives. Government also uses legal mechanisms whenever traders create shortage by hoarding.

Keywords

1. Standards of living
2. Inflation
3. Consumer Price Index
4. Wholesale Price Index
5. Administrative Price Mechanism

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Improve your learning

1. Why is there a need to regulate prices?
2. How are prices fixed by a seller/producer?
3. Differentiate the cost of living from the standard of living.
4. Who is affected the most with the increase in cost of living? Why?
5. Which groups can still get higher incomes whenever there is inflation?
6. How is Wholesale Price Index different from Consumer Price Index?
7. How is food inflation different from Consumer Price Indices?
8. What are the uses of the CPI?
9. Write any five issues that are considered while measuring CPI?
10. Read sixth paragraph under the heading 'Role of Government in Regulating Prices' and answer the question:

    How does the APM affect the government revenue? Discuss.
11. Take any five goods or services used by your family and construct a Consumer Price Index for your family based on these five goods/services.

1	2	3	4= 2 x 3	5	6	7 =5 x 6
Goods/Services	Last month's Price Rs. This month	Last month's Quantity	Expenditure Last month	This month price	This month quantity	Expenditure this month
1.	Rs.		Rs.	Rs.		Rs.
2.	Rs.		Rs.	Rs.		Rs.
3.	Rs.		Rs.	Rs.		Rs.
4.	Rs.		Rs.	Rs.		Rs.
5.	Rs.		Rs.	Rs.		Rs.
Total Expenditure			**Rs.**	**Total Expenditure**		**Rs.**
CPI:____________________%						
By how much has your total expenditure changed compared to last month? _______________						

12. Write True or false against the statements given below :

(a) Inflation increases the standard of living of the people. [ ]

(b) Value of money is shown by changes in its Purchasing Power. [ ]

(c) Change in cost of living does not affect the standard of living of pensioners [ ]

(d) Central Government workers are compensated for inflation by rise in DA [ ]

(e) WPI measures changes in the price level of only consumer goods. [ ]

13. The following table shows the wholesale Price Indices of Industrial Goods. Answer the questions that follow.

Year	Coal	Cotton cloth	Fertilizers	Cement	Iron, Steel & Ferro Alloys
2005-06	118	99	102	102	100
2006-07	118	97	104	119	105
2007-08	122	99	106	138	119
2008-09	151	103	107	139	137
2009-10	156	107	108	149	124
2010-11	165	115	117	151	136

(a) Which commodity's price rose steeply over the years?

(b) What could be the reasons for a slow rise in the price of cotton cloth and fertilizers?

14. Write a letter to your Tehsildar on proper maintenance of Public Distribution System by indicating your suggestions?