


Union Budget & Economic Survey

Ministry of Finance
Government of India

Economic Survey 2006-2007

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General Review

Review of developments

Macroeconomic overview

Vigorous growth with strong macroeconomic fundamentals has characterized developments in the Indian economy in 2006-07 so far. However, there are some genuine concerns on the inflation front. Growth of 9.0 per cent and 9.2 per cent in 2005-06 and 2006-07, respectively, by most accounts, surpassed expectations (Table 1.1). While the up-and-down pattern in agriculture continued with growth estimated at 6.0 per cent and 2.7 per cent in the two recent years, and services maintained its vigorous growth performance, there were distinct signs of sustained improvements on the industrial front (Table 1.2). Entrenchment of the higher growth trends, particularly in manufacturing, has boosted sentiments, both within the country and abroad. The overall macroeconomic fundamentals are robust, particularly with tangible progress towards fiscal consolidation and a strong balance of payments position. With an upsurge in investment, the outlook is distinctly upbeat.

1.2 The advance estimates (AE) of gross domestic product (GDP) for 2006-07, released by the Central Statistical Organisation (CSO) on February 7, 2007, places the growth of GDP at factor cost at constant (1999-2000) prices in the current year at 9.2 per cent. Growth in 2005-06, initially estimated by the CSO at the AE stage at 8.1 per cent in February 2006, was revised upwards to 8.4 per cent at the revised estimate stage in May 2006 and further to 9.0 per cent in the quick estimates released by the CSO on January 31, 2007.

1.3 The ratcheting up of growth observed in recent years is reflected in the Eleventh Five Year Plan target of an average annual growth of 9 per cent relative to 8 per cent targeted by the Tenth Plan (2002-03 to 2006-07). The shortfall in the annual average growth of 7.6 per cent from the target of 8 per cent in the five years of the Tenth Plan is attributable to the disappointing 3.8 per cent growth in the first year of the Plan and its subsequent surge to 8.6 per cent, on average, in the last four years.

1.4 Services contributed as much as 68.6 per cent of the overall average growth in GDP in the last five years between 2002-03 and 2006-07. Practically, the entire residual contribution came from industry. As a result, in 2006-07, while the share of agriculture in GDP declined to 18.5 per cent, the share of industry and services improved to 26.4 per cent and 55.1 per cent, respectively.

1.5 The lower contribution of industry to GDP growth relative to services in recent years is partly because of its lower share in GDP, and does not adequately capture the signs of industrial resurgence. First, growth of industrial sector, from a low of 2.7 per cent in 2001-02, revived to 7.1 per cent and 7.4 per cent in 2002-03 and 2003-04, respectively, and after accelerating to over 9.5 per cent in the next two years, touched 10.0 per cent in 2006-07. Second, growth of industry, as a proportion of the corresponding growth in services, which was 78.9 per cent on an average between 1991-92 and 1999-2000, improved to 88.7 per cent in the last seven years. Third, within industry, the growth impulses in the sector seem to have spread

Table 1.1 : Key indicators

Items	2003-04	2004-05	2005-06	2006-07	2003-04	2004-05	2005-06	2006-07
	Absolute values				percentage change over previous period			
Gross domestic product (at factor cost)								
(Rs. thousand crore)								
At current prices	2549.4	2855.9	3250.9 Q	3717.5 A	12.5	12.0	13.8 Q	14.4 A
At 1999-2000 prices	2222.6	2389.6	2604.5 Q	2844.0 A	8.5	7.5	9.0 Q	9.2 A
GDP—at market prices								
(Rs. thousand crore)								
(at current prices)	2765.5	3126.6	3567.2 Q	4100.6	12.5	13.1	14.1 Q	15.0 A
Gross national product (at factor cost)								
(Rs. thousand crore)								
At current prices	2531.2	2833.6	3225.9 Q	3693.4 A	12.6	11.9	13.8 Q	14.5 A
At 1999-2000 prices	2204.7	2367.7	2580.7 Q	2822.1 A	8.7	7.4	9.0 Q	9.4 A
Foodgrains production (million tonnes)	213.2	198.4	208.6	209.2 +	22.0	-6.9	5.1	0.3 +
Index of industrial production ⁽¹⁾	189.0	204.8	221.5	239.0 ^	7.0	8.4	8.2	10.8 ^
Electricity generated (in billion kwh)	558.3	587.4	617.5	493.1 ^	5.0	5.2	5.1	7.5 ^
Wholesale price index ⁽²⁾	180.3	189.5	197.2	209.2 #	4.6	5.1	4.1	6.7 #
Consumer price index for industrial workers ⁽³⁾	504	525	551	588 \$	3.5	4.2	5.0	6.9 \$
Money supply (M ₃) ⁽⁴⁾ (Rs. thousand crore)	2005.7	2251.4 (2332.7)##	2729.5	3071.7 ⁽⁶⁾	16.8	12.3	17.0@@	21.1 ⁽⁵⁾
Imports at current prices								
(in Rs. crore)								
(in US \$ million)	3,59,108	5,01,065	6,60,409	5,98,287***	20.8	39.5	31.8	40.6 ^^
Exports at current prices								
(in Rs. crore)								
(in US \$ million)	2,93,367	3,75,340	4,56,418	4,08,394***	15.0	27.9	21.6	40.6 ^^
Foreign currency assets ⁽⁶⁾								
(in Rs. crore)								
(in US \$ million)	4,66,215	5,93,121	6,47,327	7,64,501*	36.5	27.2	9.1	29.7 *
Exchange rate (Re./US \$) ⁽⁷⁾								
	45.95	44.93	44.27	45.48 @	5.3	2.3	1.5	-2.7 @

Note: Gross domestic product and Gross national product figures are at factor cost (new series base 1999-2000).

Q-Quick estimates; A-Advance estimates; @ Average exchange rate for April-January, 2006-07.

@@ Computed over comparable data i.e. April 1, 2005 due to 27 fortnights during 2005-06.

* At the end of January, 2007. ** At the end of December, 2004 *** April-December, 2006 (provisional).

As on February 3, 2007. ## Outstanding balances as on April 1, 2005.

^ April-December, 2006 \$ As on December, 2006.

^^ April-December, 2006 on provisional over provisional basis. + 2nd advance estimates 2006-07.

1. Index of industrial production; (base 1993-94=100).

2. Index (with base 1993-94 = 100) at the end of fiscal year.

3. Index (with base 1982 =100) at the end of fiscal year.

4. Outstanding at the end of financial year.

5. As on January 19, 2007, year-on-year growth.

6. Outstanding at the end of financial year.

7. Percent change indicates the rate of appreciation (+)/depreciation (-) of the Rupee vis-à-vis the US Dollar.

**Table 1.2 : Sectoral real growth rates in GDP at factor cost
(at 1999-2000 prices)**

Item	Percentage change over the previous year						
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Q)	2006-07 (A)
I. Agriculture & allied	-0.2	6.3	-7.2	10.0	0.0	6.0	2.7
II. Industry	6.4	2.7	7.1	7.4	9.8	9.6	10.0
<i>Mining and quarrying</i>	2.4	1.8	8.8	3.1	7.5	3.6	4.5
<i>Manufacturing</i>	7.7	2.5	6.8	6.6	8.7	9.1	11.3
<i>Electricity, gas & water supply</i>	2.1	1.7	4.7	4.8	7.5	5.3	7.7
<i>Construction</i>	6.2	4.0	7.9	12.0	14.1	14.2	9.4
III. Services	5.7	7.2	7.4	8.5	9.6	9.8	11.2
<i>Trade, hotels, transport and communication</i>	7.3	9.1	9.2	12.1	10.9	10.4	13.0
<i>Financial, real estate & business services</i>	4.1	7.3	8.0	5.6	8.7	10.9	11.1
<i>Community, social and personal services</i>	4.8	4.1	3.9	5.4	7.9	7.7	7.8
IV. Total GDP at factor cost	4.4	5.8	3.8	8.5	7.5	9.0	9.2
P : Provisional Q : Quick A : Advance estimates Source : Central Statistical Organisation.							

to manufacturing. Industrial growth would have been even higher, had it not been for a relatively disappointing performance of the other two sub-sectors, namely, mining and quarrying; and electricity, gas and water supply. Fourth, since 1951-52, industry has never consistently grown at over seven per cent per year for more than three years in a row before 2004-05. Fifth, year-on-year, manufacturing, according to the monthly Index of Industrial Production (IIP) available until December 2006, has been growing at double digit rates every month since March 2006, with the solitary exception of the festive month of October.

1.6 A notable feature of the current growth phase is the sharp rise in the rate of investment in the economy. Investment, in general being a forward looking variable, reflects a high degree of business optimism. The revival in gross domestic capital formation (GDCF) that commenced in 2002-03 has been followed by a sharp rise in the rate of investment in the economy for four consecutive years. The earlier estimates of GDCF for 2004-05 of 30.1 per cent, released by CSO in their advance estimates, now stand upgraded to 31.5 percent in the quick estimates. The rate of GDCF for 2005-06 as

per the quick estimates released by CSO is 33.8 per cent. This sharp increase in the investment rate has sustained the industrial performance and reinforces the outlook for growth.

1.7 Services sector growth has continued to be broad-based. Among the three sub-sectors of services, 'trade, hotels, transport and communication services' has continued to boost the sector by growing at double-digit rates for the fourth successive year (Table 1.2). Impressive progress in information technology (IT) and IT-enabled services, both rail and road traffic, and fast addition to existing stock of telephone connections, particularly mobiles, played a key role in such growth. Growth in financial services (comprising banking, insurance, real estate and business services), after dipping to 5.6 percent in 2003-04 bounced back to 8.7 percent in 2004-05 and 10.9 per cent in 2005-06. The momentum has been maintained with a growth of 11.1 per cent in 2006-07.

1.8 After an annual average of 3.0 per cent in the first five years of the new millennium starting 2001-02, growth of agriculture at only 2.7 per cent in 2006-07, on a base of 6.0 per cent growth in the previous year, is a cause of concern. Low investment, imbalance in fertilizer use, low seeds replacement rate, a

distorted incentive system and low post-harvest value addition continued to be a drag on the sector's performance. Given its low share, a mechanical calculation of the adverse impact of low growth in agriculture on overall GDP can be misleading. With more than half the population directly depending on this sector, low agricultural growth has serious implications for the 'inclusiveness' of growth. Furthermore, poor agricultural performance, as the current year has demonstrated, can complicate maintenance of price stability with supply-side problems in essential commodities of day-to-day consumption. The recent spurt of activity in food processing and integration of the supply chain from the farm gate to the consumer's plate has the potential of redressing some of the root causes such as low investment, poor quality seeds, and little post-harvest processing.

1.9 With a shortfall in domestic production vis-à-vis domestic demand and hardening of international prices, prices of primary commodities, mainly food, have been on the rise in 2006-07 so far. Wheat, pulses, edible oils, fruits and vegetables, and condiments and spices have been the major contributors to the higher inflation rate of primary articles. As much as 39.4 per cent of the overall inflation in WPI on February 3, 2007 came from the primary group of commodities. Within the primary group, the mineral subgroup recorded the highest year-on-year inflation at 18.2 per cent, followed by food articles at 12.2 per cent and non-food articles at 12.0 per cent. Food articles have a high weight of 15.4 per cent in the WPI basket. Including manufactured products such as sugar and edible oils, food articles contributed as much as 27.2 per cent to overall inflation of 6.7 per cent on February 3, 2007.

1.10 Starting with a rate of 3.98 per cent, the inflation rate in 2006-07 has been on a general upward trend with intermittent decreases. However, average inflation in the 52 weeks ending on February 3, 2007 remained at 5 per cent. A spurt in inflation like in the current year has been observed in the recent past in 1997-98, 2000-01, 2003-04 and 2004-05.

1.11 The international annual average price of the Indian basket of crude (about 60 per cent of Oman/Dubai and 40 per cent of Brent), after remaining more or less stable in 2002-04 at around US\$27-28 per barrel, increased by over 40 per cent annually in the next two years to reach US\$75.2 per barrel on August 8, 2006. To stop the hemorrhaging of public sector oil companies' finances, there was an unavoidable upward revision of retail selling prices of petro-products on June 6, 2006. The pass-through to consumers was restricted to just 12.5 per cent in a three-way burden sharing arrangement among consumers, Government and oil marketing companies. With the softening of international petroleum prices, domestic prices of petrol (motor spirit) and high-speed diesel were reduced by Rs. 2 and Re.1, respectively with effect from November 30, 2006, and again by the same amounts with effect from February 16, 2007.

1.12 Government closely monitored prices every week and initiated measures to enhance domestic availability of wheat, pulses, sugar and edible oils by a combination of enhanced imports, export restrictions and fiscal concessions. In wheat, State Trading Corporation, the parastatal, tendered overseas for 55 lakh tonnes of wheat; private trade was permitted to import wheat at zero duty from September 9, 2006; and exports were banned from February 9, 2007. The minimum support price (MSP) of wheat was raised by Rs. 50 per quintal and announced well in advance of the sowing season to bring additional acreage under wheat. In pulses, imports were allowed at zero duty from June 8, 2006; export was banned from June 22, 2006; and National Agricultural Cooperative Marketing Federation (NAFED) purchased urad and moong overseas. Regulation of commodity futures markets was strengthened for wheat, sugar and pulses; and as a matter of abundant precaution, futures trading was banned in urad and tur from January 24, 2007. Duty on palm group of oils, which meets more than a half of the domestic demand-supply shortfall in edible oils, was reduced by 20-22.5 percentage points in a phased sequence, first in August 2006 and later in January 2007.

Further, tariff values of these oils for import duty assessment were frozen. On January 22, 2007, further duty cuts were announced for portland cement, various metals and machinery items. With a firming up of international prices, the impact of duty-free import of wheat and pulses in rolling the domestic prices back was limited. But such imports improved domestic market discipline.

1.13 Inflation, with its roots in supply-side factors, was accompanied by buoyant growth of money and credit in 2005-06 and 2006-07 so far. While GDP growth accelerated from 7.5 per cent to 9.0 per cent between 2004-05 and 2005-06, the corresponding acceleration in growth of broad money (M_3) was from 12.3 per cent to 17.0 per cent. Year-on-year, M_3 grew by 21.1 per cent on January 19, 2007. The industrial resurgence and upswing in investment was reflected in, and sustained by, growth of gross bank credit (as per data covering 90 per cent of credit by scheduled commercial banks), for example, to industry (medium and large) at 31.6 per cent and for housing loans at 38.0 per cent in 2005-06. It was also observed in year-on-year growth of gross bank credit at 32.0 per cent in September 2006, albeit marginally down from 37.1 per cent in 2005-06. Reconciling the twin needs of facilitating credit for growth on the one hand and containing liquidity to tame inflation on the other remained a challenge. RBI put a restraint on the rapid growth of personal loans, capital market exposures, residential housing beyond Rs. 20 lakh and commercial real estate loans by more than doubling the provisioning requirements for standard advances under these categories from 0.40 per cent to 1.0 per cent in April 2006. Simultaneously, it increased the risk weight on exposures to commercial real estate from 125 per cent to 150 per cent.

1.14 Liquidity conditions remained fairly comfortable up to early September 2006 with the unwinding of the Central Government surplus balances with the RBI and continued intervention in the foreign exchange market to maintain orderly conditions. During 2006-07, up to September 8, 2006, RBI had not received any bid for repo under Liquidity

Adjustment Facility (LAF) and the continuous flow of funds under reverse-repo indicated a comfortable liquidity position. In 2005-06, the reverse repo rate had been raised by 25 basis points each time on April 29 and October 26, 2005, and on January 24, 2006 to reach 5.50 per cent. In 2006-07, it was raised again by 25 basis points each time on June 9 and July 25, 2006. There was some tightness with the onset of the festival season and due to high credit expansion and outflows on account of advance tax payment. From mid-September through October, 2006, while RBI had to provide accommodation to some banks through repo facility, with reverse repo operations simultaneously, in net terms, RBI absorbed liquidity from the system.

1.15 With year-on-year inflation stubbornly above 5 per cent from early-August 2006, on October 31, 2006, the RBI announced more measures to stem inflationary expectations and also to contain the credit off-take at the desired growth rate of 20.0 per cent. Unlike the previous four times, when both the repo and the reverse repo rates were raised by the same 25 basis points, thereby keeping their spread constant at 100 basis points, on October 31, 2006, only the repo rate was raised by 25 basis points. With a repeat of this policy move on January 31, 2007, the repo rate reached 7.50 per cent with a spread of 150 basis points over the reverse repo rate. Since deposits are growing at a lower rate than credit, the higher repo rate signaled to the banks the higher price of accommodation they would have to pay in case of credit overextension.

1.16 The cash reserve ratio (CRR) was hiked by 25 basis points each time on December 23, 2006 (5.25 per cent) and January 6, 2007 (5.50 per cent). While a further increase of CRR of 25 basis points was effected on February 17, another similar increase of 25 basis points will follow on March 3, 2007.

1.17 Sustained faster growth of M_3 relative to that of reserve money (M_0) observed in recent years continued in 2005-06 and

2006-07 so far with the money multiplier

$\left(\frac{M_3}{M_0}\right)$ steadily increasing from 4.43 at end-

March 2002 to 4.60 at end-March 2005, 4.76 at end-March 2006 and further to 4.79 on January 19, 2007. The increase in money-multiplier coincided with fast growth of M_0 at 17.2 per cent during 2005-06 and year-on-year at 20.0 per cent on January 19, 2007 and resulted in the rapid growth of M_3 .

1.18 Driving the fast growth of reserve money was net foreign assets (NFA) of the RBI. Even with the redemption of the India Millennium Deposits, NFA of the RBI grew by Rs. 60,193 crore and contributed 12.3 percentage points to the 17.2 per cent growth in M_0 during 2005-06. The corresponding growth of NFA between end-March 2006 and January 19, 2007 was Rs. 114,338 crore. Liquidity in the system continued to be addressed by Market Stabilisation Scheme (MSS) operations. Outstanding balance under MSS, after increasing from Rs. 29,062 crore (1.0 per cent of M_3) on March 31, 2006 to a high of Rs. 42,364 crore (1.5 per cent of M_3) on August 25, 2006, started declining thereafter to reach Rs. 40,491 crore (1.3 per cent of M_3) on January 19, 2007.

1.19 The change in the liquidity and inflation environment is reflected in the continuous hardening of interest rates in 2005-06 and in 2006-07 so far. With the high demand for credit not adequately matched by deposit growth, there was steady increase in the credit-deposit ratio and hardening of interest rates. For example, the yield on 10-year residual maturity Government securities, which had gone up by 84 basis points during 2005-06 to 7.53 per cent at end-March 2006, hardened further to 8.08 per cent on February 14, 2007. Movements in the call money rates also reveal a similar picture. The hardening of rates was more pronounced at the shorter end of the yield curve, suggesting concerns about inflation only in the short run.

1.20 The rapid growth in NFA of the RBI was a reflection of the buoyant flows of foreign exchange reserves through the balance of payments. Reserve accretion through the

balance of payments was US\$15.1 billion in 2005-06 and US\$8.6 billion in the first six months of 2006-07. While the appreciation of the US dollar vis-à-vis other major currencies resulted in a valuation loss of US\$5.0 billion in 2005-06, in the first half of the current year, the weakening US dollar resulted in valuation gain of a similar amount. Inclusive of gold, IMF reserve tranche position and valuation changes, foreign exchange reserves grew from US\$141.5 at end-March 2005 to US\$151.6 billion at end-March 2006, and to US\$165.3 at end-September, 2006. Such reserves were US\$185.1 billion on February 9, 2007.

1.21 In the balance of payments, in 2005-06 and in the first half of 2006-07, capital flows more than made up for the current account deficits of US\$9.2 billion and US\$11.7 billion, respectively, and resulted in reserve accretion. The current account deficit reflected the large and growing trade deficit in the last two years. Exports grew fast, but imports grew even faster, reflecting in part the ongoing investment boom and the high international petroleum price. In 2005-06, imports (in US dollar terms and customs basis) had grown by 33.8 per cent. In the first nine months of the current year, imports grew by 36.3 per cent. While petroleum imports continued to grow rapidly, non-oil import growth decelerated to a moderate 18.7 per cent in the first nine months of the current year, primarily because of high bullion prices leading to a decline in import of gold and silver in the first few months of the year. The non-POL trade balance, after remaining in surplus till 2003-04, has turned negative since 2004-05.

1.22 India's exports (in US dollar terms and customs basis) have been growing at a high rate of more than 20 per cent since 2002-03. During 2005-06, with growth of 23.4 per cent, India's exports crossed the US\$100 billion mark. During 2006-07, after a slow start, exports gained momentum to grow by an estimated 36.3 per cent in the first nine months to reach US\$89.5 billion. Buoyancy of exports was driven by the resurgence in the manufacturing sector and sustained demand from major trading partners.

1.23 Overall, the external environment remained supportive with the invisible account remaining strong and stable capital flows seamlessly financing the moderate levels of current account deficit caused primarily by the rise in international oil prices. The trend in invisibles (net), comprising of non-factor services (like travel, transportation, software services and business services), investment income, and transfers, compensating to a large extent the trade deficit continued in 2005-06 and through the first half of 2006-07, and resulted in a moderate current account deficit of 1.1 per cent of GDP in 2005-06.

1.24 As a proportion of GDP, invisibles (receipts) at 11.5 per cent of GDP in 2005-06 exhibited steady growth from a modest level of 2.4 per cent of GDP in 1990-91. The most recent two years have shown acceleration, particularly in software and business services. Simultaneously, invisible payments at 6.2 per cent of GDP in 2005-06 have grown, albeit at lower levels and somewhat unevenly, again with acceleration being noticed in the last two years. Under receipts, tourism earnings are estimated to have crossed the US\$6.6 billion in 2006. The UN World Tourism Organisation, in January 2007, has noted the 'emergence' of South Asia as a tourist destination, with remarkable growth of 10 per cent in tourist arrivals in 2006 which was more than double the global growth. Furthermore, it noted that growth of tourism in South Asia was 'boosted by India, the destination responsible for half the arrivals to the sub-region.'

1.25 Capital flows into India remained strong. The composition of flows, however, fluctuated from year to year. In the three-year period, 2002-05, there were large 'other flows' (delayed export receipts and others) accounting for a sizeable proportion of net capital flows. After being outflows in the previous two years, external assistance and external commercial borrowing (ECBs) — two major debt-creating flows — picked up in 2004-05. These debt flows, as a proportion of total capital flows, were 25 per cent in 2004-05 and 18 per cent in 2005-06. Foreign investment, as a proportion of capital flows, has remained in the range of 39.1 per cent to

79.3 per cent in the last four years ending in 2005-06. There was strong growth in foreign direct investment (FDI) flows (net), with three-quarters of such flows in the form of equity. The growth rate was 27.4 per cent in 2005-06 followed by 98.4 per cent in April-September 2006. This was even after gross outflows under FDI with domestic corporate entities seeking a global presence to harness scale, technology and market access advantages through acquisitions overseas. FII flows, the dominant variety of portfolio flows, after remaining buoyant until 2005-06, turned into net outflows in the first half of 2006-07. FII flows are reported to have turned positive again in the second half of the current year.

1.26 The buoyancy of foreign investment flows through the balance of payments, in part, reflected the bullish sentiments in the domestic capital markets. The BSE Sensex, the bell-weather stock-index of the Bombay Stock Exchange (BSE), rallied from a low of 8,929 on June 14, 2006 to an all-time intra-day high of 14,724 on February 9, 2007. The rally from the 13,000 mark to the 14,000 mark in only 26 trading sessions was the fastest ever climb of 1,000 points. India with a market capitalization of 91.5 per cent of GDP on January 12, 2007 compared favourably not only with emerging market economies but also with Japan (96 per cent) and South Korea (94.1 per cent). The strength of the market micro-structure from large retail participation continued.

1.27 The positive sentiments were manifest also in most indicators such as resource mobilized through the primary market. Aggregate mobilization, especially through private placements and Initial Public Offerings (IPOs), grew by 30.5 per cent to Rs. 161,769 crore in calendar year 2006, with about 6 IPOs every month, on average. Net mobilisation of resources by mutual funds increased by more than four-fold from Rs. 25,454 crore in 2005 to Rs. 1,04,950 crore in 2006. The sharp rise in mobilisation by mutual funds was due to buoyant inflows under both income/debt oriented schemes and growth/equity oriented schemes. The negative inflows in 2004 turned positive for the public sector mutual funds in

2005 and accelerated in 2006. Other indicators of market sentiments, such as equity returns and price/earnings ratio also continued to be strong and supportive of growth.

1.28 The upbeat mood of the capital markets, reflecting the improved growth prospects of the economy, was partly also a result of steady progress made on the infrastructure front. Overall index of six core industries — electricity, coal, steel, crude oil, petroleum refinery products, and cement, with a weight of 27 per cent in IIP — registered a growth of 8.3 per cent in April-December 2006 compared to 5.5 per cent in April-December 2005. On the transport and communications front, railways maintained its nearly double-digit growth in the first nine months of the current year. There was, however, a growth deceleration in cargo handled at major maritime ports (both exports and imports) and airports (exports). The news of gas discoveries in the Krishna Godavari (KG) basin under New Exploration and Licensing Policy (NELP) in recent months was an encouraging development in the country's pursuit of reduced import-dependence in hydrocarbons.

1.29 Investment requirements for infrastructure during the Eleventh Five Year plan are estimated to be around US\$ 320 billion. While nearly 60 per cent of these resources would come from the public sector, the balance would need to come either from the private sector and/or through public-private partnership (PPP). The potential benefits expected from PPP are: cost-effectiveness, higher productivity, accelerated delivery, clear customer focus, enhanced social service, and recovery of user charges. Further, the additionality of resources that PPP would bring, along with the 'value for money', continues to remain critical. Based on the number of projects that have been approved or are under consideration, it is estimated that a leveraging of nearly six times could be achieved through this route.

1.30 The ability of Government and the public sector to invest additional resources for developing the much-needed infrastructure critically depends on the creation of fiscal

space. The notification of the Fiscal Responsibility and Budget Management Act (FRBMA) 2003, with effect from July 5, 2004, the culmination of the policy resolve to place the process of fiscal consolidation in an institutional framework, has yielded rich dividends in terms of creating such fiscal space. The fiscal deficit declined to 4.1 per cent of GDP in 2005-06 and was budgeted at 3.8 per cent of GDP in 2006-07. With the implementation of the award of the Twelfth Finance Commission (TFC), which was calibrated to restructure public finances of both the Centre and States, the process gained momentum. In the current year, as a proportion of GDP, the budgeted fiscal deficit of the States has declined to less than the mandated 3 per cent two years ahead of schedule, and only a marginal revenue deficit remains to be eliminated. The decline in the deficit indicators of the Centre has been relatively slower with demands on its resources, *inter alia*, on account of the implementation of the TFC award and a 'pause' in fiscal consolidation in 2005-06. The resumption of the fiscal consolidation process in 2006-07, without compromising the National Common Minimum Programme (NCMP) objectives, indicates the commitment towards meeting the FRBMA targets.

1.31 The fiscal consolidation process underway in India, unlike the expenditure compression strategy in most other countries, has been essentially revenue-led and has involved reprioritisation of expenditure with a focus on outcomes. The tax-GDP ratio of the Centre has steadily risen from 8.8 per cent in 2002-03 to 10.3 per cent in 2005-06 and was budgeted at 11.2 per cent in 2006-07. After growing by 20.3 per cent and 22.7 per cent, respectively in 2005-06, corporate income tax and personal income tax have grown by 55.2 per cent and 30.3 per cent, respectively in April-December 2006 over April-December 2005. Buoyant growth in direct taxes revenue has helped take its share in total revenue to 47.6 per cent in 2006-07 (BE). In the reduction of revenue and fiscal deficits, buoyant revenue growth has been complemented by a discernible shift in the composition of

expenditure. While as a proportion of GDP, total expenditure of the Centre declined from 16.8 per cent in 2002-03 to 14.1 per cent in 2005-06, gross budgetary support to the Plan increased on a like-to-like basis from Rs. 111,470 crore to (including disintermediated loans to States) to Rs. 172,500 crore. The balance from current revenues, which had remained negative till 2003-04, turned positive in 2004-05 and has strengthened to Rs. 22,332 crore in 2005-06. With non-Plan expenditure as a proportion of total expenditure declining from 73.0 per cent in 2002-03 to 69.4 per cent in 2006-07 (BE), there have been distinct signs of reprioritisation of expenditure. With lower levels of borrowings of Government, the public sector draft on private savings has come down.

Consumption, saving and investment

1.32 The increasing trend in gross domestic savings as a proportion of GDP observed

since 2001-02 has continued with the savings ratio rising from 26.4 per cent in 2002-03 to 29.7 per cent in 2003-04, 31.1 per cent in 2004-05 and 32.4 per cent in 2005-06 (Table 1.3). The rise in the savings rate in 2005-06 was contributed by two of its three components: private corporate and the household sector, which as proportion of GDP, increased by 1.0 percentage point and 0.7 percentage point, respectively. The third component, namely public savings, declined by 0.4 percentage points, and made a negative contribution to the overall savings rate. However, a redeeming feature of recent years is that the savings of the public sector, which had been negative until 2002-03, was positive for the third successive year in 2005-06. The positive saving of Rs. 71,262 crore in 2005-06 (QE) is largely attributable to the higher savings of non-departmental as well as departmental enterprises.

Table 1.3 : Savings and investment (Base: 1999-2000)

(New series base 1999-2000)

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Q)
	(as per cent of GDP at current market prices)						
Gross Domestic Savings	24.8	23.4	23.5	26.4	29.7	31.1	32.4
a) Public	-0.8	-1.9	-2.0	-0.6	1.2	2.4	2.0
b) Private	25.6	25.3	25.5	27.0	28.5	28.7	30.4
i) Household	21.1	21.0	21.8	22.7	23.8	21.6	22.3
Financial	10.6	10.2	10.8	10.3	11.3	10.2	11.7
Physical	10.5	10.8	10.9	12.4	12.4	11.4	10.7
ii) Private Corporate	4.5	4.3	3.7	4.2	4.7	7.1	8.1
Gross Domestic Investment*	25.9	24.0	22.9	25.2	28.0	31.5	33.8
Public	7.4	6.9	6.9	6.1	6.3	7.1	7.4
Private	17.9	16.5	16.3	18.4	19.4	21.3	23.6
Valuables	0.8	0.7	0.6	0.6	0.9	1.3	1.2
Gross fixed capital formation	23.4	22.8	23.0	23.8	24.8	26.3	28.1
Change in stocks	1.9	0.6	0.2	0.7	0.8	2.0	2.9
Valuables	0.8	0.7	0.6	0.6	0.9	1.3	1.2
Saving - investment gap @	-1.1	-0.6	0.6	1.2	1.6	-0.4	-1.3
Public	-8.2	-8.8	-8.9	-6.6	-5.2	-4.7	-5.4
Private	7.7	8.8	9.2	8.6	9.2	7.4	6.9
Note :	Gross domestic investment denotes gross domestic capital formation (GDCF) and is adjusted for errors and omissions						
	Figures may not add up due to rounding.						
	* : Adjusted for errors and omissions;						
	@ : Difference between the rate of savings and the rate of investment.						
	GFCF : Gross fixed capital formation.						
	Q : Quick						
	Source : Central Statistical Organisation.						

1.33 A dramatic element in the savings profile of the Indian economy has been the sharp rise in the savings rate of the private corporate sector for four years in a row. For 2004-05, the earlier quick estimate of private corporate savings of 4.8 per cent of GDP has been substantially scaled up to 7.1 per cent in the provisional estimates released by the CSO. The savings rate for 2005-06, as per the quick estimates, has been placed at 8.1 per cent. The private corporate sector has financed a large part of its investment in the on-going long capex cycle from such retained earnings or savings.

1.34 As much as 0.7 percentage point of the 1.3 percentage points increase in gross domestic savings rate between 2004-05 and 2005-06 has come from the household sector. Two forces have been acting simultaneously on the portfolio behaviour of Indian households: a construction boom with residential buildings financed from housing loans from banks and the progressive maturing of the domestic financial markets. While the former has tended to increase household savings in physical form and depress financial savings, the latter has provided incentives for higher financial savings. There was a perceptible shift in the household portfolio in the three years ending in 2005-06. Physical savings as a proportion of GDP has declined steadily from a high of 12.4 per cent in 2003-04 to 10.7 per cent in 2005-06. Financial savings, on the other hand, after declining from 11.3 per cent to 10.2 per cent between 2003-04 and 2004-05, more than recovered to 11.7 per cent in 2005-06.

1.35 The increase in savings rate is what is to be expected with higher growth rate of the economy and a declining dependency ratio. With the proportion of population in the working age group of 15-64 years increasing steadily from 62.9 per cent in 2006 to 68.4 per cent in 2026, the demographic dividend in the form of high savings rate is likely to continue. As the savings rate has gone up, private final consumption expenditure (PFCE), at current prices as a proportion of GDP, has shown a declining trend particularly from 2001-02. PFCE as a proportion of GDP declined

from 63.1 per cent in 2002-03 to 62.1 per cent in 2003-04, 60.0 per cent in 2004-05, and further to 58.7 per cent in 2005-06. This decline has also been accompanied by substantial changes in the consumption basket in terms of the shares of different commodity groups. In PFCE, the share of food, beverages and tobacco came down from 43.3 per cent in 2002-03 to 39.4 per cent in 2005-06. The other major item of importance, namely, transport and communication, as a proportion of PFCE, rose from 15.8 per cent in 2002-03 to 19.1 per cent in 2004-05.

1.36 As a proportion of GDP at current prices, Government final consumption expenditure (GFCE), after declining from 11.9 per cent in 2002-03 to 11.0 per cent in 2004-05, increased to 11.5 per cent of GDP in 2005-06.

1.37 In tandem with the rise in the rate of gross domestic savings between 2003-04 and 2004-05, there was a step up in the rate of gross domestic capital formation (GDCF) or investment from 28 per cent of GDP to 31.5 per cent of GDP leading to a savings investment gap or a current account deficit of 0.4 per cent of GDP in 2004-05 (Table 1.3). GDCF rose further to 33.8 per cent of GDP in 2005-06 as per the quick estimates, widening the saving–investment gap to 1.4 per cent of GDP, with its implications for the current account of the balance of payments.

1.38 GDCF at constant prices (base: 1999-2000) as a proportion of GDP (Table 1.4) is consistently lower than the corresponding proportion at current prices (Table 1.3). This differential may reflect the greater increase in the prices of capital goods relative to the general price level, with growing technological sophistication of the production processes in the economy in general and manufacturing in particular. But, irrespective of the choice of constant or current prices as the weights, the direction of change from year to year remains unaltered.

1.39 Of the two components of GDCF, namely gross fixed capital formation (GFCF) and changes in stocks, the contribution of GFCF (consisting of items such as plant and

**Table 1.4 : Real gross domestic capital formation
(as percent of GDP at constant 1999-2000 market prices)**

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06(Q)
GDCF*	25.9	23.8	22.2	25.0	27.4	30.2	32.2
Public	7.4	6.9	6.8	6.1	6.0	6.5	6.9
Private	17.9	16.3	15.8	18.1	19.1	20.6	22.6
Corporate sector	7.4	5.6	5.2	5.8	6.7	9.5	12.2
Household sector	10.5	10.6	10.6	12.3	12.4	11.1	10.3
Valuables	0.8	0.7	0.6	0.6	0.9	1.3	1.2
GFCF	23.4	22.5	22.4	23.5	24.5	25.3	26.7
Public	6.6	6.5	6.4	6.2	6.4	6.2	6.5
Private	16.8	16.1	16.0	17.2	18.1	19.0	20.2
Change in stocks	1.9	0.6	0.1	0.7	0.6	1.8	2.8
Public	0.8	0.4	0.4	-0.2	-0.3	0.3	0.4
Private	1.1	0.2	-0.2	0.9	0.9	1.5	2.4
Valuables	0.8	0.7	0.6	0.6	0.9	1.3	1.2

Note :

GDCF : Gross domestic capital formation

GFCF : Gross domestic fixed capital formation

Figures may not add up due to rounding

*Adjusted for errors and omissions

Q : Quick

Source : Central Statistical Organisation

machinery) to growth of GDFC was lower than the corresponding contribution of changes in stocks between 2003-04 and 2004-05. While GFCF continued to lag behind changes in stocks in terms of contribution, the difference between the two contributions narrowed. This may indicate a recent pick up in fresh investment for creating additional capacity through fixed capital formation, particularly in the private sector.

1.40 From the demand-side perspective, unlike countries of East Asia during their high-growth phase or China in more recent times, GDP growth in India in the post-reform period was driven mostly by private final consumption expenditure or PFCE growth. PFCE contributed more than one half of the growth every year until 2001-02. After falling below one half in 2002-03, it had again dominated GDP growth in 2003-04. But this pattern appears to have undergone a virtuous transformation with investment rather than

private consumption being the main source of GDP growth in the latest two years of 2004-05 and 2005-06 (Figure 1.2 and Table 1.5). Data on consumption and investment in the national accounts available until 2004-05 show that the 6.8 percentage point contribution of investment to 13.1 per cent growth in GDP at current market prices in 2004-05 exceeded the corresponding contribution of private final consumption expenditure at 6.1 percentage point for the first time in recent years. In terms of contribution to growth of GDP at current market prices, from the demand side, investment continued to provide the lead during 2004-05 and 2005-06. The percentage point contribution of investment in the growth of GDP at current market prices of 13.1 per cent and 14.1 per cent in 2004-05 and 2005-06, respectively, were 7.6 per cent and 7.0 per cent, respectively. With imports growing faster than exports, the external balance continued to have a negative contribution to GDP growth in recent years.

Fig. 1.2

Point contribution to GDP growth at current market prices

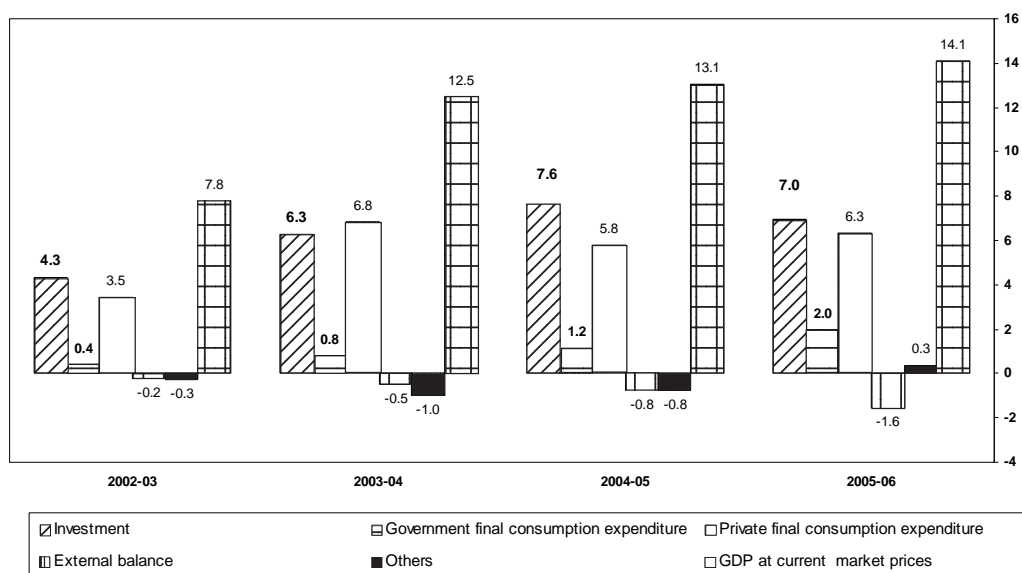


Table 1.5 : Disposition of gross domestic product (GDP)

	(percentage change over previous year)											
	at current prices						at 1999-2000 prices					
	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06(Q)
Total final consumption expenditure	6.7	8.5	5.0	10.2	9.5	11.7	1.7	5.9	1.7	6.2	5.7	7.4
Govt. final consumption expenditure	5.0	6.3	3.3	6.6	10.3	18.1	-3.6	6.3	-0.4	2.5	5.4	9.8
Private final consumption expenditure	7.1	8.9	5.4	10.9	9.4	10.6	2.8	5.8	2.1	6.9	5.7	7.0
Gross domestic capital formation	-0.3	3.3	19.0	24.9	27.3	22.1	-4.5	-1.8	16.6	19.1	19.0	16.5
Of which												
Gross fixed capital formation	4.8	9.9	11.2	17.6	19.7	21.6	0.3	4.5	8.7	13.1	11.8	15.3
Exports of goods and services	22.1	4.5	22.3	14.7	39.5	27.4	18.2	5.7	21.8	5.8	28.1	22.0
Less Imports of goods and services	12.0	4.5	22.2	16.7	41.2	32.7	3.5	3.4	10.4	7.2	22.3	27.1
GDP at market prices	7.7	8.5	7.8	12.5	13.1	14.1	4.0	5.2	3.7	8.4	8.3	9.2

Q : Quick
Source : Central Statistical Organisation

Production

1.41 The second advance estimates of crop production released by the Directorate of Economics and Statistics, Department of Agriculture and Cooperation on February 5, 2007 has placed total foodgrains production in 2006-07 at 209.2 million tonnes, which is marginally higher than the production of 208.6

million tonnes in 2005-06. Production of wheat and pulses is expected to increase by 4.5 per cent and 8.2 per cent, respectively. Production of commercial crops is expected to be significantly higher. Production of cotton expected at 21.0 million bales is not only up 13.5 per cent from 2005-06, but also an all-time record. Similarly, sugarcane production

projected at 315.5 million tonnes is up 16.8 per cent from the output of 270.0 million tonnes in 2005-06. Output of coarse grains and oilseeds are likely to be lower than their levels in 2005-06 by 6.2 per cent and 15.7 per cent, respectively. Production is expected to improve in plantation crops (coffee, tea and rubber); livestock and poultry products; horticulture products; and dairy and fisheries.

1.42 Production of crops, particularly wheat and pulses, has plateaued for some time now. Wheat production reached its peak of 76.4 million tonnes in 1999-2000, which has not been achieved again. In case of pulses, production reached 14.9 million tonnes in 1998-99 and again in 2003-04, but has remained significantly below that level in the last three years. There has not been any varietal breakthrough in pulses. Though pulses were brought within the ambit of Technology Mission on Oilseeds in 1990 and the centrally sponsored scheme of Integrated Scheme of Oilseeds, Pulses, Oilpalm and Maize (ISPPOM) is being implemented in major pulses-growing States with effect from April 2004, productivity of pulses has remained stagnant. Since pulses are genetically low-yielding; and are grown on marginal and sub-marginal lands under rain-fed conditions, focus needs to shift to micro-irrigation, micro-nutrients, improved production practices and development of improved/better yielding seeds. With overseas availability being limited, reduction in price volatility of pulses will depend on steady growth of domestic production. In case of wheat, there is need for the development of area-specific varieties, particularly to suit the water-abundant eastern region.

1.43 The year 2006-07 not only witnessed sustained growth in manufacturing, but also a distinct improvement in the growth of electricity. With a year-on-year growth of 11.4 per cent during April-December 2006 compared to a growth of 9.0 per cent in the corresponding period of 2005, manufacturing contributed over 91 per cent to the overall industrial growth measured in terms of IIP. Within manufacturing, chemicals, basic metals, machinery and equipments and

transport equipments, with a weight of 35.0 per cent in IIP, contributed 55.2 per cent to its growth. All these industries are skill-intensive and produce relatively high value-added products. Growth in cotton textiles and textile products was also in double digits. Poor performance of the sub-sectors of food products and leather, however, continues to be a cause of concern. Both these industries are not only local resource based, but also employment-intensive. In terms of use-based classification, in the current year, higher growth rates were observed in basic goods, capital goods and intermediates. These sectors are expected to sustain these higher growth rates with nearly 85 per cent of the respondents of a Survey conducted by the Confederation of Indian Industry indicating their intentions of making additional investments. Notwithstanding a recovery in the growth in the mining sector to 4.0 per cent in April-December 2006 from 0.4 per cent in April-December 2005, performance of the sector continues to be below par.

Human development, poverty and unemployment

1.44 Efforts towards social sector development continued to focus on the key areas of human development and creation of social infrastructure. NCMP mandated flagship programmes of Government witnessed large increases in outlays. These programmes included the National Rural Employment Guarantee Scheme, Total Sanitation Campaign, National Rural Health Mission, Sarva Shiksha Abhiyan (SSA), Mid-day Meal, Integrated Child Development Services (ICDS), Jawaharlal Nehru National Urban Renewal Mission and the Rajiv Gandhi National Drinking Water Mission. Apart from extending their coverage, implementation continued to focus on the difficult task of improving their access, delivery and quality of the social services.

1.45 The importance of the recent efforts at improving social infrastructure assumes significance in view of India's relative rank of 126 (among 177) in 2004, only one position higher than in 2003, in the UNDP's global

Human Development Report for 2006. National Family Health Survey III has pointed out widespread under-nutrition among women and children which needs to be addressed urgently by the National Rural Health Mission. Independent surveys on elementary education in the country have also pointed out the impossibility of achieving universal elementary education by the target date of 2007 and the low levels of achievement of the children passing out of the school system. SSA needs to garner greater efforts to focus attention on the achievement of quality education at the elementary level.

1.46 The results of the NSSO's 61st Round large-scale quinquennial survey on employment and unemployment conducted during 2004-05 throws a lot of light on the heated debate on jobless growth under reforms. The survey results show how the annual growth rate of employment, which had declined from 2.1 per cent during 1983-1994 to 1.6 per cent during 1993-2000, went up to 2.5 per cent during 1999-2005. While employment has grown faster than before, with the demographic dynamics and higher labour force participation, rate of unemployment (as measured by 'usual principal status') also went up marginally from 2.8 per cent to 3.1 per cent during 1999-2000 to 2004-05. While detailed analysis of the results of the survey is yet to be carried out, slowing down of the growth of agriculture could be one of the main reasons for the growth in the unemployment rate. Furthermore, the worrisome marginal decline in employment in the organised sector between 1994 and 2004, according to the Annual Survey of Industry data, has raised some disturbing issues about optimal regulation and incentives.

1.47 Based on the data on NSSO's 61st round large scale sample survey on household consumer expenditure for the year 2004-05, it may be concluded that the incidence of poverty came down to about 22 per cent in 2004-05 from a level of 26.1 per cent in 1999-2000 in terms of the mixed recall period (data for five non-food items, namely clothing, footwear, durable goods, education and

institutional medical expenses are collected from a 365-day recall period and the consumption data for the remaining items are collected from a 30 day recall period). Meeting the Tenth Five Year Plan's targeted reduction of five percentage points in the poverty ratio requires about a 1 percentage point further decline in the ratio in 2005-07.

1.48 India will continue to benefit from the 'demographic dividend' until 2045. India is likely to achieve a Total Fertility Rate (which is the average number of children a woman produces during her life time) of 2.1, which is the replacement level of fertility, in the decade beginning 2010. With a high proportion of the population in the reproductive age group, the total population, however, will continue to grow for another 25-35 years before stabilizing around 2045. Experience of developed countries suggest that it takes around 35 years for population to stabilize after achieving the replacement rate; it is only after 35 years that one generation replaces another.

Issues and priorities

1.49 The economy appears to have decidedly 'taken off' and moved from a phase of moderate growth to a new phase of high growth. Achieving the necessary escape velocity to move from tepid growth into a sustained high-growth trajectory requires careful consideration of two issues and three priorities. The two issues are: the sustainability of high growth with moderate inflation; and the inclusive nature of such high growth. The three priorities are: rising to the challenge of maintaining and managing high growth; bolstering the twin pillars of growth, namely fiscal prudence and high investment; and improving the effectiveness of Government intervention in critical areas such as education, health and support for the needy.

1.50 On the first issue of *sustainability of high growth without running into high inflation*, various indicators suggest that the current growth phase is sustainable.

1.51 First, higher growth together with the demographic dividend (from a growing proportion of the population in the working age

group) is likely to lead to a rise in the savings rate to finance more and more investment. There is already evidence of this virtuous and mutually reinforcing growth-savings-growth cycle in the recently released savings and investment figures for 2005-06.

1.52 Second, efficiency improvements in the economy since 1999-2000 reinforce the confidence in the high-growth phase. The ratio of net capital stock to gross value added in the economy, according to the National Accounts Statistics, went down from 2.78 to 2.60 between 1999-2000 and 2004-05. While the ratio increased to 2.66 in 2004-05, the rise was primarily due to a corresponding rise in the ratio of net capital stock to value added in agriculture. There is an encouraging and almost steady decline in the ratio of net capital stock to value added in industry.

1.53 Third, it is not only the sustained increase in savings and investment, availability of labour at reasonable wage rates, and efficiency increases, but also the opening up of new avenues in services, beyond the already well-known IT and ITES, that bolster confidence in the new high-growth phase. For example, in a remarkable transition, the tourism industry has displayed buoyant double-digit annual growth rates in each of the last three years. Tourism contributes over 10 per cent of global GDP and its potential in India, given the country's enormous natural, human and technological resources, is well-recognised. The sector, through its backward and forward linkages, can stimulate many others, particularly hotels, restaurants, and handicrafts. While a recent study by National Council of Applied Economic Research estimates tourism's contribution towards GDP (both direct and indirect) in India at only 5.90 per cent, India has already emerged as among the fastest growing tourist destinations in the world. Given its bio-diversity, variety of unique destinations and natural locales, India can transform itself into a 365 days a year destination with increased emphasis on new products like medical tourism, rural tourism, and wellness tourism, and marketing India as a destination for Meetings/Incentives/Conventions and Exhibitions (MICE).

1.54 Fourth, concerns have been expressed about whether the country is growing beyond its growth potential thereby straining its labour force and capital stock, and hence engendering inflationary instabilities. In India, with unemployment, both open and disguised, concerns about over-heating are connected more with capacity utilization and skill shortages. Rapid growth in capacity addition through investments can avert the problem of capacity constraints. Another indicator of over-heating namely, merchandise import growth, also appears to be within reasonable limits.

1.55 Fifth, infrastructure, that constrained for years the growth performance of the economy, appears to be improving. There are signs of tangible progress in areas such as power, roads, ports, and airports. Following the road shows abroad for attracting global financial capital, the setting up of a US \$ 5 billion fund to finance Indian infrastructure on February 15, 2007 by four major financial institutions (Citigroup, Balckstone, Infrastructure Development and Finance Corporation and India Infrastructure Finance Company), is an encouraging development.

1.56 The second issue is about the *nature of this high growth in terms of inclusiveness*. Putting more people in productive and sustainable jobs lies at the heart of inclusive growth. But such success, primarily, will depend on the success in achieving and maintaining high growth. There cannot be inclusive growth without growth itself. The experience of East Asia clearly reveals how high growth can eliminate poverty and transform a developing country into a developed one.

1.57 The results of the latest NSSO's 61st Round clearly show how the annual growth rate of employment has not only accelerated from 1.6 per cent during 1993-2000 to 2.5 per cent during 1999-2005, but crossed the 2.1 per cent rate recorded during 1983-1994. Unemployment has gone up not because of high growth, but because growth was not high enough. It is important to avoid the misconception that inclusive growth, by necessity, will have to be low growth.

1.58 The inclusive nature of the growth itself will be conditioned by the progress that is made in the areas of education, health and physical infrastructure. A young girl, when denied the benefit of education, often grows up to be excluded from participating in the growth process. Similarly, villagers are literally left behind in the growth process, when their village does not have the benefit of connectivity, be it roads, electricity, or communication.

1.59 Among the priorities, first is *rising to the challenge of maintaining and managing high growth*. Phase-transition invariably throws up new problems and challenges. It is necessary to make the required adjustments in mindsets, economic behaviour, and policy making. There is no scope for uneasiness or nervousness about high growth. In the latter half of the 20th century, the East Asian 'miracle' has been followed by even more rapid growth in China in more recent times. Fostering the momentum of growth in India continues to be a top priority.

1.60 Inflation in recent times has been triggered by the rapid rise in the prices of primary articles all over the world. In India, prices of essential food items have come under pressure. Why? Because of shortcomings on the supply side and poor and inefficient intermediation between the producer and the consumer. For managing inflation, supply side policies are critical, particularly in agriculture. Such policies will not only help in fighting inflation but also reinforce growth. What is important to note is that international experience shows that troublesome inflation need not be the price to be paid for favourable high growth. The fight against inflation has to be calibrated so that policies contain inflation without compromising growth. With appropriate policies, it should be possible to maintain and manage high growth without inflation.

1.61 Finding immediate answers to inflation induced by commodity-specific

supply shortfalls is difficult. A durable solution to such inflation problem has to be found in increasing yields and domestic output for products such as pulses, edible oils, rice and wheat. There is tremendous scope for increasing yield levels through technology diffusion. Simultaneously, there is a need to recognize that there could be a potential contradiction between a 'remunerative' price for the farmer and a 'fair' price for the consumer in the short run. The same contradiction arises in the case of pricing of petroleum products. The reconciliation of such a contradiction ought not to be in terms of an expensive compromise of fiscal rectitude.

1.62 The second priority is *bolstering the twin pillars of high growth, namely, fiscal prudence and high investment*. The growth resurgence observed in the economy is not an accident but the result of sound policies and several reform measures. The experience of the past few years has clearly demonstrated the benefits of fiscal prudence along the FRBMA lines. Reforms, along with the high growth, have brought about a surge in investment in the past few years. While accelerating growth and the demographic dividend will continue to boost savings and investment, simultaneously, policies have to be designed in a flexible manner to enhance investments in the economy to lay a robust foundation for growth. There is need for investment, both public and private, domestic and foreign. But it is important to resist the temptation of fiscal profligacy in the anxiety to enhance public investment. Adhering to fiscal rectitude has never been easy in any country at any time. Like going up a hill, the adjustments become harder as the destination gets closer. India's investment grade sovereign rating reflects not only the perceived strong economic prospects, strength of its balance of payments and the capital markets, but also its improving fiscal position.

1.63 The third priority is *improving the effectiveness of Government intervention in critical areas especially in the social sector*. The goal of inclusive growth can be achieved only through effective government intervention in the areas of education, health and support to the needy. Value for every tax rupee spent has to be ensured by emphasizing the outcomes and avoiding any wastage or leakages in the delivery mechanism of public goods and services. Appropriate design of programmes and placing effective monitors over the programmes are critical in this regard.

1.64 A comparison of two alternative schemes to generate self-employment opportunities among the rural poor, namely the Prime Minister's Rozgar Yojana (PMRY) and SHG-Bank linkage, illustrates the importance of programme design. Recovery under PMRY has been around 35 per cent in the three years ending in 2005. The programme of linking self-help groups (SHG) of the rural poor with the banking system (SHG-Bank linkage), to strengthen the credit delivery in rural areas was launched in 1992 through NABARD as a pilot project and mainstreamed in 1996. The focus of SHG-Bank linkage is largely on small and marginal farmers, agricultural and non-agricultural labourers, artisans and craftsmen. The uniqueness of the programme is zero subsidy. It has been reported that the recovery rates under the SHG-Bank linkage programme are close to 90 per cent. The contrast leads to obvious conclusions. A loan programme with poor recovery cannot be sustained over a long period.

1.65 To make significant progress in social infrastructure, mere expansion of the coverage or the number of programmes is not enough. With the launch of the National Rural Employment Guarantee Scheme (NREGS), which provides the country with a potential social safety net, there is need to revisit the multiplicity of poverty alleviation schemes. The effective implementation of NREGS is critical for improving inclusiveness. It should reduce poverty and improve rural infrastructure; and any failure to do so will be an indicator of its ineffective implementation.

1.66 Improvement in the quality of social services is an urgent necessity for all social sector programmes. While a large number of school-age children still remain to be enrolled in primary schools, an independent survey has revealed that many students learn by Class 8 what they should have learnt by Class 2. However, there are success stories also in different parts of the country that wait to be replicated.

1.67 Subsidies are an important fiscal policy tool for correcting market failures, particularly under-consumption of basic essentials such as food. By the end of the Eleventh Five Year Plan, with the need to feed an estimated additional 150 million people, the system will confront new challenges. Such challenges will include changing dietary patterns with increasing income and changes in lifestyle. The NCMP mandate of targeting all subsidies sharply at the poor and the truly needy like small and marginal farmers, farm labour and urban poor remains to be implemented. The inconclusive debate on subsidies needs to be resumed, and tangible progress made for cost-effective income transfers to the truly needy. Alternative mechanisms for the delivery of subsidy are available. They must be tried at least on a pilot basis, and the experience should lead to the invention of alternative and more effective mechanisms.

1.68 A sense of optimism characterizes the current economic conjuncture. Fostering the momentum of growth continues to be a top priority. Sustainability of such growth will depend on carefully calibrating policies to tame inflation without dampening growth; formulating appropriate supply-side measures, particularly in agriculture; better design and more effective delivery of social services, such as education, health and poverty-alleviation, to make growth more inclusive; and putting fresh impetus behind infrastructure. Downside risks from a rapid unravelling of global macroeconomic imbalances, volatile oil prices, and delays in the completion of the Doha Round remain, but, for the present, they appear to be limited.

Public Finance

Fiscal policy is the building block for an enabling macro-environment, which not only provides stability and predictability to the policy regime, but through its tax transfer mechanism, also ensures that national resources are allocated in terms of its defined priorities. Unproductive expenditure, tax distortions and high deficits are considered to have constrained the economy from realising its full growth potential. The medium-term fiscal policy stance of Government, therefore, has been to reduce deficits; prioritise expenditure and ensure that these results in intended outcomes; and augment resources by widening the tax base and improving the compliance while maintaining moderate rates. At the beginning of the fiscal reforms in 1991, the fiscal imbalance was identified as the root cause of the twin problems of inflation and the difficult balance of payments position. The fiscal consolidation, which followed in response, in the absence of a defined mandate, however, failed to sustain itself. For medium-term management of the fiscal deficit, and to provide the support of a strong institutional mechanism, the Fiscal Reforms and Budget Management Act (FRBMA) was enacted on August 26, 2003 and the Act and the rules were notified to come into effect from July 5, 2004. FRBMA is an important institutional expression to ensure fiscal prudence and support for macroeconomic balance. With the enactment of the FRBMA, the traditional annual budgeting moved to a more meaningful medium-term fiscal planning framework. According to the Rules, revenue deficit is to be reduced by an amount equivalent to half per cent or more of the

estimated GDP at the end of each financial year and eliminated by March 31, 2009. Fiscal deficit is to be reduced by an amount equivalent to 0.3 per cent or more of the estimated GDP at the end of each financial year and reduced to no more than three per cent of the estimated GDP by the financial year ending on March 31, 2009.

2.2 The process of fiscal consolidation under FRBMA has been continuous and essentially an incremental one. Some of the important fiscal measures that are being implemented include: reducing the peak rates of customs duties; rectifying anomalies like inverted duty structure; rationalising excise duties with a movement towards a median CENVAT rate; revisiting the tax exemptions; relying on voluntary tax compliance through taxpayer facilitation; introduction of State-level VAT for achieving a non-cascading, self-enforcing, and harmonized commodity taxation regime; increasing productivity of expenditure through an outcome budget framework, which seeks to translate outlays into better outcomes through monitorable performance indicators; and innovative financing mechanism like creation of Special Purpose Vehicle (SPV) for infrastructure projects. States have also joined the process of fiscal consolidation in line with the Twelfth Finance Commission's (TFC) recommendations and are complementing the efforts of the Central Government.

2.3 Progress in fiscal consolidation has also been satisfactory in the post-FRBM period. The fiscal deficit of the Centre as a proportion of GDP has come down from 6.2

per cent in 2001-02 to 3.8* per cent in 2006-07 (Budget Estimate (BE)). While past efforts at fiscal consolidation in the pre-FRBM era, after an initial burst of progress, had faltered because the sectoral demands on resources could not be resisted, the mandated FRBMA mechanism has proved more effective. The fiscal deficit of the Central Government, as a proportion of GDP, declined from 6.6 per cent in 1990-91 to 4.1 per cent in 1996-97, but this progress could not be sustained (Table 2.1). Further, increase in the ratio of fiscal deficit to GDP during this period was also associated with an increase in the proportion of revenue deficit, which increased from 49.4 of fiscal deficit in 1990-91 to 79.7 per cent in 2003-04. As against more than half of the incremental borrowings being applied to asset creation in 1990-91, the ratio declined to 20.3 per cent in 2003-04. Since FRBMA mandated a reduction in revenue deficit as well, gradual reduction in revenue deficit together with the reduction in fiscal deficit resulted in a decline in the proportion of revenue deficit to fiscal deficit by 22.7 percentage points in three years. The proportion of borrowed funds applied to assets creation, correspondingly, increased to 43 per cent in 2006-07 (BE).

2.4 In 2005-06, though the budget targets were met, there was deterioration in ratios of fiscal and revenue deficits to GDP compared to 2004-05. This apparent deterioration should not, however, be seen as a setback as the Budget for 2005-06 had explicitly paused the process of fiscal adjustment on account of the higher devolution of resources, arising out of the award of TFC. The pause was temporary as the process was resumed thereafter. In 2006-07, proposed reduction in revenue and fiscal deficit as proportions of GDP by 0.6 percentage points and 0.5 percentage points, respectively was higher than the levels prescribed under FRBM Rules.

2.5 The fiscal situation of the States also showed considerable improvement, which in

Table 2.1 : Trends in deficits of Central Government				
Year	Revenue deficit	Primary deficit	Fiscal deficit	Revenue deficit as per cent of fiscal deficit
(As per cent of GDP)				
1990-91	3.3	2.8	6.6	49.4
1991-92	2.5	0.7	4.7	52.7
1992-93	2.5	0.6	4.8	51.7
1993-94	3.8	2.2	6.4	59.2
1994-95	3.1	0.4	4.7	64.6
1995-96	2.5	0.0	4.2	59.2
1996-97	2.4	-0.2	4.1	58.2
1997-98	3.1	0.5	4.8	63.5
1998-99	3.8	0.7	5.1	74.8
1999-2000	3.5	0.7	5.4	64.6
2000-01	4.1	0.9	5.7	71.7
2001-02	4.4	1.5	6.2	71.1
2002-03	4.4	1.1	5.9	74.4
Enactment of FRBMA				
2003-04	3.6	0.0	4.5	79.7
2004-05	2.5	-0.1	4.0	62.6
2005-06#	2.7	0.4	4.1	64.7
2006-07(BE)	2.1	0.2	3.8 \$	57.0
# Provisional and unaudited as reported by Controller General of Accounts, Department of Expenditure, Ministry of Finance.				
\$ Refer footnote on page 2.				
Note: 1. The ratios to GDP for 2006-07 (BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.				
2. Fiscal deficit excludes transfer of states' share in small savings collections.				
Source : Budget documents.				

fact was even better relative to the performance of the Central Government. As a proportion of GDP, the fiscal deficit of the States, declined by 1.9 percentage points, post FRBMA, from 4.5 per cent in 2003-04 to 2.6 per cent in 2006-07 (BE). In so far as the reduction in revenue deficit is concerned, on an aggregate basis, this is budgeted to get eliminated in 2006-07 (BE), two years ahead of the target. A strong incentive-based restructuring scheme of fiscal transfers to serve the objectives of equity and efficiency by embedding it in a framework of fiscal consolidation proposed by TFC appears to have succeeded.

* Advance estimates (AE) of GDP for 2006-07 released by CSO on February 7, 2007 placed 2006-07 GDP at market prices at Rs 4,100,636 crore. Fiscal deficit, as projected in Budget 2006-07, as proportion of GDP based on AE works out to 3.6 per cent.

Central Government finances during Tenth Five Year Plan (2002-2007)

2.6 Robust economic growth and improved performance of the manufacturing sector helped to maintain the revenue receipts, particularly the tax revenues, buoyant throughout the Tenth Five Year Plan. Average annual growth of revenue receipts of the Central Government between 2002-03 and 2006-07 (BE) was 14.9 per cent. Though the corresponding growth in non-tax revenue was a moderate 2.6 per cent, improved growth of tax revenue (net to centre) at 19.6 per cent generated overall high growth of revenue receipt. Gross tax revenue of the Central Government recorded an average annual growth of 18.8 per cent, higher than the rate of growth of GDP (at market prices), which averaged 12.5 per cent during this period. The gross tax-GDP ratio, which had stagnated at 8-10 per cent range, increased to 10.3 per cent in 2005-06 (prov.)¹ (Table 2.2) and is expected to improve further to 10.8 per cent in 2006-07 (BE). Revenue expenditure during the Tenth Plan recorded a moderate average annual growth of 10.2 per cent leading to a reduction in revenue deficit in rupee terms and also relative to GDP. Growth of plan expenditure at 11.4 per cent was higher compared to the growth in non-plan expenditure of 8.6 per cent during the Tenth Plan, because of a significant increase of 23.3 per cent in 2006-07 (BE) over 2005-06 (prov.).

Central Government finances 2005-06

2.7 The Budget for 2005-06 had projected gross tax revenue of the Central Government to increase by 20.9 per cent. The assumed rate of growth for corporate income tax and personal income tax was 33.2 per cent and 30.1 per cent, respectively. As against this, the realised growth for gross tax revenue; corporate income tax; and personal income tax were 20.0 per cent; 20.3 per cent; and 22.7 per cent, respectively. In case of customs and excise duties, Budget

had estimated a growth of (-) 5.5 per cent and 20.7 per cent respectively. Though the realised growth in excise duties was 12.2 per cent, lower than the budget estimates, customs collections had a positive growth of 12.9 per cent. The revenue receipts from service tax at 62.4 per cent as against 23.7 per cent envisaged in the Budget were particularly buoyant. Higher service tax and customs duty collections more or less neutralised the lower collections from direct taxes and excise duties resulting in overall growth of gross tax collection to be only marginally lower than the Budget targets. Non-tax revenue, which was projected to grow at 3.5 per cent, witnessed a decline of 9.0 per cent, mainly due to a decline in interest receipts from Rs. 32,364 crore in 2004-05 to Rs. 20,564 crore in 2005-06 (prov.). Interest receipts were short of the budget estimates by Rs. 4,936 crore. Interest receipts declined rapidly during the Tenth Plan period from Rs. 37,622 crore in 2002-03 to Rs. 20,564 crore in 2005-06 because of the impact of two factors: (i) the debt-swap scheme wherein the prepayment of high-cost loans of 13 per cent and above was enabled through lower-coupon small savings transfer and additional market borrowings, and (ii) the TFC award which resulted in dis-intermediation of Central Government from loan assistance to States for financing their plan except for loans under externally aided projects, as also the consolidation and rescheduling of outstanding loans at lower rates of interest to eligible states.

2.8 In 2005-06, total expenditure at Rs. 503,908 crore was lower relative to the budget estimates of Rs. 514,344 crore. Both revenue and capital expenditure were short of the budget estimates. As against an estimated growth of 15.7 per cent in revenue expenditure, the observed growth was 14.1 per cent. Decline in the observed growth of revenue expenditure was mainly due to lower than the budgeted expenditure for interest

¹ Provisional (unaudited) figures of fiscal aggregates of Union Government accounts have been used in place of revised estimates for 2005-06, wherever possible, in this chapter.

Table 2.2 : Receipts and expenditure of the Central Government

	1990-91	2001-02	2002-03	2003-04	2004-05#	2005-06 (B.E.)	2005-06 (Prov.)@	2006-07 (B.E.)
	(Rs crore)							
1. Revenue receipts (a+b)	54,954	201,306	230,834	263,813	306,013	351,200	343,883	403,465
(a) Tax revenue (net of States' share)	42,978	133,532	158,544	186,982	224,798	273,466	269,992	327,205
(b) Non-tax revenue	11,976	67,774	72,290	76,831	81,215	77,734	73,891	76,260
2. Revenue expenditure	73,516	301,468	338,713	362,074	384,351	446,512	438,527	488,192
of which:								
(a) Interest payments	21,498	107,460	117,804	124,088	126,934	133,945	131,757	139,823
(b) Major subsidies	9,581	30,447	40,716	43,535	42,484	46,358	44,220	44,792
(c) Defence expenditure	10,874	38,059	40,709	43,203	43,862	48,625	48,297	51,542
3. Revenue deficit (2-1)	18,562	100,162	107,879	98,261	78,338	95,312	94,644	84,727
4. Capital receipts (a+b+c)	31,971	161,004	182,414	207,390	191,669	163,144	160,025	160,526
(a) Recovery of loans*	5,712	16,403	34,191	67,165	62,043	12,000	12,097	8,000
(b) Other receipts (mainly PSU disinvestment)	0	3,646	3,151	16,953	4,424	0	1,580	3,840
(c) Borrowings and other liabilities\$	26,259	140,955	145,072	123,272	125,202	151,144	146,348	148,686
5. Capital expenditure	24,756	60,842	74,535**	109,129**	113,331**	67,832	65,381	75,799
6. Total expenditure [2+5=6(a)+6(b)]	98,272	362,310	413,248	471,203	497,682	514,344	503,908	563,991
(a) Plan expenditure	28,365	101,194	111,470	122,280	132,276	143,497	140,138	172,728
(b) Non-plan expenditure	69,907	261,116	301,778	348,923	365,406	370,847	363,770	391,263
7. Fiscal deficit [6-1-4(a)-4(b)]	37,606	140,955	145,072	123,272	125,202	151,144	146,348	148,686
8. Primary deficit [7-2(a)=8(a)+8(b)]	16,108	33,495	27,268	-816	-1,732	17,199	14,591	8,863
(a) Primary deficit consumption	6,358	36,180	38,607	25,037	-298	304	1,670	-16,864
(b) Primary deficit investment	9,750	-2,685	-11,339	-25,853	-1,434	16,895	12,921	25,727
	(As per cent of GDP)							
1. Revenue receipts (a+b)	9.7	8.8	9.4	9.5	9.8	9.8	9.6	9.8
(a) Tax revenue (net of States' share)	7.6	5.9	6.4	6.8	7.2	7.7	7.6	8.0
(b) Non-tax revenue	2.1	3.0	2.9	2.8	2.6	2.2	2.1	1.9
2. Revenue expenditure	12.9	13.2	13.8	13.1	12.3	12.5	12.3	11.9
of which:								
(a) Interest payments	3.8	4.7	4.8	4.5	4.1	3.8	3.7	3.4
(b) Major subsidies	1.7	1.3	1.7	1.6	1.4	1.3	1.2	1.1
(c) Defence expenditure	1.9	1.7	1.7	1.6	1.4	1.4	1.4	1.3
3. Revenue deficit (2-1)	3.3	4.4	4.4	3.6	2.5	2.7	2.7	2.1
4. Capital receipts (a+b+c)	5.6	7.1	7.4	7.5	6.1	4.6	4.5	3.9
(a) Recovery of loans*	1.0	0.7	1.4	2.4	2.0	0.3	0.3	0.2
(b) Other receipts (mainly PSU disinvestment)	0.0	0.2	0.1	0.6	0.1	0.0	0.0	0.1
(c) Borrowings and other liabilities \$	4.6	6.2	5.9	4.5	4.0	4.2	4.1	3.6
5. Capital expenditure	4.4	2.7	3.0	3.9	3.6	1.9	1.8	1.8
6. Total expenditure [2+5=6(a)+6(b)]	17.3	15.9	16.8	17.0	15.9	14.4	14.1	13.8
(a) Plan expenditure	5.0	4.4	4.5	4.4	4.2	4.0	3.9	4.2
(b) Non-plan expenditure	12.3	11.4	12.3	12.6	11.7	10.4	10.2	9.5
7. Fiscal deficit [6-1-4(a)-4(b)]	6.6	6.2	5.9	4.5	4.0	4.2	4.1	3.6
8. Primary deficit [7-2(a)=8(a)+8(b)]	2.8	1.5	1.1	0.0	-0.1	0.5	0.4	0.2
(a) Primary deficit consumption	1.1	1.6	1.6	0.9	0.0	0.0	0.0	-0.4
(b) Primary deficit investment	1.7	-0.1	-0.5	-0.9	0.0	0.5	0.4	0.6
	(Rs. crore)							
Memorandum items								
(a) Interest receipts	8,730	35,538	37,622	38,538	32,364	25,500	20,564	19,263
(b) Dividend and profit	564	7,940	10,910	12,326	15,934	13,437	18,219	18,969
(c) Non-plan revenue expenditure	60,896	239,811	267,144	283,436	296,856	330,530	326,635	344,430

@ Provisional and unaudited as reported by Controller General of Accounts, Department of Expenditure, Ministry of Finance

Based on provisional Actuals for 2004-05.

* Includes receipts from States on account of Debt Swap Scheme for 2002-03, 2003-04, and 2004-05.

** Includes repayment to National Small Savings Fund.

\$ Does not include receipts in respect of Market Stabilization Scheme, which will remain in the cash balance of the Central Government and will not be used for expenditure.

Note : 1. The ratios to GDP for 2006-07(BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.

2. The figures may not add up to the total because of rounding approximations.

3. Primary deficit consumption =Revenue deficit-interest payments+interest receipts+dividend & profits

4. Primary deficit investment =Capital expenditure-interest receipts -Dividend & profits-recovery of loans-other receipts.

5. Figures are exclusive of the transfer of States' share in the small savings collections.

Source : Budget documents.

payments (Rs. 2,188 crore); major subsidies (Rs. 2,138 crore) and grants to States (Rs. 6,264 crore). Capital expenditure at Rs. 65,381 crore was less than the budgeted amount by Rs. 2,451 crore. In terms of plan and non-plan expenditure, while plan expenditure was higher than the budget estimates by Rs. 731 crore, non-plan expenditure was Rs. 3,182 crore less than budget provision. Reduction in revenue and total expenditure, together with increased resource mobilisation, resulted in both revenue and fiscal deficits declining from the budgeted levels. As proportion to GDP, while revenue deficit at 2.7 per cent remained as envisaged in the Budget, fiscal deficit at 4.1 per cent was lower than the budget estimates of 4.3 per cent.

Budgetary developments in 2006-07

2.9 Formulation of Budget 2006-07 was based on two important considerations. First, it had to be in line with the medium-term fiscal policy objectives consistent with FRBMA; and second, it had to further the NCMP objectives of sustaining high and inclusive growth with macroeconomic stability manifesting itself in moderate inflation and a sustainable current account. Budget 2006-07 further strengthened the process initiated earlier through augmentation of resources and allocating these in terms of NCMP priorities. The series of initiatives that were taken in the Budget included: hike in gross budgetary support (GBS) for the plan by 20.1 per cent from Rs.143,791 crore in 2005-06 (RE) to Rs.172,728 crore in 2006-07(BE); an increase of 54 per cent in the outlay for the six components of visionary development proposal Bharat Nirman - for building infrastructure, especially in rural areas - from Rs. 12,160 crore (including the North East component) to Rs. 18,696 crore; eight flagship programmes - Sarva Siksha Abhiyan, Mid-day Meal scheme, Rajiv Gandhi Drinking water mission, Total Sanitation Campaign, National Rural Health Mission, Integrated Child Development Programme, National Rural Employment Guarantee Scheme and Jawaharlal Nehru National Mission Urban Renewal Mission - from Rs.

34,927 crore in 2005-06 to Rs. 50,015 crore; and a focus on outcomes rather than outlays. The process of fiscal consolidation, which was paused during 2005-06, was resumed again in full earnest and Budget envisaged bringing revenue and fiscal deficits as proportion of GDP to 2.1 per cent and 3.8 per cent, respectively.

Revenue and Capital receipts

2.10 Expenditures of Government are generally sticky. A significant part of the expenditure, particularly interest payments; pay and allowances; transfers to the States and Union Territories are committed, and there is very little possibility of their compression in the short run. Resources that are required for allocating to the new programmes, therefore, could largely come through an augmentation of revenue receipts. The approach to fiscal consolidation was, therefore, largely revenue-led, though an attempt was made to balance it by emphasising outcomes of expenditure. Budget for 2006-07, continuing with this revenue-led strategy, estimated a growth of 15.8 per cent in revenue receipts over 2005-06 (RE), composed of 19.4 per cent growth in tax revenue accruing to the Central Government and 2.6 per cent growth in non-tax revenues. Capital receipts comprising the non-debt capital receipts and borrowings and other liabilities were expected to remain unchanged more or less at the 2005-06 (RE) levels. An expected decline in receipts from recoveries of loans was to be neutralised by an increase in other receipts and borrowings (Table 2.2).

2.11 Budget further strengthened the continuing shift in the compositional structure of taxes from regressive indirect taxes to direct taxes. The proportion of direct taxes to gross tax collections of the Central Government, which had increased from 19.1 per cent in 1990-91 to 43.8 per cent in 2005-06, was projected to grow to 47.6 per cent in 2006-07 (BE). The direct tax-GDP ratio, which was only 1.9 per cent in 1990-91, was expected to improve to 5.1 per cent in 2006-07. With indirect tax-GDP ratio

stabilising at 5.3 to 5.6 per cent in the last four years, a distinct recovery in gross tax-GDP ratio was envisaged with the ratio going up to 11.2 per cent (which with the recent upward revision in GDP now works out to 10.8 per cent) in 2006-07 (BE) (Table 2.3).

Tax measures

a) Direct taxes

2.12 In order to provide medium term-stability and predictability, Budget 2006-07 kept the tax rates moderate and stable, and no change in the rates of personal income tax or corporate income tax was proposed. No new taxes were imposed. However, for equity, there were marginal revisions in certain tax rates. The rate under Minimum Alternate Tax (MAT) was increased from 7.5

per cent of book profits to 10 per cent. Long-term capital gains arising out of securities and subject to Securities Transaction Tax were also included in calculating book profits. MAT-paying companies were allowed the credit for MAT over seven years instead of the five years allowed earlier. Adjustment of MAT credit was also allowed while calculating interest liability. Major initiatives in the field of direct taxes, particularly personal income tax, had been initiated in 2005-06 itself. These included having, through a general rebate on savings in any approved instrument up to Rs.1 lakh, neutrality of taxes between forms of savings. Budget for 2005-06 had also introduced two new taxes: a fringe benefit tax targeted at those benefits enjoyed collectively by the employees and not attributable to individual employees, which

Table 2.3 : Sources of tax revenue

	1990-91 Actuals	1995-96 Actuals	2001-02 Actuals	2002-03 Actuals	2003-04 Actuals	2004-05 Actuals	2005-06@ (Prov.)	2006-07 (BE)
(Rs. crore)								
Direct (a)	11,024	33,563	69,197	83,085	105,090	132,172	160,119	210,684
Personal Income tax	5,371	15,592	32,004	36,866	41,387	49,259	60,440	77,409
Corporation tax	5,335	16,487	36,609	46,172	63,562	82,680	99,433	133,010
Indirect(b)	45,158	76,806	116,125	131,284	147,294	170,936	199,351	230,566
Customs	20,644	35,757	40,268	44,852	48,629	57,611	65,070	77,066
Excise	24,514	40,187	72,555	82,310	90,774	99,125	111,226	119,000
Service tax	0	862	3,302	4,122	7,891	14,200	23,055	34,500
Gross tax revenue #	57,576	111,224	187,060	216,266	254,348	304,958	365,874	442,153
Tax revenue as a percentage of gross tax revenue								
Direct (a)	19.1	30.2	37.0	38.4	41.3	43.3	43.8	47.6
Personal Income tax	9.3	14.0	17.1	17.0	16.3	16.2	16.5	17.5
Corporation tax	9.3	14.8	19.6	21.3	25.0	27.1	27.2	30.1
Indirect(b)	78.4	69.1	62.1	60.7	57.9	56.1	54.5	52.1
Customs	35.9	32.1	21.5	20.7	19.1	18.9	17.8	17.4
Excise	42.6	36.1	38.8	38.1	35.7	32.5	30.4	26.9
Service tax	0.0	0.8	1.8	1.9	3.1	4.7	6.3	7.8
Tax revenue as a percentage of gross domestic product*								
Direct(a)	1.9	2.8	3.0	3.4	3.8	4.2	4.5	5.1
Personal Income tax	0.9	1.3	1.4	1.5	1.5	1.6	1.7	1.9
Corporation tax	0.9	1.4	1.6	1.9	2.3	2.6	2.8	3.2
Indirect(b)	7.9	6.5	5.1	5.3	5.3	5.5	5.6	5.6
Customs	3.6	3.0	1.8	1.8	1.8	1.8	1.8	1.9
Excise	4.3	3.4	3.2	3.3	3.3	3.2	3.1	2.9
Service tax	0.0	0.1	0.1	0.2	0.3	0.5	0.6	0.8
Total#	10.1	9.4	8.2	8.8	9.2	9.8	10.3	10.8
<p>@ Provisional and unaudited as reported by Controller General of Accounts, Department of Expenditure, Ministry of Finance.</p> <p># includes taxes referred in (a) & (b) and taxes of Union Territories and "other" taxes. .</p> <p>* Refers to gross domestic product at current market prices.</p> <p>Note: (1) Direct taxes also includes taxes pertaining to expenditure, interest, wealth, gift and estate duty. (2) The ratios to GDP for 2006-07 (BE) based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on 1999-2000 series.</p>								
Source : Budget documents								

are to be taxed in the hands of employer; and a tax on banking cash transactions (withdrawals) over a certain threshold in a single day. In Budget 2006-07, some of the concerns/anomalies in these taxes were addressed (Box 2.1).

b) Indirect taxes

2.13 As part of continuous process of bringing about a moderate, rational and simplified tax structure and to align them with ASEAN levels as per pre-announced commitments, the peak rate of customs duty on non-agricultural products was reduced from 15 per cent to 12.5 per cent in 2006-07 with a few exceptions (Box 2.2).

Box 2.1 : Budget 2006-07 - Rationalisation of Direct Taxes

- In order to tax unaccounted money being contributed to charitable and religious organizations by way of anonymous donations, such donations brought to tax at the rate of 30 per cent in the hands of certain charitable and religious organizations in certain cases. Wholly religious organizations have been kept out of the purview of this provision.
- Section 10(23G) of the Income Tax Act exempted certain income of an infrastructure capital fund/company/co-operative bank from investments made on or after June 1, 1998, in any enterprise or undertaking engaged in infrastructure projects or other eligible business. The section omitted so as to make income from existing as well as future investments in infrastructure projects taxable.
- Exemption available to any income of a notified Investor Protection Fund restricted to any income by way of contributions received from recognized stock exchanges and the members thereof.
- Exemption provided to any specified income arising to a notified non-profit body or authority established, constituted or appointed under a treaty or agreement entered into by the Central Government with two or more countries or a convention signed by the Central Government.
- To plug revenue leakages, interest not treated as actual payment not to be allowed as deduction in the computation of income of a business concern.
- The provisions of Section 54EC of the Income-tax Act amended so as to restrict the benefit of tax exemption in respect of long-term capital gains invested in the notified bonds of National Highways Authority of India (NHAI) and Rural Electrification Corporation Limited (REC).
- In Budget 2005-06, the provisions relating to savings were recast. However, fixed deposits in banks were not included as one of the avenues of savings in terms of Section 80C. Considering the demand fixed deposits in scheduled banks for a term of not less than five years were included in Section 80C of the Income Tax Act, 2006. Further, the limit of Rs. 10,000 in respect of contribution to certain pension funds in Section 80CCC was removed, subject to the overall ceiling of Rs. 1,00,000 as prescribed under section 80CCE.
- Primary Agricultural Credit Societies (PACS) and Primary Cooperative Agricultural and Rural Development Banks (PCARDB) continue to be exempt from tax under Section 80P of the Income Tax Act, while other cooperatives were brought under tax net.
- Income Tax Act amended to provide for compulsory obtaining of the permanent account number (PAN) before entering into prescribed transactions, and also to allot PAN suo moto in certain cases.
- As a procedural simplification, annexure-less return forms introduced so that returns could be furnished electronically. New return forms made compulsory for corporate taxpayers.
- The rates of STT been increased by 25 per cent in respect of all transactions chargeable to STT.
- Rationalisation of provisions of FBT done by making the following changes:
 - ◆ Valuation of the fringe benefit arising from 'tour and travel' reduced to 5 per cent from 20 per cent;
 - ◆ Valuation of the fringe benefit arising from 'hospitality' and 'use of hotel boarding and lodging facilities', in the case of airline companies and shipping industry, reduced to 5 per cent from 20 per cent;
 - ◆ Exclusion of the expenses on free samples of medicines and of medical equipment distributed to doctors;
 - ◆ Exclusion of the expenses incurred on brand ambassador and celebrity endorsement; and
 - ◆ Contribution by an employer to an approved superannuation fund in excess of Rs. 1,00,000 per year for an employee to attract the provisions of FBT.

Commodity taxes have been important instruments for management of prices, neutralising the disadvantages to domestic industry because of domestic taxes, removing anomalies in duty structure and strengthening competitiveness of domestic industry. Extension of countervailing duties (CVD) on all imported goods; reduction in duty of metals and other intermediate products; and withdrawal of exemptions to lend simplicity to the tax laws, were some of the important measures taken in Budget 2006-07. The structural shift of the taxes in favour of direct taxes was in line with the policy of removal of price distortions.

2.14 The current year has been characterised by inflationary pressures, initially upon, primary articles and fuels, but subsequently also on manufactured products. The moderation in inflation in the fuel group, with a reduction in international oil prices, from 7-9 per cent up to September 2, 2006 to 3.7 per cent in January 2007, was more than neutralised by the acceleration in inflation in primary articles and manufactured products. Along with the administrative measures, fiscal measures to combat inflation have included duty reduction in some of the items under heavy inflationary pressures. Customs duty of wheat and pulses were reduced to zero in June 2006. Duty on edible oils, particularly the palm group of oils was reduced by 10 percentage points each in August 2006 and January 2007. Duty on portland cement and metals was also reduced in January 2007.

2.15 Performance of revenues from excise duty, which had been quite disappointing with growth of such revenues declining steadily from 13.4 per cent in 2002-03 to 10.3 per cent and 9.2 per cent in the two subsequent years, revived somewhat to 12.8 per cent in 2005-06. Among others, three factors, which have had - and continue to have - a major bearing on excise duty collection, are: area-based excise duty exemptions, small-scale industries' (SSI) excise duty exemption scheme, and the low rates on selected products. Budget 2006-07, while projecting

a modest growth in excise duty revenues of 6.3 per cent, took some important steps in redressing these root causes (Boxes 2.3 and 2.4)

Tax expenditure

2.16 Tax expenditure in 2006-07 is estimated at Rs. 1,00,147 crore. Such exemptions and incentives distort resource allocation and stunt productivity. They also result in multiplicity of rates, legal complexities, classification disputes, litigation, higher cost of tax compliance and administration. Such exemptions have been justified in the past for promoting balanced regional growth; dispersal of industries; neutralization of disadvantages on account of scale of operation and location; and incentives to priority sectors including infrastructure. Furthermore, tax exemptions often create pressure groups for their perpetuation, and rent seeking can be avoided only by subjecting such exemptions to a sunset clause.

2.17 Based on a comprehensive review of the tax exemptions, 8 such exemptions in customs duties, 68 in central excise duties and 6 in service taxes were withdrawn in Budget 2006-07. Simultaneously, on the direct tax side, tax benefits available to certain cooperative banks and for income from investment in infrastructure and certain other eligible businesses were also withdrawn. Further, the Department of Revenue has posted on its website select tax exemptions/incentives currently available for eliciting the views of the stakeholders and to generate an informed debate regarding their continuance.

Service tax - a promising source of revenue

2.18 The gradual expansion of the service tax, introduced in 1994-95 to redress the asymmetric and distortionary treatment of goods and services in the tax regime, has been a buoyant source of revenue in recent years. The number of services liable for taxation was raised from 3 in 1994-95 to 6 in 1996-97, and then gradually to 99 in 2006-

Box 2.2 : Budget 2006-07 - Rationalisation of Basic Customs Duties

- The peak rate of duty on non-agricultural products reduced from 15 per cent to 12.5 per cent. Ad-valorem component of duty on textiles fabrics and garments also reduced to 12.5 per cent.
- Budget 2005-06 had introduced special additional duty of customs at 4 per cent to partly make up for the corresponding domestic levies and to start with, this duty had been imposed on ITA (Information Technology Agreement)-bound items and on specified inputs/raw materials used for manufacture of electronics/information technology items. Budget 2006-07 extended this duty to all imported goods, with a few exceptions.
- Duty reduced from 10 per cent to 7.5 per cent on primary and semi-finished forms of metals, viz., alloy steel, aluminium, copper, zinc, ashes and residues of copper and zinc, tin, base metals of Chapter 81 (such as tungsten, magnesium, cobalt, and titanium).
- Duty on ores and concentrates reduced from 5 per cent to 2 per cent.
- Duty on mineral products, except for marble, granite, asbestos and cement reduced from 15 per cent to 5 per cent.
- Duty on refractories and raw materials for refractories reduced from 10 per cent to 7.5 per cent.
- Duty reduced from 15 per cent to 10 per cent on halogens, sulphur, carbon, hydrogen, and methanol; and from 10 per cent to 5 per cent on organic chemicals. Duty on polymers of ethylene (LDPE, LLDPE, HDPE, LHDPE, LMDPE), polymers and copolymers of propylene, polymers and copolymers of styrene and polymers of vinyl chloride and ethyl vinyl acetate duty on catalyst reduced from 10 per cent to 5 per cent. Duty on styrene, ethylene dichloride and vinyl chloride monomer reduced from 5 per cent to 2 per cent. Duty on naphtha for manufacture of specified polymers reduced from 5 per cent to nil.
- Duty increased from 30 per cent to 60 per cent on honey and from 30 per cent to 80 per cent on vanaspati, bakery shortening, inter-esterified, elaidinised fats, margarine and similar boiled, oxidized, dehydrated, sulphurised, blown, polymerized or modified preparations of edible grade.
- Duty reduced from 15 per cent to 10 per cent on man made fibers, filament yarns, spun yarns, specified textile machinery and parts for manufacture of such machinery and also on textile intermediates. Duty on paraxylene has been reduced from 5 per cent to 2 per cent.
- Duty on set top boxes unified at nil basic customs duty plus 16 per cent CVD plus 4 per cent special additional duty of customs.
- Duty reduced from 10 per cent to 5 per cent on naphtha and petroleum coke. Duty on natural gas, including propane and butanes, unified at 5 per cent.
- Duty on 14 specified anti-cancer, 10 specified anti-AIDS and four other specified drugs with bulk drugs for their manufacture, and two specified diagnostic kits and one equipment, reduced to 5 per cent with nil CVD.
- Duty on vinyl acetate monomer; butyl rubber; metallurgical grade silicon; borax/boric acid; potassium chloride reduced from 15 per cent to 10 per cent.
- Duty on non-edible grade oils having free fatty acid content of 20 per cent or above, and used for manufacture of soaps, industrial fatty acids and fatty alcohols reduced from 15 per cent to 12.5 per cent, and on crude glycerine from 30 per cent to 12.5 per cent.
- Duty on cullet (broken glass); parts of pens; phenol/acetone, for manufacture of bisphenol-A; packaging machinery reduced from 15 per cent to 5 per cent. Duty on bisphenol-A and epichlorohydrin for manufacture of epoxy resins reduced from 10 per cent to 5 per cent.
- Duty reduced from 5 per cent to nil on parts of hearing aids.

Withdrawal Of Exemptions

- Duty exemptions/concessions withdrawn on following items: saddle tree; parts of outboard motors imported by specified agencies; spare parts of maintenance of textile machinery; video cassettes and video tapes; food products (excluding alcoholic preparations) imported by hotels/tourism industry in terms of licenses issued under 1997-2002 Exim Policy; plant, machinery, equipment imported for setting up of Currency Note/ Bank Note Press.
- Exemption from CVD withdrawn on specified goods for setting up of a unit with an investment of Rs.5 crore or more for manufacture of capital goods.

Box 2.3 : Budget 2006-07 – Rationalisation of Central Excise Duties

A. Relief Measures:

- I. Duty on aerated waters; petrol cars with length not exceeding four meters and engine capacity not exceeding 1200 cc; diesel cars with length not exceeding four meters and engine capacity not exceeding 1500 cc reduced from 24 per cent to 16 per cent.
- II. Duty on heat-resistant latex rubber thread; LPG gas stoves of value exceeding Rs. 2,000 per unit; compact fluorescent lamps; footwear of retail sale price between Rs. 250 and Rs. 750 per pair reduced from 16 per cent to 8 per cent.
- III. Paddy de-husking rice rubber rolls; nuclear-grade sodium produced by Heavy Water Board for supply to Kalapakkam Nuclear Power Plant; drawing inks; quebracho and chestnut extract; gold concentrate for refining exempted from duty.
- IV. Duty on specified printing, writing and packing paper reduced from 16 per cent to 12 per cent.

B. Imposition and increase:

- I. Duty of 8 per cent with CENVAT credit imposed on goggles; articles of wood, registers; accounts books, receipt books, letter pads, memorandum pads, dairies, binders, folders, file covers, etc (excluding note books and exercise books); paper labels; paper pulp moulded trays; articles of mica; goods containing at least 25 per cent by weight of fly ash/phosphor-gypsum; roofing tiles; raw, tanned or dressed fur skins; portable receivers for calling, alerting and paging; henna powder which is not mixed with any other ingredient; 100 per cent wood-free plain or pre-laminated particle or fibreboard made from sugarcane bagasse or other agro-waste; parts of walking-sticks, seat-sticks, whips, riding-crops and the like; parts of drawing and mathematical instruments; and frames and mountings for spectacles, goggles or the like having value below Rs. 500 per piece.
- II. Duty of 16 per cent imposed on umbrellas, sun umbrellas and their parts; food preparation intended for free distribution subject to end-use certification (food products, in general, are exempted unconditionally from excise duty); soap manufactured under a scheme for sale of Janata soap; strips and tapes of polypropylene used in the factory of its production in the manufacture of polypropylene ropes; parts and components of motor vehicles transferred to a sister unit for manufacture of goods falling under chapter 87; goods (other than electrical stampings and laminations, bearings and winding wires) supplied for manufacture of PD pumps of handing water; specified goods meant for display in any fair or exhibition in India; parts of table ware, kitchenware and other household articles made of iron & steel, copper, aluminium; railway track machines; sulphur; mixture of graphite and clay for manufacture of pencils and pencil leads; aluminium ferrules for manufacture of pencils; tobacco used for smoking through 'hookah' or 'chilam' and 'gudaku'. Sulphur for fertilizers has been exempted from excise duty.
- III. Duty raised from 8 per cent to 16 per cent on mosaic tiles; glassware; lay flat tubing ; and cigarette filter rods. The rate of compounded levy on stainless steel patti/pattas has been increased from Rs. 15000/- per machine to Rs. 30000/- per machine.

C. Miscellaneous:

- I. Exemption withdrawn for the unbranded goods like wadding, gauges, protein concentrates, textured protein substances, churan for pan, custard powder, and mineral water.
- II. Exemption of goods manufactured without the aid of power removed from items such as essential oils, perfumes and toilet waters, blocks, ceramic tiles, metal containers of iron, steel and aluminium.
- III. Exemption available on raw materials for manufacture of rotor blades of wind operated energy generators, extended to all glass fiber items and resin binders.
- IV. Generic exemption withdrawn from products of coir industry, cashew industry, tanning industry, oil mill and solvent extraction industry and rice industry.

07. Simultaneously, the rate of tax was raised from 8 per cent to 10 per cent in 2004-05, and further to 12.0 per cent in 2006-07. Revenue from service tax, as the combined outcome of expanding tax net, creeping rate, and buoyant service sector growth, increased

rapidly from a paltry Rs. 407 crore in 1994-95 to Rs. 14,200 crore in 2004-05. In 2005-06 (Prov.), service tax revenue was Rs. 23,055 crore (Table 2.4). Budget 2006-07 took some significant steps in rationalising the service tax regime (Box 2.5).

Box 2.4 : Budget 2006-07 – Changes in Commodity-Specific Excise Duties

Food processing:

- Duty reduced from 16 per cent to nil on condensed milk, ice cream, pectic substances, pectinates and pectates, pectin esterase, yeast and pasta.
- Duty reduced from 16 per cent to 8 per cent on ready to eat packaged food, texturised vegetable protein (soya bari), and instant food mixes, namely, pongal mix, vadai mix, pakora mix, payasam mix, gulab jamun mix, rava dosa mix, idli mix, dosai mix, murruku mix and kesari mix.
- Processed meat, fish and poultry products exempted from duty.

Petroleum:

- The general rate of cess applicable on domestic petroleum crude oil under the Oil Industry (Development) Act, 1974 increased from Rs. 1,800 per tonne to Rs. 2,500 per tonne.

Tobacco products:

- Duty rates unified at 66 per cent for all types of Pan Masala.
- Specific rates of excise duty on cigarettes revised.

Textiles:

- Duty on all man-made (like polyester, nylon, viscose and acrylic) fibers and filament yarns reduced from 16 per cent to 8 per cent

Small-scale industries (SSI):

- SSI exemption available to power-driven pumps restricted to only pumps conforming to prescribed BIS Standards.

Information technology:

- Excise duty of 12 per cent and 8 per cent imposed on computers and packaged software on electronic media, respectively.
- Set top boxes not covered under the Information Technology Agreement subjected to 16 per cent duty.
- Storage devices, namely, DVD-drives, flash drives and combo drives, exempted from duty.
- Excise duty on MP3 and MPEG4 players reduced from 16 per cent to 8 per cent

Export-oriented units

- Duty on clearances of goods to Domestic Tariff Area (DTA) from Export Oriented Units (EOU), Software Technology Parks, Electronic Hardware Technology Parks, etc. changed from 50 per cent of aggregate customs duties to 25 per cent of the basic custom duty plus excise duty payable on like goods.

Retail sale price (RSP) based assessment:

- RSP-based assessment extended to parts, components and assemblies for automobiles, plant growth regulators, and toothbrushes.
- Abatement from RSP for levy of excise duty reduced from 45 per cent to 42.5 per cent on aerated waters and 40 per cent to 37 per cent on compact fluorescent lamp, footwear of RSP between Rs. 250 to Rs. 750 per pair, ready to eat packaged food, and instant food mixes.
- Existing rate of abatement of 50 per cent to apply to all varieties of pan masala, which are subject to RSP based assessment.

Expenditure trends

2.19 The NCMP has pledged to raise the level of public spending in education to at least 6 per cent of GDP, and on health to at least 2-3 per cent of GDP in a phased manner. Further, it attaches highest priority to the development and expansion of physical infrastructure like roads, highways, ports, power, railways, water supply, sewage treatment and sanitation through higher public investment, even as the role of the private sector is expanded. This has to be accomplished in an overarching framework

of fiscal consolidation. With about 86 per cent of the revenue receipts in 2005-06 appropriated by committed expenditure like interest payments, subsidies, pay, pensions and defence, expenditure reprioritization needs to be calibrated through higher allocation of incremental revenue towards the NCMP objectives.

2.20 FRBMA stipulates that public expenditure must be reoriented for the creation of productive assets. Given the existing classification of expenditure, plan expenditure and capital expenditure are the

Table 2.4 : Service Tax—A Growing Revenue Source

Year	No of services	Number of assessees	Tax rate in per cent	Revenue (In rupees crore)	Growth in per cent
1994-95	3	3,943	5.00	407	...
1995-96	3	4,866	5.00	862	111.8
1996-97	6	13,982	5.00	1,059	22.9
1997-98	15	45,991	5.00	1,586	49.8
1998-99	26	107,479	5.00	1,957	23.4
1999-00	26	115,495	5.00	2,128	8.7
2000-01	26	122,326	5.00	2,613	22.8
2001-02	41	187,577	5.00	3,302	26.4
2002-03	52	232,048	5.00	4,122	24.8
2003-04(with effect from May 14, 2003)*	60	403,856	8.00	7,891	91.4
2004-05 (with effect from September 10, 2004)*	75	740,267	10.00	14,200	80.0
2005-06 (Prov.)	84	805,591	10.00	23,055	62.4
2006-07 (BE) (with effect from April 18, 2006)*	99	...	12.00	34,500	49.6

* The date mentioned in parentheses after 2003-04, 2004-05 and 2006-07 is the date from which the number of services under service tax increased from the previous year.
Source : Department of Revenue, Ministry of Finance.

closest approximation to expenditure for creation of productive assets. As a proportion of GDP, plan expenditure, after declining from 5.0 per cent in 1990-91 to 3.8 per cent in 1998-99, again started rising to reach 4.5 per cent in 2002-03 before declining to 3.9 per cent in 2005-06. Plan expenditure was budgeted to increase by 20.4 per cent over 2005-06 (BE) to 4.2 per cent of GDP in 2006-07. Non-plan expenditure, after recording a year-on-year growth of 15.6 per cent in each of the two years of 2002-03 and 2003-04, witnessed a moderation in growth in 2004-05 and 2005-06. While non-plan expenditure in fact had declined in 2005-06 (prov.), in 2006-07, an increase of 5.5 per cent in such expenditure was proposed over 2005-06(BE). As a proportion of GDP, non-plan expenditure followed a pattern similar to that of plan expenditure. It fell from 12.3 per cent of GDP in 1990-91 to reach 10.0 per cent in 1996-97. The proportion rose again to reach 11.4 per cent in 2001-02 and further to 12.6 per cent in 2003-04. The proportion, which is expected to have declined to 10.2 per cent

of GDP in 2005-06 (prov.), was budgeted at 9.5 per cent of GDP in 2006-07.

2.21 The Constitution requires revenue and capital expenditures to be shown separately in the budget. Article 112 (2) states: "The estimates of expenditure embodied in the annual financial statement shall show separately - (a) the sums required to meet expenditure described by this Constitution as expenditure charged upon the Consolidated Fund of India; and (b) the sums required to meet other expenditure proposed to be made from the Consolidated fund of India, and shall distinguish expenditure on revenue account from other expenditure." The same provision is repeated under Article 202 under the State Section. The distinction between revenue and capital expenditures not only is a Constitutional requirement but also an essential ingredient for policy formulation and efficient resource allocation. FRBMA 2003 highlights the significance of keeping the revenue expenditure under control and envisages elimination of the revenue deficit by the end of 2008-09.

Box 2.5 : Budget 2006-07 – Service Tax

New Services added

- Service provided by a Registrar to an issue;
- Service provided by Share Transfer Agent;
- Automated Teller Machine operations, maintenance or management;
- Service provided by recovery agent;
- Sale of space or time for advertisement, other than in print media;
- Sponsorship services provided to anybody, corporate or firm, other than sponsorship of sports events;
- Transport of passengers, other than economy class passengers, embarking on international journey by air;
- Transport of goods in containers by rail by any person, other than Government railway;
- Business support services;
- Auctioneers' service, other than auction of property under directions or orders of a court of law or auction by the Central Government;
- Public relation service;
- Ship management service;
- Internet telephony service
- Transport of persons by cruise ship;
- Credit card, debit card, charge card or other payment card related services.

Exemption withdrawn

- In relation to general insurance where -- premium is received from re-insurance, both domestic and overseas, and business for which premium is booked outside India;
- For services, other than accounting, auditing and statutory certification services, provided by practicing chartered accountant, company secretary or cost accountant in her professional capacity;
- For taxable services provided by a Call Centre or a Medical Transcription Centre;
- For services provided in relation to Enterprise Resource Planning (ERP) software system provided by a management consultant in connection with the management of any organization;
- For catering services provided on railway train by an outdoor caterer;
- For catering services provided within the premises of an academic institution or medical establishment by an outdoor caterer.

Exemption granted

- For financial leasing services including equipment leasing and hire-purchase, on that portion of the taxable value comprising of 90 per cent of an amount representing as interest, i.e., the difference between the instalment paid towards repayment of the lease amount and the principal;
- For testing and analysis services provided in relation to water quality testing by Government-owned State and district level laboratories;
- For all taxable services provided by Reserve Bank of India.

2.22 Broadly, revenue expenditure is expenditure incurred for purposes other than creation of assets of the Central Government. In many countries, it is known as current expenditure. Revenue deficit is the difference between revenue expenditure and revenue receipts. Broadly, the revenue deficit indicates the excess of current expenditures over revenues, or dis-savings by the Government, while the fiscal deficit captures the excess of overall expenditure over revenue. Revenue deficit implies an increase in the liabilities of the Central

Government without corresponding increase in its assets. The existence of revenue deficit indicates a departure from the observance of the golden rule of public finance whereby all borrowings by the Government is for financing public investment. When the focus is only on reducing the fiscal deficit, the brunt of fiscal correction is often borne by compression in capital expenditure. The change in revenue deficit on the path of fiscal adjustment indicates the quality of fiscal correction, which is as important as the level of fiscal correction itself.

2.23 As a proportion to GDP, capital expenditure declined from 4.4 per cent in 1990-91 to 1.8 per cent in 2005-06 (prov.). It is budgeted at the same level of 1.8 per cent in 2006-07. As a proportion to GDP, revenue expenditure after increasing to 13.8 per cent in 2002-03, declined to 12.3 per cent in 2005-06 (prov.). It is budgeted to decline further to 11.9 per cent in 2006-07. In terms of economic classification, revenue expenditure is composed of pay and allowances; interest payments; grants to the States and Union Territories; subsidies and others.

Interest payments

2.24 Persistent and high deficits seriously impair the counter cyclical ability of fiscal policy, lead to unsustainable debt build-up and adversely affect the composition of expenditure through larger and larger interest outgo. As a proportion of GDP, interest payments after remaining at highs of 4.6 per cent to 4.8 per cent in the four-year period from 1999-2000 to 2002-03, started declining to reach 3.7 per cent in 2005-06(prov.). It is budgeted to decline further to 3.4 per cent of GDP in 2006-07. As a proportion of revenue receipts, the corresponding decline was from a high of 53.4 per cent in 2001-02 to 38.3 per cent in 2005-06, and further to 34.7 per cent in 2006-07(BE). These declining trends, as proportion of both GDP and revenue receipts, was partly on account of the soft interest rate regime in vogue and progressive reduction in the average cost of borrowing (Table 2.5). The average cost of internal borrowing, including those under Market Stabilisation Scheme (MSS), is budgeted at 8.0 per cent in 2006-07. Bringing down the average cost of borrowing and reducing, in general, the interest outgo are critical to fiscal consolidation, growth and macroeconomic stability.

Subsidies

2.25 Subsidies are an important fiscal policy tool for correcting market failures, particularly under-consumption of basic essentials such as food. With direct provision

Table 2.5 : Interest on outstanding internal liabilities of Central Government

	Outstanding internal liabilities	Interest on internal liabilities*	Average cost of borrowings (per cent per annum)
	(Rs. crore)		
1990-91	283,033	19,664	8.2
1991-92	317,714	23,892	8.4
1992-93	359,654	27,546	8.7
1993-94	430,623	33,017	9.2
1994-95	487,682	40,034	9.3
1995-96	554,984	45,631	9.4
1996-97	621,438	55,255	10.0
1997-98	722,962	61,527	9.9
1998-99	834,551	73,519	10.2
1999-00	933,000	85,741	10.3
2000-01	1,047,976	94,900	10.2
2001-02	1,196,245	103,175	9.8
2002-03	1,323,704	113,238	9.5
2003-04	1,457,583	116,869	8.8
2004-05	1,603,785	124,126	8.5
2005-06(RE)	1,708,885	126,859	7.9
2006-07(BE)	1,891,346	136,191	8.0

Note : 1. Average cost of borrowing is the percentage of interest payment in year 't' to outstanding liabilities in year 't-1'.

2. Outstanding internal liabilities exclude NSSF loans to States, with no interest liability on the part of the Centre.

* Excludes Rs.313.61crore and Rs. 4079.62 crore towards premium on account of domestic debt buyback scheme and prepayment of external debt for 2002-03 and 2003-04 respectively.

Source : Budget documents.

by the Centre, major subsidies, mainly on food, fertiliser and petroleum grew from Rs. 40,716 crore in 2002-03 to Rs. 44,220 crore in 2005-06 (prov.), and were budgeted at Rs. 44,792 crore in 2006-07. As a proportion of GDP, subsidies fell from 1.7 per cent in 2002-03 to 1.2 per cent in 2005-06 (prov.) and 1.1 per cent of GDP in 2006-07 (BE). Including the supplementary demand for grants, the expenditure on subsidies is expected to increase by Rs. 5,200 crore in 2006-07. These subsidies, however, do not include the compensation through the issue of special securities to Oil Marketing companies towards the estimated under recoveries on account of domestic LPG and PDS Kerosene and special securities issued to Food Corporation of India for settlement of outstanding dues on account of release of foodgrains under Sampoorna Gramin Rozgar Yojana and National Food for Work Programme.

Supplementary demands for grants

2.26 There were two supplementary demands for grants in 2006-07 for which Parliament gave its approval. The first batch of demands included 42 grants involving a net cash outgo aggregating to Rs. 8,668 crore. Together with the demands for additional expenditure of Rs. 39,201 crore of a technical nature without cash outgo, the gross additional expenditure authorised was Rs. 47,869 crore. The major items involving cash outgo included subsidy on imported urea and on imported decontrolled fertiliser (Rs. 1,500 crore); transfers to State and Union Territory Governments for (i) providing Normal Central Assistance (Rs. 1,000 crore), (ii) providing special Central Assistance (Rs. 500 crore) and (iii) releasing grants-in-aid to States under Additional Central Assistance for Externally Aided Projects (Rs. 3,000 crore). Some major items of expenditure of a technical nature were for transfer of assets of erstwhile Nuclear Power Board to Nuclear Power Corporation of India as investment (Rs. 967 crore) and loan (Rs. 346 crore); writing off of accumulated losses of Indian Bank (Rs. 3,830 crore) and netting of accumulated losses of United Bank of India (Rs. 278 crore) against their equity capital as on March 31, 2006; for compensation through issue of special securities to Oil Marketing Companies towards estimated under recoveries in 2006-07 on account of domestic LPG & PDS Kerosene (Rs. 14,150 crore) and for issue of special securities to Food Corporation of India (FCI) for settlement of outstanding dues on account of release of food grains under Sampoorna Gramin Rozgar Yojana (SGRY) and National Food for Work Programme (NFFWP) till April 30, 2005 (Rs. 16,200 crore).

2.27 The second batch of supplementary demands for grants for 53 items approved by Parliament authorised gross additional expenditure of Rs. 21,824 crore. Net cash outgo involved was Rs. 11,445 crore and the rest were matched by savings or enhanced receipts. The major items of expenditure with cash outgo included

subsidies on (i) imported urea, (ii) indigenous decontrolled fertilisers and (iii) imported decontrolled fertilisers (Rs. 2,000 crore); subsidy on nitrogenous fertilisers (Rs. 1,700 crore); interest relief to debt-stressed farmers of Andhra Pradesh, Karnataka, Kerala and Maharashtra (Rs. 1,359 crore); for providing interest subvention on short-term credit to farmers (Rs. 1,000 crore); transfer to State and Union Territory Governments to recoup of the National Calamity Contingency Fund (Rs. 500 crore); and to provide (i) Normal Central Assistance (Rs. 2,100 crore), (ii) Special Central Assistance (Rs. 436 crore) and (iii) National Social Assistance Programme (Rs. 900 crore). The major items of expenditure of a technical nature, that is, without net cash outgo, were transfer to State and Union Territory Governments for write off of loans under Debt Waiver Scheme under the TFC award (Rs. 3,857 crore); and for compensation through issue of special securities to the Oil Marketing Companies towards estimated under recoveries in 2006-07 on amount of domestic LPG & PDS Kerosene (Rs. 5,000 crore).

Central Plan outlay

2.28 The Budget for 2005-06 had envisaged a Central Plan outlay of Rs. 211,253 crore, the RE for which was placed at Rs. 205,338 crore because of a shortfall under Internal and Extra Budgetary Resources (IEBR) of Central Public Sector Enterprises (CPSEs). The Budget for 2006-07 hiked the Central Plan outlay to Rs. 254,041 crore, up 20.3 per cent from 2005-06 (BE). This outlay is composed of Budget support of Rs. 131,284 crore and IEBR of CPSEs of Rs. 122,757 crore. The IEBR and Budget support in 2006-07 (BE) are 21.7 per cent and 18.9 per cent higher than 2005-06 (BE). The relative shares of important heads of development are: energy (27.4 per cent); social services (24.9 per cent); transport (19.1 per cent); communication (7.8 per cent); rural development (7.2 per cent); industry and minerals (5.7 per cent); agriculture and allied activities (2.9 per cent); and irrigation and flood control (0.2 per cent).

Central assistance for States and UTs Plans in 2006-07(BE) at Rs. 41,443 crore is up 13.4 per cent from 2005-06 (RE).

Government debt

2.29 As a proportion of GDP, outstanding liabilities (including external debt at historical exchange rate) of the Central Government declined from 55.3 per cent in 1990-91 to reach 49.4 per cent in 1996-97, reflecting the lower fiscal deficit in the intervening years. This trend got reversed subsequently, and such liabilities as a proportion of GDP rose to 63.8 per cent in 2004-05. During the Tenth Five Year Plan, average annual rate of growth of outstanding liabilities at 12.6 per cent was marginally higher than the GDP growth of 12.5 per cent. Compared to 2001-02, the ratio of outstanding liabilities to GDP in 2006-07 (BE), therefore, was higher by 0.4 percentage points. However, with the nominal rate of growth of GDP accelerating to 14.1 per cent and 15.0 per cent in 2005-06 and 2006-07, respectively, a relatively lower growth in outstanding liabilities moderated the ratio in the two recent years at 61.5 per cent in 2005-06 (RE) and 60.3 per cent in 2006-07 (BE) (Table 2.6).

2.30 The Central Government debt is composed primarily of external and internal debt, which includes market loans (as also treasury bills) and relief/savings bonds and others. The share of debt in total internal liabilities rose from 54.4 per cent in 1990-91 to 66.0 per cent in 2004-05 before marginally declining to 63.5 per cent in 2006-07 (BE). Market borrowings, as a proportion of Government debt, after increasing from 22.4 per cent in 1990-91 to 40.8 per cent in 2003-04, has hovered around 38-39 per cent. The RBI, in consultation with Ministry of Finance, fixes biannual indicative issuance calendar for Government borrowings. The Budget for 2006-07 placed the net market borrowings (dated securities and 364-day Treasury Bills excluding borrowings under MSS) at Rs. 113,778 crore. The banks have been subscribing to Government securities much in excess of their statutory liquidity ratio (SLR) requirement. With the pick up in non-

food credit (details in Chapter 3), such investments are placed at 31 per cent of net demand and liabilities of scheduled commercial banks on as on end March 2006.

2.31 Under the golden rule principle, borrowings are resorted to only for the purpose of assets creation. However, with the existence of a revenue deficit all through these years, a significant proportion of liabilities were contracted to meet the current expenditure commitments. Government accounting systems do not provide a comprehensive accounting of its assets, particularly the land, building etc., owned by it. But Government accounts do capture the assets created in the form of capital expenditure and outstanding loans receivable by the Central Government. These two together form the assets of Government created out of its annual fiscal operations. Though the assets, for example, machinery and buildings, are of different vintages, their sum total nonetheless provides an assessment of Government's assets. Total assets as defined above were 55.8 per cent of Government's outstanding liabilities, indicating that cumulatively so far nearly 45 per cent of the outstanding liabilities went to meet the current expenditure of Government.

Economic and functional classification

2.32 The economic and functional classification of the Central Government Budget 2006-07, which reclassifies budgetary transactions in significant economic categories on the lines of national income accounts, places total expenditure at Rs. 563,145 crore, indicating an increase of 10.8 per cent over 2005-06 (RE). Average annual growth of total expenditure during the Tenth Five Year Plan was 9.3 per cent. The total expenditure of Rs. 563,145 crore, excluding an allocable Rs. 4,785 crore, was composed of consumption expenditure of Rs.127,078 (22.6 per cent), current transfers of Rs.337,030 crore (59.8 per cent) and gross capital formation of Rs.94,252 crore (16.7 per cent) (Table 2.7). In terms of functional classification, general services accounted for 24.8 per cent of total expenditure, while social

Table 2.6 : Outstanding liabilities of the Central Government

(end-March)

	1990-91	2001-02	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
	(Rs. crore)						
1. Internal liabilities ##	283,033	1,294,862	1,499,589	1,690,554	1,933,544	2,126,995	2,396,846
a) Internal debt	154,004	913,061	1,020,688	1,141,706	1,275,971	1,355,943	1,522,030
i) Market borrowings	70,520	516,517	619,105	707,965	758,995	867,368	984,645
ii) Others	83,484	396,544	401,583	433,741	516,976	488,575	537,385
b) Other Internal liabilities	129,029	381,801	478,901	548,848	657,573	771,052	874,816
2. External debt(outstanding)*	31,525	71,546	59,612	46,124	60,878	68,392	76,716
3. Total outstanding liabilities (1+2)	314,558	1,366,408	1,559,201	1,736,678	1,994,422	2,195,387	2,473,562
4. Amount due from Pakistan on account of share of pre-partition debt	300	300	300	300	300	300	300
5. Net liabilities (3-4)	314,258	1,366,108	1,558,901	1,736,378	1,994,122	2,195,087	2,473,262
	(As per cent of GDP)						
1. Internal liabilities	49.8	56.8	61.0	61.1	61.8	59.6	5.85
a) Internal debt	27.1	40.0	41.5	41.3	40.8	38.0	37.1
i) Market borrowings	12.4	22.6	25.2	25.6	24.3	24.3	24.0
ii) Others	14.7	17.4	16.3	15.7	16.5	13.7	13.1
b) Other Internal liabilities	22.7	16.7	19.5	19.8	21.0	21.6	21.3
2. External debt(outstanding)*	5.5	3.1	2.4	1.7	1.9	1.9	1.9
3. Total outstanding liabilities	55.3	59.9	63.4	62.8	63.8	61.5	60.3
Memorandum items							
(a) External debt@ (Rs.crore)	66,314	199,869	196,043	184,177	191,182	194,078	n.a.
(as per cent of GDP)	11.7	8.8	8.0	6.7	6.1	5.4	n.a.
(b) Total outstanding liabilities (adjusted) (Rs.crore)	349,347	1,494,731	1,695,632	1,874,731	2,124,726	2,321,073	n.a.
(as per cent of GDP)	61.4	65.5	69.0	67.8	68.0	65.1	n.a.
(c) Internal liabilities(Non-RBI)# (Rs.crore)	208,978	1,142,698	1,337,752	1,529,571	1,771,117	1,964,070	2,234,031
(as per cent of GDP)	36.7	50.1	54.4	55.3	56.6	55.1	54.5
(d) Outstanding liabilities (Non-RBI)# (Rs.crore)	275,292	1,342,567	1,533,795	1,713,748	1,962,299	2,158,148	n.a.
(as per cent of GDP)	48.4	58.9	62.4	62.0	62.8	60.5	n.a.
(e) Contingent liabilities of Central Government (Rs.crore)	n.a.	95,859	90,617	87,780	107,957	n.a.	n.a.
(as per cent of GDP)	n.a.	4.2	3.7	3.2	3.5	n.a.	n.a.
(f) Total assets (Rs crore)	236,740	760,592	840,768	903,558	1,083,422	1,189,340	1,381,289
(as per cent of GDP)	41.6	33.3	34.2	32.7	34.7	33.3	33.7
n.a. : not available							
* External debt figures represent borrowings by Central Government from external sources and are based upon historical rates of exchange.							
@ Converted at year end exchange rates. For 1990-91,the rates prevailing at the end of March,1991; For 2002-2003,the rates prevailing at the end of March, 2003 and so on.							
# This includes marketable dated securities held by the RBI.							
## Internal debt includes net borrowing of Rs 64,211crore for 2004-05, Rs 27,230 crore for 2005-06(RE) and Rs 73,230 crore for 2006-07(BE) under Market Stabilisation Scheme.							
Note: The ratios to GDP for 2006-07 (BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.							
Source: 1. Budget documents. 2. Controller of Aid Accounts and Audit. 3. Reserve Bank of India.							

and economic services accounted for 13.2 per cent and 24.4 per cent, respectively, with the balance 37.6 per cent (being in the nature of statutory grants-in-aid to States, non-plan grants, food and other consumer subsidies, etc.) unallocable.

2.33 The share of wages and salaries within consumption expenditure at 38.6 per cent in 2006-07 (BE) was marginally less

than 40.1 per cent in 2005-06(RE). The reclassification shows that share of current grants in total expenditure went up from 19.1 per cent in 2005-06 (RE) to 22.7 per cent in 2006-07 (BE), reflecting the impact of implementation of the TFC award. Dissavings of the Central Government, which grew steadily from Rs. 10,502 crore in 1990-91 to Rs. 81,734 crore in 2002-03, was reduced to Rs. 71,968 crore in 2003-04 and

**Table 2.7 : Total expenditure and capital formation by the Central Government and its financing
(As per economic and functional classification of the Central Government budget)**

	1990-91	2001-02	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
(Rs. crore)							
I. Total expenditure	97,947	360,616	398,879	426,132	463,831	508,287	563,145
II. Gross capital formation out of budgetary resources of Central Government	28,032	76,888	76,782	82,561	92,855	85,551	94,252
(i) Gross capital formation by the Central Government	8,602	12,634	21,697	23,997	27,396	36,628	38,615
(ii) Financial assistance for capital formation in the rest of the economy	19,430	64,254	55,085	58,564	65,459	48,923	55,637
III. Gross saving of the Central Government	-10,502	-76,306	-81,734	-71,968	-60,378	-63,491	-55,277
IV. Gap(II-III)	38,534	153,194	158,516	154,529	153,233	149,042	149,529
Financed by							
a. Draft on other sectors of domestic economy	34,768	145,841	168,582	165,858	135,918	138,508	138,588
(i) Domestic capital receipts	23,421	147,337	166,699	169,800	208,259	123,021	138,588
(ii) Budgetary deficit/draw down of cash balance	11,347	-1,496	1883	-3,942	-72,341	15,487	0
b. Draft on foreign savings	3,766	7,353	-10,066	-11,329	17,315	10,534	10,941
(As per cent of GDP)							
I. Total expenditure	17.2	15.8	16.2	15.4	14.8	14.2	13.7
II. Gross capital formation out of budgetary resources of Central Government	4.9	3.4	3.1	3.0	3.0	2.4	2.3
(i) Gross capital formation by the Central Government	1.5	0.6	0.9	0.9	0.9	1.0	0.9
(ii) Financial assistance for capital formation in the rest of the economy	3.4	2.8	2.2	2.1	2.1	1.4	1.4
III. Gross saving of the Central Government	-1.8	-3.3	-3.3	-2.6	-1.9	-1.8	-1.3
IV. Gap(II-III)	6.8	6.7	6.4	5.6	4.9	4.2	3.6
Financed by							
a. Draft on other sectors of domestic economy	6.1	6.4	6.9	6.0	4.3	3.9	3.4
(i) Domestic capital receipts	4.1	6.5	6.8	6.1	6.7	3.4	3.4
(ii) Budgetary deficit/draw down of cash balance	2.0	-0.1	0.1	-0.1	-2.3	0.4	0.0
b. Draft on foreign savings	0.7	0.3	-0.4	-0.4	0.6	0.3	0.3
(increase over previous year)							
II. Gross capital formation out of budgetary resources of Central Government	2.8	14.8	-0.1	7.5	12.5	-7.9	10.2
Memorandum items							
(Rs crore)							
1 Consumption expenditure	22,359	77,324	85,389	87,170	105,692	121,680	127,078
2 Current transfers	45,134	201,188	228,501	248,436	259,529	295,367	337,030
(As per cent of GDP)							
1 Consumption expenditure	3.9	3.4	3.5	3.2	3.4	3.4	3.1
2 Current transfers	7.9	8.8	9.3	9.0	8.3	8.3	8.2
<p>Notes: (i) Gross capital formation in this table includes loans given for capital formation on a gross basis. Consequently domestic capital receipts include loan repayments to the Central Government.</p> <p>(ii) Consumption expenditure is the expenditure on wages & salaries and commodities & services for current use.</p> <p>(iii) Interest payments, subsidies, pension etc. are treated as current transfers.</p> <p>(iv) Gross capital formation & total expenditure are exclusive of loans to States'/UTs' against States'/UTs' share in the small savings collection.</p> <p>(v) The figures of total expenditure of the Central Government as per economic and functional classification do not tally with figures given in the Budget documents. In the economic and functional classification, interest transferred to DCUs, loans written off etc, are excluded from the current account. In the capital account, expenditure financed out of Railways, Posts & Telecommunications' own funds etc, are included.</p> <p>(vi) The ratios to GDP for 2006-07 (BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.</p>							
Source : Ministry of Finance, An Economic and Functional classification of the Central Government Budget-various issues.							

further to Rs. 63,491 crore in 2005-06 (RE). It was budgeted to decline further to Rs. 55,277 crore in 2006-07. As a proportion to GDP, total expenditure was budgeted at 13.7 per cent, a secular decline from 17.2 per cent in 1990-91 and 16.2 per cent in 2002-

03. All the three components, viz., consumption expenditure, current transfers, and gross capital formation, shared the decline. As a proportion of GDP, dissavings were placed at 1.8 per cent in 2005-06 (RE) and 1.3 per cent in 2006-07 (BE).

2.34 In economic and functional classification, non-monetary transactions are not recorded. The Government Finance Statistics (GFS) Manual 2001 of IMF updates the internationally recognized standards for the compilation of statistics required for fiscal analysis and harmonizes these with other internationally recognized macroeconomic statistical systems to the extent consistent with supporting fiscal analysis. GFS 2001 suggests that flows should be recorded on accrual basis, which means that the flows should be recorded at the time when economic value is created, transformed, exchanged, transferred or extinguished. TFC had recommended adoption of accrual accounting to allow better cost-price calculations, record capital use properly, distinguish between current and capital expenditure, and focus policy attention on financial position. A balance sheet can be more informative than just cash flows or debt.

There has been some progress towards migration to accrual-based accounting (Box 2.6).

Expenditure management

2.35 Public expenditure management is an integral part of the fiscal reforms and Government has been taking a series of initiatives in this regard, like avoiding rush of expenditure through releases in a time sliced manner and simplification of procedures. Recent initiatives include: special drive to bring down outstanding 'unspent balances' and 'utilisation certificates' from States and other implementing agencies; instructions that prohibit relaxation of conditionalities attached to transfer of funds under Plan schemes; revision of General Financial Rules; speeding up the process of transmission of funds and simultaneously facilitating faster feedback on unspent balances through utilization certificates; and

Box 2.6 : Accrual Accounting in Government

Traditionally, India has followed a cash-based system for accounting and financial reporting. A cash-based system is simple, and recognizes a transaction when cash is paid or received. This system of accounting, however, is not the most informative way of presenting government accounts. It is limited in scope because it lacks an adequate framework for accounting for assets and liabilities, depicting consumption of resources and full picture of government's financial position at any point of time. Importantly, capital expenditure under the cash system is brought to account only in the year in which a purchase or disposal of an asset is made. An asset once acquired is expensed in the same year and only progressive figure of expenditure remains in the book of accounts. The present system also fails to reflect accrued liabilities. Because of these weaknesses, the existing accounting system does not capture the long-term impact of the decisions taken and promotes a bias in favour of short-term policies.

Initiatives by the Office of the Comptroller & Auditor General of India:

In July 2004, Office of the Comptroller and Auditor General of India had commissioned a study on Conceptual Framework of Government Accounting System in India under Shri D. N. Ghosh, former Chairman of the State Bank of India and presently with ICRA Advisory Services. The study emphasized that the prevailing cash-based accounting system is deficient on the dimensions of transparency and user-friendliness, and suggested the need for migration to accrual accounting.

Recommendation of the Twelfth Finance Commission (TFC) & Role of Government Accounting Standards Advisory Board (GASAB):

TFC in its Report submitted in November 2004 recommended introduction of accrual accounting in Government. Government has accepted the recommendation in principle and has asked Government Accounting Standards Advisory Board (GASAB) in the office of the Comptroller and Auditor General of India to draw up a roadmap for transition from cash to accrual accounting system and an operational framework for its implementation. Besides the Union, so far, 18 State Governments have also in principle agreed to introduce the accrual accounting system. In line with these expectations, GASAB has deliberated the matter and has also discussed the study by Shri D N Ghosh. It has suggested a roadmap for transition to accrual accounting system. The roadmap spells out the constituent activities and tasks that have to be completed for transition from a cash-based system to accrual-based accounting. Currently, it is finalizing its Report on Operational Framework, which would provide a broad design of accrual accounting system in Government, and be a reference point for financial reporting by Governments to ensure uniformity and comparability in reporting across different Ministries and also the Union and the State Governments.

e-banking scheme for transfer of funds to district level implementation agencies by three Ministries which are big in the social sector, namely, the Ministries of Human Resource Development, Rural Development and Health & Family Welfare. Simultaneously, an institutional mechanism of "outcome" budget which was placed in 2005-06 has been strengthened. Performance audit by the Comptroller & Auditor General of India of selected programmes continued to throw up important lessons for expenditure management (Box 2.7).

Collection rates

2.36 The peak rate of customs duty was brought down progressively from 150 per cent in 1991-92 to 15 per cent in the Budget for 2005-06. As the spread between peak rate and average effective rate of duty was high to begin with, the initial reductions in the former did not have significant adverse impact on revenues. However, with the spread coming down, revenue growth from customs decelerated. Since there were numerous rates and exemptions, the closest approximation to the average effective rates for customs duty for different sectors is given by the relevant collection rates. The collection rate for all commodity groups combined fell from 47 per cent in 1990-91 to 10 per cent

in 2005-06 (Prov). There are large variations in the collection rates for various groups. The collection rates for the food products group fluctuated over the years, and after a decline to 19 per cent in 2003-04, climbed up to 32 per cent in 2005-06 (prov.). Apart from the changes in the composition of commodities, increase in collection rate for food products in 2005-06 compared to 2004-05 was because of special additional duties which were imposed to neutralise the disadvantages on account of domestic taxes. In chemicals group, collection rates have declined from an average of 92 per cent in 1990-91 to 20 per cent in 2005-06 (prov.). In metals also, collection rate have come down in the last few years (Table 2.8).

Fiscal outcome 2006-07 so far

2.37 As per the data on Central Government finances published by the Controller General of Accounts, for the period April-December, 2006, gross tax revenue was placed at Rs.306,527 crore and total expenditure at Rs.383,721 crore. As against an assumed growth of 19.5 per cent in gross tax receipt in 2006-07 (BE) over 2005-06 (BE), the realised growth during April-December has been 32.8 per cent. Up to December 2006, 69.3 per cent of the budgeted amount was collected. The overall growth in gross tax revenue so far vis-a-vis

Box 2.7 : Performance Audit

The Comptroller & Auditor General of India (C&AG), during audit of expenditure and revenues of the Government of India, goes beyond the accounting of such transactions and conformity with the laid down procedure, to the underlying wisdom with which the expenditures have been incurred. C&AG recently completed such performance audits on Accelerated Irrigation Benefit Programme (AIBP) and Sarva Siksha Abhiyan (SSA).

Performance review of AIBP during 2003-04 revealed that despite allocating Rs 13,823 crore (including the State's share) in 24 States during 1996-2003, could not achieve the intended objective of accelerating irrigation benefits by ensuring completion of projects over four agricultural seasons. As on March 2003, only 23 of the 172 projects covered under the programme were completed. Irrigation potential created was a mere 28.28 per cent of the target, of which only 11.06 per cent could be utilized. Poor performance was due to inadequate planning and lack of coordination; frequent modification of guidelines; inappropriate selection of projects; ineffective execution and substantial time and cost over-runs; insufficient monitoring, and lack of any meaningful mid-term evaluation for possible mid-course correction.

The performance audit of SSA (2006) revealed that even after four years of the implementation of the scheme and utilization of almost 86 per cent of the funds available with implementing agencies, the revised target to enroll all children in schools, education guarantee scheme, alternate schools, and back to school camps by 2005 was not achieved. As many as 1.36 crore children in the age group of 6-14 years (40 per cent of the total 3.40 crore children out of school) remained out of school. There were delays in the release of funds and substantial gap between planned and actual achievement.

Table 2.8 : Collection rates* for selected import groups*(in per cent)*

Sl. No.	Commodity Groups	1990-91	1995-96	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06 (Prov.)
1	Food Products	47	23	31	40	30	19	22	32
2	POL	34	30	16	10	11	11	10	6
3	Chemicals	92	44	38	29	28	24	22	20
4	Man-made fibres	83	36	49	31	31	46	39	34
5	Paper & newsprint	24	8	8	6	7	7	7	9
6	Natural fibres	20	12	18	8	10	13	11	12
7	Metals	95	52	48	36	36	32	26	25
8	Capital goods	60	33	36	28	23	19	16	12
9	Others	20	13	12	9	9	8	6	5
10	Non POL	51	28	23	19	17	14	12	11
11	Total	47	29	21	16	15	14	11	10

* Collection rate is defined as the ratio of realised import revenue (including additional customs duty/countervailing duty (CVD), and special additional duty) to the value of imports of a commodity.

S.No.1 includes cereals, pulses, tea, milk and cream, fruits, vegetables, animal fats and sugar.

S.No. 3 includes chemical elements, compounds, pharmaceuticals, dyeing and colouring materials, plastic and rubber.

S.No. 5 includes pulp and waste paper, newsprint, paperboards and manufactures and printed books.

S.No. 6 includes raw wool and silk.

S.No. 7 includes iron and steel and non-ferrous metals.

S.No. 8 includes non-electronic machinery and project imports, electrical machinery.

Source : Department of Revenue, Ministry of Finance

the growth assumed in BE for 2006-07 and 18.8 per cent recorded in the corresponding period of the previous year suggests that the current financial year may end up with collection higher than initially estimated. Non-tax revenue at Rs. 48,744 crore for the first nine months of this financial year recorded a modest growth of 1.5 per cent over the corresponding period of the previous year, and was 63.9 per cent of 2006-07 (BE) (Table 2.9).

2.38 Month-to-month movement of major fiscal parameters (Table 2.10) reveal that both revenue and expenditure have generally been well time-spaced. Revenue receipts generally become buoyant in September and December with quarterly advance tax payments falling due during these months, while both revenue and total expenditure are more evenly spread. Higher realisation from taxes in September and December get associated with a reduction in revenue and fiscal deficit in these months. Both these months in 2006 actually ended with a revenue surplus.

Financing of the Eleventh Plan

2.39 The National Development Council at its 52nd meeting on December 9, 2006 adopted the Approach Paper to the Eleventh Plan setting a "faster, more broad-based and inclusive" growth at the average annual rate of 9 per cent for the five years starting from 2007-08. This, as the Approach Paper points out, 'requires a substantial increase in the allocation of public resources for plan programmes in critical areas', including education, health, agriculture and infrastructure; an improvement in government savings from around -1.5 per cent of gross domestic product (GDP) in 2005-06 to at least +1.0 per cent to support -- without a balance of payments problem -- an increase in the total investment rate (as a proportion of GDP) from 30.1 per cent in 2005-06 to an average of 35.1 per cent on average during the Eleventh Plan; and 'call for additional (public sector) plan expenditure above current levels, of about 1 percentage point of GDP in 2007-08, rising to about 2.5 percentage points of GDP in 2011-12'. The

Table 2.9 : Central Government finances

	Budget estimates 2006-07	April-December		Col. 4 as per cent of BE 2006-07	Percentage change over 2005-06 (Col. 4/3)
		2005-06	2006-07		
1	2	3	4	5	6
		(Rs. crore)			
1. Revenue receipts(net to Centre)	403,465	216,746	280,915	69.6	29.6
Gross tax revenue	442,153	230,839	306,527	69.3	32.8
Tax (net to Centre)	327,205	168,715	232,171	71.0	37.6
Non tax	76,260	48,031	48,744	63.9	1.5
2. Capital receipts	160,526	115,753	102,806	64.0	-11.2
of which:					
Recovery of loans	8,000	7,408	7,952	99.4	7.3
Other receipts	3,840	11	0	0.0	-100.0
Borrowings and other liabilities	148,686	108,334	94,854	63.8	-12.4
3. Total receipts (1+2)	563,991	332,499	383,721	68.0	15.4
4. Non-plan expenditure (a)+(b)	391,263	237,904	272,203	69.6	14.4
(a) Revenue account	344,430	221,552	253,791	73.7	14.6
of which:	0	0	0	0.0	0.0
Interest payments	139,823	80,972	92,634	66.3	14.4
Major subsidies	44,532	33,230	40,225	90.3	21.1
Pensions	19,542	14,621	15,050	77.0	2.9
(b) Capital account	46,833	16,352	18,412	39.3	12.6
5. Plan expenditure (i)+(ii)	172,728	94,595	111,518	64.6	17.9
(i) Revenue account	143,762	74,875	93,901	65.3	25.4
(ii) Capital account	28,966	19,720	17,617	60.8	-10.7
6. Total expenditure (4)+(5)=(a)+(b)	563,991	332,499	383,721	68.0	15.4
(a) Revenue expenditure	488,192	296,427	347,692	71.2	17.3
(b) Capital expenditure	75,799	36,072	36,029	47.5	-0.1
7. Revenue deficit	84,727	79,681	66,777	78.8	-16.2
8. Fiscal deficit	148,686	108,334	94,854	63.8	-12.4
9. Primary deficit	8,863	27,362	2,220	25.0	91.9

Source : Controller General of Accounts.

Approach Paper points out that "The final picture on the size of the 11th Plan will only emerge after further consultations with the States and Central Ministries, and taking account of the reports of the various working groups on Plan resources".

2.40 In view of the FRBMA passed by the Centre and most of the States, the Approach Paper notes that bringing down the combined fiscal deficit of the Centre and the States to no more than 6 per cent of GDP from 2008-09 onwards will require a reduction in the fiscal deficit by around 1 percentage point of GDP in the first two years of the Plan. It notes "Preliminary exercises suggest that the fiscal deficit reduction in the 11th Plan period to attain the FRBM target will be achieved consistent with an increase in GBS for the

Plan by 2.3 percentage points of GDP for the Plan period as a whole. This would require an adjustment through lower non-plan expenditure or additional taxation by around 0.2 percentage points of GDP. However meeting the fiscal deficit targets will limit the scope for increasing Plan expenditure in the first two years unless the reduction in non-Plan expenditure can be significantly front loaded."

2.41 FRBMA, 2003 and the associated rules notified on July 5, 2004, by enjoining the Central Government to reduce the fiscal deficit by no less than 0.3 per cent of GDP every year and to bring it down to no more than 3 per cent of GDP by 2008-09, constrains the scope of enhancing GBS by resorting to more liabilities. However, it is

Table 2.10 : Trends in Cumulative Central Government Finances (April- November) for 2006-07*(Rs crore)*

	Budget Estimates	April	April- May	April- June	April- July	April- August	April- Sept.	April- Oct.	April- Nov.	April- Dec.
1	2	3	4	5	6	7	8	9	10	11
1. Revenue Receipts	403,465	9,434	19,330	52,382	77,336	106,551	161,406	196,474	221,190	280,915
Per cent to BE		2.3	4.8	13.0	19.2	26.4	40.0	48.7	54.8	69.6
2. Capital receipts	160,526	32,377	72,588	79,088	88,745	93,885	90,538	92,795	115,349	102,806
3. Total Receipts	563,991	41,811	91,918	131,470	166,081	200,436	251,944	289,269	336,539	383,721
Per cent to BE		7.4	16.3	23.3	29.4	35.5	44.7	51.3	59.7	68.0
4. Non Plan Expenditure	391,263	35,714	62,882	92,946	120,110	146,516	183,065	214,017	245,393	272,203
Per cent to BE		9.1	16.1	23.8	30.7	37.4	46.8	54.7	62.7	69.6
5. Plan Expenditure	172,728	6,097	29,036	38,524	45,971	53,920	68,879	75,252	91,146	111,518
Per cent to BE		3.5	16.8	22.3	26.6	31.2	39.9	43.6	52.8	64.6
6. Total Expenditure	563,991	41,811	91,918	131,470	166,081	200,436	251,944	289,269	336,539	383,721
Per cent to BE		7.4	16.3	23.3	29.4	35.5	44.7	51.3	59.7	68.0
7. Revenue Expenditure	488,192	40,298	87,950	123,057	155,546	185,949	230,683	263,773	305,673	347,692
Per cent to BE		8.3	18.0	25.2	31.9	38.1	47.3	54.0	62.6	71.2
8. Revenue Deficit	84,727	30,864	68,620	70,675	78,210	79,398	69,277	67,299	84,483	66,777
Per cent to BE		36.4	81.0	83.4	92.3	93.7	81.8	79.4	99.7	78.8
9. Fiscal Deficit	148,686	31,956	72,088	77,740	86,404	90,678	86,461	87,100	108,201	94,854
Per cent to BE		21.5	48.5	52.3	58.1	61.0	58.2	58.6	72.8	63.8

Source : Contoller General of Accounts, Department of Expenditure, Ministry of Finance

necessary to take a more long-term view of the implications of FRBMA than a myopic one of how it constrains liabilities and hence GBS in the short run. Liabilities by increasing the debt, and hence the interest burden, of the Centre, increases non-plan revenue expenditure, and hence reduces GBS in the future. This is particularly true of liabilities above a certain sustainable level. It may be argued that high GBS through high liabilities beyond a prudent limit in the past, mortgaged the present GBS.

Performance of the departmental enterprises of the Central Government

Railways

2.42 Indian Railways in 2005-06 achieved a record incremental freight loading of 65.3 million tonnes (MT) as against the incremental loading of 44.7 MT achieved in 2004-05. Consequently, freight revenues reflect an additional realization of Rs. 5,509 crore, registering a growth of 17.9 per cent

over 2004-05. The overall traffic revenues for 2005-06 at Rs. 54,405 crore registered a growth of 15.7 per cent over 2004-05. These revenues have come about with no increase in passenger fares and only a minor adjustment in freight classification. The gross traffic receipts of the Railways for 2005-06 was Rs. 54,491 crore, showing a growth of 15.0 per cent over Rs. 47,370 crore in 2004-05.

2.43 The total working expenses including appropriations to Depreciation Reserve and Pension Funds at Rs. 45,574 crore reflect an increase of 6.6 per cent over the previous year. Taking into account the net variation of the miscellaneous receipts and miscellaneous expenditure, Railways' net revenue in 2005-06 works out to Rs. 8,006 crore, which is Rs. 2,732 crore more than that of 2004-05. Out of the net revenue earned, Railways fully discharged the dividend liability of Rs. 3,005 crore for 2005-06. Besides, Railways also paid Rs. 663 crore towards outstanding deferred dividend liability of Rs. 1,990 crore. The overall effect

of the all round improvement is visible in the Operating Ratio of Railways which has improved to 83.7 per cent as against 91.0 per cent in 2004-05. The net revenue as a proportion of capital-at-charge and investment from capital fund has also improved from 8.7 per cent in 2004-05 to 12.2 per cent in 2005-06.

2.44 The plan expenditure in 2005-06 amounted to Rs 18,320 crore. This included Rs 3213 crore financed by market borrowings of Indian Railway Finance Corporation (IRFC) and Rs 518 crore as the borrowings of Rail Vikas Nigam Limited (RVNL). Apart from some important projects, which are in progress under a cost-sharing basis with the State Governments and strengthening of golden quadrilateral under National Rail Vikas Yojana, Railways have drawn up a comprehensive modernization plan to modernize, upgrade and augment rail services to the nation.

Posts

2.45 In 2005-06, the gross receipts of the Department of Posts were Rs. 5,023 crore. With gross and net working expenses of Rs. 6,429 crore and Rs. 6,233 crore, there was a deficit of Rs. 1,210 crore. Gross receipts are budgeted to go up to Rs 4,999 crore. With gross and net working expenses estimated at Rs. 6,534 crore and Rs. 6,378 crore, respectively, the deficit is projected to be Rs. 1,379 crore in 2006-07 (BE).

2.46 In a bid to reduce the deficit, the Department of Posts has, over the last few years, made efforts at increased revenue generation. However the activities performed by Department of Posts have a predominantly "social welfare" nature, where profit generation is not the prime motive. With a view to cutting down the deficit, various measures such as retail post, direct post, and business post, have been initiated. The Department of Posts has also emerged as a single point of interface between the Government of India and the general masses through initiatives such as acceptance of passport forms and filing of income tax returns, and even socially relevant initiatives

such as pulse polio campaign and NREGP payments.

Broadcasting

2.47 Prasar Bharati, a public service broadcaster, has taken a number of steps to increase its commercial revenue. Some of the important steps include production and sale of recorded media (CD/VCDs) by All India Radio (AIR) and Doordarshan, emphasis on hiring out technical facilities, in-house marketing and production of programmes for other departments, and establishment of a resource center for AIR. Total expenditure of Prasar Bharati in 2005-06 was Rs. 1,996 crore. Total receipts at Rs. 1,220 crore in 2005-06 were 47 per cent higher than Rs. 831 crore in 2004-05. A resource gap continues to exist and Rs 1,389.76 crore has been allocated in 2006-07 (BE) to cover the resource gap of Prasar Bharati.

Pension reforms in India

2.48 In the years to come, poverty amongst the elderly may be the dominant form of poverty in the country, given the breakdown of the joint family, increasing life expectancy, increasing migration flows of labour within the country, and the limited effectiveness of poverty-alleviation programmes – such as employment guarantee schemes – in targeting the elderly. A modern pension system will lay sound foundations of financial portfolios through which individuals will be able to obtain income support in old age. Pension funds are natural vehicles for long-term investment, including in equity. A modern, well-regulated pension sector, populated with professional pension fund managers, will also be a highly beneficial force in India's financial system, and improve resource flows in the form of long-term debt and equity to sound projects, particularly in infrastructure. The pension sector can also be a major customer of insurance companies for the purpose of converting a stock of pension wealth at retirement date into a flow of monthly pensions in the form of 'annuities'.

Objectives of pension reform in India

2.49 Global pension reform experience over the past 10 years has shown that “no one size fits all”. However, the two main aims of pension systems everywhere remain the same, namely; (i) reducing poverty and eliminating the risk of rapidly falling living standards post-retirement, and (ii) the broader goal of protecting the elderly from economic and social crisis.

2.50 India needs a pension system which is: self-sustainable; universally accessible, especially to the uncovered unorganised sector workers on a voluntary basis; low-cost, efficient and available throughout the country; equitable and pro-labour and does not inhibit labour mobility; and well-regulated in order to protect the interests of subscribers. On August 23, 2003, Government decided to introduce a new restructured defined contribution pension system for new entrants to Central Government service, except to Armed Forces, in the first stage, replacing the existing defined benefit system. Subsequently, the New Pension System (NPS) was operationalised from January 1, 2004 through a notification dated December 22, 2003. The main features of the NPS are:

- It is based on defined contribution. New entrants to Central Government service contribute 10 per cent of their salary and dearness allowance (DA), which is matched by the Central Government (Tier-I).
- Once the NPS architecture is fully in place, employees will have the option of a voluntary (Tier-II) withdrawable account in the absence of the facility of General Provident Fund (GPF). Government will make no contribution to this account.
- Employees will normally exit the system at or after the age of 60 years. At the time of exit, it is mandatory for them to invest 40 per cent of the pension wealth

to purchase an annuity to provide for lifetime pension of the employee and his dependent parents and spouse. Remaining 60 per cent of pension wealth will be paid to the employee in lump sum at the time of exit. Individuals would have the flexibility to leave the pension system prior to age 60. However, in this case, mandatory annuitisation would be 80 per cent of the pension wealth.

- The new system will have a central record keeping and accounting infrastructure and several fund managers to offer investment options with varying proportions of investment in fixed-income instruments and equity.
- The new system will also have a market mechanism (without any contingent liability) through which certain investment protection guarantees would be offered for the different schemes.

2.51 An interim regulator, the Pension Fund Regulatory and Development Authority (PFRDA) was constituted through a Government resolution dated October 10, 2003 as a precursor to a statutory regulator and became operational from January 1, 2004.

2.52 Till the architecture is fully in place, the Central Pension Accounting Office (CPAO) under the Controller General of Accounts is acting as the interim Central Record-keeping Agency (CRA). Contributions are currently being credited into the public account earning a return equal to the GPF rate. As per data available, about 137,952 employees are covered under the NPS. Approximately Rs. 200 crore, including Government contribution, has been credited into the pension account. The Pension Fund Regulatory and Development Authority Bill, 2005 was introduced in Parliament on March 21, 2005. The Bill proposes that the main mandate of PFRDA is to regulate the NPS, as amended from time to time by the Central Government. Pension schemes already covered under the Employees' Provident

Fund & Miscellaneous Provisions Act, 1952 and other enactments would be specifically excluded from the regulatory jurisdiction of PFRDA. However, individuals covered under such mandatory programmes under other Acts can voluntarily choose to additionally participate in the NPS.

2.53 PFRDA will establish the institutional architecture of the NPS including the CRA and pension funds. It will also frame investment guidelines for pension funds. PFRDA is empowered to impose stringent penalties for any violation of the law. The regulator will also create a special fund, which will be used for educating and protecting the interests of subscribers to schemes of pension funds. The Bill was referred to the Standing Committee on Finance. The Committee presented their report in Parliament on July 26, 2005 recommending:

- (i) allowing withdrawal from Tier I account also;
- (ii) specifying in clear terms in the Bill that one of the pension funds would be from the public sector;
- (iii) giving preference in selection to such pension fund managers that guarantee returns and spelling out the pre-requisites relating to capital structure and experience criteria for selection of pension funds and other intermediaries in the Bill;
- (iv) making available to subscribers an option of 100 per cent investment in Government securities and indicating this in the Bill;
- (v) implementing any decision relating to permitting FDI in the pension sector only by way of suitable amendments in the legislation; and not allowing such decisions and decisions relating to deployment of pension funds outside the country to be at variance with related provisions applicable to the insurance sector;
- (vi) setting up a Pension Advisory Committee similar to the Insurance Advisory Committee of IRDA;
- (vii) rephrasing clause 4 of the Bill to clearly depict the composition of the Authority; selecting members of the Authority only from amongst professionals having experience in economics or finance or law; and having a Central Government nominee as one of the part-time members;
- (viii) including the differentiation between Tier-I and Tier II accounts as a part of the basic or essential features of the New Pension System in clause 20 of the Bill; and
- (ix) bringing forward a comprehensive legislation in order to cater to the social security of the unorganized sector, inclusive of pension coverage of the workforce, simultaneously with the setting up of PFRDA as a statutory body.

A proposal to amend the PFRDA Bill, 2005, based on the recommendations of the Committee is under Government's consideration.

2.54 Ministry of Finance convened a conference of Chief Ministers and State Finance Ministers on January 22, 2007. Majority of the State Government participants generally welcomed the move towards a fiscally sustainable pension system for civil servants and the establishment of an old age income security system for all Indians. Following the lead of the Central Government, 17 States have notified a defined contribution pension system for their new employees. In the conference, States were assured that the PFRDA Bill will be amended to provide an option for investing 100 per cent of pension funds in government securities, entrusting the job of fund management initially only to public sector fund managers, etc. The investment pattern for non-government provident funds, while

conservative and restrictive, would be adopted as an interim model, pending the passage of the PFRDA Bill.

Finances of State Governments

2.55 The finances of State Governments traditionally follow a pattern similar to that of the Centre, albeit with a lag. State's own tax receipts, as a proportion of GDP, increased from 5.3 per cent in 1990-91 to 6.3 per cent in 2005-06 (RE) and are projected to marginally decline to 6.2 per cent of GDP in 2006-07 (BE). When measured as proportion of GDP, with a marginal decline in States' own tax and non-tax receipts between 2005-06 (RE) and 2006-07 (BE), total revenue

receipts of the States' is expected to decline from 12.7 per cent of GDP in 2005-06 (RE) to 12.5 per cent of GDP in 2006-07(BE). But, again as a proportion of GDP, with an expected decline in revenue expenditure by 0.6 percentage points from 13.2 per cent in 2005-06 (RE) to 12.6 per cent in 2006-07 (BE), all the States together are expected to achieve the FRBMA mandated target of eliminating revenue deficit two years ahead of the scheduled 2008-09. Similarly, with a one percentage point reduction in total disbursements as a proportion to GDP, the consolidated fiscal deficit of all the States is expected to be lower than the FRMBA mandated target of 3 per cent two years ahead of schedule (Table 2.11).

Table 2.11 : Receipts and disbursements of State Governments

	1990-91	2001-02	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
(Rs. crore)							
I. Total receipts(A+B)	91,160	373,886	425,073	527,097	582,910	616,397	665,260
A. Revenue receipts (1+2)	66,467	255,675	280,339	316,535	372,075	454,152	513,166
1. Tax receipts	44,586	180,312	198,798	226,999	267,683	317,502	360,898
<i>of which</i>							
State's own tax revenue	30,344	128,097	142,143	159,921	189,132	224,780	252,573
2. Non-tax receipts	21,881	75,363	81,541	89,536	104,392	136,650	152,268
<i>of which:</i>							
Interest receipts	2,403	9,205	9,502	8,617	9,470	9,666	9,648
B. Capital receipts	24,693	118,211	144,734	210,562	210,835	162,245	152,094
<i>of which:</i>							
Recovery of loans & advances	1,501	7,766	3,905	16,414	8,568	7,456	4,813
II. Total disbursements(a+b+c)	91,088	377,311	420,461	526,023	572,354	610,751	659,530
a) Revenue	71,776	314,863	335,450	377,681	408,497	471,437	514,952
b) Capital	13,556	50,145	70,664	122,429	144,014	120,495	129,848
c) Loans and advances	5,756	12,303	14,347	25,913	19,843	18,819	14,730
III. Revenue deficit	5,309	59,188	55,111	61,145	36,423	17,284	1,786
IV. Gross fiscal deficit	18,797	95,994	102,123	123,070	109,256	113,978	105,895
(As per cent of GDP)							
I. Total receipts(A+B)	16.0	16.4	17.3	19.1	18.6	17.3	16.2
A. Revenue receipts (1+2)	11.7	11.2	11.4	11.4	11.9	12.7	12.5
1. Tax receipts	7.8	7.9	8.1	8.2	8.6	8.9	8.8
<i>of which</i>							
State's own tax revenue	5.3	5.6	5.8	5.8	6.0	6.3	6.2
2. Non-tax receipts	3.8	3.3	3.3	3.2	3.3	3.8	3.7
<i>of which:</i>							
Interest receipts	0.4	0.4	0.4	0.3	0.3	0.3	0.2
B. Capital receipts	4.3	5.2	5.9	7.6	6.7	4.5	3.7
<i>of which:</i>							
Recovery of loans & advances	0.3	0.3	0.2	0.6	0.3	0.2	0.1
II. Total disbursements(a+b+c)	16.0	16.5	17.1	19.0	18.3	17.1	16.1
a) Revenue	12.6	13.8	13.6	13.7	13.1	13.2	12.6
b) Capital	2.4	2.2	2.9	4.4	4.6	3.4	3.2
c) Loans and advances	1.0	0.5	0.6	0.9	0.6	0.5	0.4
III. Revenue deficit	0.9	2.6	2.2	2.2	1.2	0.5	0.0
IV. Gross fiscal deficit	3.3	4.2	4.2	4.5	3.5	3.2	2.6
Note :							
1. The ratios to GDP for 2006-07 (BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.							
2. Capital receipts include accounts on a net basis.							
3. Capital disbursements are exclusive of public accounts.							
Source : Reserve Bank of India.							

2.56 Most recent indicators of State finances show a distinctly improved picture. The causative factors of fiscal deterioration in the past will, however, need to be monitored in the future as well to sustain this progress and keep the balance at the desired level. The causative factors are: interest payment; pension liabilities; losses of State PSUs; lack of proper user charges; and lack of buoyancy in taxes. The successful introduction of VAT by 30 States/UTs and the TFC incentive to enact State-level FRBM legislations appear to have deepened State-level fiscal reforms and put them on the path towards fiscal sustainability.

State level reforms

2.57 The need for fiscal adjustment have not only been recognized by States, they have also been taking a number of pro-active steps including enactment of their FRBMAs, and introduction of monthly cash flow systems aimed at improving their financial positions. Even prior to the TFC recommending enactment of FRBMA as a prerequisite for States to claim the benefits under the Debt Waiver and Relief Facility, a few States had already enacted their FRBMAs. TFC's Debt Consolidation and Waiver Facility (DCRF) has a two-stage benefit scheme as incentives to the States: first, a general scheme of debt relief applicable to all States, which provides for consolidation of Central loans (from Ministry of Finance) contracted by States till March 31, 2004 and outstanding as on March 31, 2005 for a fresh term of 20 years at an interest rate of 7.5 per cent, prospectively, from the year in which they enact FRBMAs; and second, a Debt Write-off scheme (after consolidation of Central loans-Ministry of Finance) linked to fiscal performance, subject to the following conditions:

- i) Enactment of FRBMA (required, in any case for debt consolidation),
- ii) Reduction of revenue deficit every year starting from 2004-05, when compared to the average of the preceding three years (i.e., 2001-02,

2002-03 & 2003-04). In the process, if revenue deficit is eliminated completely by 2008-09, the State gets full benefit of the waiver,

- iii) Reduction in revenue deficit should be equal to at least the interest rate relief on account of consolidation, and
- iv) Containing fiscal deficit/GSDP ratio at the 2004-05 level in all the subsequent years.

2.58 Under debt write-off scheme, repayments falling due during the period 2005-06 to 2009-10 on the consolidation of the Central loans would become eligible for write-off. The quantum of write-off will be linked to the absolute amount by which revenue deficit is reduced in each successive year, during the award period. TFC has estimated that the debt relief during its award period (2005-10) for all States would be Rs. 21,276 crore in interest payments and Rs. 11,929 crore in repayments of consolidated Central loans. If all the States eliminate revenue deficit in 2008-09, the amount of debt waiver that would be available to the States is expected to be Rs. 33,205 crore. To traverse on a credible path of eliminating revenue deficit to zero by 2008-09 and to bring down the fiscal deficit to 3 per cent of GSDP and achieve other targets of TFC, States are required to draw up their own "Fiscal Correction Paths". So far, 23 States have enacted their FRBMAs and 21 States had drawn up their fiscal correction paths. Debt consolidation has been done for 19 States namely, Andhra Pradesh, Assam, Bihar, Chhatisgarh, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Orissa, Punjab, Rajasthan, Tamil Nadu, Tripura, Uttarakhand and Uttar Pradesh. Central loans in respect of these States have also been consolidated. Out of 19 States, 6 States namely, Assam, Bihar, Kerala, Maharashtra, Tripura and Uttarakhand were not found eligible for debt waiver in 2005-06. In case of 13 States, amount of debt waiver is estimated at Rs. 3,856 crore.

Value Added Tax (VAT)

2.59 Introduction of State Level VAT is the most significant tax reform measure at State level. The State level VAT implemented has replaced the existing State Sales Tax. The decision to implement State level VAT was taken in the meeting of the Empowered Committee (EC) of State Finance Ministers held on June 18, 2004, where a broad consensus was arrived at to introduce VAT from April 1, 2005. Accordingly, VAT has been introduced by 30 States/UTs so far. Tamil Nadu has implemented VAT from January 1, 2007. The union territory of Puducherry has communicated its decision to implement VAT from April 1, 2007. Uttar Pradesh has not yet taken any decision in this regard. Since Sales Tax/VAT is a State subject, the Central Government has played the role of a facilitator. A compensation formula has also been finalised in consultation with the States, for providing compensation, during 2005-06, 2006-07 and 2007-08, for any losses on account of introduction of VAT and compensation is being released according to this formula. Technical and financial support has also been provided to the States for VAT computerization, publicity and awareness and other related aspects.

2.60 The Empowered Committee, through its deliberations over the years, finalized a design of VAT to be adopted by the States, which seeks to retain the essential features of VAT, while at the same time, providing a measure of flexibility to the States, to enable them to meet their local requirements. Some salient features of the VAT design finalized by the Empowered Committee are as follows:

- (a) The rates of VAT on various commodities shall be uniform for all the States/UTs. There are 2 basic rates of 4 per cent and 12.5 per cent, besides an exempt category and a special rate of 1 per cent for a few selected items. The items of basic necessities have been put in the zero rate bracket or the exempted schedule. Gold, silver and precious

stones have been put in the 1 per cent schedule. There is also a category with 20 per cent floor rate of tax, but the commodities listed in this schedule are not eligible for input tax rebate/set off. This category covers items like motor spirit (petrol), diesel, aviation turbine fuel, and liquor.

- (b) There is provision for eliminating the multiplicity of taxes. In fact, all the State taxes on purchase or sale of goods (excluding Entry Tax in lieu of Octroi) are required to be subsumed in VAT or made VATable.
- (c) Provision has been made for allowing "Input Tax Credit (ITC)", which is the basic feature of VAT. However, since the VAT being implemented is intra-State VAT only and does not cover inter-State sale transactions, ITC will not be available on inter-State purchases.
- (d) Exports will be zero-rated, with credit given for all taxes on inputs/purchases related to such exports.
- (e) There are provisions to make the system more business-friendly. For instance, there is provision for self-assessment by the dealers. Similarly, there is provision of a threshold limit for registration of dealers in terms of annual turnover of Rs. 5 lakh. Dealers with turnover lower than this threshold limit are not required to obtain registration under VAT and are exempt from payment of VAT. There is also provision for composition of tax liability up to annual turnover limit of Rs. 50 lakh.
- (f) Regarding the industrial incentives, the States have been allowed to continue with the existing incentives, without breaking the VAT chain. However, no fresh sales tax/VAT based incentives are permitted.

VAT implementation—experience so far:

2.61 The experience of implementing VAT has been very encouraging. The new system has been received well by all the

stakeholders, and the transition has been quite smooth with the Empowered Committee constantly reviewing the progress of implementation. The revenue performance of VAT-implementing States/UTs has been very encouraging. During 2005-06, the tax revenue of the 25 VAT implementing States/UTs registered year-on-year increase in VAT revenues of 13.8 per cent, higher than the average annual rate of growth in the last five years. In the first seven months of 2006-07 (April-October), the 30 VAT State/UTs have collectively registered revenue growth rate of 26.1 per cent over the corresponding period of the previous year. The Central Government had announced a compensation package under which the States are compensated for any revenue loss on account of VAT introduction at the rate of 100 per cent of revenue loss during 2005-06; 75 per cent during 2006-07, and 50 per cent during 2007-08. The initial Budget provision for the year 2005-06 was Rs. 5,000 crore, which was reduced to Rs. 2,500 crore at the RE stage. For the year 2006-07, a provision of Rs. 2,990 crore (BE) was initially made, and an additional provision of Rs. 1,000 crore has been made through First Supplementary. In all, 8 States requested for VAT compensation for a total amount of Rs 6,765.6 crore in 2005-06. In 2006-07 so far, claims for a total of Rs. 514.3 crore have been received from 5 States.

CST Reforms

2.62 It is generally agreed that the CST, being an origin-based non-rebatable tax, is inconsistent with the concept of VAT and needs to be phased out. One critical issue involved in phasing out of CST is that of compensating the States for revenue losses on account of such a phase out. During 2005-06, the total revenue collection from CST for all States was around Rs. 18,000 crore. Since phasing out of CST will entail a revenue loss, States are insisting on a mechanism to compensate them on a permanent basis. The EC has been deliberating on the issue. The matter was also discussed in the meetings of State Finance Ministers. The EC had submitted a

proposal to the Department of Revenue containing their recommendations on the modalities for phasing out of CST and for compensation of revenue loss on this account. The proposal of the EC was examined and, thereafter, the views and suggestions of the Government on the same have been communicated to the EC. Further deliberations on the issue are going on in the EC.

Consolidated General Government

2.63 The macroeconomic impact of the state of public finances are best analysed through the construct of 'Consolidated General Government'. With very limited data on local finances and the grant-dependent nature of local bodies in India, the aggregation of State and Central Government finances after due process of adjustment for inter-Governmental transfers, are usually taken as the General Government finances. As a proportion of GDP, tax receipts of the General Government fell from 15.4 per cent in 1990-91 to 13.8 per cent in 2001-02. Thereafter the proportion picked up to reach 16.6 per cent in 2005-06 (RE) and is budgeted at 16.8 per cent in 2006-07. With total expenditure declining from 30.9 per cent in 2003-04 to 27.6 per cent in 2006-07 (BE), there have been reductions in the revenue and fiscal deficits as proportions to GDP (Table 2.12). This reduction was possible through the harmonized fiscal policies being followed by both Central and State Governments. Sustaining this harmony in fiscal balances is a critical requirement for reaping the growth dividend through macroeconomic linkages.

Outlook

2.64 The encouraging buoyancy of revenues, particularly tax revenues, of both the Centre and the States observed in the recent past is likely to continue with tax reforms and improved compliance. But, such tax reforms must also involve accelerated improvement in tax administration, including the putting in place of an impersonal, hassle free collection mechanism that punishes

Table 2.12 : Combined receipts and disbursements of the Central and State Governments

	1990-91	2001-02	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
	(Rs. crore)						
I. Total receipts(A+B)	152,245	651,039	726,435	860,090	947,930	1,027,547	1,137,245
A. Revenue receipts (1+2)	105,757	400,162	452,969	518,546	615,643	732,848	835,469
1. Tax receipts	87,564	313,844	357,342	413,981	492,481	591,641	688,103
2. Non-tax receipts	18,193	86,318	95,627	104,565	123,162	141,207	147,366
<i>of which</i>							
Interest receipts	5,975	17,164	17,781	18,856	11,063	9,041	7,529
B. Capital receipts	46,488	250,877	273,466	341,544	332,287	294,699	301,776
<i>of which:</i>							
a) Disinvestment proceeds	-	3,646	3,151	16,953	4,424	2,356	4,840
b) Recovery of loans & advances	3,233	14,514	12,916	26,318	14,969	11,265	6,137
II. Total disbursements(a+b+c)	163,520	652,967	726,706	855,071	929,243	1,036,936	1,131,515
a) Revenue	129,628	559,511	615,960	677,953	730,403	841,952	921,982
b) Capital	22,304	67,048	88,353	145,427	172,793	169,597	190,110
c) Loans and advances	11,588	26,408	22,393	31,691	26,047	25,387	19,423
III. Revenue deficit	23,871	159,350	162,990	159,500	114,760	109,105	86,513
IV. Gross fiscal deficit	53,580	226,425	234,987	234,502	234,719	263,195	257,088
	(As per cent of GDP)						
I. Total receipts(A+B)	26.8	28.5	29.6	31.1	30.3	28.8	27.7
A. Revenue receipts (1+2)	18.6	17.5	18.4	18.8	19.7	20.5	20.4
1. Tax receipts	15.4	13.8	14.5	15.0	15.8	16.6	16.8
2. Non-tax receipts	3.2	3.8	3.9	3.8	3.9	4.0	3.6
<i>of which</i>							
Interest receipts	1.1	0.8	0.7	0.7	0.4	0.3	0.2
B. Capital receipts	8.2	11.0	11.1	12.4	10.6	8.3	7.4
<i>of which:</i>							
a) Disinvestment proceeds	0.0	0.2	0.1	0.6	0.1	0.1	0.1
b) Recovery of loans & advances	0.6	0.6	0.5	1.0	0.5	0.3	0.1
II. Total disbursements(a+b+c)	28.8	28.6	29.6	30.9	29.7	29.1	27.6
a) Revenue	22.8	24.5	25.1	24.5	23.4	23.6	22.5
b) Capital	3.9	2.9	3.6	5.3	5.5	4.8	4.6
c) Loans and advances	2.0	1.2	0.9	1.1	0.8	0.7	0.5
III. Revenue deficit	4.2	7.0	6.6	5.8	3.7	3.1	2.1
IV. Gross fiscal deficit	9.4	9.9	9.6	8.5	7.5	7.4	6.3

Note: 1. The ratios to GDP for 2006-07 (BE) are based on CSO's Advance Estimates. GDP at current market prices prior to 1999-2000 based on 1993-94 series and from 1999-2000 based on new 1999-2000 series.

2. State Government for 2004-05(Accounts), 2005-06(RE) and 2006-07(BE) pertain to Budget of 29 State Governments of which four are Vote-on-Accounts. All data for these years are, therefore, provisional.

Source : Reserve Bank of India.

evaders but does not inconvenience the honest tax payer. Building up a comprehensive data base of tax payers, taxes paid, income, and transactions in the asset markets, and linking it up effectively with scrutiny and assessment process is critical in this regard.

2.65 The sustained improvement in the fiscal position of the Centre and the States in the post-FRBM era has been attained

mostly through enhanced revenues. Success in containing or managing expenditure has been limited. The benign interest rate regime has also helped in the consolidation process. Expenditure management, particularly careful monitoring of outcomes of outlays and targeting of subsidies, remains an unfinished task. Considerable downside risks remain from potential pressures on the expenditure front.

Monetary and Banking Developments

Developments in the monetary sector during 2006-07 continued to reconcile the twin needs of facilitating the momentum of economic growth and containing inflation. This is to be viewed in the context of the performance of the economy in the immediately preceding year. Growth at 9.0 per cent in 2005-06 surpassed expectations of around 7.0 per cent and in the range of 7.0-7.5 per cent projected by the Reserve Bank of India (RBI) at the time of formulation of monetary policy in the Annual Policy Statement of 2005-06 in April, 2005 and the Mid-term Review of the Policy Statement in October 2005, respectively. In the first two quarters of the current year also, growth at 8.9 per cent and 9.2 per cent respectively has come as a pleasant surprise. Headline inflation, on a point-to-point basis and measured by the wholesale price index (WPI), remained at 4.1 per cent at end-March 2006, below the range of 5.0-5.5 per cent projected by RBI in April 2005. In spite of the benign impact of softening world crude oil prices in the current year, inflation continued to show some stubborn supply-side-induced hardening tendencies and reached a peak of 6.73 per cent on February 3, 2007.

3.2 Reflecting the higher economic growth, growth in broad money (M_3) at 17.0 per cent during 2005-06 was higher than the 12.3 per cent observed during 2004-05 (Table 3.1). The gathering momentum of growth got reflected and was also sustained by growth in credit to the commercial sector, up from the robust 26.0 per cent during the previous year to 27.0 per cent in 2005-06. Based on the emerging trends, for the purposes of monetary policy formulation for 2006-07, RBI had

factored in real GDP growth in the range of 7.5-8.0 per cent and year-on-year inflation rate in the range of 5.0-5.5 per cent, and projected M_3 expansion at around 15.0 per cent.

3.3 With indications that growth was buoyant, in the Mid-Term Review of the Annual Policy Statement (October, 2006), projection for real GDP growth for 2006-07 was revised by RBI to around 8.0 per cent. Simultaneously, the overshooting of inflation beyond the expected path required a careful calibration of policy to tame inflation without hurting the gathering momentum of growth.

3.4 Monetary developments in 2006-07 so far have been characterised by (a) continued robust expansion in the credit—particularly non-food credit by scheduled commercial banks (SCBs); (b) a pick-up in the growth of deposits with SCBs but lower than the corresponding growth in credit; (c) a turn around in investment in approved securities for the purpose of the statutory liquidity ratio (SLR), from a declining to an increasing trend between 2005-06 and 2006-07; and (d) continued growth in foreign exchange assets of the banking sector through inflows of foreign exchange reserves.

3.5 During the current year, on January 19, 2007, year-on-year growth in M_3 and credit to the commercial sector at 21.1 per cent and 26.9 per cent, respectively were considerably higher than not only the 15.6 per cent and 26.6 per cent respectively observed on January 20, 2006, but also higher than 15.0 per cent and 20.0 per cent, respectively envisaged in the Annual Policy Statement for 2006-07. There have been some recent signs of the steady expansion in credit running into

a situation of tight liquidity. During December, 2006, with liquidity injected under repo [liquidity adjustment facility (LAF)] at Rs.358,955 crore and that absorbed under reverse-repo at Rs. 314,865 crore, the net injection of liquidity in the system was Rs. 44,090 crore.

Monetary trends and developments

Broad money supply (M_3)

3.6 During 2005-06, M_3 expanded by 17.0 per cent, up from Rs.2,332,667 crore on April 1, 2005 to Rs. 2,729,536 crore at end-March 2006 (Table 3.1). Even after taking into account the existence of 27 reporting fortnights in 2005-06, this expansion was considerably higher than the expansion of 12.3 per cent during 2004-05 and than the growth rate of 14.5 per cent projected in the April 2005 Annual Policy Statement. With M_3 growing faster than nominal GDP in recent years, the velocity of money (ratio of nominal GDP to the average M_3 stock during the year) has declined from 1.62 during 2001-02 to 1.47 during 2004-05 and further to 1.45 during 2005-06.

3.7 Among the components of M_3 , demand deposits grew the highest (26.1 per cent compared to 10.3 per cent in 2004-05), followed by currency with the public (16.4 per cent compared to 13.0 per cent in 2004-05) and time deposits (15.4 per cent compared to 12.4 per cent in 2004-05). The high growth of demand deposits was mainly due to higher capital mobilisation in the primary market, increased non-food credit by banks, and large mobilisation by domestic mutual funds being temporarily parked in demand deposits pending utilisation. The sharp pick up in time deposits in the second quarter of 2005-06 reflected both the small base in the previous year as well as the rise in deposit rates of interest.

3.8 Net bank credit to commercial sector remained the main source of M_3 growth. Credit continued to grow steadily for the second year in succession, with an expansion of Rs. 359,702 crore in 2005-06 following Rs. 264,099 crore in 2004-05. There was a change, however, in the food and non-food

composition of credit between the two years. Non-food credit by SCBs expanded by 31.8 per cent (Rs. 354,192 crore) in 2005-06 compared to 27.5 per cent (Rs. 221,602 crore) in 2004-05. Food credit increased marginally by Rs. 674 crore in 2005-06 compared to Rs.5,160 crore in 2004-05 thereby registering an increase of 1.7 per cent. With credit outpacing GDP in growth terms, net domestic credit as a proportion of GDP increased from 52.7 per cent at end-March 2000 to 64.1 per cent at end-March 2003 and further to 69.0 per cent at end-March 2006.

3.9 To bridge the widening gap between the growth of credit and deposits, the banks have been funding the credit growth partly by reducing their investment portfolio through sale of Government securities above SLR requirement and liquidating their non-SLR investments. The gilt portfolio of SCBs, after increasing by Rs. 52,031 crore during 2004-05, declined by Rs. 19,514 crore during 2005-06. On March 31, 2006, SLR portfolio of SCBs was 31.0 per cent of their net demand and time liabilities (NDTL), down from 38.0 per cent a year ago. Non-SLR investments, which had increased by Rs.5,992 crore during 2004-05, declined by Rs. 10,256 crore during 2005-06.

3.10 During the current financial year up to January 19, 2007, M_3 expanded by Rs. 342,170 crore (12.5 per cent over end-March 2006) as compared to the expansion of Rs. 203,542 crore (8.7 per cent) during the corresponding period of the previous year. On a year-on-year basis, on January 19, 2007, M_3 expansion was even higher at Rs. 535,497 crore (21.1 per cent) compared to the expansion of Rs.343,007 crore (15.6 per cent) on the corresponding date of the previous year.

3.11 Currency with the public during the current financial year (up to January 19, 2007) increased by 14.2 per cent, marginally higher than 13.7 per cent during the corresponding period of 2005-06. On a year-on-year basis, growth in currency with public was 16.9 per cent as on January 19, 2007 compared to 16.3 per cent on January 20, 2006.

3.12 There was a change in the behaviour of demand and time deposits between 2005-

06 and the current year so far. Up to January 19, 2007, demand deposits with banks declined by Rs. 7,238 crore over the end-March 2006 level to Rs.397,986 crore. Such deposits had increased by Rs. 18,537 crore during the same period of previous year. On a year-on-year basis, growth in demand deposits on January 19, 2007 was lower at 17.1 per cent compared to 28.9 per cent on the corresponding date of last year. On the other hand, with interest rates firming up and availability of tax benefits under section 80C of the Income tax Act for deposits with maturity of five years and above, growth of time deposits accelerated between 2005-06 and the current year so far. On a financial year basis, time deposits increased by 15.3 per cent as of January 19, 2007 compared to 8.4 per cent during the corresponding period of 2005-06. On a year-on-year basis, the acceleration was even sharper with growth at 22.8 per cent on January 19, 2007 compared to 13.4 per cent on January 20, 2006.

3.13 Credit to the commercial sector during the current year up to January 19, 2007 had expanded by Rs. 272,357 crore compared to the expansion of Rs. 215,797 crore during the same period of the previous year. In percentage terms, however, the growth rate during the current financial year was only marginally lower at 16.1 per cent compared to 16.2 per cent during the same period of the previous year. On a year-on-year basis, growth of credit to the commercial sector on January 19, 2007 was up only to 26.9 per cent from 26.6 per cent on January 20, 2006. Credit to the commercial sector has remained the single most important source of M_3 growth in 2005-06 and in the current year so far. On a financial year (year-on-year) basis, it contributed 10.0 (16.4) percentage points to the overall M_3 growth of 12.5 (21.1) per cent in the current year up to January 19, 2007.

3.14 During the current year up to January 19, 2007, net bank credit to Government expanded by Rs.40,270 crore (5.2 per cent) compared to the expansion of Rs. 33,827 crore (4.5 per cent) during the corresponding period of 2005-06. On a year-on-year basis, on January 19, 2007, net bank credit to

Government expanded by Rs. 26,828 crore (3.4 per cent), compared to the increase of Rs. 20,281 crore (2.7 per cent) on January 20, 2006. During the current year, upto January 19, 2007, net RBI credit to Central Government expanded only by Rs. 6,963 crore compared to Rs.55,578 crore in the corresponding period of last year; on year-on-year basis this declined by Rs.15,241 crore on January 19, 2007 compared to an increase of Rs.16,341 crore on January 20, 2006 (Table 3.1).

Reserve money (M_0)

3.15 M_0 expansion, during 2005-06 at Rs. 83,931 crore (Table 3.2) was substantially higher than the increase of Rs. 52,623 crore in 2004-05. At end-March, M_0 at Rs. 5,73,066 crore in 2006 was up 17.2 per cent from Rs.4,89,135 crore at end-March 2005. During the whole of 2004-05, M_0 had grown only by 12.1 per cent.

3.16 Like in 2004-05, expanding net foreign exchange assets (NFA) of the RBI continued to be the main source of M_0 increase in 2005-06, albeit with reduced intensity. Compared to Rs. 128,377 crore (26.5 per cent) during 2004-05, NFA during 2005-06 expanded by only Rs. 60,193 crore (9.8 per cent), partly due to the redemption of India Millennium Deposits. Net domestic assets (NDA) of the RBI, the other source of M_0 variation, which had declined by Rs. 75,754 crore in 2004-05, increased by Rs.23,738 crore — mainly due to net RBI credit of Rs. 26,111 crore to Government — during 2005-06. In contrast to an increase in Government's deposits with RBI of Rs.72,558 crore on account of large issuances under the market stabilization scheme (MSS) during 2004-05, a temporary suspension of MSS from mid-November 2005 had led to a decline of Rs. 14,541 crore in Centre's deposits with the RBI during 2005-06. NFA contributed only 12.3 percentage points of the 17.2 per cent growth of M_0 during 2005-06 compared to the 29.4 percentage points of 12.1 per cent growth of M_0 during 2004-05. In contrast, contribution of NDA to growth of M_0 was a mere 4.9 percentage points in 2005-06 compared to a negative

Table 3.1 : Sources of change in money stock (M₃)

Items	Outstanding balances as on		Variations during									
			Apr. 1	Apr. 1	Mar. 31	Jan. 21	Jan. 20	Apr. 1	Apr. 1	Mar. 31	Jan. 21	Jan. 20
	Mar. 31,	Jan. 19,	2005	2005	2006	2005	2006	2005	2005	2006	2005	2006
	2006	2007	to	to	to	to	to	to	to	to	to	to
1	2	3	4	5	6	7	8	9	10	11	12	13
			<i>Rs. crore</i>					<i>Percent</i>				
I. M ₁ (Narrow Money)	825246	865538	142693	65463	40292	131783	128769	20.9	9.6	4.9	21.4	17.2
II. M ₃ (Broad Money) (1+2+3+4)	2729536	3071706	396869	203542	342170	343007	535497	17.0	8.7	12.5	15.6	21.1
1. Currency with the public	413143	471845	58272	48663	58702	56532	68311	16.4	13.7	14.2	16.3	16.9
2. Demand deposits with banks	405224	397986	83861	18537	-7238	76179	58086	26.1	5.8	-1.8	28.9	17.1
3. Time deposits with banks	1904290	2196166	254176	138079	291876	211224	407973	15.4	8.4	15.3	13.4	22.8
4. "Other" deposits with RBI	6879	5709	560	-1737	-1170	-928	1127	8.9	-27.5	-17.0	-16.8	24.6
III. Sources of change in money stock (M ₃)												
1. Net bank credit to Government (A+B)	769092	809362	20385	33827	40270	20281	26828	2.7	4.5	5.2	2.7	3.4
A. RBIs' net credit to Government	8136	12242	35798	54985	4106	13136	-15081					
(i) Central Government	5160	12123	33374	55578	6963	16341	-15241					
(ii) State Governments	2976	119	2424	-593	-2857	-3205	160					
B. Other banks credit to Government	760956	797120	-15413	-21158	36164	7145	41909	-2.0	-2.7	4.8	1.0	5.5
2. Bank credit to commercial sector (A+B)	1690961	1963318	359702	215797	272357	324977	416262	27.0	16.2	16.1	26.6	26.9
A. RBIs' credit to commercial sector	1387	1907	-3	950	520	450	-433	-0.2	68.3	37.5	23.8	-18.5
B. Other banks' credit to commercial sector	1689574	1961411	359705	214847	271837	324527	416695	27.0	16.2	16.1	26.6	27.0
3. Net foreign exchange assets of the banking sector	726194	835577	78291	7812	109383	56163	179862	12.1	1.2	15.1	9.4	27.4
4. Government's currency liabilities to the public	8754	8054	1306	1216	-700	1228	-610	17.5	16.3	-8.0	16.5	-7.0
5. Banking sector's net non-monetary liabilities other than time deposits	465466	544604	62817	55110	79138	59642	86845	15.6	13.7	17.0	15.0	19.0
Memorandum Items												
1. Money multiplier (M ₃)	4.76	4.79						-	-	-	-	-
2. Velocity of money	1.45											
3. Net domestic assets	2003341	2236130	318576	195730	232789	286844	355635	18.9	11.6	11.6	18.0	18.9
4. Net domestic credit	2460053	2772680	380087	249624	312627	345258	443090	18.3	12.0	12.7	17.4	19.0
<p>Note:1. All figures are provisional. RBI data relate to end March after closure of Government accounts. Variations in respect of scheduled commercial banks (SCBs) are based on data for last reporting Friday of March. SCBs time deposits include Rs17, 945 crore on account of proceeds from RIB (Resurgent India Bonds), since August 28,1998 and Rs 25, 662 crore from India Millennium Deposits (IMDs) since November 17, 2000.</p> <p>2. Financial year variations during 2006-07 so far is worked out from March 31, 2006, whereas the corresponding financial year variation during 2005-06 is worked out from April 1, 2005.</p>												

Table 3.2 : Sources of change in reserve money(M₀)

Items	Outstanding balances as on		Variations during						Percentage variations					
			2005-06	Year-on-year		Financial year so far		2005-06	Year-on-year		Financial year so far			
	Mar 31, 2006	Jan. 19, 2007		20 Jan 06	19 Jan 07	20 Jan 06	19 Jan 07		20 Jan 06	19 Jan 07	20 Jan 06	19 Jan 07		
			over	over	over	over	over	over	over	over	over			
		21 Jan 05	20 Jan 06	31 Mar 05	31 Mar 06	21 Jan 05	20 Jan 06	31 Mar 05	31 Mar 06					
1	2	3	4	5	6	7	8	9	10	11	12	13		
	Rs. Crore						Per cent							
Reserve Money(M ₀)	573066	641790	83931	69213	106846	45809	68724	17.2	14.9	20.0	9.4	12.0		
A: Components of Reserve Money														
a. Currency in circulation	430676	488251	62015	59241	71015	48575	57575	16.8	16.5	17.0	13.2	13.4		
b. Bankers' deposits with RBI	135511	147830	21515	10900	34704	-870	12319	18.9	10.7	30.7	-0.8	9.1		
c. "Other" deposits with RBI	6879	5709	401	-928	1127	-1896	-1170	6.2	-16.8	24.6	-29.3	-17.0		
B: Sources of Reserve Money														
1. Net RBI credit to Government	8136	12242	26111	13136	-15081	45298	4106							
2. RBI credit to banks	5795	7804	537	-150	1720	826	2009	10.2	-2.4	28.3	15.7	34.7		
3. RBI credit to commercial sector	1387	1907	-3	450	-433	950	520	-0.2	23.8	-18.5	68.3	37.5		
4. Net foreign exchange assets of RBI	672983	787321	60193	54490	172487	2044	114338	9.8	9.7	28.1	0.3	17.0		
5. Government's currency liabilities to the public	8754	8054	1306	1228	-610	1216	-700	17.5	16.5	-7.0	16.3	-8.0		
6. Net non-monetary liabilities of RBI	123990	175537	4214	-60	51237	4524	51547	3.5	0.0	41.2	3.8	41.6		
Memo items:														
1. Net domestic assets of RBI	-99917	-145531	23738	14723	-65641	43765	-45614	-542.8	-15.6	82.2	-838.6	203.8		
2. Net domestic credit by RBI	15318	21953	26645	13436	-13794	47074	6635	-60.0	60.2	-38.6	-72.7	-58.1		

contribution of (-) 14.6 percentage points in the previous year.

3.17 NFA of RBI has continued to be the main driver of M₀ expansion even during the current year, with such NFA expanding by Rs. 114,338 crore as on January 19, 2007 over the end-March 2006 level of Rs. 672,983 crore thereby contributing 20.0 percentage points to the overall 12.0 per cent growth in M₀. During the same period of the previous year, that is between end-March 2005 and January 20, 2006, NFA had expanded only by Rs. 2,044 crore.

3.18 On a year-on-year basis, M₀ expanded by 20.0 per cent on January 19, 2007, considerably higher than 14.9 per cent observed on January 20, 2006, to reach Rs. 641,790 crore. Such year-on-year growth in M₀ was mainly due to robust growth in the NFA of the RBI at 28.1 per cent on January 19, 2007 which was nearly thrice the growth of 9.7 per cent observed a year ago, matched by a sharp year-on-year decline in the NDA of the RBI of Rs. 65,641 crore compared to an increase in RBI's NDA of Rs. 14,723 crore on the corresponding date of the previous year (Table 3.2). The contributions of NFA and NDA of the RBI to the 20.0 per cent growth of M₀

on a year-on-year basis on January 19, 2007 were 32.2 percentage points and (-) 12.3 percentage points, respectively.

3.19 Reflecting these developments, the share of NFA in M₀ and in currency in circulation declined from 125.3 per cent and 166.2 per cent, respectively, to 117.4 per cent and 156.3 per cent, respectively, between end-March 2005 and end-March 2006. In a reversal of this trend in the current financial year, these ratios rose to 122.7 per cent and 161.3 per cent, respectively, on January 19, 2007 from 114.9 and 147.4 per cent, respectively, on January 20, 2006.

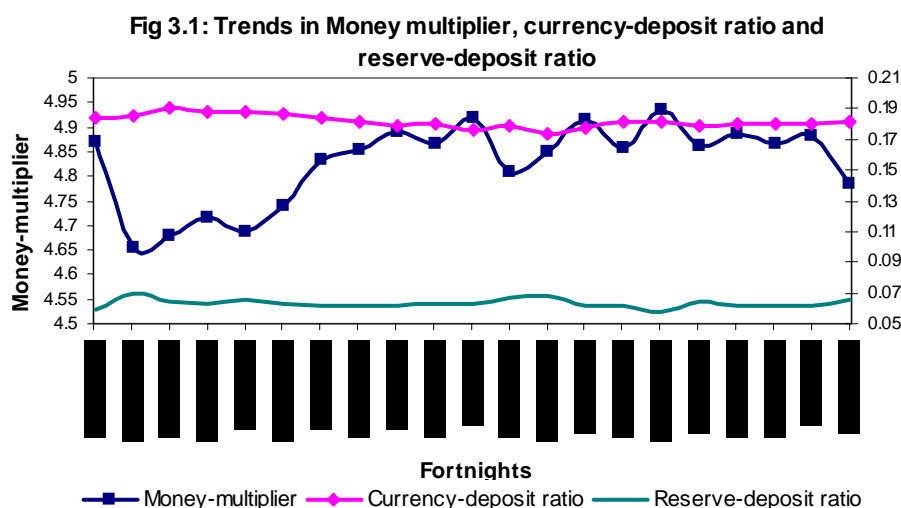
3.20 Sustained faster growth of M₃ relative to that of M₀ in recent years has resulted in

the money multiplier ($\frac{M_3}{M_0}$) steadily increasing

from 4.43 at end-March 2002 to 4.60 at end-March 2005, 4.76 at end-March 2006 and further to 4.79 on January 19, 2007 (Figure 3.1). Between January 20, 2006 and January 19, 2007, while the currency-deposit ratio declined to 0.181 from 0.189, the reserve-deposit ratio increased to 0.065 from 0.062, reflecting partly the effect of the recent hike in the cash reserve ratio (CRR) by the RBI.

Fig. 3.1

Trends in Money Multiplier, Currency-Deposit Ratio and Reserve-Deposit Ratio



Liquidity management

3.21 Unwinding of the Central Government surplus balances with the RBI during the current financial year and continued intervention by the RBI in the foreign exchange market to maintain orderly conditions led to an increase in the liquidity in the system. This was also reflected in higher bids offered and accepted by RBI through reverse-repo transactions under LAF. During 2006-07, up to September 8, 2006, RBI had not received any bid for repo and the continuous flow of funds under reverse-repo indicated a comfortable liquidity position. Thereafter, with the onset of the festival season, demand for currency increased, and high credit expansion together with outflows on account of advance tax started to affect the overall liquidity condition in the system. In response, RBI, under repo transactions, accommodated Rs.275 crore on September 15, 2006 and Rs. 5,010 crore on September 29, 2006. Such accommodations intensified during October 2006, and on six occasions, RBI injected liquidity under repo transactions: Rs. 35 crore on October 13, Rs. 1000 crore on October 19, Rs. 1,585 crore on October 20, Rs. 1,465 crore on October 23, Rs. 10 crore on October 26, and Rs. 330 crore on October 27. However, with liquidity absorption under reserve-repo simultaneously on, in net terms, there was injection of liquidity under LAF only

on October 20, October 23 and October 26, 2006.

3.22 With year-on-year inflation stubbornly above 5 per cent since early-August 2006, on October 31, 2006, the RBI in its Mid-Term Review announced measures to stem inflationary expectations and also to contain the credit off-take at the desired growth rate of 20.0 per cent stipulated in the Annual Policy Statement of April, 2006. The repo rate was raised by 25 basis points to 7.25 per cent. On December 8, 2006, it was further announced that the CRR rate would be hiked by one-half of one percentage point on net demand and time liabilities (NDTL) in two stages effective from December 23, 2006 (5.25 per cent) and January 6, 2007 (5.50 per cent). The CRR increase, which was expected to absorb about Rs. 13,500 crore from the banking sector, together with the continued high credit growth, introduced some strain on the liquidity in the system from mid-December 2006. In fact, liquidity injection into the system under LAF during December, 2006, amounted to Rs. 44,090 crore (injection under repo of Rs.3,58,955 crore exceeding absorption under reverse-repo of Rs. 3,14,865 crore). Though the LAF had been in an injection mode between January 8, 2007 to February 7, 2007, subsequently the liquidity in the system increased as reflected in absorptions under reverse-repo. In the light of the emerging liquidity situation and inflationary expectations,

RBI announced on February 13, 2007 further hike in CRR by 25 basis points each effective from the fortnights beginning February 17 and March 3, 2007. This is expected to absorb Rs. 14,000 crore from the banking system.

3.23 The liquidity in the system was also addressed during 2006-07 by MSS operations. Outstanding balance under MSS, after increasing from Rs. 29,062 crore (1.0 per cent of M_3) on March 31, 2006 to a high of Rs. 42,364 crore (1.5 per cent of M_3) on August 25, 2006, started declining thereafter to reach Rs. 40,491 (1.3 per cent of M_3) on January 19, 2007.

Monetary and credit policy

3.24 Continued high levels of crude oil prices during the first half of the year and rising primary commodity prices in the international market impacted price developments in the domestic economy. Considering the emerging trends, the objectives and overall stance of policy announced by the RBI in its Annual Policy Statement for 2006-07 were: (i) to ensure a monetary and interest rate environment that enables continuation of the growth momentum consistent with price stability while being in readiness to act in a timely and prompt manner on any signs of evolving circumstances impinging on inflation expectations, (ii) to focus on credit quality and financial market conditions to support export and investment demand in the economy for maintaining macroeconomic stability and, in particular, financial stability, and (iii) to respond swiftly to evolving global developments. (Box 3.1)

3.25 In consonance with the declared policy objectives, the RBI on June 8, 2006 raised the repo/reverse-repo under LAF by 25 basis points each, thereby retaining the spread between repo and reverse-repo rates at 100 basis points.

3.26 After careful and continuous monitoring of both domestic and global economic parameters, policy response by RBI was suitably attuned in the First Quarter Review of the Annual Policy Statement 2006-07 announced on July 25, 2006. While keeping other policy rates unchanged,

effective July 25, 2006, the repo and reverse-repo rates were raised by 25 basis points each to 7.00 per cent and 6.00 per cent, respectively, to combat emerging inflationary expectations.

3.27 In the Mid-Term Review of the Annual Policy Statement of October 31, 2006, RBI indicated that it will ensure appropriate liquidity in the system to meet all legitimate demand for credit, particularly for productive purposes, consistent with the objective of price and financial stability. Monetary stance was calibrated to address the emerging situation in the system and (a) to ensure a monetary and interest rates environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum while reinforcing price stability with a view to anchoring inflation expectations, (b) to maintain the emphasis on macroeconomic and, in particular, financial stability, and (c) to consider promptly all possible measures as appropriate to the evolving global and domestic situation. On consideration of macroeconomic as well as monetary conditions, only the repo rate was further raised by 25 basis points to reach 7.25 per cent effective October 31, 2006. Retaining the reverse-repo rate at 6.00 per cent resulted in a widening of repo-reverse repo spread to 125 basis points. (Box 3.1)

3.28 RBI, in the Third Quarter Review of the Annual Statement on Monetary Policy for 2006-07 (January 31, 2007), reiterated its resolve to keep inflation as close as possible to the declared range of 5.00-5.50 per cent at the earliest, while maintaining the medium-term goal to rein in inflation at 5.0 per cent. The review also spelt out the following three important issues in the conduct of monetary policy: (i) demand pressures appearing to have intensified, reflected in rising inflation, high money and credit growth, elevated asset prices, strains on capacity utilisation, some indications of wage pressures and widening of trade deficit; (ii) increased supply-side pressures evident from prices of primary articles; and (iii) the need of the policy to contend with lagged response of productive capacity and infrastructure to the ongoing expansion in investment. It was once again

Box 3.1: Annual Policy Statement for the Year 2006-07

A: Annual Policy Statement for the Year 2006-07

- Bank rate kept unchanged at 6.0 per cent.
- Reverse Repo Rate and Repo Rate kept unchanged at 5.5 per cent and 6.5 per cent, respectively.
- Cash Reserve Ratio (CRR) kept unchanged at 5.00 per cent.
- Ceiling interest rate on non-resident (external) rupee deposits raised to US dollar LIBOR/SWAP plus 100 basis points.
- Ceiling interest rate on export credit in foreign currency raised to LIBOR plus 100 basis points.
- Provisioning for standard advances raised to 1.0 per cent for personal loans, capital market exposures, residential housing beyond Rs.20 lakh and commercial real estate loans.
- Risk weight on exposures to commercial real estate raised to 150 per cent.
- Exposure to venture capital funds treated as part of capital market exposure and assigned with higher risk weight of 150 per cent.
- 'when issued' market in Government securities announced.
- Primary Dealers to be permitted to diversify their activities. The ceiling on interest rates on non-resident (external) rupee deposits for one to three years maturity raised by 25 basis points to 100 basis points above LIBOR/SWAP rates for US dollar of corresponding maturity with immediate effect.

B : Mid-term Review of Annual Policy Statement for the year 2006-07

- Repo Rate increased to 7.25 per cent from 7.0 per cent.
- Reverse Repo Rate and Bank Rate kept unchanged at 6.0 per cent.
- CRR kept unchanged at 5.0 per cent.
- "when issued" trading to be extended to fresh issues of Central Government securities.
- Scheduled commercial banks and primary dealers allowed to cover their short positions in Central Government securities within an extended period of five trading days.
- Resident individuals would be free to remit up to US \$ 50,000 per financial year as against the earlier limit of US \$ 25,000.
- Foreign exchange earners may retain up to 100 per cent of their foreign exchange earnings in their Exchange Earners' Foreign Currency accounts.
- Borrowers eligible for accessing ECBs can avail of an additional US \$ 250 million with average maturity of more than 10 years under the approval route. Prepayment of ECB up to US \$ 300 million without prior approval of the Reserve Bank.
- The existing limit of US \$ 2 billion on investments in Government securities by foreign institutional investors (FIIs) to be enhanced in phases to US \$ 3.2 billion by March 31, 2007.
- The extant ceiling of overseas investment by mutual funds of US \$ 2 billion enhanced to US \$ 3 billion.
- Importers permitted to book forward contracts for their customs duty component of imports.
- FIIs allowed to rebook a part of the cancelled forward contracts.
- Forward contracts booked by exporters and importers in excess of 50 per cent of the eligible limit to be on deliverable basis and cannot be cancelled.
- Authorised dealer banks to be permitted to issue guarantees/letters of credit for import of services up to US \$ 100,000 for securing a direct contractual liability arising out of a contract between a resident and a non-resident.
- Indian banks having presence outside India and foreign banks to migrate to the Basel II framework effective March 31, 2008 and other scheduled commercial banks to migrate in alignment but not later than March 31, 2009.
- Prudential limit on credit and non-credit facilities to Indian Joint Ventures/Wholly Owned Subsidiaries abroad enhanced to 20 per cent of unimpaired capital funds.

stated that to maintain price stability, RBI would use all policy instruments including CRR, LAF and MSS to modulate liquidity in the system so that all legitimate requirements of credit are met, particularly of the productive sectors of the economy. For the rest of the period, barring the emergence of any adverse and unexpected developments in the economy, the overall stance of monetary policy will be to (a) reinforce the emphasis on price stability and well anchored inflation expectations while ensuring an interest rate environment that supports export and investment demand in the economy so as to enable continuation of the growth momentum, (b) re-emphasise credit quality and orderly conditions in the financial markets for securing macroeconomic and, particularly, financial stability while simultaneously pursuing greater credit penetration and financial inclusion, (c) respond swiftly with all possible measures as appropriate to the evolving global and domestic situation impinging on inflation expectation and the growth momentum. To further strengthen anti-inflationary measures, RBI on January 31, 2007 once again raised repo rate under LAF by 25 basis points from 7.25 percent to 7.50 percent. RBI, on a further review of the domestic economic parameters, once again revised real GDP growth estimates for 2006-07 from around 8.0 per cent to 8.5-9.0 per cent. However, advance estimates of real GDP growth for 2006-07 released by the Central Statistical Organisation (CSO) on February 7, 2007 places the real GDP growth at 9.2 per cent for 2006-07.

3.29 Reducing the CRR is a medium-term objective of the RBI, and the CRR had been reduced gradually from its peak of 15 per cent of NDTL in 1992 to 4.5 per cent by June 2003. The Reserve Bank of India (Amendment) Bill 2006 has been enacted June, 2006. The amendment to the sub-section (1) of section 42 of the Reserve Bank of India Act 1934, vests RBI with the power to prescribe CRR for scheduled banks without any floor or ceiling rate thereby removing the statutory minimum CRR limit of 3.0 per cent. In response to the emerging macroeconomic conditions, on December 8, 2006, and February 13, 2007 hikes in the CRR were announced.

3.30 To create an enabling environment for further deepening and facilitating growth of the Government securities market, RBI during 2006-07, initiated measures such as (a) expanding 'when issued' trading in the case of fresh issues of Central Government securities on a selective basis; and (b) allowing scheduled commercial banks and primary dealers to cover their short positions in the Central Government securities within an extended period of five trading days and to deliver a shorted security by borrowing it through the repo market.

3.31 A debt restructuring mechanism for small and medium enterprises (SMEs) and 'one time settlement' scheme for SME accounts were also devised subsequent to the announcement made by the Union Finance Minister for stepping up credit to SMEs. Other policy measures announced were aimed at: (a) further developing and integrating financial markets with a view to enhancing allocative efficiency; (b) improving and expanding credit delivery oriented towards financial inclusion and extension of financial services to the population; (c) strengthening the capital base of banks to prepare them to migrate to BASEL II norms and implement prudential measures in consonance with international best practices in the financial sector; and (d) keeping up the pace of liberalisation of the external sector within the framework for fuller capital account convertibility recommended by the Tarapore Committee (II) of the RBI for promoting economic growth, improving financial sector efficiency and providing opportunity for diversification of investments by residents.

Interest rates

3.32 The continued rapid expansion of bank credit during 2005-06 and not so fast growth in the deposits, in spite of ample liquidity in the system, had exerted pressure on lending and deposits rates of banks. The hardening of interest rates was more pronounced at the short-end. The spread between deposits of up to one year maturity and of those above three years offered by public sector banks (PSBs) narrowed down to 75 basis points at end-March 2006 from 100 basis points at end-

Table 3.3 : Trends in interest rates*(Per cent per annum)*

Interest rates	End-March		End-January	
	2005	2006	2006	2007
Bank Rate	6.00	6.00	6.00	6.00
CRR	5.00	5.00	5.00	5.25
Weighted call money rate	4.72	6.64	7.40	7.76
BPLR				
a. Public sector banks	10.25-11.25	10.25-11.25	10.25-11.25	11.50-12.25
b. Private sector banks	11.00-13.50	11.00-14.00	11.00-13.50	11.75-15.50
c. Foreign banks	10.00-14.50	10.00-14.50	10.00-14.50	10.00-14.50
Deposits rate (more than one year maturity) #	5.25-6.25	6.00-7.00	5.50-6.50	7.25-8.50
CDs by SCBs	4.21-6.34	6.50-8.94	5.50-7.25	6.00-8.36
CPs by companies	5.20-7.25	6.69-9.25	6.20-7.75	7.74-10.00
Fixed repo rate	6.00	6.50	6.50	7.50
Fixed reverse-repo rate	4.75	5.50	5.50	6.00
Yield on				
91-Day TBs	5.32	6.11	6.11	7.56
182-Day TBs	*	6.61	6.22	7.75
364-Day TBs	5.66	6.42	6.17	7.70
10-year G-sec	6.67	7.51	7.20	7.73

Relates to major banks.
* No auction was held for 182-day TBs during 2004-05.

March 2005. The firming of the deposit rates also reflected increased competition from alternative instruments of savings. By January 19, 2007, rate for deposits of more than one year maturity at major banks was 7.25-8.50 per cent, up by in the range of 175-200 basis points over the January 20, 2006 level.

3.33 During 2005-06, the range of benchmark prime lending rates (BPLRs) of PSBs and foreign banks remained unchanged, while that of private sector banks firmed up by 50 basis points. Stiff competition in the credit market had led to banks lending at sub-BPLR rates. The share of sub-BPLR lending in total lending of commercial banks, excluding export credit and small loans, increased from 59.0 per cent at end-March 2005 to 69.0 per cent at end-March 2006 and further to 75.0 per cent at end-June 2006. During April-January 2006-07, the BPLRs of PSBs increased by 125-100 basis points. The range of interest rates for foreign banks remained unchanged during the period.

3.34 At end-March 2006, the primary market yields of 91-day, 182-day and 364-day Treasury Bills (TBs) were 6.11 per cent, 6.61

per cent and 6.42 per cent, respectively. During the current year 2006-07, in the first auctions for these TBs held in April 2006, the primary market yields softened to 5.78 per cent, 6.14 per cent and 6.06 per cent, respectively. However, showing an increasing trend from May 2006, these TB yields rose gradually to 6.36 per cent, 7.78 per cent and 7.05 per cent, respectively, at end-June 2006; to 6.60 per cent, 7.78 per cent and 6.90 per cent, respectively, at end-September 2006; and further to 7.19 per cent, 7.30 per cent and 7.24 per cent, respectively, at end-December 2006. The yield for 91-day TBs, after remaining at 7.14 per cent at the first three weekly auctions of January 2007 started gradually creeping up; it was 7.39 per cent on January 24, 2007 and further hardened to 7.56 per cent on January 31, 2007. The yields on 182-Day and 364-Day TBs also showed hardening trends and were 7.75 per cent and 7.70 per cent, respectively, at end-January 2007. (Table 3.3).

3.35 The yield on 10-year residual maturity Government securities during 2005-06 hardened by 84 basis points to 7.53 per cent

at end-March 2006, reflecting partly the rise in the yield of comparable maturity US security and the hardening of international crude oil prices. With liquidity tightening in the money market, the yield curve flattened with the spread between 1-year and 10-year yields narrowing to 98 basis points at end-March 2006.

3.36 During the early part of 2006-07, with a surge in the crude oil prices in the international market, tightening of monetary policy in the US and other economies, hike in domestic policy rates and expected issuance of oil bonds, yields on 10-year G-sec hardened further. It peaked at 8.39 per cent on July 11, 2006, and remained above 8.00 per cent up to August 23, 2006. It declined gradually to 7.38 per cent on December 5, 2006 in consonance with a rally in the price of US bonds of similar maturity, following a pause in the US Federal funds rate hike and downward movement in the crude oil prices in the world markets. This softening trend was reversed thereafter and, with continued high growth in bank credit and the announcement on December 8, 2006 of hikes in the CRR by 25 basis points each in two phases in the next 30 days to curb monetary accommodation of inflation, the yield started hardening. Yield increased from 7.39 per cent on December 8, to 7.53 per cent on December 11, to 7.68 per cent on December 14, 2006, 7.87 per cent on January 23, 2007 and softened to 7.73 per cent on January 31, 2007, before hardening again on February 14, 2007 to 8.08 per cent.

3.37 Corporate bond yields followed the same general trend as the yield on Government securities and other money market rates. The yield on 10-year AAA rated corporate bond hardened from 8.22 per cent on March 31, 2006 to 9.28 per cent on January 23, 2007. From 34 basis points on January 31, 2006 and 92 basis points on March 31, 2006, the spread over comparable G-sec yield widened to 141 basis points on January 31, 2007.

3.38 The weighted call money rate displayed considerable volatility. For example, on March 31, 2006, it suddenly shot up to 6.64

per cent from 5.95 per cent on the previous day, but eased thereafter to 5.43 per cent on June 2, 2006. On July 26, 2006, following the hike in the repo/reverse-repo rates by 25 basis points each the previous day, the rate rose sharply to 6.06 per cent. After remaining range-bound thereafter, with high credit growth continuing, transient liquidity pressures emanating from advance tax outflows hardened the rate to 7.25 per cent on September 29, 2006 and narrowed its spread over the repo rate to just 25 basis points. Up to December 12, 2006, the weighted call money rate remained within the repo/reverse-repo band of 6.00-7.25 per cent. However, from December 13, 2006 onward, for almost three fortnights, the rate breached the band with a peak of 16.78 per cent on December 29, 2006 in the wake of liquidity tightening due to hike of 25 basis points each in CRR effective the fortnights beginning December 23, 2006 and January 6, 2007, and the outflow on account of advance tax. With the tight liquidity conditions and sharp depletion of excess SLR holdings by SCBs, the scope for availing of the repo window of RBI under LAF got restricted; under the circumstances the call money market route was resorted to by the SCBs which resulted in increase in call money rates, as such operations are conducted without any collateral. As on February 6, 2007, the weighted call money rate was 7.83 per cent which was higher than the repo rate of 7.50 per cent. (Table 3.3).

Banking policy and trends

3.39 Union Budget for 2006-07 announced interest rate relief at two percentage points on the principal amount up to Rs. 1 lakh on crop loans availed of by the farmers for *Kharif* and *Rabi* seasons 2005-06. Conforming to the announcement, banks were advised on March 9, 2006 to credit the amount of relief to the borrower's account before March 31, 2006 and seek reimbursement thereafter. Out of a grant of Rs. 1,700 crore, funds aggregating Rs.840 crore were placed with the National Bank for Agriculture and Rural Development (NABARD) and NABARD settled claims aggregating to Rs. 500.65 crore to cooperative banks and regional rural banks (RRBs) upto

December 31, 2006 and balance of Rs. 339.35 crore was remitted to Government of India (GOI). In compliance with the 2006-07 budget announcement, PSBs and RRBs, were advised by the RBI on June 5, 2006 that, with effect from *Kharif* 2006-07, Government would provide them interest rate financial assistance of 2 per cent per annum in respect of short-term production credit up to Rs. 3 lakh provided to farmers. This amount of financial assistance is calculated on the amount of crop loan disbursed from the date of disbursement/drawal up to the date of payment or up to the due date, i.e. March 31, 2007, for the *Kharif* and June 30, 2007 for the *Rabi*, respectively, whichever is earlier. This financial assistance is available on the condition that they make available short-term credit at ground level at 7 per cent per annum. This subvention was available only to short-term production credit disbursed by RRBs out of their own funds and excludes such credit as supported by refinance from NABARD. Subsequently, GOI extended the interest subvention at rate of 2 per cent on the own involvement of banks in crop loan lendings at 7 per cent to cooperative banks also.

3.40 Banks were advised to formulate a transparent policy, with the approval of their Boards, for providing 'One Time Settlement' facility to those farmers whose accounts have been rescheduled/restructured due to natural calamities as also for those who have defaulted on account of circumstances beyond their control.

3.41 Banks were further advised in July 2006 to ensure that loan accounts of farmers, which are overdue as on July 1, 2006 be rescheduled on the lines of the package of Relief Measures to the Vidarbha Region in Maharashtra announced by the Prime Minister and the interest thereon (as on July 1, 2006) be waived. Fresh finance was to be ensured to such farmers. The total amount of credit of Rs. 1,275 crore envisaged to be released by banks was allocated by Bank of Maharashtra (as the Maharashtra State Level Bankers' Committees (SLBC) convenor), among the banks functioning in the relevant districts of the Vidarbha region.

3.42 In order to mitigate distress of farmers in the 31 debt-stressed districts of Andhra Pradesh, Maharashtra, Karnataka and Kerala, GOI has announced a rehabilitation package in respect of agriculture credit. The components of the package are (a) the entire interest on overdue agricultural loans as on July 31, 2006 will be waived and all farmers will have no past interest burden as on that date, so that they will be immediately eligible for fresh loan from the banking system, (b) the overdue loans of the farmers as on July 31, 2006 will be rescheduled over a period of 3-5 years with one-year moratorium, and (c) an additional credit flow will be ensured in these 31 districts through the banking sector. The burden of waiver of overdue interest on agricultural loans will be shared equally by the Central and State Governments.

3.43 The Annual Policy Statement of RBI for 2006-07 envisaged that banks' total exposure to venture capital funds (VCFs) will be treated as part of capital market exposure and assigned a higher risk weight of 150 per cent. In August 2006, banks were advised that all exposures to VCFs (both registered and un-registered) would be deemed at par with equity, and hence would be reckoned for compliance with the capital market exposure ceilings (ceiling for direct investment in equity and equity-linked instruments as well as ceiling for overall capital market exposure), and the limits prescribed for such exposure would also apply to investments in VCFs.

3.44 During the year, it was also announced that for opening small accounts banks need to seek only a photograph of the account holder and self-certification of address. Outstanding balances in these accounts at any time will be limited to Rs. 50, 000 and the total transactions limited to Rs.200,000 in one year.

3.45 To protect customers' rights, enhancing the quality of customer service and strengthening grievance redressal mechanism in banks, RBI initiated several measures on an ongoing basis. To facilitate customer service in banks under a single window, RBI set-up a separate Customer Service Department (CSD) in July 2006. Its main functions, among other things, include:

(i) disseminating instructions/information relating to customer service and grievance redressal by banks; (ii) administering the Banking Ombudsman (BO) scheme; (iii) acting as a nodal department for the Banking Codes and Standards Board of India (BCSBI); ensuring redressal of complaints received directly by the RBI on customer service in banks; and (iv) liaising between banks, Indian Banks Association (IBA), BO offices and the regulatory departments within RBI on matters relating to customer service and grievance redressal.

3.46 After taking into account the state of preparedness of the banking sector, RBI allowed banks some more time to put in place appropriate systems so as to ensure full compliance with BASEL II. Indian banks having presence outside India and foreign banks operating within India are to migrate to the standardised approach for credit risk and the basic indicator approach for operational risk under BASEL II with effect from March 31, 2008. All other scheduled commercial

banks are encouraged to migrate to these approaches under BASEL II in alignment with them, but in any case not later than March 31, 2009.

Financial performance

3.47 High sustained growth was observed in credit extended by SCBs in 2005-06; the growth in non-food credit extended by SCBs during 2005-06 was 31.8 per cent which was higher than the growth of 27.5 per cent in 2004-05. The aggregate deposits, on the other hand, grew by 18.1 per cent in 2005-06 compared to 12.8 per cent in 2004-05. This led the banks to fund loans and advances by increased resort to borrowings and offloading of Government and other approved securities. SCBs also accessed the capital market for this purpose as well as to strengthen their capital base: Rs.11,067 crore was raised from the equity market during 2005-06; in addition, Rs.30,151 crore was raised through 97 issues by private placement as compared to Rs.15,219 crore raised through 87 such issues in 2004-05.

Table 3.4 : Working results of scheduled commercial banks

Items	Public sector banks		Foreign banks		Old pvt. sector banks		New pvt. sector banks		SCBs	
	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06	2004-05	2005-06
	Rs. Crore									
A. Income	144567	160946	13036	17435	10525	11729	22107	32099	190236	222209
I) Interest Income	120365	137614	9170	12236	9275	10359	16990	24301	155801	184510
II) Other income	24202	23332	3866	5199	1250	1370	5117	7797	34435	37698
B. Expenditure	129125	144407	11054	14367	10089	10852	19010	27990	169278	197616
I) Interest expended	68764	80272	4042	5150	5673	6236	10600	15261	89079	106919
II) Intermediation cost	37041	41532	4417	5625	2611	3123	6064	8450	50133	58729
III) Provisions and contingencies	23319	22603	2595	3592	1806	1493	2345	4279	30065	31968
C. Operating profit	38761	39142	4577	6661	2242	2369	5443	8388	51023	56560
D. Net profit (A-B)	15442	16539	1982	3069	436	876	3098	4109	20958	24593
E. Net interest income (Spread)	51601	57342	5129	7086	3602	4123	6390	9041	66722	77591
F. Total assets	1692681	1926334	153636	201586	133470	149749	294421	421659	2355509	2787892
As Per cent of total assets										
A. Income	8.5	8.4	8.5	8.6	7.9	7.8	7.5	7.6	8.1	8.0
I) Interest Income	7.1	7.1	6.0	6.1	6.9	6.9	5.8	5.8	6.6	6.6
II) Other income	1.4	1.2	2.5	2.6	0.9	0.9	1.7	1.8	1.5	1.4
B. Expenditure	7.6	7.5	7.2	7.1	7.6	7.2	6.5	6.6	7.2	7.1
I) Interest expended	4.1	4.2	2.6	2.6	4.3	4.2	3.6	3.6	3.8	3.8
II) Intermediation cost	2.2	2.2	2.9	2.8	2.0	2.1	2.1	2.0	2.1	2.1
III) Provisions and contingencies	1.4	1.2	1.7	1.8	1.4	1.0	0.8	1.0	1.3	1.1
C. Operating profit	2.3	2.0	3.0	3.3	1.7	1.6	1.8	2.0	2.2	2.0
D. Net profit (A-B)	0.9	0.9	1.3	1.5	0.3	0.6	1.1	1.0	0.9	0.9
E. Net interest income (Spread)	3.0	3.0	3.3	3.5	2.7	2.8	2.2	2.1	2.8	2.8
F. Total assets	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Memo item										
1. Operating expenses as per cent of net income	48.9	51.5	49.1	45.8	53.8	56.9	52.7	50.2	49.6	50.9

3.48 During 2005-06, the total income of SCBs increased by 16.8 per cent compared to 3.5 per cent in 2004-05. However, as a proportion of assets, income at 8.0 per cent in 2005-06 was marginally lower than 8.1 per cent in 2004-05. Interest income, which is the major source of income of SCBs, grew sharply by 18.4 per cent in 2005-06 as against 7.9 per cent in the previous year, largely owing to increased volumes of credit and hardening of interest rates. 'Other income' grew by 9.5 per cent as compared to a decline of 12.9 per cent in 2004-05.

3.49 Expenditure of SCBs registered substantial growth of 16.7 per cent in 2005-06 compared to 4.8 per cent in 2004-05. Due to higher borrowing cost, interest expended by SCBs increased sharply by 20.0 per cent compared to 1.7 per cent in the previous year. Non-interest income increased by 17.1 per cent compared to 14.7 per cent in the previous year. Accordingly, banks' burden (excess of non-interest expenditure over non-interest income) increased marginally to 0.7 per cent of assets in 2005-06 from 0.6 per cent in 2004-05; the efficiency ratio — defined as operating expenses as a percentage of net interest income plus non-interest income — deteriorated from 49.6 per cent to 50.9 per cent between 2004-05 and 2005-06.

3.50 With the favourable impact of increased interest income, overall operating profit of SCBs registered a growth of 10.9 per cent in 2005-06 as against a decline of 3.0 per cent in 2004-05. Operating profits of all bank groups (consisting of State bank group, nationalised banks, other public sector banks,

foreign banks etc.) increased in 2005-06 except for the nationalised banks whose operating profit marginally declined to Rs.23,011 crore in 2005-06 from Rs. 23,121 crore in 2004-05. Operating profits for SCBs, as a proportion of total assets, declined to 2.0 per cent during 2005-06 from 2.2 per cent in 2004-05. (Table 3.4)

Interest spread

3.51 Net interest income or spread — defined as the difference between interest income and interest expenses — of SCBs as a proportion of total assets remained unchanged at 2.8 per cent in 2005-06, substantially higher than the standard international norm. The spread of foreign banks increased to 3.5 per cent in 2005-06 from 3.3 per cent in 2004-05, and that of PSBs and old private banks was 3.0 per cent and 2.8 per cent, respectively, in 2005-06 as compared to 3.0 per cent and 2.7 per cent, respectively, in 2004-05. (Table 3.4)

Non-performing assets (NPAs) of the banking sector

3.52 Improved industrial climate and new options available to banks for dealing with bad loans helped in recovering a substantial amount of NPAs in 2005-06 (Table 3.5). Such recoveries during 2005-06 were more than fresh accruals. Gross NPAs of SCBs, which had declined by Rs.5,414 crore in 2004-05, fell by a further amount of Rs. 7,558 crore in 2005-06. Aggregate amount recovered and written-off increased to Rs. 28,717 crore during 2005-06 from Rs. 25,007 crore in the previous year. NPAs of SCBs, at 1.9 per cent

Table 3.5 : Non-performing assets of scheduled commercial banks

Items	Gross NPAs (Rs. Crore)			Percentage to gross advances			Percentage to total assets		
	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
Bank group									
1. Public Sector	51538	48399	42106	7.8	5.5	3.7	3.5	2.7	2.1
2. Private Sector	10355	8782	7782	5.8	4.4	2.4	2.8	2.1	1.4
3. Foreign	2894	2192	1927	4.6	2.8	1.9	2.1	1.4	1.0
4. SCBs(1+2+3)	64787	59373	51815	7.2	5.2	3.3	3.3	2.5	1.9
Bank group									
	Net NPAs (Rs. Crore)			Percentage to net advances			Percentage to total assets		
1. Public Sector	19335	16904	14561	3.1	2.0	1.3	1.3	1.0	0.7
2. Private Sector	4128	4212	3161	2.4	2.2	1.0	1.1	1.0	0.6
3. Foreign	933	639	808	1.5	0.8	0.8	0.7	0.4	0.4
4. SCBs(1+2+3)	24396	21755	18530	2.8	1.9	1.2	1.2	0.9	0.7

of total assets at end-March 2006, were substantially lower than the 2.5 per cent observed a year ago. The operations of the Assets Reconstruction Company (India) Limited (ARCIL) during 2005-06 helped in NPA recovery. ARCIL acquired 559 cases of NPAs, with total dues of Rs.21,126 crore, from 31 banks/financial institutions (FIs).

Capital adequacy ratio

3.53 With important measures for improving capital adequacy such as (a) application of capital charge for market risk from March 2006, (b) a sharp increase in risk weighted assets on account of higher credit growth, and (c) increase in risk weights for personal loans, real estate and capital market exposure, the overall capital to risk weighted assets ratio (CRAR) for all SCBs was 12.3 per cent at end-March 2006. Though marginally lower than 12.8 percent at end March 2005, the ratio has remained substantially higher than the stipulated minimum of 9.0 per cent.

3.54 The CRAR of new private sector banks improved from 12.1 per cent at end-March 2005 to 12.6 per cent at end-March 2006. In respect of foreign banks, while it declined from 14.0 per cent to 13.0 per cent, it was still higher than the overall CRAR of 12.3 per cent observed for all SCBs. Nationalised banks' CRAR registered a decline from 13.2 per cent at end-March 2005 to 12.3 per cent at end-March 2006.

Technological developments in banks

3.55 The banking sector in India is adapting itself to rapid innovations in technology particularly on the information based technology front to impart efficiency in providing wide range of products and services to the public at large. Computerisation of banking operations had received high importance in 2005-06. Since September 1999 to March 2006, PSBs incurred an expenditure of Rs.10,676 crore on computerisation and development of communication networks. Out of 27 PSBs, branches of as many as 10 PSBs were 100 per cent computerised, while more than 50 per cent branches of 12 banks were computerised by end-March 2006.

3.56 The number of branches providing 'core banking solutions' (CBS) in recent years is increasing rapidly. Under CBS, a number of services are being provided such as 'anywhere banking', 'everywhere access', and quick transfer of funds in an efficient manner and at reasonable cost. New private sector banks, foreign banks and a few old private sector banks have already put in place CBS; PSBs are increasingly adopting similar system. The total number of branches of PSBs offering CBS increased from 11.0 per cent as on March 31, 2005 to 28.9 per cent as on March 31, 2006.

3.57 Total number of Automated Teller Machines (ATMs) installed by the banks were 21,147 at end-March 2006. Nationalised banks with 7,165 ATMs were the largest providers of the ATM service followed by new private banks (6,112), SBI group (5,443), old private banks (1,547) and foreign banks (880).

Bank credit

3.58 With credit growing by 30.8 per cent in 2005-06, credit-deposit (C-D) ratio of the SCBs was sharply up from 64.7 per cent at end-March 2005 to 71.5 per cent at end-March 2006. With buoyant credit growth, the C-D ratio has continued to grow during the current year so far, and was 74.0 per cent on January 19, 2007 compared to 70.0 per cent on the corresponding date of the previous year.

3.59 Higher-than-expected GDP growth, particularly in manufacturing, appears to be driving the demand for non-food credit. Non-food credit by SCBs expanded by Rs. 259,435 crore during the current year up to January 19, 2007, substantially higher than the Rs. 212,176 crore observed during the corresponding period of the previous year.

Investments

3.60 SCBs' investment portfolio consist of: (i) SLR investments, comprising of investment in Government and other approved securities, and (ii) non-SLR investments comprising of commercial papers, shares, bonds and debentures issued by the corporates. Compared to an increase of Rs. 49,373 crore during 2004-05, SLR investments by SCBs

declined by Rs. 22,809 crore during 2005-06. The decline in 2005-06 was mainly through an offloading of Government securities worth Rs. 19,514 crore and was for funding the growing demand for credit.

3.61 As a proportion of NDTL, SLR investment by SCBs is, by law, required to be at least 25 per cent, but such investments by SCBs are normally above this limit. While it had come down from 38.0 per cent at end-March 2005 to 31.3 per cent at end-March 2006, it continued to be considerably higher than the statutory requirement of 25.0 per cent.

3.62 During the current financial year up to January 19, 2007, with a hike in the deposits rates and consequent pick-up in deposit growth, SLR investment increased sharply by Rs. 41,837 crore (of which, Rs. 36,754 crore in Government securities) compared to a decline of Rs.24,881 crore (of which, Rs.22,885 crore in Government securities) during the corresponding period of 2005-06. Nevertheless, with SLR investments growing slower than deposits, SLR investments as a proportion of deposits declined to 31.8 per cent on January 19, 2007 compared to 36.8

per cent a year ago. As on January 19, 2007, SLR investment by SCBs was Rs. 759,291 crore — with investment in Government securities at Rs.737,496 crore.

Sectoral deployment of bank credit

3.63 Credit to agriculture and allied sector expanded by Rs. 49,602 crore (39.9 per cent) in 2005-06 compared to an increase of Rs. 33,728 crore (37.3 per cent) in the previous year. Credit to industry (large and medium) increased by Rs.110,435 crore (31.6 per cent) in 2005-06, compared to the expansion of Rs. 101,737 crore (41.2 per cent) in 2004-05. Credit to small scale industries was higher by Rs. 16,757 crore (22.6 per cent) compared to Rs. 8,334 crore (12.7 per cent) in 2004-05. Credit to housing loans expanded by Rs.50,882 crore (38.0 per cent) in 2005-06 compared to Rs.81,927 crore (157.6 per cent) in 2004-05. While loans to real estate during 2005-06 increased by Rs.12,832 crore compared to Rs. 7,969 crore extended during 2004-05, the growth rate of 94.7 per cent in 2005-06 was lower than the corresponding growth rate of 142.9 per cent observed during the previous year.

Table 3.6 : Sectoral deployment of gross bank credit

	Outstanding balances at the end of				Variations during ¹					
	2004-	2005-	September		2004-	2005-	Sep.06	2004-	2005-	Sep.06
	05	06	2005	2006	05	06	over Sep.05	2005	06	over Sept.05
	(Rs. crore)				Per cent					
I. Gross bank credit	1045954	1433728	1194588	1576982	281571	387774	382394	36.8	37.1	32.0
1. Public food procurement credit	41121	40691	40327	33458	5160	-430	-6869	14.3	-1.0	-17.0
2. Gross non-food Bank Credit	1004833	1393037	1154261	1543524	276411	388204	389263	37.9	38.6	33.7
(a) Priority sectors (i+ii+iii) ²	374953	509886	427646	536747	111119	134933	109101	42.1	36.0	25.5
i. Agriculture ³	124269	173871	140194	186527	33728	49602	46333	37.3	39.9	33.0
ii. Small scale industry	74189	90946	77827	94934	8334	16757	17107	12.7	22.6	22.0
iii. Other priority sector	176495	245069	209625	255286	69057	68574	45661	64.3	38.9	21.8
(b) Medium and large industries	348947	459382	403686	501960	101737	110435	98274	41.2	31.6	24.3
(c) Wholesale trade (excluding food procurement)	31559	39661	30534	43509	6692	8102	12975	26.9	25.7	42.5
(d) Other sectors of which:	249374	384108	292395	461308	56863	134734	168913	29.5	54.0	57.8
(1)Housing	133908	184790	152286	209099	81927	50882	56813	157.6	38.0	37.3
(2)Consumer durables	8976	8167	9211	9574	702	-809	363	8.5	-9.0	3.9
(3)Real estate loans	13546	26378	18047	35574	7969	12832	17527	142.9	94.7	97.1
(4)Loans to individuals ⁴	4101	5210	4323	4485	2081	1109	162	103.0	27.0	3.7

Note : Data is provisional; accounts for 90 per cent of bank credit of all SCBs.

1. As on the last reporting Friday of the year.
2. Excluding investments in eligible securities.
3. Indirect finance not included.
4. Against shares and debentures/bonds

3.64 Provisional data on sectoral deployment of non-food credit for the first half of 2006-07 indicates the continuation of the trend of broadening outreach of such credit across the various sectors witnessed during the earlier year. On September 29, 2006, the year-on-year increase in credit to agriculture and allied activities was Rs. 46,333 crore or 33.0 per cent and to industry (large and medium) was Rs.98,274 crore or 24.3 per cent. On a year-on-year basis, housing loans as well as loans to real estate continued to expand at a faster rate of 37.3 per cent and 97.1 per cent, respectively. (Table 3.6).

Priority sector lending

3.65 The higher credit to agriculture and housing sector, which together constituted more than two-thirds of incremental priority sector lending, helped in the 36.0 per cent increase in priority sector lending in 2005-06 on top of an increase of 42.1 per cent in the previous year. Policy measures initiated by the Government and the RBI had facilitated higher credit to small scale industries, which registered an increase of 22.6 per cent in 2005-06 as compared to 12.7 per cent during the previous year. During 2006-07, the outstanding credit to the priority sectors as on September 29, 2006 was Rs. 536,734 crore compared to Rs.427,646 crore as on September 30, 2005.(Table 3.6)

Lending to sensitive sectors

3.66 A sharp increase in the exposure to the real estate sector during 2005-06 led to substantial lending to 'sensitive sectors' by SCBs. Overall exposure to sensitive sectors

Table 3.7: Lending to sensitive sectors by scheduled commercial banks

Sector	At end-March			
	2005	2006	2005	2006
	Rs. Crore		Per cent to total	
(i) Capital market	15860	22077	9.7	7.7
(ii) Real estate	145605	260223	88.9	90.8
(iii) Commodities	2366	4391	1.4	1.5
Total	163831	286691	100.0	100.0

during 2005-06 was 18.9 per cent of aggregate bank credit, of which loans to real estate, capital market and commodities sectors in total credit were 17.2 per cent, 1.5 per cent and 0.3 per cent, respectively. Share of the real estate sector in such lending increased from 88.9 per cent to 90.8 per cent between end-March 2005 and end-March 2006 (Table 3.7).

Agricultural credit

3.67 During the Tenth Five Year Plan period, up to December 31, 2006, total flow of bank credit for agriculture and allied activities is Rs. 611,678.66 crore. Over the period (2002-03 to 2006-07), the share of commercial banks in total credit flow to agriculture and allied activities has increased, with significant increases from 2004-05 onwards.

3.68 As per the 'farm credit package' announced by the Government of India on June 18, 2004, for doubling the flow of credit to agriculture in the following three years, the target for institutional credit for agriculture by all agencies was fixed by ensuring a 30 per cent growth during 2004-05 over the previous

Table 3.8 : Flow of institutional credit to Agriculture

	Rs. crore				
Agencies	2002-03	2003-04	2004-05	2005-06	2006-07*
Co-operative Banks	23,716.38	26,958.79	31,424.23	39403.77	33,174.32
RRBs	6,069.79	7,581.15	12,404.00	15222.90	15,170.03
Commercial Banks	39,773.60	52,440.85	81,481.14	125858.90	1,00,998.81
Grand Total (1+2+3)	69,559.77	86,980.79	1,25,309.37	1,80,485.57	1,49,343.16
* Upto 31 December 2006					

year's achievement. With institutional credit flow to agriculture at Rs.125,309 crore in 2004-05, registering a growth of 44 per cent, it exceeded the target set by a wide margin (Table 3.8). The target for such credit flow was fixed at Rs.141,000 crore for 2005-06 on the basis of performance of the various agencies during 2004-05. With growth of 44 per cent, such credit of Rs. 180,485.57 crore again surpassed the target for 2005-06. During 2006-07 (up to December 31, 2006), the total flow of institutional credit at Rs.149,343.16 crore (provisional) constituted 85 per cent of the annual target of Rs.175,000 crore for the year.

Kisan credit card scheme

3.69 With a total of 642.49 lakh Kisan Credit Cards (KCCs) issued by the banking system as on December 31, 2006, the KCC Scheme introduced in August 1998 appears to have become a widely accepted mechanism for credit delivery to farmers (Table 3.9).

3.70 With a view to making KCC more user-friendly and comprehensive in its coverage of credit needs of the farmers through a single window, NABARD has further enlarged the scope of the KCC scheme to cover long-term loans for agriculture and allied activities as well. So far, the coverage of credit thereunder was restricted to short-term and medium-term loans. However, taking into consideration the

nature of requirement of the clientele of State Co-operative Agriculture and Rural Development Bank (SCARDBs), the benefits of KCC scheme have been extended to the long-term borrowers of the co-operative credit structure too. This is also expected to pave the way for acceptance of KCC as a single window for comprehensive rural credit delivery.

3.71 Keeping in view the directive of the Government of India for doubling the flow of credit to agriculture sector, NABARD advised the co-operative banks and RRBs to identify and bring into their fold, such farmers, including defaulters, oral lessees, tenant farmers, share-croppers, etc., who may have been outside the fold of the scheme, for any reasons, as also new farmers. The co-operative banks and RRBs were advised to set realistic targets and cover all farmers under KCC by March 31, 2007.

3.72 Further, the banks have to ensure that KCCs continue to get renewed in a hassle-free manner and direct their efforts towards ensuring 'quality in operations' on the KCCs. More importantly, banks have also to ensure that, henceforth, crop loans are routed only through KCCs.

Micro-finance

3.73 NABARD has been making continuous efforts through its micro-finance programme for improving the access of the rural poor to formal institutional credit. The Self Help Group (SHG) -Bank Linkage Programme was introduced in 1992 as a mechanism to provide the poor in rural areas, at their doorstep, easy and self-managed access to formal financial services on a sustainable basis by enabling them to gain access to banking services in a cost-effective manner. In all, 547 banks (47 commercial banks, 158 RRBs and 342 co-operative banks) are now actively involved in the operation of this programme. As on March 31, 2006, bank loans of Rs.11,398 crore were availed of by 2,238,565 SHGs from the banking system (Table 3.10). As on March 31, 2006 the average bank loan per SHG was around Rs.50,917; the programme has enabled nearly 329 lakh poor

Table 3.9 : Agency-wise KCCs Issued

<i>(Lakhs)</i>				
Year	Co-operative Banks	PRBs	Comercial Banks	Total
1998-99	1.56	0.06	6.22	7.84
1999-00	35.95	1.73	13.66	51.34
2000-01	56.14	6.48	23.90	86.52
2001-02	54.36	8.34	30.71	93.41
2002-03	45.79	9.64	27.00	82.43
2003-04	48.78	12.75	30.94	92.47
2004-05	35.56	17.29	43.95	96.80
2005-06	25.98	12.49	41.65	80.12
2006-07#	15.48	10.4	25.68*	51.56
Total	319.6	79.18	243.71	642.49
% Share	49.75	12.32	37.93	100.00
* Upto 30 June 2006 # upto December 31, 2006.				

Table 3.10 : Progress of SHG-Bank linkage

Year	New SHG financed by banks			Bank loan** (Rs. crore)		
	During the year		Cumulative No.	During the year		Cumulative Amount
	No.	Growth (%)		Amount	Growth (%)	
2002-03	255,882	29	717,360	1,022.34	87	2,048.68
2003-04	361,731	41	1,079,091	1,855.53	81	3,904.21
2004-05	539,365	49	1,618,456	2,994.25	62	6,898.46
2005-06	620,109	15	2,238,565	4,499.09	50	11,397.55
2006-07#	237,927		2,476,492	2,114.31		13,511.86

** Includes repeat loans to existing SHGs.
As on 31.12.2006.

families in the country to gain access to micro-finance facilities from the formal banking system. During 2006-07, as against the target of 3.85 lakh new SHGs, as on December 31, 2006, as many as 2.38 lakh SHGs were credit-linked and bank loans of Rs.13,511.86 crore were disbursed.

Rural infrastructure development fund

3.74 The Rural Infrastructure Development Fund (RIDF) was announced by Government in 1995-96 to boost public sector investment in agriculture and rural infrastructure. The Fund was to be raised from the commercial banks to the extent of their shortfall in agricultural lending. The Fund has continued and the corpus is announced every year during the budget. So far, eleven tranches have been completed and RIDF-XII is on-going during the year 2006-07.

3.75 Though the initial thrust had been on irrigation projects, the development of rural roads and bridges has received a major boost since the time of RIDF-II. Subsequently, many other activities were gradually added to the list of eligible activities under RIDF. The activities, which have been made eligible for loans from RIDF, include rural roads and bridges; irrigation, mini and small hydel projects; community irrigation wells; soil conservation, watershed development and reclamation of waterlogged areas; flood protection; drainage; forest development; market yard, godowns, *apna mandi*, rural *haats* and other marketing infrastructure; cold

storages; seed/agriculture/horticulture farms; plantation and horticulture; grading and certifying mechanisms such as testing and certifying laboratories; fishing harbour/jetties; riverine fisheries; animal husbandry; modern abattoir; drinking water supply; infrastructure for rural educational institutions; public health institutions; construction of toilet blocks in existing schools and "pay and use" toilets in rural areas; village knowledge centres; desalination plants in coastal areas; infrastructure for information technology in rural areas; and construction of anganwadi centres.

3.76 The total corpus of RIDF (Tranches I to XII) aggregated to Rs.60,000 crore. The cumulative amount sanctioned and disbursed to State Governments up to January 25, 2007, was Rs. 58,795.36 crore and Rs. 34,643.87 crore, respectively. During 2006-07 up to January 25, 2007, amount sanctioned and disbursed was Rs. 7,810.85 crore and Rs. 3,306.60 crore, respectively. The first five tranches of RIDF (I to V), have since been closed and the phasing/period of implementation in respect of projects under RIDF VI to IX tranches has been extended up to March 31, 2007. The scheduled dates of closure of RIDF X, XI and XII are March 31, 2007, 2008 and 2009 respectively.

Non-banking financial companies (NBFCs)

3.77 The number of applications received by RBI for grant of certificate of registration

Table 3.11 : Number of non-banking financial companies registered with RBI

End-June	All NBFCs	NBFCs accepting public deposits
1999	7,855	624
2000	8,451	679
2001	13,815	776
2002	14,077	784
2003	13,849	710
2004	13,764	604
2005	13,261	507
2006	13,014	428

(CoR) as NBFCs till end-March 2006 was 38,244, out of which, 13,141 applications (net of cancellation), including 423 applications (net of cancellation) of public deposit accepting companies (NBFCs-D), were authorised to accept/hold public deposits. At end-June 2006, the total number of NBFCs registered with RBI was 13,014 (net of cancellation). (Table 3.11).

3.78 With the exit of many NBFCs from the public deposits taking business, the number of NBFCs-D has steadily declined. As at end June 2006, NBFCs-D were 428. The number of Residuary Non-Banking Financial Companies (RNBFCs) remained unchanged at 3 at end-March 2006.

3.79 During 2005-06, assets and public deposits of reporting NBFCs increased by Rs. 2,394 crore and Rs.2,316 crore, respectively. Net owned funds of NBFCs increased by Rs.562 crore during 2005-06, despite a decline in the number of reporting NBFCs. Deposits of reporting NBFCs at end-March 2006 were marginally lower at 1.1 per cent of aggregate deposits of SCBs compared to 1.2 per cent at end-March 2005.

3.80 Total assets/liabilities of NBFCs (excluding RNBFCs) at end-March 2006 were Rs.35,561 crore, down marginally by 1.2 per cent from Rs.36,003 crore at end-March 2005. Such assets/liabilities had increased by 9.9 per cent during 2004-05. There were major

changes in the composition of assets and liabilities as well in 2005-06. On the liability side, paid-up capital as well as public deposits of these companies declined by 11.7 per cent and 32.1 per cent, respectively, during 2005-06. On the asset side, Bill Discount business in 2005-06 registered a substantial decline of 90.4 per cent compared to an increase of 7.8 per cent during 2004-05; their SLR investment declined by 41.3 per cent during 2005-06 compared to an increase of 31.0 per cent during 2004-05 and decline of loans and advances was 27.8 per cent compared to an increase of 3.1 per cent in the previous year.

3.81 In 2005-06, a significant decline in fee-based income (61.2 per cent) and only a marginal increase in fund-based income (5.3 per cent) resulted in stagnancy of the overall income of NBFCs (marginal decline of 0.1 per cent) compared to an increase in overall income of 5.8 per cent in 2004-05. Concomitantly, expenditure registered an increase of 13.0 per cent in 2005-06 mainly because of an increase of 31.6 per cent in operating expenses. Net profit after tax of NBFCs in 2005-06 was only Rs. 152 crore compared to Rs.572 crore in 2004-05, representing a decline of 73.4 per cent compared to an increase of 7.7 per cent in 2004-05.

3.82 Gross NPAs as a proportion of gross advances as well as net NPAs as a proportion of net advances of reporting NBFCs (excluding RNBFCs, Mutual Benefit Companies (MBCs) and Miscellaneous Non-Banking Companies (MNBCs)) at end-March 2006 declined sharply to 2.4 per cent and 0.4 per cent, respectively, compared with 8.2 per cent and 2.4 per cent, respectively at end-March 2005.

3.83 The number of NBFCs (excluding RNBFCs, MBCs and MNBCs) with less than the minimum regulatory CRAR of 12.0 per cent declined from 64 at end-March 2005 to 19 at end-March 2006. The number of NBFCs with CRAR more than 30 per cent also declined from 280 at end-March 2005 to 252 at end-March 2006.

All India financial institutions (AIFIs)

3.84 Financial assistance sanctioned and disbursed by AIFIs, which in recent years had witnessed sharp decline, exhibited a steady increase during 2005-06. Financial assistance sanctioned was higher at Rs. 27,239 crore during 2005-06 compared to Rs. 19,606 crore during 2004-05. Disbursement of Rs.20,523 crore during 2005-06 was also higher than the disbursement of Rs. 15,323 crore during 2004-05.(Table3.12)

3.85 Both in sanctions and disbursements, the investment institutions have provided

Table 3.12 : Assistance by AIFIs		
<i>Rs. crore</i>		
Items	April-March	
	2004-05	2005-06
A. Sanctions		
(a) DFI*	9,202	12,074
(b) Investment Institutions@	10,404	15,165
AIFIs (a+b)	19,606	27,239
B. Disbursements		
(a) DFI*	6,351	9,323
(b) Investment Institutions@	8,972	11,200
AIFIs (a+b)	15,323	20,523
* Relating to IFCI, SIDBI, IIBI, IVCF, ICICI Venture and TFCI.		
@ Relates to LIC and GIC. Data for 2005-06 pertain only to LIC.		
Note: All data are provisional.		
Source: RBI		

assistance at levels higher than the development finance institutions.

Outlook

3.86 The rapid rise in credit growth in recent years has reflected and also helped the growth momentum of the economy. Both credit as well as money, as a proportion of GDP, are low in India by international standards. Hence, they will continue to outpace GDP in terms of growth in the years to come. But, it is unlikely that they will grow as fast as they have in the recent past.

3.87 Monetary policy will continue to face the challenge of taming inflation while not hurting the gathering momentum of growth. The challenge on the inflation front is compounded by the supply-side nature of the basic impetus. Addressing the inflation-related supply-side problem of primary commodities requires a continuation of the move to integrate the rural sector in general and agriculture in particular with the organised financial sector. Increasing the outreach of the banking system to these hitherto neglected sectors remains a major unfinished task of economic reform. Furthermore, with buoyant capital flows through the balance of payments, monetary and credit policies will have to steer a careful path of maintaining the international competitiveness of domestic economic activities.

4

Capital and Commodity Markets

I. Capital market

Progress on developing India's capital market, which is already more competitive, deep and developed by international markets standards, continued. Business in the country's oldest stock exchange, namely the Bombay Stock Exchange (BSE) dating back to 1875, which is also one of the oldest stock exchanges in the world, continued to thrive. The National Stock Exchange (NSE), which emerged in the mid-1990s and catalysed improvements in trading systems to provide the necessary depth and choice to investors, made sustained progress. With the BSE and NSE emerging as the two apex institutions of the country's capital market, restructuring of other stock exchanges went apace. Overseen by Securities and Exchange Board of India (SEBI), an independent statutory regulatory authority, the country's capital market dealt in scrips of a large number of listed companies with a wide geographical outreach, providing a world class trading and settlement system, a wide range of product availability with a fast growing derivatives market, and well laid down corporate governance and investor protection measures.

4.2 As a part of the on-going financial and regulatory reforms of the primary and secondary market segments of the capital market, a number of initiatives were taken in 2005-06 and the current year so far. These measures, together with accelerated economic growth and macroeconomic stability, sustained the confidence of investors (both domestic and foreign) in the country's capital market. The stock market scaled new peaks year after year since 2003, with the BSE

and NSE indices crossing the 14,000 and 4,000 marks, respectively, in January 2007.

Primary market

4.3 The primary capital market has remained upbeat during 2006-07 so far. The aggregate resource mobilisation in the market, especially through Initial Public Offerings (IPOs) and private placements, was much higher in calendar year 2006 than during the previous year (Table 4.1).

Table 4.1 : Resource mobilisation through primary market

(Rs. crore)

Mode	Calendar year			
	2003	2004	2005	2006
1. Debt	5,284	2,383	66	389
2. Equity	2,891	33,475	30,325	32,672
Of which, IPOs	1,708	12,402	9,918	24,779
Number of IPOs	12	26	55	75
Mean IPO size	142	477	180	330
3. Private				
Placement	59,215 [^]	93,506	83,812	117,407
4. Euro Issues (ADR/GDR)	2,153	2,029	9,788	11,301
Total (1 to 4)	69,543	131,393	123,991	161,769

[^] For April 2003 to March 2004
Source : SEBI and RBI (for Euro Issues)

4.4 Out of Rs. 161,769 crore mobilised in the primary capital market, Rs. 117,407 crore, or 72.5 per cent of the total resources mobilised, was raised through private placement. Seventy five IPOs raised Rs. 24,779 crore, which accounted for 76 per cent of resources raised through equity. The number of IPOs showed a steady rise to 75

during 2006; on an average, there were around 6 IPOs per month.

4.5 Net mobilisation of resources by mutual funds increased by more than four-fold to Rs. 104,950 crore in 2006 from Rs. 25,454 crore in 2005. The sharp rise in mobilisation by mutual funds was due to buoyant inflows under both income/debt oriented schemes and growth/equity oriented schemes. After suffering negative inflows in 2003 and 2004, inflows turned positive for public sector mutual funds in 2005 and accelerated in 2006. The share of UTI and other public sector mutual funds in the total amount mobilised was around 22.5 per cent in 2005 and 17.8 per cent in 2006 (Table 4.2).

Table 4.2 : Trends in resource mobilisation (Net) by mutual funds				
<i>(Rs. crore)</i>				
Sector	Calendar Year			
	2003	2004	2005	2006
1. UTI	762	-1,487	1,273	6,426
2. Public Sector	-1,331	-1,262	4,446	12,229
3. Private Sector	35,646	7,524	19,735	86,295
4. Total (1 to 3)	35,077	4,775	25,454	104,950
Source: SEBI				

Secondary market

4.6 In the secondary market, the uptrends continued in 2006-07 with BSE Sensex and NSE Nifty indices closing above 14,000 (14,015) and 4,000 marks (4,024) for the first time, respectively on January 3, 2007. After a somewhat dull first half, conditions on the bourses turned buoyant during the later part of the year with large inflows from Foreign Institutional Investors (FIIs) and larger participation of domestic investors. During 2006, on a point-to-point basis, Sensex and Nifty Indices rose by 46.7 and 39.8 per cent, respectively. The pick up in the stock indices could be attributed to impressive growth in the profitability of Indian corporates, overall higher growth in the economy, and other global factors such as continuation of relatively soft interest rates and fall in crude oil prices in international markets.

4.7 Amongst the NSE indices, both Nifty and Nifty Junior delivered strong positive returns, appreciating by 39.8 per cent and 28.2 per cent, respectively during the calendar year 2006. While Nifty gave compounded returns of 28.3 per cent, Nifty Junior recorded compounded returns of 27.8 per cent per year between 2004 and 2006 (Table 4.3).

4.8 The NSE indices (Nifty and Nifty Junior), on a climb since November 2005,

Table 4.3 : Movements of the index of NSE (end of period)						
Month	Calendar Year					
	2004	2005	2006	2004	2005	2006
	Top 50 Stocks			Nifty Junior		
January	1,810	2,058	3,001	3,368	4,248	5,883
February	1,800	2,103	3,075	3,331	4,338	5,967
March	1,772	2,036	3,403	3,392	4,275	6,412
April	1,796	1,903	3,558	3,640	4,024	6,856
May	1,484	2,088	3,071	2,847	4,365	5,827
June	1,506	2,221	3,128	2,905	4,393	5,264
July	1,632	2,312	3,143	3,082	4,919	5,335
August	1,632	2,385	3,414	3,199	5,053	5,941
September	1,746	2,601	3,588	3,504	5,304	6,510
October	1,787	2,371	3,744	3,482	4,714	6,823
November	1,959	2,652	3,955	3,885	5,342	6,967
December	2,081	2,837	3,966	4,453	5,541	7,106
Source: NSE						

dipped in May and June 2006 owing to bearish sentiments and selling by FIIs. But there was a rapid recovery thereafter and an uptrend in the indices. Similarly, BSE Sensex (top 30 stocks) which was 9,398 at end-December 2005 and 10,399 at end-May 2006, after dropping to 8,929 on June 14, 2006, recovered soon thereafter to rise steadily to 13,787 by end-December 2006 (Table 4.4).

4.9 The BSE Sensex has continued its movement upwards in 2007 so far. It closed at 14,652 on February 8, 2007. The journey from 13,000 to 14,000 mark, achieved in just 26 trading sessions, was one of the fastest-ever climbs. The Sensex gained 4,389 points and appreciated by 46.7 per cent during 2006. It recorded compounded returns of 33.2 per cent per year between 2004 and 2006. BSE 500 recorded a gain of 38.9 per cent during 2006 to close at 5,271. The compounded returns of BSE 500 between 2004 and 2006 were 30.6 per cent per year.

4.10 According to the number of transactions, NSE continued to occupy the third position among the world's biggest exchanges in 2006, as in the previous three years. BSE occupied the sixth position in 2006, slipping one position from 2005 (Table 4.5). In terms of listed companies, the BSE ranks first in the world.

4.11 With the stock indices soaring, investors' wealth as reflected in market

Exchanges	Rank by number of transactions during calendar year			
	2003	2004	2005	2006
NASDAQ	1	1	2	1
NYSE	2	2	1	2
NSE	3	3	3	3
Shanghai	4	4	6	4
Korea	7	6	4	5
BSE	5	5	5	6
Shenzhen	8	8	7	7
Taiwan	6	7	8	8
Deutsche Borse	9	9	9	9
London/euronet	11	10	10	10

Source: NSE

capitalisation also increased significantly by over 45 per cent during 2006. The year under review saw increased daily volatility (as measured by standard deviation of returns) in the Indian markets partly due to a sharp sell off in the market during the month of May in line with global markets in reaction to the trend in global interest rates. The market soon recovered thereafter to touch new highs reflecting the underlying strength of the fundamentals of the Indian economy. The price-to-earnings (P/E) ratio, which partly reflects investors' expectations of corporate income growth in future, was higher at a little over 20 by end-December 2006 as compared to 17-18 at end-December 2005 (Table 4.6).

Months	Calendar Year					
	Top 30 Stocks			BSE 500		
	2004	2005	2006	2004	2005	2006
January	5,696	6,556	9,920	2,247	2,726	4,005
February	5,668	6,714	10,370	2,228	2,826	4,130
March	5,591	6,493	11,280	2,244	2,735	4,517
April	5,655	6,154	12,043	2,321	2,611	4,830
May	4,760	6,715	10,399	1,892	2,829	4,158
June	4,795	7,194	10,609	1,924	2,928	4,030
July	5,170	7,635	10,744	2,081	3,125	4,029
August	5,192	7,805	11,699	2,126	3,273	4,424
September	5,584	8,634	12,454	2,277	3,522	4,740
October	5,672	7,892	12,962	2,319	3,199	4,957
November	6,234	8,789	13,696	2,548	3,568	5,228
December	6,603	9,398	13,787	2,780	3,796	5,271

Source: BSE

Table 4.6 : Equity returns, volatility, market capitalisation and price earnings (P/E) ratio

Indices	Calendar Year			
	2003	2004	2005	2006
Nifty				
Returns (per cent)	71.9	10.7	36.34	39.83
End-year market capitalisation (Rs. cr.)	634,248	902,831	1,350,394	1,975,603
Daily volatility	1.23	1.73	1.11	1.64
End-year P/E	20.73	15.32	17.07	21.26
Nifty Junior				
Returns (per cent)	141.0	30.8	24.43	28.24
End-year market capitalisation (Rs. cr.)	132,409	165,444	218,575	333,693
Daily volatility	1.37	1.94	1.22	1.96
End-year P/E	15.73	14.19	17.11	21.78
BSE Sensex				
Returns (percent)	72.9	13.1	42.3	46.7
End-year market capitalisation (Rs. cr.)	635,015	735,528	1,213,867	1,758,865
Daily Volatility	1.2	1.6	1.1	1.6
End Year P/E	18.9	17.1	18.6	22.8
BSE 500				
Returns (percent)	101.1	17.5	36.6	38.9
End-year market capitalisation (Rs. cr.)	1,189,620	1,580,762	2,281,579	3,336,509
Daily Volatility	1.2	1.8	1.1	1.6
End Year P/E	-	-	17.5	20.2

Source: NSE and BSE

4.12 In terms of volatility of weekly returns, uncertainties as reflected by the Indian indices were higher than that depicted by indices outside India such as S&P 500 of United States of America and Kospi of South Korea. The Indian indices recorded higher volatility on weekly returns during the two-year period January 2005 to December 2006 as compared to January 2004 to December 2005 (Table 4.7).

Table 4.7 : Volatility of weekly returns on the equity market		
Class of stocks	Period	
	Jan '04 - Dec '05	Jan '05 - Dec '06
India		
Top 50 (Nifty)	2.85	3.21
Next 50 (Nifty Junior)	3.47	4.07
Sensex	2.81	2.96
BSE 500	3.07	3.23
Outside India		
U.S (S&P 500)	1.41	1.26
Korea (Kospi)	2.81	2.73

Source: NSE and BSE

4.13 The market valuation of Indian stocks at the end of December 2006, with the Sensex trading at a P/E multiple of 22.76 and S&P CNX Nifty at 21.26, was higher than those in most emerging markets of Asia, e.g. South Korea, Thailand, Malaysia and Taiwan; and was the second highest among emerging markets. The better valuation could be on account of the good fundamentals and expected future growth in earnings of Indian corporates (Table 4.8).

Table 4.8: P/E ratios in the emerging markets		
Index/Market	March 2006	Dec. 2006
South Korea KOSPI	10.86	12.21
Thailand SET	9.97	9.40
Indonesia JCI	21.68	25.10
Malaysia KLCI	15.33	17.35
Taiwan TWSE	14.62	20.85
BSE SENSEX	20.92	22.76
S&P CNX Nifty	20.26	21.26

Source: SEBI

4.14 Market capitalisation in terms of GDP indicates the relative size of the capital market, besides investor confidence and discounted future earnings of the corporate

sector. As on January 12, 2007, market capitalisation (NSE) at US\$834 billion was 91.5 per cent of GDP. India's market capitalisation compares well with other emerging economies and shows signs of catching up with some of the mature economies (Table 4.9).

Country	Market Capitalisation (US\$ billion) end 2006	Market Capitalisation as a per cent of GDP
China	1,000	33.3
India (NSE)	834*	91.5
Japan	4,800	96.0
Malaysia	251	181.3
South Korea	754	94.1
Thailand	141	72.7
USA	17,400	133.8

Note: GDP for India relates to 'advance estimate' for 2006-07, while those for other countries relate to calendar year 2006.

* As on January 12, 2007.

Source: Derived from various country sources

4.15 Liquidity, which serves as a fuel for the price discovery process, is one of the main criteria sought by the investor while investing in the stock market. Market forces of demand and supply determine the price of any security at any point of time. Impact cost quantifies the impact of a small change in such forces on prices. Higher the liquidity, lower the impact cost. The impact cost for purchase or sale of Rs.50 lakh of the Nifty portfolio and that of Rs. 25 lakh of Nifty Junior portfolio remained constant at 0.08 per cent and 0.16 per cent, respectively, over 2005 and 2006 (Table 4.10).

Portfolio	Calendar year			
	2003	2004	2005	2006
Nifty				
NSE impact cost at Rs.50 lakh (%)	0.10	0.09	0.08	0.08
Nifty Junior				
NSE impact cost at Rs. 25 lakh (%)	0.32	0.31	0.16	0.16

Source: NSE

4.16 The turnover in the spot and derivatives market, both on the NSE and BSE, has shown steady growth in the recent years. NSE and BSE spot market turnover more than doubled between 2003 and 2006. In respect of derivatives, the turnover on NSE nearly doubled in a single year between 2005 and 2006 (Table 4.11).

Markets	Calendar Year			
	2003	2004	2005	2006
NSE Spot	907,882	1,170,298	1,888,112	1,916,227
BSE Spot	409,373	533,483	701,024	961,653
NSE Derivatives	1,350,610	2,586,738	3,926,843	7,046,665
BSE Derivatives	4,006	4,008	4,010	4,012

Source: NSE and BSE

4.17 NSE and BSE spot market turnovers adding up to Rs. 2,877,880 crore and NSE and BSE derivatives turnover adding up to Rs. 7,050,677 crore in 2006 showed significant growth over the previous year. At the end of 2006, as a proportion of GDP (advance estimate for 2006-07), the turnover in the spot market was 70.2 per cent, while that in the derivatives market was 171.9 per cent.

4.18 In terms of the composition of market participants, the stock market continued to be dominated by retail investors. The average transaction size of the spot market indicated its continued accessibility to small investors (Table 4.12).

Markets	Calendar year			
	2003	2004	2005	2006
Average trade size (Rupees)				
NSE spot	26,993	27,716	24,293	25,657
BSE Spot	22,794	23,995	27,307	29,574
NSE derivatives	425,077	488,790	501,946	635,241

Source : NSE and BSE

Table 4.13: Transactions of FIIs

(Rs. Crore)

Transactions	Calendar year		
	2004	2005	2006
End-year number of FIIs	637	823	1,044
End-year number of sub accounts	1,785	2,273	3,045
1. Equity market activity			
a. Spot			
Gross Buy	185,672	286,021	475,623
Gross Sale	146,706	238,839	439,083
Net (Buy-Sale)	38,965	47,182	36,540
b. Derivatives activity			
Gross Buy	84,205	254,322	564,887
Gross Sale	86,133	249,875	564,182
Net (Buy-Sale)	-1,928	4,447	705
c. Total equity (a+b)			
Gross Buy	269,877	540,343	1,040,510
Gross Sale	232,839	488,714	1,003,265
Net (Buy-Sale)	37,037	51,629	37,245
2. Debt			
Gross Buy	13,812	7,015	11,061
Gross Sale	10,729	12,533	7,012
Net (Buy-Sale)	3,083	-5,518	4,049
3. Total FII investment (1+2)			
Gross Buy	283,689	547,358	1,051,571
Gross Sale	243,568	501,247	1,010,277
Net (Buy-Sale)	40,120	46,111	41,294
Total FII Investment (Net) in US \$ million [^]	8,763	10,467	9,031

[^] Includes dollar equivalents of FII investment in equity spot and debt segments as published by SEBI and their investment in derivatives converted from Rupees to dollars using annual average rates.

Source: SEBI

4.19 Both FIIs and mutual funds as institutional investors remained active in the equity market during the year. Though the net investment by FIIs in the equity spot market fell by around 22 per cent to Rs. 36,540 crore in 2006, there was a quantum increase in gross value of buying and selling (Table 4.13).

4.20 The number of FIIs rose by 27 per cent to 1,044 at the end of 2006. The number of sub-accounts too increased by 34 per cent to 3,045. Domestic participants accounted for the major part of the transactions in the Indian equity market with the gross turnover (including both buy and sale) by FIIs at

Rs. 20.6 lakh crore accounting for only 10.4 per cent of total gross (two-way) turnover of Rs. 198.6 lakh crore in spot and derivatives markets in 2006.

4.21 In tandem with an increase in resource mobilisation, assets under management of mutual funds increased by about Rs. 1.24 lakh crore to reach Rs. 3.24 lakh crore in 2006 (Table 4.14). The transactions of mutual funds in the equity segment of Indian stock exchanges, which amounted to net sales of Rs. 1,164 crore in 2004, turned to net purchase of Rs. 13,436 crore in 2005 and further to Rs. 15,384 crore in 2006.

Table 4.14 : Assets under management of mutual funds*(Rs. Crore)*

Schemes	Calendar year (Year end)			
	2003	2004	2005	2006
Money Market	32,424	59,447	64,711	97,757
Gilt	6,917	4,876	3,730	2,057
Income	71,258	47,451	52,903	86,350
Growth	22,938	31,551	67,144	119,538
Balanced	4,663	5,472	6,833	9,170
ELSS	1,893	1,740	3,927	8,726
Total	140,093	150,537	199,248	323,598

Source : NSE

Secondary market for debt

4.22 In the secondary market for debt, Government of India (GOI) securities continued to account for the major part of activity. In terms of market size of GOI bonds, the gross issuance of GOI dated securities in 2006 amounted to Rs.147,000 crore as compared to Rs. 129,350 crore in 2005. The end of the year market capitalisation of GOI securities increased by 7.6 per cent from Rs.1,051,521 crore in 2005 to Rs.1,131,558 crore in 2006.

4.23 The interest rates on GOI bonds have been on the rise in the past three years. The zero-coupon rate on a 1-year bond has shown an upward trend, rising from 6.09 per cent in 2004 to 8.03 per cent in 2006. Likewise, the zero-coupon rate on a 10-year bond has increased from 6.78 per cent in 2004 to 7.22 per cent in 2005 and further to 7.57 per cent in 2006. Due to the increase in interest rates, the returns to GOI bond index continued to be negative during 2006. Further, the volatility of GOI bond market during 2006 was higher than that during 2005.

Policy developments

4.24 In the Securities Market, several initiatives were taken by the Government during 2006-07. Apart from initiatives in respect of primary market (Box 4.1), several measures were undertaken during the year which concern the secondary market (Box 4.2).

II. Commodity futures market

4.25 As compared to 59 in January 2005, 94 commodities were traded in the commodities futures market as of December 2006, and these included major agricultural commodities (rice, wheat, jute, gur, cotton, coffee, major pulses like urad, arahar, chana, edible oilseeds like mustard seed, coconut oil, groundnut oil and sunflower), spices (pepper, chillies, cumin seed and turmeric), metals (aluminium, tin, nickel and copper), bullion (gold and silver), crude oil, natural gas and polymer, among others. Gold accounted for the largest share (31 per cent) of trade in terms of value, followed by silver (19 per cent), guar seed (11 per cent) and chana (10 per cent). A temporary ban was imposed on futures trading in urad and tur dal in January 2007 to ensure orderly market conditions. An efficient and well-organised commodities futures market is generally acknowledged to be helpful in price discovery for the traded commodities (Box 4.5).

4.26 The growth in the commodity derivative trading witnessed in 2005-06 continued during 2006-07. Total volume of trade rose sharply from Rs. 1.29 lakh crore in 2003-04 to Rs. 27.39 lakh crore in 2006-07 (till December 2006) (Table 4.15). In the first nine months of 2006-07, the volume of trade was already more than Rs. 21.55 lakh crore achieved in the twelve months of 2005-06. Turnover as a proportion of GDP increased from only 4.7 per

Box 4.1 : Policy developments in primary market

In the Primary Market the following policy initiatives were undertaken during 2006-07:

- SEBI notified the disclosures and other related requirements for companies desirous of issuing Indian Depository Receipts in India. It was mandated that the issuer must be listed in its home country, must not have been barred by any regulatory body, and should have a good track record of compliance of securities market regulations. SEBI stipulated the requirements of issue size, subscription to the issue and disclosures to be made in the prospectus of the issue such as general information, disclaimer clause, offering details, risk factors and financial information among other requirements.
- As a condition of continuous listing, listed companies have to maintain a minimum level of public shareholding at 25 per cent of the total shares issued. The exemptions include companies which are required to maintain more than 10 per cent, but less than 25 per cent in accordance with the Rule 19 2(b) of the Securities Contracts (Regulation) Rules, 1957 and the companies, that have two crore or more of listed shares and Rs. 1,000 crore or more of market capitalisation. SEBI has also provided a transparent mechanism to graduate to compliance of the continuous listing requirements for companies which are currently non-compliant or companies which might become non-compliant in future.
- SEBI has specified that shareholding pattern will be indicated by listed companies under three categories, viz., “shares held by promoter and promoter group”, “shares held by public” and “shares held by custodians and against which Depository Receipts have been issued”.
- In accordance with the guidelines issued by SEBI, the issuers are required to state on the cover page of the offer document whether they have opted for an IPO grading from the rating agencies. In case the issuers opt for a grading, they are required to disclose the grades including the unaccepted grades in the prospectus and abridged prospectus.
- SEBI facilitated a quick and cost effective method of raising funds termed as Qualified Institutional Placement (QIP) from the Indian securities market by way of the private placement of securities or convertible Bonds (but not warrants) with the Qualified Institutional Buyers. Listed companies having equity shares of same class listed on a stock exchange having nation-wide trading terminals and complying with the minimum public shareholding under continuous listing requirement are eligible to raise funds through the QIP route.
- SEBI stipulated that the benefit of ‘no lock-in’ on the pre-issue shares of an unlisted company making an IPO, currently available to the shares held by Venture Capital Funds (VCFs)/Foreign Venture Capital Investors (FVCIs), shall be limited to : (a) the shares held by VCFs or FVCIs registered with SEBI for a period of at least one year as on the date of filing draft prospectus with SEBI and (b) the shares issued to SEBI registered VCFs/FVCIs upon conversion of convertible instruments during the period of one year prior to the date of filing draft prospectus with SEBI provided that the period of holding such convertible instruments as fully paid-up, together with the period of holding shares resulting from conversion by the VCFs and FVCIs is at least one year as on the date of filing the draft prospectus with SEBI.
- In order to regulate pre-issue publicity by companies which are planning to make an issue of securities, SEBI amended the Disclosure and Investor Protection Guidelines to introduce “Restrictions on Pre-issue Publicity” from the time the issuer company’s Board approves the issue till the actual allotment of shares of the issue. The restrictions, *inter alia*, require an issuer company to ensure that its publicity is consistent with its past practices, does not contain projections or estimates or any information extraneous to the offer document filed with SEBI.

cent in 2003-04 to 18.3 per cent in 2004-05 and further to 76.8 per cent in 2005-06. The growth in the volume of trading has been primarily propelled by Multi Commodity Exchange, Mumbai (MCX) and National

Commodity Derivatives Exchange, Mumbai (NCDEX) (Figure 4.1), with these two exchanges also accounting for a large share of the number of contracts traded on the exchanges (Table 4.16).

Box 4.2 : Measures undertaken in the area of secondary market

- In continuation of the comprehensive risk management system put in place since May 13, 2005 in T+2 rolling settlement scenario for the cash market, the stock exchanges were advised to update the applicable Value at Risk (VaR) margin at least 5 times in a day by taking the closing price of the previous day at the start of trading and the prices at 11:00 a.m., 12:30 p.m., 2:00 p.m. and at the end of the trading session. This has been done to align the risk management framework across the cash and derivative markets.
- In order to strengthen the 'Know Your Client' norms and to have sound audit trail of the transactions in the securities market, PAN has been made mandatory with effect from January 1, 2007 for operating a Beneficiary Owner account and for trading in the cash segment similar to transactions in the futures and options segment of the stock exchanges.
- In order to implement the Union Budget proposal on creation of a unified platform for trading of corporate bonds, SEBI stipulated that the BSE Limited would set up and maintain the corporate bond reporting platform. The reporting shall be made for all trades in listed debt securities issued by all institutions such as banks, public sector undertakings, municipal corporations, corporate bodies and companies. Also, SEBI and RBI have set up an internal Working Group to implement the Budget 2006-07 announcement of creating a single, unified exchange-traded market for corporate bonds (**Box 4.3**).
- In line with the Government of India's policy on foreign investments in infrastructure companies in the Indian securities market, the limits for foreign investment in stock exchanges, depositories and clearing corporations, have been specified as follows: a) Foreign investment up to 49 per cent will be allowed in these companies with a separate Foreign Direct Investment (FDI) cap of 26 per cent and cap of 23 per cent on FII investment; b) FDI will be allowed with specific prior approval of FIPB; c) FII will be allowed only through purchases in the secondary market; d) FII shall not seek and will not get representation on the Board of Directors; and e) No foreign investor, including persons acting in concert, will hold more than 5 per cent of the equity in these companies.
- The application process of FII investment was simplified and new categories of investment (insurance and reinsurance companies, foreign central banks, investment managers, international organizations) were included under FII.
- GOI raised the cumulative debt investment limits from US\$1.75 billion to US\$2 billion and US\$0.5 billion to US\$1.5 billion for FII/sub account investments in Government securities and corporate debt, respectively. RBI, in its mid-term review of monetary policy, further enhanced the limit of FII investment on Central and State Government Securities to US\$2.6 billion by December 31, 2006 and further to US\$3.2 billion by March 31, 2007.
- Initial Issue Expenses and Dividend Distribution Procedure for Mutual Funds were rationalised.
- In compliance with the proposal made in Budget 2005-06, Mutual Funds were permitted to introduce Gold Exchange Traded Funds.
- Pursuant to the Union Budget 2006-07, the aggregate ceiling for the mutual fund industry to invest in ADRs/GDRs issued by Indian companies, equity of overseas companies listed on recognised stock exchanges overseas and rated debt securities was raised from US\$1 billion to US\$3 billion.
- In the Government Securities market, the RBI ceased to participate in primary issues of Central Government Securities from April 1, 2006 in line with the provisions of FRBM Act. Intra-day short sale in Government Securities was also permitted with effect from February 28, 2006. 'When Issued' transactions in Government Securities have been allowed with effect from August 1, 2006.
- Demutualisation of BSE, the oldest stock exchange in Asia, is well under way in accordance with the provisions of SEBI scheme for demutualisation. The exchange ceased to be an Association of Persons and became a company under the Companies Act in August 2005. A public issue in the first half of 2007 will ensure that at least 51 per cent of equity is held by public other than trading members. The change in the ownership structure is in keeping with the evolution of BSE as a modern, professionally managed, transparent, competitive and efficient stock exchange.
- Foreign institutional investors have been allowed to invest in security receipts.
- The report submitted by the Committee on Fuller Capital Account Convertibility (Chairman, Shri S.S. Tarapore) while considering fuller capital account convertibility, incidentally observed that though the overall regime had undergone a significant degree of liberalisation, in practice, some regulations relating to an earlier period of tight controls continued to remain, giving rise to a disconnect between the regulatory intent and the procedure in use. As a follow up action of the Committee's recommendations, an RBI task force has been set up to identify the anomalies in the present regulatory framework for current and capital accounts and that rectification should be undertaken within a period of three months (Box 4.4).

Box 4.3 : Recommendations of R.H.Patil Committee report on corporate bonds and securitisation

Corporate debt in India suffers from certain shortcomings: investment cult is confined to large cities; corporate debt market is lesser developed as compared to G-sec market; small issuer base; major issuance of corporate papers is through private placements with scanty disclosures; corporate debt market does not have a structured clearing and settlement mechanism in place. Addressing the above-mentioned issues, a high-level committee headed by Shri R.H.Patil gave the following main recommendations:

- The stamp duty on partly secured (including partly secured by registered mortgage) and unsecured debentures should be made uniform across all States and be linked to the tenor of the securities, with an overall cap;
- TDS rules for corporate bonds should be similar to the ones applicable to Government Securities;
- In order to incentivise corporates to raise a part of their requirements through bonds, the time and cost for public issuance and the disclosure and listing requirements for private placements should be reduced and made simpler;
- Banks should be allowed to issue bonds of maturities of over 5 years for asset-liability management (ALM) purpose and not only for the infrastructure sector as at present;
- A suitable framework needs to be put in place that incentivises efficient market-making and considers support mechanisms that market-makers need for this purpose, including permission to undertake repos in corporate bonds;
- For unlisted companies issuing bonds to institutional investors/Qualified Institutional Buyers (QIB), rating rationale should form the basis of listing;
- SEBI should issue suitable guidelines for providing wide dissemination of information/reports including compliance reports filed by companies and debenture trustees, defaults, if any, and all other relevant information that are required to be brought to the knowledge of the investors;
- The scope of investment by provident/pension/gratuity funds and insurance companies in corporate bonds should be enhanced and rating should form the basis of such investments rather than the category of issuers;
- Retail investors should be encouraged to participate in the market through stock exchanges. Such investors should also be encouraged to participate in the corporate bond market through mutual funds;
- There should be a guideline limiting the number of fresh issuances that would include re-issuance of the existing bonds by a corporate in a given time period (say over a quarter);
- The immediate creation of a centralized database of all bonds issued by corporates is an absolute necessity. This database should also track rating migrants;
- There is a need to develop a transparent and efficient secondary market for corporate bonds, incorporating the global best practices and systems to the extent they are relevant and consistent with the Indian securities market. SEBI, being charged with the responsibility of development and regulation of corporate bonds market, should provide the necessary regulatory framework;
- Steps should be taken to immediately establish a system to capture all information related to trading in corporate bonds as accurately and as close to execution as possible, and disseminate it to the entire market in real time;
- The clearing and settlement of trades in this market must follow the International Organisation of Securities Commission (IOSCO) standards and the global best practices by way of well established clearing and settlement procedures through recognised clearing and settlement agencies;
- In order to improve secondary market trading, repos in corporate bonds may be permitted by RBI to be operated by the proposed clearing entities for corporate bonds;
- As market participants gain experience with trade reporting and the first phase of clearing and settlement systems, efforts should be made to develop online order matching platforms for corporate bonds. Such trading platforms can be set up by the stock exchanges or jointly by regulated institutions like banks, financial institutions, mutual funds, insurance companies, etc. SEBI would frame specific guidelines for setting up such trading platforms. Any platform, other than the one offered by a stock exchange would effectively be performing the functions of an exchange to a limited extent and as such would need the specific approval of SEBI;
- Currently, the interest rate derivatives market is confined to the over-the-counter (OTC) market with only a handful of participants. Large corporates are active participants in this market. There is no mechanism for dissemination of trades and prices. Steps may be taken to introduce reporting system in the market and ensure real time dissemination of information. Simultaneously steps may be taken to immediately introduce the revised and approved exchange traded derivative products which have been pending for a long time.

**Box 4.4 : Recommendations of Committee on Fuller Capital Account Convertibility
(Tarapore Committee II) — Development of Indian debt market**

Government Securities Market

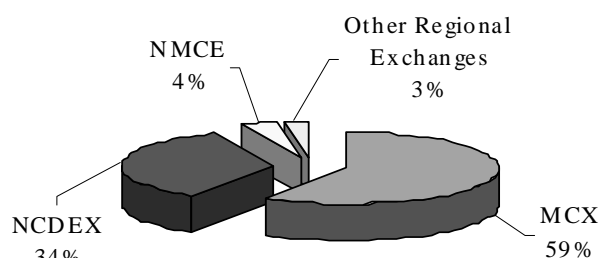
- (i) Over time, it would be preferable to progressively increase the share of mark-to-market category.
- (ii) Promoting a two-way market movement would require permitting participants to freely undertake short-selling. Currently, only intra-day short-selling is permitted. This would need to be extended to short-selling across settlement cycles; this would, however, require adequate regulatory/supervisory safeguards.
- (iii) To stimulate retail investments in gilts, either directly or through gilt mutual funds, the gilt funds should be exempted from the dividend distribution tax, and income up to a limit from direct investment in gilts could be exempted from tax.
- (iv) In line with advanced financial markets, the introduction of Separate Trading of Registered Interest and Principal of Securities (STRIPS) in G-secs should be expedited.
- (v) Expanding investor base would be strengthened by allowing, *inter alia*, entry to non-resident investors, especially longer term investors like foreign central banks, endowment funds, retirement funds, etc.
- (vi) To impart liquidity to government stocks, the class of holders of G-secs needs to be widened and repo facility allowed to all market players without any restrictions on the minimum duration of the repo; this would, however, necessitate adequate regulatory/supervisory safeguards. This will improve the incentive for a wide range of economic agents to hold G-secs for managing their liquidity needs through repos.
- (vii) A rapid debt consolidation process that is tax neutral, by exempting the gains arising from exchange of securities from all taxes, may be taken up. If necessary, a condition may be stipulated that gains arising from such an operation cannot be distributed to the shareholders.
- (viii) The limit for FII investment in G-secs could be fixed at 6 per cent of total gross issuances by the Centre and States during 2006-07 and gradually raised to 8 per cent of gross issuance between 2007-08 and 2008-09, and to 10 per cent between 2009-10 and 2010-11. The limits could be linked to the gross issuance in the previous year to which the limit relates. The allocation by SEBI of the limits between 100 per cent debt funds and other FIIs should be discontinued.

Corporate Bond and Securitised Debt Market

- (i) GOI, RBI and SEBI should be able to evolve a concerted approach to deal with the complex issues identified by the High Level Committee on Corporate Bond Market.
- (ii) Institutional trading and settlement arrangements need to be put in place and investors should have the freedom to join any of the trading and settlement platforms they find to be convenient.
- (iii) The issuance guidelines have to be changed so as to recognize the institutional character of the market. Since issuers may like to tap the bond market more frequently than the equity market and since subscribers are mainly institutional investors, issuance and listing mechanisms in respect of instruments being placed with institutional investors should be simplified by relying more on the assessment of a recognised rating agency rather than on voluminous and tedious disclosures as required by the public issues of equities.
- (iv) Until transparent trading platforms become more popular, reliable trade reporting systems should be made mandatory. Clearing and settlement arrangements like those offered by CCIL in the case of G-secs should be in place to ensure guaranteed settlement.
- (v) Stamp duty at the time of bond issues as also on securitised debt should be abolished by all the state governments.
- (vi) The FII ceiling for investments in corporate bonds of US\$1.50 billion should in future be linked to fresh issuances and the present absolute limit should be retained for the year 2006-07 and be fixed at 15 per cent of fresh issuances between 2007-08 and 2008-09 and at 25 per cent between 2009-10 and 2010-11. The allocation by SEBI of the limits between 100 per cent debt funds and other FIIs should be discontinued.
- (vii) Corporate bonds may be permitted as eligible securities for repo transactions subject to strengthening of regulatory and supervisory policies.
- (viii) In the case of the securitised debt market, the tax treatment of special vehicles that float the securitised debt has to be materially different. Government should provide an explicit tax pass-through treatment to securitisation Special Purpose Vehicles (SPVs) on par with tax pass-through treatment granted to SEBI-registered venture capital funds.
- (ix) Securitised debt should be recognised under the Securities Contract and Regulation Act (SCRA), 1956 as tradable debt. The limitations on FIIs to invest in securities issued by Asset Reconstruction Companies should be on par with their investments in listed debt securities.

Fig. 4.1

**Indian commodity exchange market share
(in terms of turn-over) in 2006-07 (till December 2006)**



■ MCX ■ NCDEX □ NMCE □ Other Regional Exchanges

Table 4.15 : Turnover on commodity futures markets

(Rs. Crore)

Exchanges	2004-05	2005-06	2006-07*
Multi Commodity Exchange, Mumbai (MCX)	165,147	961,633	1,621,803
National Commodity Derivatives Exchange, Mumbai (NCDEX)	266,338	1,066,686	944,066
National Multi Commodity Exchange, Ahmedabad (NMCE)	13,988	18,385	101,731
National Board of Trade, Indore (NBOT)	58,463	53,683	57,149
Others	67,823	54,735	14,591
All Exchanges	571,759	2,155,122	2,739,340

* Till December 31, 2006

Source: Forward Markets Commission.

Table 4.16: Number of contracts traded in national exchanges

(in lakh)

Exchange/ Year	2004-05	2005-06	2006-07*
MCX, Mumbai	33.38	152.45	255.26
NCDEX, Mumbai	109.95	274.17	236.55
NMCEX, Ahmedabad	9.56	9.95	28.51

* Till December 31, 2006

Source: Forward Markets Commission

raw jute, and in NCDEX, guar seed, chana and soy oil had the highest volumes of trade. MCX emerged as the largest commodity futures exchange during 2006-07 both in terms of turnover and number of contracts. The growth of MCX during 2006-07 is comparable with some of the international commodity futures exchanges like Goldman Sachs Commodity Index (GSCI), Dow Jones AIG Commodity Index Cash Index (DJAIG) and Reuters/Jefferies Commodity Research Bureau (RJCRB) (Figure 4.2).

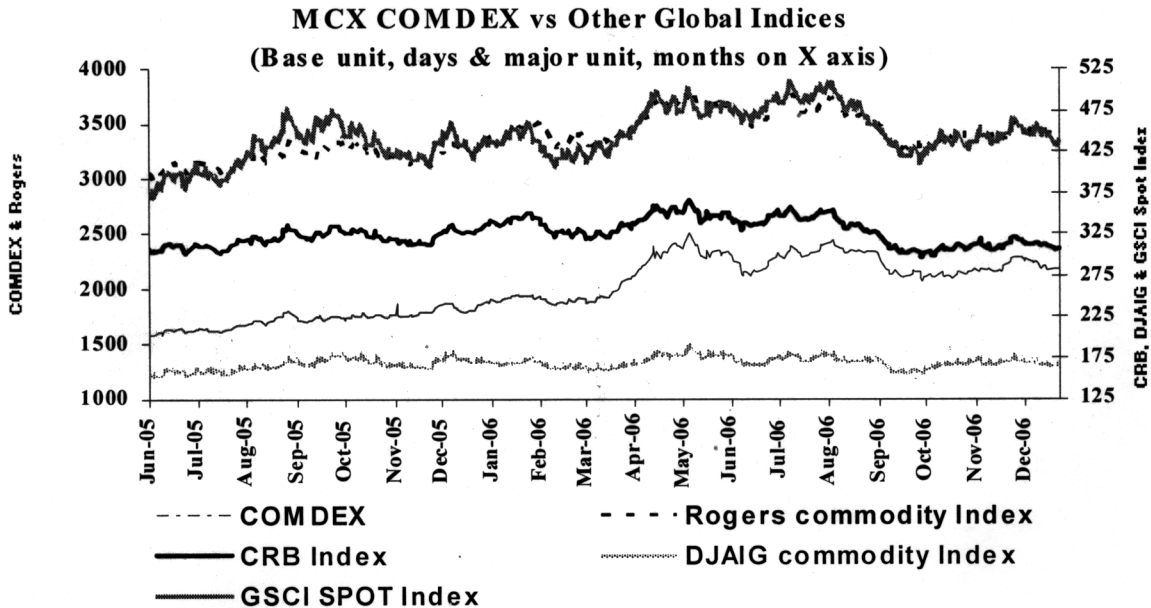
Outlook

4.27 The daily average volume of trade in the commodity exchanges in December 2006 was Rs. 12,000 crore. In the fortnight ending on December 31, 2006, gold, silver and copper recorded the highest volumes of trade in MCX, while in NMCEX, pepper, rubber and

4.28 As pick-up in investment activity is expected to continue in 2007-08, resource mobilisation through public issues, private placements and euro issues are slated to remain encouraging in the primary market

Fig. 4.2

MCX COMDEX vs Other Global Indices
(Base unit, days & major unit, months on X-axis)



segment. The recent policy initiatives to address the systemic issues in the primary capital market may increase the reliance on public issues as a major source of funds for Indian corporates besides helping to broaden the investor base.

4.29 With increased globalisation, behaviour of stock prices in the near-term will be largely influenced by a host of domestic as well as international factors. Global economy, after four consecutive years of strong growth, is expected to post an equally impressive growth in 2007. Favourable international economic conditions enhance the growth prospects of developing countries which in turn facilitates sustained flow of cross-border portfolio investment to emerging economies. On the domestic front, there are expectations of higher corporate investment and earnings, GDP growth of over 8 per cent for the fourth year in a row with macroeconomic stability, and Government's commitment to carry forward the economic reforms. These are expected to sustain the interest of not only the domestic investors but also scale-up FII interest in Indian equity and debt papers and to retain India as one of the preferred

destinations for portfolio investment. Improved investor awareness and expanding equity-cult among the small savers appear to augur well for buoyant stock markets. Recent trend of increased investors' preference to participate in equity markets through mutual fund conduit would enhance institutional investment in equity markets. The institutional and regulatory architecture should facilitate this further as this would counterbalance and cushion the impact of the swings in the stock prices.

4.30 While Government securities market is expected to attain further width and breadth as a result of the latest policy initiatives such as introduction of intra-day short sale and 'when issued' market, measures need to be taken to revive the corporate debt market to remove its sluggishness and encourage individual investment as well as institutional investment including those by FIIs.

4.31 The commodity exchanges, which have seen consistent increase in turnovers for the last few years, may remain vibrant in 2007-08 witnessing larger volume and value of commodities traded. Gold and crude oil account for the major part of the total

Box 4.5 : What commodity futures markets do?

A well-developed and effective commodity futures market, unlike physical market, facilitates offsetting the transactions without impacting on physical goods until the expiry of a contract. Futures market attracts hedgers who minimise their risks, and encourages competition from other traders who possess market information and price judgment. While hedgers have long-term perspective of the market, the traders, or arbitragers as they are often called, hold an immediate view of the market. A large number of different market players participate in buying and selling activities in the market based on diverse domestic and global information, such as price, demand and supply, climatic conditions and other market related information. All these factors put together result in efficient *price discovery* as a result of large number of buyers and sellers transacting in the futures market.

Futures market, as observed from the cross-country experience of active commodity futures markets, helps in efficient price discovery of the respective commodities and does not impair the long-run equilibrium price of commodities. At times, however, price behaviour of a commodity in the futures market might show some aberrations reacting to the element of speculation and 'bandwagon effect' inherent in any market, but it quickly reverts to long-run equilibrium price, as information flows in, reflecting fundamentals of the respective commodity. In futures market, speculators play a role in providing liquidity to the markets and may sometimes benefit from price movements, but do not have a systematic causal influence on prices.

An effective architecture for regulation of trading and for ensuring transparency as well as timely flow of information to the market participants would enhance the utility of commodity exchanges in efficient price discovery and minimise price shocks triggered by unanticipated supply demand mismatches.

References:

1. Ghosh, S. et al, 1987, "Stabilising Speculative Commodity Markets", New York, Oxford University Press
2. International Monetary Fund, "World Economic Outlook", September 2006

transactions in futures market at present. But, other commodities, particularly agricultural commodities, are expected to gain importance helping their price discovery process and thereby providing an opportunity for farmers, traders and consumers to obtain a reasonable

price. The proposed amendments to the Forward Contracts (Regulation Act), 1952 are expected to strengthen the regulatory aspects and ensure orderly conditions in the commodity futures market.

Prices and Food Management

Inflation

The Wholesale Price Index (WPI), available weekly and going back the longest, continues to be the most popular measure for monitoring inflation (Box 5.1). In terms of the WPI, annual point-to-point inflation was 6.11 per cent on January 20, 2007, the end of the 43rd week of the current year. The inflation rate in the corresponding week of the previous year was 4.24 per cent. Starting with a rate of 3.98 per cent, the inflation rate in 2006-07 has been on a general upward trend with intermittent decreases in between. While average inflation in the 52 weeks ending on January 20, 2007

remained below 5 per cent, such a spurt in inflation as observed in the current year had been surpassed in the recent past in 1998-99, 2000-01, 2003-04 and 2004-05 (Table 5.1).

5.2 The inflation rate for primary articles at 9.76 per cent on January 20, 2007 was higher than 5.87 per cent recorded in the corresponding week of the previous year. On January 20, 2007, while the inflation rate for manufactured products at 5.65 per cent was higher than 2.32 per cent recorded in the corresponding week a year ago, there was a significant deceleration in inflation in the fuel group from 7.84 per cent a year ago to 3.67 per cent.

Table 5.1 : Annual WPI inflation rate

Year	Annual point to point Inflation rate				52-week
	Primary Articles	Fuel, power, light & lubricants	Manufactured Products	All Commodities	Average (All Commodities)
Weights (per cent)	22.0	14.2	63.8	100.0	100.0
Long term trends (Average Annual)					
1991-1996	11.3	11.3	10.1	10.6	–
1996-2001	5.4	13.0	3.1	5.1	–
2001-2006	3.6	8.1	3.9	4.7	–
Recent Annual trends (Points to point)					
2002-03	6.1	10.8	5.1	6.5	3.4
2003-04	1.6	2.5	6.7	4.6	5.5
2004-05	1.3	10.5	4.6	5.1	6.4
2005-06	5.4	8.9	1.7	4.1	4.4
2006-07#	9.76	3.67	5.65	6.11	4.90
2005-06#	5.87	7.84	2.32	4.24	4.65
Contribution (adjusted) to annual inflation (per cent)					
2006-07#	34.90	13.51	51.58	100.0	–
2005-06#	29.44	39.79	30.77	100.0	–

: As on 43rd week – January, 20, 2007 and January 21, 2006.

5.3 In the current year, increase in prices of wheat, pulses, edible oils, fruits and

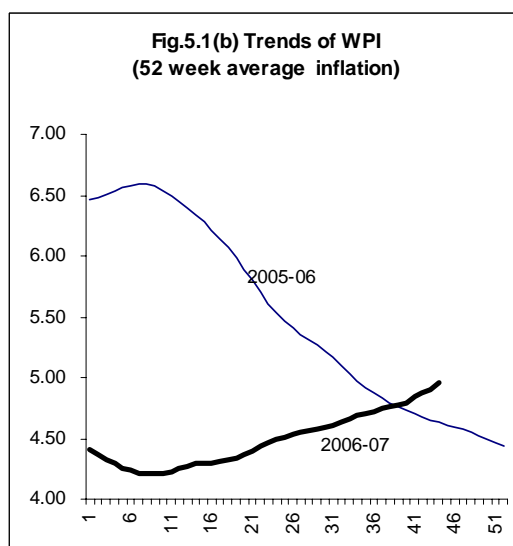
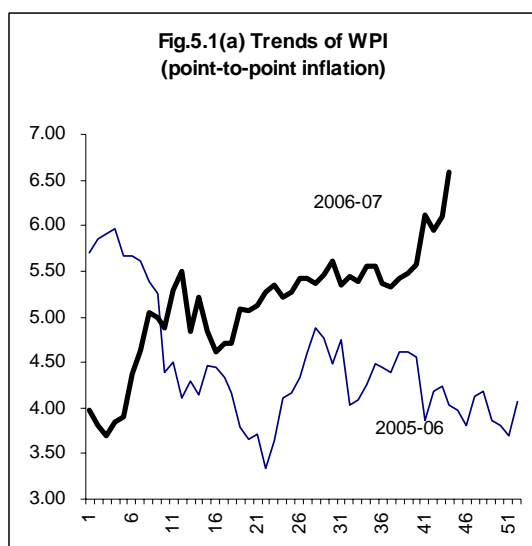
vegetables, and condiments and spices has been the major contributor to the higher

Box 5.1 : History of the Wholesale Price Index (WPI) in India

The Office of the Economic Adviser to the Government of India (Ministry of Industry) undertook to publish for the first time, an index number of wholesale prices, with base week ended August 19, 1939 = 100, from the week commencing January 10, 1942. The WPI was calculated as the geometric mean of the price relatives of 23 commodities. Each item was assigned equal weight and for each item, there was a single price quotation. From 1947, the series included as many as 78 commodities, covering 215 individual quotations, classified into five groups: food articles; industrial raw materials; semi-manufactures; manufactures; and miscellaneous. In accordance with the recommendations of the Standing Committee of the Departmental Statisticians, the Economic Adviser's Office issued a revised series of WPI, with 1952-53 as price base and 1948-49 as weight base, consisting of 112 commodities, and 555 individual quotations. The commodities were classified into five groups: food articles; liquor & tobacco; fuel, power, light & lubricants; industrial raw materials; and manufactures. The weighted arithmetic average was adopted in preference to the weighted geometric mean used for the earlier series. A new series of WPI with base 1961-62 = 100 and with an improved coverage of non-agricultural commodities was issued from July 1969. It covered 139 commodities and 774 quotations. For commodity classification, the 'Standard International Trade Classification' (SITC) with slight alterations made to fit in with the Indian conditions was followed. While introducing the series with base 1961-62, it was decided to constitute a working group to go into the methodological aspects of the index relating to the revised series, with a more recent year as the base. Accordingly, a new series, with the base year as 1970-71, was introduced in January 1977. The wider coverage of this series extended to 360 items and 1,295 price quotations. For non-agricultural items, commodities with a total value of production of more than Rs one crore each according to the Annual Survey of Industries, 1965, and items whose indigenous outputs were small but imports were substantial, were generally included. In the case of agriculture, selection of commodities was done in consultation with the Directorate of Economics & Statistics, Ministry of Agriculture. For a more representative sample, weights were assigned on the basis of the entire wholesale transactions in the economy and the values of transactions of the non-selected commodities were assigned to selected commodities whose nature and price trends were similar. To bring about greater uniformity, the 'National Industrial Classification' (NIC) was adopted, and the commodities were divided into three major groups: primary articles; fuel, power, light & lubricants; and manufactured products. The WPI series underwent another restructuring in terms of its base and weighting diagram from the beginning of 1989. The new series with 1981-82 as the base year continued the conceptual tradition followed by its predecessors. As against 360 items in the 1970-71 series, the 1981-82 series included 447 distinct commodities and 2,371 price quotations. The method of compilation and assigning of weights, as well as the classification into three major groups continued. The latest WPI series with the new base year 1993-94 follows the same methodology as earlier. There are altogether 435 articles/items in the new series, comprising of 98 'primary articles', 19 items of 'fuel, power, light and lubricants', and 318 'manufactured products'.

Fig. 5.1

Trends of WPI inflation



inflation rate of primary articles. Shortfall in domestic production vis-à-vis domestic demand and hardening international prices were the major causes for the increase in prices of these commodities. The international annual average (Jan-Dec) price of crude oil (Brent) per barrel, which was around US\$38 in 2004, after increasing to US\$54 in 2005, reached US\$65 during 2006. This necessitated an upward revision of prices of petro products in the domestic market with effect from midnight of June 6, 2006 to reduce the shortfall of their domestic prices from the corresponding import-parity prices. But the pass-through to consumers was restricted to just 12.5 per cent with the rest absorbed by Government and oil marketing companies. With the softening of international petroleum prices in 2006-07, domestic prices of petrol (motor spirit) and high-speed diesel were reduced by Rs. 2 and Re.1 respectively with effect from November 30, 2006 and again by Rs. 2 and Re. 1 respectively with effect from February 16, 2007.

Developments in 2006-07

Primary Articles

5.4 On January 20, 2007, primary articles recorded an inflation rate of 9.76 per cent as compared to 5.87 per cent a year ago, and contributed 34.87 per cent to over- all inflation

this year as against 29.73 per cent last year (Table 5.2). Year-on-year rate of inflation for these articles two years ago (January 22, 2005) was 1.04 per cent.

5.5 The primary articles' group in WPI consists of three sub-groups, viz., food articles; non-food articles; and minerals. Food group, having 15.4 per cent weight in WPI basket, recorded year-on-year inflation of 9.16 per cent on January 20, 2007 and contributed 23.10 per cent to overall inflation. Non-food articles (with weight of 6.14 per cent in WPI) with inflation of 10.17 per cent contributed 9.21 per cent to overall inflation. Though the rate of inflation for minerals sub-group decelerated from 126.99 per cent as on January 22, 2005, it has remained high in the current year at 34.81 per cent.

5.6 In the current year, commodity-wise analysis of inflation in primary products reveals that in cereals and pulses sub-groups, 8 commodities – urad, moong, gram, wheat, maize, ragi, jowar and arhar – had inflation in excess of 5 per cent. Duty-free import of wheat and pulses to ameliorate the shortfall in domestic output relative to domestic demand had a limited impact on domestic prices because of firm international prices. In case of wheat, a sharp decline in world production in 2006-07 (estimated to be around 590 million tonnes compared to 618 million tones in 2005-

Table 5.2 : Rate of inflation of primary articles and their contribution

Items	Weight	Inflation (%) (point to point)				Contribution to overall Inflation (%)			
		24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07	24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07
All Commodities	100.00	6.24	5.43	4.24	6.11	100.00	100.00	100.00	100.00
Primary Articles	22.03	4.06	1.04	5.87	9.76	14.89	4.31	29.73	34.87
(A) Food Articles	15.40	1.52	1.67	7.43	9.16	3.96	4.76	26.18	23.10
Cereals	4.41	0.68	1.81	6.43	7.66	0.50	1.45	6.39	5.40
Pulses	0.60	2.63	-1.14	23.19	21.39	0.26	-0.12	3.04	2.30
Fruits & Vegetables	2.92	5.70	0.00	11.01	11.62	2.78	0.00	7.44	5.81
Milk	4.37	2.79	4.46	-1.46	7.57	2.00	3.56	-1.47	5.02
Egg, Meat & Fish	2.21	-5.49	2.90	19.50	0.31	-2.27	1.23	10.29	0.13
Condiments & Spices	0.66	6.96	-12.29	0.33	38.55	0.85	-1.74	0.05	3.89
Other Food Articles	0.24	-5.51	18.77	11.06	21.27	-0.13	0.47	0.40	0.57
(B) Non-Food Articles	6.14	11.03	-6.45	-1.61	10.17	11.17	-7.85	-2.23	9.21
Fibers	1.52	28.06	-22.76	7.21	-1.22	5.99	-6.74	2.00	-0.24
Oilseeds	2.67	8.03	-3.49	-10.29	21.27	3.40	-1.73	-5.97	7.38
Other non-food articles	1.95	4.65	1.42	3.35	5.77	1.74	0.60	1.75	2.08
(C) Minerals	0.48	-1.93	126.99	34.81	18.23	-0.11	7.41	5.59	2.63

06) resulted in an increase in international prices from an average of US\$152.4 (for US Hard Red Wheat) during January-December 2005 to US\$212.1 in October 2006, with slight moderation to US\$204.3 in December 2006. Because of interplay of food-feed-fuel, price of maize also increased from US\$98.7 during January-December 2005 to US\$160.4 in December 2006.

5.7 Sweet potatoes, apples, brinjals, sapotas, pineapples, tomatoes, grapes, onions, banana and oranges were the commodities in the group 'vegetables and fruits' with high price rise even when seasonality is taken into account by measuring inflation on year-on-year basis. Sweet potatoes, tomatoes, oranges and onions had fairly high inflation in the previous year as well. A sharp increase in onion prices was observed in the last reporting week. With tight supply position in domestic and world markets, most of the condiments and spices, tea and coffee had inflation over 5 per cent. While international coffee prices of the Arabica variety firmed up in the last three months, robusta stabilized at US cents 162-170/kg during August-December 2006 compared to US cents 111.5/kg in January-December 2005. There was a softening trend in tea at Kolkata auctions, and the WP index was stable at 144.0 in the last 20 weeks.

5.8 In other non-food articles, edible oilseeds recorded significant price increases. While they had fallen in the previous year, such prices in January 2007 were above the levels that prevailed in January 2003, 2004 and 2005. Firm international prices of edible oils, particularly from November 2006, contributed

to this trend. In minerals—bauxite, chromite, fine clay, manganese ore and iron ore had a year-on-year inflation exceeding 15 per cent.

Fuel, Power, Light and Lubricants

5.9 On January 20, 2007, fuel and power group with year-on-year inflation of 3.67 per cent contributed 13.51 per cent to overall inflation. Of the three sub-groups in fuel and power group – namely, coal mining, mineral oils and electricity – except for 'electricity', inflation has been lower in the current year than in the previous one (Table 5.3).

5.10 Within the mineral oil sub-group, lubricants, bitumen, aviation turbine fuel, naphtha, and light diesel oil, and in the electricity sub-group, electrify tariffs for agriculture had year-on-year inflation of over 5 per cent.

Manufactured Products

5.11 Manufactured products, with a total weight of 63.75 per cent in WPI and a year-on-year inflation of 5.65 per cent on January 20, 2007, contributed more than half of the overall inflation (Table 5.4).

5.12 At the disaggregated level of 12 sub-groups within the manufactured products group, the sub-groups 'basic metals & metal products' and 'non-metallic mineral products' had year-on-year inflation in double digits, and with a weight of 10.86 in WPI, contributed 24.21 per cent to overall inflation. In the 'food products' sub-group, increase in prices was significant for wheat derivatives, skimmed milk powder and edible oils. Certain products in the sub-group 'textiles', particularly viscose staple fibre, polyester yarn and cotton yarn,

Table 5.3 : Rate of inflation of products groups in fuel & power and their contribution

Items	Weight	Inflation (%) (point to point)				Contribution to overall inflation (%)			
		24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07	24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07
All Commodities	100.00	6.24	5.43	4.24	6.11	100.00	100.00	100.00	100.00
Fuel & Power	14.23	7.70	10.17	7.84	3.67	25.34	39.01	40.19	13.51
A. Coal Mining	1.75	9.22	16.68	0.35	0.00	2.79	5.96	0.18	0.00
B. Minerals Oil	6.99	10.13	14.90	12.30	3.55	17.51	30.70	35.30	7.63
C. Electricity	5.48	4.07	1.59	2.75	4.93	5.12	2.26	4.80	5.89

Table 5.4 : Rate of inflation of manufactured products sub groups and their contribution

Items	Weight	Inflation (%) (point to point)				Contribution to overall inflation (%)			
		24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07	24-Jan-04	22-Jan-05	21-Jan-06	20-Jan-07
ALL COMMODITIES	100.00	6.24	5.43	4.24	6.11	100.00	100.00	100.00	100.00
Manufactured									
Products	63.75	6.56	5.40	2.32	5.65	59.50	56.52	31.08	51.53
Food Products	11.54	8.52	5.57	1.53	3.07	14.39	11.06	3.89	5.29
Beverages & Tobacco	1.34	0.15	7.17	5.74	7.36	0.04	2.03	2.11	1.91
Textiles	9.80	10.49	-3.43	-1.59	2.54	12.13	-4.75	-2.57	2.69
Wood & Products	0.17	0.34	-0.56	16.34	-3.08	0.01	-0.02	0.63	-0.09
Paper & Products	2.04	-0.69	1.79	1.99	7.69	-0.23	0.65	0.89	2.35
Leather & Products	1.02	15.10	7.30	4.87	-5.23	1.90	1.15	0.99	-0.75
Rubber & Plastic Products	2.39	0.82	-1.63	6.17	7.51	0.25	-0.54	2.45	2.11
Chemicals & Products	11.93	1.31	3.09	2.89	2.86	2.61	6.77	7.90	5.37
Non Metallic Mineral Products	2.52	3.40	3.88	8.23	12.46	1.20	1.53	4.09	4.47
Basic Metals & Products	8.34	20.84	17.13	1.68	13.40	24.39	26.23	3.65	19.74
Machinery & Machine Tools	8.36	1.83	8.18	2.64	7.91	1.91	9.40	3.97	8.15
Transport & Parts	4.29	0.95	5.32	2.88	1.31	0.57	3.50	2.42	0.75

had inflation above 5 per cent. There was an increase of 4 per cent in the price of cotton yarn-cones between December 30, 2006 and January 6, 2007. In the 'paper & paper products' sub-group, paperboards and speciality papers witnessed inflation exceeding 10 per cent. In 'chemicals and chemical products', price rise was significant for epoxy resins, benzene, methanol and phenol.

5.13 With higher demand for houses, infrastructure and capacity additions in industry, cement prices, after nearly 8 per cent increase in one week – January 29, 2004 to February 5, 2005 have maintained a slow but steady upward trend. Cement prices, year-on-year, increased by 17.9 per cent on January 20, 2007. With basic customs duty on cement reduced from 15 per cent to zero per cent on January 22, 2007 moderation could be expected in the coming weeks. Basic metals including non-ferrous metals have witnessed upward pressure on prices due to

lower stocks, high demand from China, and the firming of international prices. In case of zinc and lead, there has been a decline in prices in the last two weeks (week ending January 13 and January 20, 2007), but aluminum and steel-related products have continued to witness an increasing trend.

5.14 Thirty essential commodities (with a combined weight of 17.63 per cent in the WPI basket) registered an aggregate inflation rate of 4.83 per cent on January 20, 2007 compared to 4.00 per cent a year ago and contributed 13.67 per cent to overall inflation compared to 16.31 per cent a year ago. Out of 30 essential commodities, 9 items witnessed either no-change or decline in prices as compared to a year ago. Annual inflation rate was less than five per cent for 3 items in the same period (Table 5.5).

Terms of trade

5.15 Price-terms of trade between agricultural and manufacturing showed some improvement in favour of manufacturing during

**Table 5.5 : Grouping of essential items according to price rise
(as on January 20, 2007)**

Rate of inflation	Items
1. Decline of absolute prices over last year or no increase	Potatoes, sugar, salt, fish-inland, gur, coking coal, kerosene, long cloth, and dhoti, sarees & voils
2. Positive inflation: up to 5 per cent	Rice, masur, bajra
3. Annual inflation: 5 per cent to 10 per cent	Arhar, mustard oil, milk, vanaspati, mutton and safety matches
4. Annual inflation above, 10 per cent	Wheat (11.8 per cent), gram (28.2 per cent), tea (19.4 per cent, groundnut oil (25.5 per cent), jowar (10.0 per cent), moong (25.8 per cent), urad (23.5 per cent), chillies (dry) (62.4 per cent), atta (19.6 per cent), coconut oil (13.9 per cent), household laundry Soap (10.3 Per cent), onions (28.2 per cent)

2005-06 and 2006-07. But, in overall terms, with agricultural prices rising much faster than manufacturing prices in the post-reform period, the terms of trade in 2005-06, relative to 1993-94, continued to be in favour of agriculture by about 10 percentage points (Table 5.6).

Consumer Price Indices

5.16 There are four consumer price indices (CPI) measuring the changes over time in

Table 5.6 : Movement of manufactured prices vis-à-vis agricultural prices

Year/	General of wholesale Prices	Price Inde of Manufactured products	Price Index of Agricultural products@	Manu-facturing Price Index as per cent of Agricultural Price Index
Weights	100.00	63.75	21.54	(col 3/col4)*100
1	2	3	4	5
1993-94	100.0	100.0	100.0	100.0
1994-95	112.6	112.3	116.0	96.8
1995-96	121.6	121.9	126.0	96.8
1996-97	127.2	124.4	136.4	91.2
1997-98	132.8	128.0	140.3	91.2
1998-99	140.7	133.6	157.2	85.0
1999-00	145.3	137.2	159.1	86.2
2000-01	155.7	141.7	163.7	86.6
2001-02	161.3	144.3	169.5	85.1
2002-03	166.8	148.1	175.3	84.5
2003-04	175.9	156.5	182.9	85.6
2004-05	187.3	166.3	186.7	89.1
2005-06	195.6	171.4	190.7	89.9
2006-07**	205.1	177.7	202.0	88.0

* Composite index of the sub-groups – Food Articles and Non-food Articles
** Apr-Dec 2006

the general level of prices of goods and services that four different reference population groups acquire, use or pay for consumption – CPI for Urban Non-Manual Employees (CPI-UNME); CPI for Industrial Workers (CPI-IW); CPI for Agricultural Labourers (CPI-AL) and CPI for Rural Labourers (CPI-RL) (Table 5.7). These are compiled in terms of the general standards and guidelines set by the International Labour Organisation (ILO) for all the member countries. While CPI-UNME is compiled and released by Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation, the rest three are compiled and released by Labour Bureau, Ministry of Labour. CPI-IW is the most well known of these indices, as it is used for wage indexation in Government and organized sector.

5.17 With differing commodity composition and weights to the various commodities and services, inflation measured in terms of the CPI-IW and CPI-AL – available only until December 2006 – have been 1.3–2.2 percentage points higher than the corresponding WPI inflation in the current year (Table 5.8).

5.18 Year-on-year, the All-India CPI-UNME was up 6.9 per cent in December 2006. Between November and December 2006, at the group level, the index was higher by 1.09 per cent in 'fuel & light', by 0.46 per cent in 'clothing, bedding & foot-wear, etc.'. However, the index of 'food, beverages and tobacco' declined by 0.61 per cent over the previous month.

Table 5.7: Salient features of price indices

S. No.	CPI-UNME	CPI-IW	CPI-AL	CPI-RL	WPI
1	Weights allocated on the basis of	Consumer Expenditure Survey			Weights allocated based on wholesale transactions
	First:1958-59 Latest: 1982-83	First:1958-59 Latest: 2001	First:1956-57 Latest:1983	First 1983 Latest 1983	
2	Base year of the current series	1984-85	2001	1986-87	1986-87 1993-94
3	No of items/ commodities in basket	146-365	120-160	260	260 435
4	No of centres/ villages	59	76	600	600 1918 quotations
5	Time lag of the index	2 weeks	1 month	3 weeks	3 weeks 2 weeks
6	Frequency	Monthly	Monthly	Monthly	Monthly Weekly

Table 5.8 : Rate of inflation (per cent) based on different Indices

	WPI	CPI-UNME	CPI-IW	CPI-AL	CPI-RL
2001-02	3.6	4.3	5.1	1.1	1.3
2002-03	3.4	4.0	3.8	3.2	3.1
2003-04	5.5	3.9	3.7	3.9	3.8
2004-05	6.5	3.8	3.6	2.6	2.6
2005-06	4.4	4.4	4.7	3.9	3.9
2006-07#	5.0	6.6	6.3	7.2	6.9
# April-December 2006					

5.19 The rate of year-on-year inflation based on CPI-AL, after increasing from 5.6 per cent in April 2006 to 7.2 per cent in June, 2006, decreased to 6.3 per cent in July, 2006. However, thereafter it started increasing and reached 8.9 per cent in December, 2006. Of all the price indices, the CPI-AL attaches the highest weight to the food group of commodities, and CPI-AL is highly vulnerable to food prices.

Consumer Price Index- Industrial Workers- current trends

5.20 CPI-IW based year-on-year inflation, after peaking at a 7-year high of 7.6 per cent in June 2006, moderated to 6.9 per cent in December 2006 as against 5.6 per cent in December 2005. The trend of lower-than-WPI

inflation in CPI-IW was reversed in November 2005.

5.21 In the new series of CPI-IW, introduced from January 2006 with 2001 as the base, the food group has a weightage of 46.19 per cent – considerably higher than the corresponding 26.94 per cent (including those in the primary and manufactured subgroups) in the WPI. This greater importance of the food group together with the higher rate of inflation in the food group has resulted in CPI-IW inflation being higher than WPI inflation (Table 5.9).

5.22 Inflation in food items within CPI-IW, after decreasing from 5.4 per cent in January 2006 to 5.0 per cent in March 2006, showed an increasing trend since April 2006 to reach 10.0 per cent in June 2006. The decline to

Year	Year-on-year WPI inflation						Year-on-year CPI-IW inflation	
	Items	All Commodities	Essential Commodities	Food Group	General Index	Food Group		
	Weight	100.0	17.6	26.9	100.0	57.0 (Old)	46.2 (New)	
2005-06	APR	5.9	4.4	2.4	5.0			2.6
	MAY	5.5	3.3	1.4	3.7			2.0
	JUN	4.3	3.1	2.0	3.3			1.6
	JUL	4.3	4.3	3.6	4.1			4.0
	AUG	3.7	4.2	2.8	3.4			3.1
	SEP	4.1	3.3	2.3	3.6			3.5
	OCT	4.7	4.0	3.0	4.2			4.1
	NOV	4.2	5.2	4.5	5.3			6.6
	DEC	4.4	4.9	5.0	5.6			6.7
	JAN	4.1	3.9	4.7	4.8			5.4
	FEB	4.0	5.1	4.4	5.0			5.2
	MAR	3.9	5.7	3.5	5.0			5.0
2006-07	APR	3.9	5.9	3.5	5.1			5.7
	MAY	4.8	7.7	4.9	6.3			8.1
	JUN	5.1	8.6	6.1	7.6			10.0
	JUL	4.8	5.4	3.3	6.7			7.2
	AUG	5.1	5.3	3.9	6.3			8.7
	SEP	5.5	7.2	6.4	6.8			8.9
	OCT	5.5	7.5	6.5	7.3			9.9
	NOV	5.5	6.6	5.7	6.3			7.8
	DEC	5.4	6.4	6.6	6.9			-

Figures of December are provisional in terms of WPI.

7.2 per cent in July 2006 proved to be temporary. The inflation in food items in CPI-IW declined to 7.8 per cent in November, 2006 from 9.9 per cent in October, 2006.

Quarterly price trend for CPI-IW (major groups)

5.23 The trend in CPI-IW based quarter-over-previous-quarter inflation (Table 5.10) indicates that the overall CPI-IW inflation during

(Percentage change over previous quarter)								
Group	Weight (%)		2005-06				2006-07	
	1982=100	2001=100	Apr-June	July-Sep	Oct-Dec	Jan-Mar	Apr-June	July-Sep
General	100.0	100.0	0.6	2.2	1.9	0.1	1.9	2.5
Food	57.00	46.20	1.4	3.5	2.7	-2.5	4.0	3.9
Pan, supari, tobacco & intoxicants	3.15	2.27	0.5	0.4	0.5	1.0	1.1	1.2
Fuel & light	6.28	6.43	-6.6	-2.4	2.7	2.2	1.6	1.3
Housing	8.67	15.27	0.0	2.0	0.0	4.5	0.0	2.5
Clothing, bedding & footwear	8.54	6.57	1.1	0.4	-0.4	1.9	1.2	0.0
Miscellaneous group	16.36	23.26	0.7	1.1	1.2	1.5	0.8	1.6

Source : Labour Bureau, Shimla/Chandigarh.

Note : Indices from January 2006 (2001=100) onward are converted to the previous base i.e. 1982=100 by applying a linking factor of 4.63 to arrive at the rate of inflation.

the second quarter of 2006-07 at 2.5 per cent was higher than 2.2 per cent in the second quarter of 2005-06 as well as 1.9 per cent in the first quarter of 2006-07. Of the six major groups in CPI-IW, three – pan, supari, tobacco & intoxicants; housing; and miscellaneous group – witnessed acceleration of quarterly inflation between the first and second quarters of the current year.

Updating of the Price Indices

5.24 At present, four price indices – namely, WPI with base year 1993-94, CPI-UNME with base year 1984-85, and the CPI-AL and CPI-RL with base year 1986-87 – are in need of updating. The consumption expenditure patterns in both rural and urban areas and the structure of economy have undergone significant changes over the years, and there is a need to shift the existing bases of these indices to a more recent year. Accordingly, several exercises are being carried out under the directives of various technical advisory committees.

Wholesale Price Index

5.25 A Working Group under the Chairmanship of Prof. Abhijit Sen, Member, Planning Commission, is currently engaged in the revision of the current series of WPI (Base 1993-94) (Box 5.2).

Consumer Price Index for Urban Non-Manual Employees (CPI-UNME)

5.26 CPI-UNME (Base 1984-85 = 100) has limited use and is basically used for determining dearness allowances of employees of some foreign companies working in India in service sectors such as airlines, communications, banking, insurance and other financial services. It is also used under the Income Tax Act to determine capital gains and by the CSO for deflating selected service sectors' contribution to GDP at factor cost at current prices to arrive at the corresponding figure at constant prices.

5.27 For shifting the present base of CPI-UNME, presently, on the advice of its governing

Box 5.2 : Revision of the existing wholesale price index and compilation of producer price index

- The Working Group has set up four sub-groups on (a) analytical issues, (b) manufactured items & related matters, (c) unorganized/unregistered industries, and (d) agricultural commodities. The sub-groups (b) and (c) have already submitted their reports and the work of the sub-group on agricultural commodities is at the final stages. Based on the recommendations of the three other sub-groups, the sub-group on analytical issues would arrive at a consolidated picture of the commodity basket and weighting diagram for the new series of WPI. The Working Group has decided to shift the base from 1993-94 to 2000-01 for the new series.
- The Working Group has also decided to recommend initiating the process of compilation of Producer Price Index (PPI) simultaneously, with the objective of ultimately switching over from WPI to PPI. PPI measures price changes from producers' perspective as against the consumer price index which measures these from consumers' perspective. Many of the countries have switched over to PPI from WPI. In PPI, only basic prices are used for compilation, while taxes, trade margins and transport costs are excluded. PPIs, apart from their use as measure of inflation, are used as deflators in the compilation of GDP.
- PPI is considered to be a better measure of inflation as price changes at primary and intermediate stages can be tracked before it gets built into the finished goods stage.
- The Office of the Economic Adviser, Department of Industrial Policy & Promotion (DIPP), at the instance of the Working Group, has already initiated the process of collection of price data from organized and SSI units, as identified by the concerned sub-groups. Proforma for collecting the price data have already been sent to the organized manufacturing units and are currently being sent to the SSI units. The Working Group has emphasized the need for involvement of State Governments for interacting with the various industry/trade associations/government agencies to get the required price data from source agencies. Chief Secretaries of State Governments have been requested to nominate nodal officers for assisting in price collection activity. The Office of the Economic Adviser, Department of Industrial Policy and Promotion is planning to organize interactive sessions with the local industry/trade associations in different States in collaboration with the State Government agencies to facilitate smooth flow of price data for the new WPI series.

council, the National Sample Survey Organisation (NSSO) is conducting a Family Living Survey (FLS) to obtain the profile of the present consumption pattern of urban non-manual employees. The CSO is also examining the possibility of constructing a consumer price index for the urban employees.

Consumer Price Index for Agricultural Labourers (CPI-AL)

5.28 CPI-AL is basically used for revising minimum wages for agricultural labourers in different States. The present base year of CPI-

AL is 1986-87. As the consumption pattern of agricultural labourers has changed since 1986-87, the Labour Bureau proposes to revise the base of the existing series of CPI-AL by using the consumer expenditure data collected by the NSSO during its 61st NSS (2004-05) round.

Real Estate/ Housing Price Index

5.29 Housing and real estate constitute not only a major proportion of national wealth but also an important and fast expanding component of the service sector of the economy. Because both lenders and

Box 5.3 : An operational housing price index (HPI) for India

- There are various concepts of housing price indices, and many sources and ways for compiling price data, both private and public. The methodology for construction of indices differs from country to country depending on the use and purpose of such indices and the availability of data.
- With an Adviser, Ministry of Finance as the Chairman, the Technical Advisory Group (TAG) comprises of technical experts and members from NHB, CSO, RBI, Labour Bureau, HDFC, HUDCO, LIC Housing Finance Ltd., Dewan Housing Finance Corporation Ltd., and the Society for Development Studies.
- After reviewing international best practices and the methodology, sampling techniques, collection of price data for construction of real estate price indices in USA (index developed by the Office of Federal Housing Enterprise Oversight), Canada (New Housing Price Index) and UK (Halifax index), the TAG has suggested a methodology for India. The TAG decided to conduct a pilot study for Delhi and to use both the (a) hedonic regression model and (b) the basic Laspeyre's weighted index for constructing an HPI for Delhi.
- For the survey, the residential colonies in Delhi were categorized into 8 tax zones (A to H) as decided by the Municipal Corporation of Delhi (MCD) under the Unit Area Method for property tax assessment. 30 colonies in different tax zones were selected on the basis of transactions for the collection of basic data. Survey was also conducted for Bangalore, Bhopal, Kolkata and Mumbai. The Society for Development Studies [SDS] has submitted their survey reports to TAG and final report with property price indices in 5 cities together with the methodology to be adopted for compilation and regular dissemination of the index is expected to be submitted by March 2007.
- It is well known that the registered prices of houses are grossly under-estimated due to very high registration fees and stamp duty. The subsequent obligations for the payment of property tax act as a disincentive to individual purchasers (except corporate bodies) for revealing the exact purchase price of a house. Therefore, in addition to information from registration offices, basic data on value, plinth area, location, age and basic characteristics of houses are being collected from property dealers, Residents' Welfare Associations (RWAs), Development Authorities/Municipal Corporations and the private builders.
- The TAG has decided to take 2001 as the base year for the construction of HPI. The choice of the base year for HPI is consistent with the base period of other indices, that is, 2001 for the revised CPI-IW series, 2000-01 for the revised WPI and 1999-2000 for the revised GDP series.
- For HPI, basic data has been collected for each year since 2001 for the 5 cities. For each selected colony of the 5 cities and for each year, information has been collected for 20 transactions, which actually took place during the year.

borrowers may have large real estate/housing exposures (direct as well as indirect), financial balance sheets may be affected by any large volatility of prices in this sector. Thus, it is desirable to monitor housing and real estate prices – an important segment of asset prices – for formulation of appropriate monetary and fiscal measures. The National Housing Bank (NHB) has set up a Technical Advisory Group (TAG) to explore the possibility of constructing a real estate price index (Box 5.3).

Service Price Indices

5.30 Given the importance of the service sector, there is a need to develop service price indices for selected services, particularly in the national accounts framework. The need for such indices was highlighted by the Working Group set up to revise the WPI and reiterated by the National Statistical Commission. The Office of the Economic Adviser, Department of Industrial Policy & Promotion, Ministry of Commerce and Industry has been implementing two plan

schemes aiming at (i) switching over from the existing WPI to the PPI, and (ii) developing service sector price indices, as per international best practices. Under the plan schemes, studies are being commissioned for selected services – road transport, railways, air transport, port, banking, insurance, posts, telecommunication, business services and trade services – to develop service price indices (Box 5.4).

Anti-Inflationary Measures

5.31 High inflation hurts the poor, and by putting pressure on interest rates, adversely affects both savings and investment. Thus, containment of inflation is high on the Government's agenda. The anti-inflationary policies of Government include strict fiscal and monetary discipline; rationalization of excise and import duties of essential commodities to lighten the burden on the poor; effective supply-demand management of sensitive items through liberal tariff and trade policies; and strengthening the public distribution system.

Box 5.4 : Service price indices in India

As per OECD-Eurostat 2005 Inquiry on National Collection of Services Producer Prices Preliminary Report, giving information on 45 countries, the number of National Statistical Agencies taking up data collection on service producer prices, though growing, is still small. While some agencies have focused exclusively on the prices of services provided to enterprises, others have approached the subject more broadly through the development of services producer price indices. Approaches differ and coverage varies. Attempts are on to enhance the coverage, aiming at an improved deflator for the sector.

According to the OECD-Eurostat report, 30 countries collect services producer prices. These are Australia, Austria, Belgium, Canada, China, Czech Republic, Denmark, Finland, France, Germany, Hong Kong (China), Ireland, Israel, Italy, Japan, Korea, Lithuania, Mexico, Netherlands, New Zealand, Norway, Poland, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States, and Vietnam. In addition, preliminary work has started in several others, particularly European countries, under the auspices of Eurostat.

The need for a service sector price index in India is warranted by the growing dominance of the sector in the economy. So far, there is no index number to measure the changes in the prices of the service sector. The present Wholesale Price Index (WPI) takes care of price movements of only commodity-producing sectors, viz. primary and secondary sectors, of the economy. The need for such an index was recommended by the Working Group set up to revise the WPI (1993-94) series and was reiterated by the National Statistical Commission. The Office of the Economic Adviser, Ministry of Commerce and Industry has been making an effort to develop sector specific service price indices for the country. Technical assistance for this work is being received under World Bank Assisted Economic Reforms Project.

Efforts are being made to develop service price indices for selected service sectors on an experimental basis, initially covering road transport, railway services, air transport services, business services, trade services, port services, postal, telecommunication services, banking services and insurance services. The basic studies relating to construction of index numbers for road transport, air transport, ports services, insurance, railway transport and banking services have been completed and are under examination. Studies on postal, telecommunication, business and trade services are proposed to be launched soon. The completed studies would be discussed among academicians, practitioners and users before putting in place the service price indices.

5.32 During 2006-07, the Government initiated a slew of measures to contain the price rise of primary commodities:

- State Trading Corporation tendered overseas for import of 55 lakh tonnes of wheat to supplement domestic availability.
- Permission was given to private trade to import wheat first at 5 per cent duty from June 27, 2006 and then at zero duty from September 9, 2006 as against the normal applicable duty of 50 per cent.
- Import of pulses was permitted at zero duty from June 8, 2006 and a ban on export of pulses was made with effect from June 22, 2006.
- Close monitoring of prices of each and every essential item on a weekly basis was put in place.
- Regulatory measures were initiated by the Forward Markets Commission (FMC) to contain volatility in the futures prices of wheat, sugar and pulses and ban on futures trading in some pulses was imposed to reduce speculative pressures.

- Reduction in duty on palm group of oils by 20-22.5 percentage points was effected in two phases, first in August 2006 and later in January 2007. Further, tariff values of these oils were frozen at levels prevailing in July 2006, thus reducing to that extent the impact of increase in international prices.
- On January 22, 2007, further duty cuts were announced for portland cement, various metals and machinery items.

International prices of select commodities

5.33 In an open economy, domestic prices react to movement of prices of various commodities in the world markets. International prices of edible oils, cereals and metals witnessed sharp increases in January 2007 relative to the prices that prevailed in October-December 2005 quarter (Table 5.11). Domestic production shortfalls in wheat and maize, and dependency on imports for metals and edible oils, transmitted the international price shocks to domestic prices.

Table 5.11 : International prices of select commodities (quarterly averages)

Commodity	Unit	Oct-Dec	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Dec	Jan	Increase in
		2005	2006	2006	2006	2006	2006	2007	Jan 2007 relative to Oct.-Dec. 2005 (per cent)
Coal, Australia	\$/mt	39.6	46.9	52.6	50.3	46.6	49.8	51.3	29.6
Crude oil, avg, spot	\$/bbl	56.6	61.0	68.3	68.8	59.0	61.0	53.5	-5.4
Tea, auctions (3), average\$	c/kg	166.2	178.7	192.3	195.6	182.4	182.8	175.3	5.5
Coconut oil	\$/mt	574.0	578.3	578.7	599.1	671.2	731.7	731.0	27.4
Groundnut oil	\$/mt	963.0	917.7	896.3	946.3	1120.4	1174.0	1180.0	22.5
Palm oil	\$/mt	438.3	436.4	438.7	492.7	542.8	583.0	599.0	36.7
Soybean oil	\$/mt	558.7	535.3	576.3	620.3	662.2	696.7	696.0	24.6
Maize	\$/mt	99.8	105.0	109.3	117.4	155.7	160.4	165.4	65.7
Rice, Thailand, 5%	\$/mt	281.6	298.8	307.6	312.4	300.3	305.0	313.0	11.2
Wheat, US, HRW	\$/mt	164.5	173.8	189.6	196.1	208.7	204.3	196.1	19.2
Sugar, world	c/kg	26.3	37.5	36.5	30.6	26.0	25.5	24.1	-8.3
Cotton A Index	c/kg	126.1	129.0	121.8	128.4	127.6	130.5	130.8	3.7
Urea, E. Europe, bulk	\$/mt	224.7	219.2	228.1	210.4	234.0	254.7	269.8	20.1
Aluminum	\$/mt	2075.6	2420.8	2653.3	2481.8	2723.7	2813.6	2809.3	35.4
Copper	\$/mt	4302.0	4939.9	7210.4	7670.0	7068.2	6675.1	5669.7	31.8
Lead	c/kg	104.9	124.2	110.0	119.0	162.7	172.6	166.6	58.8
Nickel	\$/mt	12649.3	14810.5	19924.6	29153.5	33129.0	34570.3	36811.1	191.0
Steel cr coilsheet	\$/mt	750.0	750.0	666.7	700.0	658.3	650.0	650.0	-13.3
Tin	c/kg	643.2	760.6	852.9	865.3	1033.5	1115.9	1136.2	76.6
Zinc	c/kg	164.0	224.2	329.2	336.3	420.4	440.5	378.7	130.8

\$ Arithmetic average of prices at three auction center—Kolkata, Colombo and Manbasa/Nairobi.

Table 5.12 : Import of Wheat (2006-07)—Some basic estimates

	1 st Tender	2 nd Tender	3 rd Tender	4 th Tender	5 th Tender
Quantity tendered (lakh tonnes)	5	8	22	4	16.7
Supply Schedule	March-May	July-October	September-January	September-October	November-February
Rate in US\$ per tonne	179	187-198	190-205	210-215	224-270
Landed weighted average cost estimated US\$ per tonne	179	191	198	211	229
Landed cost (In Rupees/per tonne)	7,981	8,851	9,101	9,815	10,582

Commodity Profiles

5.34 The overall availability of most of the essential commodities including rice, sugar, tea, milk and edible oils was generally satisfactory. However, the prices continued to be under pressure for most part of the year. The stocks of rice with central agencies on November 1, 2006 were satisfactory as per the buffer stock norms. There was some concern about dwindling stocks of wheat and its impact on the prices in mid-January, 2006; however, the stocks position was addressed with imports (Table 5.12). To augment their domestic availability, edible oils and pulses, in which the country is not self-sufficient, continued to be imported.

Wheat

5.35 With adoption of modern production technology, the production of wheat – the second most important cereal in India after

rice – accelerated from 11.0 million tonnes in 1960-61 to a record 76.4 million tonnes in 1999-2000. But production has more or less plateaued since then, and is estimated at 72.5 million tonnes in 2006-07.

5.36 The decline in wheat output to 69.4 million tonnes in 2005-06 coincided with a bad international wheat year. World wheat production was estimated to be around 587 million tonnes as against a production of 628 million tonnes in 2004-05 (corresponding to India's agriculture year of 2003-04) and sharp increases in international wheat prices (Table 5.11). Wholesale price index of wheat, after increasing by 10.7 per cent between January 22, 2005 and January 21, 2006, increased by a further 11.8 per cent between January 21, 2006 and January 20, 2007 (Table 5.13).

Table 5.13 : Wholesale price index of selected commodities (1993-94=100)

	24-Jan-04	22-Jan-05	21-Jan-06	16-Sep-06	14-Oct-06	18-Nov-06	16-Dec-06	20-Jan-07
Wheat	191.3	188.5	208.6	215.5	220.7	232.0	233.0	233.2
Gram	139.9	136.5	173.0	214.3	236.8	239.5	233.6	221.8
Arhar	178.4	169.4	172.0	181.6	185.6	182.0	180.8	186.7
Moong	187.2	191.2	240.9	303.2	323.1	311.0	305.3	303.1
Masur	252.4	237.2	241.7	251.4	254.6	249.1	250.8	251.8
Urad	213.2	222.6	327.1	391.1	451.0	426.6	424.2	403.8
Rape & Mustard Oil	197.1	174.1	157.8	161.8	162.3	164.1	174.7	169.7
Groundnut Oil	176.2	169.2	166.0	184.4	191.8	195.7	196.6	208.3
Coconut Oil	167.8	184.7	131.7	140.5	149.0	150.1	151.5	150.0
Potatoes	92.7	127.2	193.5	292.0	321.0	289.2	226.9	186.3
Onions	235.5	126.3	158.3	147.3	154.3	159.8	151.0	202.9
Tea	107.1	115.8	120.6	144.0	144.0	144.0	144.0	144.0
Sugar	124.1	162.2	166.7	168.7	166.8	164.7	161.6	155.2

5.37 Besides daily monitoring, the Government has taken several measures to stabilize the price of wheat such as (a) release of adequate quantities under targeted public distribution scheme (TPDS) and other welfare schemes, (b) augmenting domestic supplies through Open Market Sales Scheme, (c) ensuring adequate stocks in all the regions in the country together with supplementing the domestic availability with import of 55 lakh tonnes through State Trading Corporation, and (d) by permitting private trade to import at zero duty. However, higher international prices continued to push the landed cost of the imported wheat in each successive tender (Table 5.12).

5.38 With a perceived supply-demand mismatch and private trade offering prices above the minimum support price (MSP), Government procurement was lower than the target fixed for 2006-07 (rabi marketing season corresponding to agriculture year of 2005-06). Stock of wheat (with Food Corporation of India (FCI) and State agencies) at 6 million tonnes in November 2006, the latest month for which data is readily available, was lower than 10.3 million tonnes recorded in October, 2005. The upward trend in year-on-year inflation in wheat prices commenced in August 2006 (12 per cent) and reached 20 per cent in November 2006. Such inflation declined to 12 per cent in January 2007 (Figure 5.4). The domestic price of wheat has been following the trend in the international prices.

Pulses

5.39 The chronic demand-supply imbalance for most of the pulses observed over the last decade has continued. With rising incomes, domestic consumption of pulses, estimated at over 15-16 million tonnes per year, is steadily increasing. With limited price elasticity, price of pulses tend to be highly sensitive to supply-shortfalls.

5.40 Domestic production of pulses, after its peak of 14.9 million tonnes in 2003-04, declined to 13.1 million tonnes in 2004-05 and to 13.4 million tonnes in 2005-06. In the current year, production is estimated to recover to 14.5 million tonnes. International

availability of pulses is limited in quantity as well as in origin (mainly Australia, Canada, Turkey and Myanmar), During 2005-06, 1.6 million tonnes of pulses were imported as against 1.3 million tonnes in 2004-05. Imports during the current year upto January 2007 were 1.7 million tonnes as against 1.41 million tonnes in April to January 2006.

5.41 Wholesale price index of three out of the five important pulses – the two exceptions being arhar and masur – increased significantly in the last two years (Table 5.13). Year-on-year, price of gram increased by 28.2 per cent and 26.7 per cent in January 2006 and January 2007, respectively. The corresponding increase in the price of moong was 25.8 per cent and 26.0 per cent, and of urad 23.0 per cent and 46.9 per cent. WPI-based average inflation of pulses as a group (Figure 5.5) was in the range of 28-44 per cent since April 2006. The current financial year started with 36 per cent year-on-year inflation in pulses. Such inflation, after decelerating to 28 per cent in August 2006, accelerated to 44 per cent in October 2006. However, recent months have shown some declining tendencies with inflation down from 34 per cent in November 2006 to 30 per cent in January 2006.

Edible Oils

5.42 Prices of edible oils were generally stable during 2004-2006. During this period, domestic production of nine oilseeds also increased from 148.4 million tonnes in 2002-03 to 279.8 million tonnes in 2005-06. In 2006-07, production of these nine oilseeds is estimated to have declined by 18.5 per cent to 236.2 million tonnes.

5.43 Domestic consumption of edible oils is estimated at over 10 million tonnes per year, while domestic production has been hovering around 6 million tonnes. Import of edible oils (mainly soyabean and palm group of oils), which bridges the gap between domestic supply and demand, was 47.00 lakh tonnes and 42.88 lakh tonnes in 2004-05 and 2005-06, respectively. During the first six months of 2006-07, such imports were 21.58 lakh tonnes compared to 24.86 lakh tonnes in the corresponding period a year ago.

5.44 During the current year, edible oil prices, after remaining steady till around August, started hardening thereafter. Firm international prices and low domestic availability contributed to such hardening. WPI for edible oils as a sub-group (with a weight of 2.76 per cent in overall WPI), year-on-year, increased by 11.46 per cent on January 20, 2007 as against a decline of 5.73 per cent on the corresponding date of the previous year. (Figure 5.6)

5.45 Government reduced basic customs duty on crude palm group of oils by a total of 20 percentage points in two equal instalments in August 2006 and in January 2007. The duty on refined palm group of oils was reduced by 22.5 per cent. A reduction in basic customs duty of 10 percentage points was also announced for sunflower seed oil in January 2007. The impact of the duty cuts is now getting reflected on the price of imported edible oils. Groundnut oil prices, however, continue to experience upward pressures as the import option is not available and domestic production has declined considerably.

Sugar

5.46 India is the largest consumer of sugar and the second largest producer of sugar with a share of over 15 per cent of world sugar production. Sugar production is provisionally estimated at 193 lakh tonnes in 2005-06 sugar season (October-September) as compared to 130 lakh tonnes in 2004-05 sugar season. In the the current 2006-07 sugar season, sugar production is preliminarily estimated to peak at 227 lakh tonnes, surpassing the previous record of 201 lakh tonnes in 2002-03 sugar season. Consumption is estimated at 190 lakh tonnes.

5.47 The retail price of sugar, which was in the range of Rs. 17.00 to 21.00 per Kg in January 2005 increased to Rs. 19.50 to 23.00 per kg in the month of February 2006 and further to Rs. 20.00 to 23.00 per Kg in the month of May 2006. In order to check the rising prices, the Government in July, 2006 decided to allow import of white sugar without any quantitative restrictions upto September 30,

2006 at zero rate of duty, besides disallowing exports till the end of current financial year, i.e. March 31, 2007. However, sugar exports towards discharge of export obligation against advance licenses, provided the export obligation period had not expired prior to the imposition of export restriction, were allowed. Release mechanism was also discreetly deployed to contain the price hike. Subsequently, in December, 2006, on account of fresh assessment of the sugar situation, with production estimates of 227 lakh tonnes in sugar year 2006-07, the Government decided to open sugar exports to the license holders for fulfillment of their export obligation on account of raw sugar imports in the sugar year 2003-04 and 2004-05. This was further revised in January 2007 to open up sugar exports for all. In terms of WPI, the year-on-year price of sugar declined by 0.7 per cent in December, 2006 and by 9.1 per cent as on January, 20, 2007. The year-on-year inflation was 7.0 per cent in April, 2006 (Figure 5.7).

Onion

5.48 During the initial months of the current financial year 2006-07, onion prices remained at lower levels as compared to last year. Production of onion during 2006-07 is estimated at 6.21 million tonnes which is the same as in 2005-06. Exports of all varieties of onion by NAFED and other State Trading Enterprises during 2006-07 (up to January 16, 2007) were relatively higher at 9.14 lakh tonnes as against 6.37 lakh tonnes in the corresponding period of the previous year. Prices of onion have registered increase during the latter half of January in the north zone. For example, retail prices in Delhi increased from Rs. 9 per kg on December 1, 2006 to Rs. 11 per kg on December 28, 2006 and further to Rs.17 per kg on January 18, 2007. The increased price is apparently due to higher exports of onion in the current year than in the previous one.

Potato

5.49 Production of potato during 2005-06 is estimated at 26.48 million tonnes, around the same level as in the previous year. Price of

potato registered an increase for a temporary phase during July-November, 2006. With only stored potato available, prices tend to show a general upward trend during the months of September-November. The new potato crop from Karnataka and Himachal Pradesh starts arriving from November, and such arrivals increase by the third week of November from Bihar, Uttar Pradesh, Uttaranchal, Punjab, Gujarat and Haryana. Since November, prices of potato have eased in the various markets, such as Delhi, Lucknow, Shimla, and Thiruvananthapuram. (Figure 5.8)

Tea

5.50 The retail prices and availability of tea indicated a steady trend during the current year under review. As per DGC&S data, exports of tea during the first five months of 2006-07 (April-September) were 899.60 lakh kg as against 764.15 lakh kg in the corresponding period a year ago.

5.51 In terms of WPI, monthly average inflation rate of tea (Figure 5.9) came down from 32.1 per cent in October 2006 to 19.4 per cent on January 20, 2007. International prices of tea have also declined since October 2006. Prices of tea (Kolkata auction) came down from US cents 184 per Kg in October 2006 to US cents 166 Kg in January 2007.

II. Food Management

5.52 Procurement higher than the offtake had resulted in a build-up of excessive stocks of foodgrains during the two successive years of 2001-02 and 2002-03. Subsequently, however, due to increased offtake under TPDS and other welfare schemes, stocks of foodgrains stood at 18.8 million tonnes on January 1, 2006, lower than not only the stocks of 21.7 million tonnes on January 1, 2005 but also the buffer stock norm of 20 million tonnes. The main reason for the decline in stocks was the lower stock of wheat.

5.53 Coarse grain procurement was higher at 1.14 million tonnes in 2005-06 as against 0.8 million tonnes in 2004-05. Wheat stocks were depleted down to 2 million tonnes in April 2006 against a buffer stock norm of 4 million tonnes. Poor procurement of wheat

further reduced the actual stocks relative to buffer norms. To make up for the shortfall of wheat procurement in the rabi marketing season (RMS) 2006-07, Government decided to import 5.5 million tonnes of wheat through the State Trading Corporation (STC) for the central pool at an average weighted price of US\$ 205.31 per tonne, of which 4.5 million tonnes arrived by end of January 2007. In addition, one million tonnes of wheat import on account of private traders was also contracted.

5.54 On the sugar front, adequate domestic availability is ensured with a supply of 22.7 million tonnes as against estimated consumption of 19.0 million tonnes. In so far as rice and wheat are concerned, accelerated procurement of rice (Table 5.14) together with the augmentation of stocks through imports of wheat has ensured adequate consumption-stocks in food grains. Government's timely decision of importing wheat checked the deficit and augmented the domestic availability of foodgrains, pre-empting major negative impact on food security for the nation.

Procurement of Foodgrains

5.55 The year 2005-06 was a normal agricultural year with adequate procurement of foodgrains. Rice procurement during the kharif marketing season (KMS) 2005-06 at 27.7 million tonnes was higher by around 3 million tonnes compared to 2004-05 (Table 5.15). Wheat procurement during RMS 2006-07 (as on November 30, 2006) at 9.2 million tonnes was, however, substantially lower by 5.6 million tonnes than that during RMS 2005-06. In KMS 2006-07, which started from October 2006, procurement of rice upto January 15, 2006 was satisfactory at 11.1 million tonnes compared to 11.5 million procured in the corresponding period of 2005-06.

5.56 Till recently, it was a common grievance of many States that their farmers have not benefited much from the price support operations, since the procurement of foodgrains by the Food Corporation of India (FCI) has been largely concentrated in a few States such as Punjab, Haryana, Uttar Pradesh and Andhra Pradesh. These four

**Table 5.14: Procurement of wheat and rice (central pool)
(Million tonnes)**

MarketingYear	Wheat		Rice	
	(April - March)		(October - September)	
	Qty	Per cent change	Qty	Per cent change
1995-96	12.33	3.88	10.07	-26.55
1996-97	8.16	-33.82	12.97	28.80
1997-98	9.30	13.97	15.59	20.20
1998-99	12.65	36.02	12.60	19.18
1999-00	14.14	11.78	18.23	44.68
2000-01	16.35	15.63	21.28	16.73
2001-02	20.63	26.18	22.13	3.99
2002-03	19.05	-7.66	16.42	-25.80
2003-04	15.80	-17.06	22.83	39.04
2004-05	16.80	6.33	24.68	8.10
2005-06	14.79	-11.96	27.66	13.57
2006-07*	9.23	-	9.96	-

* As on November 30, 2006
Source : Department of Food and Public Distribution.

Table 5.15: Procurement of Rice

State/U.T.	Quantity (Lakh tonnes)			Per cent share of states		
	2003-04	2004-05	2005-06	2003-04	2004-05	2005-06
Andhra Pradesh	42.30	39.04	49.72	18.5	15.8	18.0
Bihar	3.63	3.43	5.24	1.6	1.4	1.9
Chhattisgarh	23.74	28.37	32.65	10.4	11.5	11.8
Haryana	13.34	16.62	20.54	5.8	6.7	7.4
Maharashtra	3.08	2.05	1.94	1.4	0.8	0.7
Orissa	13.73	15.90	17.85	6.0	6.4	6.5
Punjab	86.62	91.06	88.55	37.9	36.9	32.0
Tamil Nadu	2.07	6.52	9.26	0.9	2.6	3.3
Uttar Pradesh	25.54	29.71	31.51	11.2	12.0	11.4
Karnataka	-	0.21	0.48	-	0.1	0.2
Kerala	-	0.33	0.94	-	0.1	0.3
Uttaranchal	3.23	3.16	3.36	1.4	1.3	1.2
West Bengal	9.25	9.44	12.75	4.1	3.8	4.6
Others	1.75	0.99	1.77	0.8	0.4	0.6
Total	228.28	246.83	276.56	100.0	100.0	100.0

Source : Department of Food and Public Distribution.

States accounted for nearly 74 per cent of rice procured for the central pool in KMS 2003-04 (Table 5.15) while only two states, Punjab and Haryana, accounted for more than 91 per cent

of wheat procurement in RMS 2005-06 (Table 5.16). The procurement of rice in non-traditional States, which have adopted the decentralized procurement scheme, like

State/U.T.	Procurement of wheat			Per cent share of states		
	2004-05	2005-06	2006-07*	2004-05	2005-06	2006-07*
Bihar	0.15	45.30	-	0.1	23.5	-
Haryana	51.15	45.29	22.29	30.5	23.5	24.2
Himachal Pradesh	0	0.00	-	0.0	0.0	-
Madhya Pradesh	3.49	4.80	0.00	2.1	2.5	0.0
Punjab	92.4	90.10	69.46	55.0	46.7	75.3
Rajasthan	2.79	1.60	0.02	1.7	0.8	0.0
Uttaranchal	0.54	0.40	0.00	0.3	0.2	0.0
Uttar Pradesh	17.41	5.60	0.49	10.4	2.9	0.5
Chandigarh	-	-	-	-	-	-
Delhi	0.02	0.02	-	0.0	0.0	-
Total	167.95	193.11	92.26	100.0	100.0	100.0

* : As on November 30 2006.
Source : Department of Food and Public Distribution.

Chhattisgarh, Orissa, Tamil Nadu and West Bengal, has gone up substantially from 7.8 million tonnes in KMS 2003-04 to 10.9 million tonnes in 2005-06 (Table 5.15).

Off-take of foodgrains from the central pool

5.57 Offtake of foodgrains from the central pool for the year 2005-06 was 42.2 million tonnes, and for the year 2006-07 upto October 2006 was 20.6 million tonnes, which was lower than 24.7 million tonnes recorded during the corresponding seven months of the previous year (Table 5.17). The offtake under TPDS, had gone up from 29.7 million tonnes to 31.4

million tonnes between 2004-05 and 2005-06; the off-take during the first seven months of the current year at 17.5 million tonnes was lower than the off-take during the corresponding period of the previous year.

5.58 The offtake under Antyodaya Anna Yojana (AAY) at 4.8 million tonnes and above the poverty line (APL) category at 5.0 million tonnes during April-October, 2006 were higher than 4.2 million tonnes and 4.7 million tonnes, respectively, recorded in the corresponding seven months of the previous year. However, the offtake of foodgrains under below the poverty line (BPL) category at 7.7 million tonnes during the first seven months of the

Schemes	2001-02	2002-03	2003-04	2004-05	2005-06	2005-06*	2006-07*
TPDS of which	138.36	203.40	241.94	296.52	313.87	181.84	175.06
BPL	100.52	137.24	158.04	174.52	156.43	92.88	77.00
APL	21.06	30.78	42.24	67.29	83.02	47.27	50.44
AAY	16.78	35.39	41.65	54.71	74.42	41.69	47.61
Welfare schemes	71.84	113.80	135.00	106.09	97.48	62.96	30.81
Open market sale	55.98	56.61	13.30	2.47	10.71	2.44	0.10
Export	46.84	124.64	103.08	9.67	0.00	0.00	0.00
Total	313.04	498.45	493.32	414.75	422.06	247.24	205.96

* April to October.

current year was lower than the corresponding 9.3 million tonnes during the first seven months of the previous year. Open market sales during April to October, 2006 also witnessed a decline.

Buffer stock

5.59 The years 2001-02 and 2002-03 witnessed high levels of stock build-up in the central pool (Table 5.18). Foodgrains stocks reached a peak of 64.7 million tonnes, an all time record, in June 2002. The year 2003-04 witnessed a general easing in the foodgrains stocks with relatively lower procurement of rice and wheat following a bad agricultural year in 2002-03 and relatively high offtake of foodgrains, especially for drought-related relief operations and under the welfare schemes.

5.60 The steady reduction in stocks prompted the Government to stop fresh allocation of rice and wheat for export with effect from August 2003, which has continued till date. The year 2004-05 started with a much lower stock of 20 million tonnes on April 1, 2004, down from 32.8 million tonnes on April 1, 2003. Stocks, however, remained consistently higher than the buffer requirement during 2004-05 with sufficient procurement of rice and wheat and relatively lower offtake than in the previous year. On April 1, 2005, the stock at 17.40 million tonnes was above the buffer norm of 16.2 million tonnes.

5.61 The stock of foodgrains on November 1, 2006 at 18.50 million tonnes against the buffer norm of 16.2 million tonnes was sufficient to meet the requirements under TPDS, Welfare Schemes and Open Market Sales during the current financial year.

Table 5.18 : Central foodgrains stock and minimum buffer norms

(in million tonnes)

Beginning of The month	Wheat		Rice		Total (wheat and rice) Buffer norm	Actual stock
	Buffer norm	Actual stock	Buffer norm	Actual stock		
January-2001	8.4	25.0	8.4	20.7	16.8	45.7
April	4.0	21.5	11.8	23.2	15.8	44.7
July	14.3	38.9	10.0	22.8	24.3	61.7
October	11.6	36.8	6.5	21.5	18.1	58.3
January-2002	8.4	32.4	8.4	25.6	16.8	58.0
April	4.0	26.0	11.8	24.9	15.8	50.9
July	14.3	41.1	10.0	21.9	24.3	63.0
October	11.6	35.6	6.5	15.8	18.1	51.4
January-2003	8.4	28.8	8.4	19.4	16.8	48.2
April	4.0	15.6	11.8	17.2	15.8	32.8
July	14.3	24.2	10.0	11.0	24.3	35.2
October	11.6	18.4	6.5	5.2	18.1	23.6
January-2004	8.4	12.7	8.4	11.7	16.8	24.4
April	4.0	6.9	11.8	13.1	15.8	20.0
July	14.3	19.1	10.0	10.8	24.3	29.9
October	11.6	14.2	6.5	6.1	18.1	20.3
January-2005	8.4	8.9	8.4	12.8	16.8	21.7
April	4.0	4.0	12.2	13.3	16.2	17.4
July	17.1	14.5	9.8	10.1	26.9	24.5
October	11.0	10.3	5.2	4.8	16.2	15.1
January-2006	8.2	6.2	11.8	12.6	20.0	18.8
April	4.0	2.0	12.2	13.7	16.2	15.7
July	17.1	8.2	9.8	11.1	26.9	19.3
October	11.0	6.4	5.2	6.0	16.2	12.4
November-2006	11.0	6.0	5.2	12.5	16.2	18.5

Figures from 2002 onwards provisional.

Source : Department of Food and Public Distribution.

Minimum Support Prices (MSP)

5.62 Substantial increases in the MSPs of paddy and wheat after the mid-nineties and upto 2000-01 (Table 5.19) resulted in a large gap between the cost of production (C2 costs) and the MSP of wheat and paddy, and led to a build-up of foodgrains stocks with the FCI to an unprecedented level of 64.7 million tonnes in June 2002, almost three times the buffer norms. However, from 2001-02 onwards, the price policy for Rabi and Kharif crops announced modest MSP increases for wheat and paddy.

5.63 Despite the modest increase in MSP, procurement of paddy/rice for the Central Pool was at an unprecedented level of 27.6 million tonnes in KMS 2005-06. However, in spite of the announcement of an incentive bonus of Rs. 50/- per quintal over the MSP, procurement of wheat in RMS 2006-07 was only 9.2 million tonnes. The decline in wheat procurement in RMS 2006-07 is attributed to a shortfall of output of wheat from the targeted level, lower market arrivals, high ruling market prices, and

negative market sentiments due to low stocks of wheat. In order to encourage farmers to increase production of wheat as well as to enhance procurement in RMS 2007-08, the Government has announced an MSP of Rs. 750 per quintal, which is Rs. 100 per quintal more than last year's MSP. In order to enhance procurement of rice during KMS 2006-07, an incentive bonus of Rs. 40 per quintal for paddy crop 2006-07 upto March 31, 2007 has also been announced.

Economic cost of foodgrains

5.64 Economic cost of rice has shown an increasing trend since 1999-2000. The budget estimate of economic cost of rice during 2006-07 was increased by 3.3 per cent from the revised estimate for 2005-06 due to high increase in distribution cost (Table 5.20). The increase in the procurement incidentals was 17.4 per cent during 2006-07(BE). Economic cost of wheat has also shown an increasing trend between 2002-03 and 2004-05 (actual). With increase in distribution cost, the economic cost of wheat in 2006-07(BE) rose by 9.3 per cent over 2005-06(RE).

Table 5.19 : Minimum support/procurement price of wheat and paddy

(Rs./Quintal)

Crop Year	Wheat		Paddy			
	MSP	per cent Change	Common	per cent Change	Grade'A'	per cent Change
1997-98*	510	7.4	415	9.2	455	-
1998-99	550	7.8	440	6.0	470	3.3
1999-00	580	5.5	490	11.4	520	10.6
2000-01	610	5.2	510	4.1	540	3.8
2001-02	620	1.6	530	3.9	560	3.7
2002-03	620\$	0.0	530\$	0.0	560\$	0.0
2003-04	630	1.6	550	3.8	580	3.6
2004-05	640	1.6	560	1.8	590	1.7
2005-06	650^	1.6	570	1.8	600	1.7
2006-07	750	15.4	580@	1.8	610@	1.7

Note: For MSP of other crops, see appendix-5.5

* Effective 1997-98, MSP is fixed for two varieties of paddy, common and grade-A.

\$ One time special drought relief of Rs.20/- per quintal was given in case of paddy over and above the existing MSP and Rs 10/- per quintal for wheat was given over and above the MSP.

^ An incentive bonus of Rs.50/- per quintal over the MSP given for wheat procured in RMS 2006-07 during the period 20-03-2006 to 30-06-2006. @ An incentive bonus of Rs.40/- per quintal over the MSP allowed for paddy procured in KMS 2006-07 till 31-03-2007.

Source : Ministry of Agriculture.

Table 5.20 : Economic Cost of Rice and Wheat*(Rupees per quintal)*

Year	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06(RE)	2006-07(BE)
Rice								
Procurement incidentals	56.1	69.9	66.8	61.7	25.6	56.3	21.3	25.0
Distribution Cost	187.5	189.9	119.6	157.7	215.4	270.1	181.4	320.7
Economic Cost \$	1074.8	1137.1	1098.0	1165.0	1231.3	1329.6	1350.7	1395.0
% Increase over previous year								
Procurement incidentals	-	24.6	-4.4	-7.6	-58.5	119.9	-62.2	17.4
Distribution Cost	-	1.3	-37.0	31.9	36.6	25.4	-32.8	76.8
Economic Cost \$	-	5.8	-3.4	6.1	5.7	8.0	1.6	3.3
Wheat								
Procurement incidentals	117.1	128.2	134.7	137.6	145.5	191.3	163.7	163.9
Distribution Cost	202.0	166.2	126.7	145.5	165.3	239.1	227.0	256.6
Economic Cost \$	887.5	883.8	852.9	884.0	928.7	1049.6	1031.5	1070.0
% Increase over previous year								
Procurement incidentals	-	9.5	5.1	2.2	5.7	31.5	-14.4	0.1
Distribution Cost	-	-17.7	-23.8	14.8	13.6	44.6	-5.1	13.0
Economic Cost \$	-	-0.4	-3.5	3.6	5.1	13.0	-1.7	3.7
\$: Weighted average of common and grade-A rice taken together.								

5.65 FCI is reimbursed the difference between the economic cost of foodgrains and the issue price. The economic cost of foodgrains of FCI has been on the rise over the years (Table 5.20) with increases in the MSPs of rice and wheat. The imposition of State taxes and levies at over 10 per cent advalorem on procurement of foodgrains by the States of Punjab, Haryana and Andhra Pradesh (from where large quantities are procured) have been inflating the economic cost.

Decentralized Procurement Scheme

5.66 The decentralized procurement scheme of the Government of India that is in operation since 1997 has evoked good response from the State Governments. Under this scheme, the designated States procure, store and also issue foodgrains under TPDS. The difference between the economic cost of the State Governments and the central issue price (CIP) is passed on to the State Governments as subsidy. The decentralized system of procurement,

helps to cover more farmers under the MSP operations, improves efficiency of the PDS, provides varieties of foodgrains more suited to local taste, and reduces the transportation costs of the FCI. 11 States/UT (West Bengal, Uttar Pradesh, Madhya Pradesh, Chhatisgarh, Uttarakhand, Gujarat, Orissa, Tamil Nadu, Union Territory of Andaman & Nicobar islands, Karnataka and Kerala) are undertaking decentralised procurement. There was record procurement of 10.9 million tonnes of rice under this scheme by these States in KMS 2005-06.

Central issue price

5.67 Wheat and rice are issued by the Central Government at uniform CIP to States and Union Territories for distribution under TPDS (Table 5.21).

5.68 There has been no revision of CIPs for BPL since July 2000, and for APL since July 2001 (except for a reduction in APL prices for 3 months in 2002-03).

Table 5.21 : PDS issue price of wheat and rice (Rs/quintal)				
Year	Wheat	Change in per cent	Rice	Chang in per cent
1998-99				
BPL	250	0.0	350	0.0
APL	650	44.4	905	29.3
1999-00				
BPL	250	0.0	350	0.0
APL	682	4.9	905	0.0
2000-01				
BPL	415	66.0	565	61.4
APL	830	21.7	1130	24.9
2001-02				
BPL	415	0.0	565	0.0
APL	610	-26.5	830	-26.5
2002-03 (April)				
BPL	415	0.0	565	0.0
APL	510	-16.4	730	-12.0
2002-03 (July)				
BPL	415	0.0	565	0.0
APL	610	19.6	830	13.7
Note: The CIPs of wheat and rice are subsidized and have remained unchanged for BPL families since July, 2000.				

Food subsidy

5.69 Provision of minimum nutritional support to the poor through subsidised foodgrains and ensuring price stability in different States are the twin objectives of food security system. To attain these twin objectives, Government incurs food subsidies. Annual increases in food subsidies, which were 27-45 per cent in the three years between 2000-01 and 2002-03, moderated in the four subsequent years (Table 5.22). Food subsidy as a proportion of GDP has also shown a moderating tendency since 2002-03.

5.70 Food subsidy is disbursed through FCI, which is the main instrument of Government for procurement and distribution of wheat and rice under TPDS and other welfare schemes, and for maintaining the buffer stock of foodgrains as a measure of food security. In the States which are undertaking decentralized procurement, State-specific economic cost is determined by the Government well in advance in consultation with the State Governments, and the difference between the economic cost so fixed

Table 5.22 : Growth of food subsidies in India			
Year	Food subsidy* (Rs crore)	Annual growth (Per cent)	As per cent of GDP Base: 1993-94
1997-98	7500	23.64	0.52
1998-99	8700	16.00	0.52
1999-00	9435	8.45	0.48 [^]
2000-01	12060	27.82	0.57 [^]
2001-02	17499	45.10	0.77 [^]
2002-03	24176	38.16	0.99 [^]
2003-04	25160	4.07	0.91 [^]
2004-05	25800	2.54	0.83 [^]
2005-06(RE)	23200	-10.08	0.66 [^]
2006-07(BE)	24200	4.31	-
[^] As per cent of GDP (new series based on 1999-00). * Other than that on sugar. Source : Budget documents, various issues and CSO.			

and the CIP fixed on an all-India basis is reimbursed to the States as food subsidy. Efforts are on to persuade other States to adopt this scheme.

Outlook

5.71 In the current year, pressure on inflation may persist because of a mis-match in supply and demand for some primary articles and firm international prices. Higher demand as a result of an accelerated growth in GDP, higher growth in reserve money because of a faster increase in foreign assets, the multiplier effect of increase in broad money, and credit growth have also exerted pressure on demand side. Government has been quick in responding to these developments and has been making efforts to ease the pressure on prices. In petroleum products only a partial pass-through of the increase in international prices was provided and later a reduction in the prices of petrol and diesel was made which kept the inflation for the group 'fuel and power' moderate. Duty reductions in some essential commodities, metals and cement and the monetary stance of the Reserve Bank of India will have an added impact on inflationary expectations; results thereof may be visible in days to come. However, unless the supply side constraints— especially in food items— are removed, the inflationary pressure will not be tamed fully.

External Sector

India's external economic environment continued to be supportive of growth in output and trade in 2005-06 and 2006-07 so far. The continued expansion in world output growth for a record fourth year in a row in 2007 (Table 6.1), amidst rising concerns about continuing global macroeconomic imbalances, protracted Doha negotiations, volatile international crude oil prices, and inflation, testifies to the emergence of a new phase of the external economic scenario. This new phase has been

marked by robust and broad-based growth in emerging market economies, particularly with China and India together accounting for about 40 per cent of global growth measured in purchasing power parity terms. Increasingly, India is being recognized as an important player in the global economic scenario.

6.2 The robust phase of global output expansion in the recent past has been accompanied by stable growth in world trade volume; reasonable stability in world trade

Table 6.1 : External environment
(Annual per cent change unless otherwise noted)

	2004	2005	Projections	
			2006	2007
World output	5.3	4.9	5.1	4.9
Advanced economies	3.2	2.6	3.1	2.7
United States	3.9	3.2	3.4	2.9
Euro area	2.1	1.3	2.4	2.0
Japan	2.3	2.6	2.7	2.1
Other advanced economies	4.6	3.7	4.1	3.7
Newly industrialised Asian economies	5.9	4.5	4.9	4.4
Other emerging market and developing countries	7.7	7.4	7.3	7.2
Developing Asia	8.8	9.0	8.7	8.6
China	10.1	10.2	10.0	10.0
India	8.0	8.5	8.3	7.3
ASEAN-4*	5.8	5.1	5.0	5.6
Commonwealth of Independent States (CIS)	8.4	6.5	6.8	6.5
Russia	7.2	6.4	6.5	6.5
World consumer prices				
Advanced economies	2.0	2.3	2.6	2.3
Other emerging market and developing countries	5.6	5.3	5.2	5.0
World trade volume (goods & services)	10.6	7.4	8.9	7.6
World trade prices (in US dollar terms)				
Manufactures	9.4	3.6	2.2	2.3
Oil	30.7	41.3	29.7	9.1
Non-fuel primary commodities	18.5	10.3	22.1	-4.8
Capital flows				
Other emerging market and developing countries				
Private capital flows (net) in US\$ billion	213.4	261.7	205.6	188.3

* Includes Indonesia, Malaysia, Philippines and Thailand.

Source : World Economic Outlook, September 2006, IMF.

prices; and supportive growth in capital flows (net) to emerging market economies and developing countries. Despite persistence of high oil prices and the higher aggregate demand, inflation, both as measured by GDP deflator and consumer prices (2.3 per cent in 2005 and 2.6 per cent in 2006) for advanced economies and consumer prices (5.3 per cent in 2005 and 5.2 per cent in 2006) for emerging market economies and developing countries, has been low. While the key world economic indicators point to a virtuous phase of global economic activity that provides a conducive environment for deepening the process of development, some downside risks remain.

6.3 With a share of 20.1 per cent in global output in 2005, US continues to impact the world economy significantly. The current account deficit of the US after persisting around 5 per cent or more of GDP for five years is expected to be close to US\$1 trillion in 2007. Such a large current account deficit has been matched by similarly large surpluses in other countries and led to apprehensions about an abrupt unwinding of the global

macroeconomic imbalances and disruptive sudden changes in cross-currency rates with associated adverse implications for the world economy (Box 6.1).

6.4 The extended timeline of December 2006 of the Doha Round of negotiations under the World Trade Organisation (WTO) has been missed. Agricultural subsidies and non-agricultural market access are proving to be stumbling blocks. International crude oil prices, per barrel, which rose rapidly for Brent from an average of US\$42.1 in 2004-05 to US\$57.9 in 2005-06, reached an all-time high of US\$78.7 on August 8, 2006. While a warm winter, among other reasons, led to a decline in such prices to a low of US\$50.7 on January 17, 2007, considerable uncertainty remains about volatile oil prices. Some concerns have also been expressed about the sustainability of this phase of high growth momentum, particularly in China and India, without overheating and build up of inflationary pressures.

6.5 There appears to be some diminution of the downside risks over time. Initially, the

Box 6.1 : Global imbalances

Global imbalances in the form of two or more countries having large non-zero current account balances are not a new phenomenon. Even in the era of gold standard, with fixed exchange rates, there were current account deficits financed by large capital flows to fund investment overseas and/or finance expenditure in the settlements or colonies. But such imbalances used to adjust through gold movement across countries.

In the post-gold standard era, conventional economic theory envisions equilibrium in international transactions across nations to be established mainly through market determined exchange rates in the medium to long run. Global imbalances, in the current conjecture, refer to the persistence of large current account deficit in US which is financed mainly through corresponding surpluses in some other countries. US has been experiencing growing deficits in its external current account, particularly trade, while simultaneously, international financial system has been contracting dollar-denominated liabilities to offset such deficits. The US current account deficit grew from 4.8 per cent of GDP and 5.7 per cent of GDP in 2003 and 2004, respectively to US\$791.5 billion, equivalent of 6.4 per cent of GDP, in 2005. This, however, did not result in any appreciable decline in the external value of the US dollar primarily because East Asian and other economies were running huge current account surpluses and investing such surpluses in US financial assets, particularly bonds. This led some analysts to postulate that US dollar was the *de facto* international reserve currency, and the existing system of payment settlement could be sustained indefinitely. Such a view has been described as Bretton Woods 2 System.

The IMF, in its *World Economic Outlook* 2005 had cautioned that an abrupt decline in capital inflows to the US: "could engender a rapid dollar depreciation and a sharp increase in US interest rates, with potentially serious adverse consequences for global growth and international financial markets". In the event, the US dollar depreciated in nominal effective terms by 2.1 per cent in 2006 up to November.

Furthermore, the capital flows to finance the US current account deficit, it has been pointed out by many analysts, have been appropriated not for investment, but for consumption expenditure, particularly the US fiscal deficit. A cooling of asset prices in US (particularly housing) and rising bond yields together with tightening of monetary policy, it has been widely feared, may impact the global economy significantly. A sudden and sharp revision in the asset prices or US bond yields could affect global financial stability and through abrupt contraction in consumption, cause recessionary trends. It is in this context that the need to unwind the global imbalances in an orderly fashion assumes importance. The IMF has initiated a dialogue for this purpose with key stakeholders.

IMF in its bi-annual publication *World Economic Outlook* (WEO) April 2006 issue, had projected global output to grow by 4.9 per cent in 2006. With a pick up in growth in US, Euro Area and Japan and the continued momentum in the emerging market economies and developing countries in the first half, in the WEO September 2006, the IMF upped the growth forecast to 5.1 per cent.

Balance of Payments

6.6 The growing strength of India's Balance of Payments (BoP) observed in the post-reform period since the crisis of 1991 continued in 2005-06. This growing strength was in spite of a widening of the current account deficit from US\$2.5 billion in 2004-05 to US \$ 9.2 billion, equivalent to 1.1 per cent of GDP, in 2005-06 (Table 6.2). With a burgeoning trade deficit, primarily on account of rising oil prices, the reversal from current account surpluses witnessed between 2001-

02 and 2003-04 to a current account deficit in 2004-05 appears to be continuing into 2006-07 so far.

6.7 Rising foreign investment, both direct and portfolio, together with a sharp revival of inflows in non-resident (NR) deposits, in spite of the large repayment of India Millennium Deposits (IMD) under external commercial borrowing, maintained a strong balance in the capital account, and even after financing the current account deficit, resulted in a reserve accretion of US\$15.1 billion in 2005-06. While reserve accretion in 2005-06 was lower by US\$11.1 billion relative to 2004-05, because of a higher current account deficit (US\$6.7 billion) and a lower capital account balance (US\$4.4 billion), India continued to be among the top nations with high levels of reserves.

6.8 Given such robust external position, RBI had deemed it opportune to revisit the issue of fuller capital account convertibility and

Table 6.2 : Balance of Payments : Summary

(in US \$ million)

	1990-91	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	(April-Sept.)				
									R	R	PR	2005-06	2006-07
												PR	P
1. Exports	18477	37542	45452	44703	53774	66285	85206	105152	49255	60550			
2. Imports	27915	55383	57912	56277	64464	80003	118908	156993	76364	95691			
3. Trade balance	-9438	-17841	-12460	-11574	-10690	-13718	-33702	-51841	-27109	-35141			
4. Invisibles (net)	-242	13143	9794	14974	17035	27801	31232	42655	19949	23458			
Non-factor services	980	4064	1692	3324	3643	10144	15426	23881	11726	14298			
Income	-3752	-3559	-5004	-4206	-3446	-4505	-4979	-5510	-2278	-2051			
Pvt. transfers	2069	12256	12854	15398	16387	21608	20525	24102	10489	11157			
Official transfers	461	382	252	458	451	554	260	182	12	54			
5. Current account balance	-9680	-4698	-2666	3400	6345	14083	-2470	-9186	-7160	-11683			
6. External assistance (net)	2204	891	410	1117	-3128	-2858	1923	1682	409	358			
7. Commercial borrowing (net)@	2254	333	4303	-1585	-1692	-2925	5194	2723	2925	5093			
8. IMF (net)	1214	-260	-26	0	0	0	0	0	0	0			
9. Non-resident deposits (net)	1537	1540	2316	2754	2978	3642	-964	2789	233	2029			
10. Rupee debt service	-1193	-711	-617	-519	-474	-376	-417	-572	-142	-67			
11. Foreign investment (net)	103	5117	5862	6686	4161	13744	13000	17224	7542	5832			
Of which :													
(i) FDI (net)	97	2093	3272	4734	3217	2388	3713	4730	2129	4218			
(ii) FII	0	2135	1847	1505	377	10918	8662	9926	4529	-106			
(iii) Euro equities & others	6	889	743	447	567	438	625	2568	884	1720			
12. Other flows (net)+	2283	3930	-3740	-96	8795	6111	9893	392	2696	7084			
13. Capital account total (net)	8402	10840	8508	8357	10640	17338	28629	24238	13663	20329			
14. Reserve use (- increase)	1278	-6142	-5842	-11757	-16985	-31421	-26159	-15052	-6503	-8646			

R: Revised, PR : Partially Revised, P : Preliminary

@ Figures include receipts on account of India Development Bonds in 1991-92, Resurgent India Bonds in 1998- 99 and India Millennium Deposits in 2000-01 and related repayments, if any, in the subsequent years.

+ Include, among others, delayed export receipts and errors & omissions.

Source : Reserve Bank of India.

constituted a committee headed by Shri. S. S. Tarapore to bring out a roadmap for the purpose. The committee recommended a three-phase strategy for moving towards fuller capital account convertibility (Box 6.2). Though no final view has been taken on acceptance of the recommendations in totality, RBI has initiated measures on an on-going basis beginning with the announcements in its Mid-term Review of the Annual Policy Statement for 2006-07.

Current account

6.9 As a proportion of GDP, on BoP basis, exports, which had grown from 5.8 per cent in 1990-91 to 12.2 per cent in 2004-05, grew further to 13.1 per cent in 2005-06 (Table 6.3). The corresponding rise in imports was from 8.8 per cent in 1990-91 to 17.1 per cent in 2004-05 and further to 19.5 per cent in 2005-06. Trade deficit as a proportion of GDP, which had actually declined from 3.0 per cent in 1990-91 to 2.1 per cent in 2002-03, widened to 4.9 per cent in 2004-05 and further to 6.4 per cent in 2005-06. Imports grew rapidly and the trade

deficit widened sharply, particularly in 2004-05 and 2005-06, because of higher outgo on import of petroleum, oil and lubricants (POL) with large increases in international POL prices.

6.10 According to an IMF and International Energy Agency (IEA) estimate, an oil price increase of US\$10 per barrel results in a deterioration of the trade balance of oil importing developing countries by 1.2 per cent of GDP. Trade deficit in India ballooned from 2.3 per cent of GDP in 2003-04, when oil prices began their initial climb, to 4.9 per cent in 2004-05 and further 6.4 per cent in 2005-06. An estimate excluding the impact of the oil price rise, that is with the same headline price of Indian basket of crude as in 2002-03 but with the same quantities as actually imported in the relevant years, yields trade deficit of 3.4 per cent of GDP each in 2004-05 and 2005-06. The above estimate indicate an oil price impact of 1.47 per cent and 3.05 per cent in 2004-05 and 2005-06, respectively somewhat lower than the impact projected by the IMF-IEA estimate.

Table 6.3 : Selected indicators of external sector

	1990-91	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	(April-Sept.)	
								2005-06	2006-07
1. Growth of exports - BOP (%)	9.0	21.1	-1.6	20.3	23.3	28.5	23.4	34.2	22.9
2. Growth of imports - BOP (%)	14.4	4.6	-2.8	14.5	24.1	48.6	32.0	48.2	25.3
3. Exports/imports - BOP (%)	66.2	78.5	79.4	83.4	82.9	71.7	67.0	64.5	63.3
4. Import cover of FER (No. of months)	2.5	8.8	11.5	14.2	16.9	14.3	11.6	11.2	10.4
5. External assistance (net)/TC (%)	26.2	4.8	13.4	-29.4	-16.5	6.7	6.9	3.0	1.8
6. ECB (net)/TC (%)	26.8	50.6	-19.0	-15.9	-16.9	18.1	11.2	21.4	25.1
7. NR deposits/TC (%)	18.3	27.2	33.0	28.0	21.0	-3.4	11.5	1.7	10.0
As per cent of GDP at current market prices									
8. Exports	5.8	9.9	9.4	10.6	11.0	12.2	13.1		
9. Imports	8.8	12.6	11.8	12.7	13.3	17.1	19.5		
10. Trade balance	-3.0	-2.7	-2.4	-2.1	-2.3	-4.9	-6.4		
11. Invisibles balance	-0.1	2.1	3.1	3.4	4.6	4.5	5.3		
12. Current account balance	-3.1	-0.6	0.7	1.2	2.3	-0.4	-1.1		
13. External debt	28.7	22.5	21.1	20.3	17.8	17.3	15.8		
Notes :									
(i) TC: Total capital flows (net).									
(ii) ECB: External commercial borrowing.									
(iii) FER: Foreign exchange reserves, including gold, SDRs and IMF reserve tranche.									
(iv) As total capital flows are netted after taking into account some capital outflows, the ratios against item no. 5, 6 and 7 may, in some years, add up to more than hundred per cent.									
(v) Rupee equivalents of BOP components are used to arrive at GDP ratios. All other percentages shown in the upper panel of the table are based on US dollar volumes									

Box 6.2 : Towards fuller capital account convertibility

With growing strength of the balance of payments in the post-1991 reform period, in August 1994, by accepting obligations under Article VIII of the articles of agreement of the IMF, India made the Rupee convertible for current account transactions. A Committee headed by Shri S.S.Tarapore in 1997 had chalked out a phased road map for making the capital account convertible. The East Asian crisis intervened soon thereafter, leading to lack of popular enthusiasm for capital account convertibility. With external sector remaining robust and gaining strength every year and the relative macro economic stability with high growth providing a conducive environment for relaxation in capital controls, RBI, in pursuance of the announcement by the Prime Minister, constituted a Committee (Chairman: S.S. Tarapore) on March 20, 2006 for setting out a roadmap towards fuller capital account convertibility. The Committee submitted its Report to the RBI on July 31, 2006.

Conscious of the risks in the movement towards fuller convertibility of the Rupee as emanating from cross country experiences in this regard, the Committee calibrated the liberalization roadmap to the specific contexts of preparedness – namely, a strong macroeconomic framework, sound financial systems and markets, and prudential regulatory and supervisory architecture. After reviewing the existing capital controls, it detailed a broad five-year time frame for movement towards fuller convertibility in three phases: Phase I (2006-07); Phase II (2007-08 to 2008-09); and Phase III (2009-10 to 2010-11). It recommended the meeting of certain indicators/targets as a concomitant to the movement in: meeting FRBM targets; shifting from the present measure of fiscal deficit to a measure of the Public Sector Borrowing Requirement (PSBR); segregating Government debt management and monetary policy operations through the setting up of the Office of Public Debt independent of the RBI; imparting greater autonomy and transparency in the conduct of monetary policy; and slew of reforms in banking sector including a single banking legislation and reduction in the share of Government/RBI in the capital of public sector banks; keeping the current account deficit to GDP ratio under 3 per cent; and evolving appropriate indicators of adequacy of reserves to cover not only import requirements, but also liquidity risks associated with present types of capital flows, short-term debt obligations and broader measures including solvency.

Some of the significant measures, to be implemented in a sequenced manner as per the given roadmap include: raising the overall external commercial borrowing (ECB) ceiling as also the ceiling for automatic approval gradually; keeping ECBs of over 10-year maturity in Phase I and over 7-year maturity in Phase II outside the ceiling and removing end-use restriction in Phase I; monitoring import-linked short-term loans in a comprehensive manner and reviewing the per transaction limit of US\$20 million; raising the limits for outflows on account of corporate investment abroad in phases from 200 per cent of net worth to 400 per cent of net worth; providing Exchange Earners Foreign Currency Account holders access to foreign currency current/savings accounts with cheque facility and interest bearing term deposits; prohibiting FII's from investing fresh money raised through Participatory Notes (PN), after providing existing PN-holders an exit route so as to phase them out completely within one year; allowing non-resident corporates (and non-residents) to invest in the Indian stock markets through SEBI-registered entities including mutual funds and portfolio management schemes who will be individually responsible for fulfilling know your customer (KYC) and Financial Action Task Force (FATF) norms; allowing institutions/corporates other than multilateral ones to raise Rupee bonds (with an option to convert into foreign exchange) subject to an overall ceiling which should be gradually raised; linking the limits for borrowing overseas to paid-up capital and free reserves, and not to unimpaired Tier I capital, as at present, raising it substantially to 50 per cent in Phase-I, 75 per cent in Phase II and 100 per cent in Phase III; abolishing the various stipulations on individual fund limits and the proportion in relation to net asset value; raising the overall ceilings from the present level of US\$2 billion to US\$3 billion in Phase I, to US\$4 billion in Phase II and to US\$5 billion in Phase III; raising the annual limit of remittance abroad by individuals from existing US\$25,000 per calendar year to US\$50,000 in Phase I, US\$100,000 in Phase II and US\$200,000 in Phase III; allowing non-residents (other than NRIs) access to Foreign Currency Non-Resident (FCNR(B)) and Non-Resident (External) Rupee Account (NR(E)RA) schemes.

6.11 The invisibles (net), comprising of non-factor services (like travel, transportation, software services and business services), investment income, and transfers, have traditionally compensated to a large extent the trade deficit, and this trend continued in 2005-06 with a moderate current account deficit at 1.1 per cent of GDP. As a proportion of GDP, invisibles (receipts) at 11.5 per cent of GDP

in 2005-06 exhibited steady growth from a modest level of 2.4 per cent of GDP in 1990-91, with the most recent two years showing acceleration, particularly in software and business services. Simultaneously, invisible payments at 6.2 per cent of GDP in 2005-06 have grown, albeit at lower levels and somewhat unevenly, again with acceleration being noticed in the most recent two years.

6.12 The steady growth in invisibles (net) conceals divergent patterns and sharp changes in some of the components over a decade and a half. For instance, annual growth in travel receipts (gross), after remaining mostly in single digit during the 1990s, has shown rapid growth in the range of 18-52 per cent in the last three years ending in 2005-06. Nevertheless, with even faster growth in travel payments (gross), growth in travel receipts in net terms have been negative since 1997-98. Similarly growth in transportation receipts has varied in the range of (-) 11.3 per cent to 46.0 per cent between 1991-92 and 2005-06, with high growth in the latest 4 years. With growth in payments also varying from (-) 28.9 per cent to 95.0 per cent in the same period, and very high growth of 95.0 per cent and 72.8 per cent in the last two financial years (2004-05 and 2005-06), there were also outflows on a net basis under transportation. In the recent two years ending in 2005-06, with strong growth, miscellaneous (other than software services) payments have exceeded such receipts. Rapid growth of non-software miscellaneous services payments may indicate how business services payments have also risen in tandem with business services receipts in recent years, reflecting the ongoing technological transformation and modernization of the economy/industry.

6.13 Private transfers (net), which remained the single largest component of the invisibles (net) account till 2004-05, fell below miscellaneous (net) receipts in 2005-06. The ratio of net invisible receipts to private transfers (net) rose dramatically from 3/7 to more than 2 between 1991-92 and 2005-06. The growth in miscellaneous (net) receipts has been driven mostly by software services. On a net basis, in 2005-06, with rapid growth of 31.7 per cent and 209.8 per cent in receipts from software services and business services, respectively, non-factor services moved closer to private transfers in the invisibles account. In the invisible account, on a gross basis, both receipts and payments have grown at rapid rates of over 30 per cent in both 2004-05 and 2005-06.

6.14 The four other main components of non-factor services, namely, travel, transportation, insurance and Government transactions (not included elsewhere), have exhibited mixed trends. Transportation (net), which had yielded modest positive inflows only in 2003-04 and 2004-05 in the preceding decade and a half, slipped back with an outflow of US\$1.6 billion in 2005-06. The pick up in international tourism observed in 2003-04 and 2004-05 continued in 2005-06 and resulted in a net inflow of US\$1.4 billion in 2005-06. With insurance receipts and payments more or less balancing each other and Government account yielding a modest net outflow of US\$197 million, the total invisibles (net) inflow amounted to US\$23.9 billion in 2005-06 for non-factor services.

6.15 Investment income (net) continued to be negative reflecting the servicing costs of capital inflows. While receipts on this account have grown rapidly at an average rate of 20.1 per cent in the last six years to reach US\$5.7 billion in 2005-06, payments on this account grew at a lower average rate of 13.6 per cent to reach US\$11.2 billion in 2005-06. Official transfers, a very small component in the invisibles account, continued to decline in 2004-05 and 2005-06.

6.16 Overall, in 2005-06, current receipts (including grants) grew by 27.6 per cent to US\$197.4 billion. But, such receipts fell short of current payments (including grants) which grew by 31.4 per cent to US\$206.6 billion. Current receipts covered 95.6 per cent of current payments in 2005-06.

6.17 As per the quarterly data on BoP for 2006-07 released by the RBI on December 29, 2006, both imports and exports have decelerated in the first half of the current year. With revisions to the first quarter data, trade deficit at US\$35.1 billion during April-September 2006 was considerably higher than US\$27.1 billion observed in the corresponding period of 2005. As per the quarterly data, export growth, which was 23.7 per cent in the first quarter of 2006-07, continued to be robust at 22.9 per cent in the first six months (34.2 per cent in April-

September 2005). Imports, which had grown by 23.6 per cent in the first quarter, also strengthened to 25.3 per cent growth in the first six months of the current year. There was, however, a deceleration of import growth from 48.4 per cent in the first half of 2005-06. However, as pointed out by the Economic Advisory Council to the Prime Minister in its outlook for BoP released on January 11, 2007, the provisional nature of the data, which can get revised sharply, needs to be taken into account in drawing any firm conclusions. The Council, in an earlier Report, had also expressed concern at the levels of divergence between customs (DGCI&S) trade data and RBI's trade data as per BoP accounts (Box 6.3).

6.18 In the first half of the current year, while invisibles receipts rose on account of growth in export of software and other professional and business services, invisible payments also

rose sharply, particularly in travel and transportation. Net invisible receipts at US\$23.5 billion, was up from US\$19.9 billion in the first half of 2005-06, but not enough to offset the rising trade deficit. Consequently, during April-September, the current account deficit widened from US\$7.2 billion in 2005 to US\$11.7 billion in 2006.

External Trade

6.19 India's total external trade, including goods and services, grew by 31.2 per cent to US\$361 billion in 2005-06. Growth was 27.5 per cent in the first half of 2006-07, with value of such trade at US\$212.5 billion. Trade in services has been growing faster than merchandise trade, and the share of services in total external trade increased from 25.8 per cent in 2004-05 to 27.4 per cent in 2005-06. In the first half of 2006-07, the share was 26.5 per cent.

Box 6.3 : Divergence in trade data

Periodically concerns have been expressed, since 1980s, as regards the divergence in the merchandise trade data compiled by the two agencies, namely, Reserve Bank of India (RBI) and Directorate General of Commercial Intelligence and Statistics (DGCI&S), Kolkata, Ministry of Commerce and Industry. This divergence is more pronounced in the case of imports. This divergence was examined by the High Level Committee on Balance of Payments (Chairman: Dr. C. Rangarajan, April 1993) and the Technical Group on Reconciling Balance of Payments and DGCI&S data on merchandise trade (Chairman: Shri O.P. Sodhani, September 1995). While the two agencies are recording the same transactions, the scope, time period, definition, method and coverage of items of trade differ considerably, besides inclusion and exclusion errors in trade items. While RBI relies on foreign exchange release/receipt returns, which are actual cash outgo and cover all flows, DGCI&S relies on customs data, which in turn are based on bills of entries (import document filed with the Customs), which might remain somewhat incomplete for a number of reasons in the short run. Defence imports are not reflected in the DGCI&S data. As such for a particular time period at any specific date, given the leads and lags in reporting, the two sets of data would never match.

The extent of the divergence has narrowed over the years, particularly for years prior to 2004-05 (Table below).

Divergence in import data

Year	<i>(in US\$ million)</i>		
	RBI-BoP	DGCI&S-Customs	Difference
1990-91	27,915	24,075	3,840
1995-96	43,670	36,678	6,992
2000-01	57,912	50,536	7,376
2001-02	56,277	51,413	4,864
2002-03	64,464	61,412	3,052
2003-04	80,003	78,150	1,853
2004-05	118,908	111,518	7,390
2005-06	156,993	149,166	7,827
2006-07(April-September)	95,691	83,927	11,764

As per the extant revision policy of the RBI, data on exports and imports are revised every quarter up to 24 months while DGCI&S finalise their trade data after 8 months. However, the extent of this level of divergence in the current conjecture makes it arduous for calibrating the policy responses to external sector developments in the short-run.

Merchandise Trade:

6.20 India's merchandise exports (in US dollar terms and on customs basis), which have been growing continuously at a high pace of more than 20 percent since 2002-03, continued its momentum and grew by 23.4 per cent to cross the US\$100 billion mark in 2005-06. Exports during 2006-07, which gained momentum after a slow start, reached US\$89.5 billion in April-December, 2006 with growth of 36.3 per cent on provisional to provisional (POP) basis (growth rates comparisons for April-December of the current year is on POP basis, unless stated otherwise).

6.21 Export performance was dominated by volume growth till 2002-03. There was a reversal of this trend in 2003-04, with increasing contribution of higher unit value in export performance. Subsequent years witnessed a surge both in terms of volume and unit value. During 2005-06, for exports, while volume increased by a record 45.4 percent (mainly in items like petroleum products, chemicals & related products and machinery & transport equipment), the unit value increased by 20.4 per cent (mainly in petroleum products, minerals & ores, machinery & transport equipment and footwear) (Table 6.4). However, notwithstanding these favourable developments on the export front, there was

a sharp deterioration in both net and income terms of trade. The net terms of trade, which measures the unit value index of exports as a proportion of unit value index of imports, deteriorated as the unit value index of imports rose by 49 per cent (mainly due to a sharp rise in the price of crude petroleum by over 40 per cent, and of gold and other metals). Even gross terms of trade, which measures the volume index of imports as a ratio of volume index of exports, fell with a decline in the quantum of imports (particularly gold) while quantum of exports increased.

6.22 India's share in world merchandise exports, after remaining unchanged at 0.8 per cent between 2003 and 2004, reached 1.0 per cent in 2005, and remained there in the first eight months of 2006 (Table 6.5). This increase was due to India's exports growing at more than double the rate of growth of world exports since 2005. China has been a stellar export performer for years; for the first time, in 2005 and the first eight months of 2006, India's export growth surpassed that of China.

6.23 India's significant export growth in recent years was on account of a host of favourable external developments and domestic policy initiatives. Improved global growth and recovery in world trade aided the growth of Indian exports. The opening up of the economy and corporate restructuring has enhanced the competitiveness of Indian

Table 6.4 : Performance of the foreign trade sector
(Annual percentage change)

Year	Export growth			Import growth			Terms of trade	
	Value (in US dollar terms)	Volume	Unit Value	Value (in US dollar terms)	Volume	Unit Value	Net	Income
1990-00	7.7	10.6	8.4	8.3	12.4	7.2	1.5	11.7
1990-95	8.1	10.9	12.6	4.6	12.9	7.6	5.0	16.5
1995-00	7.3	10.2	4.3	12.0	11.9	6.9	-2.0	7.0
2000-01	21.0	23.9	3.3	1.7	-1.0	8.2	-4.5	18.3
2001-02	-1.6	3.7	-1.0	1.7	5.0	1.1	-2.1	1.5
2002-03	20.3	21.7	0.3	19.4	9.5	10.7	-9.4	10.3
2003-04	21.1	6.0	8.5	27.3	20.9	-0.1	8.6	15.1
2004-05	30.8	17.6	8.9	42.7	14.7	21.6	0.5	5.0
2005-06	23.4	45.4	20.4	33.8	-1.6	49.0	-27.4	-33.2
2006-07*	36.3	-	-	36.3	-	-	-	-

*April-December, 2006

Source : DGCI&S, Kolkata

Country	Percentage growth rate				Share in world exports				Value (US \$ billion)
	1995-01	2004	2005	2006*	2001	2004	2005	2006*	2005
1. China	12.4	35.4	28.5	25.8	4.3	6.6	7.4	7.8	762.0
2. Hong Kong	3.6	15.6	11.6	8.6	3.1	2.9	2.8	2.6	289.0
3. Malaysia	6.6	26.5	12.1	15.1	1.4	1.4	1.4	1.4	140.9
4. Indonesia	5.7	11.2	18.2	17.4	0.9	0.8	0.8	0.9	84.6
5. Singapore	4.1	24.5	15.6	34.5	2.0	2.0	2.2	2.3	229.6
6. Thailand	5.9	20	14.6	20.0	1.1	1.1	1.1	1.1	110.0
6. India	8.5	25.7	30.0	40.4	0.7	0.8	1.0	1.0	99.5
8. Korea	7.4	30.9	11.8	13.7	2.5	2.8	2.7	2.7	284.0
9. Developing countries	7.9	27.1	21.8	23.1	36.8	40.7	43.8	44.8	4530.3
10. World	5.5	21.2	13.9	16.4	100.0	100.0	100.0	100.0	10355.3

Source : IFS statistics, IMF. * January-August, 2006

industry. There is a far greater export-orientation of domestic manufacturers, and corporate sector has been pursuing new growth strategies in response to economic reforms. Firming up of domestic economic activity, especially resurgence of the manufacturing sector, provided a supporting base for strong sector-specific exports. Trade policy reforms, continued trade promotion, market diversification and trade facilitation efforts seem to have paid good dividends. The nominal effective exchange rate (NEER) measuring the value of country's currency relative to the currencies of principal trading partners is a proximate indicator of its competitiveness in international trade. The NEER-5 (base 2000=100) which is a 5 currency export-weighted index, depreciated on a yearly basis till 2004-05, and after a bout of appreciation in 2005-06, depreciated steadily in 2006-07 till August 2006.

6.24 Reaching the 1.5 per cent targeted share of world exports by 2009, and maintaining and further accelerating the current dynamism in exports on a long term basis require a deepening of domestic reforms: reducing constraints like infrastructure bottlenecks, outdated/inflexible labour laws, SSI reservations, and high transaction costs; and a calibrated policy of phasing out export incentive schemes coupled with lowering of basic customs duties. Exporters, in turn, need to place more emphasis on non-price factors like product quality, brand image, packaging, delivery and

after-sales service. A more aggressive push to foreign direct investment (FDI) in export industries will not only increase the rate of investment in the economy but also infuse new technologies and management practices in these industries, and thereby increase exports.

6.25 Indian banks, particularly the Export-Import Bank of India (Exim Bank), are financing different stages of exports (see Box 6.4). Availability of adequate export credit at competitive rates continues to be an important determinant of export performance. However, export credit as a proportion of net bank credit (NBC) has gone down steadily in the current decade (Table 6.6). While this may partly

Outstanding as on	Export credit (Rs crores)	Variations (Per cent)	Export credit as per cent of NBC
March 24, 2000	39118	9.0	9.8
March 23, 2001	43321	10.7	9.3
March 22, 2002	42978	-0.8	8.0
March 21, 2003	49202	14.5	7.4
March 19, 2004	57687	17.2	7.6
March 18, 2005	69059	19.7	6.3
March 31, 2006	86207	24.8	5.7
December 22, 2006*	97763	13.4	5.6

Note : ¹ Data upto March 2004 relate to select banks accounting for 90 per cent of bank credit
² March 18, 2005 onwards, data pertain to all scheduled banks excluding RRBs availing export credit refinance from the RBI.
* Over the corresponding figure as on March 31, 2006 (variation)

Source : Reserve Bank of India (RBI)

Box 6.4 : Export finance

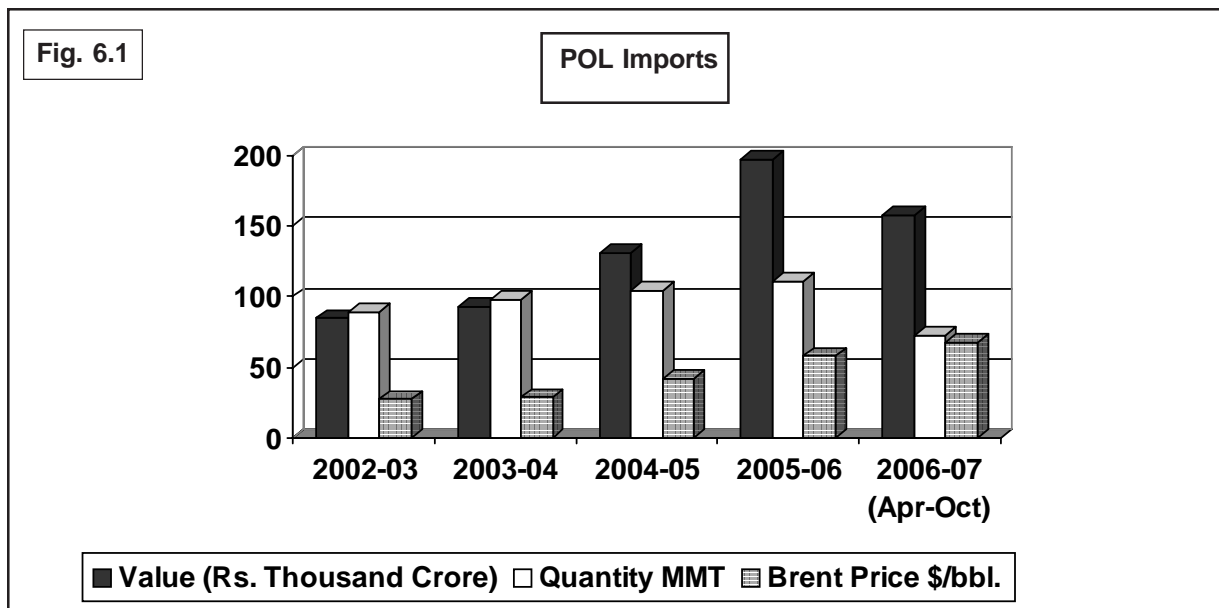
Pre-shipment and post-shipment credits are the customary banking credit facilities for exports. Traditional exports (such as tea), with foreign exchange from such exports realised typically within 180 days from shipment, require finance which is short-term in nature. Non-traditional exports, covering products such as capital goods, services, and project exports, however, require deferred credit over the medium (1-5 years) and long term (beyond 5 years and up to 10 years). Commercial banks, with their liability structure short-term in character, concentrate on traditional, short-term export finance. Export credit of scheduled commercial banks amounted to Rs. 65,914 crore at end-March 2005. Export-Import Bank of India (Exim Bank), with its medium/long term liability structure, concentrates primarily on medium to long-term export finance, besides working capital. Exim Bank also provides refinance and rediscounting facilities to commercial banks so that short-term exports are not affected by lack of finance. Exim Bank's lending has steadily increased over the years. In 2005-06, Exim Bank's approved loans increased by over 29 per cent to Rs. 20,489 crore.

Exim Bank provides finance at various stages of the export cycle — import finance, product development, production, marketing, pre-shipment and post-shipment — as well as for overseas investment. It has a range of export credit programmes, such as supplier's and buyer's credit, for Indian companies executing contracts overseas for projects, products, as well as services. The Exim Bank also extends guarantee facilities to facilitate Indian companies in executing export contracts and extends lines of credit, on its own or at the behest of the Government of India, to overseas governments, or to agencies nominated by them, or to financial institutions overseas for encouraging imports from India on deferred payment terms. Exim Bank's import lines of credit provide financing for import of capital goods and related services particularly for enhancing export production capabilities of small and medium sized export oriented units.

reflect the growing strength of the Indian export sector, which may be availing of less export credit, it may also be a reflection of the relatively higher cost of export credit in India compared to other countries.

6.26 Merchandise imports grew by 33.8 per cent to US\$149.2 billion in 2005-06. This high growth in imports in value terms was primarily due to the high POL prices. While volume growth of POL imports declined marginally from 6.4 per cent in the previous year to 6.1

per cent in 2005-06, with the price of Indian basket of crude oil increasing by 42.1 per cent (Figure 6.1), POL imports during 2005-2006 increased by 47.3 per cent to US\$44 billion. Growth of non-POL imports in 2005-06 was 28.8 per cent. With high international price of gold and silver, there was a rapid deceleration in growth of import of gold and silver from 62.6 per cent to 1.5 per cent between 2004-05 and 2005-06. Non-POL non-bullion import grew by 39.0 per cent in 2005-06. Apart from the high price of gold, subdued global demand for



gems & jewellery affected the import of items related to export of gems & jewellery i.e. pearls, precious & semi-precious stones, the import of which declined by 3.1 per cent.

6.27 In the current year, imports continued to grow, though at a slightly decelerated pace due to the fall in gold and silver imports. The 36.3 per cent growth in imports in April-December 2006 was substantially contributed by the growth in POL imports at 39.2 per cent due to high crude oil prices. While the trend of negative growth of gold and silver imports, which started in October 2005, continued even in the first few months of the current year, there has been a reversal in this trend from August 2006 with a very high growth of around 182 per cent in September 2006. This was due to the softening of international gold prices which fell from a high of \$675.4 per troy ounce in May 2006 to \$598.2 per troy ounce in September 2006, coupled with the festival demand both for domestic consumption and for exports. With gold and silver import growth at 15.5 per cent in April-December 2006, non-POL import growth also picked up to 18.7 per cent. Non-POL non-bullion import growth was at 19.1 per cent.

6.28 Trade deficit reached a record high of US\$46 billion (as per customs data) in 2005-06 and US\$41.7 billion in the first nine months of the current year. With rapid growth in non-POL imports, even the non-POL trade balance turned negative to US\$(-)5.3 billion in 2004-05, and more than doubled in 2005-06 to US\$(-)14.0 billion. Non-POL trade deficit in the first seven months of the current year at US\$ (-)9.6 billion was higher than such deficit of US\$ (-) 7.6 billion in the first seven months of the previous year.

Composition of merchandise trade

6.29 Export growth in 2005-06 was broad-based with good performance in most of the sectors (Table 6.7). Major drivers of export growth during 2005-06 were petroleum products, engineering goods and chemicals. Growth of 66.2 per cent in exports of petroleum products (over and above the 91.2 per cent growth in the previous year) and the perceptible increase in share of petroleum

products in total exports to 11.5 per cent in 2005-06 reflected not only the rise in POL prices, but also India's enhanced refining capacity. Induced by strong international demand and higher prices, exports of ores & minerals, after more than doubling in 2004-05, grew by another 17.4 per cent in 2005-06. Manufacturing growth was powered mainly by engineering goods (mainly manufactures of metals, machinery and instruments and transport equipment); chemicals and related products, and textiles. However, there was a marginal decline in the share of manufactured goods (other than POL) in total exports from 74.2 per cent in 2004-05 to 72.0 per cent. Agriculture and allied exports also registered reasonably good growth of 19.8 per cent.

6.30 Data on commodity composition of trade are available only up to October 2006. During April-October 2006, the major drivers of export growth were petroleum products and engineering goods while exports of primary products decelerated. Between the first seven months of 2004-05 and 2006-07, exports of petroleum products went up more than three-fold while that of engineering goods almost doubled. The deceleration in exports of primary products during April-October 2006 was mainly due to the negative growth in export of ores & minerals due to a fall in demand from China and Japan. Manufactured products export growth decelerated during April-October 2006, mainly due to the decline in exports of gems and jewellery with the fall in off-take in major markets like Hong Kong, Singapore, Israel, Belgium, Japan, Switzerland and Germany and a possible shift in consumer spending in US. The sustained growth of engineering goods exports was supported by machinery & instruments, primary & semi-finished iron & steel, non-ferrous metals and manufacturers of metals in particular. There was a deceleration in export growth in textiles across most of the product groups including readymade garments (RMG). With the sudden rise in share of POL products in exports to 16.3 per cent, the share of manufactures fell drastically to 69 per cent despite reasonable growth.

Table 6.7 : Commodity composition of exports

Commodity Group	Percentage share				Growth rate*			
	2004-05	2005-06	April-October		2004-05	2005-06	April-October	
			2005-06	2006-07			2005-06	2006-07
I. Primary products	16.0	15.4	14.9	13.9	36.2	18.9	38.6	17.3
Agriculture & allied	10.5	10.2	9.9	9.9	11.7	19.8	28.9	25.4
Ores & minerals	5.5	5.2	5.0	4.0	136.5	17.4	63.2	1.1
II. Manufactured goods	74.2	72.0	73.5	69.0	24.9	19.6	30.1	17.6
Textile incl. RMG	14.9	14.5	11.0	9.8	5.3	20.4	20.2	11.7
Gems & jewellery	16.5	15.1	16.8	12.9	30.2	12.8	29.6	-4.4
Engineering goods	20.7	20.7	20.6	22.5	40.2	23.4	36.8	37.0
Chemical & related pdcts.	12.2	11.6	11.3	10.4	33.9	17.3	27.9	14.8
Leather & manufactures	2.9	2.6	2.1	1.8	12.0	11.1	21.9	5.7
Handicrafts (incl. carpet handmade)	1.2	1.2	1.3	1.0	-7.0	30.2	37.4	-7.3
III. Petroleum, crude & products (incl. Coal)	8.5	11.5	11.0	16.3	91.2	66.2	67.7	85.3
Total exports	100.0	100.0	100.0	100.0	30.8	23.4	33.9	25.3

* In US \$ terms
Source : DGCI&S, Kolkata

6.31 Prospects for export of textiles and clothing (T&C) including RMG, an important sector in India in terms of both output and employment, improved after dismantling of the quota system in 2005. Export of textiles including RMG grew by 20.4 per cent to reach US\$14.8 billion in 2005-06. But, in the second year of the quota free regime, growth of such exports by India moderated to 11.7 per cent in April-October, 2006, while that of China grew by 28.9 per cent in April-November 2006. Furthermore, during April-October 2006, while T&C exports to US from India grew by only 6.2 per cent, that from China grew by 16.8 per cent. Even though India improved its share of the global T&C trade from 2.9 per cent in 2004 to 3.4 per cent in 2005, China registered major gains to garner a 24 per cent share of such global trade. China's trade surplus in T&C increased by US\$ 20 billion to US\$100 billion in 2005.

6.32 With a share of 23 per cent of India's merchandise exports, engineering sector is the largest contributor to such exports well ahead of gems & jewellery. There has also been a spurt in Engineering Process Outsourcing (EPO) from giant automotive and aerospace companies like Ford Motor Company, General Motors, Boeing and Airbus. Similarly, a number of semi-conductor

manufacturing companies, electronic goods manufacturers, and mobile handset vendors have been outsourcing some of their work to India. EPO has grown at a compound annual rate of 37 per cent between 2003 and 2006, and has the potential to reach a level of US\$10-20 billion in the next five years from the present level of US\$3.5 billion. Such EPOs have a beneficial impact on engineering goods exports in the medium term. India, with its low cost labour and talented manpower, has the potential of being the major hub of engineering goods both for direct exports and development of engineering process outsourcing services.

6.33 Gems & jewellery, contributing about 15 per cent of India's total commodity exports, is an important item in India's export basket. While India has emerged as one of the key players in gems & jewellery exports on the basis of its traditional strength in craftsmanship and its share in the US\$146 billion global business in 2005 was around 11 per cent, of late, there has been a deceleration in export growth in this sector.

6.34 India had a share of 2.3 per cent of world exports of marine products (Table 6.8). Exports of marine products, which after a decline in 2003-04 had picked up in subsequent years, grew by 6.3 per cent in

Table 6.8 : Share of major exports of India in World exports

(Items with one per cent share and above in 2005)

HS rev.1	Product	2000	2005
03	Fish, crustaceans, molluscs, aquatic invertebrates, nes	3.4	2.3
05	Products of animal origin, nes	1.2	1.1
08	Edible fruit, nuts, peel of citrus fruit, melons	2.1	1.2
09	Coffee, tea, mate and spices	5.8	3.7
10	Cereals	2.3	1.3
12	Oil seed, oleagic fruits, grain, seed, fruit, etc, nes	1.7	1.1
13	Lac, gums, resins, vegetable saps and extracts nes	11.9	10.0
14	Vegetable plaiting materials, vegetable products nes	4.4	4.9
23	Residues, wastes of food industry, animal fodder	2.4	2.1
25	Salt, sulphur, earth, stone, plaster, lime and cement	2.7	3.4
26	Ores, slag and ash	1.9	9.1
29	Organic chemicals	1.2	1.6
32	Tanning, dyeing extracts, tannins, derivatives, pigments etc	1.5	1.5
41	Raw hides and skins (other than furskins) and leather	1.8	2.6
42	Articles of leather, animal gut, harness, travel goods	4.1	3.2
46	Manufactures of plaiting material, basketwork, etc.	0.1	1.9
50	Silk	11.3	10.0
52	Cotton	6.6	3.6
53	Vegetable textile fibres nes, paper yarn, woven fabric	4.5	3.4
55	Manmade staple fibres	2.0	1.3
57	Carpets and other textile floor coverings	7.5	10.8
58	Special woven or tufted fabric, lace, tapestry etc	2.4	1.6
61	Articles of apparel, accessories, knit or crochet	2.1	2.6
62	Articles of apparel, accessories, not knit or crochet	3.6	3.5
63	Other made textile articles, sets, worn clothing etc	6.3	6.6
64	Footwear, gaiters and the like, parts thereof	1.4	1.6
67	Bird skin, feathers, artificial flowers, human hair	1.7	3.1
68	Stone, plaster, cement, asbestos, mica, etc articles	1.9	2.7
71	Pearls, precious stones, metals, coins, etc	6.5	8.1
72	Iron and steel	0.9	1.2
73	Articles of iron or steel	1.2	1.1
74	Copper & Articles there of	0.4	1.0

Source : NCTI based on UN-ITC Trade Map data.

April-October 2006. In terms of export earnings, among marine products, frozen shrimp continued to be the largest export item, followed by frozen fish, cuttlefish, squid, and dried items. European Union accounted for the largest share of India's export of marine products, followed by US and Japan. This sector, however, faced a number of hurdles in the major export destinations. Indian shrimp imports to US have been subject to anti-dumping duty of 10.17 per cent from August 2004. In European markets, India's marine products have been facing problems due to multiplicity of standards – in addition to the EU's own standards, the standards of each of the member states.

6.35 While efforts at export diversification has continued, in 2005, India had a share of one per cent or more of world exports in only 32 out of a total of 99 commodity chapters at the two digit (Harmonised System (HS) Revision 1) level (Table 6.8). In these 32 items, India had a significant world export share of 5 per cent or more only in six items: carpets and other textile floor coverings; silk; lac, gums, resins, vegetable saps and extracts not elsewhere specified; ores, slag and ash; pearls, precious stones, etc.; and other made textile articles, sets, worn clothing, etc.

6.36 With a sudden spurt in world trade in 2005 and domestic constraints, two items of India's exports have moved out of the one per

Table 6.9 : Imports of principal commodities

Commodity	Percentage Share				Growth Rate*			
	2004-05	2005-06	April-October		2004-05	2005-06	April-October	
			2005-06	2006-07			2005-06	2006-07
POL	26.8	29.5	29.6	33.7	45.1	47.3	41.4	44.0
Pearls, precious & semi-precious stones	8.4	6.1	7.5	4.1	32.2	-3.1	36.8	-31.3
Capital goods	12.4	15.0	10.7	12.1	39.5	62.0	53.8	43.1
Electronic goods	9.6	9.5	9.1	9.4	35.1	32.7	33.2	29.2
Gold & silver	10.0	7.6	9.0	8.6	62.6	1.5	43.4	20.8
Chemicals	6.2	5.7	6.1	5.5	38.3	23.2	42.2	12.9
Edible Oil	2.2	1.4	1.7	1.3	-3.0	-17.9	-6.1	-1.1
Coke, coal and briquettes	2.9	2.6	2.6	2.4	126.7	21.0	30.6	21.1
Metaliferrous ores & metal scrap	2.2	2.6	2.7	3.9	90.5	57.3	75.3	85.5
Professional instruments and optical goods	1.4	1.3	1.4	1.3	24.4	28.9	43.8	18.5
Total Imports**	100.0	100.0	100.0	100.0	42.7	33.8	44.4	26.4
* In US \$ terms								
** Columns do not add up to a hundred because of other items not included in the Table								
Source : DGCI&S, Kolkata								

cent share in world exports. They are code 07: 'Edible vegetables and certain roots and tubers' due to fall in India's exports in 2005, and code 28: 'inorganic chemicals, precious metal compound, isotopes' due to rise in world exports. With the rise in copper prices, code 74: 'copper and articles thereof' has made an entry into the one per cent share category. In new items like office and telecom equipment and scientific instruments, which have registered high growth rates in world trade in recent years, India's share continued to be negligible. The items with large potential, in which India has not yet made a mark while China has already established itself, include many electronic and electrical items, processed food items, scientific instruments and apparatus, toilet papers and handkerchiefs, electro-medical appliances, furniture and toys.

6.37 With hefty rise in crude oil prices, POL continued to be the most important item of India's imports, accounting for a little over a third of total imports in April-October 2006 (Table 6.9). Following POL, capital goods was the second most important item of import.

Capital goods imports have been growing rapidly, reflecting higher domestic investment, resurgence of manufacturing, and rising needs of export sector. Import of industrial inputs like chemicals and metaliferrous ores & metal scrap also increased substantially to support high growth in manufacturing sector, while a rise in international metal prices was also a contributory factor for the latter.

6.38 Machinery including both electrical and non-electrical, transport equipment and project goods were the main contributors to the rise in capital goods imports. Project goods imports, which reflect the technological maturity and industrial capabilities of a country, increased by 48 per cent with the growth further accelerating in the current year. This augurs well for the industrial and infrastructure sectors of the economy.

Direction of Trade

6.39 The share of 11 major trading partners of India, accounting for nearly a half of India's trade, has not changed much since 2000-01 (Table 6.10). US continues to be the single largest trading partner of India, but with a

Table 6.10 : India's major trading partners, 2000-2006

Percentage share in total trade (exports+imports)

Country	2000-01	2002-03	2003-04	2004-05	2005-06	April-October	
						2005-06	2006-07
1. US	13.0	13.4	11.6	10.7	10.6	10.3	9.7
2. U.K	5.7	4.6	4.4	3.7	3.6	3.7	3.1
3. Belgium	4.6	4.7	4.1	3.6	3.0	3.3	2.4
4. Germany	3.9	4.0	3.8	3.5	3.8	3.7	3.7
5. Japan	3.8	3.2	3.1	2.8	2.6	2.4	2.3
6. Switzerland	3.8	2.4	2.6	3.3	2.8	3.3	3.2
7. Hong Kong	3.7	3.1	3.3	2.8	2.7	2.9	2.3
8. UAE	3.4	3.8	5.1	6.2	5.1	5.3	6.9
9. China	2.5	4.2	4.9	6.5	7.0	6.8	7.7
10. Singapore	2.5	2.5	3.0	3.4	3.5	3.7	4.0
11. Malaysia	1.9	1.9	2.1	1.7	1.4	1.4	2.2
Total (1 to 11)	48.6	47.9	48.1	48.2	46.1	46.8	47.5

Source : DGCI&S, Kolkata

declining trend. China, on the other hand, has increased its share almost threefold to become the second largest trading partner of India. With rising POL prices, and India not only importing crude oil from but also exporting refined POL products to the United Arab Emirates (UAE), UAE has emerged as the third largest trading partner of India. There is a perceptible change in the share of India's trade with Singapore after the signing of the Comprehensive Economic Cooperation Agreement (CECA) with growth of gems & jewellery, petroleum products and ships and boats on the export side, and machinery and organic chemicals on the import side. In the two most recent years, there is a slight fall in the shares of countries like Belgium and Hong Kong, reflecting the slowdown in both exports and imports of gems & jewellery and related items.

6.40 In terms of export destination, US continued to be the principal destination accounting for 16.8 per cent of India's total exports in 2005-06, followed by UAE (8.4 per cent), China (6.5 per cent), Singapore (5.4 per cent) and U.K. (5.0 per cent). Region wise, Asia and ASEAN countries have emerged as major export destinations. From a level of around 40 per cent in 2001-02, the share of Asia & ASEAN countries (including West Asia

& North Africa (WANA) with a share of 19 per cent and the three China's: China Peoples Republic, Hong Kong and Taiwan with 10 per cent) accounts for half of India's total exports in April-October 2006. During this period, destination-wise, India's exports to Africa, Asia & ASEAN posted strong growth, while exports to Europe and America registered moderate growth. Among the major markets, while growth in exports to UAE, China and Singapore was very high, growth in exports to US and UK was moderate.

6.41 India's merchandise exports to South Asian countries increased by an impressive 19.3 per cent in 2005-06 compared to the 7.3 per cent growth in 2004-05. The major items of India's exports to South Asian countries include: engineering goods, chemicals and related products, petroleum, crude and products, cotton yarn fabrics and made ups, and rice. Similarly, imports from South Asian countries increased by 40.1 per cent in 2005-06 over and above an equally impressive growth of 40.6 per cent posted during a year ago. Major imports include non-ferrous metals, textile yarn fabrics and made ups, iron and steel, spices, organic and inorganic chemicals, artificial resins and plastic material, essential oil and cosmetic preparation and fruits and nuts. This trend is likely to be further

strengthened with South Asian Free Trade Area (SAFTA) coming into force from January 1, 2006. India has already notified the reduction in tariffs as per SAFTA Agreement on July 1, 2006.

6.42 In 2005-06, for India's imports, Asia & ASEAN continued to be the major – and rapidly growing – source accounting for 35.2 per cent of total imports. Country-wise, imports from China recorded high growth of 51.3 per cent over and above the 75 per cent growth in the previous year. Growth of imports from EU25 (with a share of 16.0 per cent) was 19.5 per cent and that from America (with a share of 7.8 per cent) 12.7 per cent. In America, US was the major source of imports; Germany, Belgium and the UK were the major import sources in EU25. In South East Asia, import growth from major sources like Singapore and Thailand and in South Asia, growth in imports from Sri Lanka, Bangladesh and Pakistan and even Maldives were high. In April-October, 2006 very high growth was registered in the case of imports from Africa, mainly due to dramatic growth rates in five digits in imports from Nigeria (mainly crude oil) which also raised its share in India's imports to 4.4 per cent. Among the other regions, growth was high in the case of imports from Latin America and Asia & ASEAN. Imports from major oil exporters like Saudi Arabia, UAE and other WANA countries recorded rapid growth. China, the top import source of India with 9.1 per cent share, recorded growth of 58.1 per cent, while imports from US (with 5.7 per cent share) was also buoyant at 30.2 per cent.

Services Trade

6.43 India has been recording high growth in the export of services during the last few years. Such exports have increased threefold during the last three years; in 2005-06, with a growth of 42.0 per cent, it reached US\$ 61.4 billion. Growth has been particularly rapid in the miscellaneous service category, which comprises of software services, business services, financial services and communication services. In 2005, while India's share and ranking in world merchandise exports were 1 per cent and 29, respectively,

its share and ranking in world commercial services' exports was 2.3 per cent and 11, respectively. By growing faster than merchandise exports, services exports constituted almost 60 per cent of merchandise exports in 2005-06.

Trade Policy

6.44 In the Union Budget 2006-07, the peak rate of basic customs duties was reduced from 15 per cent to 12.5 per cent. RBI, in its Mid-Term Review of Annual Policy 2006-07 of October 2006, has also come out with policies related to exports which include allowing all categories of foreign exchange earners to retain up to 100 per cent of their foreign exchange earnings in their Exchange Earners' Foreign Currency accounts; allowing large turnkey/project exporters/service exporters with satisfactory track record to operate one foreign currency account with inter-project transferability of funds/machinery in any country, subject to specified reporting requirements; and allowing large turnkey/project exporters/service exporters with good track record to deploy their temporary cash surpluses in either short-term bank deposits or AAA-rated short-term paper abroad, subject to monitoring by the authorized dealer bank(s).

6.45 The Annual Supplement of Foreign Trade Policy (FTP) 2004-09, in April 2006, announced the twin schemes of Focus Product and Focus Market. Further, to meet the objective of employment generation (Box 6.5) in rural and semi urban areas, export of village and cottage industry products were included in the Vishesh Krishi Upaj Yojana, renamed as Vishesh Krishi and Gram Udyog Yojana . A number of measures announced to achieve the objective of making India a gems and jewellery hub of the world include: allowing import of precious metal scrap and used jewellery for melting, refining and re-export; permission for export of jewellery on consignment basis; permission to export polished precious and semi precious stones for treatment abroad and re-import in order to enhance the quality and afford higher value in the international market. The value addition norms have been reduced due to the increase

Box 6.5 : Exports and employment

One of the objectives of the FTP was to make trade an instrument for employment generation. A study was also commissioned by the Department of Commerce to find out the employment potential in the export sector.

In 2004-05, against an export of US\$80 billion, the total employment generation in the export sector was 16 million (9 million direct and 7 million indirect). In 2009-10, it is estimated that overall exports of US\$165 billion will result in total employment of 37 million. Thus, exports are likely to generate incremental employment of 21 million between 2004-05 and 2009-10.

In 2004-05, in the export sector, the maximum employment was in agricultural products (6.2 million) followed by mineral products (1.7 million), textile and textile articles (1.7 million) and prepared foodstuff and beverages, etc. (1.6 million). While export has recorded robust growth in recent years, the corresponding growth of export of labour-intensive goods has slowed down. Between 1995 and 2003, while *labour-intensive exports* (rice, tea, spices, horticulture and floriculture products, marine products, processed food, textiles, gems and jewellery, handicrafts, sports goods) grew by 7.2 per cent per year, the growth of *resource-intensive exports* (iron ore), *medium-technology-intensive exports* (manufactures of metals, primary & semi-finished iron and steel, manmade yarns, petroleum products) and *knowledge-intensive exports* (chemicals, drugs and pharma, plastics and linoleum, machinery and transport equipment, machinery, electronic goods) were of the order of 12 per cent, 19 per cent and 14 per cent, respectively. India's relatively small share of global exports of labour-intensive goods relative to China's indicate how the potential for such exports remain unutilized.

Since certain industrial products can generate large employment per unit of investment compared to other products, and promoting their export would in turn give a thrust to their manufacture and resulting employment, in the 2006-07 annual revision of FTP the 'Focus Product Scheme' was formulated. The Scheme allows duty-credit facility at 2.5 per cent of the FOB value of exports on fifty per cent of the export turnover of notified products, such as value added fish and leather products, stationery items, fireworks, sports goods, and handloom & handicraft items. The Vishesh Krishi Upaj Yojana was also launched to promote labour-intensive and value added products such as fruits, vegetables, and flowers. To take the benefits of foreign trade further to rural areas, the Vishesh Krishi Upaj Yojana has been expanded to include village industries based products for export benefits, and it is therefore renamed as Vishesh Krishi Upaj aur Gram Udyog Yojana.

in prices of gold and silver in international markets.

6.46 In order to enable the country to offer supply of fuel and other stores to foreign going vessels and aircrafts at international rates thereby making India an attractive destination for refueling, the Annual Supplement 2006 of FTP, 2004-09 also announced that such supplies would be treated as exports for extending the benefits under various export promotion schemes. To promote development and export of auto sector, import of new vehicles by auto manufacturers has been allowed for R&D purposes, without homologation. A number of procedural changes have been effected to streamline the existing provisions like enabling ITES to avail refund of Central Sales Tax and interest payments on delayed refunds. Through the introduction of duty-free import authorization, a window has been introduced to offer the facility to import required inputs for export

production with the facility of transferability of inputs or the scrip. In order to promote services exports, some new features have been added to the 'Served from India Scheme'. The scheme now allows transfer of both the scrip and the imported input to the Group Service Company while, earlier, transfer of imported material only was allowed. Some policies aimed at simplification include filing of applications for obtaining authorization under duty exemption/remission schemes like Advance authorization/EPCG/DEPB on line with digital signature and payment of fee through Electronic Fund Transfer (EFT) mode.

6.47 A major development related to trade policy was the operationalization of the Special Economic Zone (SEZ) Act 2005. SEZ Act and SEZ Rules were notified on February 10, 2006 to give transparency and stability to the policy. The SEZ Rules provide for differentiated minimum land requirements for different classes of SEZs. Every SEZ is divided into a

Box 6.6 : Special Economic Zones (SEZs)

India was one of the first in Asia to recognize the effectiveness of the Export Processing Zone (EPZ) model in promoting exports, with Asia's first EPZ set up in Kandla in 1965. However, the EPZs were not able to emerge as effective instruments for export promotion on account of multiplicity of controls and clearances, absence of world-class infrastructure and an unstable fiscal regime.

With a view to overcome these shortcomings and attract larger foreign investments in India, the Special Economic Zones (SEZs) Policy was announced in April 2000. This policy was intended to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with minimum possible regulations. To instill confidence in investors and signal the Government's commitment to a stable SEZ policy regime and with a view to impart stability to the SEZ regime thereby generating greater economic activity and employment through the establishment of SEZs, the Special Economic Zones Act, 2005, was passed by Parliament in May, 2005. The SEZ Act, 2005, supported by SEZ Rules, came into effect on February 10, 2006. The main objectives of the SEZ Act are generation of additional economic activity, promotion of exports of goods and services, promotion of investment from domestic and foreign sources, creation of employment opportunities and development of infrastructure facilities. Various incentives and facilities are offered to both units in SEZs for attracting investments into SEZs (including foreign investment) as well as for SEZ developers. It is expected that these incentives and facilities will trigger a large flow of foreign and domestic investment in SEZs, in infrastructure and productive capacity, leading to generation of additional economic activity and creation of employment opportunities.

During 2005-06, exports from functioning SEZs, which are mainly the former EPZs were around US\$5 billion. At present 1,016 units are in operation in these SEZs providing direct employment to over 1.79 lakh persons (about 40 per cent of whom are women). Private investment by entrepreneurs for establishing units in these SEZs is of the order of about Rs.3163 crore.

After the SEZ Act and SEZ Rules came into effect on February 10, 2006, formal approval has so far been granted to 237 SEZ proposals and in-principle approval has been granted to 164 SEZ proposals. Out of the 237 formal approvals, notifications have already been issued in respect of 63 SEZs. In these 63 new generation SEZs which have come up after February 10, 2006, investment of the order of Rs.11,194 crore has already been made in less than one year. These SEZs have so far provided direct employment to 15,097 persons. It is expected that total investment in these SEZs would be around Rs.58,459 crore and 8,90,700 additional jobs will be created by December 2009. It is also expected that if all the 237 SEZs become operational, investment of the order of Rs.3,00,000 crore may take place and 4 million additional jobs may be created.

Concerns have been expressed regarding acquisition of agricultural land for setting up SEZs. The State Governments have been advised that in land acquisition for SEZs, first priority should be for acquisition of waste and barren land and if necessary single crop agricultural land could be acquired for the SEZs. If perforce a portion of double cropped agricultural land has to be acquired to meet the minimum area requirements, especially for multi-product SEZ, the same should not exceed 10 per cent of the total land required for the SEZ. Various issues relating to setting up of SEZs in the country including issues raised by various political parties are being addressed by the Empowered Group of Ministers.

processing area where alone the SEZ units would come up and the non-processing area where supporting infrastructure is to be created. The SEZ Rules also provide for simplified procedures for development, operation and maintenance of the SEZ, setting up units in SEZs, single window clearance both relating to Central as well as State Governments for setting up of an SEZ and units in a SEZ, and simplified compliance procedures/documentation with emphasis on self-certification. A Board of Approval has been constituted by Government in exercise of the powers conferred under the SEZ Act (Box 6.6).

6.48 Contingency trade policy and non-tariff measures (NTMs) continued to act as

significant barriers to exports from developing countries, but with somewhat reduced intensity (Table 6.11). Such barriers are considerably stiffer for products with lower value addition and lower technological content (e.g. agriculture, textiles, and leather products), which are of major interest to developing countries like India. With its diversified manufacturing and export base, India has been one of the major users as well as one of the major targets of anti-dumping measures in the world. During January-June 2006, 20 WTO members reported initiating a total of 87 new investigations, down from the 105 initiations in the corresponding period of 2005. India reported the highest anti-dumping

Table 6.11 : Investigations initiated by top ten users of anti-dumping measures, 1995–2006

Country	1995	2000	2001	2002	2003	2004	2005	2006 Jan- June	1995- June 2006
India	6	41	79	81	46	21	28	20	448
United States	14	47	75	35	37	26	12	0	366
European Community	33	32	28	20	7	30	25	17	345
Argentina	27	45	26	14	1	12	12	5	209
South Africa	16	21	6	4	8	6	23	2	199
Australia	5	15	23	16	8	9	7	9	188
Canada	11	21	25	5	15	11	1	4	138
Brazil	5	11	17	8	4	8	6	3	125
Mexico	4	6	5	10	14	6	7	3	89
China, P.R.	0	6	14	30	22	27	24	3	126
All countries	157	292	364	312	232	213	201	87	2938
Source : WTO									

initiations with 20 new initiations (taking each country as one case) followed by European Communities (17) and Australia (9). As far as imposition of new final anti-dumping measures during the first half of 2006 is concerned, China reported applying the largest number (15) followed by Turkey (11), India (8) and Egypt (7).

WTO related issues

6.49 At Hong Kong, in December 2005, WTO Ministers had agreed to establish modalities for agriculture and Non-Agricultural Market Access (NAMA) by April 30, 2006, submit the draft Schedules by July 31, 2006 and conclude the negotiations across all areas of the Doha Round by the end of 2006. In respect of services, all Members were to file their revised offers by July 31, 2006 and submit the draft Schedules by October 31, 2006. These deadlines were missed despite intensive negotiations.

6.50 The intensive discussions through January to July 2006 had focused mainly on the triangular issues of Domestic Support, Agricultural Market Access (AMA), and NAMA. At the informal meeting of the Trade Negotiations Committee (TNC) held on July 24, 2006, the Director General, WTO, who is its Chairman, reported that "it remained clear that the gaps remain too wide", and

recommended that the only course of action would be to suspend the negotiations across the Round as a whole to enable serious reflection by participants. In the light of the impasse particularly in agriculture (Box 6.7), and ruling out the possibility of finishing the Round by the end of 2006, Members agreed to suspend the negotiations across all areas of the Doha Work Programme, and to resume them when the negotiating environment was right.

6.51 For India, the suspension has been a disappointment. It is an avoidable delay on the delivery of the development promises of the Round. India has welcomed the soft resumption of negotiations on November 16, 2006 and subsequently the full-scale resumption on February 7, 2007 on the principles that it preserves the architecture of the negotiations, inclusiveness, and the progress made so far, and leads to an outcome that is balanced, ambitious and pro-development.

India's Regional Trading Arrangements

6.52 India views Regional Trading Arrangements (RTAs) as 'building blocks' towards the overall objective of trade liberalization complementing the multilateral trading system. In the past, India had adopted a very cautious and guarded approach to

Box 6.7 : Agri-exports and India's stand on agricultural issues in WTO

India's total exports of agricultural and allied products including plantations at US \$ 10.5 billion in 2005-06 constitute 10.2 per cent of its export share. Developed country markets continued to account for nearly 35 per cent of India's agri-exports. However, its contribution to national economy is significant in terms of sustaining livelihood of a significant proportion of the population, including a large number of producers and landless agricultural labourers (characterized as low-income and resource-poor). This section of population lack skills and are not covered under any safety nets, which are essential for ensuring a minimal cross-sector labour mobility. Like India, most developing countries are in a similar situation in sharp contrast to the reality of the agriculture sector in developed countries. Apart from a number of agricultural crops, a number of other products, including livestock products, are produced in hilly/mountainous or other disadvantaged regions, or by tribal communities and women. India, and other developing countries, have, therefore, been insisting that special and differential treatment for developing countries must be integral to all aspects, including the negotiated outcome, on agriculture under the Doha Round in the WTO.

Mitigating the risks facing the low-income, resource-poor and subsistence farmers associated with price declines, price volatility and predatory competition and other market imperfections, including the huge amounts of production and trade-distorting subsidies provided by some developed countries to their agriculture sector, remains paramount. Therefore, along with other developing countries, particularly its alliance partners in the G-20 and G-33, India has been emphasizing that the Doha agricultural outcome must include at its core:

- removal of distorting subsidies and protection by developed countries to level the playing field, and
- appropriate provisions designed to safeguard food and/or livelihood security, and to meet the rural development needs in developing countries.

Apart from appropriate policy flexibilities to enable developing country governments to help the low-income and vulnerable producers absorb or insure themselves against risks, India has also taken the stand that governments must also be able to foster stable and remunerative prices for domestic producers in order to increase productivity and gradually move away from dependence on low-productivity agriculture. To these ends, meaningful and effective instruments (Special Products and the Special Safeguard Mechanism) are important for developing countries like India. At Hong Kong, it has been agreed that Special Products and the Special Safeguard Mechanism shall be an integral part of the modalities and the outcome of negotiations in agriculture. Moreover, developing countries shall have the right to self-designate an appropriate number of Special Products, guided by indicators based on the three fundamental criteria of food security, livelihood security and/or rural development needs. These designated products will attract more flexible treatment. Developing country Members will also have the right to have recourse to a Special Safeguard Mechanism based on import quantity and price triggers, with precise arrangements to be further defined.

regionalism. Recognizing that RTAs would continue to feature prominently in world trade, India engaged with its trading partners/blocks with the intention of expanding its export market and began concluding in principle agreements and moving in some cases even towards Comprehensive Economic Cooperation Agreements (CECAs) which covers Free Trade Agreement (FTA) in goods, services, investments and identified areas of economic cooperation. Framework agreements have already been entered into with a number of trading partners with specific road maps to be followed and specified time frames by which the negotiations are to be completed (Box 6.8). Joint Study Groups have also been set up for examining feasibility of CECA between India-Japan, India-Brazil-South Africa and India-Russia. The reports are at various stages of completion. India and

European Commission have also set up a High Level Trade Group (HLTG) as mandated by the India-EU Summit held in New Delhi on September 7, 2005. The mandate of the HLTG is to explore ways and means to increase bilateral economic flows including the possible launching of negotiations on a comprehensive trade and investment agreement.

Capital account

6.53 In 2005-06 and 2006-07 so far, capital flows into India remained strong on an overall basis with capital account surplus rising simultaneously with current account deficit, albeit with varying movements in the different components. Debt creating flows, particularly external assistance and external commercial borrowings (ECBs), which had turned into net outflows in 2002-03 and 2003-04, became positive inflows in 2005-06. Non-resident

Box 6.8: India — Status of FTAs/ RTAs

India-Sri Lanka Free Trade Agreement (ISLFTA)

India-Sri Lanka Free Trade Agreement, signed in December, 1998 and in operation since March, 2000, provided for tariff reduction/elimination in a phased manner on all items except the negative list and tariff rate quota (TRQ) items. While India has already completed the tariff elimination programme in March 2003, Sri Lanka is scheduled to reach zero duty by 2008. The two countries have since initiated negotiations in August 2004 on Comprehensive Economic Partnership Agreement (CEPA) which covers trade in services and investment.

Agreement on SAFTA

The Agreement on South Asia Free Trade Area (SAFTA) was signed during the 12th SAARC Summit on January 6, 2004 in Islamabad. Since then, negotiations on four annexes — Rules of origin, Sensitive lists, Revenue compensation for LDCs, and Technical assistance to LDCs — have been completed. The tariff liberalization programme under the Agreement has been implemented from July 1, 2006.

Framework Agreement on Comprehensive Economic Cooperation between ASEAN and India

Framework Agreement on Comprehensive Economic Cooperation was signed on October 8, 2003 in Bali. The Trade Negotiating Committee (TNC) is negotiating FTA in goods.

Framework Agreement for establishing Free Trade Area between India and Thailand

The Framework Agreement for establishing Free Trade Area between India and Thailand was signed on October 9, 2003 in Bangkok. The Early Harvest Scheme covering 82 items for exchange of concessions between India and Thailand has been implemented with effect from September 1, 2004. The TNC is already negotiating FTA in goods; and negotiations on services and investment are at a preliminary stage.

Framework Agreement on the BIMSTEC FTA

The Framework Agreement on the BIMSTEC (Bay of Bengal initiative for Multi-sectoral Technical & Economic Cooperation) Free Trade Area was signed in February, 2004 at Phuket by Bangladesh, Bhutan, India, Myanmar, Nepal, Sri Lanka and Thailand. The Framework Agreement provides for implementing FTA on Goods with effect from July 1, 2006. Negotiations are being held by the TNC on FTA in goods, services and investment.

Comprehensive Economic Cooperation Agreement (CECA) between India and Singapore

India-Singapore CECA, signed on June 29, 2005, came into force on August 1, 2005. The Agreement provides for Early Harvest Scheme, phased reduction/elimination of duties on products other than those in the negative list by India by April 1, 2009, whereas Singapore eliminated duties on all products originating from India from August 1, 2005. CECA also covers investment, services, Mutual Recognition Agreement, and customs cooperation.

India-Afghanistan Preferential Trade Agreement

A Preferential Trade Agreement (PTA) between India and Afghanistan was signed on March 6, 2003. India has granted concessions on 38 products, mainly fresh and dry fruits, in return for concessions on 8 items for exports to Afghanistan.

India – MERCOSUR Preferential Trade Agreement (PTA)

A PTA was signed between India and MERCOSUR (Brazil, Argentina, Uruguay and Paraguay) on January 25, 2004 in New Delhi. The annexes to the PTA were signed on March 19, 2005 in New Delhi. The PTA will be operational after its ratification by the legislatures of MERCOSUR countries.

Bangkok Agreement

Bangkok Agreement is a PTA signed in July 1975 among Bangladesh, Republic of Korea, Sri Lanka and India. China acceded to this Agreement in 2001. This Agreement has been renamed as Asia Pacific Trade Agreement (APTA) from November 2, 2005. Three rounds of negotiations have been concluded under this Agreement. The Third Round concessions have been implemented from September 1, 2006.

Global System of Trade Preferences (GSTP)

Two rounds of negotiations have been held under GSTP signed in April 1998. 44 developing countries have acceded to this Agreement. Third round of negotiations, launched in June 2004, are expected to be concluded by the end of 2007.

SAARC Preferential Trade Area (SAPTA)

Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka are participants in the Agreement signed in April, 1993. Four rounds of negotiations have been concluded under SAPTA. Concessions exchanged during the four rounds of SAPTA have already been implemented.

India-Chile Framework Agreement on Economic Cooperation

A Framework Agreement on Economic Cooperation was signed between India and Chile on January 20, 2005. The Agreement envisages a PTA between two sides. The negotiations on PTA have been concluded, and the Agreement was signed on March 8, 2006.

India-Korea Joint Task Force (JTF)

Based on the recommendations of the Joint Study Group (JSG), India and Korea constituted a Joint Task Force for having negotiations on FTA in goods, services and investment. Four Rounds of Negotiations have been held so far.

India-China Joint Task Force (JTF)

A Joint Task Force between India and China has been set up to study in detail the feasibility of, and the benefits that may derive from the possible China-India Regional Trading Arrangement and also give its recommendations regarding its content.

India-Gulf Cooperation Council (GCC) FTA

A Framework Agreement on Economic Cooperation was signed between India and GCC on August 25, 2004. The first round of negotiations on India-GCC FTA was held in Riyadh on March 21-22, 2006 wherein the GCC side agreed to include services as well as investment and General Economic Cooperation, along with goods, in the proposed FTA.

PTA/CECPA between India & Mauritius

A Preferential Trade Agreement (PTA)/Comprehensive Economic Cooperation & Partnership Agreement (CECPA) is being negotiated with Mauritius which is likely to be finalized shortly.

Framework Agreement with South Africa Customs Union (SACU)

A decision has been taken to enter into a Framework Agreement with the South African Customs Union (SACU). The Agreement will aim to promote expansion of trade and provide a mechanism to negotiate and conclude a comprehensive Free Trade Agreement within a reasonable time.

India-Israel Preferential Trade Agreement

Negotiation process for India-Israel Preferential Trade Agreement has commenced.

deposits (net) rebounded after an outflow of about US\$1 billion in 2004-05 to an inflow of US\$2.8 billion in 2005-06. The developments in the first half of 2006-07 indicate some deviation from 2005-06, particularly in FII flows.

6.54 For 2006, the WEO, in both April and September 2006, had projected a moderation of private net capital flows to emerging market economies and developing countries from their torrid pace of 2005, and with overall net surpluses in their current account to result in continuation of the process of reserve accumulation in such countries. For emerging Asian economies, WEO 2006 (both April and September issues) had projected FDI to remain stable but portfolio flows to remain negative (outflows) as in 2005. These projections for 2006 followed the increased volatility observed in stock market crashes and exchange rates pressures in the first half of 2006, after a period of relative calm. The Indian experience in the first half of 2006-07

was more or less in conformity with the WEO projection.

Foreign investment

6.55 Foreign investment (net) receipts, as a proportion of total capital flows, rose steadily from 1.2 per cent in 1990-91 to reach a peak of 155.2 per cent in 1995-96 (all data for the capital account are on BoP basis unless stated otherwise). Thereafter, it declined to reach a low of 29.4 per cent in 1998-99. After some fluctuations in the interim, such investment (US\$17.2 billion) in 2005-06, as a proportion of total capital flows, stood at 71.1 per cent. As a proportion of GDP, foreign investment remained at 0.2 per cent or less till 1992-93. It picked up with reforms to reach 1.6 per cent of GDP in 1996-97, and after some fluctuations in the interim, has remained at about 2 per cent in the latest three years. In the first half of 2006-07, foreign investment (net) declined to US\$5.8 billion from US\$7.5 billion in the first half of 2005-06. Foreign

investment has two components: FDI, and portfolio, with the latter having two sub-components — FII, and Euro equities and others.

Foreign direct investment (FDI)

6.56 FDI inflows (net), which had declined from US\$ 4.7 billion in 2001-02 to US\$ 2.4 billion in 2003-04, continued its growth for the second consecutive year in 2005-06 to climb back to US\$ 4.7 billion again. The overall FDI reported is inward FDI netted for outward FDI. FDI on a comparative net basis, year-on-year, exhibited a growth of 27.4 per cent in 2005-06 reflecting the improved investment climate. Outward investment also simultaneously showed signs of a pick up with domestic companies making deeper forays for acquisitions abroad. FDI inflows were mainly in the form of equity accounting for about 75.2 per cent of the total FDI into India during 2005-06. FDI abroad (outward investment) grew sharply to reach US\$3.2 billion in 2005-06.

6.57 The rising trend in FDI observed in 2005-06 accelerated further in 2006-07. As per provisional data available, FDI (net) in April-September 2006 at US\$4.2 billion was almost twice its level in April-September 2005. As per the latest data on foreign direct investment inflows, there has been a 98.4 per cent jump in the equity investment into India in April-September 2006-07 over April-September 2005-06 levels.

Foreign institutional investment (FII)

6.58 Portfolio flows into India consist of FII flows and resources mobilised by Indian companies through American Depository Receipts (ADRs) and Global Depository Receipts (GDRs). Such flows into India mirror the robustness of capital markets and overall macroeconomic conditions. Portfolio investment picked up steam initially in 1993-94 and later with the deepening of FII flows, shot up rapidly in 2003-04 and 2004-05. In 2005-06, with inflows at US\$68.1 billion and outflows at US\$55.6 billion, net portfolio inflow was a record high of US\$12.5 billion. GDRs/ADRs and others, which are a part of the portfolio flows rose from a level of US\$625

million in 2004-05, to reach US\$2.6 billion in 2005-06.

6.59 In sharp contrast to the increase in FDI in 2006-07 so far, portfolio investment (net) fell sharply from US\$5.4 billion in April-September 2005 to US\$1.6 billion in April-September 2006. While portfolio inflows increased by US\$21.2 billion (from US\$27.5 billion to US\$48.7 billion), outflows increased even more by US\$25.0 billion (from US\$22.1 billion to US\$47.1 billion), during the reference period. The sharp decline in portfolio net inflows was more than the increase in FDI (net) to result in a decline in foreign investment inflows between the first half of the previous year and current year.

6.60 FII inflows (net), which had shot up to US\$10.9 billion in 2003-04, after remaining strong in the two subsequent years, turned into a net outflow in the first six months of the current financial year. Data on FII (net) for April-November 2006, as released by RBI, report an inflow of US\$3.8 billion indicating a subsequent reversal, which may get reflected in the partially revised data of BoP at a later date.

External commercial borrowings (ECBs)

6.61 ECBs, which are medium and long-term loans, have seen net outflows only in four out of the last sixteen years ending in 2005-06. The most recent period of such net ECB outflows were the three year period 2001-04. ECBs turned back into net inflows in 2004-05, and such inflows were US\$2.7 billion in 2005-06. During the first half of the current year, such net inflows rose to US\$5.1 billion. On a gross basis, in the first half of the current year, inflow of ECBs rose to US\$7.1 billion from US\$6.4 billion in the first half of 2005-06, while repayments of such ECBs declined by 42.5 per cent. With acceleration in growth of manufacturing sector, improvement in India's credit rating, and the current interest and exchange rate outlook, ECBs continued to remain attractive for funding purposes.

6.62 Apart from ECBs, debt flows in the capital account comprise of two more components – external assistance and short-

Table 6.12 : Outstanding balances and net flows under various non-resident deposit Schemes

Panel A : Outstanding balances under different schemes*								
<i>(US\$ million)</i>								
As at the end of								
	March 2000	March 01	March 02	March 03	March 04	March 05	Mar-06 (P.E.)	Nov-06 (P.E.)
Foreign Currency Non-Resident (Banks)	8172	9076	9673	10199	10961	11452	13064	14270
Non-Resident External Rupee Accounts	6758	7147	8449	14923	20559	21291	22070	23481
Non-Resident (Non Repatriable) Rupee Deposits	6754	6849	7052	3407	1746	232		
Total	21684	23072	25174	28529	33266	32975	35134	37751
B. Net flows under non-resident deposits*								
<i>(US\$ million)</i>								
Schemes	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Apr-Nov (P.E.)	
							2005-06	2006-07
FCNR(B)	904	594	526	762	492	1612	-32	1206
NR(E)RA @	860	1626	6195	4695	84	1177	508	1509
NR(NR)RD	553	508	-3745	-1816	-1538			
Total	2317	2728	2976	3641	-962	2789	476	2715
P.E.: Provisional Estimates.								
* All figures are inclusive of accrued interest.								
@ The inflows into NR(E)RA deposits from the year 2002-03 onwards may partly be due to crediting of maturity proceeds of the NR(NR)R deposits which were discontinued with effect from April 1, 2002.								
Note: Inflows/Outflows have been calculated by taking the monthly variation in rupee denominated deposits & converting those by monthly average exchange rate. All figures are inclusive of interest & valuation changes arising on account of fluctuation in non dollar currencies against US dollar.								
Source : RBI								

term loans. External assistance (net), which is loans from official sources at concessional rates, after being net outflows in the two years ending in 2003-04, remained positive in 2005-06. Short-term external loans to India in April-September 2006 exhibited a growth of 22.2 per cent, and with their repayments rising by 13.4 per cent, the net inflows from such short-term loans almost doubled.

Non-resident deposits

6.63 In the last sixteen years ending 2005-06, non-resident deposits remained an important and relatively stable source of capital flows. As a proportion of total capital flows, it had strengthened in the four-year period 2000-04 to above 20 per cent. But, such deposits became a source of negative flows in 2004-05. There was a resumption of the earlier trend in 2005-06, with the proportion rising to 11.5 per cent.

6.64 With the discontinuance of Non-Resident (Non-Repatriable) Rupee deposits with effect from April 1, 2002, the outstanding on the other two forms of NRI deposits, namely, NR(E)RA and FCNR(B) at US\$35.1 billion at end-March 2006 are mainly on account of the former. At end-November 2006, such outstandings at US\$37.8 billion, however, indicate growth in both forms. FCNR(B) inflows have been strong in every single month in 2006-07 up to November 2006. NR(E)RA flows have also been strong in the same period, but were marginal in the months of April and October. Together, these resulted in the total inflows of US\$2.7 billion in both the non-resident accounts as against US\$ 476 million in the corresponding period of the previous year (Table 6.12).

Exchange rate developments

6.65 With a flexible exchange rate regime, and interventions limited to maintaining orderly market conditions, the Rupee exhibited considerable two-way movement in 2005-06 and 2006-07 so far. The average annual exchange rate of the Rupee steadily depreciated from Rs.33.45 per US dollar in 1995-96 to Rs.48.40 per US dollar in 2002-03. It has since appreciated steadily to reach Rs.44.27 per US dollar in 2005-06.

6.66 Movements in monthly average exchange rates and daily exchange rates provide further evidence of the flexibility of the Rupee exchange rate. The monthly exchange rate of the Rupee vis-à-vis the US dollar has moved in the range of Rs.43.49 to Rs.46.34 in the last two years. Against other major world currencies, particularly Euro and Pound, the Rupee has exhibited similar two-way movements.

6.67 In 2006-07 so far, in terms of the monthly average of the exchange rate of the Rupee vis-à-vis the US dollar, the rupee depreciated steadily until August 2006, before starting to appreciate thereafter. This broad pattern was mirrored even in the Rupee rates vis-à-vis the other major currencies such as Euro and Pound. Against Yen, however, the Rupee started appreciating from June 2006 rather than August 2006.

6.68 The NEER-5 (base 2000=100) composed of a basket of five currencies, namely, US dollar, Euro, Pound Sterling and Yen, had been depreciating on a yearly basis till 2004-05 to reach a level of 90.76. With a bout of appreciation initially in April-July 2005 and subsequently in January-February 2006, it rose, on an annual basis, to 94.06. It depreciated steadily in 2006-07 till August 2006, reaching a low of 88.05, whereafter it has picked up and was at 91.31 in November 2006.

6.69 The real effective exchange rate (REER), which is the NEER adjusted for price differentials, displayed some signs of appreciation. REER-5 (Base 2000=100) with the same currency basket as NEER-5, rose steadily to reach 106.79 in 2005-06. During 2006-07, it declined to reach a level of 100.65 in August 2006 and thereafter has risen to 109.04 in November 2006.

Foreign exchange reserves

6.70 The continuance of the robust net capital inflows not only helped finance the rising current account deficits seamlessly, but also resulted in further accretion to foreign exchange reserves. During 2005-06, accretion of such reserves through the BoP was US\$15.1 billion. With the US dollar appreciating vis-à-vis other major currencies, there was a valuation loss of US\$5.0 billion

Table 6.13 : Sources of accretion to foreign exchange reserves

(US\$ billion)

Items	2004-05	2005-06	April-September	
			2005-06	2006-07
I. Current account balance	-5.4	-10.6	-7.2	-11.7
II. Capital account (net) a to f	31.6	25.7	13.7	20.3
a. External assistance	1.9	1.4	0.4	0.4
b. External commercial borrowings	5.0	1.6	2.9	5.1
c. Foreign investment	12.2	18.2	7.5	5.8
d. Short-term credit	3.8	1.7	1.0	1.9
e. Banking capital	3.9	1.4	2.8	3.2
Of which : NRI deposits	-1.0	2.8	0.2	2.0
f. Other items in capital account	4.8	1.4	-0.9	3.9
III. Valuation change	2.4	-5.0	-5.0	5.1
TOTAL (I+II+III)	28.6	10.1	1.5	13.7

Source : Reserve Bank of India, Mumbai.

on the existing stock of foreign exchange reserves (Table 6.13). Thus, during 2005-06, foreign exchange reserves rose by US\$10.1 billion from US\$141.5 billion at end-March 2005 to US\$151.6 billion at end-March 2006. In the first half of 2006-07, accretion of reserves through the BoP was US\$8.6 billion. With other major currencies appreciating vis-à-vis the US dollar, there was a valuation gain of US\$5.1 billion on the existing stock of foreign exchange reserves. Thus, during April-September 2006, foreign exchange reserves rose by US\$13.7 billion from US\$151.6 billion at end-March 2006 to US\$165.3 billion at end-September 2006.

6.71 Balance of payments data is available only up to September 2006. With active purchase of foreign exchange by RBI of US\$9.8 billion in the first nine months of 2006-07, the stock of foreign exchange reserves reached US\$180.0 billion on February 2, 2007. The sustained appreciation of other major currencies vis-à-vis the US dollar in the current year

suggests that cumulative accretion to reserves of US\$28.4 billion up to February 2, 2007 includes a large element of valuation gain. Foreign exchange reserves on February 2, 2007 provided an import cover of about 11 months.

External debt

6.72 India's external debt stock stood at US\$126.4 billion at end-March 2006, reflecting an increase of US\$3.2 billion over the year. After increasing by US\$5.8 billion in the first quarter of 2006-07, it increased by a further US\$4.3 billion in the second. The total external debt of the country stood at US\$136.5 billion (Rs. 638,181 crore) at the end of September 2006 (Table 6.14). The rise in external debt stock during this period was brought about essentially by a rise in ECBs, NRI deposits and short-term debt. As compared to end-March 2006, long-term debt at US\$125.9 billion and short-term debt at US\$10.6 billion at the end of September 2006 were higher by 7.0 per cent (or US\$8.2 billion) and 21.7 per cent (or US\$1.9 billion), respectively.

Table 6.14 : India's external debt

	End-March				End June	End Sept.
	2003R	2004R	2005R	2006R	2006R	2006QE
	(US \$ million)					
Long-term debt	100,245	107,214	115,680	117,695	123,098	125,937
Short-term debt	4,669	4,431	7,524	8,696	9,105	10,579
Total external debt	104,914	111,645	123,204	126,391	132,203	136,516
	(Rupees crore)					
Long-term debt	476,624	471,827	506,467	525,392	568,969	589,565
Short-term debt	22,180	19,251	32,922	39,199	41,960	48,616
Total external debt	498,804	491,078	539,389	564,591	610,929	638,181
	(Ratio as per cent)					
External debt to GDP	20.4	17.8	17.3	15.8	*	*
Short-term debt to total external debt	4.5	4.0	6.1	6.9	6.9	7.7
Short term debt to foreign currency assets	6.5	4.1	5.6	6.0	5.8	6.7
Debt service ratio	16.0(12.4)	15.9(8.1)	6.1(5.7)	10.2(6.1)	*	*
Concessional debt to total debt	36.8	36.1	33.0	31.2	30.1	29.3
R : Revised QE : Quick Estimates * : Not computed for the broken year.						
Note : Figures in brackets indicate debt service ratios excluding exceptional transactions such as prepayments for 2002-03 and 2004-05, and prepayments as well as redemptions of Resurgent India Bonds (RIBs) for 2003-04 and pre-payments as well as redemption of India Millennium Deposits in 2005-06.						

Table 6.15 : International comparison of external debt– 2004

Sl. No.	Country	Total external debt (US \$ billion)	Debt sustainability indicators			
			Debt to GNI	Debt service	Short term debt to total external debt	Concessional debt to total debt
(ratio as per cent)						
1	China	248.9	12.9	3.5	47.2	15.5
2	Brazil	222.0	38.0	46.8	11.4	1.5
3	Russian Federation	197.3	34.7	9.8	17.8	0.0
4	Argentina	169.2	117.4	28.5	16.2	0.8
5	Turkey	161.6	53.6	35.9	19.7	2.9
6	Indonesia	140.6	56.5	22.1	17.4	27.7
7	Mexico	138.7	20.8	22.9	6.6	1.0
8	India*	122.7	17.9	6.1**	6.1	35.0
9	Poland	99.2	41.7	34.6	17.0	6.4
10	Hungary	63.2	66.8	25.2	19.5	0.3

* According to World Bank data.
 ** As World Bank did not provide debt service ratio for India for 2004, information has been taken from India's External Debt: A Status Report

Source : Global Development Finance 2005, The World Bank.

6.73 Debt servicing as a proportion of gross external current receipts rose from 6.1 per cent in 2004-05 to 10.2 per cent in 2005-06, mainly due to the one-off redemption payments of India Millennium Deposits. With rapidly rising imports and import-related trade credit, short-term debt rose both as a proportion of total debt as well as a proportion of foreign currency assets. While external debt has increased in absolute terms, as a proportion of GDP, it has dropped from 17.3 per cent at end-March 2005 to 15.8 per cent at end-March 2006. Furthermore, according to the Global Development Finance 2006, (World Bank), India was eighth in position among the top ten debtor countries in 2004 after China, Brazil, Russian Federation, Argentina, Turkey, Indonesia and Mexico (Table 6.15). This contrasts with India being the third largest debtor country in the world in 1991.

6.74 The cautious external debt management policy pursued by the Government focuses on raising funds on concessional terms and from less expensive sources with longer maturities, monitoring of short-term debt, prepaying high-cost loans, restricting end-use and enforcing limits on ECBs and encouraging non-debt creating

capital flows. This has helped in containing the accumulation of external debt and maintaining external debt within manageable limits.

6.75 In the Report of the Committee on Fuller Capital Account Convertibility (Tarapore Committee II), there are several recommendations on external debt management (Box 6.9).

6.76 As part of the Special Data Dissemination Standards of IMF, the member countries disseminate data on external debt on a quarterly basis in different formats. To facilitate cross-country comparisons, World Bank and IMF developed jointly a centralized database system called 'Quarterly External Debt Statistics (QEDS)' prescribing certain standard formats of debt data reporting. India formally joined QEDS during the year (in November 2006) by supplying external debt data for the quarter ending June 2006 to World Bank in the prescribed format. As per their request, similar details were also furnished subsequently for the period of end-March 2006. The external debt data for India in the QEDS main table provides quarter wise data on calendar year basis (Box 6.10).

Box 6.9 : Committee on Fuller Capital Account Convertibility (Tarapore Committee II) - Recommendations concerning external debt

- Overall ECB ceiling as also the ceiling for automatic approval should be gradually raised. Rupee denominated ECB (payable in foreign currency) should be outside the ECB ceiling. ECBs of over 10-year maturity in Phase I* and over 7-year maturity in Phase II* should be outside the ceiling. End-use restriction should be removed in Phase I.
- Volume of trade credit should be a matter of concern, as there could be sudden changes in the availability of such credit. Furthermore, adequate coverage of trade credit figures, even while noting that suppliers' credit of less than 180 days are excluded from these data, should also be a matter of concern. Import-linked short-term loans should be monitored in a comprehensive manner. The per transaction limit of US\$20 million should be reviewed and the scheme revamped to avoid unlimited borrowing.
- The banks' borrowing facilities are at present restrictive, though there are various special facilities which are outside the ceiling. The limits for borrowing overseas should be linked to paid-up capital and free reserves, and not to unimpaired Tier-I capital, as at present, and raised substantially to 50 per cent in Phase I, 75 per cent in Phase II and 100 per cent in Phase III*. Ultimately, all types of external liabilities of banks should be within an overall limit.
- At present only NRIs are allowed to maintain FCNR(B) and NR(E)RA deposits. Non-residents (other than NRIs) also should be allowed access to these deposit schemes. Since NRIs enjoy tax concessions on FCNR(B) and NR(E)RA deposits, it would be necessary to provide FCNR(B)/NR(E)RA deposit facilities as separate and distinct schemes for non-residents (other than NRIs) without tax benefits. In Phase I, the NRs (other than NRIs) could be first provided the FCNR(B) deposit facility, without tax benefits, subject to Know Your Customer/Financial Action Task Force (KYC/FATF) norms. In Phase II, the NR(E)RA deposit scheme, with cheque writing facility, could be provided to NRs (other than NRIs) without tax benefits after the system has in place KYC/FATF norms. The present tax regulations on FCNR(B) and NR(E)RA deposits for NRIs should be reviewed by Government.
- The present FII limit for investment of US\$2 billion in G-secs (Centre and States) as a percentage of total gross issuances of Centre and States for 2005-06 amounts to only 4.8 per cent. Rather than an *ad hoc* fixation of ceiling, the ceiling should be calibrated as a percentage of annual gross issuance and this ceiling should be gradually raised.
- The limit for FII investment in G-secs could be fixed at 6 per cent of total gross issuances by the Centre and States during 2006-07 and gradually raised to 8 per cent of gross issuance between 2007-08 and 2008-09, and to 10 per cent between 2009-10 and 2010-11. The limits could be linked to the gross issuance in the previous year to which the limit relates. The allocation by Securities and Exchange Board of India (SEBI) of the limits between 100 per cent debt funds and other FIIs should be discontinued.
- The FII ceiling for investments in corporate bonds of US\$1.50 billion should in future be linked to fresh issuances and the present absolute limit should be retained for the year 2006-07 and be fixed at 15 per cent of fresh issuances between 2007-08 and 2008-09 and at 25 per cent between 2009-10 and 2010-11. The allocation by SEBI of the limits between 100 per cent debt funds and other FIIs should be discontinued.

* Phase I: 2006-07, Phase II: 2007-08 & 2008-09 and Phase III: 2009-10 & 2010-11

Box 6.10 : World Bank/IMF's QEDS - Gross external debt position by sector

(in US \$ million)

	2006Q1	2006Q2	2006Q3
General Government	45236.0	45877.0	46396.0
Short-term	0.0	0.0	0.0
Money market instruments			
Loans			
Trade credits			
Other debt liabilities			
Arrears			
Other			
Long-term	45236.0	45877.0	46396.0
Bonds and notes	270.0	375.0	538.0
Loans	43906.0	44435.0	44797.0
Trade credits	1060.0	1067.0	1061.0
Other debt liabilities			
Monetary Authorities	0.0	0.0	0.0
Short-term	0.0	0.0	0.0
Money market instruments			
Loans			
Currency and deposits			
Other debt liabilities			
Arrears			
Other			
Long-term	0.0	0.0	0.0
Bonds and notes			
Loans			
Currency and deposits			
Other debt liabilities			
Banks	35809.0	36254.0	37161.0
Short-term	0.0	0.0	0.0
Money market instruments			
Loans			
Currency and deposits			
Other debt liabilities			
Arrears			
Other			
Long-term	35809.0	36254.0	37161.0
Bonds and notes	40.0	41.0	41.0
Loans	635.0	562.0	557.0
Currency and deposits	39134.0	35651.0	36563.0
Other debt liabilities			
Other Sectors	45346.0	50072.0	52959.0
Short-term	8696.0	9105.0	10579.0
Money market instruments			
Loans			
Currency and deposits			
Trade credits	8696.0	9105.0	10579.0
Other debt liabilities			
Arrears			
Other			
Long-term	36650.0	40967.0	42380.0
Bonds and notes	9397.0	11605.0	11919.0
Loans	26507.0	28627.0	29743.0
Currency and deposits			
Trade credits	746.0	735.0	718.0
Other debt liabilities			
Direct investment: Intercompany lending			
Debt liabilities to affiliated enterprises			
Arrears			
Other			
Debt liabilities to direct investors			
Arrears			
Other			
Gross external debt position	126391.0	132203.0	136516.0

The data on external debt of India as well as of other countries, on a comparable basis is available at the website www.worldbank.org of the World Bank.

Outlook

6.77 In the coming year, the external economic environment is likely to remain supportive of India's growth momentum. Global output growth in 2007 has been projected at 4.9 per cent by WEO (September 2006).

6.78 With the ongoing upswing in investment, exports are expected to continue with its observed buoyancy in recent years. Simultaneously, rising investment and higher growth will also result in higher imports. But, a continuation of the relatively benign crude prices of recent months will have a softening impact on import growth. The current account of the balance of payments, which had turned into a deficit in 2004-05 and 2005-06, is likely to remain in deficit in 2006-07. However, going forward, this deficit may come down with rapid growth in invisibles (particularly software and business services) receipts, higher exports, and a slowing down of import growth. From the investment-saving perspective to the current account, the observed increase in the domestic savings rate, with accelerating growth and declining dependency ratio, also supports such a prognosis.

6.79 While downside risks from volatile crude prices and large global imbalances

remain, with strong capital flows – particularly of the non-debt variety — financing the current account deficit through surpluses on the capital account should not pose difficulties. In fact, it is quite likely that the 'problems of plenty' with large increases in foreign exchange reserves will continue with its associated implications for monetary management.

6.80 The Economic Advisory Council to the Prime Minister has raised certain valid issues in the context of projections of BoP for 2006-07 like the need to reconcile divergence of trade data between DGCI&S and RBI, the need to cut delays and ensure its timely availability, and minimizing the extent of revisions. Though beyond the final revisions of data (or even after about a year) there has been lesser divergence, the estimation of the various parameters of external sector, so critical for its management, has become arduous. The movement towards fuller capital account convertibility may also require a sound system of monitoring of the external sector variables and hence a modern real time system of data management is an imperative, lest the ability of the country to diagnose the symptoms of a crisis in time and take corrective action stands compromised.

Industry

Overview

The impressive growth of the industrial sector, propelled by robust growth in manufacturing has continued unabated during the current year so far. Year-on-year industrial growth of 10.6 per cent in the first nine months of 2006-07 was the highest recorded since 1995-96. In seven of the eight months of the current year, the year-on-year growth of the manufacturing sector was in double-digits (Table 7.1).

7.2 In the current year until November, the year-on-year growth of the overall Index of Industrial Production (IIP), which measures the absolute level and percentage growth of industrial production (Box 7.1), as well as its three subsectors, viz. mining, electricity and manufacturing, in April-November 2006 was higher than that in comparable period of the previous year. Manufacturing sector contributed 91.1 per cent to this improved performance. There was a moderate turnaround in the growth rates of the mining

Table 7.1 : Annual growth rate of industrial production in major sectors of industry

(Based on the index of industrial production)

Base: 1993-94=100

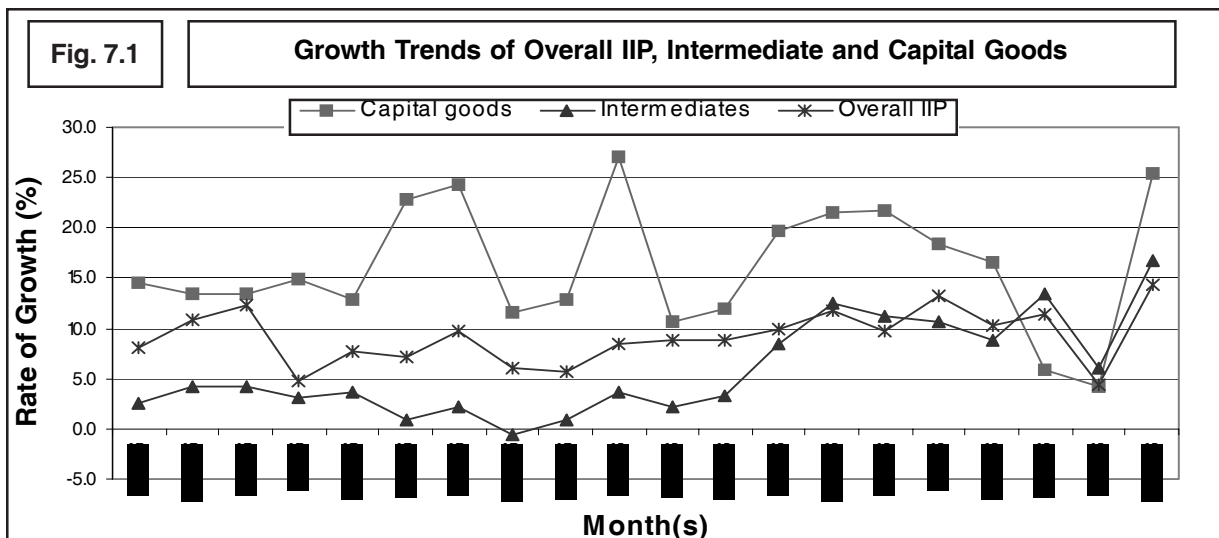
(per cent)

Period	Mining & Quarrying	Manuf-cturing	Electricity	Overall
Weights	10.47	79.36	10.17	100.00
1995-96	9.7	14.1	8.1	13.0
1996-97	-1.9	7.3	4.0	6.1
1997-98	6.9	6.7	6.6	6.7
1998-99	-0.8	4.4	6.5	4.1
1999-00	1.0	7.1	7.3	6.7
2000-01	2.8	5.3	4.0	5.0
2001-02	1.2	2.9	3.1	2.7
2002-03	5.8	6.0	3.2	5.7
2003-04	5.2	7.4	5.1	7.0
2004-05	4.4	9.2	5.2	8.4
2005-06	1.0	9.1	5.2	8.2
2006-07#	3.8	11.5	7.3	10.6

(April-November)

Source : Central Statistical Organisation.

and the electricity sectors compared to the previous year, but such growth continued to lag far behind the overall IIP growth.



Sector	Weight	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	Apr.-Nov.	
								2005-06	2006-07
Basic Goods	35.5	3.7	2.6	4.9	5.4	5.5	6.7	6.1	9.3
Capital Goods	9.3	1.8	-3.4	10.5	13.6	13.9	15.8	16.2	16.1
Intermediate Goods	26.5	4.7	1.5	3.9	6.4	6.1	2.5	2.5	10.9
Consumer Goods Of which	28.7	8.0	6.0	7.1	7.1	11.7	12.0	13.3	9.7
Durables	5.4	14.5	11.5	-6.3	11.6	14.4	15.3	14.2	12.5
Non-Durables	23.3	5.8	4.1	12.0	5.8	10.8	11.0	12.9	8.7
IIP (Index of Industrial Production)	100	5.0	2.7	5.7	7.0	8.4	8.2	8.3	10.6

Source : Central Statistical Organisation

7.3 Under the use-based classification of industries, growth signals were mixed (Table 7.2 and Figure 7.1). Year-on-year, during April-November, while growth accelerated in basic

and intermediate goods sectors between 2005 and 2006, there was a deceleration of growth in consumer goods industries. Encouragingly, however, except in the months of September

Code (NIC-1987)	Industry group	Weight	2004-05	2005-06	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Apr.-Nov.	
													2005-06	2006-07
20-21	Food products	9.1	-0.4	2.0	-7.4	-6.1	-3.7	26.9	-0.8	11.3	-9.2	11.3	-4.7	1.9
22	Beverages, tobacco and related products	2.4	10.8	15.7	13.9	14.6	10.2	11.8	18.2	18.7	2.4	11.0	17.4	12.5
23	Cotton textiles	5.5	7.6	8.5	9.3	14.0	10.8	14.3	13.5	14.7	9.7	18.3	11.3	13.0
24	Wool, silk and man-made fibre textiles	2.3	3.5	0.0	12.7	12.4	-0.4	2.7	9.9	3.7	-4.0	18.2	-0.8	6.6
25	Jute and other vegetable fibre textiles (except cotton)	0.6	3.7	0.5	-6.6	2.5	3.6	-5.1	5.5	0.2	-0.9	9.7	2.6	1.0
26	Textile products (including wearing apparel)	2.5	19.2	16.3	12.6	18.0	13.1	28.1	14.8	4.2	-0.4	16.0	20.5	12.9
27	Wood and wood products; furniture and fixtures	2.7	-8.4	-5.7	-7.9	-19.6	-15.2	26.4	11.6	11.2	10.4	9.3	-3.5	2.4
28	Paper & paper products and printing, publishing & allied industries	2.7	10.5	-0.9	9.0	17.2	10.2	7.3	-2.1	8.8	3.9	15.6	5.2	8.4
29	Leather, and leather & fur products	1.1	6.7	-4.8	-24.4	-2.4	-3.7	-3.9	-0.3	5.6	-13.4	17.7	-0.1	-3.7
30	Basic chemicals & chemical products (except products of petroleum & coal)	14.0	14.5	8.3	14.5	14.5	4.1	9.6	9.9	11.0	0.9	8.4	11.7	9.1
31	Rubber, plastic, petroleum and coal products	5.7	2.4	4.3	4.3	12.1	10.8	9.2	13.0	15.7	7.7	23.2	2.8	11.9
32	Non-metallic mineral products	4.4	1.5	11.0	18.5	8.6	18.2	13.3	6.6	16.3	11.1	17.7	8.3	13.7
33	Basic metal and alloy industries	7.5	5.4	15.8	21.4	21.4	19.8	20.0	14.3	20.0	20.9	25.4	15.6	20.4
34	Metal products and parts, except machinery and equipment	2.8	5.7	-1.1	4.6	-9.7	7.8	6.7	10.1	11.5	25.1	-1.5	-2.2	6.8
35-36	Machinery and equipment other than transport equipment	9.6	19.8	12.0	8.8	13.9	18.2	15.8	23.3	14.2	2.1	17.3	10.8	14.1
37	Transport equipment and parts	4.0	4.1	12.7	13.8	25.9	21.2	22.8	11.2	12.4	4.4	21.8	12.5	16.3
38	Other manufacturing industries	2.6	18.5	25.2	33.8	37.8	18.9	15.9	7.9	-10.6	-18.5	23.0	18.9	10.4

Growth rates are estimated over the corresponding period of the previous year.
Source: Central Statistical Organisation.

Box 7.1: The historical development of the all india index of industrial production (IIP)

Index of Industrial Production (IIP) is a single representative figure to measure the general level of industrial activity in the economy. The Office of Economic Advisor, Ministry of Commerce and Industry made a maiden attempt of compilation and release of the IIP with base year 1937. With the inception of Central Statistical Organisation (CSO) in 1951, the responsibility for compilation and publication of the IIP was vested with CSO. The IIP covers mining, manufacturing and electricity sectors only. It excludes construction, also considered part of the secondary sector. IIP has been revised from time to time in 1946, 1951, 1956, 1960, 1970, 1980-81 and 1993-94 by shifting the base; by reviewing the coverage of items; and by improving the technique of construction to reflect the changes in industrial structure

IIP, with 1937 as the base, covered 15 industries accounting for more than 90 per cent of the total production of these industries. The weights were allocated on the basis of total value of output during the base year. Cotton textiles; jute manufacture; sugar and steel had 78 per cent of the IIP weight. Subsequently, the base year was shifted to 1946 but the scope continued to be restricted to mining and manufacturing sectors, comprising of 20 industries with 35 items. The 'value added by manufacture' in the base year obtained from the First Census of Manufactures, India 1946 was used for determining the weights. Cotton textiles, jute manufacturer, steel, sugar and coal accounted for 82.7 per cent of the total weight.

The IIP with 1951 as the base and compiled by CSO had 88 items. The items were classified according to the International Standard Industrial Classification (ISIC) 1948 of all economic activities. Weights were allotted to various items in proportion to 'value added by manufacture' in the base year 1951. This index had three sectors: mining, manufacturing and electricity with weights of 7.16 per cent, 90.68 per cent and 2.16 per cent respectively. The index was further revised to base year 1956 on the recommendation of the working group constituted by CSO. It covered 201 items (198 of these were in the manufacturing sector), classified according to the Standard Industrial and Occupational Classification of All Economic Activities. The weights were assigned to the various items on the basis of 'value added by manufacture', in the base year as per Census of Manufactures 1956. The weights of mining, manufacturing and electricity sector for this series of IIP were 7.47 per cent, 88.85 per cent and 3.68 per cent respectively. The index with the year 1960 as base year covered 312 items in the monthly index and an additional 124 items in an annual index. The index continued to be the weighted average of the components, with weights proportional to 'value added by the manufacture in the base year.

The index numbers with base 1970 covered 352 items comprising 61 items for mining; 290 for manufacturing and 1 for electricity sector. The weighting diagram for the manufacturing sector was based on the results of Annual Survey of Industries (ASI) 1970, whereas for the mining, the net value added by that sector as estimated by Indian Bureau of Mines, and in case of electricity, the net value added in 1970 as available from the White Paper on National Income, were used. For compiling the index, monthly production reports were collected by CSO from 17 source agencies, which in turn collected data from the production units.

The IIP with 1980-81 as the base for the first time included 18 items of the small-scale sector in the compilation of the index. Further, in respect of items like machinery, machine tools etc. where the reporting was in value terms, the Wholesale Price Index (base 1981-82) for the concerned category was used as deflators. The index has 350 items in all comprising 61 items from mining; 288 items from manufacturing and 1 from electricity.

The current series of IIP has 1993-94 as its base. The new series has 543 items clubbed into 287 item groups comprising 285 items groups from manufacturing and one each from mining and electricity. The index relating to Mining and Quarrying sector is supplied by the Indian Bureau of Mines, Nagpur and that is dovetailed with manufacturing and electricity indices compiled by CSO. The sectoral weights are allocated on the basis of Gross Value Added for 1993-94 as published in the National Account Statistics. As per the norms laid down by Special Data Dissemination Standards (SDDS) of IMF, the quick estimate of IIP of any month is being released within six weeks from the reference month according to an advance release calendar. This index is subsequently revised twice, namely, in the next month and the following third month.

and October 2006, year-on-year growth for capital goods has been in double digit and higher than overall IIP growth every month since February 2004. Furthermore, a sharp pick-up in growth was observed in intermediate goods in the current year.

7.4 At a two-digit level of disaggregation across the various segments of the manufacturing sector (Table 7.3), as many as nine sectors, with a combined weight of 44.2 per cent in IIP, grew at over 10 per cent, on an average, during the period April–November 2006. During the comparable period of the

previous year, there were eight such sectors accounting for a weight of 48.1 per cent. Leather and leather & fur products have exhibited a negative rate of growth during the current year so far (April-November).

7.5 Eleven sub-sectors registered an improvement in performance over the comparable period of the previous year, while performance in the other six groups deteriorated. Sectors like food products, jute and other vegetable fibre textiles, wood and wood products, and leather and leather & fur products have either shown a decline or a moderate growth. Lacklustre growth in these industries, which are relatively more labour intensive, is reflected in the slow growth of employment in manufacturing.

Highlights of some industries

Automotive

7.6 Automotive industry, comprising of the automobile and auto-component sectors, is one of the key segments of the economy with extensive forward and backward linkages with other key segments of the economy. Installed capacity of the industry has been growing at a compounded annual rate of over 16 per cent since 2001-02. The automobile industry produced a wide variety of vehicles including 17 lakh four wheelers (passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles such as jeeps), and over 80 lakh two and three wheelers (scooters, motor-cycles, mopeds, and three wheelers) in 2005-06 (Table 7.4).

Category	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (till Sept'06)
Passenger cars	513	564	609	842	961	1,046	594
Multi-utility vehicles	128	106	112	146	249	263	144
Commercial vehicles	157	163	204	275	350	391	237
Two wheelers	3,759	4,271	5,076	5,625	6,527	7,600	4,155
Three wheelers	203	213	277	341	374	434	264
Total	4,759	5,316	6,280	7,229	8,461	9,735	5,394
Growth in per cent	(-)2.00	11.70	18.60	15.12	16.80	14.97	18.04

Source : Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industries)

7.7 Delicensing and opening up to FDI has not only helped this sector to develop in the domestic economy but also to clock impressive performance in the export market. Automobile exports crossed the US\$1 billion

mark in 2003-04 and increased to US\$2.28 billion in 2005-06. The industry exported as much as 17.7 per cent and 16.3 per cent of its domestic production of three wheelers and passenger cars in 2005-06 (Table 7.5)

Category	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (till Sept'06)
Passenger cars	23	50	71	126	161	170	98
Multi-utility vehicles	4	3	1	3	6	5	3
Commercial vehicles	14	12	12	17	30	41	23
Two wheelers	111	104	180	265	367	513	332
Three wheelers	16	15	43	68	67	77	62
Total	168	185	307	479	620	806	519
Growth in per cent	20.24	9.74	65.35	55.98	31.25	28.03	27.43

Source : Ministry of Heavy Industries & Public Enterprises (Department of Heavy Industries)

7.8 The auto component industry, comprising of around 500 firms in the organized sector and more than 10,000 firms in the small and unorganized sector has been one of the fastest growing segments of Indian manufacturing. It has the capability to manufacture the entire range of auto parts and has rapidly added to its capacity base. The turnover of the sector has grown from US\$3.1 billion to US\$10.0 billion between 1997-98 and 2005-06. In 2005-06, the sector's exports grew by 28 per cent to reach US\$1.8 billion. The industry has also made considerable progress on the quality front as borne out by international recognition received by several producers and by the direction of exports. The major destinations of export for this sector are USA and Europe, which belong to the category of high Accepted Quality Level (AQL).

7.9 The major challenges that the auto industry is presently facing is with respect to its capability to innovate and upgrade in order to remain competitive (both qualitatively and price wise) in the international market.

7.10 The initiatives taken by the Government in 2006-07 to give a boost to the automobile sector include: a) reduction in the duty of raw material to 5-7.5 per cent from the earlier 10 per cent, b) setting up of the National Automotive Testing and R&D Infrastructure Project (NATRIP) at a total cost of Rs.1,718 crore for enabling the industry to usher in global

standards of vehicular safety, emission and performance standards, and (c) finalisation of the Automotive Mission Plan (AMP) 2006-2016 for making India a preferred destination for design and manufacture of automobile and automotive components.

Textiles

7.11 Production of fabrics increased by 9.25 per cent in 2005-06 and, in the current year upto November 2006, by 8.20 per cent over the corresponding period of the previous year (Table 7.6). In US dollar terms, the value of exports increased by 21.8 per cent in 2005-06 and 11.7 per cent in the current year up to September 2006 (Table 7.7).

7.12 Nevertheless, Indian textile sector's performance continues to lag substantially behind that of China even in the post-quota era. China's export of textiles and clothing reached a new peak of US\$115.51 billion in 2005 which accounted for 24.07 per cent of global trade. In comparison, India's share was a miniscule 3.37 per cent amounting to US\$16.14 billion. The Indian textile sector continues to suffer from ageing machinery, inadequate infrastructural facilities (power and ports), and rigid labour laws. The continuing scheme such as the Technology Upgradation Fund (TUF) and the Scheme for Integrated Textile Parks launched last year are aimed at addressing some of these problems. Under the Technology Upgradation Fund Scheme

Table 7.6 : Production of fabrics								
<i>(in millions of square metres)</i>								
Sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	April-November 2005-06	2006-07(P)
Mills	1,670 (4.2)	1,546 (3.7)	1,496 (3.6)	1,434 (3.4)	1,526 (3.4)	1,656 (3.3)	1,085 (3.3)	1,234 (3.5)
Power looms (including Hosiery)	30,499 (75.8)	32,259 (76.8)	33,835 (80.6)	34,794 (82.1)	37,437 (82.5)	41,044 (82.8)	27,105 (82.6)	29,471 (83.0)
Handlooms	7,506 (18.7)	7,585 (18.0)	5,980 (14.2)	5,493 (13.0)	5,722 (12.6)	6,108 (12.3)	4,111 (12.5)	4,278 (12.1)
Others	558 (1.4)	644 (1.5)	662 (1.6)	662 (1.6)	693 (1.5)	769 (1.6)	513 (1.6)	513 (1.5)
Total	40,233	42,034	41,973	42,383	45,378	49,577	32,814	35,496
Note : Figures in parentheses indicate share in output								
P – Provisional								
Source : Office of Textile Commissioner, Mumbai								

Table 7.7 : Export of textiles*(in US\$ million)*

Item	2003-04	2004-05	2005-06	April-August	
				2005-06	2006-07(P)
Ready made garment	5,786.37	6,024.39	7,752.44	3,085.34	3,461.88
Cotton Textiles	3,599.95	3,544.16	4,493.20	1,650.53	2,071.09
Wool & Woollen Textiles	337.98	417.09	473.91	197.42	204.89
Manmade Textiles	1,821.24	2,050.73	2,000.08	777.20	907.83
Silk	545.21	594.56	691.83	279.06	292.75
Handicrafts	1,085.36	1,013.85	1,239.26	524.11	501.46
Coir & Coir manufacture	77.77	105.56	134.25	53.99	59.44
Jute goods	242.43	276.25	294.60	127.33	128.79
Total	13,496.31	14,026.72	17,079.57	6,694.97	7,628.13

Source : Foreign Trade Statistics of India (Principal Commodities and Countries) DGCI&S, Kolkata

(TUFS), launched on April 1, 1999, loans amounting to Rs.14,901 crore have been disbursed to 6,739 applicants. Under the Scheme for Integrated Textile Park (SITP) launched in the last financial year to develop 25 Integrated Textile Parks (covering weaving, knitting, processing and garmenting sectors) of international standard, project proposals worth Rs.2,411 crore, (of which assistance from Government is Rs.862.55 crore) have been sanctioned. These projects are likely to be completed by March 2008.

Gems and Jewellery

7.13 The gems and jewellery sector, contributing about 15 per cent of India's total merchandise exports during 2005-06, continued to maintain India as the largest cutting and polishing centre of diamonds in the world both in terms of quantity and value. In terms of carat, India's share in this sector is about 80 per cent of the world market. Gold jewellery and coloured gem segments accounts for about 15 per cent and 5 per cent, respectively of India's gem and jewellery export in value terms.

7.14 Total exports of gems and jewellery in 2005-06 was US\$15.5 billion, up from US\$13.4 billion and US\$10.7 billion in the previous two years. During the period April-September 2006, however, exports declined marginally by 0.66 per cent from the corresponding period

of the previous year due to a reduction in the international prices. Destination wise, the major market for Indian gems and jewellery in terms of importance are USA, UAE, Hong Kong, Belgium, Israel, Japan, Thailand, UK, Singapore and Korea. USA itself accounts for 29 per cent of the total exports from India in this sector.

7.15 In the Foreign Trade Policy updated as on April 7, 2006, Government has extended the following facilities to this sector:

- Import of gold of 8 carat and above has been allowed under the replenishment scheme subject to the import being accompanied by an Assay Certificate specifying the purity, weight and alloy content.
- Duty-free import entitlement of consumables for metals other than gold and platinum at 2 per cent of FOB value of exports during the previous financial year.
- Duty-free import entitlement of commercial samples fixed at Rs. 30,000.
- Duty-free re-import entitlement for rejected jewellery fixed at 2 per cent of FOB value of exports.
- Cutting and polishing of gems and jewellery to be treated as manufacturing for the purpose of exemption under Section 10A of the Income Tax Act.

- Import of precious metal scrap/used jewellery has been allowed for melting, refining and re-export of jewellery. However, such imports will not be allowed through hand baggage.
- Exporters of gems and jewellery have been allowed to export jewellery on consignment basis and export cut and polished precious and semiprecious stones for treatment and re-import as per rules.
- Value additions norms for different categories of gems and jewellery products have been reduced.

7.16 Steps have been taken to encourage creation of training infrastructure to impart skills in jewellery designing, participation of exporters in international fairs, and arrangement of buyer-seller meets abroad to showcase the quality and variety of Indian products under the Market Development Assistance and Market Access Initiative scheme of the Government.

7.17 Based on traditional strength in craftsmanship, India has emerged as one of the key players in the gem and jewellery sector. However, in a global business worth US\$80 billion annually, India's market share continues to be less than 3 per cent. In the coming years factors like changing tastes, competition from other luxury goods, growth of market share of substitutes like synthetic diamonds and non-precious metals, and growth of cutting and polishing industries in mining countries are likely to affect this sector. In order to increase its share, the country has to graduate towards the higher end of the value chain through technological upgradation. The industry will also need to explore and develop virgin markets which are likely to be high growth economies. The share of organized sector has to increase further to ensure better marketing, quality management and professionalisation.

Steel

7.18 The impressive growth of the steel sector continued for the fourth consecutive year. During April-December 2006, production of finished (carbon) steel, year-on-year, increased by 9.7 per cent to reach 35.65 million

tonnes (Table 7.8). Additional capacities of four million tonnes have been commissioned in this sector in the current year. The apparent consumption of finished (carbon) steel at 31.45 million tonnes was 9.8 per cent higher than that in the comparable period of the previous year. Export of finished (carbon) steel during this period grew by 10.9 per cent to 3.50 million tonnes.

7.19 The increasing presence of the Indian steel companies in the global market with a wide-ranging export basket including complex and technologically sophisticated product is a pointer to the increased competitiveness of this industry. This is mainly due to improvement in the operational parameters of the Indian plants effected through establishment of new state-of-the-art plants and their continuous modernization and implementation of de-bottlenecking and technology upgradation schemes in the older plants. Most importantly, energy efficiency of the plants in terms of coke rate and power consumption has improved through better operating practices, use of better quality raw materials (e.g. imported coking coal) accessed from global sources and optimum processing of raw materials (e.g. washing of coal, beneficiation and sintering of iron ore). The average techno-economic parameters of an Indian plant vis-à-vis international benchmarks show that the Indian plants are fast catching up with the best in the world.

7.20 Domestic market prices of steel, in general, declined throughout 2005 and the trend persisted till the start of fiscal 2006-07. However, during the first three quarters of the current fiscal steel prices started firming up. The price rise has been stronger in case of flat products, where most of the key items saw marked rise during October 2006 from a year ago. For non-flat steel, the rise has been of a lesser intensity as compared to the flats. The increase has been mainly due to the strong domestic demand for steel and increase in cost of raw materials like zinc and ferro-alloys. In continuation of the policy thrust to ensure availability of steel and price stability, Government reduced the customs duty on alloy/stainless steel and non-alloy steel items

Table 7.8 : Production, consumption, export and import of finished carbon steel and pig iron*(in million tonnes)*

Item	2003-04	2004-05	2005-06	2005-06 (April-December)	2006-07
PRODUCTION					
Finished Carbon Steel					
Main producers	15.19 (5.60)	15.61 (2.79)	16.21 (2.79)	11.79	12.75 (8.10)
Secondary producers	21.77 (12.91)	24.44 (12.28)	28.33 (15.90)	20.70	22.90 (10.60)
Total	36.96 (9.70)	40.06 (8.38)	44.54 (11.20)	32.49	35.65 (9.70)
Pig Iron					
Main Producers	0.97 (-12.70)	0.63 (-35.30)	1.01 (61.12)	0.79	0.65 (-17.60)
Secondary Producers	2.80 (-32.90)	2.60 (-6.96)	3.69 (41.68)	2.55	2.80 (10.00)
Total	3.76 (-28.70)	3.23 (-14.24)	4.70 (45.44)	3.33	3.45 (3.50)
EXPORTS					
Finished Carbon Steel	4.84 (7.30)	4.38 (-9.38)	4.48 (2.21)	3.16	3.50 (10.90)
Pig Iron	0.52 (-17.64)	0.40 (-24.13)	0.44 (11.95)	0.30	0.20 (-7.00)
IMPORTS					
Finished Carbon Steel	1.54 (1.98)	2.11 (36.94)	3.85 (82.55)	2.87	2.70 (-6.00)
Pig Iron	0.00 (100.00)	0.01 (300.00)	0.00 (62.50)	0.00	0.00
APPARENT CONSUMPTION					
Finished Carbon Steel	31.17 (7.88)	34.39 (10.33)	39.19 (13.94)	28.63	31.45 (9.80)
Pig Iron	3.26 (-29.67)	2.79 (-14.46)	4.14 (48.19)	2.92	3.22 (10.30)

Note: Figures in parenthesis indicate variation over the previous year.

Source : Joint Plant Committee.

to 7.5 per cent and 5 per cent respectively with effect from April 1, 2006. Customs duty on alloy and stainless steel was further reduced to 5 per cent from January 22, 2007.

Chemical, Petrochemical and Pharmaceutical

7.21 The chemical sector, comprising basic chemicals and its products, petrochemicals, fertilizers, paints, gases and pharmaceuticals, accounted for about 17.6 per cent in the output of manufacturing sector, 13-14 per cent in total exports and 8-9 per cent in total imports of the country in 2005-06. This well-diversified sector, covers more than 70,000 commercial products and is intensive in knowledge, capital and power. This sector has made good progress during the last five years, and turned from a net importer in the 1990s to a net

exporter. During 2005-06, however, there was a deceleration in the growth rate of the sector to 8.2 per cent from 14.5 per cent in 2004-05.

Basic Chemicals

7.22 The production of major basic chemicals comprising alkalies, inorganic and organic chemicals, pesticides and dyes and dyestuffs was up by 3.61 per cent from 7.38 million tonnes to 7.64 million tonnes between 2004-05 and 2005-06. However, the output of basic chemicals showed a marginal decline of 2.22 per cent, year-on-year, in the first half of the current fiscal (April-Sept) vis-à-vis that in the comparable period last year. Within basic chemicals, growth of dyes and dyestuffs, and inorganic chemicals accelerated from over 7 per cent in 2005-06, to over 10 per cent in the first half of the current year.

Petrochemicals

7.23 The production of petrochemicals which mainly comprise of synthetic fibres, polymers, elastomers, synthetic detergent intermediates and performance plastics increased by 1.61 per cent from 7.35 million tonnes in 2004-05 to 7.47 million tonnes in 2005-06. Output of elastomers, synthetic detergent intermediates and performance plastics was higher by 13.40 per cent, 13.93 per cent and 12.39 per cent, respectively, in 2005-06. The overall growth performance of petrochemicals improved to 7.97 per cent in the first half of the current year.

Pharmaceuticals

7.24 Driven by the knowledge skills, growing enterprises, low costs, improved quality and buoyant demand (both domestic and international), the pharmaceutical sector's value of output grew more than tenfold from Rs. 5,000 crore in 1990 to over Rs. 55,000 crore during 2005-06. With value of exports at over Rs. 21,000 crore or US\$4.7 billion in 2005-06, India is today recognized as one of the leading global players in pharmaceuticals. Internationally, recognized as amongst the lowest-cost-producers of drugs, India holds fourth position in terms of volume and thirteenth position in terms of value of production in pharmaceuticals. It is estimated that by the year 2010, the Indian pharmaceutical industry has the potential to achieve over Rs. 1,00,000 crore in formulations and bulk drug production.

7.25 Increasing number of Indian pharmaceutical companies have been getting

international regulatory approvals for their plants from agencies like USFDA (USA), MHRA (UK), TGA (Australia), and MCC (South Africa). India has the largest number of USFDA-approved plants for generic manufacture. Considering that the pharmaceutical industry involves sophisticated technology and stringent "Good Manufacturing Practice" (GMP) requirements, major share of Indian pharma exports going to highly developed western countries bears testimony to not only the excellent quality of Indian pharmaceuticals but also price-competitiveness. Indian companies are now seeking more Abbreviated New Drug Approvals (ANDAs) in USA in specialized segments like anti infectives, cardiovasculars and central nervous system groups.

7.26 Due to various policy initiatives taken by Government in the recent past, research and development (R&D) activities in this sector has not only increased quantitatively but also qualitatively. The National Pharmaceutical Policy, aimed at ensuring availability of life saving drugs at reasonable prices, is being finalized and will be implemented shortly.

Oil and Gas

7.27 Crude oil production in 2006-07 up to December 2006 was 25.40 million tonnes, up 6.03 per cent from 24.03 million tonnes in the first nine months of 2005-06. Natural gas production up to December 2006 at 23.53 billion cubic metres, however, was down 2.42 per cent from 24.10 billion cubic metre in the same period of the previous year. Thus, on the aggregate, oil and oil equivalent of gas

Box 7.2 Under recovery by Oil Marketing Companies

(Rupees in Crore)

Under-recovery	2003-04	2004-05	2005-06 (Estimate)	April- June 2006	April-September 2006
PDS Kerosene and domestic LPG*	9,274	17,842	24,630	6,803	14,875
Petrol and Diesel	0	2,304	15,370	10,243	18,310
Total	9,274	20,146	40,000	17,046	33,185

*On gross basis, i.e. before sharing of losses by upstream oil companies.

Source: Ministry of Petroleum & Natural Gas

(O+OEG) production in 2006-07 up to December 2006, year-on-year, increased by only about 1.85 per cent.

7.28 With 19 refineries – 17 in the public sector and 2 in the private – the domestic refining capacity in December 2006 was 148.97 million tonnes per year. During 2005-06, refinery throughput at 130.11 million tonnes was up 2.1 per cent from 127.42 million tonnes in the previous year. During April-December 2006, such throughput was 107.42 million tonnes.

7.29 Global prices of crude oil and petroleum products reached new highs in the past two years. The Indian basket of crude oil prices touched an all-time high of US\$75.20 per barrel on August 8, 2006. Government tried to distribute the heavy burden of this oil price hike equitably amongst various stakeholders, namely upstream companies, oil-marketing companies, Government and the consumers. As in 2004 and 2005, Government tried to further restructure the duties on petroleum products to mitigate the burden of price rise on the common man. In the Union Budget 2006, LPG (Domestic) was categorized as “Declared Goods” requiring State Governments to peg the sales tax rate to no more than 4 per cent and thereby partially reduce the severe under-recoveries (Box 7.2) suffered by oil marketing companies in sensitive petroleum products. Further, with effect from June 14, 2006, customs duty on petrol and diesel was reduced from 10 per cent to 7.5 per cent. Since mid-June 2006, in line with the recommendation of the High-Powered Inter-Ministerial Committee headed by Dr. C. Rangarajan, the basis of pricing was changed from import-parity to trade-parity. Trade-parity price is the weighted average of import-parity (4) and export-parity (1) prices.

7.30 During 2006, in view of the very high under-recoveries and acute financial distress having a direct bearing on the corporate image and strength of the oil marketing companies, Government was compelled to increase the prices of petrol and diesel by Rs.4 per and Rs.2 per litre respectively with effect from June 6, 2006. Prior to this the prices of petrol and diesel were revised on September 7, 2005.

However, the prices of PDS Kerosene and domestic LPG were not touched. Government also decided to issue bonds worth Rs.28,300 crore to oil marketing companies for losses suffered due to non-revision of prices in respect of sensitive petroleum products for the current financial year 2006-07. During the year 2005-06, such bonds worth Rs.11,500 crore were issued by Government.

7.31 However, in view of declining international prices, Government reduced the prices of petrol and diesel with effect from November 30, 2006. The impact of this reduction was around Rs.2 per litre for petrol and Rs.1 per litre for diesel. A further reduction of the same magnitude was made effective from February 16, 2007. International prices of oil are projected to remain high in winter,

Box 7.3 : Policy Decisions during 2006-07

- Petroleum and Natural Gas Regulatory Act, 2006 has been notified on April 3, 2006 to regulate specific activities relating to petroleum, petroleum products and natural gas consequent to deregulation of the petroleum sector.
- Taking into account the oil security of India, Government has decided to set up strategic crude oil storage facility of 5 million tonnes at various locations in the country.
- Sale of 5 per cent ethanol blended petrol in various parts of the country has been allowed, subject to commercial viability, from November 1, 2006.
- Sixth Round of New Exploration Licensing Policy (NELP) was launched on February 23, 2006 by offering 55 exploration blocks covering an area of 3.52 lakh square kilometers.
- Coal Bed Methane (CBM) has emerged as another alternative viable source of gas. The third round of CBM-II policy was launched, and 10 CBM blocks have been awarded.
- On December 20, 2006 Government has notified the Policy for Development of Natural Gas Pipelines and City or Local Natural Gas Distribution Networks, which inter alia seeks to promote competition and arm's length business.
- Along with intensifying exploration efforts in the country, the oil companies are aggressively following a policy of gaining global properties. ONGC Videsh Limited (OVL) has presence in 15 countries and has set a target to acquire 20 million tonnes per annum of oil and oil equivalent gas production by 2020.

with OPEC announcing a cut in output by 1.2 million barrels per day with effect from November 1, 2006 and a further cut of 0.50 million barrel per day with effect from February 1, 2007 with a view to maintain oil prices. Government has taken several steps to effectively control and regulate the volatility in prices, and augment production of oil and natural gas (Box 7.3).

Tourism

7.32 The impressive growth profile of the tourism sector observed over the last two years appears to be continuing. As per the World Tourism Organization, about 808 million tourists travelled internationally – a growth of 5.6 per cent over 2004 – and spent about US\$680 billion. Furthermore, according to the World Travel and Tourism Council (WTTC), tourism accounted for 10.6 per cent of global GDP, 12.0 per cent of the total world exports and 8.3 per cent of global employment in the year 2005.

7.33 The double-digit growth in both number of foreign tourist arrivals and foreign exchange earnings therefrom continued for the third consecutive year in 2005-06. However, there was a deceleration in the growth rate of foreign tourist arrivals and foreign exchange earnings therefrom between 2004-05 and 2005-06 (Table 7.9).

7.34 Sustained improvement in tourist infrastructure, such as airports, rail and roads leading to connectivity of tourist destinations,

development of tourist destinations and circuits, improving and expanding existing products such as cultural and heritage tourism, rural tourism, adventure tourism and health and healing tourism, need to be pursued to establish India's competitive advantage in this critical sector.

Electronics & Computer Technology

7.35 The Indian IT-enabled Services and Business Process Outsourcing (ITES-BPO) have demonstrated their superiority, sustained cost advantage and fundamentally-powered value proposition in the international market. This sector is growing with Indian companies expanding their service offerings, enabling customers to deepen their offshore engagements and shifting from low-end business processes to high-value ones. The software and ITES exports from India grew from US\$12.9 billion (Rs. 58,240 crore) in 2003-04 to US\$17.7 billion (Rs. 78,230 crore) in 2004-05 (Table 7.10). Software and ITES exports from India estimated at US\$23.4 billion during 2005-06 was up 32 per cent from the previous year.

7.36 With strong demand over the past few years placing India among the fastest growing IT markets in the Asia-Pacific region, the industry's contribution to GDP rose from 1.2 per cent in 1999-2000 to an estimated 4.8 per cent in 2005-06. Indian companies are enhancing their global services delivery capabilities through a combination of greenfield initiatives, cross-border mergers & acquisitions, partnerships and alliances with local players. This is enabling them to execute end-to-end delivery of new services. Global software giants such as Microsoft, Oracle and SAP, have established their captive development centres in India. A majority of the companies in India have already aligned their internal processes and practices to international standards such as ISO, CMM, and Six Sigma. This has helped establish India as a credible sourcing destination. As of December, 2006, over 400 Indian companies have acquired quality certifications with 82 companies certified at SEI CMM Level 5 – higher than any other country in the world.

Table 7.9 : Foreign tourist arrivals and foreign exchange earning

Year	Foreign tourists		Estimated foreign Exchange Earnings	
	Number in Lakh	Growth Rate	Million US\$	Growth Rate
1998-99	23.97	1.1	2993	2.7
1999-00	25.05	4.5	3036	1.4
2000-01	26.99	7.7	3168	4.3
2001-02	24.28	-10.0	2910	-8.1
2002-03	24.54	1.0	3029	4.1
2003-04	29.33	19.5	3979	31.4
2004-05	36.03	22.8	5029	26.4
2005-06	40.53	12.5	5931	17.9

Source : Ministry of Tourism

Table 7.10 : Electronics exports						
<i>(Rs. Crore)</i>						
Items	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1. Electronics Hardware	4,788	5,800	5,600	7,700	8,000	8,500
2. Computer Software	28,350	36,500	46,100	58,240	78,230	103,200
Total	33,138	42,300	51,700	65,940	86,230	111,700

Table 7.11 : Electronics production						
<i>(Rs. Crore)</i>						
Items	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
1. Consumer Electronics	11,950	12,700	13,800	15,200	16,800	18,000
2. Industrial Electronics	4,000	4,500	5,550	6,100	8,300	8,800
3. Computers	3,400	3,550	4,250	6,800	8,800	10,800
4. Communications and Broadcasting Equipments	4,500	4,500	4,800	5,350	4,800	7,000
5. Strategic Electronics	1,750	1,800	2,500	2,750	3,000	3,200
6. Components	5,500	5,700	6,600	7,600	8,800	8,800
Sub-Total	31,100	32,750	37,500	43,800	50,500	56,600
7. Software for Exports	28,350	36,500	46,100	58,240	78,230	103,200
8. Domestic Software	9,400	10,874	13,400	16,250	19,630	26,460
Total	68,850	80,124	97,000	118,290	148,360	186,260

Source : Ministry of Information and Technology

7.37 While there have been no spectacular achievements in the hardware segment as in the case of the software segment of the IT sector, there has been a steady progress in production (Table 7.11) and exports (Table 7.10) of hardware.

7.38 Contrary to some popular misperceptions, the growth of the IT and ITES sector has had a salutary effect on the

employment scenario with total number of professionals employed in this sector growing from an estimated 284,000 in 1999-2000 to 1,287,000 in 2005-06. The increase in the number of employed person in the sector was as high as 230,000 in 2005-06 itself. In addition, Indian IT-ITES is estimated to have helped create an additional 30 lakh job opportunities through indirect and induced

Box 7.4 : Policy Initiatives For Electronics and IT Sector

- The Information Technology Amendment Bill has been introduced in the Parliament on December 15, 2006. This proposes to put in place technology applications, security practices and procedures relating to such applications. Furthermore, it addresses the issue of technological neutrality in IT laws as recommended by UNCITRAL Model Law on Electronic Signature.
- A proposal for Electronics & IT Hardware Manufacturing Policy is also under consideration which aims to i) rationalize tariff structure on capital goods and inputs, ii) unify manufacturing for domestic market and exports, iii) facilitate registration of international patents, iv) transfer state-of-the-art technology(TOT) and v) enhance Research and Development.
- In order to ensure that the benefits of IT reach the common man, Government has initiated a move to make available tools and fonts in various Indian languages freely to the general public. Tamil, Hindi and Telugu software tools and fonts have already been released. All Indian languages are expected to be covered in the next one year.
- Government , to ensure penetrations of the IT and ITES in the rural areas, has formulated a proposal to establish 1,00,000 Common service Centres (CSCs) in rural areas, which will serve not only as the front-end for most government services but also as a means to connect the citizens of rural India to the World Wide Web. The scheme will be implemented through Public Private Partnership (PPP). An outlay of Rs. 5,742 has been approved of which the share of the Central Government and the State Governments would be Rs.856 crore and Rs.793 crore, respectively. The balance would be invested by the private sector.

employment in telecom, power, construction, facility management, IT transportation, catering and other services. Government has taken several steps to further enhance this industry (Box 7.4).

Central Public Sector Enterprises (CPSEs)

7.39 Contributing an estimated 11.12 per cent of GDP at market prices in 2005-06, the CPSEs continued to be engaged in the production and supply of a wide range of products and services (Box 7.5) including basic goods like steel, cement and chemicals; capital goods like pressure vessels, boilers and drilling rigs; and intermediate goods like electricity and gas. They also rendered a large number of services like telecommunications, tourism, and warehousing.

7.40 The National Common Minimum Programme (NCMP) stipulates a strong and effective public sector whose social objectives are met without prejudice to its commercial functioning. Efforts are being made to

modernize and restructure sick CPSEs and revive sick industry. Only the chronically loss-making CPSEs are being considered for closure or sell-off after payment of due compensation to the laid-off employees. The problem of sickness in CPSEs is addressed by the administrative Ministries/Departments by evolving an appropriate need-based strategy concerning a particular CPSE. Government, to further help the CPSUs to turn around financially, set up the Board for Reconstruction of Public Sector Enterprises (BRPSE) in December 2004 to recommend measures for restructuring/reviving CPSEs referred to them. The BRPSE also recommends cases where disinvestment or closure or sale are justified. Till October 31, 2006, BRPSE has made recommendations in respect of 36 CPSEs, and Government has approved the proposals in 21 cases.

7.41 In order to ensure and encourage efficiency in their functioning, Government has taken various steps to professionalise the Boards of CPSEs. These include provision of outside professionals in the form of part-time

Box 7.5 : Highlights of CPSE performance in 2005-06

- The share of CPSEs in GDP at market prices stood at 11.12 per cent in 2005-06 and 11.68 per cent in 2004-05.
- The cumulative investment of all CPSEs at end-March, 2006 was Rs.3,93,057 crore. The share of manufacturing CPSEs in such investment was the highest at 51 per cent followed by service CPSEs at 40 per cent, mining CPSEs at 7 per cent.
- The overall growth in turnover of CPSEs was 11.86 per cent. The growth in the turnover of 'heavy engineering and construction services' group was the highest at 39 per cent during the year.
- In terms of capacity utilization, 51 per cent of all CPSEs operated at 75 per cent or higher; 16 per cent at 50-75 per cent, and the residual 33 per cent at less than 50 per cent.
- CPSEs had a near monopoly in the production of coal (85.52 per cent), crude oil (85.87 per cent) and petroleum refining (74.51 per cent). The aggregate reserves and surpluses of all CPSEs went up to Rs. 3,59,077 crore.
- The long-term loans of CPSEs went up to Rs. 3,61,714 crore.
- The accumulated losses of all CPSEs declined by Rs.10,578 crore from Rs.83,725 crore in 2004-05 to Rs.73,147 crore.
- While the petroleum producing CPSEs ranked among the top ten profit-making CPSEs, the fertilizer producing CPSEs were generally the loss-making ones.
- 44 CPSEs are listed on the domestic stock exchanges. While the shares of MTNL (ADR) are listed on the New York Stock Exchange, the shares of GAIL and SAIL are listed on the London Stock Exchange.
- In net value addition of CPSEs at market prices, the share of 'taxes and duties' was the highest at 46 per cent, followed by 'net profit' (26 per cent), 'salaries & wages' (19 per cent) and 'interest' (9 per cent).
- At end-March, 2006, the 239 CPSEs employed over 16.49 lakh people excluding casual workers. The comparable figures in the previous four years were 19.92 lakh, 18.66 lakh, 17.62 lakh, 17.00 lakh, respectively.

Source: Department of Public Sector Enterprises.

non-official Directors, restricting the number of Government nominated Directors to one-sixth of the actual strength of the Board subject to a maximum of two, and incorporation of functional Directors upto a limit of 50 per cent of the actual strength of the Board. On the recommendations of Arjun Sen Gupta Committee, the Government, during 1987-88, introduced the concept of Memorandum of Understanding (MOU) to ensure clarity in the functioning of CPSEs, and proper balance between accountability and autonomy for better results. The number of CPSEs signing MOUs went up from 4 in 1987-88 to 112 in 2006-07. In order to further the competitive spirit, an attempt has also been made to evaluate the performance of the CPSEs on the basis of (a) sales, (b) growth of sales, (c) net profit, (d) growth in net profit, (e) return on net worth, (f) earning per share, and (g) dividend pay-out ratio.

7.42 The Government policy on disinvestment has evolved over the last decade and has been generally announced through the Budget. Disinvestment of Government equity in CPSEs began in 1991-92. Till 1999-2000, disinvestment was primarily through sale of minority shares in small lots. Between 1999-2000 and 2003-04, the emphasis of disinvestment changed in favour of strategic sale. The proceeds from disinvestment from April 1991 to March 2006 amounted to Rs. 49,241.29 crore. At present,

the policy is to list large, profitable CPSEs on domestic stock exchanges.

Micro and Small Enterprises

7.43 The micro and small enterprises (MSEs) constitute an important segment of the Indian economy, contributing around 39 per cent of the country's manufacturing output and 34 per cent of its exports in 2004-05. It provides employment to around 29.5 million people in the rural and urban areas of the country (Table 7.11).

7.44 The process of economic liberalisation and market reforms, while exposing the Indian MSEs to increasing levels of domestic and global competition, has also opened up attractive possibilities of access to larger markets and of stronger and deeper linkages of MSEs with larger enterprises. Improved manufacturing techniques and management processes can be sourced and adopted with greater ease. A robust and vibrant MSE segment can derive the benefits of these new opportunities provided appropriate enabling policies are put in place and measures for capacity building in public private mode are also initiated. In this environment of competition and rapid technological changes, the segment can then achieve higher sustained growth by enhancing its technological capabilities, improving its product and service quality to global standards and seeking ways of innovation

Table 7.11 : Performance of Micro and Small Enterprises

Year	No. of units (in lakh)			Production (Rs. crore)		Employment (in lakh)	Exports (Rs. crore)
	Regd.	Unregd.	Total	(at current prices)	(at constant prices)		
2002-03	15.91	93.58	109.49 (4.1)	3,11,993 (10.5)	2,10,636 (7.7)	260.21 (4.4)	86,013 (20.7)
2003-04	16.97	96.98	113.95 (4.1)	3,57,733 (14.7)	2,28,730 (8.6)	271.42 (4.3)	97,644 (13.5)
2004-05	17.53	101.06	118.59 (4.1)	4,18,263 (16.9)	2,51,511 (10.0)	282.57 (4.1)	1,24,417 (27.4)
2005-06	18.71	104.71	123.42 (4.1)	4,76,201 (13.9)	2,77,668 (10.4)	294.91 (4.4)	N.A.

Note : Figures in parenthesis indicate percentage growth over previous years
Source : Development Commissioner (SSI).

7.45 Initiatives and measures taken by the Government during the year to enable MSEs enhance their competitive strength, address the challenges of competition and avail of the benefits of the global market include:

- Enactment of the Micro, Small and Medium Enterprises Development (SMED) Act, 2006. (Box 7.6)
- Amendment to the Khadi and Village Industries Commission Act, 1956 introducing several new features to facilitate professionalism in the operations of the Commission as well as field-level formal and structured consultations with all segments of stakeholders. The new Commission has been constituted.
- A package for Promotion of Micro & Small Enterprises has been approved recently to address most of the concerns in the areas such as credit, cluster-based development, infrastructure, technology, and marketing. Capacity building of MSME Associations and support to women entrepreneurs are the other important features of this package.
- An empowered group of Ministers (EGoM) under the Chairmanship of the External Affairs Minister has been set up to lay down a comprehensive policy for cluster-development and oversee its implementation.
- Under the Credit Guarantee Scheme, life insurance cover for chief promoters of units provided guarantee cover by the Credit Guarantee Fund Trust for Small Industries (CGTSI) has been introduced. Further, the one-time guarantee fee under the scheme has been reduced from 2.5 per cent to 1.5 per cent with effect from April 1, 2006.
- After due consultation with the stakeholders, 180 items reserved for exclusive manufacture in micro & small enterprises have been de-reserved on May 16, 2006 and 87 such items have been dereserved on January 22, 2007.

7.46 The logic of reserving items for domestic production exclusively in the small-

Box : 7.6 Salient Features of the Micro, Small and Medium Enterprises Development Act, 2006

- It provides the first-ever legal framework for recognition of the concept of "enterprise" (comprising both manufacturing and services) and integrating the three tiers of these enterprises, viz, micro, small and medium
- Under the Act, enterprises have been categorized broadly into those engaged in (i) manufacturing and (ii) providing/rendering of services. Both categories have been further classified into micro, small and medium enterprises, based on their investment in plant and machinery (for manufacturing enterprises) or in equipment (in case of enterprises providing or rendering services) as under:

Manufacturing Enterprises: Micro Enterprises – investment up to Rs. 25 lakh. Small Enterprises – investment above Rs. 25 lakh and up to Rs. 5 crore. Medium Enterprises – investment above Rs. 5 crore and up to Rs. 10 crore.

Service Enterprises:

Micro Enterprises – investment up to Rs. 10 lakh
Small Enterprises – investment above Rs. 10 lakh and up to Rs. 2 crore.
Medium Enterprises – investment above Rs. 2 crore and up to Rs. 5 crore.

- The Act provides for a statutory consultative mechanism at the national level with wide representation of all sections of stakeholders, particularly the three classes of enterprises, and with a wide range of advisory functions, and an Advisory Committee to assist the Board and the Centre/State Governments.
- The other features include (i) establishment of specific Funds for the promotion, development and enhancement of competitiveness of these enterprises, (ii) notification of schemes/programmes for this purpose, (iii) progressive credit policies and practices, (iv) preference in Government procurements to products and services of the micro and small enterprises, (v) more effective mechanisms for mitigating the problems of delayed payments to micro and small enterprises and (vi) simplification of the process of closure of business by all three categories of enterprises.

scale sector, particularly when such products can be freely imported from large-scale production units abroad and when such a policy prevents the 'small' from growing and benefiting from the economies of scale, has progressively come under serious questioning. However the question that needs to be

Table 7.12 : Trend in Reservation of Items for the Small Scale Sector

Date of Notification	Number of Reserved	Number of Dereserved	Cumulative Total
Phase 1			
April 11, 1967	47	0	47
Feb 19, 1970	8	0	55
Feb 24, 1971	73	0	128
Nov 11, 1971	0	4	124
Feb 26, 1974	53	0	177
June 5, 1976	3	0	180
April 26, 1978	324	0	504
Phase 2			
April 26, 1978*	807		807
Dec 30, 1978		1	806
May 12, 1980	27	0	833
Feb 19, 1981	1	1	833
Aug 3, 1981	9		842
Dec 23, 1981	02	13	831
Oct 14, 1982		3	828
Oct 19, 1982	9		837
Sep 3, 1983	35		872
Oct 18, 1984	1		873
May 30, 1986	7	14**	869
Oct 30, 1986	1	7	863
Feb 13, 1987	0	13	850
July 20, 1987	0	3	847
March 18, 1988	0	1	846
March 3, 1989	3	14	835
July 31, 1989	1		836
April 3, 1997	0	15	821
Feb 3, 1999	0	9	812
Jan 1, 2001	0	1	811
June 29, 2001	0	14***	799
May 20, 2002	0	51@	749
June 3, 2003	0	75@@	675
Oct 20, 2004	0	85@@@	605
March 28, 2005	0	108@@@@	506
May 16, 2006		180	326
Jan 22, 2007	0	87	239

Source: Ministry of Small Scale Industries (SSI) and Agro & Rural Industries

* In 1978, it was decided to recast the reserved list by following codes adopted in the NIC and in the process the list of dereserved items expanded from 504 to 807.

** Since it included three sub-items, the effective number comes to 11 only

*** Since it included two sub-items, the effective number comes to 12 only

@ Since it included one sub-item, the effective number comes to 50 only

@@ Since it included one sub-item, the effective number comes to 74 only

@@@ Since it included 15 sub-items, the effective number comes to 70 only

@@@@ Since it included 10 sub-items, the effective number comes to 98 only

addressed is whether the reservation in the small scale sector is based on any objective policy parameter. The process of reservation of items for production exclusively by the small-scale sector started in 1967 and reached its peak in 1984 (Table 7.12). There has been a gradual relaxation of the reservation policy over time, and the number of items reserved for the small-scale sector was 239 on January 22, 2007.

Industrial Sickness

7.47 Since its inception in May 1987 till the end of September 2006, the Board of Industrial and Financial Reconstruction (BIFR) received 6,991 references under the Sick Industrial Companies (Special Provision) Act (SICA), 1985 (Table 7.13). These references included 296 references from CPSUs and State PSU (SPSUs).] With 6,991 references received, 5,412 were registered under section 15 of SICA. 1,707 were dismissed as non-maintainable under the Act. 760 rehabilitation schemes, including 12 by Appellate Authority of Industrial and Financial Reconstruction (AAIFR)/Supreme Court, were sanctioned and 1,303 companies were recommended to be wound up. 485 companies have been declared 'no longer sick' and were discharged from the purview of SICA on their net worth turning positive after the implementation of the schemes.

7.48 Among the 296 references for PSUs, 213 (91 CPSUs and 122 SPSUs) were registered up to September 30, 2006. Rehabilitation schemes were sanctioned for 28 CPSUs and 26 SPSUs. It was recommended that 29 CPSUs and 40 CPSUs be wound up. 9 CPSUs and 14 SPSUs were declared 'no longer sick'. As on March 31, 2002, 2003, 2004 and 2005 the gross disposal of cases was, 2,400, 2,867, 3,318 and 3,426, respectively. In the current year, the gross disposal of cases, as on September 30, was 4,115.

Industrial Relations

7.49 The continued decline in the number of strikes and lockouts indicates an improvement in industrial relations in the country (Table 7.14). The number of strikes and

Table 7.13 : References to BIFR as on September 30, 2006

Sl. No.	Status	Private	Central PSUs	State PSUs	Total PSUs	Total
1	References received	6,695	108	188	296	6,991
2	Registration declined	1,484	17	66	83	1,567
3	Under Scrutiny	12	0	0	0	12
A	References registered (=1-2-3) DISPOSALS	5,199	91	122	213	5,412
5	Dismissed					
	(i) as non-maintainable	1,660	11	36	47	1,707
	(ii) as multiple registered	218	0	0	0	218
6	Rehabilitation schemes approved/sanctioned					
	(i) by BIFR	695	27	26	53	748
	(ii) by AAIFR/SC	11	1	0	1	12
7	Declared on longer sick out of SI No. 6	462	9	14	23	485
8	Winding up recommended to the concerned high courts	1,234	29	40	69	1,303
9	Dropped now	119	5	3	8	127
B	Total (5+6+8+9)	3,937	73	105	178	4,115
C	PENDING					
10	Draft schemes circulated	42	2	0	2	44
11	Winding up notice issued	85	1	4	5	90
12	Pending for sickness determination	357	2	1	3	360
13	Declared sick	678	11	10	21	699
14	Schemes failed and reopened	8	1	0	1	9
15	Pending cases remanded by AAIFR	43	1	2	3	46
16	Stay ordered by courts	46	0	3	3	49
	Total (C=A-B)	1,262	18	17	35	1,297

Source: BIFR, Department of Economic Affairs, Ministry of Finance

lockouts, taken together, was down by 4.4 per cent in 2005. During the current year, as per the available information till September, 2006 West Bengal experienced the maximum

instances of strikes and lockout followed by Tamil Nadu and Gujarat. Industrial disturbances were concentrated mainly in textile, financial intermediaries (excluding

Table 7.14 : Strikes and lockouts

Year	Strikes		Lockouts		Total	
	Number	Mandays lost (in million)	Number	Mandays lost (in million)	Number	Mandays lost (in million)
2000	426	11.96	345	16.80	771	28.76
2001	372	5.56	302	18.20	674	23.77
2002	295	9.66	284	16.92	579	26.58
2003	255	3.21	297	27.05	552	30.26
2004	236	4.83	241	19.04	477	23.87
2005	227	10.81	229	18.86	456	29.66
2006(Jan-Sep)(P)	154	3.16	192	10.60	346	13.75

P – Provisional, Total may not tally due to rounding off

Source : Labour Bureau, Shimla

insurance and pension fund), engineering and chemical industries.

Foreign Direct Investment

7.50 The inflow of Foreign Direct Investment (FDI) has registered robust growth in the current financial year. As per the latest report of UNCTAD, India surpassed South Korea to become the fourth largest recipient of FDI in

the region. During April-September 2006, total FDI inflows (excluding 'reinvested earnings' and 'other capital components') were Rs.20,155 crore (US\$4.38 billion). Cumulative FDI inflows since August 1991 up to September 2006 were Rs.1,81,566 crore (US\$43.29 billion). Among sectors attracting high cumulative FDIs (Table 7.15), electrical equipments retained the first spot, followed by services and telecommunications. Services

Table 7.15 : Sectors attracting highest FDI inflows

(Amount in Rupees crore and in US\$ in million in parentheses)

Ranks	Sector	2003-04	2004-05	2005-06	2006-07 (April – Sep)	Cumulative inflows (from Aug 1991 to Sep 2006)	Share of FDI inflows (in per cent)
1	Electrical Equipments (including computer software and electronics)	2,449(532)	3,281(721)	6,499(1451)	3,601(778)	27,311(6,272)	17.54
2	Services Sector (financial & non-financial)	1,235(269)	2,106(469)	2,565(581)	6,955(1,509)	19,759(4,600)	12.69
3	Telecommunications (radio paging, cellular mobile, basic telephone services)	532(116)	588(129)	3,023(680)	3,835(405)	16,172(3,776)	10.39
4	Transportation Industry	1,417(308)	815(179)	983(222)	1,187(259)	14,502(3,436)	9.31
5	Fuels (Power +Oil refinery)	521(113)	759(166)	416(94)	632(138)	11,608(2,720)	7.45
6	Chemicals (other than fertilizers)	94(20)	909(198)	1979(447)	439(95)	9,019(2,238)	5.79
7	Food Processing Industries	511(111)	174(38)	183(42)	150(33)	4,852(1,212)	3.12
8	Drugs and Pharmaceuticals	502(109)	1,343(292)	760(172)	219(48)	4,531(1,055)	2.91
9	Metallurgical Industries	146(32)	881(192)	681(153)	511(111)	3,328(766)	2.14
10	Cement and Gypsum Products	44(10)	1(0)	1,970(452)	96(21)	3,327(768)	2.14

Source : FDI Data Cell, Ministry of Commerce

and telecommunications dislodged transportation industry to the fourth spot from the second spot held by it last year.

7.51 As destinations of FDI inflows (Table 7.16), the first four spots continued to be New Delhi, Mumbai, Bangalore and

Table 7.16 : Region-wise/State-wise Break- up of Cumulative FDI Inflows until September 2006

Rank	RBI's Regional Office	State covered	Amount of FDI Inflows		Share of FDI inflows in rupees (in per cent)
			Rupees in crore	US\$ in million	
1	New Delhi	Delhi, Part of UP and Haryana	27,369.16	6,053.2	24.00
2	Mumbai	Maharashtra, Dadra and Nagar Haveli, Daman and Diu	24,545.44	5,399.1	21.52
3	Bangalore	Karnataka	7,809.7	1,727.5	6.85
4	Chennai	Tamil Nadu and Pondicherry	7,413.15	1,630.6.7	6.50
5	Hyderabad	Andhra Pradesh	4,412.80	970.6	3.87

Source : FDI Data Cell, Ministry of Commerce

Chennai, while Hyderabad overtook Ahmedabad to occupy the fifth place by September, 2006.

7.52 With increased liberalisation, equity caps on FDI existed only in limit sectors. These are a FM radio broadcasting (upto 20 per cent); insurance, defence production, petroleum refining in the PSUs, print and electronic media covering news and current affairs (upto 26 per cent); air transport services, asset reconstruction companies, cable network, direct to home (DTH), hardware for uplinking, HUB, etc. (upto 49 per cent); single brand retailing (upto 51 per cent); atomic minerals, private sector banking, telecom services, establishment and operation of satellites (upto 74 per cent). FDI is prohibited in retail trading (except for single brand product retailing), gambling and betting, lottery and atomic energy. Approval for proposals for induction of equity of more than 24 per cent for manufacture of items that are reserved for small-scale sector and the proposals where the foreign investor has an existing joint venture/technical collaboration/trademark agreement in the same field of activity and attract the provisions of Press Note (2005 Series) are not under automatic route.

7.53 A comprehensive review of the FDI policy was undertaken during the current year vide Press Note 4 dated February 10, 2006, to consolidate the liberalization already effected and further rationalize the FDI policy governing various activities. The major policy initiatives taken are:

➤ **Change of route:** FDI has been allowed up to 100 per cent under the automatic route for distillation and brewing of potable alcohol, manufacture of industrial explosives, manufacture of hazardous chemicals, manufacturing activities located within 25 kms of the Standard Urban Area limits requiring industrial license under the IDR(Act) 1951, setting up of greenfield airport projects, laying of natural gas/LNG pipelines, market study and formulation and investment financing

in the petroleum sector, and cash and carry wholesale trading and export trading.

- **Increase in equity caps:** FDI caps have been increased to 100 per cent and automatic route extended to coal and lignite mining for captive consumption, setting up of infrastructure relating to marketing in petroleum and natural gas sector and exploration and mining of diamonds and precious stones.
- **FDI in new activities:** FDI has been allowed up to 100 per cent on the automatic route in power trading and processing and warehousing of coffee and rubber. FDI has also been allowed up to 51 per cent for 'single brand' product retailing which requires prior approval of Government. Specific guidelines have been issued for governing FDI for 'single brand' product retailing.
- **Removal of restrictive conditions:** Mandatory divestment conditions for Business to Business e-commerce has been dispensed with.
- **Procedural simplification:** The transfer of shares from resident to non-resident including acquisition of shares in an existing company has been placed on the automatic route subject to sectoral policy on FDI.

7.54 In order to boost production of cash crops through infusion of foreign funds and technical know how, vide Press Note 4 of February 10, 2006, Agriculture & plantations was removed from the list of prohibited sectors for FDI, and the activities permitted within these sectors were included in the sector-specific policy. As per the present policy, FDI up to 100 per cent is permitted under the automatic route in floriculture, horticulture, development of seeds, animal husbandry, pisciculture, aqua-culture and cultivation of vegetables & mushrooms under controlled conditions, and services related to agro and allied sectors. FDI up to 100 per cent with prior Government approval is permitted in tea

Table 7.17 : Employment trends vis-à-vis IIP growth in the organized manufacturing sector (1987-88 to 2003-04)

(Value figures in lakh and others in numbers)

Characteristics	1987-88	1991-92	1996-97	2001-02	2002-03	2003-04
No. of factories	102,596	112,286	132,814	128,549	127,957	129,074
Fixed Capital	7,847,463	15,190,240	38,004,439	43,196,013	44,475,938	47,333,140
No. of Workers	6,061,786	6,269,039	7,208,143	5,957,848	6,161,493	6,086,908
No. of employees	7,785,580	8,193,590	9,448,643	7,686,654	7,870,529	7,803,395
Total persons engaged	7,903,826	8,319,563	9,536,282	7,750,366	7,935,948	7,870,081
Wages to workers	893,370	1,358,263	2,655,459	2,743,824	2,968,905	3,047,777
Total emoluments	1,408,105	2,097,048	4,640,358	5,105,957	5,515,801	5,833,675
Other benefits	189,157	421,840	947,074	1,238,964	1,318,412	1,411,758
Total inputs	11,938,728	23,302,799	55,691,484	77,922,749	91,618,549	103,962,377
Value of output	15,397,307	29,919,581	74,180,838	96,245,663	113,056,111	128,738,002
Depreciation	625,220	1,134,080	2,753,467	3,892,702	4,203,558	4,482,349
Net value added	283,360	5,482,702	15,735,887	14,430,212	17,234,004	20,293,276
Rent paid	44,751	119,117	426,234	375,118	379,356	416,084
Interest paid	862,606	1,881,190	3,994,437	4,221,788	3,835,182	3,397,229
Profits 3,28,741	963,507	4,197,844	3,488,385	6,185,254	9,234,531	
IIP growth (%)	7.3	0.6	6.1	2.7	5.7	7.0

Source : Annual Survey of Industries

plantation subject to the conditions of divestment of 26 per cent equity of the company in favour of an Indian partner/Indian public within a period of five years and prior approval of the State Government concerned in case of any future land use change. Besides the above two, FDI is not allowed in any other agricultural sector/activity.

Industrial Sector, the Eleventh Five Year Plan and Special Economic Zones

7.55 As stated in the Approach Paper to the Eleventh Plan, to "... absorb all new entrants into the labour force, non-agricultural employment would need to increase at over 6 per cent per annum during the 11th Plan. This poses a major challenge not only in terms of generating non-agricultural employment but also in matching its required location and type". Thus, generation of adequate employment is one of the crucial elements in the Eleventh Plan's vision of "inclusive growth". And, this major target of employment generation in the non agricultural sector is intimately linked with the growth of the industrial sector.

7.56 The performance on the employment front in the organized manufacturing sector in

the period up to 2003-04 raises some disturbing questions in this context. As per the figures published by Annual Survey of Industries, there was a decline in the absolute number of persons engaged in the organized manufacturing sector between 1987-88 and 2003-04 (Table 7.17). The decline actually took place during the period 1996-97 to 2003-04, when average annual growth rate of IIP was 5.5 per cent, and such growth of the manufacturing sector was even higher at 5.9 per cent. Profitability (i.e., share of profits in the net value added) during the period 1987-88 to 2003-04 increased substantially from 11.6 per cent to 45.51 per cent, while share of wages came down from 56.4 per cent to 35.7 per cent. With a bias towards capital-intensive technology, there was a drop in total employment in the sector. The trend of sluggish employment growth in organized manufacturing is also corroborated by the lacklustre performance of the historically labour-intensive manufacturing sub-sectors like leather, food products, jute and jute products and leather and leather products in more recent years.

7.57 As per Planning Commission estimates, an annual average growth rate of about 12 per cent of the manufacturing sector

is necessary to ensure that the targeted average annual growth of 10 per cent of the industrial sector is achieved during the Eleventh Plan. Upgradation of infrastructure, an enabling fiscal structure, technological modernization, amendment of labour laws and corporate laws and enhanced accessibility to institutional credit are some of the crucial policy aspects which need to be addressed immediately to ensure that the targets are met.

7.58 The challenge ahead lies in appropriately sequencing to sustain the popular support for reforms and reconciling the conflicting interests of the various reforms constituencies. The recent debate about Special Economic Zones (SEZ) illustrates the kind of considerations that have to be taken into account in the formulation of policies. Some of the apprehensions against the SEZs are (a) generation of little new activity as there may be relocation of industries to take advantage of tax concessions, (b) revenue loss, (c) large-scale land acquisition by the developers which may lead to displacement of farmers with meagre compensation, (d) acquisition of prime agricultural land having serious implications for food security, (e) misuse of land by the developers for real estate and (f) uneven growth aggravating regional inequalities. Many of these apprehensions, however, could be addressed through appropriate policies and safeguards.

7.59 SEZs have been established in many countries as testing grounds for implementation of liberal market economy principles. They are viewed as instruments to enhance the acceptability and credibility of transformation policies, to attract domestic and foreign investment, and generally, for the opening up of the economy. With its genesis in the Export Processing Zones (EPZ), the SEZs in India seek to promote value addition component in exports, generate employment and mobilize foreign exchange. EPZs and SEZs were employed with considerable success by China and other ASEAN countries in the 1970s and 1980s to create regional islands, where export-oriented manufacturing could be undertaken. While EPZs in some of these countries had their share of early

difficulties, they provided scope for cultivating manufacturing competitiveness when licensing, labour rigidities and high import duties and taxes acted as a disincentive for investment in the rest of the areas. However, in India, the EPZ experiment was much less of an unequivocal success; and since 1965, when the first EPZ in Kandla was set up, a total of only 11 such zones have come into existence. The Exim Policy of 1997-2002 then introduced the more comprehensive and liberal SEZ concept, after which a bill was drafted and passed by Parliament in the form of the SEZ Act, 2005.

Environmental Issues

7.60 Increased and efficient environmental vigilance is an absolute must for containing the negative environmental impact of industrialisation. Industrial pollution is concentrated in industries like petroleum refineries, textiles, pulp and paper, industrial chemicals, iron and steel and non metallic mineral products. Small-scale industries, especially foundries, chemical manufacturing and brick making, can also be significant polluters. In the power sector, thermal power, which constitutes bulk of the installed capacity for electricity generation, is an important source of air pollution.

7.61 In order to contain the damaging impact of industrialisation on environment, Government has initiated various steps (Box 7.7), for protection, conservation and development of the environment. The National Environment Policy (NEP) 2006, which was approved and adopted in May 2006, intends to facilitate realization of sustainable development by mainstreaming environmental concerns in all developmental activities and describing key environmental challenges currently and prospectively facing the country. Another significant policy development was the Environment Impact Assessment (EIA) Notification, 2006 on September 14, 2006, which involved a complete re-engineering of the Environment Impact Assessment (EIA) process and made it more efficient, decentralized and transparent. A National Clean Development Mechanism Authority

Box 7.7 : Major Initiatives to control Environmental Pollution

- Notification of general and source-specific standards for emissions and effluents.
- Regulating the siting of industries.
- Regular monitoring for compliance to environmental standards.
- Legal action for non-compliance.
- Setting up of clean technology mechanisms in polluting industries.
- Setting up of Common Effluent Treatment Plants (CETPs) in industrial estates.
- Establishing waste minimization circles (WMC) in clusters of small scale industries.
- Implementing recommendations of Charter of Corporate Responsibility for Environmental Protection (CREP) in 17 categories of highly polluting industries.
- Implementing an Eco-mark scheme to encourage production/consumption of environment-friendly products.
- Setting up of progressive emission norms at the manufacturing stage for controlling vehicular pollution and introduction of cleaner fuels like unleaded petrol, low sulphur diesel and compressed natural gas (CNG).
- Setting up National Clean Development Mechanism Authority (CDM) as per Kyoto Protocol.
- Promoting economic instruments to internalize the costs of pollution and fiscal incentives for pollution control equipments.

(CDM) has also been set up for the purpose of protecting and improving the quality of environment in terms of the Kyoto Protocol. The CDM Authority receives projects for evaluation and approval for carbon market. Till December 2006, host country approval has been accorded to 473 projects facilitating investment of more than Rs.36,408 crore.

Outlook

7.62 The expected overall annual growth of industry in the Tenth Plan period (2002-2007) at around 8.7 per cent is likely to be short of the targeted growth rate of 10 per cent for the Plan period. Given the recent performance, however, the Eleventh Plan (2007-2012) target of 10 per cent annual industrial growth appears eminently achievable. As the country enters into the first year of the Eleventh Plan, the sustained growth of the industrial sector is crucially dependent on removing the

infrastructural impediments, especially, in the power sector.

7.63 Capacity additions through investment is critical for accelerating growth in industry. The investment scenario looks quite optimistic, particularly with rising domestic savings rates and FDI inflows. Sustained economic growth, fiscal consolidation and an enabling policy environment will continue to provide incentive to capacity addition in industry and sustaining its high growth.

7.64 Adequate expansion of employment in the industrial sector, particularly in the organized segment, requires attention. The formation of appropriate skills through a wide variety of vocational training as well as optimal degree of flexibility of labour laws are important aspects in this regard. Progress on these fronts will determine how much progress is made in generating employment in the organized industry in the years to come.

Agriculture

As per information received from the India Meteorological Department (IMD), the South West Monsoon (June-September) arrived over Kerala on May 26, 2006, a week earlier than normal. The monsoon covered the entire country by July 24, 2006, with a delay of nine days. The area-weighted rainfall from June 1 to September 30, 2006 for the country was 99 per cent of long-period average (LPA) against a forecast of 93 per cent of LPA made by the IMD. The 2006 monsoon rainfall was not evenly distributed over time and space. The uneven distribution of the rainfall (June–September, 2006) adversely affected North-East India (deficiency of 17 per cent), Northwest India (deficiency of 6 per cent) and South Peninsula (deficiency of 5 per cent). Rainfall in Central India was in excess by 16

per cent. Out of the 36 meteorological sub-divisions in the country, monsoon rainfall was normal in 20, excess in 6, and deficient in the remaining 10 sub-divisions (Table 8.1).

8.2 At the end of the monsoon season, five meteorological sub-divisions namely Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Western Uttar Pradesh and Haryana experienced moderate drought conditions (seasonal rainfall deficiency of 26 per cent to 50 per cent). Out of 533 total meteorological districts that the 36 meteorological sub-divisions have, 130 districts experienced moderate drought and 30 districts experienced severe drought conditions, while rainfall departure in the rest of 373 meteorological districts was within normal.

**Table 8.1 : Monsoon Performance — 1998 to 2006
(June – September)**

Year	Number of meteorological sub-divisions			Percentage of districts with normal/excess rainfall	Percentage of long period average rainfall for the country as a whole
	Normal	Excess	Deficient / scanty		
1999	25	3	7	67	95
2000	23	5	7	65	92
2001	29	1	5	67	92
2002	14	1	21	39	81
2003	26	7	3	77	105
2004	23	0	13	56	86
2005	23	9	4	72	99
2006	20	6	10	60	99

Excess : +20 per cent or more of LPA; Normal: +19 per cent to –19 per cent of LPA;
Deficient : -20 per cent to –59 per cent of LPA; Scanty: -60 per cent to –99 per cent of LPA.
Source : India Meteorological Department.

Table 8.2 : Reservoir storage						
	2006		2005		Avg. of last 10 years	
	Storage BCM	Percent of FRL	Storage BCM	Percent of FRL	Storage BCM	Percent of FRL
Beginning of monsoon season (as on 02-06-2006)	29.8	2.2	16.62	12	18.62	14
End of monsoon season (as on 05-10-2006)	120.2	90	109.6	82	93.25	70
Increase in storage during monsoon season	90.4	68	92.9	70	74.63	56
Source : Ministry of Water Resources.						

Reservoir storage

8.3 The Central Water Commission (CWC) monitors the total live storage of 76 important reservoirs, having their full reservoir level (FRL) of 133 Billion Cubic Meters (BCM). At the end of monsoon 2006, the total water availability in these reservoirs at 120.2 BCM was up 10 per cent from 109.6 BCM in the same period of 2005 (Table 8.2). These aggregates are quite favorable from the viewpoint of hydroelectricity generation as well as rabi crop.

Growth in Agriculture

8.4 Deviations in foodgrains and agricultural output from its long-term trend are

determined by, among other factors, variations of monsoon around its long-term trend. Furthermore, the negative impact of excess rainfall (compared to LPA) on such output appears to be not as high as the adverse impact of deficient rainfall. With this asymmetric response of foodgrains production to monsoon variability, the repetition of deficient rainfall in the monsoon in 2002, 2004 and 2006 during the Tenth Five Year Plan has led to—(a) poor agricultural growth; (b) reduction in the share of agriculture in GDP; (c) creating inflationary pressure in some primary products; and (d) reduction the potential growth of other sectors by dampening demand.

Table 8.3 : Annual average growth rate (at constant prices)		
Five Year Plan	Overall GDP growth rate	Agriculture & Allied Sectors
Seventh Plan (1985-90)	6.0	3.2
Annual Plan (1990-92)	3.4	1.3
Eighth Plan (1992-97)	6.7	4.7
Ninth Plan (1997-2002)	5.5	2.1
Tenth Plan (2002-07)	7.6	2.3
2002-03	3.8	-7.2
2003-04	8.5	10.0
2004-05 (P)	7.5	0.0
2005-06 (Q)	9.0	6.0
2006-07 (A)	9.2	2.7
P: Provisional, Q: Quick estimates, A: Advance estimates		
Note : Growth rates prior to 2001 based on 1993-94 prices and from 2000-01 onwards based on new series at 1999-2000 prices.		
Source : CSO		

8.5 A moderate annual average growth of 3.0 per cent in the first six years of the new millennium starting 2001-02, notwithstanding a growth of 10 per cent in 2003-04 and 6 per cent in 2005-06, agriculture and allied sector has continued to be a cause of concern (Table 8.3). The structural weaknesses of the agriculture sector reflected in low level of public investment, exhaustion of the yield potential of new high yielding varieties of wheat and rice, unbalanced fertilizer use, low seeds replacement rate, an inadequate incentive system and post harvest value addition were manifest in the lacklustre agricultural growth during the new millennium.

8.6 Low yield per unit area across almost all crops has become a regular feature of Indian agriculture (Table 8.4). For example, though India accounted for 21.8 per cent of global paddy production, the estimated yield per hectare in 2004-05 was less than that in Korea and Japan, and only about a third of that in Egypt, which had the highest yield level in the reference year. Similarly, in wheat, while India, accounting for 12 per cent of global production, had average yield slightly lower

than the global average, it was less than a third of the highest level estimated for the UK in 2004-05. For coarse grains and major oilseeds, Indian yields are a third and 46 per cent, respectively, of the global average. In cotton, the situation is slightly better with Indian yields at 63 per cent of the global average. While agro-climatic conditions prevailing in countries may partly account for the differences in yield levels, nonetheless, for major food as well as commercial crops, there is tremendous scope for increasing yield levels with technological breakthroughs.

Agricultural Production and Growth in 2006-07

8.7 Agriculture, and especially a variety of crops produced under diverse climatic situations in different cropping systems, supports 115.5 million farm families. Rice-wheat is the main cropping system of Indo-Gangetic Plains in North-West and North-East Regions, while monoculture of rice is prevalent on the coastal belt of Eastern and Southern States. Cotton-based cropping system dominates in rainfed conditions of Central (Madhya Pradesh and Maharashtra),

**Table 8.4 : International comparisons of yield
Selected commodities – 2004-05**

<i>Metric tonnes/hectare</i>					
Rice/paddy		Wheat		Maize	
Egypt	9.8	China	4.25	U.S.A	9.15
India	2.9	France	7.58	France	7.56
Japan	6.42	India	2.71	India	1.18
Myanmar	2.43	Iran	2.06	Germany	6.69
Korea	6.73	Pakistan	2.37	Philippines	2.1
Thailand	2.63	U.K	7.77	China	4.9
U.S.A	7.83	Australia	1.64		
World	3.96	World	2.87	World	3.38
Cotton		Major Oilseeds			
China	11.10	Argentina	2.51		
U.S.A	9.58	Brazil	2.48		
Uzbekistan	7.98	China	2.05		
India	4.64	India	0.86		
Brazil	10.96	Germany	4.07		
Pakistan	7.60	U.S.A	2.61		
		Nigeria	1.04		
World	7.33	World	1.86		

Source : Ministry of Agriculture and Cooperation.

Southern (Karnataka, Andhra Pradesh and Tamil Nadu) and Western (Gujarat) regions and irrigated areas of Northern (Punjab and Haryana) and Western (Rajasthan) regions. Sugarcane is predominantly grown in Uttar Pradesh, Maharashtra, Tamil Nadu and Karnataka.

8.8 The distribution of farm holdings is dominated by small and marginal farmers. Rainfed agriculture constitutes about 60 per cent of the net sown area. These areas are the major domain of oilseeds, pulses and coarse cereals production. The intensity and distribution of rainfall determine the crop prospects in a majority of the areas. Heavy rains during August-September 2006 in Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra and Rajasthan led to inundation/flooding in several parts of the States affecting a sizeable area of crops.

8.9 Late monsoon rains during September in several States have not only brightened production prospects of kharif crops but also triggered early sowing of crops on residual moisture during rabi, especially of wheat in Madhya Pradesh, Maharashtra and Rajasthan. In view of this factor, target for foodgrains production for 2006-07 has been fixed at 220 million tonnes (MT) (Table 8.5).

Crop Production Prospects

8.10 The production of kharif foodgrains during 2006-07 is estimated at 107.2 MT (2nd AE), which is lower than 109.9 MT achieved during 2005-06 (Table 8.6). The production

Table 8.5 : Agriculture Production Targets for 2006-07

<i>(Million tonnes)</i>			
Name of the Crop	Kharif	Rabi	Total
Rice	80.78	12.02	92.80
Wheat	-	75.53	75.53
Jowar	4.28	3.33	7.61
Bajra	8.55	-	8.55
Maize	12.54	2.85	15.39
Ragi	2.79	-	2.79
Barley	-	1.65	1.65
Small Millets	0.53	-	0.53
Total Coarse Cereals	28.69	7.83	36.52
Total Pulses	5.78	9.37	15.15
Total Foodgrains	115.25	104.75	220.00
Cotton*	185.00	-	185.00
Jute**	101.20	-	101.20
Mesta**	11.60	-	11.60
Sugarcane	-	-	270.0

* Lakh bales of 170 kgs each
** Lakh bales of 180 kgs each

of kharif rice is estimated at 77.4 MT against 78.3 MT in 2005-06. Total foodgrains production in 2006-07 is estimated at 209.2 MT (2nd AE).

8.11 Second advance estimates for commercial crops show an improved performance. Sugarcane production is estimated to go up to 315.5 MT during 2006-07 (2nd AE) compared to 270.0 MT during 2005-06 (Table 8.7). The production of cotton at 209.6 lakh bales is the not only highest so far but also 13.5 per cent higher than 185 lakh bales produced in 2005-06. Production of jute

Table 8.6 : Foodgrains production

<i>(Million tonnes)</i>						
Crop/ Year	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07*
Rice	93.3	71.8	88.5	83.1	91.8	90.0
Wheat	72.8	65.8	72.2	68.6	69.4	72.5
Coarse Cereals	33.4	26.1	37.6	33.5	34.1	32.0
Pulses	13.4	11.1	14.9	13.1	13.4	14.5
Foodgrains						
(i) Kharif	112.1	87.2	117.0	103.3	109.9	107.2
(ii) Rabi	100.8	87.6	96.2	95.1	98.7	102.0
Total (i)+(ii)	212.9	174.8	213.2	198.4	208.6	209.2

* 2nd advance estimates (2nd AE).
Source : Ministry of Agriculture.

Table 8.7 : Commercial crops production*(Million tonnes)*

Crop	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07*
Groundnut	7.0	4.1	8.1	6.8	8.0	4.4
Rapeseed & Mustard	5.1	3.9	6.3	7.6	8.1	7.6
Soyabean	6.0	4.7	7.8	6.9	8.3	8.7
Other Oilseeds	2.6	2.1	3.0	3.1	3.6	2.9
Total nine Oilseeds	20.7	14.8	25.2	24.4	28.0	23.6
Cotton @	10	8.6	13.7	16.4	18.5	21.0
Jute & Mesta @@	11.7	11.3	11.2	10.3	10.8	11.4
Sugarcane	297.2	287.4	233.9	237.1	270.0	315.5

@ Million bales of 170 kg each @@ Million bales of 180 kgs. each.
* 2nd advance estimates.
Source : Ministry of Agriculture.

and mesta is also expected to be higher during 2006-07. Production of nine oilseeds at 23.6 million tonnes in 2006-07 (2nd AE) is estimated to decline by 15.7 per cent compared to their production in 2005-06.

Rabi Prospects (2006-07)

8.12 Area coverage under wheat has been encouraging. It is noteworthy that timely sowing of the crop ensures higher productivity by virtue of adequate time for the reproductive phase and consequent grain formation, which is shortened in delayed sowing. Further, the impact of higher temperature on grain formation during early March is also reduced to a minimum. The area sown under wheat (up to January 5, 2007) at 275.5 lakh hectare (ha) is 6.8 per cent higher than that during the corresponding period in 2005-06.

Horticulture

8.13 Acreage under horticulture – which includes fruits, vegetables, spices, floriculture and plantations – is expected to be 20 million hectares in 2006-07 (Table 8.8). With production of 53 MT and 108 MT, respectively, in 2005-06, India was the second largest producer of both fruits and vegetables in the world. India occupies first position in the production of cauliflower, second in onion and third in cabbage. The National Horticulture Mission (NHM) aims at doubling horticultural production by 2012. Under the NHM, action plans for 18 States, 2 Union Territories and

10 national level agencies have been approved during 2006-07. An amount of Rs. 560.29 crore has been released up to December 11, 2006.

8.14 A Centrally Sponsored Scheme on Technology Mission for Integrated Development of Horticulture in North Eastern region including Sikkim was approved with an outlay of Rs. 229.38 crore for the Ninth Five Year Plan period. The implementation of the scheme has been extended to the States of Jammu & Kashmir, Himachal Pradesh and Uttarakhand during the Tenth Plan with an additional outlay of Rs. 260.00 crore. The scheme aims at establishing convergence and synergy among numerous ongoing governmental programmes through horizontal and vertical integration of these programmes, to ensure adequate, appropriate, timely and concurrent attention to all the links in the production, post-harvest and consumption chain. During 2006-07, an amount of Rs. 157.50 crore was released, out of which Rs. 81.86 crore was for NE States and Rs.75.63 crore for Jammu & Kashmir, Himachal Pradesh and Uttarakhand.

Recent initiatives

Action Plan on Enhancing Production and Productivity of Wheat

8.15 To enhance the productivity and output of wheat in the country, Ministry of Agriculture has formulated a three-year rolling plan,

Table 8.8 : Area and production of major horticultural crops*(Area-Million hectare, Production-Million tonnes)*

Crops	2002-03		2003-04		2004-05*		2005-06*	
	Area	Production	Area	Production	Area	Production	Area	Production
Fruits	4.8	49.2	5.1	49.8	5.3	52.8	5.9	54.4
Vegetables	5.9	84.8	6.7	101.4	7.1	108.2	7.2	113.5
Spices	2.4	3.8	5.2	4	3.2	4.9	3.2	5.9
Plantation crops	3.1	13.1	3.3	9.4	3.1	10.4	3.2	9.8
Flowers	0.1	0.2	0.2	0.6	0.1	0.7	0.1	0.8
Others	0.09	0.9	0.1	0.3	0.4	0.4	0.4	0.5
Total	16.4	152.0	20.6	165.5	19.2	177.4	20.0	184.9

Source: National Horticultural Board * Estimates

targeting about 50 per cent of the area under wheat. A new scheme - 'Enhancing Sustainability of Dryland Farming Systems' has been formulated keeping in view the commitment of Government to launch a special programme for dry land farming in the arid and semi-arid regions of the country under the National Common Minimum Programme (NCMP). The proposed scheme aims at addressing issues like rainwater harvesting and its efficient utilization; in situ soil moisture conservation; use of organic manures; alternate land use; and adoption of improved dry land farming technologies.

National Rainfed Area Authority

8.16 Government has decided to set up a National Rainfed Area Authority to address the problems of rainfed areas for sustainable and holistic development of such areas including appropriate farming and livelihood system approaches.

Mini Mission-II of Jute Technology Mission

8.17 This Mission was approved in June 2006 and is being implemented from the next jute season. This will replace the on-going Scheme of Special Jute Development Programme being implemented under Macro Management.

8.18 There was considerable progress under the new schemes for the promotion of micro irrigation, National Bamboo Mission and Central Institute of Horticulture for the North

Eastern region, which were mentioned as being at advanced stages of approval in the last Economic Survey.

Micro-irrigation

8.19 A Centrally Sponsored Scheme on micro-irrigation was launched in January, 2006 for covering a total area of 6.2 lakh ha. The scheme aims to achieve greater water use efficiency to result in enhanced productivity and better quality of produce. During 2006-07, Annual Action Plan of 14 States have already been approved for implementation as per the guidelines and a sum of Rs. 279.40 crore has been released to the States till November, 2006 to cover an area of 3.31 lakh hectare.

National Bamboo Mission

8.20 India possesses the world's second largest reserves of bamboo, and a vast legacy of usage and traditional skill. Department of Agriculture and Cooperation has launched the National Bamboo Mission with 100 per cent central assistance at a total cost of Rs.568.23 crore, including an outlay of Rs.90 crore during 2006-07 (Tenth Plan) and the first four years of the Eleventh Plan.

8.21 Exciting development over the past year, in the form of new and substantively industrial applications of bamboo, have reinforced the belief that value-added bamboo products can generate substantial incremental income and employment. The National Mission on Bamboo Applications of the

Department of Science and Technology has developed and inducted a wide range of products and applications, including wood substitutes and composites, pre-fabricated housing and structures, gasification of bamboo to provide electricity to remote and off-grid locations, and moulded products. The development of high density corrugated roofing and durable and thermally efficient bamboo composite material has led to the growing induction of pre-fabricated structures in high altitude and other climatically adverse locations.

8.22 Formerly closed plywood units have been re-commissioned and new units are being established for the manufacture of these products. Indigenously developed bamboo processing machinery is not only finding local markets, but has been exported as well. Breakthroughs in micro-propagation have enabled the production of tissue-cultured plant material of bamboo, paving the way for large-scale intensive cultivation. For the first time, tissue-cultured plant material has been exported as well. In the coming year, a new range of applications, including thermoplasts, hygiene products and activated carbon are expected to be placed in the market. Having witnessed unprecedented growth in the last two years and with continued efforts at technological upgradation and product diversification, the bamboo economy of the country is likely to continue to grow and contribute to employment generation, especially in the North East and other tribal areas.

Central Institute of Horticulture, Nagaland

8.23 Recognizing the importance for institutional support for development of horticulture in the North Eastern Region, Government sanctioned a Central Institute of Horticulture in Nagaland during January, 2006, with a financial outlay of Rs. 20 crore spread over a period of five years.

National Bee Board

8.24 In June 2006, Department of Agriculture & Cooperation restructured the National Bee Board (NBB), which was formed in 2000 and registered as a society under the

Societies Registration Act XXI of 1860, with public-private partnership including the farmers, beekeepers, processors and other stakeholders. The main objective of NBB is the overall development of beekeeping in India by popularizing state of the art technologies relating to nucleus stock production, capacity building and training of bee breeders and beekeepers, and processing and quality control of bee products. This step is expected to supplement the incomes of farmers engaged in bee keeping.

Livestock, Poultry, Dairy and Fisheries

Livestock Sector

8.25 The livestock sector, which contributes 27 per cent to the GDP from agriculture and allied activities, is of special importance and a main source of family income in the arid and semi-arid regions of the country. In the arid and semi-arid regions, the contribution of livestock to agricultural GDP is as high as 70 per cent and 40 per cent, respectively. The sector has excellent forward and backward linkages, which promote many industries and increase the incomes of vulnerable groups such as agricultural labourers and small and marginal farmers.

8.26 In 2005-06, livestock sector produced 97.1 million tonnes of milk (Table 8.9), 46.2

Table 8.9 : Production and per-capita availability of milk

Year	Per capita availability (grams/day)	Production in million tonnes
1950-51	124	17.0
1960-61	124	20.0
1970-71	112	22.0
1980-81	128	31.6
1990-91	176	53.9
2000-01	220	80.6
2001-02	225	84.4
2002-03	230	86.2
2003-04	231	88.1
2004-05	233	92.5
2005-06	241	97.1
2006-07*	245	100.0

* Provisional.

Source: Department of Animal Husbandry and Dairying

billion eggs, 44.9 million kg of wool and around 2.31 million tonnes of meat from organized sector. The All India Summary Reports of the 17th Livestock Census released in July 2006 points out that India possesses the largest livestock populations in the world after Brazil. It accounts for about 56 per cent of the world's buffalo population and 14 per cent of the cattle population. It ranks first in respect of buffalo and second in respect of cattle population, second in goat population and third in respect of sheep in the world.

Livestock Insurance

8.27 Livestock Insurance Scheme was approved in February 2006 for its implementation during the remaining part of 2005-06, and in 2006-07 on a pilot basis in 100 selected districts across the country with a total outlay of Rs. 120 crore. The scheme aims at protecting the farmers against losses due to un-timely death of animals. The Central Government is providing subsidy to the tune of 50 per cent of the premium under the scheme.

8.28 An amount of Rs. 24.21 crore was released during 2005-06 to the implementing agencies in the States. An additional amount of Rs. 25.10 crore out of Rs. 51 crore allocated for the year 2006-07 has been released.

Poultry

8.29 The poultry sector, with total value of output exceeding Rs.15,000 crore and providing direct and indirect employment to over three million people, produced around 1.9 MT of chicken-meat in 2005. Between the 1970 and 2006, the annual per capita availability of eggs has quadrupled from 10 to 41, while the corresponding increase in chicken meat has been even faster from 146 grams to 1.6 kgs. While India's share of world trade in poultry and poultry products continues to be very small, in the last decade the value of such exports has increased from Rs.11 crore in 1993-94 to Rs. 326 crore in 2005-06. Exports of products, such as live poultry, eggs, hatching eggs, frozen eggs, egg powder and poultry meat, to countries including Bangladesh, Sri Lanka, Middle East, Japan,

Denmark, Poland, USA and Angola augurs well for the industry. Uninterrupted supplies of feed as well as preparedness for external shocks such as avian influenza (Box 8.1) are critical for the continued robust growth of this sector.

8.30 An active surveillance programme is being carried out all over the country focusing on early detection of avian influenza. Though vaccination has not yet been introduced in the country, Government maintains strategic reserve of poultry vaccine. India has a fully equipped Bio-Security Level 3 laboratory at Bhopal. More than 85,000 samples have been tested at Bhopal after the first outbreak of avian influenza on February, 2006 in a small area in Maharashtra. A second outbreak was reported from Maharashtra itself a few months later. India was declared free of avian influenza on August 18, 2006 after following stipulated guidelines of World Organisation of Animal Health. Targeted surveillance continues and focuses on areas where outbreak took place, areas visited by migratory birds with poultry concentrations around them and areas of major poultry population.

Dairying

8.31 India ranks first in the world in milk production, which rose from 17 MT in 1950-51 to around 100 MT by 2006-07. The per capita availability of milk has also increased from 112 grams in 1968-69 to 230 grams per day in 2005-06 and is expected to reach about 245 grams per day in 2006-07.

8.32 Presently, about 1.13 lakh village level co-operative societies spread over 265 districts in the country form part of the National Milk Grid. The Grid links the milk producers throughout India with consumers in over 700 towns and cities smoothing the seasonal and regional variations in the availability of milk, and ensuring a remunerative price to the producers and a reasonable price for quality milk and milk products to the consumers. Almost an equal quantity of milk is handled by the cooperative and private sectors. Consequent to de-licensing of the dairy sector in 1991, the Milk and Milk Products Order (MMPO) 1992 promulgated under the

Box 8.1 : Avian Influenza in India: Preparedness, Control and Containment

In 2006, the first outbreak of avian influenza occurred February 18 in the western part of country in a small area in Maharashtra running contiguously over an adjoining territory of Gujarat. A second outbreak was reported from Maharashtra itself. The isolated appearances of bird flu received widespread media attention and caused some panic. Public announcements made by domestic airlines, Indian Railway and the Armed Forces further fuelled the public misgivings about consuming chicken and other poultry products. Many States imposed ban on the inter-State movement of poultry and poultry products. As a result, the consumption and prices of poultry products nosedived. The poultry industry suffered substantial financial losses on account of drastic decline in the demand for poultry and poultry products, leading to difficulties in meeting its debt service obligations to banks and financial institutions. Government initiated various strategic actions to control and contain the outbreak in accordance with the Action Plans for the Department of Animal Husbandry, Dairying and Fisheries (DADF) and the Ministry of Health and Family Welfare (MOHFW):

- Carrying out demarcation of the relevant area of 3 kms. as the infected zone and a further area of 7 kms. as the surveillance zone.
- Culling out over a million poultry, both backyard and commercial, in a radius of 10 kms around the affected farm premises.
- Destroying more than 8,500 MT of feed material, nearly 17 lakh eggs, and other infected materials such as egg product, feathers, and protective cloth used by the staff engaged in operations.
- Cleaning and disinfecting the infected premises/area, and concluding the operations in each area with the issue of a sanitization certificate by the respective States.
- Post-operation surveillance in the affected area, including ensuring that no birds are stocked for the next three months after culling has been carried out.
- Compensating the owners for culled poultry by sharing the cost with the State Government on an equal basis. More than Rs. 3 crore has been paid as compensation soon after carrying out culling, especially for backyard poultry.
- Providing personnel involved in containment work with personal protective equipment and cover of Tami lu by the health authorities. Government announced relief measures for poultry farmers consisting of a one-time reduction of four percentage points in the interest payment liability on all bank loans availed of by poultry units, a moratorium of one year on payment of principal and interest, conversion of working capital into term loans, rescheduling of term loans and sanction of additional working capital, wherever necessary. The poultry sector was also provided relief by way of release of maize at concessional rate. There has been no outbreak after April 18, 2006. After following stipulated guidelines of World Organization of Animal Health (OIE), India declared freedom from avian influenza on August 18, 2006.

Essential Commodities Act, 1955, continues to regulate the milk sector. As per the provisions of this order, any person/dairy plant handling more than 10,000 litres per day of milk or 500 MT of milk solids per annum has to be registered with the registering authority appointed by Government. Post- liberalization, private entrepreneurs as well multinational milk products companies have made investments in the dairy sector, especially in putting up manufacturing facilities. Investments in the cooperative sector, however, are concentrated largely in milk procurement and processing.

8.33 Under Integrated Dairy Development Project, 73 projects with an outlay of Rs.407.58 crore and spread over 25 States and 1 UT have been approved. Cumulative

expenditure incurred up to end-March 2006 was Rs.274.33 crore. By end-March 2006, the programme had benefited 10.56 lakh farmers through 16,469 village-level dairy cooperative societies procuring 13.6 lakh litres of milk per day.

Fisheries

8.34 Fish production in the country has increased from 0.75 MT in 1950-51 to 6.50 MT in 2005-06 (Table 8.10). Fishing, aquaculture and a host of allied activities, a source of livelihood to over 14 million people as well as a major foreign exchange earner, in 2005-06 contributed about one per cent of the total GDP and 5.3 per cent of the GDP from agriculture sector. The geographic base of Indian marine fisheries has 8,118 km. coastline, 2.02 million sq.km. of Exclusive

Year	Fish production (Million tonnes)			Export of marine products	
	Marine	Inland	Total	Quantity (‘000 tonnes)	Value (Rs. crore)
1950-51	0.5	0.2	0.7	20	2
1960-61	0.9	0.3	1.2	20	4
1970-71	1.1	0.7	1.8	40	35
1980-81	1.5	0.9	2.4	80	235
1990-91	2.3	1.5	3.8	140	893
2000-01	2.8	2.8	5.6	503	6288
2002-03	3.0	3.2	6.2	521	6793
2003-04	3.0	3.4	6.4	412	6086
2004-05	3.52	2.78	6.30	482	6460
2005-06(P)	3.76	2.81	6.57	551	7019

Source : Department of Animal Husbandry, Dairying and Fisheries.

Economic Zone including 0.5 million sq. km. of continental shelf, and 3,937 fishing villages. There are 189 traditional fish landing centres, 59 minor fishing harbours and 6 major fishing harbours, which serve as bases for about 2,80,000 fishing craft consisting of 1,81,000 non-motorized traditional craft, 45,000 motorised traditional craft and 54,000 mechanised boats. Out of 180 deep sea fishing vessels, only 60 are in operation at present.

8.35 National Fisheries Development Board has been set up to realize the untapped potential of fishery sector with the application of modern tools of research and development including biotechnology. The Board was registered in July, 2006 under Andhra Pradesh

Society Registration Act 2001 and has become operational. The Coastal Aquaculture Authority Bill, 2005 passed by both Houses of Parliament became an Act on June 23, 2005. Rules have already been framed under the Act.

Plantation

Tea

8.36 Production of tea, after stagnating between 1997-98 and 2004-05 at around 830-850 million kgs, increased by over 12 per cent in 2005-06 (Table 8.11). The current year also looks promising as the April-October output is estimated to be 8.2 per cent higher than in the comparable period in 2005-06. With nine major tea producing States in India — Assam,

Year	Production Quantity	Exports		Imports		Domestic consumption \$ Quantity
		Quantity	Value	Quantity	Value	
1997-98	835.6	211.3	2003.2	2.6	17.8	597
1998-99	855.2	205.9	2191.8	8.9	64.7	615
1999-00	836.8	188.9	1796.3	10.4	62.0	633
2000-01	848.4	203.6	1889.8	15.2	95.5	653
2001-02	847.4	190.0	1695.8	16.8	86.7	673
2002-03	846.0	184.4	1665.0	22.5	105.3	693
2003-04	850.5	183.1	1637.0	11.1	67.0	714
2004-05	830.7	205.8	1924.7	32.5	145.0	735
2005-06	930.9	181.1	1631.60	16.40	99.26	757
2006-07(April-Oct.)@	722.5	114.3	1048.50	13.75	70.84	NA

@ Estimated NA Not available \$ Relates to calendar year.
Source : Ministry of Commerce and Industry.

West Bengal, Tripura, Arunachal Pradesh, Nagaland, Himachal Pradesh, Tamilnadu, Kerala and Karnataka — India is the largest producer and consumer of tea in the world. With consumption of tea in quantity terms growing more or less steadily at about 3 per cent per year, net exports (exports less imports) of tea has declined over the years. Government has approved setting up of a Special Purpose Tea Fund (SPTF) under the Tea Board for funding replantation and rejuvenation activities aimed at improving the age profile of tea plantations. A total outlay of Rs. 567.1 crore has been proposed during 2006-07 which will spill over to the 11th Five-year plan. The estimated area to be taken up for replantation/rejuvenation is expected to be 85,044 hectares comprising replantation of 68,154 hectares and 16,890 hectares of rejuvenation. This is expected to improve yield levels.

Coffee

8.37 Coffee output, which after growing rapidly between 1997-98 and 2000-01 to over 3 lakh tonnes had stagnated in 2001-02, fell to around 2.7 lakh tonnes in the next four years ending in 2005-06 (Table 8.12). Coffee prices declined from US \$1700 per tonne in 1998 to around US \$580 per tonne in 2003. International coffee (robusta) averaged US cents 79.3 per kilogram in January-December, 2004, but recovered to US cents 174.5 in

January, 2007. Wholesale price index of coffee also improved from 90 as on January 24, 2004 (1993-94=100) to 196.2 on January 27, 2007. With an increase in prices, there appears to be a resurgence in coffee production in 2006-07 so far.

8.38 Indian coffee by contributing 4 per cent to global production enjoys a niche market. Farm productivity and production slumped in many producing countries during the crisis years of 2002-2005, perhaps due to which the demand has finally caught up with supply and prices have started firming up. To mitigate the problems of coffee growers arising from the low prices of coffee in the crisis years, Government has taken a series of steps including: (i) re-phasing/restructuring of loans taken by the coffee growers including interest relief; (ii) interest subsidy on working capital loans of 5 per cent for small growers and 3 per cent for large growers; (iii) campaigns to promote domestic consumption of coffee; (iv) reduction of import duty on specified machinery to 5 per cent for the coffee sector to enable the industry to improve productivity, quality and consumption of coffee; (v) an International Coffee Festival in Bangalore in February 2007 to reinforce the salient and unique features of Indian coffees to the entire coffee fraternity across the globe; and (vi) implementation of weather (rainfall) insurance as a risk management support for coffee growers in collaboration with Agriculture

Table 8.12 : Coffee production, consumption and trade

Year	Production Quantity (lakh tonnes)	Export		Domestic Consumption (lakh tonnes)	
		Quantity (lakh tonnes)	Value (Rs crore)		Value US\$ million
1997-98	2.28	1.79	1708	477	0.50
1998-99	2.65	2.12	1752	431	0.50
1999-00	2.92	2.45	1901	372	0.55
2000-01	3.01	2.47	1374	243	0.60
2001-02	3.01	2.14	1050	216	0.64
2002-03	2.75	2.07	1051	234	0.68
2003-04	2.70	2.33	1158	262	0.70
2004-05	2.75	2.11	1224	295	0.75
2005-06	2.74	2.02	1510	349	0.80
2006-07*	3.00 @	1.31 @	1016 @	227 @	0.80

* (April-October) @ including re-exports
Source : Ministry of Commerce and Industry

Insurance Company of India Ltd. After a prolonged and unprecedented crisis, India as one of the sixty odd coffee producing countries of the world seems to be managing to stage a recovery in the current year.

Natural rubber

8.39 India ranks third in production and fourth in consumption of natural rubber in the world. Rubber plantations are spread over 5.9 lakh hectares in 16 States. Rubber is primarily grown in Kerala and adjoining Kanyakumari district of Tamilnadu, the traditional rubber growing areas of the country. In 2005-06, these traditional areas accounted for 86 per cent of total planted area and 95 per cent of total production. Other States contributing to the remaining area/production are Tripura, Assam, Meghalaya, Mizoram, Manipur, Goa and coastal Karnataka. Production of natural rubber is dominated by small holdings, which accounts for 88 per cent of the production as well as area with an average holding size of 0.5 hectare.

8.40 Production of natural rubber, which grew almost by a quarter between 2002-03 and 2005-06, is expected to increase by 3.5 per cent in 2006-07 over 2005-06 (Table 8.13). Consumption of natural rubber, which had exceeded domestic production in each year between 1999-2000 and 2004-05, was below domestic output in 2005-06. With consumption growth exceeding growth in

domestic output, 2006-07 is likely to see a reversion to the trend of the earlier years. The improvement in yield, observed since 2003-04, however, appears to be continuing in the current year. Wholesale price index of raw rubber which was 176 as on January 24, 2004 (1993-94=100) increased to 324.1 as on January 27, 2007. International Prices of Rubber also increased from US\$ 1.48 per kg during January-December 2004 to US\$ 2.11 per kg in January, 2007. Higher prices, while exerting pressure on general price level and products using rubber as an input, nonetheless, provided higher income to the growers.

National Commission on Farmers

8.41 The National Commission on Farmers (NCF) chaired by Dr. M.S. Swaminathan submitted five Reports between December 2005 and October, 2006. Key recommendations of the Commission are incorporated in the Revised Draft National Policy for Farmers. These include: asset reforms covering land, water, livestock and bio resources; farmer-friendly support services covering extension, training and knowledge, connectivity, credit and insurance; assured and remunerative marketing; inputs and delivery services; and curriculum reforms in the agriculture universities. Other major initiatives recommended include bringing Agriculture in the Concurrent List of the Constitution; setting up of a National Food Security and Sovereignty Board; universalization of PDS; setting up of an Indian Trade Organization; making the Commission on Agriculture Cost and Prices into an autonomous statutory organization with MSP at least 50 per cent more than the cost of production, and launch of a Rural Non-farm Livelihood Initiative (RNFLI). RNFLI when implemented would be able to absorb higher number of people dependent on agriculture. The recommendations are under active consideration of Government. However, there are several programmes already under implementation by the Department of Agriculture & Cooperation on the lines recommended by the Commission.

Table 8.13 : Natural Rubber-Consumption, production & yield

Year	Consumption ('000 tonnes)	Production ('000 tonnes)	Yield (kg/ha)
1997-98	572	583	1549
1998-99	592	605	1563
1999-00	628	622	1576
2000-01	631	630	1576
2001-02	638	631	1576
2002-03	695	649	1592
2003-04	719	711	1663
2004-05	755	749	1705
2005-06	801	803	1796
2006-07*	841	831	1857

*Anticipated

Source : Ministry of Commerce and Industry.

Agricultural Inputs

Irrigation

8.42 The Accelerated Irrigation Benefit Programme (AIBP) was launched during 1996-97 to give loan assistance to the States to help them complete some of the incomplete major/medium irrigation projects which were in an advanced stage of completion. The Surface Minor Irrigation Schemes of North-Eastern States; Hill States of Sikkim; Uttarakhand; Jammu and Kashmir; Himachal Pradesh and Kalahandi; Bolangir and Koraput (KBK) Districts of Orissa have also been provided Central Loan Assistance (CLA) under this programme since 1999-2000. Grant component was introduced in the programme from April, 2004 like other Central sector schemes. The criteria for AIBP have been further relaxed from April, 2005 to include minor irrigation schemes of non-special category States with potential of more than 100 hectare, with preference to tribal and drought-prone areas which benefit dalits and adivasis. The assistance being provided since 2004-05 is on the pattern of normal central assistance, that is, 70 per cent loan and 30 per cent grant in the case of non-special category States and 10 per cent loan and 90 per cent grant in the case of special category States and KBK Districts of Orissa. For funding purposes, the drought-prone, tribal, and flood-prone areas in the country are treated at par with Special Category States.

8.43 Up to March 2006, under AIBP, the State Governments were provided Rs.19,437.88 crore as CLA/grant for 200 major/medium irrigation projects and 5,562 Surface Minor Irrigation Schemes. So far 50 major/medium and 4,187 surface MI schemes have been completed. An additional irrigation potential of 3.25 million hectare has been created through major/medium irrigation projects up to March 2005, and an irrigation potential of 162.85 thousand hectare has been created through Surface MI Schemes up to March 2006. Relaxation in criteria for all approved projects in (a) drought-prone areas, (b) tribal areas, (c) States with lower irrigation

development as compared to National average and (d) districts identified under PM's package for agrarian distress was approved by the Cabinet in November 2006.

8.44 The Centrally Sponsored Command Area Development (CAD) Programme started in 1974-75 with an objective to bridge the gap between the irrigation potential created and its utilization to optimize agriculture productivity/production through an integrated and coordinated approach for efficient land and water management in the irrigated commands. It was restructured in April 2004 and was renamed as Command Area Development and Water Management (CADWM) Programme. Some components were deleted from the programme and two new components — correction of system deficiencies up to distributaries of 150 cusec capacity and renovation and desilting of existing irrigation tanks within CAD Projects — were included under the restructured programme. Mandatory 10 per cent beneficiary contribution in some of the components was also introduced in the restructured programme. Between its inception and December 31, 2006, 311 projects with total Culturable Command Area (CCA) of 28.58 million ha have been covered. By end-March 2006, the construction of field channels has been completed in an area of 17.43 million ha. The programme is presently going on in 136 projects with balance executable CCA of 7.70 million ha.

8.45 Government sanctioned a Pilot Scheme for "National Project for Repair, Renovation & Restoration of Water Bodies directly linked to Agriculture" in January, 2005 with an estimated cost of Rs. 300 crore to be shared by Centre and States in the ratio of 3:1. The water bodies having cultivated command area of more than 40 ha and up to 2000 ha were included under the pilot scheme in one or two districts in each States. The objective of the scheme is to restore and augment storage capacities of water bodies and to recover and extend their lost irrigation potential. The scheme has been approved in 24 district projects in 14 States, namely, Andhra Pradesh, Chhattisgarh, Jharkhand,

Table 8.14 : Agency-wise Ground Level Credit Flow for Agriculture and Allied Activities*(Rs. crore)*

Agency	2002-03	2003-04	2004-05	2005-06	2006-07*
Cooperative Banks	23,716	26,959	31,424	39,404	33,174
RRB's	6,070	7,581	12,404	15,223	15,170
Commercial Banks	39,774	52,441	81,481	1,25,859	1,00,999
Total	69,560	86,981	1,25,309	1,80,486	1,49,343

* Upto December 31, 2006
Source : NABARD.

Karnataka, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, West Bengal, Himachal Pradesh, J&K, Gujarat, Kerala and Maharashtra at an estimated cost of Rs. 296.87 crore. Central share of Rs. 132.01 crore has been released to the States by December 31, 2006. These projects cover 1,076 water bodies with total original cultivable command area of 2.99 lakh ha. The physical work for restoration has been completed for 232 water bodies and the work is in progress in the remaining 844 water bodies. The potential created will be part of the 'Bharat Nirman'. It has been decided, as announced in the Budget Speech 2006-07, that the project will be expanded throughout the country through external assistance. The proposals from Andhra Pradesh, Karnataka, Orissa and Tamil Nadu have been posed to the World Bank for external assistance. The proposal for Andhra Pradesh is at an advanced stage of negotiations with the World Bank and the proposal in respect of Tamil Nadu was concluded on January 23, 2007.

8.46 Irrigation is one of the six components for development of rural infrastructure under Bharat Nirman. The irrigation component of Bharat Nirman aims at creation of irrigation potential of 10 million ha during 2005-06 to 2008-09 mainly through completion of ongoing major and medium irrigation projects. Utilization of completed projects / schemes is also emphasized. Further, development of new projects of minor irrigation to cater to the requirement of specific areas, particularly to provide benefit to small and marginal farmers and dalits and tribals, has also been included in Bharat Nirman. During 2005-06, against the

target of 1.90 million ha, the reported irrigation potential created was 1.45 million ha.

Agricultural Credit

Flow of institutional Credit to Agriculture

8.47 The 'Farm Credit Package' announced in June 2004 stipulated doubling the flow of institutional credit for agriculture in the ensuing three years. The target of 30 per cent growth in agricultural credit in 2004-05 was surpassed by the actual growth of 44 per cent in overall credit by all agencies to Rs.1,25,309 crore in 2004-05 (Table 8.14). Based on this encouraging performance, the target for flow of institutional credit for agriculture and allied activities for 2005-06 was raised to Rs. 1,41,000 crore, which again was surpassed by the actual achievement of Rs.1,80,486 crore (provisional). The target for such credit for 2006-07 was fixed at Rs.1,75,000 crore, of which 85 per cent (Rs. 1,49,343 crore) was achieved by December 31, 2006.

Kisan Credit Card Scheme

8.48 To provide adequate and timely support from the banking system to the farmers for their cultivation needs, including purchase of all inputs in a flexible and cost effective manner, a model Kisan Credit Card Scheme (KCC) was introduced in August 1998. NABARD had advised banks for extensive coverage through expanding its outreach by lending to more farmers including non-willful defaulters, oral lessees, tenant farmers, share-croppers, who may have been outside the fold of the scheme, for whatever reasons, as also new farmers. The co-

operative banks and RRBs were advised to cover all farmers under KCC by end-March 2007 and to make the renewal process of KCCs more user friendly.

8.49 The KCC scheme made rapid progress with cumulatively more than 645 lakh cards issued up to October, 2006. The scheme has also been extended to the borrowers of the long-term cooperative credit structure to address all the loan requirements of borrowers of State Cooperative Agriculture Rural Development Banks (SCARDBs) under KCC Scheme.

8.50 Government has decided that from Kharif 2006-07, farmers would receive crop loans up to a principal amount of Rs. 3 lakh at 7 per cent rate of interest. This year, the Government of India is providing interest subvention of 2 per cent per annum to Public Sector Banks, Regional Rural Banks (RRBs) and Cooperative Banks on amount of short term agriculture credit disbursed out of their own resources. Concessional refinance to Cooperative Banks at 2.5 per cent per annum and to RRBs at 4.5 per cent per annum will also be provided through NABARD for this purpose. Further, in order to provide relief to the farmers who have availed of crop loans from Commercial Banks, RRBs and Primary Agriculture Cooperatives (PACs) for kharif and rabi 2005-06, an amount equal to two percentage points of the borrower's interest liability on principal amount up to Rs. one lakh has been credited to his/her bank account.

8.51 In January, 2006, Government announced the package for revival of Short-Term Rural Cooperative Credit Structure involving financial assistance of Rs.13,596 crore. NABARD has been designated as the implementing agency for the purpose. States are required to sign memorandum of understanding (MOU) with NABARD, committing to implement the legal, institutional and other reforms as envisaged in the revival package. So far 8 states, namely Andhra Pradesh, Maharashtra, Madhya Pradesh, Rajasthan, Orissa, Uttarakhand, Uttar Pradesh and Gujarat, have signed MOU with GOI and NABARD.

8.52 The self-help group (SHG) Bank Linkage Programme has emerged as the major micro-finance programme in the country. Since inception of the scheme (upto December 31, 2006) 24.8 lakh. SHGs have been provided credit aggregating Rs.13,512 crore by the banking system.

Rehabilitation Package for distressed farmers

8.53 A special relief package for farmers was announced for 31 districts in Andhra Pradesh, Maharashtra, Karnataka and Kerala where there was high incidence of farmers' suicides. As regards credit, the package envisages: (a) Waiving of interest on overdue loans as on July 1, 2006 so that farmers have no past burden. This would make them eligible for fresh loan from the banking system. It is estimated that an amount of Rs. 2,718 crore will be waived in 31 affected districts. The Government of India and respective State Governments will share this amount equally. (b) The overdue loans of the farmers as on July 1, 2006 will be rescheduled over a period of 3—5 years with a one year moratorium. (c) A credit flow of Rs. 21,422 crore will be ensured in these 31 districts in 2006-07.

Agricultural Insurance

8.54 The Government of India in coordination with the General Insurance Corporation of India (GIC), had introduced a scheme called the National Agricultural Insurance Scheme (NAIS) from rabi 1999-2000 season. The main objective of the scheme is to protect the farmers against losses suffered by them due to crop failure on account of natural calamities, such as drought, flood, hailstorm, cyclone, fire, pest/diseases, so as to restore their credit worthiness for the ensuing season. Agricultural Insurance Company of India Ltd. (AICIL) which was incorporated in December, 2002 and started operating from April, 2003 took over the implementation of NAIS.

8.55 In the implementation of NAIS (Table 8.15), certain limitations/shortcomings relating to unit area of insurance, calculation of guaranteed income, low indemnity level, and

Table 8.15 : Performance of National Agricultural Insurance Scheme

Sl. No.	Season	Number of farmers covered (lakhs)	Area (lakh ha.)	Sum assured (Rs. crore)	Premium (Rs. crore)	Total claims (Rs. crore)
1	Rabi 1999-2000	5.8	7.8	356.4	5.4	7.7
2	Kharif 2000	84.1	132.2	6,903.4	206.7	1,222.5
3	Rabi 2000-01	20.9	31.1	1,602.7	27.8	59.5
4	Kharif 2001	87.0	128.9	7,502.5	261.6	493.5
5	Rabi 2001-02	19.6	31.5	1,497.5	30.2	64.7
6	Kharif 2002	97.7	155.3	9,431.7	325.5	1,824.3
7	Rabi 2002-03	23.3	40.4	1,837.6	38.5	188.6
8	Kharif 2003	79.7	123.6	8,114.1	283.3	649.9
9.	Rabi 2003-04	44.2	64.7	3,049.5	64.1	490.7
10.	Kharif 2004	126.9	242.7	13,170.5	458.9	1,037.6
11.	Rabi 2004-05	35.3	53.4	3,774.2	75.9	160.6
12.	Kharif 2005	126.7	205.3	13,517.7	449.9	1,054.8
13.	Rabi 2005-06	40.5	72.2	5,069.5	104.8	252.3
14.	Kharif 2006*	66.5	101.1	7,500.3	233.2	—
Total		858.0	1,390.1	83,327.5	2,565.7	7,506.6

* Provisional

delay in settlement of insurance claims were observed. Keeping in view the above limitations in the existing scheme, National Common Minimum Programme (NCMP) provided for redesigning the crop insurance schemes. The recommendations of a Joint Group constituted for suggesting improvements in the existing crop insurance schemes and the comments received from States/UTs and other concerned Departments/agencies have been internalized in a modified draft which is under consideration, by the Government.

Rainfall Insurance Scheme “Varsha Bima”

8.56 AICIL introduced Rainfall Insurance Scheme known as “Varsha Bima” during 2004 south-west monsoon period. Varsha Bima provided for five different options suiting varied requirements of farming community: (i) seasonal rainfall insurance based on aggregated rainfall from June to September, (ii) sowing failure insurance based on rainfall between June 15 and August 15, (iii) rainfall distribution insurance with the weight assigned to different weeks between June and September, (iv) agronomic index constructed on the basis of water requirements of crops, (v) a catastrophe option covering extremely adverse deviation of 50 per cent and above

in rainfall during the season. Varsha Bima was piloted in 20 rain-gauge areas spread over Andhra Pradesh, Karnataka, Rajasthan and Uttar Pradesh in 2004-05.

8.57 Based on the experience of the pilot project, the scheme was fine-tuned and implemented as “Varsha Bima-2005” in around 130 districts across Andhra Pradesh, Chhatisgarh, Gujarat, Karnataka, Maharashtra, Madhya Pradesh, Orissa, Tamil Nadu, Uttarakhand and Uttar Pradesh during kharif 2005. On an average, 2 or 3 block/tehsils were covered under each IMD rain gauge station. The scheme covered the major crops and provided at least two coverage options namely, Seasonal Rainfall Insurance or Rainfall Distribution Index and Sowing Failure Insurance. Varsha Bima-2005 covered 1.25 lakh farmers with a premium income of Rs. 3.17 crore against a sum insured of Rs. 55.86 crore. Claims amounting to Rs. 19.96 lakh were paid for the season.

8.58 During kharif 2006, the scheme is being implemented as Varsha Bima-2006 in and around 150 districts/rain gauge station areas covering 16 states across the country. AICIL is also piloting another weather related insurance product for mango and coffee.

Seeds

8.59 Seed, which is the carrier of new technology for crop production and higher crop yields, is a critical input for sustained growth of agriculture. In India, more than four-fifths of the farmers rely on farm-saved seed leading to a low seed-replacement rate. The Indian Seed Programme includes the participation of Central and State Governments, Indian Council of Agricultural Research (ICAR), State Agricultural Universities, and the cooperative and private sectors. There are 14 State Seed Corporations (SSCs) besides two national level corporations. Though the private sector started to play a significant role in production and distribution of seed, particularly after introduction of the Seed Policy of 1988, the organized seed sector, particularly for food crops and cereals, continues to be dominated by the public sector. However, it is estimated that about 46 per cent of the seed

commercially sold in the country is by private seed companies.

8.60 Indian seeds programme recognizes three kinds of seeds generation, namely breeder, foundation and certified seeds. The annual rate of growth of certified/quality seeds distribution is targeted to accelerate from 12.1 per cent in 2005-06 to 18.1 per cent in 2006-07. During 2006-07, 69,980 quintal breeder seed is anticipated to be produced by the National Agricultural Research System (Table 8.16).

Fertilisers

Consumption

8.61 The consumption of chemical fertilizers (in terms of nutrients) grew by 10.6 per cent to 20.34 MT during 2005-06 (Table 8.17). Though the nitrogenous fertilizers account for over 60 per cent of total

Table 8.16 : Production of Breeder and Foundation Seeds and Distribution of Certified Seed

Year	Production of Breeder Seed (quintals)	Production of Foundation Seed (lakh quintals)	Distribution of Certified/Quality Seed (lakh quintals)
2003-04	61,826	6.5	108.59
2004-05	66,460	6.9	113.10
2005-06	65,880	7.4	126.74
2006-07	69,980 (Anticipated)	8.0 (Anticipated)	149.63 (Anticipated)

Table 8.17 : Consumption of major fertilizers

(in lakh, tonnes)

Fertiliser	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (Apr-Sep 06)*
Urea	199.17	184.93	197.67	206.65	222.97	113.66
DAP	61.81	54.73	56.24	62.56	67.64	32.06
MOP	19.93	19.12	18.41	24.06	27.31	10.02
Nitrogenous Fertilizers (N)	113.10	104.74	110.77	117.13	127.23	64.68
Phosphatic Fertilizers (P)	43.82	40.19	41.24	46.24	52.04	25.75
Potassic Fertilizers (K)	16.67	16.01	15.98	20.61	24.13	9.67
N+P+K	173.60	160.94	167.99	183.98	203.40	100.10
Percentage increase	3.94	-7.29	4.38	9.52	10.56	8.84

Source: Ministry of Chemicals and Fertilisers * Provisional

consumption (in terms of nutrients), the share of potassic fertilisers is increasing in recent years. Compared to a share of 9.6 per cent in 2001-02, the share of pottasic fertilisers increased to 11.8 percent in 2005-06.

8.62 Per hectare fertilizer application was quite high in Punjab, Haryana, Andhra Pradesh and Tamil Nadu, but quite low in Rajasthan, Orissa and Madhya Pradesh, apart from in the States in the North-Eastern region (Table 8.18). The all-India average consumption of fertilizers per ha was up at 104.50 kgs in 2005-06 from 94.52 kgs in 2004-05.

Capital Formation in Indian Agriculture

8.63 The share of the agricultural sector's capital formation in GDP declined from 2.2

per cent in the late 1990s to 1.9 per cent in 2005-06 (Table 8.19). This disturbing decline was partly due to the stagnation or fall in public investment in irrigation, particularly since the mid-1990s. However, there is indication of a reversal of this trend with public sector investment in agriculture accelerating since 2002-03. The share of public investment in gross investment in agriculture increased by 6.5 percentage points from 1999-2000 to reach 24.2 per cent in 2005-06.

Agricultural Marketing

8.64 Efficient marketing with a dynamic supply chain is essential for the development of the agriculture sector. Agricultural production in the country end-March 2006 was serviced through 7,566 regulated agricultural markets. There were 21,780 rural primary/periodic agricultural markets, out of which about 15 per cent functioned under the ambit of regulation. There are already some examples of novel private sector initiatives to improve the marketing channels in agriculture (Box 8.2)

8.65 Ministry of Agriculture had formulated a model law on agricultural marketing in consultation with State/UT Governments to bring about marketing reforms in line with emerging trends. This model Act enables establishment of private markets/yards, direct purchase centres, consumers/farmers markets for direct sale, and promotion of public-private-partnership (PPP) in the management and development of agricultural markets in the country. It also provides for exclusive markets for onions, fruits, vegetables and flowers. Regulation and promotion of contract farming arrangement has also been made a part of this legislation. A provision has also been made for constitution of State Agricultural Produce Standards Bureau for promotion of grading, standardization and quality certification of agricultural produce. So far 15 States and 5 Union Territories have amended their Agricultural Produce Marketing Committee (APMC) Act to derive the benefits of market reforms.

Table 8.18 : Per hectare Fertiliser consumption of N.P.K fertilizers during 2004-05 and 2005-06 (in Kg.)
(Based on 2004-05 provisional Gross Cropped Area)

S.No.	State/U.T.	2004-05	2003-04
1	Andhra Pradesh	203.61	158.57
2	Karnataka	117.34	99.51
3	Kerala	57.00	56.74
4	Tamil Nadu	183.67	159.07
5	Pondicherry	1100.26	1086.30
6	A & N Island	12.63	10.92
7	Gujarat	111.07	99.49
8	Madhya Pradesh	47.13	53.42
9	Chhatisgarh	67.36	65.19
10	Maharashtra	84.52	74.68
11	Rajasthan	36.29	31.33
12	Goa	32.66	34.08
13	Dadra & N.Havali	43.97	41.25
14	Haryana	166.72	155.10
15	Himachal Pradesh	48.75	47.00
16	Jammu & Kashmir	81.31	66.30
17	Punjab	210.06	194.56
18	Uttar Pradesh	140.37	134.13
19	Delhi	10.51	13.08
20	Uttaranchal	94.24	88.93
21	Bihar	152.32	99.78
22	Jharkhand	67.61	62.10
23	Orissa	57.33	51.59
24	West Bengal	127.50	129.73
25	Arunachal Pradesh	2.94	2.98
26	Assam	49.26	41.25
27	Tripura	39.21	34.74
28	Manipur	59.84	85.97
29	Meghalaya	17.98	18.05
30	Nagaland	1.50	1.46
31	Arunachal Pradesh	2.94	2.98
32	Mizoram	25.45	5.85
33	Sikkim	2.83	5.01
All India		104.50	94.52

Source : Ministry of Chemicals and Fertilizers.

Table 8.19 : Gross Capital Formation in Agriculture

Year	Investment in Agriculture (Rs. crore)			Share in agricultural gross investment (per cent)		Investment in Agriculture as a per cent of GDP at constant prices
	Total	Public	Private	Public	Private	
Old Series (at 1993-94 prices)						
1990-91	14836	4395	10441	29.60	70.40	1.92
1995-96	15690	4849	10841	30.90	69.10	1.57
1996-97	16176	4668	11508	28.90	71.10	1.51
1997-98	15942	3979	11963	25.00	75.00	1.43
1998-99	14895	3870	11025	26.00	74.00	1.26
1999-00	17304	4221	13083	24.40	75.60	1.37
New Series (at 1999-00 prices)						
1999-00	43473	7716	35757	17.7	82.3	2.2
2000-01	38735	7155	31580	18.5	81.5	1.9
2001-02	47043	8746	38297	18.6	81.4	2.2
2002-03	46823	7962	38861	17.0	83.0	2.1
2003-04	45132	9376	35756	20.8	79.2	1.9
2004-05	48576	10267	38309	21.1	78.9	1.9
2005-06*	54539	13219	41320	24.2	75.8	1.9

* Quick Estimates.

Source : CSO

Box 8.2 : Agricultural Marketing: Private initiatives by ITC

TE-choupal is a business platform consisting of a set of organizational subsystems and interfaces connecting farmers to global markets. This common structure can be leveraged to procure/provide a host of product and services for the farmer as a producer as well as a consumer. The e-choupal business platform consists of three layers each at different levels of geographic aggregation. Each of the three layers is characterized by three key elements: (a) the infrastructure (physical or organizational) through which transactions take place, (b) the entity (person or organization) orchestrating the transactions, and (c) the geographical coverage of the layer. The first layer consists of the village-level kiosks with internet access (or e-Choupal), managed by an ITC-trained local farmer (called a Sanchalak) and within walking distance (1-5 kilometres) of each target farmer. The relatively sparse population density in rural India justified the location of one e-Choupal per cluster of five villages. The second layer consists of a bricks-and-mortar infrastructure (called hubs) managed by the traditional intermediary who has local knowledge/skills (called a Samyojak) in his new role) and within tractorable distance (25-30 kilometers) of the target farmer.

ITC chose to operate the platform on the following three business principles:

- (a) Free Information and knowledge which ensures wider participation by the farmer,
- (b) freedom of choice in transactions (farmers, after accessing information at the e-Choupal, are free to transact their own way),
- (c) transaction-based income stream for the Sanchalak by tying his revenue stream to transaction (on a commission basis).

Towards another Big Push to Agriculture- Second Green Revolution

8.66 The urgent need for taking agriculture to a higher trajectory of 4 per cent annual

growth can be met only with improvement in the scale as well as quality of agricultural reforms undertaken by the various States and agencies at the various levels. These reforms

must aim at efficient use of resources and conservation of soil, water and ecology on a sustainable basis, and in a holistic framework. Such a holistic framework must incorporate financing of rural infrastructure such as water, roads and power.

8.67 The Approach Paper to the Eleventh Five Year Plan has aptly highlighted such a holistic framework and suggested the following strategy to raise agricultural output: (a) doubling the rate of growth of irrigated area; (b) improving water management, rain water harvesting and watershed development; (c) reclaiming degraded land and focusing on soil quality; (d) bridging the knowledge gap through effective extension; (e) diversifying into high value outputs, fruits, vegetables, flowers, herbs and spices, medicinal plants, bamboo, bio-diesel, but with adequate measures to ensure food security; (f) promoting animal husbandry and fishery; (g) providing easy access to credit at affordable rates; (g) improving the incentive structure and functioning of markets; and (h) refocusing on land reforms issues. National Commission on Farmers has already laid the foundation for such a framework.

8.68 Programme formulation as well as their implementation in the States must be based on unique regional contexts incorporating agro-climatic conditions; and availability of appropriate research and development (R&D) backed by timely and adequate extension and finance.

8.69 Varietal break-through has been a major constraint in achieving higher level of productivity in pulses. These are genetically low yielding and less input responsive as compared to cereals and their cultivation has continued to be done on marginal and sub-marginal lands under rainfed conditions. With the limited availability of pulses overseas, development of hybrid varieties becomes a pre-requisite for increasing domestic production.

8.70 R&D expenditure on agriculture in India is low by international standards despite

its high social return. Development of area specific seeds and their application, particularly in water abundant eastern belt can increase the yield levels in these areas. Increased R&D expenditure backed by modern technologies and compatible institutions must be focused in the coming years. R&D has to focus on areas such as rainfed, and drought-prone; crops such as drought-resistant and amenable to biotechnological applications; and biotechnology which has growth as well as export potential. With proper implementation, the National Agricultural Innovation Project initiated in July, 2006 for enhancing livelihood security in partnership mode with farmers' groups, panchayati raj institutions and private sector would go a long way in strengthening basic and strategic research in frontier agricultural sciences.

Outlook

8.71 The short-term outlook for agricultural sector appears bright. With a welcome rainfall in early February, prospects of wheat and other rabi crops have brightened. The production of cotton, sugarcane and jute & mesta would set a new record in the current year. However, the production of oilseeds is expected to witness a decline of 15.7 per cent. There has been a sharp increase in the area under wheat with high domestic and international prices providing incentives to the farmers. World Bank's commodity price index for agriculture with 1990=100, which was 104.7 in January-December, 2004 reached 133.7 in January, 2007. Wholesale prices of most agricultural products were also firm in 2006-07. Together with better crop prospects, this augurs well for farm income. In the medium-term, the prospects for agriculture will be determined by the pace and quality of reforms in this sector; the ability to increase investment in surface irrigation, ground water recharge of aquifers, and restoration of water bodies; and developing high-yielding varieties of non cereal food and cash crops.

Infrastructure

Provision of quality and efficient infrastructure services is essential to realize the full potential of the growth impulses surging through the economy. There is now a widespread consensus that exclusive dependence on government for the provision of all infrastructure services introduces difficulties concerning adequate scale of investment, technical efficiency, proper enforcement of user charges, and competitive market structure. At the same time, complete reliance on private production, particularly without appropriate regulation, is also not likely to produce optimal outcomes. India, while stepping up public investment in infrastructure, has been actively engaged in finding the appropriate policy framework, which gives the private sector adequate confidence and incentives to invest on a massive scale, but simultaneously preserves adequate checks and balances through transparency, competition and regulation.

9.2 An investment of Rs.14,50,000 crore or about US\$320 billion would be required in the infrastructure sector during the Eleventh Five Year Plan. These investments are to be achieved through a combination of public investment, public-private-partnerships (PPPs) and exclusive private investments, wherever feasible. Investment requirements by 2012 estimated by the Committee on Infrastructure, headed by the Prime Minister, in some of the key sectors are: Rs.2,20,000 crore for modernization and upgradation of highways; Rs.40,000 crore for civil aviation; Rs.50,000 crore for ports; and Rs.3,00,000 crore (of which 40 per cent is expected to come from the private sector through PPP) for the Railways.

Review of 2006-07

9.3 The overall index of six core industries having a direct bearing on infrastructure and accounting for 27 per cent weight in the Index of Industrial Production (IIP), registered a growth of 8.3 per cent during April-December, 2006, which was higher than the 5.5 per cent registered during April-December, 2005 (Table 9.1). In the first nine months of 2006-07, crude petroleum, refinery products and electricity generation registered an acceleration in their growth rates, but there was a decline in the growth rates of coal, cement and finished steel.

Power

9.4 Electricity generation by power utilities during 2006-07 was targeted to go up by 6.7 per cent to 663.0 billion KWh. The growth of such power generation during April-December 2006 was 7.5 per cent (Table 9.2) as compared to 4.8 per cent in the corresponding period last year. But, while thermal generation exhibited substantial acceleration in growth during the first three quarters of 2006-07, growth in hydro and nuclear generation slowed down.

9.5 During April-December 2006, the plant load factor (PLF), an important measure of efficiency, has been higher for Central Sector Plants compared to those of State Electricity Boards (SEBs) (Table 9.3). Average PLF of private plants was higher than that of the public sector. During April-December, while PLF of SEBs increased from 64.8 per cent to 68 per cent between 2005 and 2006, the increase masked substantial variation across States with PLF for the eastern and the north-eastern states significantly lower.

Table 9.1 : Trends in growth of physical output in infrastructure sectors <i>(in per cent)</i>						
Items	2002-03	2003-04	2004-05	2005-06	April-December*	
					2005-06	2006-07
I. Energy						
1. Coal production	4.6	5.1	6.4	6.4	6.2	4.5
2. Electricity generated (Utilities only)	3.2	5.1	5.2	5.1	4.8	7.5
3. Petroleum						
(a) Crude oil production	3.4	0.7	1.8	-5.3	-6.0	6.0
(b) Refinery throughput	4.9	8.2	4.3	2.1	0.5	12.6
II. Steel						
III. Cement						
<i>Average growth rate of I to III</i>	5.0	6.1	5.8	6.1	5.5	8.3
IV. Transport and communications						
1. Railway revenue-earning Goods traffic	5.3	7.5	8.1	10.7	10.7	9.7
2. Cargo handled at major ports	9.0	10.0	11.3	10.3	12.6	8.3
3. Telecom: Cell phone connections	119.2	115.3	10.4	89.4	55.4	107.31
4. Civil aviation						
<i>a. Cargo handled</i>						
<i>i. Exports</i>	13.3	1.0	12.4	7.3	13.1	-1.3
<i>ii. Imports</i>	18.6	13.4	24.2	15.8	12.7	19.6
<i>b. Passengers handled at</i>						
<i>i. International Terminals</i>	4.8	6.5	14.0	12.8	12.7	11.8
<i>ii. Domestic Terminals</i>	9.6	13.1	23.6	27.1	21.9	37.0
* Provisional						
Source : Item no. I to III Ministry of Commerce & Industry.						
IV Ministry of Statistics and Programme Implementation.						

Table 9.2 : Trends in the power sector (utilities only)						
	2004-05	2005-06	April-December		Change over previous year@	
			2005	2006	2005	2006*
			(Billion KWh)		(per cent)	
1. Power generation**	587.4	617.5	458.8	493.1	4.8	7.5
(i) Hydro-electric	84.5	101.3	80.61	91.77	19.1	13.8
(ii) Thermal	486.1	497.2	363.3	385.3	1.5	6.1
(iii) Nuclear	16.8	17.2	13.2	13.61	7.3	3.0
Memorandum item: Plant load factor (PLF), in per cent	74.8	73.6	71.5	74.2	-2.2	3.8
* Provisional; @ April-December						
** Excludes generation from captive and non-conventional power plants and Thermal Power Plants below 20 MW units and Hydro power plants below 2 MW.						

	2001-02	2002-03	2003-04	2004-05	2004	April-December	
						2005	2006
I. State Electricity Boards	67.0	68.7	68.4	69.6	67.1	64.8	68.0
II. Central Sector	74.3	77.1	78.7	81.7	82.1	79.8	80.8
III. Private Sector	74.7	78.9	80.5	85.1	85.4	86.7	88.1
REGIONS							
Northern	75.1	75.4	76.3	77.1	76.8	75.0	78.3
Western	74.1	75.8	75.1	78.6	76.2	74.5	74.2
Southern	82.4	86.4	83.4	84.1	78.2	75.2	80.3
Eastern	48.7	52.1	56.9	60.4	64.6	62.4	66.1
North-Eastern	16.7	14.8	14.0	15.0	16.1	16.2	16.4
All-India	69.9	72.2	72.7	74.8	73.6	71.5	74.2

9.6 With the rate of return of SEBs deteriorating to -27.4 per cent in 2006-07 (RE) from -24.8 per cent in 2005-06 (Table 9.4), resources forgone through such poor returns continued to be very large. In 2006-07, while the direct transfers from State Governments

to SEBs was Rs.13,870 crore, an uncovered subsidy of Rs.21,201 crore remained, indicating the large reform potential for improving not only the electricity sector itself but also the fiscal position of the States.

	1991-92	2005-06 Provisional	2006-07 (RE)	2007-08 Plan projection
A. Gross subsidy involved				
(i) On account of sale of electricity to				
(a) Agriculture	5,938	24,472	27,333	27,089
(b) Domestic	1,310	10,839	13,014	11,841
(c) Inter-State Sales	201	1,087	-216	612
Total	7449	36,398	40,131	39,542
(ii) Subventions received from State Govts.	2,045	11,613	13,870	12,457
(iii) Net subsidy	5,404	24,784	26,261	27,085
(iv) Surplus generated by sale to other sectors	2,173	6,059	5,061	8,816
(v) Uncovered subsidy	3,231	18,725	21,201	18,269
B. Commercial Losses				
(i) Commercial Losses (excluding subsidy)@	4,117	21,110	26,150	21,391
(ii) Commercial Losses (including subsidy)	NA	9,496	12,280	8,933
C. Rate of Return (ROR %) #	-12.70	-24.84	-27.43	-18.59
D. Revenue Mobilisation				
Additional Revenue Mobilisation from achieving				
(a) 3% ROR	4,959	24,350	29,225	25,193
(b) From introducing 50 paise per unit from Agriculture/Irrigation	2,176	1,100	1,643	1,287
RE: Revised Estimates, AP: Annual Plan Projections, # for losses without subsidy. Note:- (i) The information regarding commercial losses in case of Orissa and Delhi pertains to GRIDCO of Orissa and Transmission Company of Delhi only.(ii) Information in case of Punjab, Tamilnadu, Himachal Pradesh, Bihar, Jharkhand Chattisgarh and Madhya Pradesh is relating to there State Electricity Boards. In case of other states, the information pertains to transmission and distribution utilities formed after the reform and restructuring of the sector.				
Source : Planning Commission.				

9.7 Coal continued to remain the mainstay of the power sector, with 54.2 per cent (69,199 MW) of total installed power generation capacity in the country of 1,27,673 (MW) as of December, 2006 in coal-fired thermal units. With around 67 per cent of total power generation coming from coal-fired power stations, power sector is the major consumer of coal in the country absorbing around 78 per cent of the country's total coal production.

9.8 In the past, coal has been imported for blending by the power stations to maintain the environmental stipulations regarding use of coal of less than 34 per cent ash content, and also occasionally supplementing supplies from indigenous sources (Table 9.5). During the current year and the last, coal continued to be imported to bridge the gap between anticipated demand and domestic availability.

9.9 Out of the total 1,27,673 MW installed generating capacity in the country on October 31, 2006, 13,582 MW (about 10.64 per cent) is based on gas or liquid fuel (excluding diesel).

Year	Quantity (MT)
2001-02	3.56
2002-03	3.07
2003-04	3.37
2004-05	4.53
2005-06	10.44 *
2006-07	7.4 #

* Out of total import of about 11.22 MT.
Provisional.

The supply of gas to power stations of total 10,999 MW capacity which use gas as the primary fuel remained inadequate (Table 9.6) with supply of gas not keeping pace with the demand for gas in power sector. Even the commitments of gas allocations made earlier to power stations are not being fulfilled.

9.10 Though the gas based power stations have provision for the use of alternate fuels, such as naphtha and HSD, the prevailing high costs of such fuels prevented their utilization and resulted in generation loss.

Capacity addition programme

9.11 The Tenth Plan capacity addition target of 41,110 MW was scaled down to 36,956 MW at the time of the Mid-Term Appraisal (Tables 9.7 and 9.8). The likely achievement is expected to be around 23,250 MW, which is 57 per cent of the original target and 63 per cent of the target in the Mid-Term Appraisal. By type of ownership, the anticipated shortfall (73 per cent) is the highest in the private sector, while by type of plant, it is the highest (43 per cent) in hydro plants.

9.12 While there are shortfalls vis-à-vis the targets, these shortfalls are lower than in the earlier Plans. In the Ninth Plan, achievement was less than 50 per cent of the target. The capacity addition in the Ninth Plan was only 19,015 MW against the target of 40,245 MW.

9.13 The process of revival of the Dabhol Power Project, closed since June, 2001, was

Years	Required*	Gas in MMSCMD		Shortfall	Estimated Generation loss in BU
		Supplied			
(1)	(2)	(3)	(4)=(2)-(3)		
2000-01	44.54	24.40	20.14	33.0	
2001-02	46.31	24.33	21.98	36.1	
2002-03	48.26	25.12	23.14	38.0	
2003-04	49.25	25.62	23.63	38.9	
2004-05	49.73	30.70	19.03	31.2	
2005-06	53.38	35.37	18.01	23.88	
April-October 2006	53.45	34.28	19.17	18.43	

*Generation loss calculated by considering the demand-supply gap of gas at 90 per cent PLF, Gross Calorific Value of gas = 9000 Kcal/SCM, Station Heat Rate = 2000 Kcal/KW hr. and no generation made using liquid fuels.
Note: MMSCMD – million metric standard cubic meter per day; BU- Billion Units

**Table 9.7 : Tenth Plan targets and achievements in power sector
(by ownership)**

(in MW)

	Target		Additional Capacity : Status		
	Original	Mid-Term Appraisal	Commissioned	Under execution	Overall anticipated
Central	22832	19817*	11115	2610	13725
State	11157	12240	5460	2135	7595
Private	7121	4899	1931	0	1931
Total	41110	36956	18505	4745	23250

* Including 2520 MW nuclear projects under construction

Table 9.8 : Tenth Plan targets and achievements in power sector (by type)

(in MW)

	Target		Additional Capacity : Status		
	Original	Mid-Term Appraisal	Commissioned	Under execution	Overall anticipated
Thermal	25417	23261	10129	3535	13664
Hydro	14393	11125	7196	990	8186
Nuclear	1300	2570	1180	220	1400
Total	41110	36956	18505	4745	23250

initiated in 2005. A joint venture company by the name of Ratnagiri Gas and Power Private Limited (RGPPL), with shareholding of National Thermal Power Corporation (NTPC), Gas Authority of India Limited (GAIL), Indian Financial Institutions (IFIs) and Maharashtra State Electricity Board (MSEB) has been constituted to restart the power plant and complete the construction of Phase II and the associated LNG terminal. The Project's assets have been taken over by RGPPL with the approval of Maharashtra High Court. Block-II (740MW) of Dabhol Power Project has already been commissioned on May 15, 2006. Balance capacity of the project is expected to be commissioned by March, 2007.

9.14 Power plants using super-critical technology have a higher thermal efficiency of about 40 per cent compared to 38.6 per cent of sub-critical units of 500 MW units or less. At present all the operating thermal power units are sub-critical units. Six super-critical units of 660 MW of NTPC Ltd., at Sipat (3x660) and Barh (3x660) are at an advanced stage of construction, and the first super-critical unit

is expected to be commissioned during 2009-2010. In the Eleventh Plan, NTPC and some state utilities have plans to go for adoption of 800 MW units. NTPC has already drawn up plans to induct 800 MW units at Darlipalli, Lara and Gajmara. At the same time, Government has also invited tenders to set up Ultra Mega Power Projects in other parts of the country with large size units with an option of 800 MW.

9.15 Government is encouraging the use of hydel and wind energy sources which do not rely on fossil fuels and avoid carbon emissions. India has an estimated unutilized hydro-power potential of more than 1,50,000 MW. A study by the Central Electricity Authority (CEA) has identified 399 potential hydel projects with an aggregate capacity of 1,07,000 MW. Preparation of pre-feasibility reports (PFRs) of 162 schemes with aggregate installed capacity of 49,930 MW has already been completed by CEA. As a follow up of preparation of PFRs, action has been initiated for preparation of Detailed Project Reports (DPRs) in respect of 77 low-tariff schemes (with first year tariff being below

Rs.2.50/ KWh) by CPSUs/SPSUs/SEBs/ Independent Power Producers (IPPs).

Ultra-Mega Power Projects (UMPPs)

9.16 The Ministry of Power, Government of India has launched an initiative for development of coal-based Ultra-Mega Power Projects (UMPPs) in India, each with a capacity of 4,000 MW or above. These projects will be awarded to developers on the basis of tariff-based competitive bidding. To facilitate tie-ups of inputs and clearances, project-specific shell companies have been set up as wholly owned subsidiaries of the Power Finance Corporation (PFC) Ltd. These companies will undertake preliminary studies and obtain necessary clearances including water, land, fuel, power selling tie-up etc. prior to award of the project to the successful bidder.

9.17 Nine sites have been identified by CEA in nine States for the proposed UMPPs. These include four pithead sites, one each in Chhattisgarh, Jharkhand, Madhya Pradesh and Orissa, and five coastal sites, one each in Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu. It is proposed to set up pithead projects as integrated proposals with corresponding captive coal mines. On the request of Ministry of Power, Ministry of Coal has already allocated captive coal mining block for Sasan UMPP in Madhya Pradesh and earmarked captive coal mining block for Orissa UMPP. For the coastal projects, imported coal shall be used. The projects are to be developed with a view to lower the cost of power to the consumers. These projects, adopting super-critical technology to reduce emissions, would be environment-friendly.

9.18 A time bound action plan for preparation of project report, tie-up of various inputs/clearances, appointment of consultants, preparation of RFQ/RFP have been prepared. Lanco Infrastructure has bagged the Sasan Project at Rs. 1.19 per unit whereas Tata Power has been awarded the Mundra project at Rs. 2.26 per unit. The encouraging results achieved in these two cases has shown the way forward for capacity addition with most competitive tariff. Developers for

Krishnapatnam UMPP (Andhra Pradesh) and Tilaiya (Jharkhand) UMPP are expected to be selected by April, 2007 and July 2007 respectively. Once the developers are selected, the ownership of the shell companies shall be transferred to the successful bidders. Development of merchant power plants is also on the anvil. (Box 9.1)

Power Transmission Network and National Grid

9.19 Formation of a strong national power grid has been recognized as a flagship endeavour to steer the development of the power system to cost-effective fulfillment of the objective of 'Electricity to All' at affordable prices. A strong all-India grid would enable exploitation of unevenly distributed generation resources in the country to their optimum potential.

9.20 The existing inter-regional transmission capacity of 11,450 MW connects Northern, Western, Eastern and North Eastern regions in a synchronous mode operating at the same frequency, and the Southern region asynchronously. This has enabled inter-regional energy exchanges of more than 12 billion kWh in a year, thus contributing to greater utilization of generation capacity and an improved power supply position. It is expected to achieve inter-regional capacity of 15,750 MW by the end of the Tenth Plan and 37,150 MW by the end of the Eleventh Plan. The plan also includes synchronous integration of Southern region with rest of the regions forming an all-India synchronous grid.

9.21 For encouraging competition in development of transmission projects, Ministry of Power has notified Tariff-Based Competitive Bidding Guidelines for Transmission Service under Section 63 of the Electricity Act, 2003. As per the provisions in these guidelines, an Empowered Committee under the chairmanship of Member, Central Electricity Regulatory Commission has been constituted with representatives from Ministry of Power, Planning Commission, CEA, Powergrid Corporation of India Ltd (PGCIL) and two experts from the power sector. This

Box 9.1 : Development of Merchant Power Plants

To facilitate the development of the electricity market, the Ministry of Power has issued the approach and guidelines on development of merchant power plants (MPPs). Unlike traditional utilities, MPPs compete for customers and absorb the full market risk. There is no guarantee regarding minimum off-take of their output. Typically the risk of a MPP is carried on the balance sheet of the promoter. MPPs can provide the additional generating reserves that India needs now and will need in the future. They are a modern, market-based answer – at least in part – to the energy challenges faced by the country. MPPs are a product of the restructuring of the electricity industry and they fill different niches in the market; some provide steady supplies to a power grid, while others fire up only when demand is at the highest and meet peak loads. Merchant power plants operating competitively help assure that power is produced with efficiency and supplied to locations where it is needed most. MPPs up to a capacity of 1,000 MW would be provided coal linkage, and captive coal blocks may also be provided to merchant power plants in the range of 500–1000 MW.

It would be essential that certain normative criteria are laid down for eligibility for coal blocks allotment, particularly to IPPs and merchant plans. These criteria could relate to net worth of the company, their internal resource generation and annual turn-over. The agencies being allotted the coal blocks may also be required to put in place bank guarantee of a reasonable amount which should be liable to be encashed if important milestones for development of coal mines are not achieved. The intermediate milestones may also include indicators concerning the development of power projects, such as award of Engineering Procurement and Construction (EPC) contracts, and commencement of construction. Success of this scheme would, to a great extent, depend on availability of reliable data and information for plant sites and other inputs in this capacity range so that developers then can take further appropriate action. An initiative to prepare such PFRs for various plant locations has been taken by the Ministry with CEA to provide the technical inputs for preparation of such reports and PFC, on the basis of advice of CEA, would engage various agencies to develop brief feasibility reports in a time-bound manner for about two dozen power plant locations with 500–1000 MW capacity. These reports may become available in 3-6 months time.

Committee has identified 14 transmission projects to be developed by the private sector through tariff -based competitive bidding. Rural Electrification Corporation (REC) and PFC have been entrusted the task of formulating Feasibility Report/DPR for these transmission lines and to invite bids under the supervision of the Empowered Committee.

Distribution reforms

9.22 Distribution reforms have been identified as the key area to infuse efficiency and commercial viability into the power sector. The 2002 privatization experience of Delhi has been encouraging so far (Box 9.2).

9.23 In February 2000, the Government of India introduced the Accelerated Power Development Programme (APDP), with the objective of initiating a financial turnaround in the performance of the state owned power sector, which was subsequently rechristened as Accelerated Power Development and Reforms Program (APDRP). There are two components under APDRP: “investment component” and “incentive component”. While the investment

component focuses on specific projects for up-gradation of sub-transmission and distribution network, the latter envisages incentivising State Governments up to 50 per cent of the actual total loss reduction by SEBs/ Utilities, as a grant. So far, an incentive amount of Rs 1,575 crore has been released to eight states.

Rural electricity initiatives under Rajiv Gandhi Grameen Vidyutikaran Yojna (RGGVY)

9.24 This scheme of Rural Electricity Infrastructure and Household Electrification was introduced in April, 2005 for achieving the NCMP objective of providing access to electricity to all rural households over a period of four years. At present, only 44 per cent of the rural households have access to electricity. REC is the nodal agency for the programme. The services of CPSUs have been offered to the State for assisting them in the execution of rural electrification projects as per their willingness and requirement. The management of rural distribution has been envisaged through franchisees to non-governmental organizations (NGOs), users’

Box 9.2 : Privatisation of the Power Sector in Delhi

The power sector in Delhi was unbundled in July, 2002 with the erstwhile Delhi Vidyut Board (DVB) being unbundled into one holding company, one generation company, one transmission company and three distribution companies. Each distribution company had 51 per cent equity participation from the private sector, with the remaining equity came from the Government of [full please] NCT of Delhi. The privatization was undertaken on the basis of bids in terms of reduction in aggregate technical and commercial (AT&C) losses. Each distribution company had to reduce the AT&C loss levels by at least 17 per cent over the five year period 2002-07. The AT&C loss levels at the beginning of the privatization process, the targets set for each year and the actual performance – in per cent – are as follows :-

Opening levels			2002-03	2003-04	2004-05	2005-06
BSES Yamuna Power Ltd.	57.2	Target	56.45	54.7	50.7	45.05
		Achievement	61.89	54.29	50.12	43.89
BSES Rajdhani Power Ltd.	48.1	Target	47.55	45.0	42.7	36.70
		Achievement	47.40	45.06	40.64	35.53
North Delhi Power Ltd.	48.1	Target	47.60	43.35	40.85	35.35
		Achievement	47.79	44.86	33.79	26.52

Besides other benefits, the actual AT&C level for each distribution company has been better than the respective target. The Cabinet on December 18, 2006 has approved an amendment to Electricity Act 2003 making power theft a cognizable offence.

associations, cooperatives or individual entrepreneurs. Panchayat institutions would be associated with the management.

9.25 Progress of implementation of RGGVY until February 9, 2007 was as follows:

- 28,241 villages have been electrified and 5,04,141 connections to BPL households have been released.
- 27 states and their utilities have signed Memorandum of Agreement agreeing to the conditionalities for implementation of the programme as envisaged under RGGVY.
- So far 317 projects for 316 districts have been sanctioned for 27 states at the cost of Rs.11,514.22 crore covering 69,534 un-electrified villages and 1.08 crore BPL households and 1,65,124 electrified villages have been covered for intensive electrification.
- Tenders have been issued for 273 projects covering 272 districts, 69,239 un-electrified villages and 92,02,889 BPL households.
- Contracts have been placed for 200 projects covering 175 districts to

electrify 61,012 un-electrified villages and 71,06,387 households.

- Four CPSUs — Power Grid Corporation (India) Ltd. (PGCIL), National Thermal Power Corporation (NTPC), National Hydro-electric Power Corporation (NHPC), Damodar Valley Corporation (DVC) — are working in 134 districts of Assam, Bihar, Chattishgarh, Gujarat, Jammu & Kashmir, Jharkhand, Madhya Pradesh, Orissa, Rajasthan, Tripura, Uttar Pradesh, and West Bengal.

Policy Initiatives

Rural electrification policy

9.26 On August 23, 2006, Government notified Rural Electrification Policy under section 4 & 5 of the Electricity Act, 2003. The policy aims at provision of access to electricity to all households by year 2009, quality and reliable power supply at reasonable rates, and minimum lifeline consumption of 1 unit per household per day as a merit good by year 2012.

Tariff policy

9.27 There exists considerable variation in the average tariff rate of electricity supply to

Table 9.9 : State-Wise average rate of electricity for domestic and industrial consumers*(As on July, 2006)*

Sl. No.	Name of Utility	Tariff effective from	Domestic 4 KW Total (P/K Wh)	Large industries 500 KW 40% LF (at 11 KV) Total (P/K Wh)
1.	Andhra Pradesh	01.04.2006	396.63	415.08
2.	Assam	01.04.2005	388.60	408.79
3.	Bihar	01.06.2001	237.18	244.34
4.	Chandigarh	01.08.2005	304.00	367.55
5.	Chattisgarh	01.07.2005	277.09	528.84
6.	Delhi (BSES/NDPL)	15.07.2005	346.50	580.96
	Delhi (NDMC)		252.25	-
7.	Goa	01.04.2002	170.75	362.44
8.	Gujarat (URBAN)	25.06.2004	516.46	501.82
	Gujarat (Ahmedabad Electrical Company Ltd.)	01.08.2002	433.39	449.52
9.	Haryana	15.08.2004	379.25	419.00
10.	Himachal Pradesh	08.07.2006	242.25	342.57
11.	Jharkhand	01.04.2005	183.00	442.93
12.	Karnataka – (Bangalore Metro Area)	10.10.2005	418.29	491.69
	Karnataka – (Other local bodies)		413.04	487.46
13.	Kerala	01.04.2004	398.89	421.28
14.	Madhya Pradesh – (continuous supply area)	01.04.2006	423.60	530.67
	Madhya Pradesh – (non-continuous supply area)		411.73	
15.	Maharashtra	01.12.2003	367.94	435.53
	Maharashtra – Mumbai – (TATA's)	01.06.2004	338.05	477.81
16.	Manipur	03.09.2002	299.70	341.16
17.	Mizoram	25.07.2005	195.00	107.02
	Mizoram – District headquarters		247.50	
18.	Meghalaya	01.10.2004	246.25	265.52
19.	Orissa	01.04.2006	247.00	401.94
20.	Pondicherry	16.04.2002	113.75	331.90
21.	Punjab	01.04.2006	374.15	413.20
22.	Rajasthan	01.04.2005	396.88	475.25
23.	Tamil Nadu	01.02.2006	216.25	494.41
24.	Uttaranchal	01.04.2006	215.00	298.89
25.	Uttar Pradesh	01.12.2004	339.75	466.38
26.	West Bengal	01.04.2005	299.35	498.72
	West Bengal – Kolkata – CESC	01.04.2005	460.28	485.13
	West Bengal – DVC	01.09.2000		345.10

Average rate includes tariff and duty/taxes.

Note : The average rates of electricity supply is computed by the CEA on the basis of tariff notifications and various electricity duties/taxes and fuel cost adjustment charges levied on it. The average rates have been computed assuming the same level of energy for various categories of consumers in different States/Union Territories.

Source : Central Electricity Authority.

domestic and industrial consumers (Table 9.9). Under the provisions of the Electricity Act 2003, Central Government has notified the tariff policy, evolved in consultation with the State governments, CERC and various stakeholders. To promote competition, the policy provides that all future requirements of power should be procured competitively, except in the case of one-time expansion of

existing projects, or where a state-controlled publicly owned company has been identified as the developer. A transition period of five years has been indicated for achieving the goal of developing generation and transmission projects in the public sector also through competitive bidding only. The policy lays down a timeframe for rationalization of electricity tariffs and mandates reduction of the cross

subsidies to within a band of $\pm 20\%$ by the end of year 2010-11. The policy clearly states that provision of free electricity is not desirable, as it encourages wasteful consumption of electricity and, in most of the cases, depletion of the water table. To facilitate choice of supply to the consumers through open-access in distribution, the policy provides unambiguous methodology for calculating cross-subsidy surcharge and its time bound reduction. It also lays down the mechanism for arranging back-up supply for such consumers.

9.28 The overall-weighted rate of electricity tariff has gone up by a cumulative 13.4 per cent between January 25, 2003 and January 20, 2007 (Table 9.10). The differential increases among the various categories reveal a healthy trend of reduction in cross-subsidies.

New Hydro-Policy

9.29 Section 63 of the Electricity Act provides for development of projects on the basis of competitive bidding for tariff. Sections 61 and 62 allow such projects developed on the basis of tariff to be fixed by the Regulator on the basis of capital cost and norms. In fact, the Electricity Tariff Policy notified in January 2006 also allows a special dispensation for project development by State and Central PSUs on the basis of capital cost and norm-based tariff to be determined by the

Regulatory Commission. This dispensation, allowed for PSUs, is now proposed to be made available for the same period of 5 years to promote hydro-power development even through the private sector route. The State would be required to follow a transparent process for selection of the developer.

9.30 This arrangement would have several advantages. While the initiative for allocation of the project would remain with the State Government (subject to the requirement of transparency in the allocation), the scrutiny of the regulator and the CEA would ensure that the project is being designed and built in the most optimal and economic manner, and that the interest of the consumers is adequately protected. From the point of view of the developer, this procedure would reduce numerous risks associated with the construction and operation and maintenance (O&M) of hydro projects

Guidelines for procurement of electricity

9.31 In compliance with section 63 of the Electricity Act, 2003, the Central Government on January 19, 2005 had notified guidelines for procurement of power by Distribution Licensees through competitive bidding. On March 31, 2006, Central Government has also issued the standard bid document containing request for qualification (RFQ), request for proposal (RFP) and model power purchase

Table 9.10 : Electricity tariffs

Effective Date rate	Over-all weighted use	For domestic use	For commercial use	For agricultural use	For industry traction	For railway
Wholesale Price Index (1993-94=100)						
25-Jan-03	241.0	241.9	254.6	261.6	220.5	240.8
24-Jan-04	250.8	255.9	264.7	268.7	230.9	246.4
22-Jan-05	254.8	254.3	251.2	274.7	238.0	248.8
21-Jan-06	261.8	254.1	255.0	291.8	239.9	248.6
20-Jan-07	274.7	263.8	259.9	315.7	246.0	251.8
Rate of increase of electricity tariffs (year-on-year per cent)						
24-Jan-04	4.07	5.79	3.97	2.71	4.72	2.33
22-Jan-05	1.59	-0.63	-5.10	2.23	3.07	0.97
21-Jan-06	2.75	-0.08	1.51	6.22	0.80	-0.08
20-Jan-07	4.93	3.82	1.92	8.19	2.54	1.29
Cumulative increase since January 23, 2003	13.98	9.05	2.08	20.68	11.56	4.57

Table 9.11 : Growth of telephones over the years*(in Million)*

	March, 03	March, 04	March, 05	March, 06	December, 06
Fixed lines	41.33	40.92	41.42	40.23	40.32
CDMA	0.61	9.46	15.92	32.67	44.17
GSM	12.69	26.15	41.03	69.19	105.43
Wireless (CDMA and GSM)	13.30	35.61	56.95	101.86	149.60
Gross Total	54.63	76.53	98.37	142.09	189.92
Annual growth (in per cent)		40	29	44	45

agreement (PPA) for long term procurement of power from projects having specified site and location.

Telecommunications

9.32 India's telecom sector has been one of the biggest success stories of market-oriented reforms, and India is now amongst the fastest growing telecom markets in the world. Supportive government policies coupled with private sector participation have fuelled the unprecedented expansion of this sector (Table 9.11). The announcement of the

New Telecom Policy, 1999 was a watershed event for telecommunications in India. Other policy milestones include the opening of the long-distance market in 2002, the termination of VSNL's monopoly over international traffic in the same year, and the resolution of the wireless in local loop issue. As a result, telecom tariffs which were among the highest in the world less than four years ago have now dipped to being among the lowest (Tables 9.12 and 9.13). Tele-density has also increased from 12.7 per cent in March 2006 to 16.8 per cent in December, 2006.

Table 9.12 : Tariff for national long distance (NLD) calls*(In Rupee per minute)*

Distance	2001	2002	March 2003 onwards	April 10 - Sept. 09, 2004	With effect from September 10, 2004	India One* Plans effective March 1, 2006
Upto 50 Kms	1.20	1.20	1.20	1.20	1.20	1.00
Above 50 Kms and up to 200 Kms.	4.80	4.80	2.40	2.40	2.40	1.00
Above 200 Kms and up to 500 Kms.	12.00	4.80	4.80	3.60	2.40	1.00
Above 500 Kms. And upto 1000 Kms.	18.00	9.60	4.80	3.60	2.40	1.00
Above 1000 Kms.	24.00	9.60	4.80	3.60	2.40	1.00

Table 9.13 : Tariff for international long distance (ILD) calls*(In Rupee per minute)*

Country	From Oct., 2003 to April 9, 2004	With effect from April 10, 2004 to Oct. 20, 2004	With Effect from Oct. 21, 2004 to May 20, 2005	With Effect from May 21, 2005 onwards	With Effect from October 1, 2006
United Kingdom	7.20	7.20	7.20	7.20	7.20
USA and Canada	9.60	7.20	7.20	7.20	7.20
Rest of Europe	9.60	9.60	9.60	9.60	9.60
South East Africa	12.00	9.60	9.60	9.60	9.60
SAARC countries	21.18	18.00	18.00	12.00	12.00
Sri Lanka	21.18	18.00	12.00	12.00	7.20
Kuwait, UAE, Oman & Qatar	24.00	18.00	18.00	12.00	9.60
Rest of the World	24.00	18.00	18.00	12.00	12.00

Table 9.14 : USO Fund : collections and disbursements

Year	2002-03	2003-04	2004-05	2005-06	2006-07@	Total
Collections	1653.61	2143.22	3457.73	3533.29	-	10787.85
Disbursements	300	200	1314.58	1766.85	650.76	4232.19
@ as on November 30, 2006						

9.33 The total number of telephones has increased from 54.63 million on March 31, 2003 to 142.09 million on March 31, 2006 and 189.92 million on December 31, 2006. While 43.72 million telephones were added during the twelve months of 2005-06, during the current year, about five million subscribers are being added every month. With this growth, the number of telephones is expected to reach 250 million by the end of 2007. The growth of wireless services has been phenomenal, with wireless subscribers growing at a compound annual growth rate (CAGR) of above 90 per cent per annum since 2003. Today the wireless subscribers are not only much more than the fixed subscribers in the country, but also increasing at a much faster pace. The share of wireless phones has increased from 24.3 per cent in March 2003 to 78.77 per cent in December, 2006. Improved affordability of wireless phone has made universal access objective more feasible. The number of internet subscribers grew at 25 per cent, while broadband subscribers grew from a meagre 0.18 million to 1.32 million, during 2005-06. It is necessary to increase the broadband connectivity for the knowledge-based society to grow quickly and for reaping the consequent economic opportunities.

9.34 Foreign direct investment (FDI) is one of the important sources to meet the huge funds that are required for rapid network expansion. The FDI policy provides an investor-friendly environment for the growth of the telecom sector. The total FDI approved and the actual inflow up to July, 2006 were Rs. 38,923.38 crore and Rs. 11,801.46 crore, respectively.

9.35 Of the more than 23.54 lakh public call offices (PCOs) functioning in the country, two lakh are in the rural areas. Apart

from this, 5.6 lakh village public telephones (VPTs) are also providing access to telecom facilities in the rural areas. The Mobile Grameen Sanchar Sewak Scheme providing telephone at the doorstep of villagers in about 12,000 villages is also in place.

9.36 The universal service obligation (USO) fund continues to be used to subsidise the development of the telecom sector in the rural areas (Table 9.14). From the USO fund, support is being provided for the following:

- Provision of VPTs in 66,822 villages and Rural Community Phones (RCPs) in 46,253 villages. Agreements for the same have been signed, and till December, 2006, 38,795 VPTs and 35,221 RCPs have been provided.
- Replacement of multi access radio relay (MARR) based VPTs — out of a total of 1.86 lakh such VPTs, 1.65 lakh have been replaced till November, 2006.
- Provision of new rural household direct exchange lines (DELs) in identified 1,685 net cost positive short distance charging areas (SDCAs) — more than 13 lakh rural DELs have been provided in these SDCAs till November, 2006.
- Maintenance of 18.65 lakh rural DELs installed between April 1, 2002 and March 31, 2005.

9.37 USO Fund is also proposed to be used for creating infrastructure for mobile and broadband services in rural areas. With this initiative, it may be expected to aid in the increase of rural tele-density. Mobile services being a key driver for increasing

tele-density in rural areas, there is a need to optimize the use of USO Fund to roll-out such services in rural areas.

Manufacture of telecom equipment

9.38 Indian telecom industry manufactures a complete range of telecom equipments using state of the art technologies designed specifically to match the diverse terrain and climate conditions. Production of telecom equipment has increased from Rs. 16,090 crore in 2004-05 to Rs.17,833 crore in 2005-06. Rising demand for a wide range of telecom equipment, particularly in the area of mobile telecommunication, has provided excellent opportunities to domestic and foreign investors in the manufacturing sector. A proposal for setting up Telecom Equipment and Services Export Promotion Council and Telecom Testing and Security Certification Centre (TETC) is in the pipe line. A large number of companies like Alcatel, Cisco etc. have also shown interest in setting up their research & development (R&D) centres in India. With the above initiatives, India is expected to become a manufacturing hub for telecom equipment.

Vision for the future

9.39 By the end of 2012, a total of 650 million telephone connections (including 66 million wired and 584 million wireless connections) are expected to be achieved. Concurrently, there is also a vision of providing 200 million rural telephone connections, which translates into a rural tele-density of 25 per cent.

Broadband connectivity would be made available on demand, without limiting the speed. Each village would have at least one broad-band enabled kiosk. Broad-band connection would be provided to schools, health centers and panchayat offices. It is also envisaged that internet and broad-band subscribers will increase to 40 million and 20 million, respectively, by 2010.

Posts

9.40 The Indian postal network is amongst the largest networks in the world in terms of area covered and population served (Table 9.15).The services on offer can be broadly classified into four categories: communication services (letters, post cards, etc.), transportation services (parcel, logistic post), financial services (savings bank, money order, international money transfer service, Public-Private Partnerships for extending financial service outreach through post office network, and Postal Life Insurance) and premium value-added services (speed post, business post, retail post, etc.). It may be emphasized that the Post Office Savings Bank is the largest savings bank in India in terms of network, accounts and annual deposits.

9.41 There is a significant subsidy element in the provision of postal services (Table 9.16) with user charges roughly covering only 78 per cent of the cash costs. This deficit is likely to increase from Rs. 1,375 crore in 2003-04 to Rs.1,379 crore in 2006-07(BE). Redefining the rationale, the mechanism and the size of

Table 9.15 : Postal network – international comparisons

Country	Permanent post office	Population served	Average area served (sq.km)	Employee
China	63,555	20,521	151	0.49
India	1,55,333*	6,623*	21.16*	0.53*
Indonesia	20,073	10,954	94.88	0.11
Malaysia	1,211	20,169	272.30	0.59
Sri Lanka	4,680	4,074	14.02	1.18
U.K.	15,868	3,734	15.31	3.24
USA	37,579	7,825	256.24	2.81

Source: Department of Posts.
* As on 31.3.2006.

Table 9.16 : Subsidy on postal services

Service	Subsidy per unit (Rs.)	Traffic (in million)	Total subsidy (Rs. Crore)
Post Card	6.39	270.68	172.83
Printed Post Card	0.92	78.00	7.15
Letter Card	4.52	280.99	127.04
Registration	15.90	192.36	305.81
Money Order	25.80	111.08	286.61
Reg. Newspaper			
(a) Single)	8.95	81.18	72.66
(b) Bundle)	15.10	8.28	12.51
Printed books	14.69	17.58	25.82
Parcel	23.78	40.99	97.46
Others	NA	NA	267.33
Total	NA	NA	1375.22

Source : Department of Posts.

the subsidy constitutes an important policy question at this juncture.

9.42 The spread of computers and communication technology has had profound implications for the postal system. Propelled by these new technologies, postal systems the world over, including India Post, are responding to these challenges by redefining their roles, developing and expanding their core competencies and even harnessing the very technologies that have challenged them. Presently, 8,163 post offices, which include all head post offices and major sub-post offices, are computerized for both counter and back office works. A National Data Centre (NDC) will also be set up in Delhi to connect all the computerized post offices by March 2007.

9.43 As a part of the 20th anniversary celebrations of Speed Post, the Department introduced One India One Rate Scheme under which the customer pays just Rs.25 for any consignment weighing up to 50 grams for any destination in India, excepting local. In a unique partnership with Ministry of External Affairs, Department of Posts assists Indian citizens in obtaining passports in a convenient

manner through the service of Speed Post Passport Service. Applications for passports are sold and accepted at 1,093 Speed Post circles and post offices in the country. The post office checks the completed application forms and forwards them to the passport office at no extra cost to the customer. Further, the issued passport is also delivered to the applicant through Speed Post. Filing of income tax returns has been made easy with the tie-up between Department of Posts and Ministry of Finance to file income tax returns through 187 Post Offices with effect from October 26, 2006. The total number of income tax returns filed through Post Offices till October 31, 2006 is 412,278. Service tax application returns are also being collected through post offices in Delhi.

Roads

9.44 India has one of the largest road networks in the world, aggregating to 3.34 million kilometers. The country's road network consists of Expressways, National Highways, State Highways, Major District Roads, Other District Roads and Village Roads. The road network comprises 66,590 km of National Highways, 1,28,000 km of State Highways, 4,70,000 km of Major District Roads and about 26,50,000 km of other District and Rural Roads. National Highways comprise only about 2 per cent of the total length of roads and carry about 40 per cent of the total traffic across the length and breadth of the country. Out of the total length of National Highways, 32 per cent is single lane/intermediate lane, 56 per cent is 2-lane standard and the balance of 12 per cent is 4-lane standard or more.

9.45 The National Highways Development Project (NHDP) – the largest highway project ever undertaken by the country – which is being implemented by the National Highway Authority of India (NHAI), consists of the following components:

- NHDP Phase I & II envisage 4/6 laning of about 14,279 kilometer of National Highways, at a total estimated cost of Rs.65,000 crore (at 2004 prices) These two phases comprise of Golden Quadrilateral (GQ), North-South and

East-West Corridors, Port Connectivity and other projects. The Golden Quadrilateral (GQ-5,846 km) connects the four major cities of Delhi, Mumbai, Chennai and Kolkata. The North-South and East-West Corridors (NS-EW-7,300 km) connect Srinagar in the North to Kanyakumari in the South, including spur from Salem to Kochi and Silchar in the East to Porbandar in the West.

- Government has approved upgradation of 4,035 km under NHDP Phase III-A at an estimated cost of Rs. 22,207 crore as also to take advance action in the form of preparation of the DPRs for the balance length (7,078 km) under Phase-IIIB.
- Government on October 5, 2006 has approved six laning of 6,500 km of national highways comprising 5,700 km of GQ and balance 800 km of other sections under NHDP Phase-V at a cost of Rs.41,210 crore.
- Government on November 2, 2006 has approved construction of 1,000 km of expressways with full access control on new alignments at a cost of Rs.16,680 crore under NHDP-Phase VI.

9.46 By November 30, 2006, 6,776 km of national highways pertaining to NHDP had been completed, the bulk of which (5,475 km) lie on the GQ (Table 9.17). Constraints faced in the timely completion of NHDP include

delays in land acquisition, removal of structures and shifting of utilities, law and order problem in some States, and poor performance of some contractors. Nearly 93 per cent works on GQ have been completed by November 2006, and the NS and EW corridors are expected to be completed by December 2009.

9.47 With the completion of about 93 per cent of the GQ, a substantial impact upon the economy is already visible. At this stage there is a need to focus attention on corridor management and road safety, and NHA has already put in place a corridor management policy.

Corridor management

9.48 The substantial completion of NHDP Phase-I, i.e. GQ, has called for a shift in emphasis to corridor management, i.e. the technique of managing the highways so as to deliver maximum throughput in terms of speed and traffic volume, while minimizing operational cost and enhancing road safety. The concept of corridor management is applied on the completed sections of NHDP through O&M contracts. The scope of work, inter-alia, includes road maintenance, road property management, incident management, traffic management and engineering improvements.

Financing of NHDP

9.49 For implementation of NHDP Phases I and II, the main source of finance of NHA is the fuel cess (Table 9.18). The present rate of

	NHDP						NHDP Total
	GQ	NS&EW Phase I & II	NHDP Phase III-A	NHDP Phase V	Port connectivity	Other	
Total length (km)	5846	7300	4035	6500	380	945	25006
Already four laned (km)	5474	853	30	-	131	287	6776
Under implementation (km)	371	5295	1090	148	228	638	7770
Contracts under implementation (No)	35	145	17	2	7	16	216
Balance length for award (km)	-	1053	2915	6352	21	-	10341

Table 9.18 : Financing of NHAI

Year	Cess funds	External assistance		Borrowings	Budgetary Support
		Grant	Loan		
1999-2000	1032	492	-	-	-
2000-01	1800	461	120	656.62	-
2001-02	2100	887	113	804.44	-
2002-03	2000	1202	301	5592.94	-
2003-04	1993	1159	290	-	-
2004-05	1848	1239	361	-	-
2005-06	3269.74	2400	600	10.1	1400.00
2006-07	6407.45	1582.5	395.5	-	110.00

(Rs. crore)

cess is Rs. 2 per litre on both petrol and diesel. A part of this cess is allocated to NHAI to fund the NHDP. This cess is leveraged to borrow additional funds from the domestic market. Besides, the Government of India has also negotiated various loans from World Bank (US\$1,965 million), Asian Development Bank (US\$1,605 million) and Japan Bank for International Cooperation (Jap. Yen 32,060 million) for financing various projects under NHDP. These loans from the multilateral institutions are passed on to NHAI by the Government partly in the form of grant and partly as loan. NHAI also negotiated a direct loan of US\$165 million from ADB for one of its projects. The funds provided to NHAI, including its borrowings from the market, are utilized for meeting project expenditure as well as debt servicing.

Public-private partnership (PPP):

9.50 Historically, investments in infrastructure, particularly in the highways, were being made by the Government mainly because of the large volume of resources required, long gestation period, uncertain return and associated externalities. The galloping resource requirements and the concern for managerial efficiency and consumer responsiveness in recent times have led to an active involvement by the private sector also. To encourage participation of the

private sector, the Department of Road Transport and Highways has laid down comprehensive policy guidelines for private sector participation in the highway sector. Government has also announced several incentives such as tax exemptions and duty-free import of road building equipments and machinery to encourage private sector participation. It has been decided that all the sub-projects in NHDP Phase-III to Phase-VII would be taken up on the basis of PPP on Build Operate and Transfer (BOT) mode. The private sector participation envisaged in Phase-II of NHDP has also been increased.

Special Accelerated Road Development Programme in the North Eastern Region (SARDP-NE)

9.51 The SARDP NE envisages widening of 3,228 km of national highways, improvement including widening of 2,500 km of State roads and 2-laning of 1,888 km of roads of strategic importance in the north-eastern region. This programme will provide at least 2-lane road connectivity to all State capitals and district head-quarters of all the eight North Eastern States, apart from providing improved connectivity to the backward areas and neighbouring countries. This programme will be implemented in two phases as follows:

Phase A: It consists of 1,110 km of national highways and 200 km State/general staff (GS) roads costing an estimated Rs. 4,618 crore.

Phase B: It involves improvement of 2,118 km national highways and 4,188 km State/GS Roads.

Government approved implementation of Phase A on September 22, 2005 and gave approval for preparation of DPRs for phase B on May 18, 2006.

9.52 A high-powered Inter-Ministerial Committee has been set up to approve and co-ordinate individual sub-projects under SARDP-NE. Up to December 27, 2006, the Committee has approved various sub-projects covering 452 km length at an estimated cost of Rs. 1,140 crore under Phase "A" of the programme.

Future plans

9.53 Government has set ambitious plans for upgradation of National Highways in a phased manner in the years to come. A presentation was made before the Committee on Infrastructure proposing the following projects in addition to the completion of the ongoing works included under NHDP Phase-I and Phase-II:

- 4-laning of 11,113 km (NHDP Phase-III) including 4,035 km already approved.
- Accelerated road development programme for the North Eastern region.
- 2-laning with paved shoulders of 20,000 km of national highways (NHDP Phase-IV).
- 6-laning of GQ and some other selected stretches covering 6,500 km (NHDP Phase-V).
- Development of 1,000 km of express ways (NHDP Phase-VI).
- Development of ring roads, bypasses, grade separators, service roads etc. (NHDP Phase-VII).

As a policy, Government has decided to take-up future phases of NHDP proposals mainly on a PPP basis. Implementation of projects through construction contracts will be only in exceptional cases where private sector participation is not possible at all.

Ports

9.54 Ports not only play a crucial role in facilitating international trade but also act as fulcrums of economic activity in their surroundings and hinterland. The country's coastline of 7,517 kms spread over 13 States/UTs is studded with 12 major ports and 187 non-major ports. Of the non-major ports, around 60 are handling traffic. The total traffic carried by both the major and minor ports during 2005-06 was estimated at around 570 MT. The 12 major ports carry about three-fourths of the total traffic, with Vishakapatnam as the top traffic handler in each of the last six years. Despite having adequate capacity and modern handling facilities, average turnaround time is 3.5 days as compared with 10 hours in Hong Kong, which undermines the competitiveness of Indian ports. Congestion is due primarily to the slow evacuation of cargo rather than a lack of handling capacity, since ports are not adequately linked to the hinterland. To this end, all port trusts have set up groups with representatives from NHAI, the Railways, and State governments to prepare comprehensive plans aimed at improving road-rail connectivity of ports. An efficient multimodal system, which uses the most efficient mode of transport from origin to destination, is a prerequisite for the smooth functioning of any port. It involves coordinating rail and road networks to ensure good connectivity between port and hinterland.

9.55 Traditionally, all over the world, the ownership of ports has been dominated by the public sector. But privatization of port facilities and services has now gathered momentum and India is also following the trend and an enabling policy framework has already been put in place. Depending on the nature of facility/service, private operators can enter into a service contract, a management contract, a concession agreement or a

Table 9.19 : Trends in traffic at major ports							
	2004-05	2005-06*	April – October		Change over previous year.		
			2005	2006*	2005-06	2006-07**	
			In million tonnes			In per cent	
1. P.O.L.	126.4	142.1	77.7	84.6	12.4	8.9	
2. Iron Ore	76.2	79.2	42.5	42.9	3.9	0.9	
3. Fertiliser & Raw Materials	9.7	12.2	6.8	7.5	25.8	10.3	
4. Food Grains	3.8	2.1	1.2	2.4	44.7	100.0	
5. Coal	52.6	58.8	34.5	32.7	11.8	-5.2	
6. Vegetable Oil	3.7	3.9	2.6	2.5	5.4	-3.8	
7. Other Liquids	10.3	10.8	6.3	6.0	4.9	-4.8	
8. Containerized Cargo	54.8	62.0	35.4	40.8	13.1	15.3	
9. Others	46.3	52.5	30.6	34.1	13.4	11.4	
TOTAL	383.8	423.6	237.6	253.5	10.4	6.7	
* Provisional							
** April-October, 2006							
Source : Department of Shipping							

divestiture to operate port services. Areas that have been opened up to the private sector on a BOT basis include construction of cargo-handling berths and dry-docks, container terminals and warehousing facilities and ship-repair facilities.

9.56 In 2006-07, up to October 2006, cargo handled by major ports registered growth of 6.6 per cent, down from 10.4 per cent observed in the corresponding seven months of 2005-06 (Table 9.19). About 80 per cent of total volume of ports' traffic handled was in the form of dry and liquid bulk, with the residual consisting of general cargo, including containerised cargo.

9.57 There was an impressive growth of 13.6 per cent per annum in container traffic during the five years ending in 2005-06. Half of the world's traded goods are containersied, and this proportion is expected to increase further. The largest container port in the world in 2005, Singapore, processed 23.19 million TEUs (twenty foot equivalent units). The 10th largest port, Los Angeles in the USA processed 7.49 million TEUs. In contrast, Jawaharlal Nehru Port (JNPT), India's largest container port, handled roughly 2.67 million TEUs in 2005-06.

9.58 The annual aggregate cargo handling capacity of major ports increased from 397.5 MT per annum (MTPA) in 2004-05 to 456.20 MTPA in 2005-06, with the average turnaround time increasing marginally from 3.4 days to 3.5 days in 2005-06. The average output per ship berth-day improved from 9,240 in 2004-05 to 9,267 tonnes in 2005-06. The pre-berthing waiting time at major ports on port account, however, increased from 6.03 hours in 2004-05 to 8.77 hours in 2005-06. Significant inter-port variations in pre-berthing waiting time continued to persist. (Table 9.20).

Civil Aviation

Airports

9.59 The operations, management and development of the airports at Delhi and Mumbai were handed over to the joint venture companies namely Delhi International Airport (P) Ltd. (DIAL) and Mumbai International Airport (P) Ltd. (MIAL). The strategic joint venture partners in DIAL are a consortium led by M/s GMR Group along with Fraport as the Airport Operator, and Malaysian Airports and India Development Fund as the other members. The joint venture partners together hold 74 per cent equity with the balance 26 per cent being held by Airports Authority of India (AAI).

Table 9.20 : Selected performance indicators for major ports

Sl. No.	Name of the Port	Average pre-berthing waiting time (hours) – on Port A/c			Average turnaround time (days)		
		2004-05	2005-06	April-October 2006	2004-05	2005-06	April-October 2006
		1. (a) Kolkata (Kolkata Dock Systems)	0.00	0.09	0.04	4.17	4.12
1. (b) Kolkata (Haldia Dock Complex)	7.42	30.37	27.60	3.00	4.00	4.02	
2. Mumbai	6.00	4.80	5.06	4.21	4.09	4.70	
3. Jawaharlal Nehru	8.35	7.40	6.24	1.84	1.96	1.85	
4. Chennai	0.90	0.90	0.80	3.90	3.30	3.40	
5. Cochin	4.16	2.94	0.44	2.33	2.13	2.18	
6. Vizag	1.11	1.54	0.96	3.20	3.80	3.51	
7. Kandla	16.56	19.68	36.00	4.62	4.39	5.49	
8. Mormugao	25.25	17.58	19.52	4.35	4.08	4.88	
9. Paradip	1.62	1.48	1.35	3.41	3.55	3.40	
10. New Mangalore	2.64	0.96	1.92	2.96	3.00	3.30	
11. Tuticorin	1.68	3.06	4.56	2.66	2.83	3.63	
12. Ennore	0.42	0.36	0.32	1.68	2.23	1.93	
All Major Ports	6.03	8.77	9.96	3.41	3.50	3.63	

Similarly, in case of MIAL, the strategic joint venture partners are a consortium comprising of M/s GVK Group along with Airport Company South Africa as the Airport Operator, and Bidest, South Africa as the other member. Various agreements/contracts for handing over the control of the two airports to DIAL and MIAL were executed in April 2006; and with effect from May 3, 2006, the transactions have become effective. The companies have since finalized their master plans for a 20 year period.

9.60 Construction work at greenfield airports of international standards at Hyderabad and Bangalore is in progress. The two airports are likely to be operational by the middle of 2008. State Governments are encouraged to set up greenfield airports with private sector participation. Proposals to set up greenfield airports in Navi Mumbai, Kannur in Kerala, Goa and Pakyong near Gangtok in Sikkim are in the pipeline. A greenfield international airport is already operational in Kochi.

9.61 Airports Authority of India (AAI) has decided to develop and modernize 35 non-metro airports in the country: Agati, Agartala,

Agra, Ahmedabad, Amritsar, Aurangabad, Bhopal, Bhubaneshwar, Chandigarh, Coimbatore, Dehradun, Dimapur, Goa, Guwahati, Imphal, Indore, Jaipur, Jammu Khajurao, Lucknow, Madurai, Mangalore, Nagpur, Patna, Port Blair, Pune, Raipur, Rajkot, Ranchi, Trichy, Thiruvananthapuram, Udaipur, Vadodara, Varanasi, and Vishakapatnam. The Committee on Infrastructure has approved the report of the task force for the development of 35 non-metro airports. Development of airports in NE Region will be taken up by AAI on a priority basis.

9.62 Through an Act of Parliament, Airport Economic Regulatory Authority (AERA) is proposed to be set up to fix, review and approve tariff structure for the aeronautical services and monitor pre-set performance standards at Indian airports. The Authority will ensure a level playing field for all categories of airport operators and also oversee and deal with natural monopoly and common user/carrier segments of airports. Government has adopted an overall liberal approach in the matter of grant of traffic rights under bilateral agreements with various foreign countries. A revised air services agreement was signed with USA that led to increased co-operation in

the aviation sector. Under this agreement, both sides can designate any number of services to any point in the territory of the other country with full intermediate and beyond traffic rights. Similarly, traffic rights were enhanced with 19 other countries — Australia, Belgium, Canada, China, Egypt, France, Germany, Italy, Japan, Kuwait, Mauritius, the Netherlands, New Zealand, Oman, Scandinavian countries, Singapore, Spain, UAE (Sharjah), UK — to provide for more flights and better connectivity with these countries and also more commercial opportunity to all operating carriers.

9.63 The signing of a new Air Services Agreement is the first milestone for the purpose of establishing air connectivity with new destinations. During the recent past, a number of new Air Services Agreements were initialled/signed based on modern practices in the civil aviation sector. Air Services Agreement with some countries were signed a long time ago and needed updating in view of the changed circumstances and developments in the international civil aviation scenario, and with respect to newer standards and recommended practices. Some of these countries are Australia, Brazil, Finland, Iceland, New Zealand, Qatar, Tunisia, UK and USA. The tourist charter guidelines were significantly liberalized in 2004. All airports in the country were opened for international tourist charters flights and Indian passport holders were also allowed to travel on the tourist charter flights. Recently, Government has decided to liberalise the tourist charter guidelines further.

Augmentation of fleet by airlines

9.64 A major fleet acquisition is underway by the national carriers, namely Indian Airlines, Air India and Air India Charters' Limited. The project of Indian Airlines for acquisition of 43 Airbus aircraft has been approved by the Government. The first A-319 from this batch of new aircraft joined the fleet of Indian Airlines Limited in October, 2006 and the remaining 42 aircraft will arrive in batches by March, 2010. After receiving Government approval,

Air India signed an agreement with M/s Boeing Company on December 30, 2005 for the acquisition of 8 B777-200 LR, 15 B777-300 ER, 27 B787 Dreamliner aircraft for itself, and 18 B737-800 aircraft for its subsidiary company Air India Charters Limited, which operates a low cost airline under the brand name Air India Express. These aircraft would be delivered to Air India between end of November, 2006 and December, 2011. Up to December, 2006, Ministry of Civil Aviation has issued no objection certificate for import/acquisition of 42 aircraft for scheduled operators, 62 aircraft for non-scheduled operators and 31 aircraft for private operators. Besides this, in principle approval for 135 aircraft was also granted to scheduled operators.

Commencement of new air services

9.65 During 2006, Air India Express started operations in the sectors Mangalore-Delhi-Amritsar-Dubai and Dubai-Chennai. Air India Express also took over Air India's Singapore operations from Chennai with effect from October 29, 2006. While Indian Airlines commenced operation in the sectors Bangalore-Bhubaneshwar-Bangalore and Delhi-Khajurao-Varanasi and return, Alliance Air started operation in the sector Chennai-Bhubaneshwar-Chennai. Several private sector airlines started new services both on metro and non-metro routes. Go Air and IndiGo were among the new airlines that started operations during the year. During 2006, private airlines have introduced 22 new routes.

Air traffic

9.66 Policy initiatives have had a marked impact upon airline traffic. The years 2004-05, 2005-06 and 2006-07 have been years of record growth in air traffic. During the period April-September, 2006, international and domestic passengers recorded growth of 15.8 per cent and 44.6 per cent, respectively, leading to an overall growth of 35.5 per cent. During the same period, international and domestic cargo recorded growth of 13.8 per cent and 8.7 per cent, respectively, resulting in an overall growth of 12.0 per cent.

Railways

9.67 Indian railways, world's second largest rail network under a single management, has been contributing to the development of the country's industrial and economic landscape for over 150 years. Of the two main segments of the Indian Railways — freight and passenger — the freight segment accounts for roughly two-thirds of revenues. Within the freight segment, bulk traffic accounts for nearly 95 percent, of which more than 44 percent is coal. Improved resource management, *inter alia*, through increased wagon load, faster turnaround time and a more rational pricing policy has led to an improvement in the performance of the railways during the last two years (Table 9.21).

9.68 In the process of rationalizing passenger and freight tariff structures since 2002-03, the relative index of AC First Class was reduced from 1400 to 1150 and AC 2-Tier from 720 to 650. There was a reduction

of about 18 per cent in the fares of AC First Class and 10 per cent in that of AC 2-Tier. It is expected that sustained rationalization measures over the coming years will sharpen the competitive edge of the Railways.

9.69 Rationalization of classification is aimed at securing eventual elimination of cross-subsidies in fares and freight, and evolving a more transparent and cost-based tariff regime. This process necessarily requires increase in freight rates for commodities being transported below cost and lowering the freight charges for commodities being moved at abnormally high rates.

9.70 In the freight segment, the number of commodities in goods tariff has been reduced from 4,000 commodities to 80 main commodity groups in 2005-06, and further to 27 groups in 2006-07. The total number of classes for charging freight has been reduced from 59 to 17.

Table 9.21 : Performance of the Indian Railways

	2004-05	2005-06**	April-December		Change over previous year	
			2005	2006	2005-06	2006-07@
(per cent)						
1. Revenue earning						
freight traffic (million tonnes)						
Total	602.10	666.51	481.09	527.95	10.70	9.74
i) Coal	271.40	294.25	213.61	226.18	8.42	5.88
ii) Raw materials for steel plant (excl. coal)	44.26	51.35	38.77	38.98	16.02	0.54
iii) Pig iron & finished steel from steel plants	15.24	17.74	11.90	14.94	16.40	25.55
iv) Iron ore for export	36.41	41.24	31.11	28.57	13.27	-8.16
v) Cement	53.77	61.19	41.46	53.93	13.80	30.08
vi) Foodgrains	46.52	41.74	29.67	29.47	-10.28	-0.67
vii) Fertilizers	28.75	32.65	24.50	26.23	13.57	7.06
viii) POL	32.00	33.45	25.04	26.19	4.53	4.61
ix) Balance (other goods)	73.75	92.90	65.03	83.46	25.97	28.34
2. Net tonne kilometres (billion)	407.40	439.60	317.26	346.24	7.90	9.14
3. Net tonne kms./wagon/day(BG) (broad gauge)	2677*	2872	2815	3075	7.28	9.24
4. Passenger traffic orig. (million)#	5378	5725	4327	4644	6.45	7.32
5. Passenger kilometres (billion)	576	616	472	514	6.94	8.90
* Revised	@ April-December	# Excluding Metro Kolkata				
Source : Ministry of Railways.						

9.71 The high-density network connecting the four metropolitan cities of Chennai, Delhi, Kolkata and Mumbai, including its diagonals, popularly called the Golden Quadrilateral has got saturated at most of the locations. Given the present growth scenario, the Railways expect to carry 95 million tonnes incremental traffic per year and about 1,100 million tonnes revenue earning freight traffic by the end of the Eleventh Plan. This entails large investment for capacity augmentation. Development of dedicated freight corridors (DFCs) for carrying additional traffic is essential in view of the high growth in demand. Therefore, the Railways have proposed a 2700-kilometer long railway line project (Eastern Corridor from Ludhiana to Sonnagar as Phase-I – 1,279 Kms. and Western Corridor from Jawaharlal Nehru Port near Mumbai to Dadri/Tughlakabad – 1,483 Kms). These DFCs along with the feeder routes of Indian Railways will ensure availability of sufficient capacity in the face of rising demand for transport. The Eastern Corridor will be extended to the proposed Deep Sea Water Port near Kolkata as and when traffic builds up. Both the Eastern and Western Corridors will be made suitable for running of longer and heavier trains of 25 tonne axle load. While the Eastern Corridor will be electrified, the Western Corridor will operate on diesel traction in order to permit Double Stack Container operation. Logistics parks are proposed to be developed on DFC. An SPV called Dedicated Freight Corridor Corporation of India Limited (DFC-CIL) has been formed to implement the project.

9.72 Accident per million train kilometer, an important index of rail safety, came down progressively from 0.55 in 2001-02 to 0.29 in 2004-05 and further to 0.28 in 2005-06 (Provisional). A Special Railway Safety Fund (SRSF) of Rs. 17,000 crore was set up in 2001-02 to wipe out the arrears in renewal/replacement of over-aged assets of track, bridges, rolling stock, signaling gear and some safety enhancement works within a fixed time frame of six years. The expenditure under SRSF in the first four and a half years was Rs. 12,965 crore. For the year 2006-07 (BE),

the allocation (net) for SRSF is Rs. 2,240 crore, with Rs. 1,365 crore from the general exchequer and Rs. 875 crore from the Ministry of Railways.

9.73 Indian Railway/Indian Railway Catering and Tourism Corporation (IRCTC) are developing facilities to meet the pressing requirements of good quality food to the traveling public and simultaneously enhancing railway revenue by introducing the concept of food plazas at stations. By the end of 2005-06, 36 food plazas have been operationalised. It has been decided to set up 100 budget hotels, adjoining the railway stations for the benefit of railway passengers and tourists, in general. The IRCTC would set up these hotels through private participation.

9.74 Although both passenger and freight traffic continues to increase every year, the manpower employed has been steadily reducing. The staff strength came down from 14.22 lakh to 14.11 lakh (provisional) between end-March, 2005 and end-March, 2006. In order to meet the rising expectations of customers, staff is being trained in customer care with special emphasis on the behavioral aspects.

Urban Infrastructure

9.75 Urban infrastructure consists of drinking water, sanitation, sewage systems, electricity and gas distribution, urban transport, primary health services and environmental regulation. The process of urbanization has gathered considerable momentum in recent times and this has put urban infrastructure and services under severe strain. For example, several cities in India have only two to four hours of water supply during the entire day. Smaller cities, because of inadequate financial resources, have found it particularly difficult to cope with the increasing demands on services.

Financing pattern

9.76 In terms of financing patterns, the foundation of urban infrastructure has to be user charges. It is possible for urban institutions to access funds from the capital

markets to finance a large portion of capital expenditure on urban infrastructure, which can be serviced by user charges in the future. While municipal bond issues have indeed taken place, the magnitude of resources raised is as yet insignificant. The user-charge financed approach can facilitate a massive increase in capital expenditure on urban infrastructure without worsening the fiscal problem. In addition, the tariff restructuring or subsidy design allows for more efficient and targeted impact on the poor.

9.77 In 2000-01, the Government inserted a new clause (vii) in Section 10(15) of the Income Tax Act, 1961, exempting interest income from bonds issued by local authorities. Funds raised from Tax Free Municipal Bonds are to be used only for capital investments in urban infrastructure. Ministry of Urban Development is the nodal agency for processing applications for issue of tax free bonds. Recently guidelines for issue of municipal tax-free bonds have been revised in consultation with the Ministry of Finance and circulated to all the State and UT Governments on March 7, 2006.

Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

9.78 Jawaharlal Nehru National Urban Renewal Mission (JNNURM) was launched to encourage cities to initiate steps to bring about improvement in the existing service levels in a financially sustainable manner. The objectives of the mission, *inter alia*, include planned development of identified cities including semi-urban areas, outgrowths and urban corridors and improved provision of basic services to the urban poor. It embraces two sub-missions: one on urban infrastructure and governance, and the other on basic services for the urban poor. Cities/Urban Agglomerations/Parastatals will be required to prepare detailed project reports for undertaking projects under identified areas. Funds for the identified cities would be released to the designated State Nodal Agency, which in turn would leverage, to the extent feasible, additional resources from the

financial institutions/private sector/capital market. Private sector participation in development, management and financing of urban infrastructure would be clearly delineated.

9.79 The admissible components under the sub-mission on urban infrastructure and governance include urban renewal, water supply (including de-salination plants) and sanitation, sewerage and solid waste management, urban transport, development of heritage areas, preservation of water bodies etc. A provision of Rs.50,000 crore has been agreed to as Central Assistance for JNNURM for a period of 7 years beginning from 2005-06.

9.80 An amount of Rs. 2,500 crore has been provided for in the year 2006-07 for the sub-mission on Urban Infrastructure and Governance. From April 2006 to February 2007 (i.e. as on February 12, 2007), City Development Plans have been submitted in respect of 39 cities of which 33 have appraised. The Memorandum of Agreement in respect of the reforms agenda have been negotiated and signed in respect of 32 cities. 315 DPRs have been submitted under the Mission of which 146 have been approved by the Central Sanctioning and Monitoring Committee of the Ministry of Urban Development. Projects worth Rs. 11,648 crore have been sanctioned and the additional central assistance committed is Rs. 5,583 crore.

Urban transport

9.81 Urban transport is one of the key elements of urban infrastructure. An effective urban transportation system enhances productivity and growth in the economy. Urban transportation covers two broad modes, viz. private transport and public transport. Public transport is energy-efficient and less polluting. Public transport system also helps to maximize urban-rural linkage and improves access of the rural/semi-urban population in the periphery to the city centres for the movement of labour without proliferation of slums within and around cities.

9.82 The major objective of urban transport initiative is to provide efficient and affordable public transport. A National Urban Transport Policy (NUTP) has been formulated with the objective of ensuring easily accessible, safe, affordable, quick, comfortable, reliable and sustainable mobility for all.

9.83 Revised guidelines for preparation of comprehensive city transport plans and DPRs have been prepared and circulated to all State Governments/UTs for availing of financial assistance to the extent of 40 per cent of cost as Central assistance under the present scheme of Urban Transport Planning. Detailed guidelines have also been formulated for the guidance of the States and cities and preparation of DPRs for both rail-based and road-based public transport.

9.84 Delhi and Kolkata have introduced Metro Rail system in their cities. Delhi Mass Rapid Transit System (MRTS), a joint venture between the Government of India and the Govt. of National Capital Territory of Delhi, is being implemented by the Delhi Metro Rail Corporation (DMRC). (Box 9.3)

9.85 For better connectivity within the National Capital Region (NCR) a commuter rail system, namely, Integrated Rail cum Bus Transit (IRBT) System, which constitutes Phase-I of the Regional Rapid Transit System (RRTS) for the NCR, is contemplated. The Planning Commission has set up a Task Force under the chairmanship of Secretary (UD) on May 22, 2006. The NCR Planning Board is in the process of awarding a consultancy study on an "Integrated Transportation Plan for National Capital Region". Based on the said study, the Regional Rapid Transit System (RRTS) Project is likely to be taken up during the Eleventh Plan.

9.86 The Bangalore Mass Rapid Transit System (MRTS) contemplates construction of metro corridors along East-West (18.1 km.) and North-South (14.9 km.) in Bangalore. The Government of Karnataka has got financial appraisal of the project conducted recently. The estimated completion cost of the project is Rs.5,605 crore. Bangalore Metro Rail Corporation (BMRC), a joint venture company, is executing the project, which is scheduled

Box 9.3 : Delhi Metro Rail System

Delhi Metro Rail System, technically known as Delhi Mass Rapid Transit System (MRTS) and popularly called Delhi Metro, has two phases.

Delhi MRTS Project Phase I, already completed, consists of the following corridors:

Line 1: Shahdara–Rithala;

Line 2: Vishwavidyalaya–Central Secretariat ;

Line 3: Barakhamba Road–Dwarka, and Extension of Line 3 to Dwarka sub-city and Barakhamba Road–Indraprastha.

Delhi MRTS Project Phase II (50.07 kms.), at an estimated cost of Rs.8,118 crore, approved by the Government with necessary sanction for implementation issued on March 30, 2006, consists of the following alignments:

1. Vishwavidyalaya–Jahangir Puri;
2. Central Secretariat–All India Institute of Medical Sciences (AIIMS);
3. AIIMS–Qutab Minar;
4. Shahdara–Dilshad Garden;
5. Indraprastha–New Ashok Nagar;
6. Yamuna Bank–Anand Vihar Inter-State Bus Terminus (ISBT); and
7. Kirti Nagar–Mundka.

As per decision of Group of Ministers (GoM), the proposals in respect of Indian Institute of Technology (IIT)–Qutab Minar portion (2.88 kms.) of the proposed Central Secretariat to Qutab Minar line was reviewed by DMRC and cost-benefit analysis of alternative proposals carried out in the context of its impact on the Qutab Minar. The revised alignment from Green Park to Ambedkar Colony via Hauz Khas, Sarvapriya Vihar, Malviya Nagar and Saket has been approved by the GoM on October 17, 2006.

Extension of Delhi Metro Phase-II to Gurgaon and NOIDA has been approved by the Government subject to certain conditions.

to be completed by 2011. The first section of 7 kms will be completed in 2009.

9.87 The Government of Maharashtra has proposed a MRTS for Versova-Andheri-Ghatkopar on the basis of Mumbai Metro Master Plan. The project — Mumbai Metro Rail Project — consists of two corridors. First corridor is of a total length of 11.07 kms. — Versova-Andheri-Ghatkopar. Completion cost is estimated at Rs. 2,356 crore and it is proposed to be funded through Viability Gap Funding (VGF). The second corridor is Colaba-Bandra-Charkop line of 38.23 kms length. Estimated cost is Rs. 8,825 crore (at June 2005 prices). While giving in-principle approval for the project, the Government of Maharashtra has been asked to exhaust the VGF route first.

9.88 To provide better public transport and ease congestion, proposals for Bus Rapid Transit System (BRTS) have been approved for Ahmedabad, Bhopal, Indore and Pune under JNNURM. These approved BRTSs covering a total length of more than 156 kms., have total estimated cost of Rs.1,408 crore, of which Central assistance is around Rs.670 crore. Considering the low cost, ease of implementation, wide area coverage and overall sustainability, a lot of cities are coming up with BRTS proposals to be funded under JNNURM.

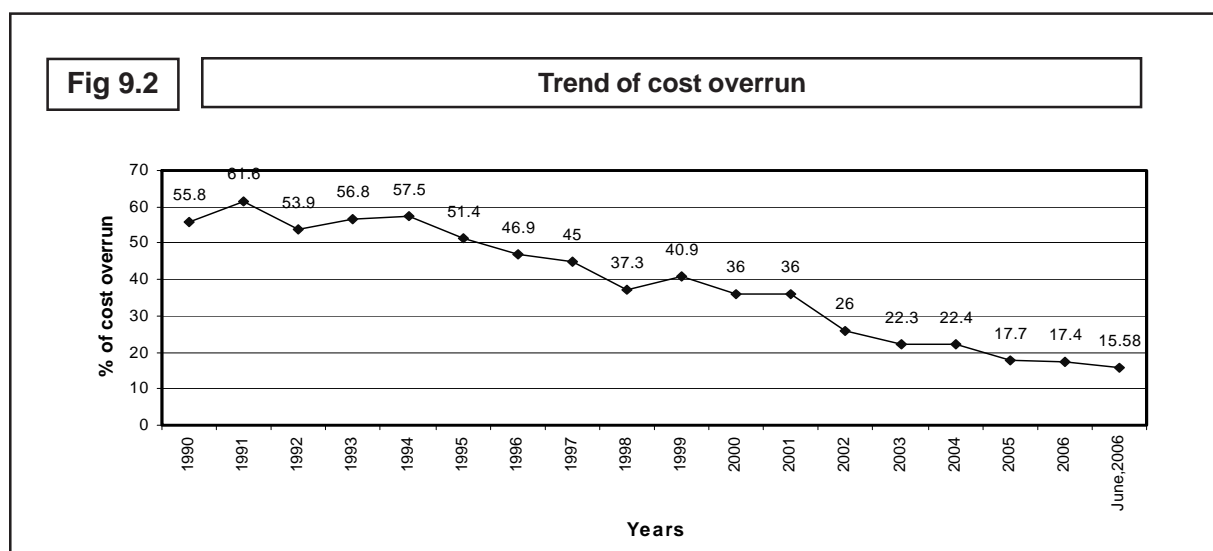
Implementation of Central Sector Projects

9.89 At the end of June 2006, there were 837 projects (each costing Rs. 20 crore and

above) with an estimated investment of about Rs.3,69,499 crore spread over 16 sectors: atomic energy, civil aviation, coal, fertilizers, mines, information and broadcasting, steel, petroleum, power, railways, road transport and highways, shipping and ports, telecommunications, urban development, water resources, and health and family welfare. Of these, 190 projects were having cost overrun to the tune of 43.3 per cent as compared to their latest approved estimates. There were 257 projects which had a time overrun, ranging from 1 to 159 months.

9.90 An analysis of the cost overrun of the projects shows that it is 15.6 per cent of the overall cost of the projects. The main sectors accounting for the cost overrun are railways, water resources, petroleum, atomic energy, civil aviation, power, health and family welfare, and urban development. Out of the total 837 projects, 233 projects accounted for nearly 65 per cent of the total cost overrun with respect to the original sanctioned estimates.

9.91 Time and cost overruns have declined because of close monitoring, policy changes and systemic improvement brought out by the administrative ministries concerned, with support from the Ministry of Statistics and Programme Implementation (MOS&PI). An analysis of the trend in the last 15 years shows that the cost overruns have come down from 61.6 per cent in March 1991 to 15.6 per cent in June 2006 (Figure 9.2).



9.92 An analysis of 476 projects each costing Rs. 100 crore and above at the end of September, 2006 shows that there was cost overrun of 10.2 per cent with anticipated cost of Rs. 3,44,830 crore as compared to the original sanctioned cost of Rs. 3,12,878 crore for these projects. The expenditure incurred on these projects at the end of September, 2006 was Rs. 1,18,779 crore, which is 34 per cent of the total anticipated cost.

9.93 In 2005-06, 91 projects costing Rs. 27,730 crore spread over 13 sectors were completed. The expenditure reported for these projects was Rs. 22,579 crore. These completed ones included projects in road transport and highways (28), power (12), coal (11), petroleum (9), telecommunication (7), railways (7), shipping and ports (5), urban development (3), steel (3), fertilisers (2), civil aviation (2), information and broadcasting (1), and health and family welfare (1) sectors.

9.94 During the current financial year, up to the end of September, 2006, 31 projects with an estimated cost of Rs. 23,817 crore were completed. The expenditure reported for these completed projects was Rs. 20,739 crore.

Public Private Partnership (PPPs) in Infrastructure

9.95 Government is actively pursuing PPPs to bridge the infrastructure deficit in the country. Several initiatives have been taken during the last three years to promote PPPs in sectors like power, ports, highways, airports, tourism and urban infrastructure. Under the overall guidance of the Committee of Infrastructure headed by the Prime Minister, the PPP programme has been finalized and the implementation of the various schemes is being closely monitored by the constituent Ministries/Departments under this programme.

9.96 The appraisal mechanism for the PPP projects has been streamlined to ensure speedy appraisal of projects, remove red tape, adopt international best practices and have uniformity in guidelines. An appraisal mechanism has been notified including the setting up of the Public Private Partnership Appraisal Committee (PPPAC) responsible

for the appraisal of PPP projects in the central sector. The committee has mandated detailed guidelines for submitting proposals and follows a pre-determined time frame for according approval to proposals submitted in a time bound manner. 29 proposals have so far been received from different central ministries for clearance by PPPAC, out of which 15 proposals involving a capital cost of Rs. 8,280 crore have been approved.

9.97 PPP projects involve long-term detailed contracts between Government and private parties spelling out the rights and obligations of both the contracting parties. Given the complex issues involved and the exposure of Government in such contracts, Committee on Infrastructure has mandated issue of model documents. Government has decided to create standardized frameworks based on due diligence rather than evolving agreements on a project-by-project basis. The agreements will be based on international practices and will create a framework with the right matrix of risk allocation obligations and returns. The Model Concession Agreement (MCA) for National Highways has been issued by the Committee on Infrastructure. Planning Commission has also issued MCAs for ports, state highways and operation and maintenance agreements for highways, though these are only for guidance and have not been approved by the Committee on Infrastructure. Guidelines for pre-qualification of bidders for PPP projects are also under finalisation and are expected to be issued shortly.

9.98 PPP is still a nascent concept in India, and expertise at the level of project authorities, both at the central and state levels, is limited. The awareness of concerns and issues relating to PPPs is still lacking and not evenly spread across the different States. A need was felt to provide capacity building in State Governments to enable them to prepare PPP proposals. To promote the PPP programme, all State Governments and Central Ministries have been advised to set up a PPP Cell with a senior level officer deputed as PPP nodal officer. It is proposed to provide assistance to states in this regard. Technical assistance

(TA) from the Asian Development Bank has been received for overall capacity building in State Governments for PPPs. The TA would fund strengthening of the PPP Cell of the respective State governments, including hiring of consultants and training of personnel.

9.99 A website on the PPPs in India has been set up by the Department of Economic Affairs. The updated status of the above programmes is available on the website *www.pppinindia.com*. A database on PPP projects in India is also being developed and the task has been outsourced to a private firm that will be responsible for collection, compilation and maintenance of the database.

Outlook

9.100 The drumbeats of infrastructure are gradually getting louder and in the next few years their rumble will be felt and heard all over the country. There exist strong, well recognized linkages between infrastructure on the one hand and economic growth and poverty alleviation on the other. Not only will infrastructure give a fillip to economic growth, but robust economic growth, in turn, by enhancing willingness to pay appropriate user charges, will promote investment in infrastructure. The outlook for infrastructural improvement looks promising. With experience gained in PPPs, formulation of model PPP and concession agreements, infrastructure investments should gain momentum over the coming months and year.

9.101 Short-term problems, however, are unlikely to disappear rapidly without resolute action. In power, for example, enough generation capacity will get added to wipe out

the shortages only over the medium term. Improving the short-term power outlook will critically depend on how fast success in slashing transmission and distribution losses from the near 40 per cent to 15 per cent is achieved. The successful financial turnaround of the railways has demonstrated that, given the will, the leakages in the power sector can also be plugged.

9.102 Outlook in infrastructure will depend on how investment in infrastructure is facilitated. Such investment requires long-term funds with long pay back periods, for example, from insurance and pension funds. Thus, success on the infrastructure front will be facilitated by the development of a vibrant bond market, and pension and insurance reforms. A single, unified exchange-traded market for corporate bonds would help create a mature debt market for financing infrastructure.

9.103 Progress on the roads and highways front will depend on how rapidly constraints such as delays in land acquisition, removal of structures and shifting of utilities, law and order problem in some States, and poor performance of some contractors are removed.

9.104 Urban infrastructure is a vital element of the Indian infrastructure scenario. The JNNURM is a significant move to address the creaking urban infrastructure, but comprehensive planning and effective monitoring are essential to take this scheme successfully to its logical conclusion. Outlook on urban infrastructure, however, will depend critically on how fast the finances and functional efficiency of urban local bodies are improved.

Social Sectors

Progress towards sustained improvement in the quality of life of the people in general and the poor in particular continued as reflected in the UNDP's global Human Development Report (HDR) for 2006 which ranks India in terms of the Human Development Index (HDI) at 126, up one rank from last year, among the countries with medium human development out of 177 countries of the world (Table 10.1). In terms of the Gender Development Index (GDI), however, India showed a marked improvement from the 105th rank in 2000 to 96th rank in 2004.

10.2 Progress on the social sector front, however, continued to be slow as reflected in India's latest HDI ranking being lower by two compared to 2000. While the comparable absolute values of the three dimensional (income, health and education) HDI for India has improved consistently over the years, the

relative ranking of India has remained sticky. Some countries in the region have done better than India.

10.3 The paramount need for making rapid strides in living standards, health, education, gender justice, welfare and development of scheduled castes (SCs), scheduled tribes (STs) and other backward castes (OBCs) continues. The Approach Paper to the Eleventh Plan categorically states that the Plan will seek to reduce poverty, disparities across regions and communities by ensuring access to basic physical infrastructure as well as health and education for all, and recognize gender as a cross-cutting theme across all sectors. While the Approach Paper provides the assurance, some major initiatives consistent with the broad outlines of social sector development agenda laid down by the National Common Minimum Programme (NCMP) have already been taken in 2006-07 (Box 10.1)

Table 10.1 : India's global position on human and gender development

Country	Human development index (HDI)		HDI Rank		Gender development index (GDI)		GDI Rank	
	2000	2004	2000	2004	2000	2004	2000	2004
Norway	0.956	0.965	1	1	0.941	0.962	3	1
Australia	0.947	0.957	5	3	0.956	0.956	1	3
Sri Lanka	0.747	0.755	89	93	0.737	0.749	70	68
China	0.730	0.768	96	81	0.699	0.765	77	64
Indonesia	0.682	0.711	110	108	0.678	0.704	91	81
India	0.577	0.611	124	126	0.560	0.591	105	96
Pakistan	0.511	0.539	138	134	0.468	0.513	120	105
Bangladesh	0.510	0.530	145	137	0.468	0.524	121	102
Nepal	0.500	0.527	142	138	0.470	0.513	119	106
Mozambique	0.364	0.390	170	168	0.307	0.387	144	128
Niger	0.268	0.311	172	177	0.263	0.292	146	136

Source : UNDP Human Development Report (HDR) 2002 & 2006.

Box 10.1 : Major initiatives in the Social Sector in 2006-07

- The **National Rural Employment Guarantee Scheme (NREGS)** launched on February 2, 2006 has been made fully operational in 200 backward districts of the country. Allocation for three rural employment schemes, i.e., SGRY, NREGS and SGSY, in 2006-07 is Rs. 15,500 crore, of which Rs. 11,300 crore is for NREGS.
- Allocation for **Bharat Nirman**, the programme for building infrastructure and providing basic amenities to rural areas, has been enhanced by 54 per cent from Rs. 12,160 crore in 2005-06 to Rs. 18,696 crore in 2006-07.
- Provision for **health and education** in 2006-07 enhanced by 22.0 per cent and 31.3 per cent, respectively, to Rs. 12,564 crore and Rs. 24,115 crore, respectively.
- The allocation for **Mid-Day Meal (MDM) Scheme**, the largest school lunch programme in the world covering 12 crore children, has been enhanced from Rs.3,345 crore in 2005-06 to Rs. 5,348 crore in 2006-07.
- Provision for **Rajiv Gandhi National Drinking Water Mission** (for rural drinking water supply) has been increased from Rs. 4,050 crore to Rs. 5,200 crore between 2005-06 and 2006-07.
- Allocation for **National Rural Health Mission**, launched on April 12, 2005, increased from Rs. 6,731 crore to Rs. 9,065 crore between 2005-06 and 2006-07.
- Against an estimated outlay of Rs. 6,250 crore for the **Jawaharlal Nehru National Urban Renewal Mission** for 2006-07, Rs. 4,595 crore has been provided as grant component.
- Old age pensions granted to destitute persons of 65 years and above under the **National Social Assistance Programme (NSAP)** has been increased from Rs. 75 per month to Rs. 200 per month. The Central grant allocated on this account is Rs. 2,800 crore during 2006-07.
- Allocation for schemes exclusively for **welfare and development of SCs and STs** has been enhanced by 14.5 per cent to Rs. 2,902 crore in 2006-07.

10.4 Central government expenditure on social services including rural development have gone up consistently over the years increasing from Rs. 18,240 crore in 1995-96

to Rs. 87,607 crore in 2006-07 (BE) (Table 10.2). While most social sector subjects fall within the purview of the States, Central support for social programmes has

Table 10.2 : Central Government expenditure (Plan and Non-Plan) on social services and rural development

(Rs. Crore)

Social service	1995-96	2001-02	2002-03	2003-04	2004-05	2005-06 (RE)	2006-07 (BE)
1. Social Service							
a. Education, Sports, Youth Affairs	3,630	8,642	9,885	10,928	13,985	18,018	23,530
b. Health & Family Welfare	2,542	5,977	6,521	7,195	8,191	9,988	12,941
c. Water Supply, Housing etc.	1,756	5,989	6,815	7,892	9,023	9,759	10,375
d. Information & Broadcasting	596	1,284	1,395	1,300	1,319	1,557	1,594
e. Welfare of SC/ST and OBC	800	1,093	1,152	1,132	1,322	1,482	1,763
f. Labour & Employment	507	847	771	833	1,002	1,262	1,478
g. Social Welfare & Nutrition	1,270	2,620	2,372	2,343	2,580	3,799	4,673
h. North-Eastern areas	-	-	-	-	-	7,884	9,571
i. Other Social Services	530	2,010	438	713	1,701	2,220	802
Total	11,631	28,462	29,349	32,336	39,123	55,969	66,727
2. Rural Development	6,609	6,241	11,960	12,226	9,514	14,250	15,654
3. i) Pradhan Mantri Gramodaya Yojana (PMGY)*		2,533	2,600	2,400	2,766	-	-
ii) Pradhan Mantri Gram Sadak Yojana (PMGSY)*		2,500	2,500	2,325	2,461	4,220	5,226
4. Social Service, Rural Dev., PMGY and PMGSY (1+2+3)	18,240	39,736	46,409	49,287	53,864	74,439	87,607

* : Launched in 2000-01 (BE) as a new initiative for basic rural needs. However, PMGY has been discontinued from 2005-06.

Source : Budget documents.

continued to expand in various forms. While part of the normal central assistance gets integrated into annual plans of States for social sector development, the major programme-specific funding to States is through the Centrally Sponsored Schemes (CSS). Pattern of funding for schemes, however, varies depending on not only the importance attached to the sectors, but also the inability of the States to pledge huge resources for large interventions. For example, about 90 per cent central grant is available for programmes like the National Rural Employment Guarantee Scheme (NREGS) and Mid-Day-Meal (MDM) Scheme, while for certain other schemes, State share of funding may go up to as much as 50 per cent.

10.5 The emphasis on social sector is also reflected in the increasing trend of expenditure on social services by the general government (Centre and States combined) in recent years (Table 10.3). Expenditure on social sectors, as a proportion of total expenditure, after decreasing from 21.4 per cent in 2001-02 to 19.7 per cent in 2003-04, increased to 22.2

per cent in 2006-07 (BE). The corresponding increases in the share of total expenditure for education and health were from 9.7 per cent to 10.6 per cent, and from 4.4 per cent to 5.1 per cent, respectively.

Poverty

10.6 Planning Commission, as the Government's nodal agency, estimates the incidence of poverty at the national and state levels, on the basis of large sample survey on household consumer expenditure conducted by the National Sample Survey (NSS) Organisation approximately every five years. The provisional data of the latest NSS 61st Round for the year 2004-05 indicate that, the poverty ratio at the national level was 27.8 per cent if the Uniform Recall Period (URP, in which the consumer expenditure data for all the items are collected from a 30-day recall period) is used, and about 22 per cent if the Mixed Recall Period (MRP, in which the consumer expenditure data for five non-food items, namely, clothing, footwear, durable goods, education and institutional medical

**Table 10.3 : Trends of social sector expenditure by General Government
(Centre and State Governments combined)**

ITEMS	2001 -02 Actual	2002 -03 Actual	2003-04 Actual	2004 -05 Actual	2005 -06 RE	2006-07 BE
In rupees crore						
Total expenditure	644,746	704,904	796,384	869,757	1,009,668	1,114,929
Expenditure on social sector	137,843	145,226	156,893	177,016	222,210	247,572
Education	68,071	72,535	76,878	85,793	102,628	117,812
Health	28,578	31,457	34,822	39,078	50,164	56,932
Others	41,194	41,234	45,193	52,146	69,418	72,828
(In per cent)						
As percentage of GDP:						
Total expenditure	28.26	28.77	28.85	27.82	28.30	27.19
Expenditure on social sector	6.04	5.93	5.68	5.66	6.23	6.04
Education	2.98	2.96	2.79	2.74	2.88	2.87
Health	1.25	1.28	1.26	1.25	1.41	1.39
Others	1.81	1.68	1.64	1.67	1.95	1.78
As percentage of total expenditure:						
Expenditure on social sector	21.4	20.6	19.7	20.4	22.0	22.2
Education	10.6	10.3	9.7	9.9	10.2	10.6
Health	4.4	4.5	4.4	4.5	5.0	5.1
Others	6.4	5.8	5.7	6.0	6.9	6.5
As percentage of social sector expenditure						
Education	49.4	49.9	49.0	48.5	46.2	47.6
Health	20.7	21.7	22.2	22.1	22.6	23.0
Others	29.9	28.4	28.8	29.5	31.2	29.4

Source : Budget documents of Union and State Governments/RBI.

expenses, are collected from a 365-day recall period, and the consumption data for the remaining items are collected from a 30-day recall period) is used. The corresponding URP-based poverty estimate for 1993-94 was 36.0 per cent. The MRP-based poverty estimate of about 22 per cent in 2004-05 is roughly but not strictly comparable with the poverty estimates of 26.1 per cent in 1999-2000.

Poverty alleviation and employment generation programmes

10.7 To accelerate the reduction in poverty and increase in employment, a number of poverty alleviation, employment generation and basic services programmes are being implemented at present (Box 10.2). Fully recognising the centrality of the panchayats in effectively implementing poverty alleviation and most other social sector programmes, Government has set up the Ministry of Panchayati Raj to carry forward the process of empowerment of panchayati raj institutions (PRIs). A number of steps have been taken to devolve functions to PRIs in line with the Constitutional mandate. The annual outlay for this sector for 2006-07(BE) of Rs.3,825 crore includes Rs.3,750 crore for the newly created Backward Regions Grant Fund (BRGF) for the 250 most backward districts of the country.

Employment and unemployment

10.8 Like for poverty, the latest and seventh quinquennial NSS survey, namely the 61st

round conducted during July 2004-June 2005, constitutes an important source of information on employment and unemployment. The 61st round of the NSSO survey reveals a faster increase in employment during 1999-2000 to 2004-05 as compared to 1993-94 to 1999-2000 (Table 10.4).

10.9 The Tenth Five Year Plan (2002-07) aimed at provision of gainful and high quality employment in excess of addition to the labour force to reduce the number of unemployed significantly by the end of the Plan. The Tenth Plan advocated the need to increase the employment content of growth by promoting sectors and activities, which employ more labour per unit of output. On the whole, the Tenth Plan aimed at the creation of approximately 50 million employment opportunities – 30 million from the normal process of growth and additional 20 million from special initiatives – during a period of five years. The results of the 61st NSSO round show that above 47 million persons were provided employment during 2000 to 2005.

10.10 Net annual addition to employment on Usual Principal Status (UPS) basis went up from 5.47 million during 1993-94 to 1999-2000 to 9.58 million during 1999-2000 to 2004-05. Simultaneously, however, according to the 61st round estimates, during 1999-2000 to 2004-05, labour force grew even faster at an annual 2.54 per cent compared to annual employment growth of 2.48 per cent. As a result, despite the faster growth of employment, unemployment (on UPS basis) was higher at 3.06 per cent of the labour force

Table 10.4 : Employment and unemployment (by Usual Principal Status)

	1983	1993-94	1999-2000	2004-05	1983 to 1993-94	1993-94 to 1999-2000	1999-2000 to 2004-05
	In million				Growth in per cent per annum		
Labour Force	277.34	343.56	377.88	428.37	2.06	1.60	2.54
Workforce	269.36	334.54	367.37	415.27	2.09	1.57	2.48
Number of unemployed	7.98	9.02	10.51	13.10
As a proportion of labour force in per cent							
Unemployment rate	2.88	2.62	2.78	3.06

Source : Various rounds of NSSO Survey on employment and unemployment.

**Box 10.2 : Poverty alleviation, employment generation and basic services programmes:
current Status**

(a) Pradhan Mantri Gram Sadak Yojana (PMGSY)

Launched on December 25, 2000 as a 100 per cent Centrally Sponsored Scheme (CSS), the primary objective of PMGSY is to provide all-weather connectivity to all the eligible unconnected habitations in the rural areas. Up to December 2006, with cumulative expenditure of Rs. 18,281 crore about 107,569 km of road works has been completed.

(b) Indira Awaas Yojana (IAY)

IAY is a CSS funded on cost-sharing basis between the Centre and the States in the ratio of 75:25. In the case of UTs, the entire funds are provided by Centre. The target groups for housing under IAY are households below poverty line living in rural areas, particularly those belonging to SC/ST and freed bonded labourers. Up to December 2006, with cumulative expenditure of Rs. 29,246.27 crore, 153 lakh houses have been constructed/ upgraded.

(c) Swarnjayanti Gram Swarozgar Yojana (SGSY)

SGSY, a holistic self-employment generation programme, was launched from April 1, 1999 by restructuring the earlier Integrated Rural Development Programme (IRDP) and allied programmes. The emphasis of SGSY is on a focused approach to poverty alleviation, capitalising advantages of group lending and overcoming the problems associated with a multiplicity of programmes. SGSY is funded on the same sharing basis as IAY. Up to December 31, 2006, 24.38 lakh self-help groups (SHGs) have been formed and 73.25 lakh swarozgaris have been assisted with a total outlay of Rs.16,443.66 crore.

(d) Sampoorna Grameen Rozgar Yojana (SGRY)

SGRY, launched on September 25, 2001 to provide additional wage employment in the rural areas, has a cash and food grains component. The cash-component of SGRY is funded on the same sharing basis as IAY and SGSY, while foodgrains are provided free of cost to the States and UTs. In 2005-06, 82.18 crore person-days of employment were generated with the Centre releasing Rs. 5497.43 crore as cash component and about 37.30 lakh tonnes of food grains to the States/UTs. Besides, under the special component of the SGRY, with the States/UTs meeting the cash components, Centre released 15.64 lakh tonnes of food grains to the 11 calamity affected States. In 2006-07 up to October 31, 2006, the number of person-days of employment generated under SGRY was 18.41 crore while the Centre's contributions in terms of cash and food grains component up to December 31, 2006 were Rs. 2,762 crore and 16.67 lakh tonnes, respectively. Under the special component, about 4.44 lakh tonnes of food grains have been released to calamity-hit States in the current year up to December 2006.

(e) DPAP, DDP and IWDP

Drought Prone Areas Programme (DPAP) was launched in 1973-74 to tackle the special problems faced by areas constantly affected by severe drought conditions. While Desert Development Programame (DDP) was launched in 1977-78 to mitigate the adverse effects of desertification, the Integrated Wasteland Development Progrmame (IWDP) has been under implementation since 1989-90 for the development of wastelands/ degraded lands. The basis of implementation of all three programmes has been shifted from sectoral to watershed basis from April 1995. So far, in 2006-07 up to January 31, 2007, 3,076 new projects covering 15.38 lakh ha, 2,270 new projects covering 11.35 lakh ha and 463 new projects covering 21.08 lakh ha have been sanctioned under DPAP, DDP and IWDP, respectively.

(f) Swarna Jayanti Shahari Rozgar Yojana (SJSRY)

In December 1997, the Urban Self-Employment Programme (USEP) and the Urban Wage Employment Programme (UWEP), which are the two special components of the SJSRY, substituted for various programmes operated earlier for urban poverty alleviation. The SJSRY is funded on the same sharing basis as IAY and SGSY. The number of urban poor assisted for setting up micro/group enterprises in 2005-06 was 0.98 lakh against a target of 0.80 lakh; while in the current year, against a target of 1.20 lakh, 0.53 lakh was achieved by December 31, 2006. The number of urban poor imparted skill training in 2005-06 was 1.42 lakh against a target of 1 lakh. In the current year, against a target of 1.50 lakh, 0.72 lakh was achieved by December 31, 2006. Under UWEP, the mandays of employment generated was 43.48 lakh in 2005-06 and 1.78 lakh in the current year till now. Coverage of beneficiaries under the community structure component was 337.4 lakh both in 2005-06 and the current year up to December 31, 2006.

(g) Valmiki Ambedkar Awas Yojana (VAMBAY)

VAMBAY, launched in December 2001, facilitates construction and upgradation of dwelling units for slum dwellers, and provides a healthy and enabling environment through community toilets under Nirmal Bharat

Abhiyan, a component of the scheme. The Central Government provides a subsidy of 50 per cent, with the balance provided by the State Governments/Union Territories. Cumulatively, up to March 2006, Rs. 936.63 crore had been released as Central subsidy for the construction/upgradation of 4,58,630 dwelling units and 65,331 toilets seats. For 2006-07, Central allocation of Rs. 75 crore has been made for meeting the committed liabilities for on-going projects. VAMBAY has been subsumed in Integrated Housing and Slum Development Programme (IHSDP) launched along with Jawaharlal Nehru National Urban Renewal Mission (JNNURM) on December 3, 2005.

(h) Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

JNNURM, which is for a seven year period from 2005-06, has two main components – Basic Services to the Urban Poor (BSUP) Programme and Integrated Housing and Slum Development Programme (IHSDP). BSUP was launched to assist cities and towns in taking up housing and infrastructural facilities for the urban poor in 63 selected cities in the country. IHSDP for taking up housing and slum upgradation programmes in non-BSUP cities was launched along with BSUP in December 2005. The allocation for JNNURM in 2006-07 (BE) is Rs. 4,900 crore.

(i) National Rural Employment Guarantee Scheme (NREGS)

With the NREG Act being passed in September, 2005, the NREGS was implemented from February 2, 2006 in 200 identified districts of the country with the objective of providing 100 days of guaranteed unskilled wage employment to each rural household opting for it. The ongoing programmes of SGRY and National Food for Work Programme (NFFWP) have been subsumed under NREGS in these districts. NREGS will cover all districts of the country within five years. The NREGS, a demand-driven scheme, has its focus on works relating to water conservation, drought proofing (including afforestation/tree plantation), land development, flood-control/protection (including drainage in waterlogged areas) and rural connectivity in terms of all-weather roads. Of the Rs. 11,300 crore allocated for NREGS in 2006-07(BE), Rs. 6,714.98 crore was released up to January 31, 2007. Till January 31, 3.47 crore job cards have been issued; and of the 1.50 crore households who have demanded employment, 1.47 crore households have been provided employment. Under the scheme, up to December 2006, of the 53.65 crore person-days of employment generated, 21.13 crore were for women; and of about 5.81 lakh works taken up, 2.34 lakh were completed.

in 2004-05 compared to 2.78 in 1999-2000. Incidence of unemployment had come down from 2.88 per cent in 1983 (38th round) to 2.62 per cent in 1993-94 (50th round).

10.11 It appears that the increase in unemployment between the 55th and 61st

rounds of NSSO was primarily because of an increase in such unemployment incidence for females, both in the rural and urban areas (Table.10.5). Furthermore, while unemployment among males declined in terms of UPS and current weekly status (CWS), it increased by the current daily status

Table 10.5 : Unemployment rates for 55th round (1999-2000) and 61st round (2004-05) of the NSSO

(all-India)

Round	Rural					
	Males			Females		
	Usual	CWS	CDS	Usual	CWS	CDS
55th (1999-2000)	2.1	3.9	7.2	1.5	3.7	7.0
61st (2004-05)	2.1	3.8	8.0	3.1	4.2	8.7
Round	Urban					
	Males			Females		
	Usual	CWS	CDS	Usual	CWS	CDS
55th (1999-2000)	4.8	5.6	7.3	7.1	7.3	9.4
61st (2004-05)	4.4	5.2	7.5	9.1	9.0	11.6

Usual: Usual Principal Status, CWS: Current Weekly Status, CDS: Current Daily Status
Source: NSSO's 61st Round Survey on Employment and Unemployment conducted during July 2004 - June 2005.

(CDS) both in rural and urban areas. There are analytical differences (for example, chronic unemployment versus that of the intermittent and disguised variety) in the nature of unemployment according to the UPS, CWS and CDS status. More expert analysis of the recently released data from the 61st NSSO round will reveal the root causes as well as the probable remedies.

10.12 The reversal of the declining trend in employment growth – from an annual 2.1 per cent in the ten years ending in 1993-94 to 1.6 per cent in the five years ending in 1999-2000 to 2.5 per cent in the five years ending in 2004-05 is an encouraging development. Nevertheless, there is need for faster employment growth for not only absorbing the addition to the labour force, particularly with the ongoing demographic changes, but reducing the unemployment rate. The share of agriculture in total employment has come down from 61.67 per cent in 1993-94 to 58.54 per cent in 1999-2000, and further to 54.19 per cent in 2004-05. With the declining share of agriculture in GDP, the scope for absorbing substantial additional labour force in agriculture appears limited. While construction and services, particularly transport, storage & communication, contributed in maintaining employment growth in the economy, employment growth in manufacturing fell short of its potential.

Employment in Organized Sector

10.13 Employment growth in the organized sector, public and private combined, declined during the nineties. Annual employment growth in establishments covered by Employment Market Information System of

Ministry of Labour decelerated from 1.20 per cent during 1983-1994 to –0.38 per cent per annum during 1994-2004 (Table 10.6).

10.14 This deceleration happened in spite of an acceleration in annual employment growth in the private sector from 0.44 per cent to 0.61 per cent during the reference periods, as this acceleration was not enough to make up for the corresponding decline of employment in the public sector. However, the latter decline was mainly due to a decrease in employment in public sector establishments, whereas the private sector showed acceleration in the pace of growth in employment from 0.44 per cent to 0.61 per cent per annum (Table 10.6). While the rightsizing of the public sector, whose primary objective is to deliver essential services such as education, health, roads and irrigation and not for providing direct employment, is a welcome development and should continue, there is an urgent need to step up employment growth in the organized private sector.

10.15 The Approach paper to the Eleventh Plan targets generation of additional employment opportunities in services and manufacturing, in particular, labour intensive manufacturing sectors such as food processing, leather products, footwear and textiles, and in service sectors such as tourism and construction. It calls for elimination of distorting fiscal incentives which foster capital intensity; infrastructure investment; removal of distortions that hinder competition, prevent entry and discourage graduation from unorganized to organized status; and greater emphasis on vocational training and skill development to improve employability of youth. As Village and Small Scale Enterprises (VSE) will have to provide most of the new employment during the Eleventh Plan, the Approach Paper also calls for redressing the problems faced by VSE units and home based workers, particularly women, such as non-availability of timely and adequate credit, unreliable or absence of power supply, requirement of permission from a number of government agencies and burden of multiple inspections. Some direct employment will also be available in the social

Table 10.6 : Annual Growth of Employment in Organized Sector

(In per cent)

	1983-1994	1994-2004
Public Sector	1.53	-0.80
Private Sector	0.44	0.61
Total Organized	1.20	-0.38

sectors like health and education. Moreover, wage employment programmes like the NREGS will help.

Education

10.16 A broad objective of the National Policy on Education (NPE), 1986 modified in 1992 has been that education should play a positive and interventionist role in correcting social and regional imbalances, empowering women and in securing rightful place for the disadvantaged and the minorities. At the international level, India is committed to the 'Millennium Development Goals' and 'Education For All'. At the national level there is the commitment under the NCMP for increasing public expenditure on education to 6 per cent of GDP and for universalizing elementary education. There is also an obligation, under the Constitution's 86th Amendment, for making available free and compulsory education to all children in the age group of 6-14 years. To achieve these objectives, a number of programmes are being implemented out of which the two flagship programmes of the Government are the Sarva Shiksha Abhiyan and the Mid-Day Meal Scheme.

Sarva Shiksha Abhiyan (SSA)

10.17 The goals of SSA are:

- i) All children of 6-14 age in school/ EGS (Education Guarantee Scheme) centre/bridge course by 2005;
- ii) Bridge all gender and social category gaps at primary stage by 2007 and at elementary education level by 2010;
- iii) Universal retention by 2010;
- iv) Focus on elementary education of satisfactory quality with emphasis on education for life.

10.18 Implemented in partnership with the States, SSA addresses the needs of 194 million children in the age group of 6-14 years. Under the scheme, 9.72 lakh existing primary and upper primary schools and 36.95 lakh existing teachers have been covered. The

achievements of SSA till September 30, 2006 include opening of 1,64,477 new schools, construction of 97,999 School buildings, construction of 2,81,001 additional classrooms, 1,50,202 drinking water facilities, construction of 1,93,608 toilets, supply of free textbooks to 5.78 crore children and appointment of 6,66,840 teachers. About 30 lakh teachers receive in-service training each year. There has been a significant reduction in the number of out of school children on account of SSA interventions. State/UTs have reported that as on March 31, 2006, there were 70.5 lakh children in the 6-14 age group who were not enrolled in a school. Allocation for SSA was increased by 41.0 per cent from Rs. 7,800 crore in 2005-06 (RE) to Rs. 11,000 crore in 2006-07(BE).

Mid-Day Meal (MDM) Scheme

10.19 Under the MDM scheme, cooked mid-day meal with a nutritional content of 450 calories and 12 grams protein is served to children studying at primary level in government, government-aided, and local body schools; and in Education Guarantee Scheme (EGS)/Alternative & Innovative Education (AIE) Centres. The Scheme is being implemented by all States/UTs. About 12 crore children studying in over 9.50 lakh schools are presently covered under the scheme. In order to improve the quality of meal, the Scheme was last revised in June, 2006. The cooking cost norm has been fixed at Rs. 2 per child per school day, with Rs. 1.80 as Central assistance for North East States and Rs. 1.50 for other States and UTs. Recognizing the need for appropriate infrastructure, assistance for construction of 94,500 kitchen-cum-stores was sanctioned for the first time to States in 2006-07(BE). Similarly, assistance to States has been provided at the rate of Rs. 5,000 per school to procure/repair kitchen devices. MDM scheme has helped in promoting school participation, preventing classroom hunger, instilling educational values and fostering social and gender equity. Allocation for MDM scheme was Rs.5,348 crore in 2006-07(BE).

National Programme for Education of Girls at Elementary Education (NPEGEL)

10.20 Launched in July, 2003 as a focused intervention aimed at enhancing girls' education, NPEGEL provides for development of a "model school" in every cluster with more intense community mobilization and supervision of girls' enrolment in schools. Gender-sensitization of teachers, development of gender-sensitive learning materials and provision of need-based incentives like stationery, workbooks and uniforms are some of the objectives under NPEGEL. It is being implemented in about 3,164 educationally backward blocks in 25 States.

10.21 Under NPEGEL, around 31,450 model schools have been developed, 1.97 lakh teachers have been gender-sensitized, skill building provided to girls on diverse trades and life skills; 10,419 additional classrooms constructed for bridge courses; teacher training and skill building activities imparted to girls; and over 51,345 Early Childhood Care and Education (ECCE) centres are being supported in areas not covered by Integrated Child Development Services (ICDS) scheme to help free girls from sibling care responsibilities and attend schools. Free uniforms have been given as a direct educational incentive to about 2 crore girls in educationally backward blocks. 1.84 crore girls have been benefited under NPEGEL till October 31, 2006. Outlay for NPEGEL is Rs.813.36 crore in 2006-07(BE).

Kasturba Gandhi Balika Vidyalaya (KGBV) Scheme

10.22 KGBV is a scheme launched in July 2004 for setting up residential schools at upper primary level for girls belonging predominantly to the SC, ST, OBC and minority communities. It is being implemented in educationally backward blocks of the country where female rural literacy is below the national average and gender gap in literacy is above the national average. The scheme provides for a minimum reservation of 75 per cent of the enrolment for girls from SC, ST, OBC or minority communities. For the

remaining 25 per cent, priority is accorded to girls from families below poverty line.

10.23 Funded on cost-sharing basis between the Government and the States in the ratio of 75:25, KGBV scheme is being implemented in 24 States and 1 Union Territory. Of the 1,180 KGBVs sanctioned by Government, by September 30, 2006, 782 had been operationalised with 52,186 girls – of whom, 13,779 are SCs and 14,637 are STs enrolled in them.

Adult Education

10.24 The objective of the National Literacy Mission (NLM) is to impart functional literacy to non-literates in the 15-35 age-group. The goal of the Mission is to achieve sustainable threshold literacy rate of 75 per cent by 2007. The main programmes of the Mission include Total Literacy Campaign to provide basic literacy to the non-literates, followed by Post-Literacy Programme for the reinforcement of the literacy skills to the neo-literates and the Continuing Education Programme to provide facilities for life-long education to the community at large. At present, 101 districts are implementing Total Literacy Campaigns, 171 districts Post-Literacy Programmes and 325 districts Continuing Education Programmes.

10.25 The scheme of Continuing Education is now the flagship programme of the NLM. As more neo literates emerge out of the literacy campaigns, the thrust is on providing continuing and life-long learning to these people. For this purpose, the focus is on setting up Continuing Education Centres (CECs) and Nodal Continuing Education Centres (NCECs) which serve a population of about 2,000-2,500 people and provide facilities of library, reading room, learning centre, sports and cultural activities, information window, *churha mandal* (discussion groups) and target specific programmes, individual interest promotion programmes and income generation programmes. In the reading room and library set up in the CECs, a variety of books on different topics specially prepared for the neo-

literate by the State Resource Centres as well as magazines and newspapers are made available.

10.26 In addition, 194 Jan Shikshan Sansthan have been set up to provide vocational training to the neo-literates and backward sections of the society and 26 State Resource Centres have been established for providing academic and technical resource support for the literacy programmes. A special drive is in operation in 134 districts which have the lowest literacy rates in the country. The drive has a special focus on the minority groups, SCs, STs, women and other backward sections of the society by drawing up implementation strategies suited to their specific needs.

Secondary Education

10.27 Secondary education, which has a 2+2 structure and starts with classes IX-X leading to higher secondary classes XI-XII, prepares young persons in the age group 14-18 for entry into the world of higher education and work. The number of secondary and higher secondary schools has increased from 7,416 in 1950-51 to 1,52,049 in 2004-05. The corresponding increase in total enrolment has been from 1.5 million in 1950-51 to 37 million in 2004-05. While gross enrolment ratio (GER), which shows total enrolment in secondary stage (IX-XII class) as a proportion of total population in the relevant age-group, has also increased steadily from 19.3 per cent in 1990-91 to 39.91 per cent in 2004-05, it continues to be low. GER for Class IX-X (14-16 years) was 51.55 per cent and for Class XI-XII (16-18 years) was 27.82 per cent on September 30, 2004. With rapid scientific and technological changes, the productivity and average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII. There is a need to increase the GER at the secondary level, particularly now that the SSA aims to enroll all children of elementary school going age in elementary schools by 2010, and the target should be to provide a secondary school within 5 kilometers of any habitation during the

Eleventh Plan period. Not only universal enrolment, but universal retention and satisfactory quality of learning should also be priority areas.

10.28 The intervention of the Central Government in secondary education has primarily been in two areas (i) through apex level bodies, and (ii) through various CSSs. Central Government supports autonomous organizations like National Council of Educational Research and Training (NCERT), Central Board of Secondary Education (CBSE), Kendriya Vidyalaya Sangathan (KVS) and Navodaya Vidyalaya Sangathan (NVS) and Central Tibetan School Administration (CTSA), the first one for providing research and policy support to the Central and State Governments, CBSE for affiliating Secondary Schools and the remaining three for their own school systems. There are 919 functional Kendriya Vidyalayas and 539 Navodaya Vidyalayas which are pace setting schools in the country.

Higher Education

10.29 There has been an impressive growth in the area of higher education with an increase in annual student enrolment from 7.26 million in 1997-98 to 10.48 million in 2004-05. Enrolment of women students rose from 2.45 million in 1997-98 to 4.04 million in 2004-05, constituting 40.4 per cent of the total enrolment. As per NSSO survey (55th Round 1999-00), there were inequalities in enrolment in higher education across various social groups in rural and urban areas, and also in terms of gender. Women belonging to SCs and STs and those living in rural areas are the most disadvantaged.

Demography and Health

10.30 According to the Technical Group on Population Projections constituted by the National Commission on Population, May 2006, annual population growth is expected to gradually decelerate from 1.6 per cent in the five years ending in 2006 to 0.9 per cent in the five years ending in 2026 (Table 10.7). India's population, which is estimated to have gone up from the Census 2001 figure of 1029

Table 10.7 : India : Population projections (in millions)

Year	2001	2006	2011	2016	2021	2026
Total	1,029	1,112	1,193	1,269	1,340	1,400
Below 15 years	365*(364)	357	347	340	337	327
15-64 years	619*(613)	699	780	851	908	957
Above 65 years	45*(49)	56	66	78	95	116

Notes: *Figures are as per smoothing of age-groups for working out population projections. Figures in parenthesis are as per Census of India 2001. These figures will not tally with the total since 'age not stated' is excluded.

2001 figures exclude the population of Paomata, Mao-Maram and Purul sub-divisions of Senapati district of Manipur.

Source: Population Projections for India and States 2001-2026 – Census of India 2001: Report of the Technical Group on Population Projections constituted by the National Commission on Population, May 2006.

million to 1112 million in 2006, is projected to increase to 1400 million by 2026.

10.31 The well-known 'demographic dividend' will manifest in the proportion of population in the working age group of 15-64 years increasing steadily from 62.9 per cent in 2006 to 68.4 per cent in 2026. The actual tapping of this demographic dividend will, however, depend a lot on ensuring proper healthcare and other human resource development such as education.

10.32 Healthcare is important not only for reaping the demographic dividend, having a healthy productive workforce and general welfare, but also for attaining the goal of population stabilization. Population stabilization is proposed to be achieved by addressing issues like child survival, safe motherhood and contraception. There has been some improvement in the quality of health care over the years (Table 10.8), but wide inter-State, male-female and rural-urban

Table 10.8 : India — Selected health indicators

Sl. No.	Parameter	1951	1981	1991	Current level
1	Crude birth rate (CBR) (Per 1000 population)	40.8	33.9	29.5	23.8 (2005)
2	Crude death rate (CDR) (Per 1000 population)	25.1	12.5	9.8	7.6 (2005)
3	Total fertility rate (TFR) (Per woman)	6.0	4.5	3.6	2.9 (2005)
4	Maternal mortality ratio (MMR) (Per 100,000 live births)	NA	NA	437 (1992-93) NFHS	301 (2001-03)
5	Infant mortality rate (IMR) (Per 1000 live births)	146 (1951-61)	110	80	58 (2005)
6	Child (0-4) mortality rate (Per 1000 children)	57.3 (1972)	41.2	26.5	17.0 (2004)
7	Couple protection rate (per cent)	10.4 (1971)	22.8	44.1	48.2 (1998-99) NHFS
8	Life expectancy at birth				
	8.1 Male	37.2	54.1	59.7 (1991-95)	63.87 (2001-06)
	8.2 Female	36.2	54.7	60.9 (1991-95)	66.91 (2001-06)

Source : Office of Registrar General India; NFHS: National Family Health Survey; NA: Not Available.

disparities in outcomes and impacts continue to persist. While population stabilization is in the Concurrent List, health is a State subject. The reproductive and child health services reach community and household levels through the primary health care infrastructure. Inadequacies in the existing health infrastructure have led to gaps in coverage and outreach services in rural areas. Empirical studies suggest that education, income and the overall quality of the State administration are often more important than specific public health interventions in explaining the differences in demographic and health indicators.

10.33 India's position on health parameters compared even to some of its neighbours continues to be unsatisfactory. India compares poorly not only with China and Sri Lanka, but also Bangladesh and Nepal with respect to some indicators (Table 10.9).

National Rural Health Mission (NRHM)

10.34 NRHM is the main vehicle for giving effect to the mandate of the NCMP. Operationalized throughout the country, its special focus is on 18 States with weaker health infrastructure and health status indicators. Provision of accessible, affordable, accountable, effective and reliable primary

health care facilities especially to the poor and vulnerable sections of the population, bridging the gap in rural health care services through creation of a cadre of Accredited Social Health Activists (ASHA), improved hospital care, decentralized planning, ensuring population stabilization, intersectoral convergence and maintaining gender balance constitute the basic features of the NRHM.

10.35 The Mission envisaged selection of a trained female community health worker called ASHA in each village in the ratio of one per 1000 population in all 18 high-focus States and in tribal and under-served areas of other States. ASHA would reinforce community action for universal immunization, safe delivery, newborn care, prevention of water-borne and other communicable diseases, nutrition and sanitation. ASHAs would work in close coordination with the Anganwadi Workers (AWW). ASHAs would also provide immediate and easy access for the rural population to essential health supplies like Oral Rehydration Solution (ORS), contraceptives, a set of ten basic drugs, and a health communication kit developed for villages.

Strengthening of Primary Health Infrastructure & Improving Service delivery

10.36 Though there has been a steady increase in health care infrastructure available

Table 10.9 : Some health parameters: India and its Neighbours

Country	Life expectancy at birth (years)	Under-five mortality rate (per 1,000 live births)		Infant mortality rate (per 1,000 live births)		Maternal mortality ratio (per 100,000 live births)
		2000-05	1990	2004	1990	
China	71	49	31	38	26	51
India	63	123	85	80	62*	540*
Nepal	61	145	76	100	59	740
Pakistan	63	128	101	96	80	530
Sri Lanka	74	23	14	19	12	92
Bangladesh	63	144	77	96	56	380
South Asia	63	126	84	84	62	NA

NA : Not available.

* Figures shown for India are at variance with the official figures of the Office of Registrar General of India (RGI) for MMR and IMR. Data shown in the table are as per the methodology and adjustment made by UNDP.

Source : UNDP, Human Development Report 2006.

Table 10.10 : Trends in health care infrastructure			
	1951	1991	2005 (Period/Source)
SC/PHC/CHC	725	57353	171608 *
Dispensaries and Hospitals (all)	9209	23555	27770 **
Beds (Private & Public)	117198	569495	914543 (all types)**
Nursing Personnel	18054	143887	865135 @
Doctors (Modern System)	61800	268700	656111 @
* RHS: Rural Health Statistics, 2006. ** Health Information of India, 2004. @ National Health Profile, 2005.			

over the plan period (Table 10.10) as per the Rural Health Infrastructure Bulletin 2006, there is a shortage of 19,269 Sub-Centres(SCs), 4,337 Primary Health Centres (PHCs) and 3,206 Community Health Centres (CHCs) as per 2001 population norm. Further, almost 50 per cent of the existing health infrastructure is in rented buildings. Last but not the least, poor upkeep and maintenance, and high absenteeism of manpower in rural areas, have eroded the credibility of the health delivery system in the public sector. NRHM seeks to strengthen the public health delivery system at all levels. All the facilities are also being provided untied funds to enable the local management committee to carry out locally relevant initiatives for better service delivery. Flexible, decentralized planning is the pivot on which the entire concept of the Mission revolves.

10.37 The NRHM seeks to strengthen service delivery by ensuring community ownership of the health facilities (Box 10.3). The success of decentralized planning process under NRHM hinges on the capacity of the districts and the States. The management capacity at the States, districts and blocks is being strengthened with the constitution of the Programme Management Units (PMUs) with professionals including MBAs, Chartered Accountants, and computer experts etc. These professionals have been assigned specific roles and a training component has been built in to make management effective.

10.38 The UNICEF evaluation conducted over 2006 has indicated that the coverage of

immunization has improved from 52.8 per cent for full immunization in 2000-01 to 54.5 per cent during 2004-05. Janani Suraksha Yojana (JSY) has been launched all over the country to promote safe delivery, and incentives are being provided to BPL families for institutional delivery. During 2005-06, over 6 lakh beneficiaries of JSY were reported by the States and during 2006-07, till December 2006, 12 lakh beneficiaries have been reported under JSY by the States. Outlay on NRHM has gone up by 23 per cent from Rs.6,731 crore in 2005-06(RE) to Rs.11,505 crore in 2006-07(BE).

Reproductive and Child Health (RCH-II) Program

10.39 The Second phase of Reproductive and Child Health (RCH-II) Program, launched on April 1, 2005 for a period of 5 years, intends to improve the performance of family welfare in reducing maternal and infant morbidity and mortality, and unwanted pregnancies, and thus lead to population stabilization. Reoriented and revitalized to give a pro-poor focus, the programme is envisaged as an umbrella programme by integrating all the related and inter-linked stand alone schemes into a single composite programme. With a sector-wide approach to family welfare, it adopts a decentralized process by inviting each State/ UT to prepare its own implementation plan on the basis of a situational analysis of ground realities and requirements. Funds approved for RCH II went up from Rs.1,523.75 crore to Rs.1,871.67 crore between 2005-06(RE) and 2006-07(BE).

Box 10.3 : Achievements of NRHM

- 3.19 lakhs ASHAs selected and in position after orientation in 18 high focus States and tribal areas of other States.
- 68,000 Sub-Centres have become functional
- 2045 CHCs identified to be upgraded to Indian Public Health Standards.
- Facility surveys completed in 1,452 CHCs.
- Integrated Management of Neo-natal Childhood Illness (IMNCI) started in 25 States.
- Over 1 lakh Health and Sanitation Committees constituted by States.
- 8,080 Rogi Kalyan Samitis set up at different facilities.
- 228 Mobile Medical Units operationalized by States.
- 22,655 doctors, Auxiliary Nurse Midwives (ANMs) and other para-medicos appointed on contract basis by the States.
- Comprehensive training plan developed in the critical areas of (i) skilled birth attendants, (ii) emergency obstetric care, (iii) no scalpel vasectomy, and (iv) anesthesia.
- Over 1000 management/accounting professionals (CA/MBA) appointed in States to support NRHM.
- Over 10 lakh monthly health and nutrition days being organized at Anganwadi Centres.
- Japanese Encephalitis (JE) vaccination completed in 11 districts of 4 States and 93 lakh children immunized.
- Evaluated immunization coverage reported at 54 per cent.
- Neo-natal tetanus eliminated from 7 States.
- 299 Mother NGOs appointed under partnership arrangements with NGO stakeholders.
- Mainstreaming of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) in 1594 PHCs and 2315 AYUSH practitioners co-located in PHCs.
- National Health Resource Centre at central level finalized for manpower training. State and District Health Missions have been constituted in all States. To strengthen management capacities in the States, PMUs have been set up under NRHM and 392 districts have reported functioning PMUs

Universal Immunization Programme

10.40 Under this programme, vaccines are given to infants and pregnant women for controlling vaccine-preventable diseases, namely childhood Tuberculosis (BCG), Diphtheria, Pertussis and Tetanus (DPT), Measles, Poliomyelitis (OPV) and Neonatal Tetanus (NNT). The programme was first launched in the urban areas in 1985. The coverage was progressively extended to cover the entire country by 1990. Between 1988 and 2005, there has been a decline of 40 per cent in Diphtheria, 69 per cent in Pertussis, 66 per cent in Measles, 92 per cent in NNT and 99 per cent in Polio cases.

Pulse Polio Programme

10.41 An outbreak of Polio has been witnessed in the recent past with the spread of polio virus. During 2006, 666 cases have been reported. To respond to this,

supplementary immunization activities have been intensified in the high risk areas.

National Vector Borne Disease Control Programme

10.42 The National Vector Borne Disease Control Programme (NVBDCP) is an umbrella programme for prevention and control of vector borne diseases and the objectives are in tandem with the goals set out in the NHP 2002 and Millennium Development Goals (MDGs). Annual incidence of malaria came down from 1.82 million cases reported with 963 deaths in 2005 to 1.2 million cases reported with 961 deaths in 2006(Provisional). In some pockets, where the parasite has developed resistance to widely used anti-malaria drug Chloroquine, Government has introduced a new drug combination of Artemisinin plus Sulfadoxine-Pyremethamine for treating such cases.

Rapid Diagnostic Tests (RDTs) for quick detection of malaria cases are also being scaled up for use by trained health workers/volunteers, especially in remote, inaccessible areas with inadequate microscopy facility. Use of insecticide treated bed nets is being promoted for personal protection besides use of insecticides for indoor residual spray in high risk areas for malaria control. Introduction of larvivorous fish in water collections are being actively encouraged for control of mosquito breeding. The success of these interventions depends on the community participation. Filariasis is a chronic debilitating disease associated with disfigurement and social stigma. To achieve the goal of elimination of Lymphatic Filariasis by year 2015, Government launched nationwide annual Mass Drug Administration (MDA) with annual single recommended dose of DEC tablets in addition to scaling up home-based foot care and hydrocele operations. In 2005, all 20 endemic States/UTs except Tamil Nadu implemented MDA covering around 500 million population.

10.43 Under Kala-azar, where the incidence of cases is fluctuating, timely and quality indoor residual spraying with DDT for vector control, complete treatment of patients and intensive social mobilization are being stressed upon. Japanese Encephalitis (JE) has been reported from many States in the country. Andhra Pradesh, Assam, Bihar, Haryana, Karnataka, Kerala, Maharashtra, Tamil Nadu, Uttar Pradesh and West Bengal have recorded repeated occurrences and outbreaks. During 2005, there was an epidemic outbreak in Uttar Pradesh with total number of cases increasing to 6,727 and 1,682 deaths. In 2006, 2832 suspected cases of JE/viral encephalitis have been reported with 658 deaths. There is no specific treatment for JE.

10.44 Dengue is a viral disease where focal outbreaks were recorded mainly from urban areas. But, in recent years, dengue is increasingly being reported from semi-urban and rural areas, due to expanding urbanization and lifestyle changes. In 2005, 11,985 cases and 157 deaths and in 2006, 10,891 cases

with 171 deaths have been reported. As there is no specific treatment for dengue, the emphasis is on avoidance of mosquito-breeding conditions in homes and workplaces, and minimizing the man-mosquito contact. Community awareness and participation, inter-sectoral collaboration and appropriate civil bye laws and building bye laws are crucial for effective control of dengue. *Chikungunya* is a debilitating non-fatal viral illness which reappeared after a long period in 2006. The reported number of Chikungunya suspected cases up to the end of 2006 is 1.39 million. There have been no reported deaths directly related to Chikungunya.

National Tuberculosis Control Programme

10.45 The Revised National TB Control Programme (RNTCP) using Directly Observed Treatment Short-course (DOTS) strategy is being implemented with the objective of covering at least 85 per cent of new sputum positive patients to be put on treatment and detection of at least 70 per cent of such patients. Under implementation since 1997, the entire country has been covered by March 2006. Till date, the RNTCP has placed more than 65 lakh patients on DOTS treatment, averting more than 11.78 lakh deaths. Overall performance of RNTCP is as per expectation with cure/treatment completion rate consistently above 85 per cent and death rate reduced to less than 5 per cent among registered TB patients.

National AIDS Control Programme

10.46 It is estimated that there were about 5.2 million HIV infections in the country in 2005 with sexual transmission as major mode of transmission. However, transmission through other routes like use of infected syringes and needles by Injecting Drug Users (IDUs), through infected blood and blood products and from mother to child do occur. Up to November, 2006, 1.6 lakh cases have been reported by the National AIDS Control Programme. The first phase of the project on AIDS was launched in 1992. Encouraged by the progress achieved, a second phase was formulated by the Government in 1999 with two key objectives (i) to reduce the spread of

HIV infection in India; and (ii) strengthen India's capacity to respond to HIV/AIDS on a long-term basis. These objectives are being achieved through prevention interventions among high risk groups and among the general population and by providing care and support services for people living with HIV and AIDS. The total outlay for Second Phase of the National AIDS Control Programme (NACP-II) was Rs.2,064.65 crore. The programme has five components viz. (i) priority targeted intervention for populations at high risk, (ii) preventive intervention for the general population, (iii) low-cost care for people living with HIV/AIDS, (iv) institutional strengthening, and (v) inter-sectoral collaboration.

National Leprosy Eradication Programme

10.47 The goal of elimination of Leprosy (less than 1/10,000 population) at the national level was achieved as scheduled in December, 2005 with 26 States/UTs achieving elimination in 2005 and Orissa in 2006-07. The programme has been decentralized in all the States. The prevalence rate has come down further to 0.85/10,000 population by May, 2006. Leprosy services have also been completely integrated with the general healthcare system and there is a fall in the annual case detection rate.

Control of Non-communicable Diseases

10.48 Non-communicable diseases continue to be important public health problems in India, being responsible for sizeable mortality and morbidity. Ageing population allows manifestation of cardiovascular diseases, cancer and mental disorders which also result in high prevalence of chronic disability. Research at ICMR focusing on identifying risk factors, their prevention, health services requirements and control strategies, is in progress. The National Programme for Control of Blindness has addressed very effectively cataract which continues to be the major cause of blindness. Cataract surgery has registered an increase from 15 lakh in 1992-93 to 49.05 lakh in 2005-06. While cataract continues to be the major cause of blindness, other emerging causes

that need to be addressed include diabetic retinopathy and glaucoma. Under the National Mental Health Programme, assistance has been provided to 58 medical colleges for upgradation of their psychiatric wings.

Integrated Disease Surveillance Project (IDSP)

10.49 Integrated Disease Surveillance Project (IDSP), initiated in November, 2004 with World Bank support, aims at establishment and operation of a central level disease surveillance unit, integration and strengthening of disease surveillance at State and district levels, improvement of laboratory support and training for disease surveillance and action. The diseases covered under the project include water-borne diseases and emerging diseases. Surveillance under IDSP includes water quality monitoring/ surveillance. The project has been expanded in phased manner to cover all the States/UTs of the country by March, 2007. It is a decentralized, action oriented, integrated and responsive programme.

User charges in government health facilities in India

10.50 In a developing country, private health care tends to be too expensive for the common citizen, especially the poor, while public health systems tend to suffer from inadequate resources and poor service delivery. Reforms of the public health system in a developing country often include the introduction of user charges to respond to the challenge of augmenting resources of and removing inefficiency in public health service delivery system. There have been successful attempts at introducing user charges in a majority of the States (Box 10.4).

10.51 User charges enhance the stake of the user, and improve accountability. Furthermore, such user charges often recover only a part of the cost of operation and maintenance of the health service delivery system, and continue to be only a fraction of the corresponding charges under private health care. Below poverty line users are normally exempt from payment of such

Box. 10.4 : User charges in the public health sector in India

- Reforms in health sector in India, initiated in early 1990s, included levying of user charges for services in public health facilities as one of the initiatives. User charges came to be levied from patients belonging to families above poverty line for diagnostic and curative services, while free or highly subsidized services continued to be provided to the poor and needy patients.
- States where user fees are being levied include Assam, Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tripura, Uttar Pradesh, Uttaranchal and West Bengal. There are inter-State differences in the levy, collection and utilization of such charges.
- Some States like Haryana levy rates for various services in all public health institutions from Primary Health Centre upwards. In West Bengal, user charges apply only in secondary and tertiary level health facilities. In case of Madhya Pradesh and Kerala, the charges for various services are approved by Rogi Kalyan Samitis (RKS)/Hospital Development Committees at the facility level, and hence vary across institutions. In Orissa, lower rates are levied in less developed and tribal districts. Cost recovery ratio varies across States, but seldom exceeds a quarter.
- There is also variation in the nature of services for which user charges are levied. For example, in Orissa user charges is limited to accommodation, transportation and laboratory/diagnostic services, while in West Bengal, user charges are collected for diagnostic, curative services in both outpatient and inpatient departments, as well as ancillary services like diet. In most States, services for which user fees are charged include registration, diagnostic tests (pathological and radiological), bed charges, operation theatre charges amongst others. All States implementing user charges, exempt the poor, treatment under National Health Programmes and emergency cases.
- The funds collected by way of user charges are meant to be utilized for improving the quality of services in health facilities, such as maintenance of hospital buildings, improving the cleanliness & hygiene, minor repairs and construction works, maintenance and repair of equipment, purchase of medicines & consumables, and improving facilities for patients and attendants. Available literature on experiences of user charges in states indicate that user charges is definitely a means to raise resources to support the health care delivery system as well as improve the quality of health services and financial sustainability in health care system.

charges. “Free” public health care services often involve a lot of non-financial costs such as waiting time, lack of access and inadequate facilities such as hospital beds, equipment and medicines.

Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH)

10.52 There are approximately 7.25 lakh registered practitioners, 3,194 hospitals and 21,290 AYUSH dispensaries all over the country. Mainstreaming of AYUSH in the health care delivery network is envisaged in the NRHM with focus on improvement and upgradation of standards of education, standardization of drugs and quality control, sustainable collection and cultivation of medicinal plants.

10.53 The Indian Medicine Central Council (Amendment) Act, 2005 and Homoeopathy Central Council (Amendment) Act, 2005 have been introduced in the Parliament with a view

to bringing about transparency and accountability in the functioning of these Councils and to improve standards of graduate and postgraduate education in Ayurveda, Siddha, Unani and Homoeopathy. The Indian Medicine and Homoeopathy Pharmacy Bill, 2005 has also been introduced in Parliament to establish a Central Pharmacy Council for Indian Medicine and Homoeopathy to regulate and standardize pharmacy education. To address concerns relating to presence of heavy metals in Ayurveda, Siddha and Unani formulations, mandatory testing of heavy metals for Arsenic, Lead, Mercury and Cadmium in all purely herbal Ayurveda, Siddha and Unani drugs for export purposes has been introduced with effect from January 1, 2006 to ensure that, before these medicines are exported, the manufacturers and exporters take steps to ensure that these purely herbal medicines do not contain any heavy metal by way of contamination. From Rs. 293.71 crore

during the Ninth Plan, with an expenditure of more than Rs. 1,000 crore, a quantum jump in outlays on schemes for development and promotion of AYUSH system of medicine has been achieved during Tenth Plan.

Women and Child Development

Development of Women

10.54 The three dimensional strategy for development of women, namely social empowerment, economic empowerment and gender justice continued during the terminal year of the Tenth Plan. Measures to uplift health and nutrition standards of women under ICDS include health check up for pregnant women and lactating mothers, pre- and post-natal care, and supplementary nutrition. The Kishori Shakti Yojana (KSY) aims at improving the nutritional and health status and their self development. In 2006-07, KSY has been expanded to cover all 6,118 ICDS projects. Under the 'Nutrition Programme for Adolescent Girls' (NPAG), special attention is being given to nutrition requirements of the potential mothers of the future. NPAG is being implemented as a pilot project in 51 districts. Under NPAG free food grains at a rate of 6 kg. per month are given to under nourished adolescent girls. Swayamsidha is a centrally sponsored scheme for holistic empowerment of women, through mobilization and formation of women into SHGs. Under the scheme, which was launched in 2000-01 and will end in March 2007, over 68,575 women's SHGs have been formed covering 10.00 lakh women members.

10.55 The Rastriya Mahila Kosh (RMK) provides micro credit with a unique credit delivery model "RMK-Intermediary Organisations-SHG – Beneficiaries", one of the main reasons for its success. The other reasons are its flexible credit norms, hassle free loans, no collateral and reasonable rate of interest. Under the Support to Training and Employment Programme (STEP), women are trained in various traditional trades and crafts (such as dairying, fisheries, animal husbandry, handlooms, handicraft, sericulture and social forestry). A comprehensive package of services provided includes access to credit,

health care, elementary education, crèche facility, and market linkages.

10.56 Swawlamban Scheme, which provides training and skills to women in traditional and non-traditional trades, was transferred to States from April 1, 2006. To maintain continuity of implementation, States have been requested to make provision in their Annual Budget for the Scheme. To facilitate employment of women away from their homes/towns, schemes such as Working Women Hostels with day-care centres and crèches/day centres continue. Care and protection of women in distress is a focused area for attention through Swadhar Homes and Short Stay Homes.

Legal safeguards for women

10.57 The National Commission for Women (NCW) safeguards the interests of women with a mandate covering all aspects of women's rights. Of the 42 Central Acts concerning or impacting women, 41 have been reviewed by the NCW for their efficiency and removing gender discriminatory provisions. The Protection of Women from Domestic Violence Act, 2005, which came into force on October 26, 2006, seeks to provide immediate relief to women facing situations of violence in their homes. Further, amendments are also proposed in labour legislations affecting women, such as Maternity Benefit Act, 1961 and Factories Act 1948.

Gender Budgeting

10.58 The Annual Plan 2006-07 carried forward the two important on-going strategies of Women Component Plan (WCP) and Gender Budgeting. The main objective is to mainstream gender perspective in all sectoral policies and programmes and to work towards the ultimate goal of elimination of gender discrimination and creating enabling environment for gender justice and empowerment of women. The WCP envisages that not less than 30 per cent of funds/benefits are earmarked under various schemes of women related Ministries/ Departments for women. Gender budgeting is perceived as a powerful tool for tracking

not only allocation of resources for women but also implementation issues and outcomes. Rs. 28,737 crore was allocated for benefit of women under 24 Demands for Grants in 18 Ministries and Departments in 2006-07(BE). In 2006-07, to carry forward the exercise of universalizing gender budgeting exercises, gender budget cells have been set up in 50 Central Ministries/Departments, and several States have also undertaken steps in this regard. Apart from quantification of allocation of resources for women, the other initiatives include mainstreaming gender concerns in policies and implementation process, collection and compilation of gender disaggregated data, gender development indices, and review and analysis of programmes, policies/interventions with a gender perspective.

Welfare and Development of Children

10.59 A rights-based approach has been adopted in the Tenth Plan with the strategy of promoting survival, protection and development of children. While the 'National Charter for Children' and the 'National Plan of Action for Children' were adopted in February 2004 and August 2005, respectively, a proposal to set up a 'National Commission for Child Rights' is under process.

10.60 Initiated in 1975, ICDS is one of the largest child intervention programmes in the world with a holistic package of six basic services for children up to six years of age, and for pregnant and nursing mothers. These services are: health-checkup, immunization, referral services, supplementary feeding, pre-school education, and health and nutrition education through one platform i.e. Anganwadi Centre. Starting with a modest 33 blocks/projects, it has gradually expanded to 6,118 projects of which 5,659 projects with 7,48,229 Anganwadi Centres were operational by March 31, 2006. ICDS covers 562 lakh beneficiaries consisting of 467 lakh children below 6 years of age and 95 lakh pregnant and lactating mothers. To fulfill the NCMF commitment of providing a functional Anganwadi in every settlement and ensuring full coverage of all children, and also to comply

with the Supreme Court's directives, Government has approved 466 additional ICDS projects and 1,88,168 Anganwadi Centres. A number of new initiatives have been taken to improve the impact of the programme, which includes sharing of one-half of the cost of supplementary nutrition with the States under ICDS. To increase the outreach of the scheme, further expansion of the scheme to 173 additional projects, 1,07,274 additional Anganwadis and 25,961 Mini Anganwadi Centres have also been approved by the Government on December 7, 2006. In order to improve the functional efficiency, the field functionaries of ICDS are continuously being trained through Anganwadi Training Centres (AWTCs)/Middle Level Training Centres (MLTCs) and the National Institute of Public Cooperation and Child Development (NIPCCD). In 2006-07, KSY, which uses the ICDS infrastructure for targeting adolescent girls (11-18 years), and addresses their needs of self development, nutrition and health status, literacy and numerical skills, and vocational skills, has been expanded from 2000 ICDS projects to all the 6,118 ICDS projects. The Nutrition Programme for Adolescent Girls (NPAG), covering under-nourished adolescent girls in the age group of 11-19 years (weight less than 35 kg), has been operationalised through the administrative set up of ICDS in 51 identified backward/most populous districts of States/UTs. The Rajiv Gandhi National Creche Scheme for children of Working Mothers was launched on January 1, 2006 and is being implemented by the Central Social Welfare Board and two other national level voluntary organizations, namely Indian Council for Child Welfare and the Bharatiya Adimjati Sevak Sangh.

10.61 The Integrated Programme for Street Children provides basic facilities like shelter, nutrition, health care, education, and recreation facilities, and seeks to protect street children from abuse and exploitation. Child-line with a dedicated number 1098 is a 24-hour toll-free telephone service for all children in distress in 73 cities is also available under the scheme. An amendment to the

Juvenile Justice (Care and Protection of Children) Act, 2000, inter-alia, providing that in no case, a juvenile in conflict with law shall be placed in a police lockup or lodged in jail, was passed by Parliament and came into effect from August 23, 2006. Under Programme for Juvenile Justice, 50 per cent expenditure requirements of State/UTs is being provided for establishment and maintenance of various homes under the Juvenile Justice (care and protection of children) Act, 2000. The implementation of a Scheme for Welfare of Working Children in Need of Care and Protection commenced in January, 2005 to provide non-formal education and vocational training to working children to facilitate their entry/re-entry into mainstream education.

Rural Water Supply and Sanitation

10.62 Water is a State subject, and the schemes for providing drinking water facilities are implemented by the States. The Central Government supplements States' efforts through financial and technical support. The Eleventh Plan envisages provision of safe drinking water to all rural habitations. A major programme – "Accelerated Rural Water Supply Programme (ARWSP)" – is being implemented since 1972-73 to achieve this objective. With an investment of over Rs. 66,000 crore, more than 4.2 million hand pumps and 2.1 lakh piped-water schemes have been installed in the rural areas. On April 1, 2006, 97.02 per cent of rural habitations were fully covered, and 2.73 per cent were partially covered. However, the problem of lagging States (Table 10.11) and contamination due to arsenic, salinity, fluoride, iron, etc in 1,95,813 habitations needs to be addressed on a priority basis.

10.63 ARWSP, currently being implemented through the Rajiv Gandhi National Drinking Water Mission, aims at coverage of all rural habitations with population of 100 and above, especially the un-reached ones, ensuring sustainability of the systems and sources, and tackling the problem of water quality monitoring and surveillance through a catchment area approach. Adequate operation

and maintenance (O&M) is critical for sustaining water supply systems already created. The annual estimated cost of O&M at Rs. 6,000 crore is heavy for the Government alone to bear. Peoples' involvement is envisaged not only to enhance the economic viability of O&M but also for better upkeep and enhanced life span of the system created. The Central allocation of funds for ARWSP has been stepped up from Rs. 2,900 crore in 2004-05 to Rs. 4,060 crore in 2005-06 (RE) and further to Rs. 5,200 crore in 2006-07 (BE). A sectoral reform programme called "Swajaldhara" with partial capital cost sharing and full responsibility of O&M by users was taken up on a pilot basis to institutionalize community-based decentralized rural water supply schemes, and utilizing 20 per cent of ARWSP funds for this purpose.

10.64 The results of a fresh habitation survey conducted in 2003 indicate large incidence of slippage from 'fully covered' to 'partially/not covered' categories due to a number of factors, such as sources going dry, lowering of the ground water table, systems outliving their lives, and increase in population resulting in lower per capita availability. Drinking water supply is one of the six components of Bharat Nirman, which has been conceived as a plan to be implemented from 2005-06 to 2008-09 for building rural infrastructure. Under Bharat Nirman, it has been envisaged to cover 55,067 uncovered habitations of Comprehensive Action Plan '99 and also to address the problem of slippage and water quality. On April 1, 2006, there were 41,946 uncovered habitations, 1,95,813 water quality affected habitations and approximately 2,52,060 slipped back habitations.

10.65 The Central Rural Sanitation Programme (CRSP), a CSS launched in 1986, was restructured in 1999 to introduce the Total Sanitation Campaign (TSC). TSC envisages synergized interaction between Government and people and active NGOs. It also incorporates intensive Information, Education and Communication (IEC) campaigns, provision of an alternate delivery system and more flexible, demand-oriented construction norms. TSC envisages a shift

Table 10.11 : Coverage of habitations under rural water supply (as on April 1, 2006)				
State/UT	Status of habitations			
	NC	PC	FC	Total
Andhra Pradesh	0	0	69,732	69,732
Arunachal Pradesh	34	309	3,955	4,298
Assam	144	4,803	65,608	70,555
Bihar	0	0	105,340	105,340
Chattisgarh	0	0	50,379	50,379
Goa	0	5	390	395
Gujarat	0	0	30,269	30,269
Haryana	0	0	6,745	6,745
Himachal Pradesh	0	4,941	40,426	45,367
Jammu & Kashmir	606	2,210	8,368	11,184
Jharkhand	0	0	100,096	100,096
Karnataka	0	3,494	53,188	56,682
Kerala	0	5,871	3,892	9,763
Madhya Pradesh	0	0	109,489	109,489
Maharashtra	240	15,598	70,092	85,930
Manipur	0	0	2,791	2,791
Meghalaya	7	127	8,502	8,636
Mizoram	0	26	781	807
Nagaland	16	609	900	1,525
Orissa	0	0	114,099	114,099
Punjab	97	593	12,759	134,49
Rajasthan	1,877	0	92,069	93,946
Sikkim	0	0	1,679	1,679
Tamil Nadu	0	0	66,631	66,631
Tripura	0	0	7,412	7,412
Uttar Pradesh	0	0	243,508	243,508
Uttarakhand	26	203	30,745	30,974
West Bengal	0	0	79,036	79,036
Andaman & Nicobar Islands	0	39	465	504
Dadra & Nagar Haveli	5	19	492	516
Daman & Diu	0	0	32	32
Delhi	0	0	219	219
Lakshdweep	0	10	0	10
Pondicherry	0	37	230	267
Chandigarh	0	0	18	18
Total	3,052	38,894	1,380,337	1,422,283
Number that are uninhabited/ unpopulated/migrated/urbanised				381
Grand total				1,422,664
NC : Not covered, FC : Fully covered.		PC: Partially covered.		

from an allocation-based programme to a demand-based project mode with greater household involvement, intensive IEC campaign and emphasis on school sanitation. TSC projects have been sanctioned in 568 districts with approved outlay of Rs. 9,969.33 crore.

Welfare and Development of Backward Classes and other weaker sections

Scheduled Castes (SCs)

10.66 SCs, constituting 16.23 per cent of the total population of the country (2001 Census), suffer on account of severe socio-economic deprivation arising out of poor asset base, dependence on wage labour, subsistence level of farming, engagement in scavenging and other unclean occupations and related social evils. By way of special interventions, four schemes are being implemented to encourage SC students for continuing their education from school to higher levels. During 2006-07 up to December 31, 2006, Rs. 14.45 crore was released for 5.75 lakh beneficiaries under the Scheme of Pre-Matric Scholarships to the children of those engaged in unclean occupation. The corresponding amount released under the scheme of Post-Matric Scholarships was Rs. 265.20 crore to over 14.70 lakh SC students. For the Up-gradation of Merit of SC students Rs.2.38 crore have been released benefiting 1,371 students. An allocation of Rs. 35.13 crore has been made under Rajiv Gandhi National Fellowship for SC students for pursuing M.Phil and Ph.D courses against which Rs. 34.18 crore has been released up to December 31, 2006 benefiting 1,333 candidates selected through the University Grants Commission.

10.67 Special Central Assistance (SCA) to Scheduled Castes Sub-Plan is a major scheme for economic advancement of SC persons. From the allocation of Rs. 450.15 crore for this scheme in 2006-07(BE), up to December 31, 2006, Rs. 296.28 crore had been released to States/UTs, benefiting 1,54,640 persons. National-level Finance and Development Corporations provide credit facilities to the beneficiaries who are living below double the poverty line. Up to December

31, 2006, National Scheduled Castes Finance and Development Corporation disbursed Rs. 52.69 crore benefitting 26,990 persons, and National Safaikaramcharis Finance and Development Corporation disbursed Rs. 42.64 crore to 20,099 beneficiaries.

10.68 A new scheme of Self-Employment for Rehabilitation of Scavengers has been approved during the current year to assist those scavengers, who are waiting for rehabilitation and are yet to be assisted, in a time bound manner by March 2009. To abolish the practice of untouchability and curb the high incidence of crimes and atrocities against SCs, efforts are made for effective implementation of the Protection of Civil Rights (PCR) Act, 1955 and the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989, with the help of 22 Special Courts under the Protection of Civil Rights (PCR) Act, 1955, and also 137 Special Courts under the Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act, 1989.

10.69 The strategy of Scheduled Castes Sub Plan (SCSP) was evolved by the Planning Commission in 1979 to expedite socio-economic development of the SCs. As per the guidelines, SCSP is to be formulated by States/UTs to channelise flow of outlays and benefits in their Plans in proportion to the percentage of SC population to the total population. SCA to SCSP as 100 per cent grant-in-aid to States/UTs who formulate SCSPs continues.

Scheduled Tribes (STs)

10.70 According to the 2001 Census, STs accounted for 84.32 million, equivalent to 8.2 per cent of the country's total population. Compared to the rest of the society, STs continue to be socio-economically backward. The outlay for the welfare and development of STs went up by 10.54 per cent from Rs. 1498.92 crore in 2005-06(RE) to Rs.1615.58 crore in 2006-07(BE). The outlay of 2006-07 includes Rs. 816.71 crore provided as SCA to Tribal-Sub Plan which includes Rs.220 crore for development of forest villages and Rs.400 crore as grant-in-aid under Article

275(1) of the Constitution, which includes Rs.150 crore for minor irrigation of tribal lands.

10.71 SCA to Tribal Sub Plan is a 100 per cent grant extended to States as additional funding to undertake a number of developmental schemes. The focus is on family-oriented income-generating schemes, creation of critical infrastructure, extending financial assistance to SHGs for community-based activities, and development of primitive tribal groups and forest villages. Grant-in-aid under Article 275(1) is also being provided to the States with an objective to promote the welfare of the STs and improve administration in the States to bring them at par with the rest of the States, and to take up such special welfare and development programmes which are otherwise not included in the Plan programmes. Under the flagship scheme of Post-Matric Scholarships, all eligible ST students are provided with stipend to pursue their education beyond matric including professional and graduate and post-graduate courses in recognized institutions. A new scheme of Rajiv Gandhi National Fellowship for ST students to pursue higher education was launched during 2005-06 and has been entrusted to UGC for implementation. Economic empowerment of STs continued through extension of financial support to the National Scheduled Tribes and Finance Development Corporation (NSTFDC) and the Tribal Cooperative Marketing Federation of India Limited (TRIFED). Under the scheme of NSTFDC, financial support is being extended to STs beneficiaries/entrepreneurs in the form of term-loans and micro credit at concessional rate of interest for income generating activities. The TRIFED purchases products from STs, thereby strengthening their economic status. To address the problems of tribal communities, who are dependent on forests and to undo the historical injustice done to them, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Bill, 2006 has been passed by the Parliament in the Winter Session of 2006. This Act recognizes the forest rights of forest dwelling scheduled tribes and other traditional forest dwellers over the forest land under their

occupation for self-cultivation, rights over minor forest produce and traditional rights. A National Tribal Policy 2006 covering all important issues that concern tribals has been drafted and will be finalized shortly .

Minorities

10.72 Muslims, Christians, Sikhs, Buddhists, and Parsis were declared as Minority communities vide Gazette Notification issued on October 23, 1993 by the Union Government. As per the 2001 Census, these five notified minority communities constitute 18.42 per cent of the country's population. The main factor responsible for socio-economic backwardness of the minority communities, particularly the Muslim community, is the lack of access to the common school system. This is particularly true in the case of Muslim girls. In the financial year 2006-07, the corpus of the Maulana Azad Education Foundation which provides financial assistance to implement educational schemes for the benefit of the educationally backward minorities has been enhanced to Rs. 200 crore from Rs. 100 crore.

10.73 The Union Government set up a High Level Committee on March 9, 2005 headed by Justice Rajinder Sachar for preparation of a report on the social, economic and educational status of the Muslim community. The Sachar Committee in its report has made 47 recommendations. Some important recommendations relate to measures which should be undertaken for high quality education, specifically for school education of Muslim girls, promoting and enhancing access to Muslims in priority sector advances, imparting training to the minorities for entrepreneurial development, participation of minorities in micro-credit schemes, and introducing CSS and Central Plan Schemes (CPS) for minorities. In addition, provision of basic amenities, good quality government schools and health facilities, pucca approach roads, and general improvement in living conditions (supply of electricity/housing/clean drinking water and sanitation) at all the villages/towns/habitations will serve the overall interest of all communities.

Social Sectors

Other Backward Classes (OBC)

10.74 Government provides central assistance to State Governments/UT Administrations for educational development of Other Backward Classes. Till November 30, 2006, Rs.31.22 crore and Rs. 17.36 crore, respectively, were released to States/UT Administrations against allocations of Rs.34.99 crore under Post Matric Scholarships for OBCs, and of Rs.25.00 crore under Pre Matric Scholarships, respectively. For construction of hostels for OBC boys and girls, the State Governments/UT Administrations/NGOs have been provided with Rs.11.17 crore during the year as Central Assistance. National Backward Classes Finance and Development Corporation extends credit facilities to persons living below double the poverty line for undertaking various income generating activities. During the year 2006-07 till November 2006, the Corporation has disbursed Rs.54.32 crore benefiting 34,330 persons.

Welfare of Persons with Disabilities

10.75 Out of an allocation of Rs. 243 crore made in 2006-07(BE) for the Welfare of Persons with Disabilities, Rs. 105.41 crore has been spent up to November 30, 2006. The programmes are implemented through National and Apex level Institutes dealing with different categories of disabilities such as visual, hearing, orthopaedic and mental. These Institutes conduct short-term and long-term courses for various categories of personnel for providing rehabilitation services to those needing them. Up to November 30, 2006, an amount of Rs 32.03 crore has been released to seven institutes under plan schemes.

10.76 Section 41 of the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 stipulates that the appropriate Governments and the local authorities shall, within the limits of their economic capacity and development, provide incentives to employers both in public and private sectors to ensure that at least five per cent of their work force is composed of persons with disabilities. The National Policy

for Persons with Disabilities, which was adopted in 2006, also lays down that proactive measures will be taken to provide incentives, awards, tax exemptions, etc. to encourage employment of persons with disabilities in the private sector. In order to secure employment of persons with disabilities in the private sector, financial incentive at the rate of 20 per cent of the emoluments paid to disabled employees may be reimbursed to an employer. Five Composite Rehabilitation Centres (CRCs) at Srinagar, Lucknow, Bhopal, Guwahati and Sundernagar provide facilities for manpower development and ensuring availability of rehabilitation services for all categories of persons with disabilities. Four Regional Rehabilitation Centres (RRCs) provide services to persons with spinal injuries at Chandigarh, Cuttack, Jabalpur and Bareilly. 199 District Disability Rehabilitation Centres (DDRCs) have been sanctioned in the country for providing comprehensive rehabilitation services at the grass root level. At present, 122 DDRCs are functioning in the country.

10.77 Under the scheme of Assistance to the Disabled for Purchase/ Fitting of Aids and Appliances (ADIP) an amount of Rs.31.35 crore has been released during 2006-2007 up to November 30, 2006. Deen Dayal Disabled Rehabilitation Scheme provides financial assistance to voluntary organizations for running rehabilitation centres for leprosy-cured persons, for manpower development in the field of mental retardation and cerebral palsy, and establishment and development of special schools for the major areas of orthopaedic, speech, hearing, visual and mental disability. Under this scheme, organizations are given grant-in-aid for both recurring and non-recurring expenditure to the extent of 90 per cent of the total approved cost of the project. During the year 2006-07, an amount of Rs.32.24 crore has so far been released up to November 30, 2006 to voluntary organizations. National Handicapped Finance and Development Corporation provides credit facilities to persons with disability for their economic empowerment.

Social Defence Sector

10.78 To fulfill the commitments of the National Policy on Older Persons for providing health, shelter, vocational training, recreation, and protection of life for the aged, special emphasis is being placed on expanding the on-going programmes of old age homes, day care centres, mobile medicare units and medicare centres being implemented under the scheme of Integrated Programme for Older Persons. During the year 2006-07, an amount of Rs 6 crore has been released under this scheme, up to November 30, 2006. Rigorous efforts are being made to tackle the growing problem of drug abuse and alcoholism through an integrated and comprehensive community based approach in the country. The programme is implemented through voluntary organizations running Treatment-Cum-Rehabilitation Centres and Awareness and Counseling Centres. An amount of Rs.9.50 crore up to November 30, 2006, has been released to voluntary organizations under the scheme of Prevention of Alcoholism and Substance (Drugs) Abuse during the financial year 2006-07. For effective implementation of the programmes, the personnel engaged in delivery of services in these NGOs are being trained under various programmes organized by the National Institute of Social Defence.

Outlook

10.79 Sustained and high levels of economic growth in recent years provide a unique opportunity and momentum for faster social sector development. The buoyant economy should not only generate adequate employment but also provide adequate and need based resources for large interventions in the critical areas of social sector. The recent resurgence of manufacturing also bodes well for employment generation.

10.80 Availability of resources alone, however, will not guarantee faster social sector development. Efficacy of the

programmes will depend a lot on the manner in which States implement various social sector programmes, these primarily being in the domain of the States. Time bound achievement of the physical targets will depend a lot on the capacity mobilization of the States at various levels. Accountability and transparency, especially through the PRIs, need to be emphasized to ensure good governance and delivery of quality services through public action for most social sector programmes. Capacity building of PRIs

themselves is a critical success factor to achieve these objectives. States must ensure availability of adequate and skilled manpower for PRIs which are crucial for effective implementation of the social sector programmes like the NREGS. Monitoring the progress and effective implementation of the various social sector schemes through the outcome budget along with Right to Information Act and decentralization through the PRIs are expected to strengthen the process of inclusive growth.