

Inflation – Impact on Indian Economy & Agriculture

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Abstract— Inflation is the rise in the prices of goods and services and affects all the major sectors in an economy. Inflation also reflects erosion in the purchasing power of money – a loss of real value in the internal medium of exchange and unit of account in the economy. In a country like Indian where a majority of population is working in agriculture sector, the effect of inflation increases manifold. This paper aims to put light on the impact of inflation on Indian agriculture and then give some suggestions for the improvement of the economy.

Index Terms— Food inflation, Inflation, Indian economy, Indian agriculture, monetary policy, macro & micro economics, RBI policy.

An Introduction:

Inflation is a rise in the general level of prices of goods and services in an economy over a period of time. When the general price level rises, each unit of currency buys fewer goods and services. Consequently, inflation also reflects erosion in the purchasing power of money – a loss of real value in the internal medium of exchange and unit of account in the economy.

The Indian method for calculating inflation, the Wholesale Price Index, is different from the rest of world. Each week, the wholesale price of a set of 435 goods is calculated by the Indian government. Since these are wholesale prices, the actual prices paid by consumers are far higher.

In times of rising inflation, this also means that the cost of living increases are much higher for the populace. Due to increasing prices, people have to spend more to maintain the standard of living. So, inflation is eating up the savings of an average man.

With most of India's vast population living close to or below the poverty line, inflation acts as a 'Poor Man's Tax'. This effect is amplified when food prices rise, since food represents more than half of the expenditure of this group.

Recent History and Present Status:

India's 2009-10 Economic Survey Report suggested a high double-digit increase in food inflation, with signs of inflation spreading to various other sectors as well. The Deputy Governor of the Reserve Bank of India, however, expressed his optimism in March 2010 about an imminent easing of Indian wholesale price index-based inflation, on the back of falling oil and food prices.

On March 19, 2010, the Reserve Bank of India raised its benchmark reverse repurchase rate to 3.5% percent, after this rate touched record lows of 3.25%. The repurchase rate was raised to 5% from 4.75% as well, in an attempt to curb Indian inflation.

For 2009, Indian inflation stood at 11.49%. This rate reflects the general increase in prices, taking into account the purchasing power of the common man. According to the Economic Survey Report for 2009-10, economic growth decelerated to 6.7% in 2008-09, from 9% in 2007-08. The economy is expected to grow by 8.7% in 2010-11, with a return to a growth rate of 9% in 2011-12.

In its Annual Monetary Policy Statement, RBI had said "the firming up of global commodity prices poses upside risks to inflation". The central bank's industrial outlook survey shows companies are increasingly regaining their pricing power in many sectors, and as the recovery gains momentum, the demand pressures are expected to accentuate.

Changes in Metal/Mineral Prices

Steel prices rose by over 9 per cent in the past year. Barring cement, prices of most industrial commodities have gone up sharply. While in some cases, such as nickel, prices have more than doubled; crude oil has surged about 75 per cent over the past year on rising demand from emerging economies such as China and India. Bullion is also on a high, with gold getting more expensive by the day. This fact hasn't escaped the attention of the Reserve Bank of India.

Commodities that grew dearer:

Commodity	30-Apr-09	30-Apr-10	(%) Change
Copper (\$/tonne)	4515.00	7430.00	64.56
Zinc (\$/tonne)	1408.00	2285.00	62.29
Aluminium (\$/tonne)	1430.50	2255.00	57.64
Nickel (\$/tonne)	11505.00	26300.00	128.60
Lead (\$/tonne)	1355.00	2230.00	64.58
Gold (\$/oz)	888.20	1179.20	32.76
MCX Rubber (100 kgs)	10200.00	16429.00	61.07
Crude (\$/barrel)	49.10	85.99	75.13
Steel (Rs /tonne)*	46500.00	42500.00	9.41
Cement (Rs / 50 kg)	245 - 275	255-285	4.00

Higher international metal prices have a direct bearing on domestic prices, which is reflected in higher raw material prices. Since most of these metals are used as a raw material or as a bi-product in the industrial sector and if the prices in the international market from where we import them are higher, it would increase the cost of production which automatically leads to high price of final product. Also, the domestic economy is showed initial symptoms of overheating as is seen in higher investment and higher industrial production, which triggers demand-pull inflationary forces.

The rise in the cost of raw material for steel making "is having a cascading effect on the input cost of products such as two wheelers," said Ravi Sood, Chief Financial Officer, Hero Honda Motors, India's largest two-wheeler maker. Hike in prices of crude oil effects every industry in general since they are used everywhere.

Food Inflation and the Agriculture Sector:

Food industry is most badly hit by inflation. India's Economic Survey Report, 2009-2010, reveals a double digit

increase in food inflation, currently standing at a staggering 16.12%. Inflation has spread to other sectors as well. It is not one cause, but a sum of many events that has led to this:-

- In 2008, the Finance Minister waived loans up to sixty thousand crores. A benevolent gesture, but as a result of having more money in hand, demand for commodities went up which resulted in high prices (law of demand).
- We have not been witnessing very good monsoons in the last few years. If the crop yield isn't good, then the demand clearly exceeds supply resulting in higher prices.
- The global economy, as a whole, is in a state of imbalance. With major nations in the world experiencing an economic setback, the import expenses are rising too.
- The ever rising costs of petroleum and crude oil have a direct impact on transportation charges.

As many people live below or close to poverty line in India, the poor pay a heavy price. With the increasing wholesale and retail margins, the farmers do not benefit from the rise in prices that consumers in rural and urban areas are forced to pay.

For quite a while now, India has witnessed a debate on the sustainability of our much applauded growth rate in times when inflation seems unstoppable. However, the reality is that inflation has been deeply affecting our agriculture sector, and the nature of this problem is worth investigating.

Firstly, we must put forward a basic and important question- why is it that the agriculture sector is more susceptible to the pressures of inflation and not other areas such as industry? To this question, we see an obvious answer emerge – there is excessive demand for food. Some people are even holding the government's NREGA programme responsible for the rise in the food prices. But it is obviously not the case since it implies that inflation is caused by the poor man's food expenditure.

Also, in the statement that there is excessive demand for food, the supply side of the situation is being ignored altogether. In this connection, some attention must be paid to Sergio Rebelo's (1991) insights into the area of growth economics. Rebelo and many other experts point out that the most important barrier to steady growth comes from the law of diminishing returns. This law states that in any production process, extra doses of a variety of resources

combined with a fixed quantum of a given resource leads to a rise in output at ever decreasing rates. Or it can be said that the rate of growth of output must fall in the presence of a fixed resource even if all other resources were to increase at constant rates.

The relevance of this law can be seen quite plainly when it comes to the agricultural sector. Here, land is the fixed non augmentable resource, while seeds, water, fertilizers etc are the variable resources. According to the law of diminishing returns, equal extra doses of the variable resources will yield less than equal extra quantities of an agricultural produce, say rice. In other words, to keep the output of rice at a constant rate, the variable resources must be increased not in equal doses, but in ever increasing amounts. To put this in more technical terms, a given rate of growth of agricultural output calls for a larger rate of input consumption in that sector. This is true as long as the size of land remains constant and the technology used in its productivity remains unchanged. However, it cannot be ignored that if productivity rises due to technological improvements, the constraints imposed by the law of diminishing returns could get postponed and in the process, an equal rate of growth of outputs and inputs in agriculture may be observed.

Therefore in the absence of technological improvements, a steady growth in agriculture can be extracted from a fixed plot of land only if the growth rate of capital use is higher than the growth rate of the input.

However, once the inputs such as fertilizers, pesticides, etc are captured under the term 'capital', the word capital itself assumes yet another dimension. The purchase of capital amounts to the expenditure of money. On the other hand, money can be spent on non agricultural activities also, such as on industry where the extra inputs do not lead to a diminishing extra produce.

Let's take the production of televisions for example. The inputs that go into the production of a TV such as plastic, wires etc are qualitatively different from the inputs required by agriculture. However, we are aware that as opposed to agriculture, the extra doses of these inputs do not lead to a diminishing extra produce. Hence, in a way, the law of diminishing returns does not work for manufacturing in the same way as it does for agriculture. However, it must be understood that the law does not disappear altogether. It takes the form of an overall capacity constraint.

In the case of agriculture, equal extra amounts of capital produce diminishing extra quantities of the agricultural product. If markets are free, the owners of capital will seek

maximum returns from their capital investment. Since manufacture yields a constant rate of return, from each unit of capital and agriculture yields even smaller units, the capital owner will agree to employ extra capital in agriculture only if the price of the agricultural product rises relative to the price of manufactured goods as capital use increases in the agriculture sector.

Therefore as long as the law of diminishing returns is in force and technical progress in agriculture is stagnant, there will be natural tendency for agricultural prices to rise relative to that of manufacture, quite independent of the demand forces. Also, this relative price movement must persist forever, unless agriculture witnesses some technological improvements. Moreover, for sustainable growth, capital employment in agriculture must increase at a higher rate than the rate of growth of the agricultural produce.

It is evident so far that the conclusions do not depend solely on the demand forces. If demand is brought in it and it grows at a rate higher than the rate of growth of agricultural output, the price of agricultural products will rise at an even higher rate than what is indicated by the supply considerations alone. Hence, Indian policy planners are giving attention only to the problems related to demand and are completely ignoring the supply based argument which is fundamental.

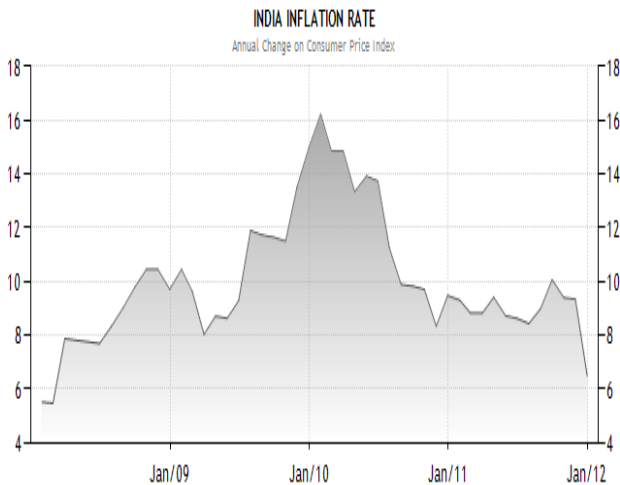
Returning back to supply yet again, if the required excess in the capital growth is not maintained, the desired growth rate of agriculture also cannot be achieved. In India, land policy has reduced the size of the individual plots to such an extent that employment of increasing quantities of capital has turned quite impossible.

The arguments above rely on the assumption of free markets where capital is allowed to move in the direction of the highest returns. In practice though, markets are not quite 'free'. Also, endless fragmentation has made it technically impossible for large capital to move into agriculture. Hence, in the end it is only small capital that gets attracted to the agriculture sector especially in those parts of the country where land holdings are rather small. This, in turn, leads to far smaller agricultural growth in comparison to industry. Under these circumstances, even if the law of diminishing returns was to be ignored, food prices are expected to skyrocket and this has actually been observed.

The problem can be addressed perhaps by opting for large scale agriculture, although that wouldn't be an easy task. On the other hand, attempting to restrain food inflation by

repeated increases in the rate of interest charged for borrowing capital is not reasonable either. Since it is physically not possible to employ capital in agriculture, industry continues to be its only feasible destination.

Macro and Micro economic Factors:



SOURCE: WWW.TRADINGECONOMICS.COM | INDIA MINISTRY OF LABOUR

Conclusion:

It is evident from the data we have seen that inflation rose steadily till January 2010, after which a certain decline in the same has been witnessed.

To combat inflation, India needs to remove infrastructural bottlenecks in order to have sustained growth. These also include import duties etc. which are levied on industrial purchases.

More industrial subsidies should be introduced to check the prices of industrial intermediary products.

If in future inflation is not curbed, it will not only deprive the common man of basic amenities but along with it, also deprive the Indian economy of its growth of all the sectors.

Since demand-side pressures are strengthening because of increased cash in hand, monetary policy would have to be active and vigilant in order to keep inflation in check.

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