

# **CRISIL YOUNG THOUGHT LEADER 2008**

A Dissertation

On

*Combating Global Commodity and food inflation: What should India's strategy be?*

By

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## TABLE OF CONTENTS

<i>EXECUTIVE SUMMARY</i> .....	2
1. Introduction .....	3
2. Causes for the crisis .....	4
2.1 US policies pushing corn-based ethanol and other biofuels.....	4
2.2 Strong demand for food from big developing countries such as China and India....	6
2.3 Speculation because of futures trading in commodities .....	6
2.4 High Crude Oil Prices.....	7
3. Steps taken by the government.....	9
3.1 Fiscal Policies.....	9
3.2 Monetary Policy Measures.....	9
4. Things the government could have done better.....	12
5. Recommendations .....	14
<i>REFERENCES</i> .....	17

## **EXECUTIVE SUMMARY**

The years 2007 and 2008 have been significant for the global economies with many countries afflicted with problems like the food inflation, oil inflation and the sub-prime crisis. India was no different. With food prices shooting over the roof, the government had to rush in with a number of measures to tackle the crisis. This paper analyses the reasons behind the food-inflation crisis and the steps taken by the government to tackle the same. It also critiques some of the decision taken by the government and suggests ways by which such crises need to be handled in the future.

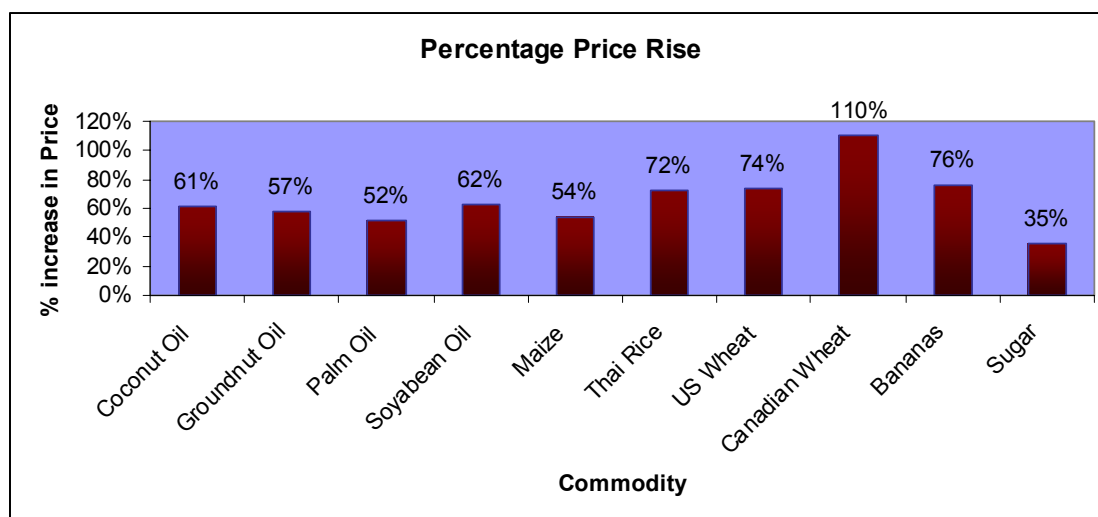
One of the main causes for the food inflation was the push by countries like the U.S and Brazil to go for biofuels resulting in a supply crisis for many food grains. Some other reasons include the strong demand for food grains from developing countries like India and China, speculation driving up prices by means of trading in commodities futures and the global crude oil prices. The government's response was knee-jerk and was a mix of fiscal and monetary decisions, the efficacy of which is still in question. The government needs to take a long-term look at the problem instead of looking at short-term solutions.

## 1. Introduction

The raging commodity and food prices over the last year or so have created quite a furore and stirred a debate among the economists worldwide. Though the situation has eased over the last few months with the prices easing (or rather crashing) dramatically, the larger question still remains as to what needs to be done to prevent such incidents from happening in the future.

The International Monetary Fund's Commodity Price Index indicates that food prices have been up 65% in early 2008 when compared with 2005, metal prices were up 70% since 2005 and petroleum products index was up 175.5%.

An analysis<sup>1</sup> reveals that in the eight months between August 2007 and March 2008, there has been a huge rise in prices of individual commodities and they are mentioned in the graph below:



Source: *The Economic Times*

This food inflation has been a global phenomenon and is not just restricted to India.

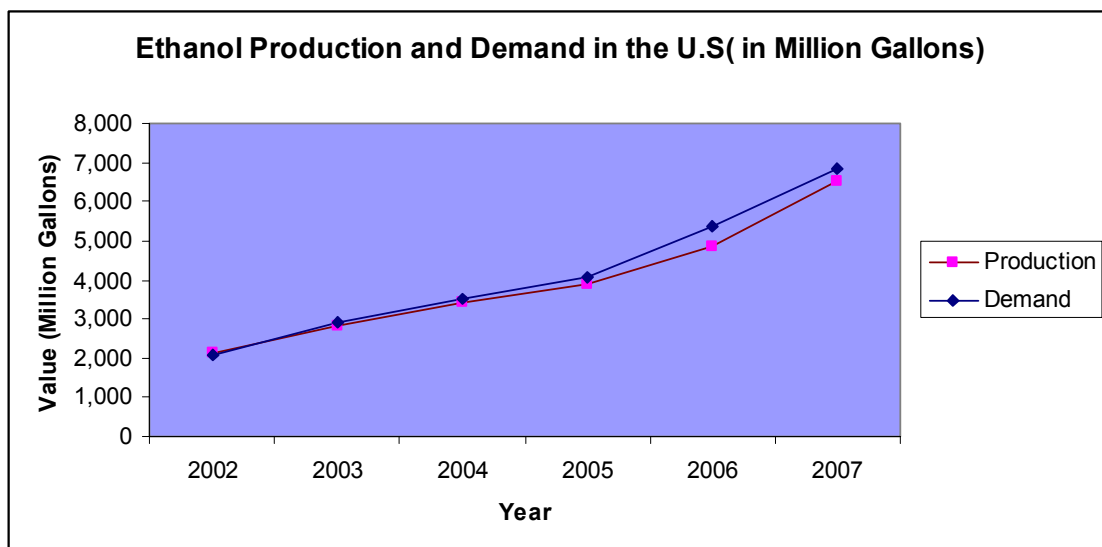
<sup>1</sup> "Living with high inflation for a while?" - Article by Omkar Goswami in the Economic Times dated April 8, 2008.

## 2. Causes for the crisis

The following are some of the main causes that can be attributed to the food and commodity prices inflation over the last year:

### 2.1 US policies pushing corn-based ethanol and other biofuels

There has been a lot of interest in ethanol fuel in the United States, which is touted as the replacement for fossil fuels. Ethanol currently constitutes a very small supply of the U.S' fuel supply but the demand is estimated to grow over the years. The total production and demand for ethanol in the U.S has shown a consistent increase over the past few years as shown in the graph below, with the demand exceeding the production.



Source: *Renewable Fuels Association*

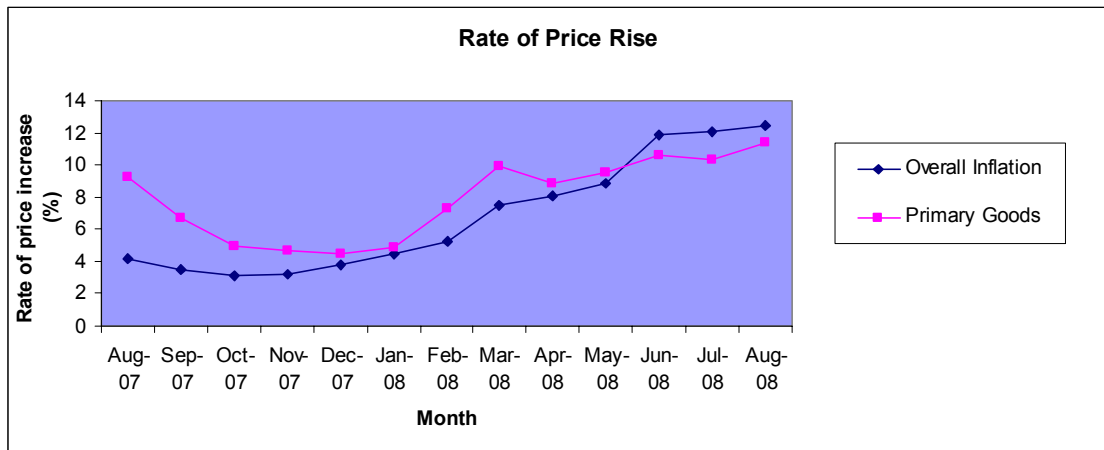
Ethanol Production is likely to soar over the next few years by the passing of the Energy Policy Act of 2005, which set a standard for renewable fuels mandating 7.5 billion gallons of annual domestic renewable-fuel production by 2012. The U.S itself accounts

for 70% of the world's ethanol production and most of the cars running in the U.S today run on blends of up to 10% ethanol.

This ethanol is mainly produced from corn, wheat, soyabean, sugarbeets and sugarcane with corn accounting for the major portion. This has resulted in most of the corn being produced in the U.S and other countries being diverted for ethanol production and hence resulting in a shortage of the supply. The U.S Department of Agriculture mentions that the U.S uses 25% of total corn crop for ethanol production. Other ingredients for biofuels include Soyabeans, Canola, Sunflower, Mustard and Cotton whose prices also came under pressure because of increasing demand resulting in food inflation.

With increasing oil prices in 2006 and 2007, ethanol production is also increasing sharply in the EU as well as in Brazil and China. The conversion of these food crops into fuel did not the rise of oil prices but has created scarcities of food grains leading to inflation.

This is evident from the price increase of primary articles in India, which have increased at a higher rate than the overall inflation rate which is shown in the graph below:



Source: CMIE Business Beacon Database

## **2.2 Strong demand for food from big developing countries such as China and India**

Though this theory has been debunked by many, a lot of economists still believe that a part of the food and commodities inflation has been fuelled by the strong demand for food and other commodities from developing countries like China and India. With the per capita income of these countries increasing steadily and the affluence of the growing middle class in these countries, the consumption levels have increased over the years.

Globally, there has also been a continuous increase in the consumption demand for corn owing mainly to the increased demand from the meat and starch sector. There is a growing requirement of maize from poultry sector, which uses corn as feed.

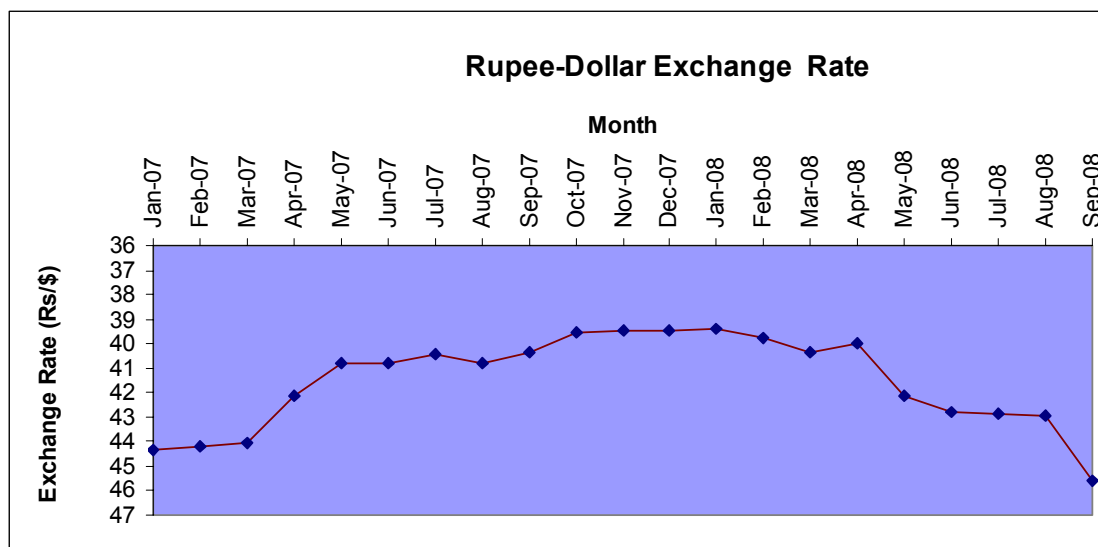
In India, rising household incomes have shifted human consumption from maize to other cereals like rice and wheat. The rising incomes have also led to an increased consumption of meat, particularly of poultry, which has increased the demand for maize as feed.

## **2.3 Speculation because of futures trading in commodities**

Another factor contributing to the rising food prices is the effect of increased speculative activities in the commodities market.

With speculation about increased commodity prices spreading and substantial liquidity waiting to move out of the equity markets, it was obvious that the commodity prices move up. This can explain single-day surges of about 30% in prices of rice and wheat as happened in early 2008.

Working along with these speculations was the declining price of the U.S dollar, which was the unit of account for the commodity markets. As the dollar started depreciating, commodity markets began building in currency risk in their quotations. The dollar exchange rate against the rupee is shown below



Source: *CMIE Business Beacon Database*

We find that except for the last few months when the dollar started appreciating because of the capital flight from India, the dollar had been continuously depreciating for the last year and a half hence playing into the speculators' hands.

## 2.4 High Crude Oil Prices

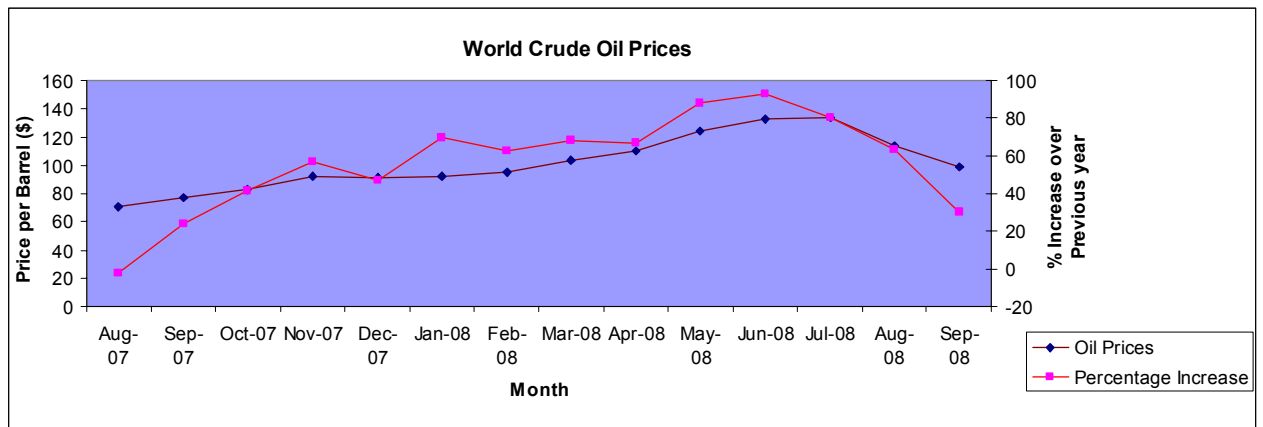
There is a strong correlation between crude oil and other components forming the inflation index, because the latter are either derivatives of oil or are directly/indirectly impacted by oil prices.

A report by UK's Green Party Euro-MP Caroline Lucas predicted as early as January 2007 that oil security is necessary for food security. It indicates that industrialized farming, with hydrocarbon-fuelled farm machinery and irrigation systems, consumes 50 times more energy than that of traditional agriculture. It also estimates that 90% of all the food products require the use of oil.<sup>2</sup> The report details the extent to which 21<sup>st</sup> century food systems are dependent on intensive energy use, and examines why they are

<sup>2</sup> Chris Skrebowski, *Joining the Dots*, Presentation to Energy Institute Conference, London, 10 November 2004.

particularly vulnerable to the impact of high energy prices on the fertilizers, pesticides, plastics, aviation fuel and others.

Thus, strong oil prices throughout the last prices resulted in the food and commodity prices going over the roof. The change in oil prices over the period due to severe supply shocks is shown in the graph below:



Source: *CMIE Business Beacon Database*

### **3. Steps taken by the government**

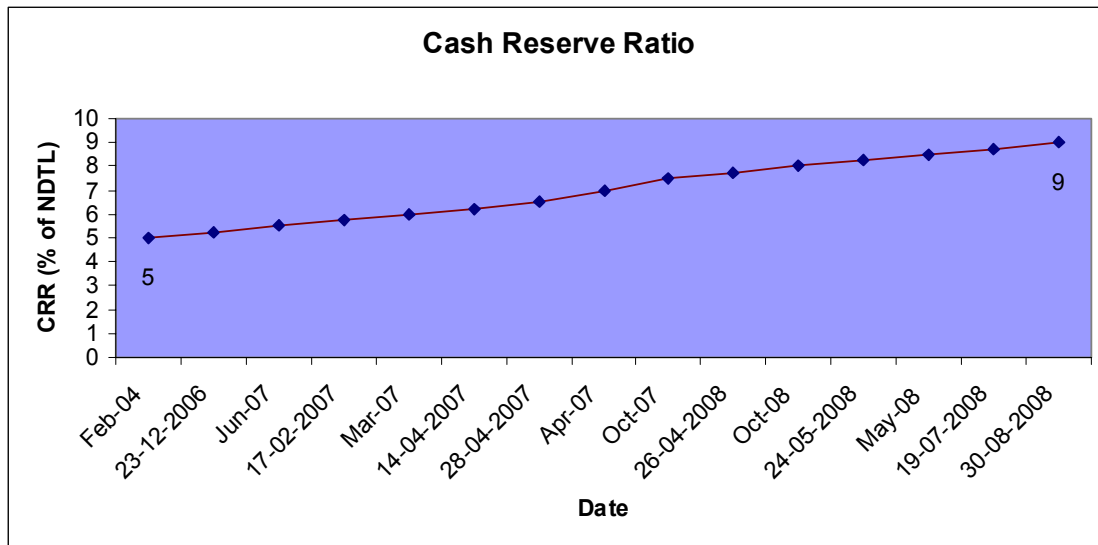
#### **3.1 Fiscal Policies**

The Indian government has taken a mix of monetary and fiscal policies to tackle inflation. The fiscal policies are elaborated below:

- 1) Banning of four commodities in futures trading – Rubber, refined soyaoil, Potato and Channa (gram).
- 2) Cutting import duties and banning the export of non-basmati rice.
- 3) Reduction of customs duty for pulses to zero and a ban on Pulses exports till March 2009.
- 4) Removal of Custom duty on semi-milled or wholly-milled rice, till March 2009.
- 5) No import duty on wheat till December 2009.
- 6) Reduction of Customs duties on crude and refined edible oil to around 20-27.5%.
- 7) Reduction of customs duty on palm oil by 10 percentage points.
- 8) Banning of cement exports and reduction or removal of customs duty for various kinds of steel.
- 9) Abolition of customs duty for cotton imports and reduction of excide duty for petrol and diesel.

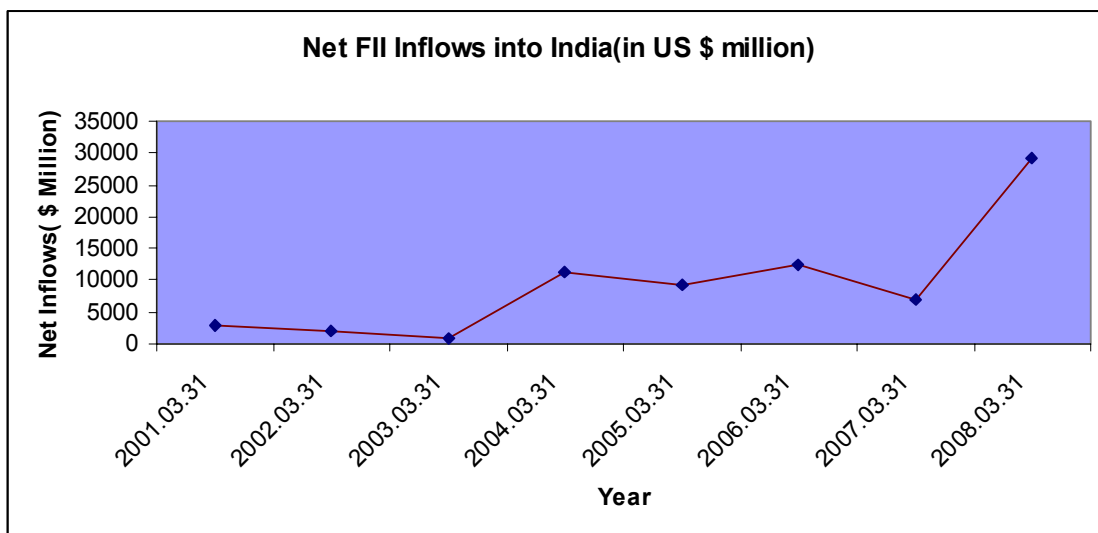
#### **3.2 Monetary Policy Measures**

Apart from these fiscal measures, some monetary measures were also taken by the government to tackle the inflation crisis. The Reserve Bank of India (RBI) has been increasing the Cash Reserve Ratio (CRR) and interest rates continuously from 2006 onwards. The CRR had been increased from 5.5% in late 2006 to around 9% in August 2008. This was mainly because of the overall economic scenario across the world and the high growth that was anticipated before the subprime crisis wreaked havoc.



Source: CMIE Business Beacon Database

These rate hikes were meant to suck out excess liquidity from the system. However, with the U.S economy in a recession and with low interest rates in the U.S, there was a big interest-rate differential between the rates in U.S and India, as a result of which portfolio inflows started increasing at a very high rate (shown in the graph) thereby helping the rupee appreciate.



Source: CMIE Business Beacon Database

As a result of these portfolio inflows, the rupee appreciated to Rs.37 per dollar at one point of time before the RBI became uncomfortable with the exchange rate as Indian exports were becoming uncompetitive.

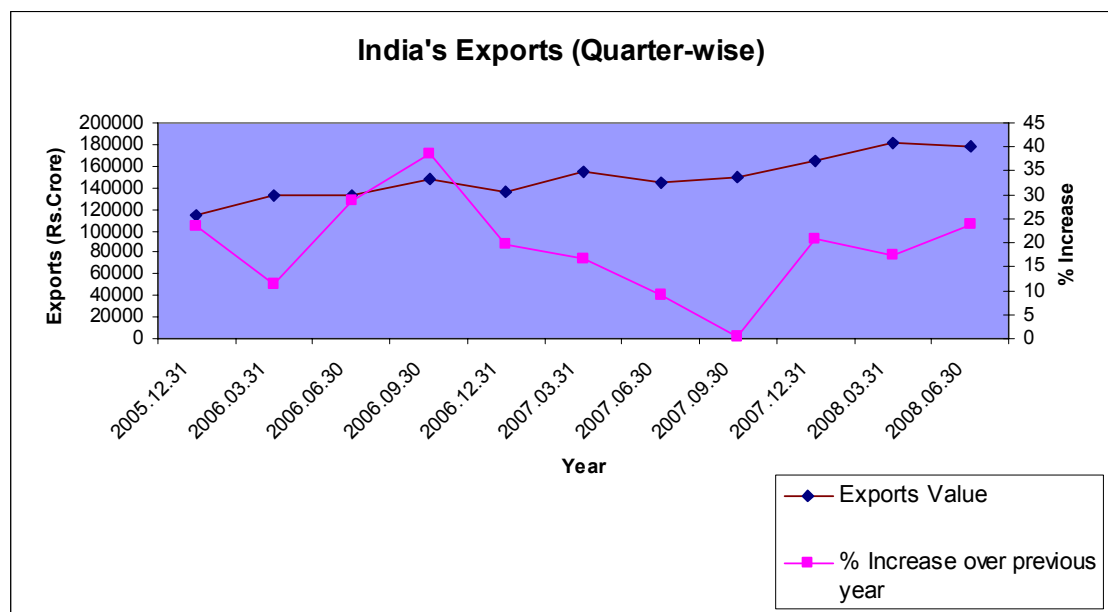
### **Market Stabilization Scheme**

RBI used the concept of Market Stabilization Scheme (MSS) to suck out excess liquidity in the system to moderate the effect of inflation. It conducted a bond auction and sucked out Rs.5000 crore from the banking system in the month of April. This removal of excess liquidity negated the need for going for a further CRR hike. However, the interest payable on these securities has to be met by the central government and appears in the budget as a part of the aggregate interest burden. Thus, the greater the degree to which the RBI has to resort to sterilization to neutralize the effects of capital inflows, the larger is the cost that the government would have to bear, by diverting a part of its resources for the purpose.

#### 4. Things the government could have done better

- 1) The RBI has the prime objective of inflation targeting but also has another role in maintaining the exchange rate of the rupee. In this scenario, when the rupee was appreciating because of foreign inflow of money, the RBI started selling rupees and buying dollars in the market to bring down the rupee exchange rate. This infused more rupees into the system thereby pushing up the inflation more.

This could have been avoided as the Indian exports were not affected to a great extent by the rupee depreciation and exports were increasing at a steady rate throughout 2007-08, which is evident from the graph below:



Source: CMIE Business Beacon Database

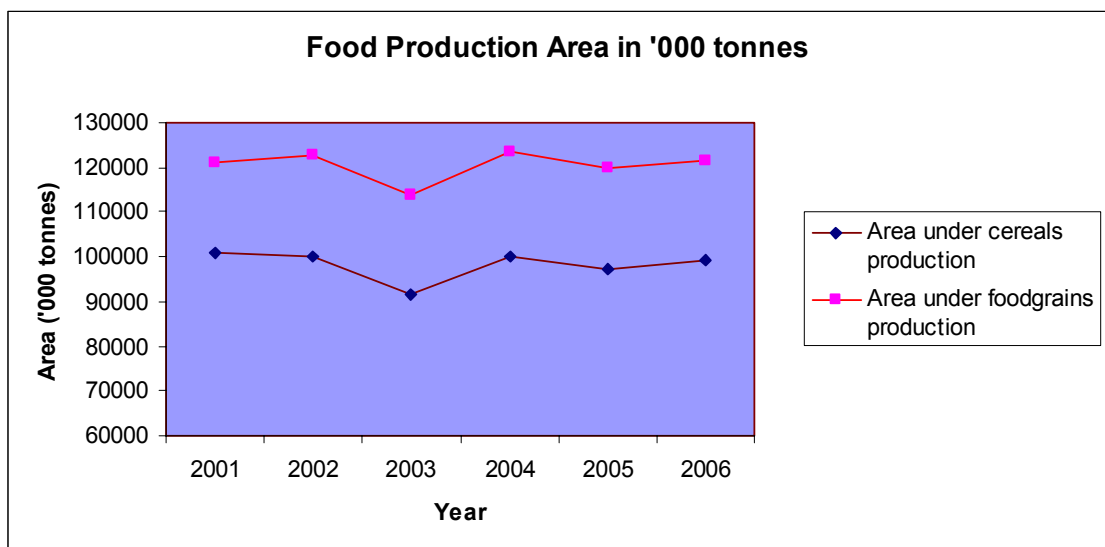
Also, rupee appreciation would have boosted imports, which would have helped.

- 2) The government announced the implementation of the sixth pay commission which would cost the exchequer Rs.22,100 crore this fiscal. Also, the cost of farm loans to be waived at three installments is estimated at Rs.71,680 crore. This is bound to increase the government expenditure by a huge amount resulting in a

bad fiscal state, which in turn leads to inflation. The government could have done better by not playing to the masses by introducing farm subsidies. However, the pay commission recommendations need to be looked at in more detail. Freezing employees' salaries will not help but improving their productivity will certainly help in the long run.

## 5. Recommendations

- 1) Instead of just relying on monetary and fiscal policies, the government should aim at improving the state of agriculture in the country. The total cultivable area for food grains has remained practically constant throughout the last six years from 2001 to 2006.

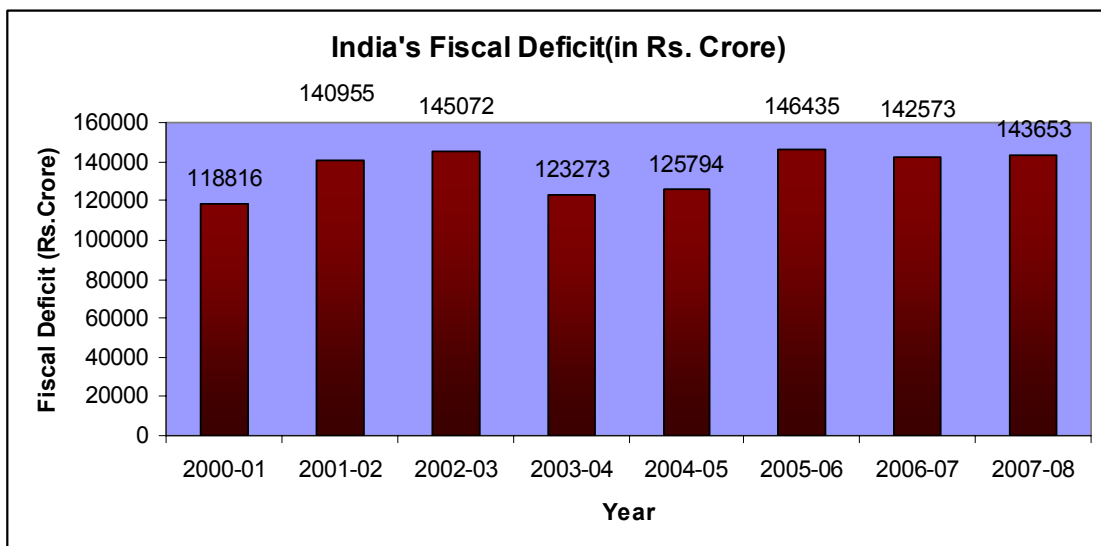


Source: *CMIE Business Beacon Database*

Though the total production of foodgrains like rice, wheat, jowar, bajra, ragi, etc have increased over the years at a decent rate, they depend on the monsoons. The government should concentrate more on improving area under cultivation, rural labor productivity, creating off-farm employment and supply-chain efficiency which will go a long way in preventing such incidents from happening in the future. With Special Economic Zones (SEZ) the order of the day, proper land-acquisition laws need to be put in place. Though farm productivity will take quite some time to improve, there has to be more emphasis by the government on agriculture.

Capital formation in agriculture continues to remain abysmally low with investment in agriculture remaining stagnant at 2.5% as a ratio to GDP. There has to be greater coordination between Centre and states to revolutionize the agriculture sector.

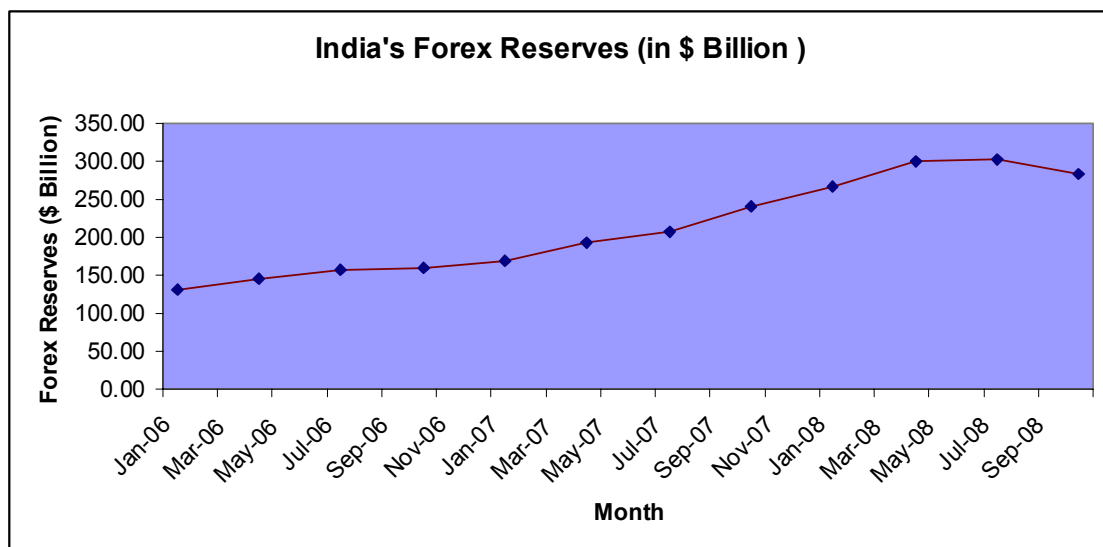
- 2) Instead of taking half-baked measures to control inflation, the government needs to take decisions which would prove to be beneficial over the long term. The government should follow fiscal prudence and ensure that the fiscal deficit is kept within limits.



Source: RBI Website

Though India's fiscal deficit was reduced to 3.17% of gross GDP this year from 3.8% in 2006-07, unnecessary government expenditure should be avoided. This is because, as the government starts spending more money than the revenues that it's getting through taxation, the fiscal deficit increases. This increase in fiscal deficit results in more money supply and hence fuels inflation. Hence, the government has to put a particular target for fiscal deficit every year and needs to stick to it.

- 3) India should take the lead in finding a solution to the global food and energy prices through global dialogue and coordination. It should enlist the help of all the emerging economies to seek a moratorium on the production of biofuels from food crops. It should put pressure on the U.S and other countries to ensure that bio-fuel production is limited to recycling of bio-wastes and with reclaimed waste lands. With the demand of biofuels set to increase on account of the depleting reserves of conventional fuel sources like coal, this has to be taken in right earnest.
- 4) India's Foreign Exchange reserves have been increasing continuously over the past few years as illustrated below:



Source: RBI Website

From a modest \$131 billion in reserves in 2006, we have grown to about \$300 billion in reserves by 2008. This is attributable to the good growth India has been witnessing since 2006 and the continued inflow of foreign funds. With more inflows, the monetary base increases and hence pushes up inflation. With so much of foreign reserves remaining unutilized, a part of the forex reserves can be used for infrastructure projects in India or for technological upgradation of India's farm sector. This can go a long way in improving the farm sector in India.

## **REFERENCES**

- Centre for Monitoring Indian Economy (CMIE) Database
  - Business Beacon database
  - Economic Intelligence Service database
  - Indian Harvest database
- [www.commodityonline.com](http://www.commodityonline.com)
- <http://www.commodityonline.com/news/Can-Futures-ban-bring-down-Inflation-in-India-8124-3-1.html>
- <http://www.commodityonline.com/news/India-may-have-crossed-the-inflation-hump-12063-3-1.html>
- <http://www.iht.com/articles/2008/05/05/business/5indfood.php>
- <http://www.livemint.com/2008/04/06231602/What-should-RBI-do-now.html>
- [http://economictimes.indiatimes.com/Opinion/Living\\_with\\_high\\_inflation\\_for\\_a\\_while/rssarticleshow/2933606.cms](http://economictimes.indiatimes.com/Opinion/Living_with_high_inflation_for_a_while/rssarticleshow/2933606.cms)
- <http://www.livemint.com/2008/04/15003034/Food-inflation-riots-worry-wo.html?pg=2>
- [http://economictimes.indiatimes.com/Opinion/Living\\_with\\_high\\_inflation\\_for\\_a\\_while/rssarticleshow/msid-2933606.curpg-2.cms](http://economictimes.indiatimes.com/Opinion/Living_with_high_inflation_for_a_while/rssarticleshow/msid-2933606.curpg-2.cms)
- [http://economictimes.indiatimes.com/Opinion/Living\\_with\\_high\\_inflation\\_for\\_a\\_while/rssarticleshow/msid-2933606.curpg-3.cms](http://economictimes.indiatimes.com/Opinion/Living_with_high_inflation_for_a_while/rssarticleshow/msid-2933606.curpg-3.cms)
- [www.rbi.org.in](http://www.rbi.org.in)
- <http://www.commodityonline.com/news/India-may-have-crossed-the-inflation-hump-12063-3-1.html>
- <http://www.livemint.com/2008/06/15142452/Less-futures-exposure-taming-p.html>
- [www.wikipedia.com](http://www.wikipedia.com)

## Profile

### EDUCATION

Qualification	Institute/Organization	Board/ University	Year	%/CGPA
MBA	NMIMS	NMIMS	2009	3.13/4
B.E(Hons) Electrical and Electronics	Birla Institute of Technology and Science (BITS), Pilani	Birla Institute of Technology and Science (BITS), Pilani	2004	7.66/10
H.S.C	E R Higher Secondary School, Trichy	Tamilnadu State Board	2000	97.1
S.S.C	E R Higher Secondary School, Trichy	Tamilnadu State Board	1998	95.8

- Completed NCFM (Basic Securities) module and AMFI Mutual Funds(Basic) module

### Work Experience:

#### 31 Months

- Worked with FROST & SULLIVAN India Pvt. Ltd. as a Research Analyst from Dec 06 – Mar 07. (04 months)
- Worked with INFOSYS TECHNOLOGIES LTD as a Software Engineer in the Banking and Capital markets vertical from Jul 04- Sep 06. (27 months)

### Key Projects:

- Played a key role in preparing industry research reports through primary and secondary research during my stint at Frost & Sullivan
- Successfully carried out various activities like design, development, testing and maintenance of a number of related applications for the client 'Bank of America' at Infosys
- Conducted periodic security and process audits for the project team as the configuration controller and ensured that all team members conformed to regulations
- As a module leader, mentored new entrants in the team on the technical work and the types of processes followed at Infosys
- Key single point of contact for many of the applications that I was handling at Infosys

### Achievements:

- Won the IFCI Award for Financial Research Excellence competition held at FMS, Delhi
- Awarded 'Spot Award' for excellence in work at Infosys
- Part of the team which won the 'Most Valuable Player- Best Team' award in a given quarter at Infosys
- School topper in the tenth standard and second in the twelfth standard at E.R Higher Secondary School
- Awarded a merit scholarship by the Tamilnadu state government for excellence in the twelfth standard

### Extra-curricular activities:

- Participated and won prizes in a number of oratorical, essay-writing and quiz competitions at the school and college level
- Organized and coordinated sports events during the annual sports meet in BITS
- Active member of the alumni interface cell in NMIMS and played a major role in organizing alumni meets