

# Review of Economic Developments

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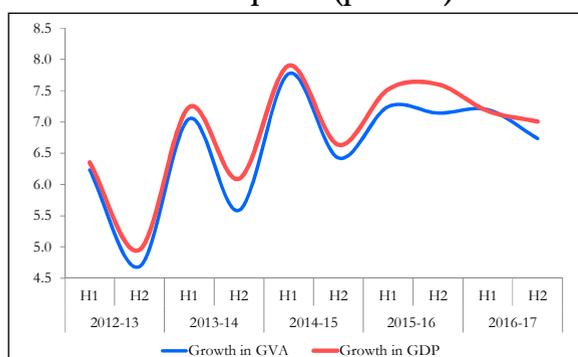
*The Economic Survey 2015-16 had predicted the Indian economy to register the GDP growth rate in the range of 7 to 7.75 per cent in the year 2016-17. The economy was indeed treading along that path and clocked 7.2 per cent in the first half of the current financial year, as per the estimates released by the Central Statistics Office (CSO). However, consequent upon the radical measures initiated in November 2016 in the form of demonetisation of Rs. 1000 and Rs. 500 currency notes, the Indian economy is likely to experience a slowdown in the growth rate that could be lower than the first advance estimates of CSO. The first advance estimates released in early January 2017 were arrived at mainly based on data prior to demonetisation and largely reflect the economic situation prevailing in the first seven to eight months of the financial year. Even the likely reduction in the rate of real GDP growth of 1/4 percentage points to 1/2 percentage points relative to the baseline of about 7 per cent still makes India's growth noteworthy given the weak and unsettled global economy which posted a growth rate of a little over 3 per cent in 2016. That India managed to achieve this high growth in the aftermath of demonetisation and amidst the global slowdown, along with a macro-economic environment of relatively lower inflation (unlike a generally higher inflation in the previous episodes of high growth), moderate current account deficit coupled with broadly stable rupee-dollar exchange rate and the economy treading decisively on the fiscal consolidation path, makes it quite creditable. Most external debt indicators also point towards an improvement as at end September 2016.*

*However, challenges abound. The investment to GDP ratio has not only been lower than the desirable levels but has been consistently declining over the last few years. This trend needs to be reversed at the earliest in order to realise higher and lasting economic growth. Similarly, the savings rate will have to be raised, so that investment can be financed without resorting to high dose of external financing. After remaining fairly stable for much of the last two years, international prices of crude oil have started to trend up. This along with rise in the prices of other commodities like coal, etc. could exert inflationary pressure and have the potential to adversely impact the trade and fiscal balances. The outlook for the next financial year suggests that growth is set to recover, as the currency in circulation returns to normal levels and taking into account the significant reform measures initiated by the government.*

## I. INTRODUCTION

8.1 As per the first Advance Estimates (AE) released by the CSO, the Indian economy is estimated to register a GDP growth rate of 7.1 per cent in 2016-17. (There is a likelihood of this growth being revised downwards in the subsequent revisions carried out by the CSO). The growth in the second half of 2016-17 works out to 7.0 per cent as against 7.2 per cent in the first half (Figure 1). The first AE released by CSO in early January 2017 were arrived at based on data mainly up to October and in some cases up to November 2016 and hence largely mirror the economic situation during the first seven to eight months of the financial year.

**Figure 1. Growth in GDP and GVA at constant prices (per cent)**



Source: CSO

8.2 As per the first AE, the growth rate of gross value added (GVA) at constant basic prices for 2016-17 is placed at 7.0 per cent, as against 7.2 per cent in 2015-16. The growth in the second half of 2016-17 is estimated at 6.7 per cent as against 7.2 per cent in the first half (Figure 1). The sector-wise details are presented in the Table 1.

8.3 At the sectoral level, growth of agriculture & allied sectors improved significantly in 2016-17, following the normal monsoon in the current year which was preceded by sub-par monsoon rainfall in 2014-15 and 2015-16. Higher growth in agriculture sector in 2016-17 is not surprising; rabi sowing so far and the first advance estimates of the kharif crop production for the year attest to this. After achieving a real growth of 7.4 per cent in terms of value added in 2015-16, the growth in industrial sector, comprising mining & quarrying, manufacturing, electricity, gas & water supply, and construction sectors moderated in 2016-17. This is in tandem with the moderation in manufacturing, mostly on account of a steep contraction in capital goods, and consumer non-durable segments

**Table 1. Growth Rate of GVA at Basic Prices for Different Sectors (per cent)**

Sector	2012-13 <sup>a</sup>	2013-14 <sup>a</sup>	2014-15 <sup>b</sup>	2015-16 <sup>c</sup>	2016-17 <sup>d</sup>	2016-17	
						H1	H2
<b>Agriculture, forestry &amp; fishing</b>	1.5	4.2	-0.2	1.2	4.1	2.5	5.2
<b>Industry</b>	3.6	5.0	5.9	7.4	5.2	5.6	4.9
Mining & quarrying	-0.5	3.0	10.8	7.4	-1.8	-0.9	-2.6
Manufacturing	6.0	5.6	5.5	9.3	7.4	8.1	6.7
Electricity, gas, water supply, etc	2.8	4.7	8.0	6.6	6.5	6.4	6.6
Construction	0.6	4.6	4.4	3.9	2.9	2.5	3.4
<b>Services</b>	8.1	7.8	10.3	8.9	8.8	9.2	8.4
Trade, hotel, transport, storage	9.7	7.8	9.8	9.0	6.0	7.6	4.5
Financial, real estate & professional services	9.5	10.1	10.6	10.3	9.0	8.8	9.2
Public administration, defence, etc.	4.1	4.5	10.7	6.6	12.8	12.4	13.2
<b>GVA at basic prices</b>	5.4	6.3	7.1	7.2	7.0	7.2	6.7

Source: CSO

Note: a=second revised estimate; b=first revised estimate c=provisional estimate; d= first advance estimate

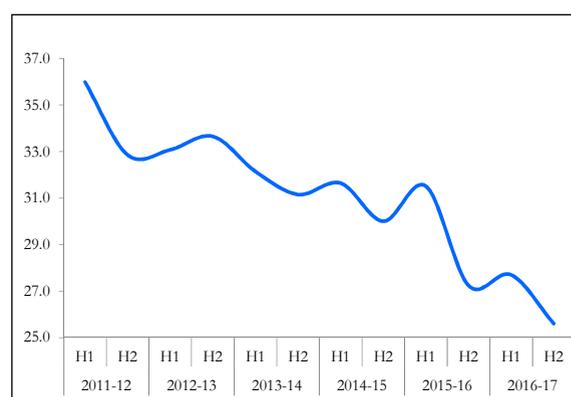
of Index of Industrial Production (IIP). The contraction in mining and quarrying largely reflects slowdown in the production of crude oil and natural gas. However, the performance of industrial sector in terms of value added continued to be at variance with its achievements based on IIP. As in the previous years, the service sector continued to be the dominant contributor to the overall growth of the economy, led by a significant pick-up in public administration, defence & other services, that were boosted by the payouts of the Seventh Pay Commission. Consequently, the growth in services in 2016-17 is estimated to be close to what it was in 2015-16 (Table 1).

8.4 Fixed investment (gross fixed capital formation(GFCF)) to GDP ratio (at current prices) is estimated to be 26.6 per cent in 2016-17, vis-à-vis 29.3 per cent in 2015-16. The growth in fixed investment at constant prices declined from 3.9 per cent in 2015-16 to (-) 0.2 per cent in 2016-17. Fixed investment rate has been declining since 2011-12 (Figure 2) and this trend has to be reversed for medium to long term growth prospects. Being aware of the need to boost investment and growth, Government, in co-ordination with the Reserve Bank of India and other stakeholders, has taken a number of steps to improve the ease of doing

business and to improve the balance sheet positions of banks and firms.

8.5 It is the 23.8 per cent growth in government final consumption expenditure that is the major driver of GDP growth in the current year from the demand side (Table 2). Private consumption is also projected to grow at a reasonable pace during the year. With plummeting imports of gold, silver and other bullion, acquisition of valuables by households is expected to contract in the current year. Steeper contraction in imports, compared to exports, during the first half of 2016-17 led to a sharp decline in trade deficit. Despite slowing services exports, the decline in merchandise trade deficit helped improve the position of net exports of goods and non-factor services in the national accounts.

Figure 2. GFCF as percentage of GDP



Source: CSO

Table 2. Growth Rate of GDP at constant Prices and its components (per cent)

Component	2012-13 <sup>a</sup>	2013-14 <sup>a</sup>	2014-15 <sup>b</sup>	2015-16 <sup>c</sup>	2016-17 <sup>d</sup>	2016-17	
						H1	H2
Government final consumption	0.5	0.4	12.8	2.2	23.8	16.9	32.4
Private final consumption	5.3	6.8	6.2	7.4	6.5	7.1	6.0
Gross fixed capital formation	4.9	3.4	4.9	3.9	-0.2	-4.4	4.2
Change in stocks	-3.8	-18.6	20.3	5.5	5.2	5.9	4.6
Valuables	2.6	-42.2	15.4	0.3	-33.5	-47.9	-19.3
Exports of goods and services	6.7	7.8	1.7	-5.2	2.2	1.7	2.6
Imports of goods and services	6.0	-8.2	0.8	-2.8	-3.8	-7.5	-0.1
<b>GDP</b>	<b>5.6</b>	<b>6.6</b>	<b>7.2</b>	<b>7.6</b>	<b>7.1</b>	<b>7.2</b>	<b>7.0</b>

Source: CSO

Note: a=second revised estimate; b=first revised estimate c=provisional estimate; d= first advance estimate

## II. FISCAL DEVELOPMENTS

8.6 Budget 2016-17 reaffirmed Government's commitment to continue with fiscal consolidation and projected fiscal deficit at 3.5 per cent of GDP for the year, down from 3.9 per cent in 2015-16. Consolidation was sought to be achieved through a 11.9 per cent increase in the gross tax revenue (over 2015-16 PA) and significant strides in non-tax revenue and non-debt capital receipts, despite upside compulsions on the expenditure side necessitated primarily by higher pay-outs on account of the implementation of the recommendations of the Seventh Pay Commission.

8.7 The buoyancy of non-debt receipts of the Union Government, consisting of net tax revenue, non-tax revenue and non-debt capital receipts during April-November 2016 supported fiscal rectitude (Table 3). The growth in non-debt receipts at 25.8 per cent during April-November 2016 surpassed the budgeted growth rate of 16.4 per cent for the full year (over 2015-16 PA).

8.8 On the whole, tax collections, especially union excise duties and service tax, have been buoyant in the current year till November 2016 (Figure 3). Despite the possible short-term spill-over effects of the cancellation of the legal tender character of

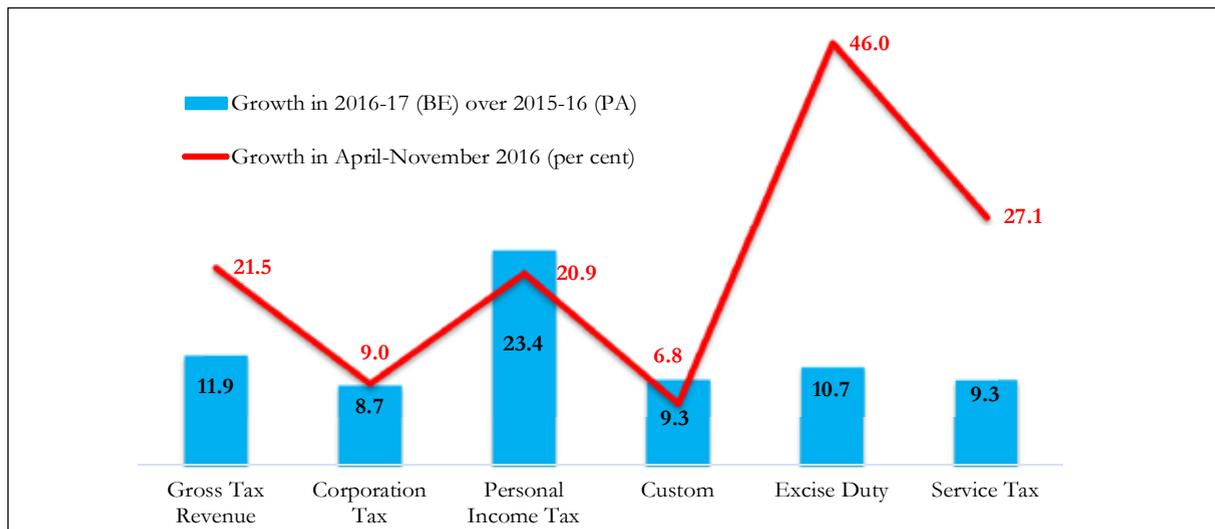
**Table 3. Non-debt receipts of the Union Government**

	April-November (as per cent of BE)		Growth in April-November (per cent)	
	2015-16	2016-17	2015-16	2016-17
Gross tax revenue	53.0	57.2	20.8	21.5
Tax (net to Centre)	50.5	58.9	12.5	33.6
Non tax revenue	78.1	54.2	34.9	1.0
Non-debt capital receipts	25.8	48.5	180.3	57.1
Total non-debt receipts	53.9	57.4	20.0	25.8

*Source:* CGA

*Note:* BE-Budget Estimates

**Figure 3. Growth in Central taxes (per cent)**



*Source:* CGA

*Note:* PA: Provisional Actuals

high value notes, indirect taxes grew by 36.4 per cent during the month of November 2016. The tax measures on additional resource mobilization have primarily helped this buoyancy thus far.

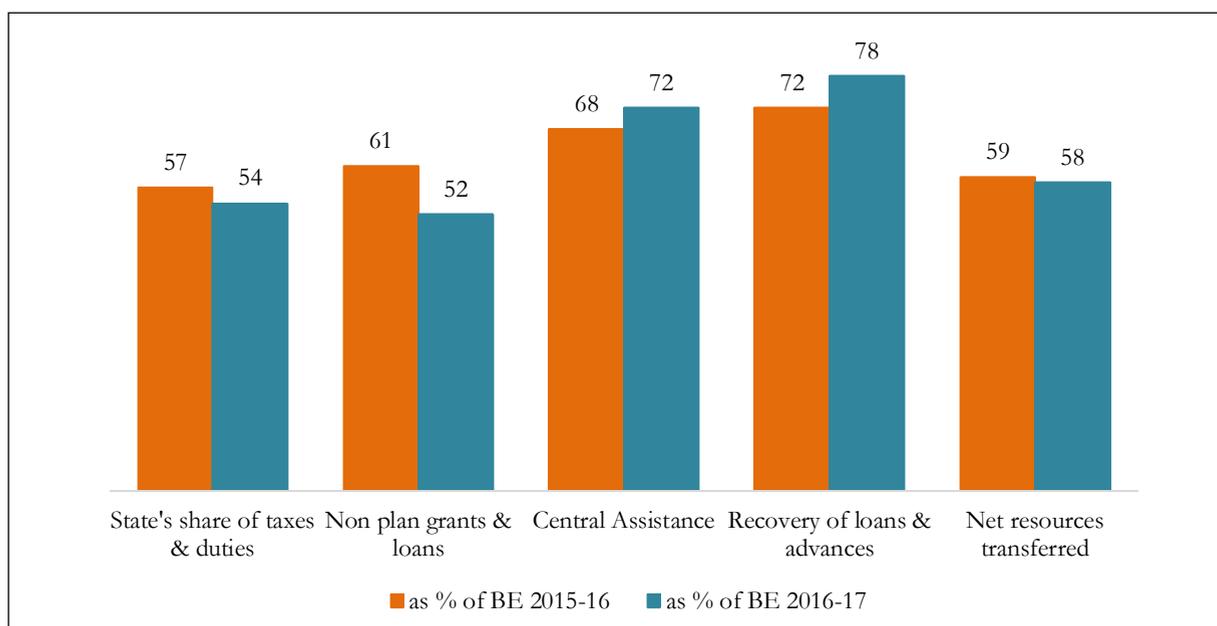
8.9 An average of about 34.5 per cent of the gross tax collections was realized during the fourth quarter during the five-year period, 2011-12 to 2015-16. This indicates that the achievement of the budget estimates of tax collections in the current year will depend significantly on the dynamics of economic activity and tax collections during the last quarter. In the last quarter of the current year, the pace of economic activity can be affected by the demonetisation of the high domination currency and the response to the gradual re-monetization.

8.10 The realization of the gross tax revenue during April-November 2016 as ratio of the budget estimates for 2016-17 was much higher than the corresponding figure in the previous year (Table 3). Devolution to States and Union Territories during April-November 2016 also kept pace with the tax

collections (Figure 4). The net resources transferred, including tax devolution, non-plan grants and Central assistance during April-November 2016 was 58 per cent of the budget estimates for the full year and a notch below the corresponding accomplishments in the previous year.

8.11 The growth in revenue expenditure during April-November 2016, which prima facie seems very high (Table 4), may be viewed against the background of a few developments. Firstly, the salary component of the revenue expenditure increased by 23.2 per cent, close to the same as its budgeted growth, owing to meeting the commitments under the Seventh Pay Commission. Secondly, in contrast to 5.9 per cent decline in major subsidies budgeted for the current year, it increased by 5.0 per cent during April-November 2016, despite a decline in fertilizer and petroleum subsidy bills. This was because of a 21.6 per cent surge in food subsidy, largely because it is front-loaded this year and is likely to taper off, to a great extent, as the year progresses. The third reason for

**Figure 4. Transfer to States and Union territories during April-November**



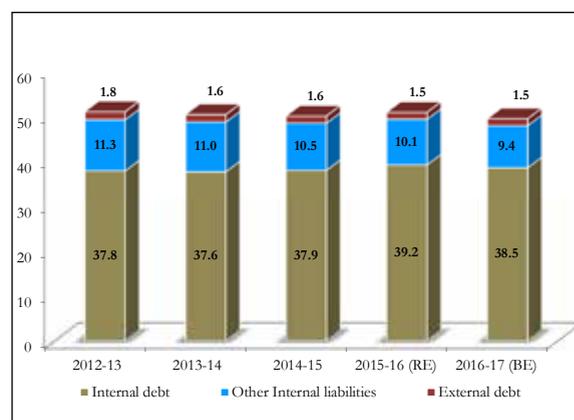
Source: CGA

the strong growth in revenue expenditure is an increase of 39.5 per cent in the grants for creation of capital assets (GCCA) during April-November 2016. All grants given to the State Governments and Union Territories are treated as revenue expenditure, but a part of these grants are used for creation of capital assets. The investment push that the Central Government expenditure provides to the economy can be approximated by subtracting these grants from revenue expenditure and adding it to the capital expenditure. This adjustment reduces the gap between the growth in capital and revenue expenditures (Table 4).

8.12 The total outstanding liabilities of the Central Government are composed of internal debt, other internal liabilities like provident funds, small savings, etc. and external debt. The growth in the total outstanding liabilities of the Union Government remained closely similar during 2014-15 and 2015-16, at 10.1 per cent and 10.4 per cent respectively. Yet, there was an increase in the ratio of internal debt of the Central Government to GDP in 2015-16 (Figure 5). This was not due to any adverse

change in the trajectory of debt addition, but to the nominal GDP growth declining in the year—despite an acceleration of the real GDP growth—on account of a sharp decline in inflation. The growth in total outstanding liabilities was budgeted to come down sharply to 7.9 per cent in 2016-17 from 10.4 per cent in the previous year.

**Figure 5. Outstanding liabilities of the Union Government as per cent of GDP (per cent)**



Source: CGA

Note: RE- Revised estimates

### III. PRICES

8.13 The headline inflation as measured by the Consumer Price Index (CPI) remained under control for the third successive financial

**Table 4. Major expenditure categories of the Union Government**

	April-Nov as per cent of BE		April-November Growth (per cent)	
	2015-16	2016-17	2015-16	2016-17
Total Expenditure	64.3	65.0	6.3	12.6
Revenue expenditure	64.0	66.1	3.2	16.4
Interest payments	55.4	54.1	8.6	5.6
Major subsidies	82.9	85.3	-3.6	5.0
Pensions	68.3	65.7	(-)1.4	34.1
Salaries	43.6	42.4	NA	23.2
Grants for creation of capital assets	73.2	67.7	-0.8	39.5
Capital expenditure	65.8	57.6	30.8	-10.4
Adjusted revenue expenditure (*)	63.3	65.9	3.6	14.3
Adjusted capital expenditure (*)	68.1	61.7	18.1	6.4

Source: CGA

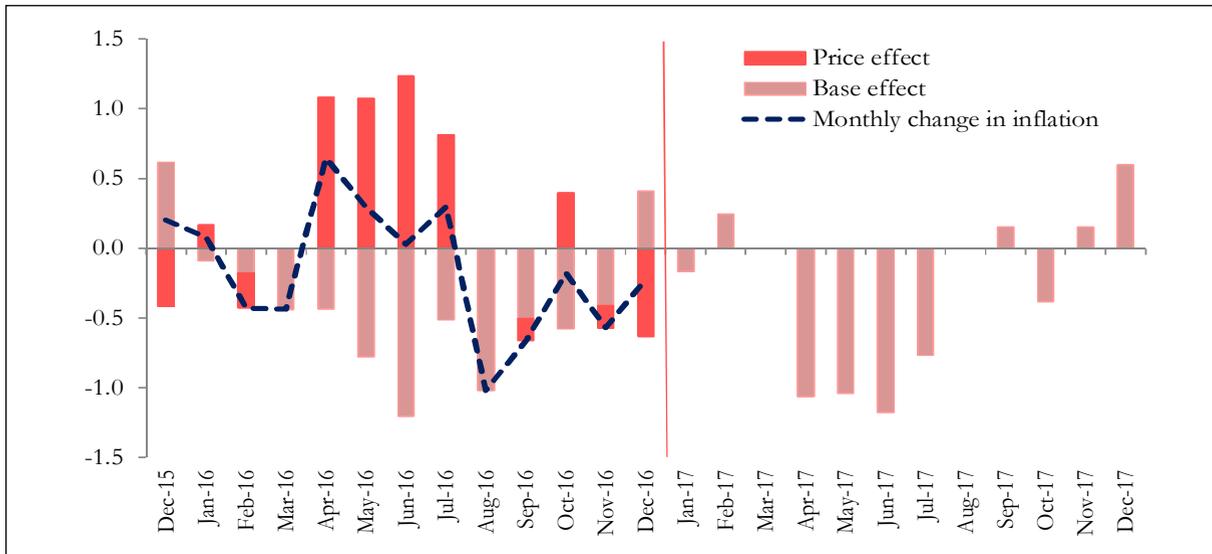
Note: (\*)=Adjusted revenue and capital expenditures are arrived at by deducting 'grants for creation of capital assets' from revenue expenditure and adding it to capital expenditure

year. The average CPI inflation declined to 4.9 per cent in 2015-16 from 5.9 per cent in 2014-15. It was 4.8 per cent during April-December 2016. Inflation hardened during the first few months of 2016-17, mainly due to upward pressure on the prices of pulses and vegetables. It dipped to two-year low of 3.4 per cent in December 2016 as a result of lower prices (Figure 6), especially of food items.

per cent in 2015-16 from 2.0 per cent in 2014-15. The downward trend, however reversed during the current financial year partly due to impact of rise in global commodity prices and partly owing to adverse base effect. The global commodity and energy prices have increased by 18 per cent and 23 per cent respectively in the first eleven months of 2016 as per IMF price indices. The WPI inflation stood at 3.4 per cent in December 2016 (Figure 7) and the average inflation was 2.9 per cent during April- December 2016.

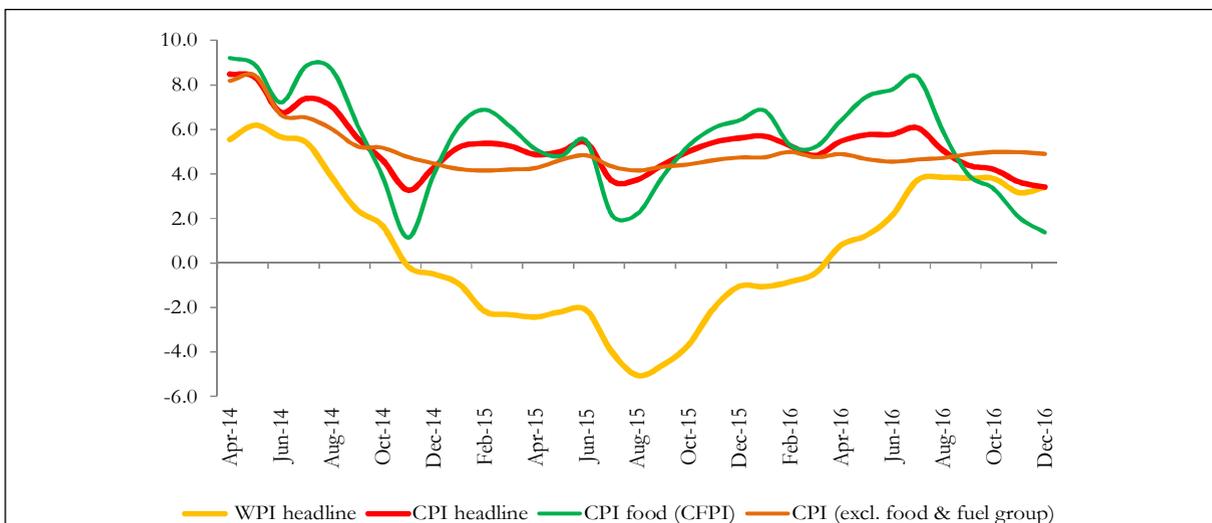
8.14 The average inflation based on the wholesale price index (WPI) declined to (-) 2.5

**Figure 6. Base Effect and Price Effect in CPI (percentage points)**



Source: Calculated using CPI data, CSO

**Figure 7. Inflation based on WPI and CPI-Combined (per cent)**



Source: CSO & DIPP

### Food inflation

8.15 The inflation in India is repeatedly being driven by narrow group of food items. Pulses continued to be the major contributor of food inflation (Figure 8b). The prices of pulses, in particular tur and urad, remained persistently high from mid 2015 to mid 2016 due to shortfall in domestic and global supply. Since July 2016, pulses prices except gram dal prices have been declining owing to near normal monsoon, increase in the Rabi pulses sowing and buffer build up by the Government. Sugar prices also firmed up on account of lower production and hardening of price in the international market. Vegetable prices, which flared during the lean summer season, have also declined sharply as supply picked up during the post monsoon and winter season. The CPI food inflation (CFPI) has, as a result, dipped to a two-year low of 1.4 per cent in December 2016. The inflation for pulses & products dipped to negative 1.6 per cent in December 2016, and the vegetables inflation remained negative since September 2016.

### Core inflation remains sticky

8.16 While the headline inflation has dropped sharply in the recent months, the CPI based core inflation (exclusive of food and fuel group) has remained sticky so far during this fiscal year (Table 5). CPI based refined core inflation (exclusive of food & fuel group, petrol & diesel) has been averaging around 5 per cent in the current fiscal year. Inflation for Pan, tobacco & intoxicants, Clothing & footwear, Housing and Education groups continued to be above 5 per cent and the major contributors of the core inflation. Inflation for the 'Transport & communication' group has been rising in recent months partly reflecting rise in global crude oil prices and its pass-through to domestic petrol and diesel prices. Price of crude oil (Indian basket) has increased from \$39.9 in April 2016 to \$52.7 in December 2016. Likewise, comparatively higher gold price in the international market this financial year has contributed towards sticky core inflation.

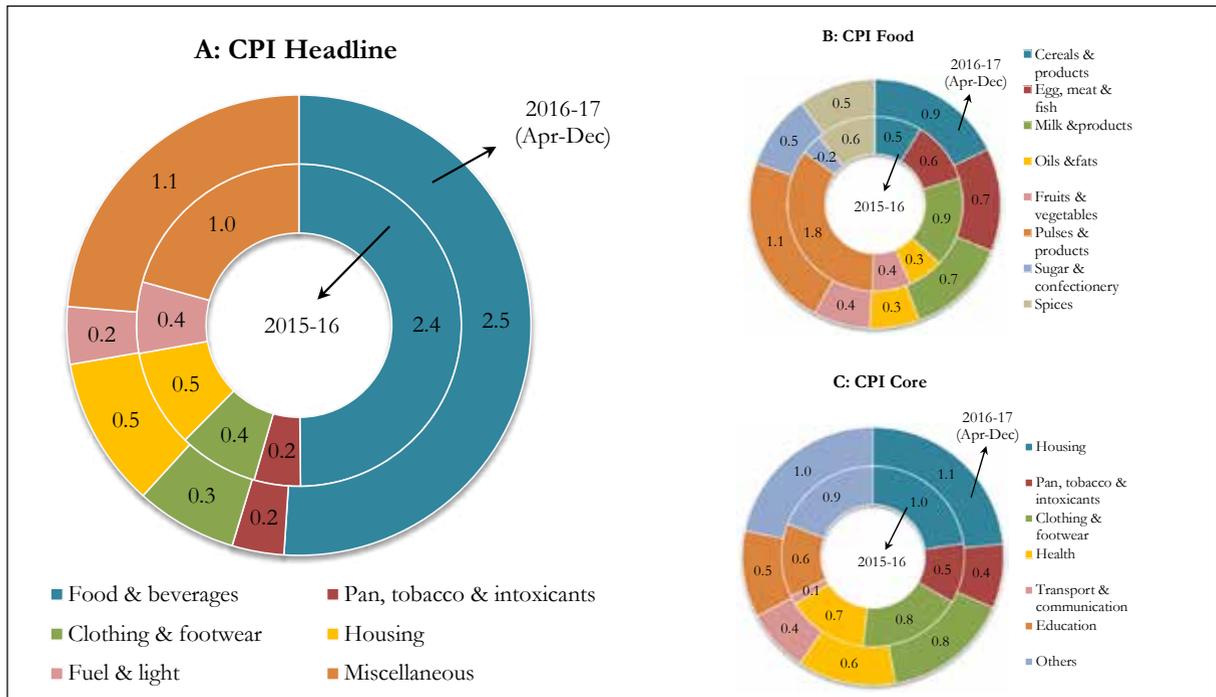
**Table 5. Quarter-wise inflation in WPI and CPI (in per cent)**

	Weights	2015-16				2016-17		
		Q1	Q2	Q3	Q4	Q1	Q2	Q3 (P)
<b>WPI Headline</b>	<b>100.0</b>	<b>-2.3</b>	<b>-4.6</b>	<b>-2.3</b>	<b>-0.8</b>	<b>1.4</b>	<b>3.8</b>	<b>3.4</b>
<b>CPI Headline</b>	<b>100.0</b>	<b>5.1</b>	<b>3.9</b>	<b>5.3</b>	<b>5.3</b>	<b>5.7</b>	<b>5.2</b>	<b>3.7</b>
I. Food & beverages	45.9	5.4	3.3	5.9	5.8	7.0	6.0	2.8
II. Pan, tobacco, etc.	2.4	9.5	9.5	9.4	8.7	7.7	6.8	6.6
III. Clothing & footwear	6.5	6.1	5.9	5.7	5.6	5.3	5.2	5.0
IV. Housing	10.1	4.6	4.6	5.0	5.3	5.4	5.3	5.1
V. Fuel and Light	6.8	5.8	5.5	5.3	4.5	3.0	2.8	3.2
VI. Miscellaneous	28.3	3.8	3.3	3.7	4.1	4.0	4.2	4.7
CFPI*	39.1	5.1	2.7	5.9	5.8	7.2	6.1	2.2
CPI excl. food & fuel (core)	47.3	4.6	4.3	4.6	4.8	4.7	4.7	5.0

Source: DIPP & CSO

Note: P: Provisional \*CFPI: Consumer Food Price Index

**Figure 8. Drivers of CPI-Headline, Food and Core inflation  
(Contribution in percentage points)**



Source: Calculated using CPI data, CSO

**Inflation outlook**

8.17 In view of the deceleration in the wholesale and retail prices of key food items during the second half of the current financial year so far, the average inflation based on CPI is projected to remain below 5 per cent. For the next financial year, the recent uptick in global commodity prices, in particular crude oil prices, pose an upside risk. The food inflation is likely to remain subdued in the light of higher Rabi sowing acreage, projected increase in the production of pulses and key agri-products globally and astute food management and price monitoring by the Government.

**IV. MONETARY MANAGEMENT AND FINANCIAL INTERMEDIATION**

8.18 The Government amended the Reserve Bank of India Act, 1934 during the current financial year. The amended Act provides for inflation target to be set by the Government,

in consultation with the Reserve Bank, once in every five years and further provides for a statutory basis for the constitution of an empowered Monetary Policy Committee (MPC). As per the revised monetary policy framework, the Government has fixed the inflation target of 4 per cent with tolerance level of +/- 2 per cent for the period beginning from 5<sup>th</sup> August, 2016 to March 31, 2021. The Government has also notified the constitution of the MPC on 29<sup>th</sup> September 2016. So far the MPC has already held two meetings. The MPC, in its latest meeting held on December 7, 2016, while maintaining accommodative policy stance did not change the policy rate. The policy rate was reduced by 25 basis points to 6.25 per cent in its first meeting held on October 4, 2016. Hence the reverse repo rate under the Liquidity Adjustment Facility (LAF) remains 5.75 per cent, and the Marginal Standing Facility (MSF) rate is 6.75 per cent.

8.19 The Reserve Bank of India (RBI) also refined its monetary policy framework in April 2016, with the objective of meeting short-term liquidity needs through regular facilities; frictional and seasonal mismatches through fine-tuning operations and more durable liquidity by modulating net foreign assets and net domestic assets in its balance sheet. The MPC so far has gone by the script.

**Liquidity situation**

8.20 The RBI has been managing liquidity following its liquidity management framework (Figure 9). In order to bring ex ante liquidity conditions close to neutrality it has pumped durable liquidity through open market operations (OMOs). Post the withdrawal of specified bank notes (SBNs), RBI has conducted exceptional operations to mop the large surplus liquidity through variable reverse repo rate. To complement the RBI’s efforts, the Government also increased the limit on securities under market stabilisation scheme from Rs. 30,000 crore to Rs. 6 lakh crore. Liquidity conditions were generally tight during Q1 of 2016-17. The condition eased significantly in the subsequent months barring one or two exceptional episodes. The

weighted average call money rate (WACR), on an average has been hovering around policy rate without crossing the upper and lower bounds of the corridor.

**Yield on Government bills/ securities**

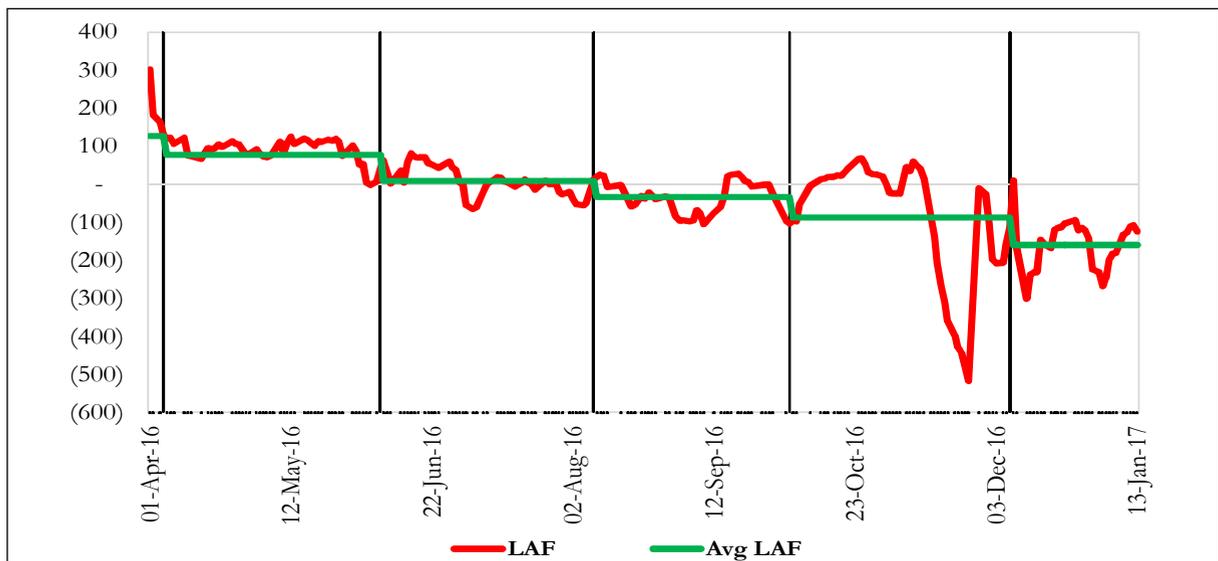
8.21 There was a sharp fall in the 91 days t-bill rate in April 2016 owing to 25 bps cut in repo rate. Ten years government security (G-sec) yield however continued to tread high in spite of the rate cut and in fact increased marginally after the rate cut (Figure 10). However, yield on G-sec started softening since June 2016. As of 30<sup>th</sup> December 2016, 10-year G-sec yield stood at 6.63 per cent.

8.22 The transmission of the rate cuts, however, remained far from perfect. Base rate came down marginally from 9.30/9.70 in April 2016 to 9.30/9.65 as of 30<sup>th</sup> December 2016. Term deposit rates for greater than one-year maturity period declined from 7.00/7.50 to 6.50/7.00 in this period.

**Banking sector**

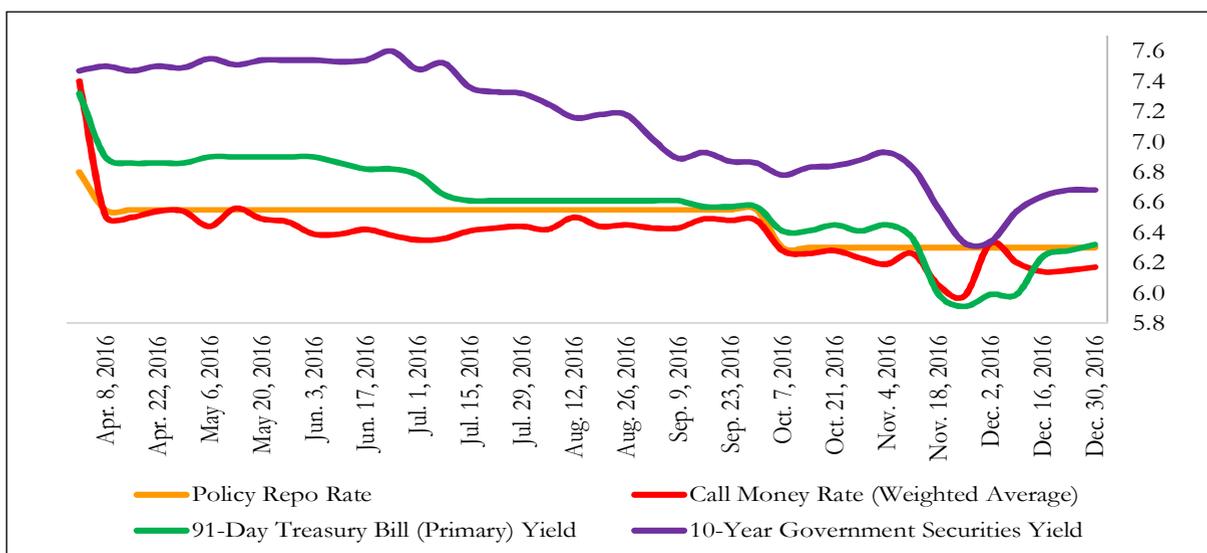
8.23 The performance of the banking sector, public sector banks (PSBs) in

**Figure 9. Liquidity Condition (Rs. thousand crore)**



Source: RBI

**Figure 10. Movement of Key Rates (per cent)**



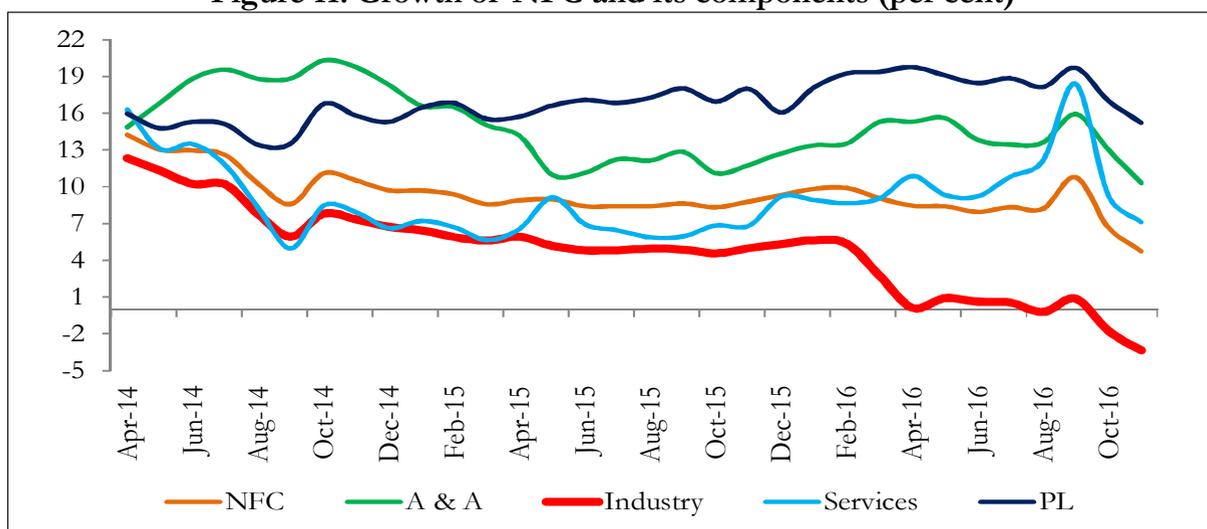
Source: RBI

particular, continued to be subdued in the current financial year. The asset quality of banks deteriorated further. The gross non-performing assets (GNPA) to total advances ratio of scheduled commercial banks (SCBs) increased to 9.1 per cent from 7.8 per cent between March and September 2016. Profit after tax (PAT) contracted on year-on-year basis in the first half of 2016-17 due to higher growth in risk provisions, loan write-off and decline in net interest income.

**Credit growth**

8.24 Non- food credit (NFC) outstanding grew at sub 10 per cent for all the months except for September 2016 (Figure 11). Credit growth to industrial sector remained persistently below 1 per cent during the current fiscal, with contraction in August, October and November. However, bank credit lending to agriculture and allied activities (A&A) and personal loans (PL) segments continue to be the major contributor to overall NFC growth.

**Figure 11. Growth of NFC and its components (per cent)**



Source: RBI

**Measures to strengthen corporate bond market**

8.25 The RBI took a number of measures to strengthen the corporate bond market in India. It accepted many of the recommendations of the Khan Committee to boost investor participation and market liquidity in the corporate bond market. The new measures as announced by the RBI include: (a) Commercial banks are permitted to issue rupee-denominated bonds overseas (masala bonds) for their capital requirements and for financing infrastructure and affordable housing; (b) brokers registered with the Securities and Exchange Board of India (SEBI) and authorized as market makers in corporate bond market permitted to undertake repo / reverse repo contracts in corporate debt securities. This move will make corporate bonds fungible and thus boost turnover in the secondary market; (c) banks allowed to increase the partial credit enhancement they provide for corporate bonds to 50 per cent from 20 per cent. This move will help lower-rated corporates to access the bond market; (d) permitting primary dealers to act as market makers for

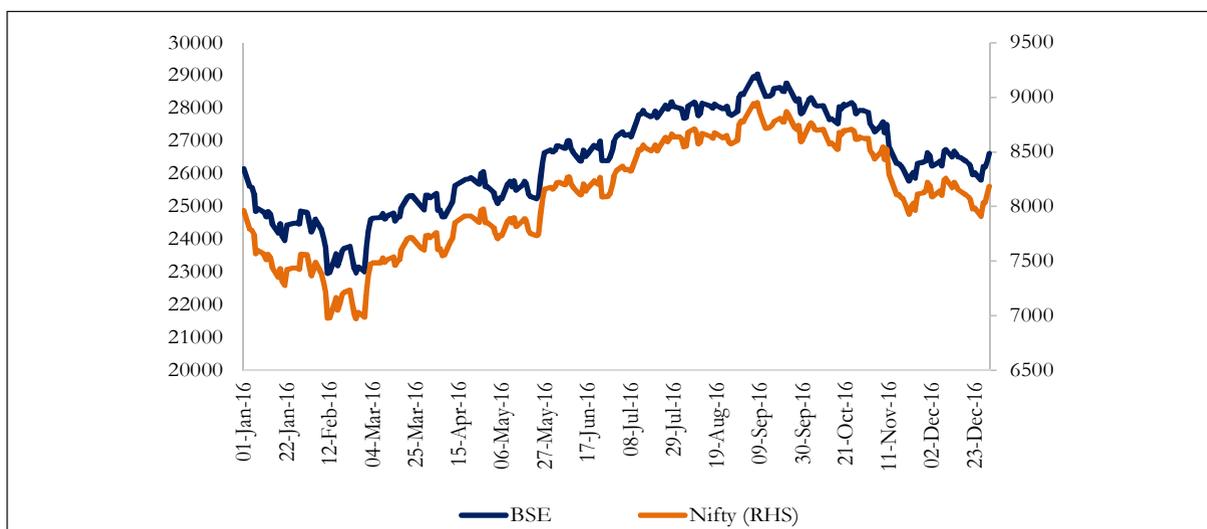
government bonds, to give further boost to government securities by making them more accessible to retail investors; and (e) to ease access to the foreign exchange market for hedging in over the counter (OTC) and exchange-traded currency derivatives, the RBI has allowed entities exposed to exchange rate risk to undertake hedge transactions with simplified procedures, up to a limit of US\$30 million at any given time.

**Indian markets performance**

8.26 Indian markets recorded modest growth of 1.95 – 3 per cent (Sensex was up by 1.95 per cent while Nifty was higher by 3.0 per cent) for the calendar year 2016 as compared to losses registered in 2015.

8.27 The upward momentum, visible in the Indian markets peaked around September 2016, lost steam thereafter (Figure 12), particularly in the wake of foreign capital outflow from emerging markets. Global and domestic factors had a sizable impact on the performance of the Indian markets. Some of the closely watched developments were the Brexit, the US Presidential elections as well as policy announcements by the US Federal

**Figure 12. Indian Benchmark Indices: Sensex & Nifty (Daily Movements from 1<sup>st</sup> January 2016 to 31<sup>st</sup> December 2016)**



Source: Nifty, Sensex

Reserve and the RBI. In addition, other factors which weighed on market sentiment included the policy decisions taken by the OPEC regarding oil production and the appointment of the new governor of the RBI.

### Foreign Portfolio Investments

8.28 For the first time since the meltdown of 2008, Net Foreign Portfolio Investments (FPI) have turned negative (implying that there was an outflow from the Indian markets to the tune of Rs. 23079 crore) (Table 6). The FPI outflow was not a phenomenon associated with Indian markets alone as FPIs pulled out of most EMEs in a big way due to higher returns in advanced economies.

## V. INDIA'S MERCHANDISE TRADE

### Exports

8.29 In line with subdued global growth and trade, India's exports declined by 1.3 per cent and 15.5 per cent in 2014-15 and 2015-16 respectively. The trend of negative growth was reversed somewhat during 2016-17 (April-December), with exports registering a growth of 0.7 per cent to US\$ 198.8 billion from US\$ 197.3 billion in 2015-16 (April-December). During 2016-17 (April-December) Petroleum, oil and lubricants (POL) exports constituting 11.1 per cent of total exports declined by 9.8 per cent to US\$ 22.0 billion over corresponding previous period, while non POL exports grew by

**Table 6. Net FPI/FII Investment in India in 2010-2016 (in Rs. Crore)**

Segments	2010	2011	2012	2013	2014	2015	2016
Equity	133266	-2714.3	128360	113136	97054	17808	20568
Debt	46408	42067	34988	-50849	159156	45857	-43647
<b>Total</b>	<b>179674</b>	<b>39352.9</b>	<b>163348</b>	<b>62286</b>	<b>256213</b>	<b>63663</b>	<b>-23079</b>

Source: NSDL

**Table 7. Export Performance of some important sectors**

	2015-16	2016 (APR-NOV) (P)
Positive Growth	Chemicals and related* products {0.6}	Ores and minerals { 35.3 } Marine products { 20.6 } Gems and Jewellery {11.6} Electronic goods {3.0 } Engineering goods {0.9}
Negative Growth	Textiles {-3.2} Gems and Jewellery {-4.8} Electronic goods {-5.3} Leather {-10.3} Marine products {-13.5} Ores and minerals {-16.4} Engineering goods {-17.0} Agriculture and allied products {-17.6} Petroleum products {-46.2}	Chemicals and related products* { -0.5 } Agriculture and allied products { -3.0 } Leather { -4.8 } Textiles { -5.2 } Petroleum products { -9.8 }

Source: Department of Commerce

Note: Figures in bracket {} indicates growth rate y-o-y. \*: including plastic & plastic products.

P: Provisional as per quick estimates

2.2 per cent to US \$ 176.8 billion. A large number of export sectors have moved to positive growth territory in April-November 2016-17 as compared to 2015-16 (Table 7).

8.30 Region-wise, India's exports to Europe, Africa, America, Asia and CIS and Baltics declined in 2015-16. However, India's exports to Europe, America and Asia increased by 2.6 per cent, 2.4 per cent and 1.1 per cent respectively in 2016-17 (April-November), while exports to Africa declined by 13.5 per cent. USA followed by UAE and Hong Kong were the top export destinations.

### Imports

8.31 Value of imports declined from US\$ 448 billion in 2014-15 to US\$ 381 billion in 2015-16, mainly on account of decline in crude oil prices resulting in lower levels of POL imports. During 2016-17 (April-December) imports declined by 7.4 per cent to US\$ 275.4 billion compared to the corresponding period of previous year. POL imports declined by 10.8 per cent. Gold and silver imports declined by 35.9 per cent and non-POL and non-gold & silver imports by 2.0 per cent. Positive growth was registered in pearls and semi-precious stones (19.0 per cent) and Food and allied products (1.3 per cent). Imports of capital goods declined by 8.8 per cent.

8.32 India's imports from Europe, Africa, America, Asia and CIS & Baltics regions declined in 2015-16. However, in 2016-17 (April-November), imports from CIS & Baltics region increased by 10.3 per cent while other four regions witnessed decline. Top three import destinations of India were China followed by UAE and USA in 2016-17 (April-November).

### Trade deficit

8.33 In 2015-16, India's trade deficit declined by 13.8 per cent (vis-à-vis 2014-

15) to US\$ 118.7 billion. Furthermore, it declined by 23.5 per cent to US\$ 76.5 billion in 2016-17 (April-December) as compared to US\$ 100.1 billion in the corresponding period of previous year.

## VI. BALANCE OF PAYMENTS

### Current account

8.34 Despite moderation in India's exports, India's external sector position has been comfortable, with the current account deficit (CAD) progressively contracting from US\$ 88.2 billion (4.8 per cent of GDP) in 2012-13 to US\$ 22.2 billion (1.1 per cent of GDP) in 2015-16. The CAD further narrowed in 2016-17 (H1) to 0.3 per cent of GDP. In 2016-17 (H1), sharp contraction in trade deficit outweighed the decline in net invisible earnings. The downward spiral in international crude oil prices resulted in a decline in oil import bill by around 18 per cent which together with a sharp decline in gold imports led to a reduction in India's overall imports (on BoP basis). Net services receipts declined by 10 per cent in H1 of 2016-17 despite increase in services receipts (4.0 per cent) as growth in services payments was higher (16 per cent). However, growth of receipts of software was marginal and financial services receipts declined. Subdued income conditions in source countries, particularly in the gulf region due to downward spiral in oil prices continued to weigh down on remittances by Indians employed overseas as private transfers moderated to US\$ 28.2 billion in H1 of 2016-17 from US\$ 32.7 billion in H1 of 2015-16.

### Capital/finance account

8.35 Despite higher net repayments on overseas borrowings and fall in banking capital (net) with building up of foreign currency assets by banks & decline in NRI deposits (net), robust inflow of foreign

direct investment (FDI) and net positive inflow of foreign portfolio investment (FPI) were sufficient to finance CAD leading to an accretion in foreign exchange reserves in H1 of 2016-17. The net FDI flows of US\$ 21.3 billion recorded a growth of about 29 per cent over the corresponding period of last year. There was net inflow of portfolio investment amounting to US\$ 8.2 billion in H1 of 2016-17 as against outflow of US\$ 3.5 billion in H1 of 2015-16. Banking capital recorded net outflow of US\$ 6.8 billion, primarily on account of acquisition of foreign currency assets by banks, while net repayment of external commercial borrowings resulted in an outflow of US\$ 4.6 billion in H1 of 2016-17. With net capital flows remaining higher than the CAD, there was net accretion to India's foreign exchange reserves (on BoP Basis) (Table 8 and Appendix A1).

### Foreign exchange reserves

8.36 In H1 of 2016-17, India's foreign exchange reserves increased by US\$ 15.5 billion on BoP basis (*i.e.*, excluding valuation effects), while in nominal terms (*i.e.*, including valuation effect) the increase was to the tune of US\$ 11.8 billion. The loss due to valuation changes of US\$ 3.7 billion mainly reflects the appreciation of the US dollar against major

currencies.

### Exchange rate

8.37 Inflows on account of FIIs, particularly into the equity segment, and positive sentiments generated by a narrower CAD in H1 of 2016-17 helped the rupee to move in a narrow range. The subsequent depreciation of the rupee could be attributed largely to the strengthening of the US dollar globally following the US presidential election results and tightening of monetary policy by the Federal Reserve. Nevertheless, in 2016-17 so far, the rupee has performed better than most of other emerging market economies (EMEs). During 2016-17 (April-December), on y-o-y basis, the rupee depreciated by 3.4 per cent against US dollar as compared to the depreciation of Mexican peso (14.4 per cent), South African Rand (8.6 per cent) and Chinese renminbi (6.3 per cent). The rupee depreciated in terms of nominal effective exchange rate (NEER) against a basket of 6 and 36 currencies during April-December 2016. However, the 6-currency and 36-currency REER (Trade-based; Base year: 2004-05=100) appreciated by 6.1 per cent and 5.6 per cent, respectively as at end-December 2016 over end-March 2016.

**Table 8. Summary of Balance of Payments (US \$ billion)**

	2013-14	2014-15	2015-16	2015-16	2016-17
		(April-March)		H1	H1
Trade balance	-147.6	-144.9	-130.1	-71.3	-49.5
Net services	73.1	76.5	69.7	35.6	32.0
Invisibles (net)	115.2	118.1	107.9	56.7	45.7
Current Account Balance	-32.4	-26.9	-22.2	-14.7	-3.7
Total Capital/ Finance A/C (Net)	47.9	88.3	40.1	25.3	19.2
Reserve Movement (- increase) and (+ decrease)	-15.5	-61.4	-17.9	-10.6	-15.5
Trade balance/GDP(per cent)	-7.9	-7.1	-6.3	-7.1	-4.6
Invisible Balance/GDP (per cent)	6.2	5.8	5.2	5.7	4.3
Current Account Balance/GDP (per cent)	-1.7	-1.3	-1.1	-1.5	-0.3
Net Capital Flows/GDP (per cent)	2.6	4.3	1.9	2.5	1.8

Source: RBI

## VII. EXTERNAL DEBT

8.38 At end-September 2016, India's external debt stock stood at US\$ 484.3 billion, recording a decline of US\$ 0.8 billion over the level at end-March 2016, mainly due to a reduction in commercial borrowings and short term external debt. However, on a sequential basis, total external debt at end-September 2016 increased by US\$ 4.8 billion from the end-June 2016 level.

8.39 The shares of Government (Sovereign) and non-Government debt in the total external debt were 20.1 per cent and 79.9 per cent respectively, at end-September 2016. US dollar denominated debt accounted for 55.6 per cent of India's total external debt at end-September 2016, followed by Indian rupee (30.1 per cent), SDR (5.8 per cent), Japanese Yen (4.8 per cent) Pound Sterling (0.7 per cent), Euro (2.4 per cent) and others (0.6 per cent).

8.40 The maturity pattern of India's external debt indicates dominance of long-term borrowings. At end-September 2016, long-term external debt accounted for 83.2 per cent of India's total external debt. On

a residual maturity basis, short-term debt constituted 42.0 per cent of total external debt at end-September 2016 and 54.7 per cent of total foreign exchange reserves. The ratio of concessional debt to total external debt was 9.4 per cent at end-September 2016, same as at end-June 2016 and a marginal increase from the 9.0 per cent at end-March 2016. Most of the key external debt indicators showed an improvement in September 2016 (Table 9) vis-à-vis March 2016. The share of short-term debt in total external debt declined to 16.8 per cent at end-September 2016 and foreign exchange reserves provided a cover of 76.8 per cent to the total external debt stock. Other indicators also generally showed an improvement.

8.41 Cross-country comparison of external debt based on the World Bank's annual publication titled 'International Debt Statistics 2017', which contains the external debt data for the year 2015, indicates that India continues to be among the less vulnerable countries. India's key debt indicators compare well with other indebted developing countries.

**Table 9. India's Key External Debt Indicators (per cent)**

Year	External Debt (US\$ billion)	External Debt to GDP	Debt Service Ratio	Concessional Debt to Total Debt	Foreign Exchange Reserves to Total Debt	Short-Term External Debt# to Foreign Exchange Reserves	Short-Term External Debt to Total Debt
2007-08	224.4	18.0	4.8	19.7	138.0	14.8	20.4
2013-14	446.2	23.9	5.9	10.4	68.2	30.1	20.5
2014-15	474.7	23.2	7.6	8.8	72.0	25.0	18.0
2015-16(PR)	485.0	23.4	8.8	9.0	74.3	23.1	17.2
End-Sept 2016 (QE)	484.3	*	*	9.4	76.8	21.8	16.8

**Source:** India's External debt as at end-September 2016, Ministry of Finance

**Notes:** PR: Partially Revised; QE: Quick Estimates. # Short Term External Debt is based on Original Maturity. \*: Not worked out for part of the year

## VIII. OUTLOOK FOR THE ECONOMY FOR THE YEAR 2017-18

8.42 CSO in its first AE estimated the economy to grow by 7.1 per cent in the current year. However, it has stated that these numbers have been projected taking into account the information for first seven to eight months. It is therefore unlikely to have captured the impact of withdrawal of the high denomination currency. Although it is difficult to precisely pinpoint the impact on GDP, in all likelihood, the growth numbers of GDP, GVA, etc. could be revised downwards in the subsequent revisions to be carried out by the CSO. Inflation could also be lower than what comes out from the implicit GDP deflator underlying the CSO's first AE for 2016-17.

8.43 For 2017-18, it is expected that the growth would return to normal as the new currency notes in required quantities come back into circulation and as follow up actions to demonetisation are taken. Helping to maintain the momentum of such growth will be factors like possible normal monsoon, an increase in the level of exports following the projected increase in global growth and above all various reform measures taken by the Government to strengthen the economy. Some possible challenges to growth exist. For example, the prices of crude oil have started rising and are projected to increase further in the next year. Estimates suggest that oil prices could rise by as much as one-sixth over the 2016-17 level, which could have some dampening impact on the growth. Fixed investment rate in the economy has consistently declined in the past few years, more so the private investment. Raising the growth rate of the economy will to a great extent depend on quickly reversing this downward trend in the investment. The last few years have also witnessed a slowdown in global trade and investment flows. Although,

India has not been particularly affected by this slowdown, lower growth in foreign portfolio investment cannot be ruled out, partly on account of the fact that the interest rates in the United States have begun to increase.

8.44 On balance, there is a strong likelihood that Indian economy may recover back to a growth of 6¾ per cent to 7½ per cent in 2017-18.

## IX. AGRICULTURE AND FOOD MANAGEMENT

8.45 As per the first advance estimates of the CSO, growth rate for the agriculture and allied sectors is estimated to be 4.1 per cent for 2016-17. Details may be seen at Table 1.

### Production

8.46 As per the First Advance Estimates (AE) released by Ministry of Agriculture and Farmers Welfare on 22<sup>nd</sup> September 2016, production of Kharif food-grains during 2016-17 is estimated at 135.0 million tonnes compared to 124.1 million tonnes in 2015-16 (Table 10).

**Table 10. Production of Major Kharif Crops (in Million Tonnes)**

Crops	2015-16 (First AE)	2016-17 (First AE)
Total Kharif food-grains	124.1	135.0
Rice	90.6	93.9
Total Coarse Cereals	27.9	32.5
Total Pulses	5.6	8.7
Total Oilseeds	19.9	23.4
Sugarcane	341.4	305.2
Cotton@	33.5	32.1

**Source:** Directorate of Economics & Statistics, Department of Agriculture, Cooperation & Farmers Welfare.

**Note:** @Production in million bales of 170 kgs each.

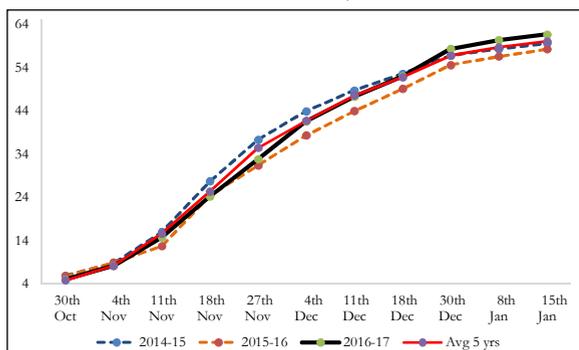
### Acreage under kharif and rabi crops

8.47 During 2016-17, area sown upto 14<sup>th</sup> October, 2016 under all kharif crops taken

together was 1075.7 lakh hectares which was 3.5 per cent higher compared to 1039.7 lakh hectares in the corresponding period of 2015-16 (Appendix A2). Arhar registered the maximum percentage increase in acreage during the Kharif season 2016-17 compared to the previous year.

8.48 The rabi crops' sowing is in progress. The area coverage under rabi crops (total area) as on 13<sup>th</sup> January 2017 for 2016-17 at 616.21 lakh hectares is 5.9 per cent higher than that in the corresponding week of last year (Figure 13). The area coverage under wheat as on 13<sup>th</sup> January 2017 is 7.1 per cent higher than that in the corresponding week of last year. The area coverage under gram as on 13<sup>th</sup> January 2017 is 10.6 per cent higher than that in the corresponding week of last year (Figure 13 in Chapter 1).

**Figure 13. Sowing of Rabi Crops (Million Hectares)**



Source: Directorate of Economics & Statistics.

**Monsoon rainfall and its distribution**

8.49 During the South West Monsoon Season (June-September) of 2016 the country as a whole received rainfall which was 97 per cent of its long period average (LPA). The actual rainfall received during this period was 862.0 mm as against the LPA at 887.5 mm. Region-wise details are given in Table 11. Out of the total 36 meteorological subdivisions, 4 subdivisions received excess rainfall, 23 subdivisions received normal rainfall and the remaining 9 subdivisions received deficient rainfall.

**Table 11. Long Period Average (LPA) vs. Actual South West Monsoon Season Rainfall (June to September) in 2016**

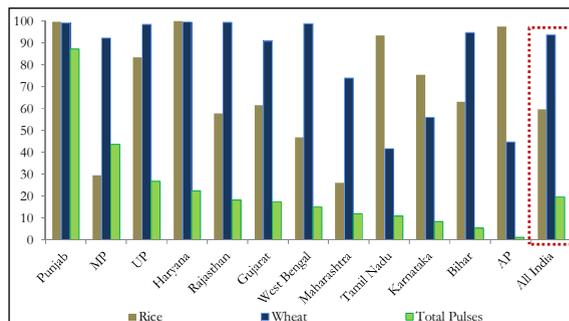
Region	LPA (mm)	Rainfall (mm) (Actual)	Rainfall (% of LPA)
All India	887.5	862.0	97
Northwest India	615.1	584.2	95
Central India	975.3	1034.1	106
Northeast India	1437.8	1281.5	89
South Peninsula	715.6	661.5	92

Source: India Meteorological Department.

**Irrigated area under principal crops**

8.50 Irrigation is one of the critical inputs to improve productivity in agriculture. Wide regional and crop-wise variations can be seen in coverage of irrigated area (Figure 14).

**Figure 14. State-wise per cent coverage of irrigated area under principal crops during 2013-2014**



Source: Directorate of Economics & Statistics.

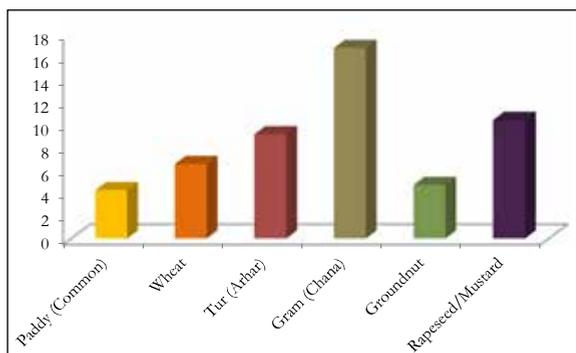
**Price policy of agricultural produce**

8.51 The price policy of Government for major agricultural commodities seeks to ensure remunerative prices to the farmers to encourage higher investment and production, and to safeguard the interest of consumers by making available supplies at reasonable prices. On account of the volatility of prices of pulses, a Committee on 'Incentivising Pulses Production Through Minimum Support Price (MSP) and Related Policies' was set up under the Chairmanship of Dr. Arvind Subramanian, Chief Economic Adviser, which submitted its report on 16<sup>th</sup> September, 2016. The main

recommendations are given in Annexure A3 and the report is available at [http://mof.gov.in/reports/Pulses\\_report\\_16th\\_sep\\_2016.pdf](http://mof.gov.in/reports/Pulses_report_16th_sep_2016.pdf). To increase productivity of pulses, a new extra early maturing, high yielding variety of Arhar (Pusa Arhar-16) has been developed to be made available for farmers in the next Kharif season.

8.52 The Minimum Support Prices (MSPs) of major crops during the last two years are presented in Annexure A4. During 2016-17, MSPs were raised substantially mainly for pulses to incentivize farmers to cultivate pulses (Figure 15).

**Figure 15. Per cent Change in MSP (2016-17 over 2015-16) of select crops**

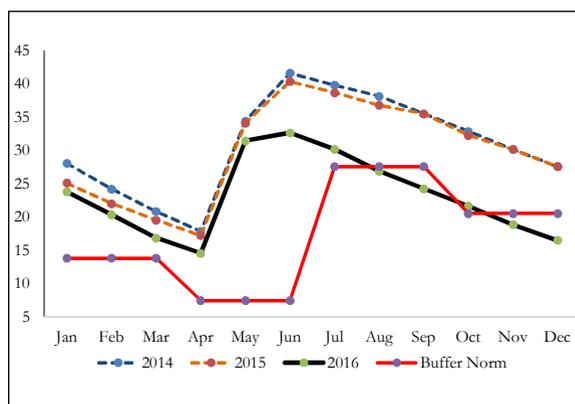


Source: Commission for Agricultural Costs and Prices (CACP).

### Food-grain stocks and procurement in central pool

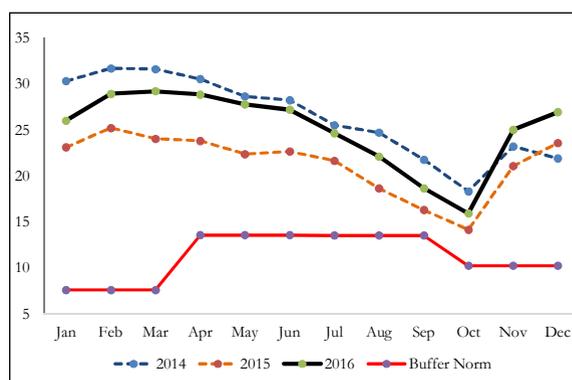
8.53 The food-grain management involves procurement of rice and wheat and following the norms for buffer stocks. The stocks of food-grains (Rice and Wheat) was 43.5 million tonnes as on 1<sup>st</sup> December, 2016 compared to 50.5 million tonnes as on 1<sup>st</sup> December, 2015 vis-à-vis the buffer stock norm of 30.77 million tonnes as on 1<sup>st</sup> October 2015 (Figure 16.A & B). Procurement of rice as on 6<sup>th</sup> January 2017 was 23.2 million tonnes during Kharif Marketing Season 2016-17 whereas procurement of wheat was 22.9 million tonnes during Rabi Marketing Season 2016-17. As part of the price policy to protect consumers, the Central Issue Prices

**Figure 16 A. Wheat Stocks and Buffer Norms (in Million Tonnes)**



Source: Food Corporation of India.

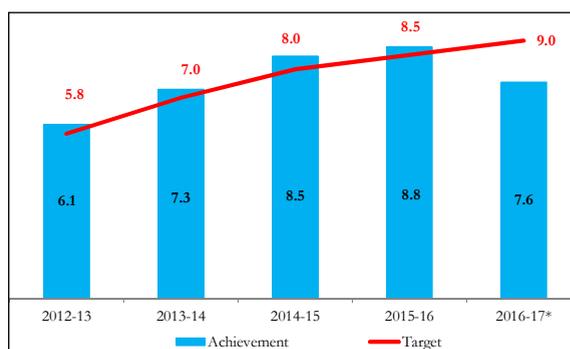
**Figure 16 B. Rice Stocks and Buffer Norms (in Million Tonnes)**



Source: Food Corporation of India.

of rice and wheat have remained unchanged since 1<sup>st</sup> July 2002.

**Figure 17. Agriculture Credit (Rs. lakh crore)**



Source: NABARD.

Note: \*The target for 2016-17 refers to the full year while achievement is for the first half.

### Agriculture credit

8.54 Credit is an important input to improve agricultural output and productivity. To improve agricultural credit flow, the credit

target for 2016-17 has been fixed at Rs. 9 lakh crore against Rs. 8.5 lakh crore for 2015-16 (Figure 17). As against the target, the achievement for 2016-17 (upto September 2016), was 84 percent of the target, higher than the corresponding figure of 59 per cent upto September 2015.

## X. INDUSTRIAL, CORPORATE AND INFRASTRUCTURE SECTORS

8.55 As per the first advance estimates of the CSO, growth rate of the industrial sector comprising mining & quarrying, manufacturing, electricity and construction is projected to decline from 7.4 per cent in 2015-16 to 5.2 per cent in 2016-17 (See Table. 1 & para 8.3). During April-November 2016-17, a modest growth of 0.4 per cent has been observed in the Index of Industrial Production (IIP) which is a volume index with base year of 2004-05. This was the composite effect of a strong growth in electricity generation and moderation in mining and manufacturing (Table 12). In terms of use-based classification, basic goods, intermediate goods and consumer durable goods attained moderate growth. Conversely, the production of capital goods declined steeply and consumer non-durable goods sectors suffered a modest contraction during April-November 2016-17 (Table 12).

8.56 The eight core infrastructure supportive industries, viz. coal, crude oil, natural gas, refinery products, fertilizers, steel, cement and electricity that have a total weight of nearly 38 per cent in the IIP registered a cumulative growth of 4.9 per cent during April-November, 2016-17 as compared to 2.5 per cent during April-November, 2015-16. The production of refinery products, fertilizers, steel, electricity and cement increased substantially, while the production of crude oil and natural gas fell during April-

November, 2016-17. Coal production attained lower growth during the same period.

**Table 12. IIP-based Growth Rates of Broad Sectors/Use-based Classification (per cent)**

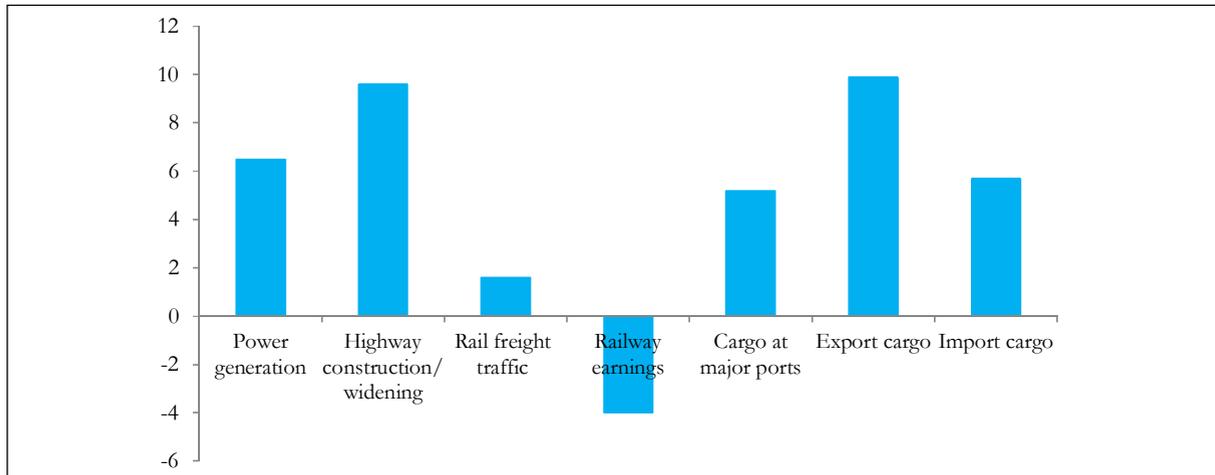
	2014-15	2015-16	April-Nov. 2015-16	April-Nov. 2016-17
General index	2.8	2.4	3.8	0.4
Mining	1.5	2.2	2.1	0.3
Manufacturing	2.3	2.0	3.9	-0.3
Electricity	8.4	5.7	4.6	5.0
Basic goods	7.0	3.6	3.9	4.1
Capital Goods	6.4	-2.9	4.7	-18.9
Intermediate goods	1.7	2.5	2.0	3.4
Consumer goods	-3.4	3.0	4.1	1.8
Durables	-12.6	11.3	11.8	6.9
Non-durables	2.8	-1.8	-0.5	-1.8

**Source: CSO**

8.57 Most indicators of infrastructure-related activities showed expansion during H1 2016-17. Thermal power with a growth of 6.9 per cent boosted overall power generation while hydro and nuclear power generation contracted marginally during April-September 2016 (Figure 18).

8.58 The performance of corporate sector (Reserve Bank of India, January 2017) highlighted that the growth in sales was 1.9 per cent in Q2 of 2016-17 as compared to near stagnant growth of 0.1 per cent in Q1 of 2016-17. The growth of operating profits decelerated to 5.5 per cent in Q2 of 2016-17 from 9.6 per cent in the previous quarter. The Y-o-Y growth in interest expenses remained flat in Q2 of 2016-17, as compared to 5.8 per cent in the previous quarter. Growth in net profits registered a remarkable growth of 16.0 per cent in Q2 of 2016-17, as compared to 11.2 per cent in Q1 of 2016-17.

8.59 The Government has liberalized and simplified the foreign direct investment (FDI) policy in sectors like defence, railway infrastructure, construction and

**Figure 18. Growth in infrastructure-related activities during H1 2016-17 (in per cent)**

Source: MoSPI

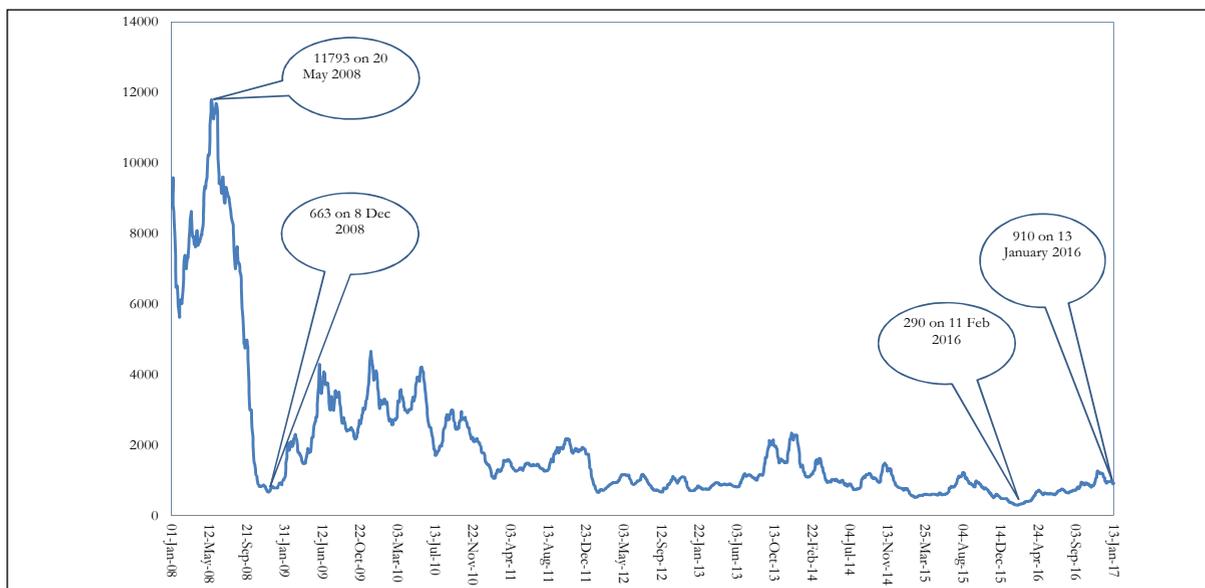
pharmaceuticals, etc. During April-September 2016-17, FDI equity inflows were US\$ 21.7 billion as compared to total FDI inflows of US\$ 16.6 billion during April-September 2015-16 showing 30.7 per cent surge. Sectors like services sector, construction development, computer software & hardware and telecommunications have attracted highest FDI equity inflows.

8.60 Many new initiatives have been taken up by the Government to facilitate investment and ease of doing business in the country. Noteworthy among them are initiatives such as Make-in-India, Invest India, Start Up India and e-biz Mission Mode Project under the National e-Governance Plan. Measures to facilitate ease of doing business include online application for Industrial Licence and Industrial Entrepreneur Memorandum through the eBiz website 24x7 for entrepreneurs; simplification of application forms for Industrial Licence and Industrial Entrepreneur Memorandum; limiting documents required for export and import to three by Directorate General of Foreign Trade; and setting up of Investor Facilitation Cell under Invest India to guide, assist and handhold investors during the entire life-cycle of the business.

## XI. SERVICES SECTOR

8.61 As per the first advance estimates of the CSO, growth rate of the services sector is projected to grow at 8.8 per cent in 2016-17, almost the same as in 2015-16 (See Table 1 & para 8.3). As per WTO data, India's commercial services exports increased from US\$ 51.9 billion in 2005 to US\$ 155.3 billion in 2015. The share of India's commercial services to global services exports increased to 3.3 per cent in 2015 from 3.1 per cent in 2014 despite negative growth of 0.2 per cent in 2015 as compared to 5.0 per cent growth in 2014. This was due to the relatively greater fall in world services exports by 6.1 per cent in 2015. As per RBI's BoP data, India's services exports declined by 2.4 per cent in 2015-16 as a result of slowdown in global output and trade. However, in H1 of 2016-17, services exports increased by 4.0 per cent compared to 0.3 per cent growth in the same period of previous year. Growth of net services, which has been a major source of financing India's trade deficit in recent years, was (-) 9.0 per cent in 2015-16 and (-) 10.0 per cent in H1 of 2016-17 due to relatively higher growth in imports of services. Growth of software exports which accounted for 48.1 per cent share in services exports was 1.4 per cent in 2015-16 and 0.1 per cent in H1 of 2016-17.

Figure 19. Baltic Dry Index



Source: <http://in.investing.com/indices/baltic-dry-historical-data>

8.62 India's tourism sector witnessed a growth of 4.5 per cent in terms of foreign tourist arrivals (FTAs) with 8.2 million arrivals in 2015, and a growth of 4.1 per cent in foreign exchange earnings (FEEs) of US\$ 21.1 billion. In 2016 (Jan. to Dec.), FTAs were 8.9 million with growth of 10.7 per cent and FEE (US\$ terms) were at US\$ 23.1 billion with a growth of 9.8 per cent.

8.63 The Nikkei/Markit Services PMI for India was at a high of 57.5 in January of 2013. It fell to 46.7 in November 2016 from 54.5 in October 2016. However, it increased marginally to 46.8 in December 2016. The Baltic dry index (BDI) an indicator of both

merchandise trade and shipping services, which showed some improvement up to 18 November 2016 declined somewhat to 910 on 13 January 2017 (Figure 19).

## XII. SOCIAL INFRASTRUCTURE, EMPLOYMENT AND HUMAN DEVELOPMENT

### Trends in social sector expenditure

8.64 As per the Reserve Bank of India data, expenditure on social services by Centre and States, as a proportion of GDP was 7.0 per cent during 2016-17 (BE), with education and health sectors accounting for 2.9 per cent and 1.4 per cent respectively (Table 13). The year 2014-15 in respect of which latest actual figures are available showed a significant

Table 13. Trends in social sector expenditure

Items	2009-10	2013-14	2014-15	2015-16 RE	2016-17 BE
As percentage to GDP					
Total Expenditure	28.6	26.6	25.1	28.2	28.4
Expenditure on Social Services	6.9	6.6	5.7	6.9	7.0
<i>of which:</i>					
Education	3.0	3.1	2.6	2.9	2.9
Health	1.4	1.2	1.1	1.3	1.4
Others	2.5	2.3	2.0	2.7	2.7

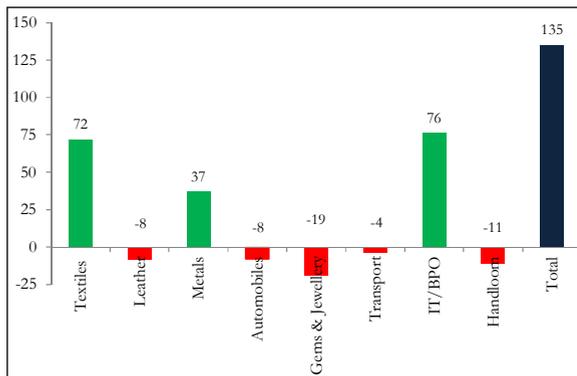
Source: Reserve Bank of India.

decline from the RE level following a large decrease in actual social sector expenditure of the states from the revised estimates.

### Employment scenario

8.65 The results of the quarterly quick employment surveys in select labour-intensive and export-oriented sectors by the Labour Bureau for the period December, 2015 over December, 2014 (Figure 20) show that the overall employment increased by 135 thousand. The sectors that contributed to this increase include: IT/BPOs sector, textiles including apparels and metals. Employment, however, declined in gems & jewellery sector, handloom/powerloom sector, leather, automobiles sectors and transport sector during the same period.

**Figure 20. Estimated change in Employment in Eight Selected Sectors (in 000)**  
(December 2015 over December 2014)



Source: Labour Bureau.

8.66 A broader coverage on labour employed and related statistics is provided by the Annual Employment and Unemployment Surveys

(EUS) also conducted by the Labour Bureau, Ministry of Labour and Employment. The results of the latest EUS, 2015-16 are summarised in Table 14. The Labour Force Participation Rate (LFPR) at the all India level based on usual principal status approach was estimated at 50.3 per cent. The All India LFPR of females is much lower than that for males. There are wide interstate variations in the female LFPR as well. The North Eastern and Southern States, in general, display high female LFPR as compared to low levels in Northern States. As per EUS, 2015-16, the unemployment rate for females was higher than that of males across rural and urban areas (Table. 14). There are wide inter-state variations in UR as can be seen in Figure 21.

8.67 As per EUS Surveys, employment growth has been sluggish. Further, States that show low unemployment rates also generally rank high in the share of manufacturing. While States compete to seek investment offering incentives, linking incentives to the number of jobs created, sustained efforts need to be considered as a tool to increase employment.

8.68 The employment by sectors and by categories are shown in Figure 22 (A&B). There is a clear shift in employment to secondary and tertiary sectors from the primary sector. The growth in employment by category reflects increase in both casual labour and contract workers (Figure 22.B). This has adverse implications on the

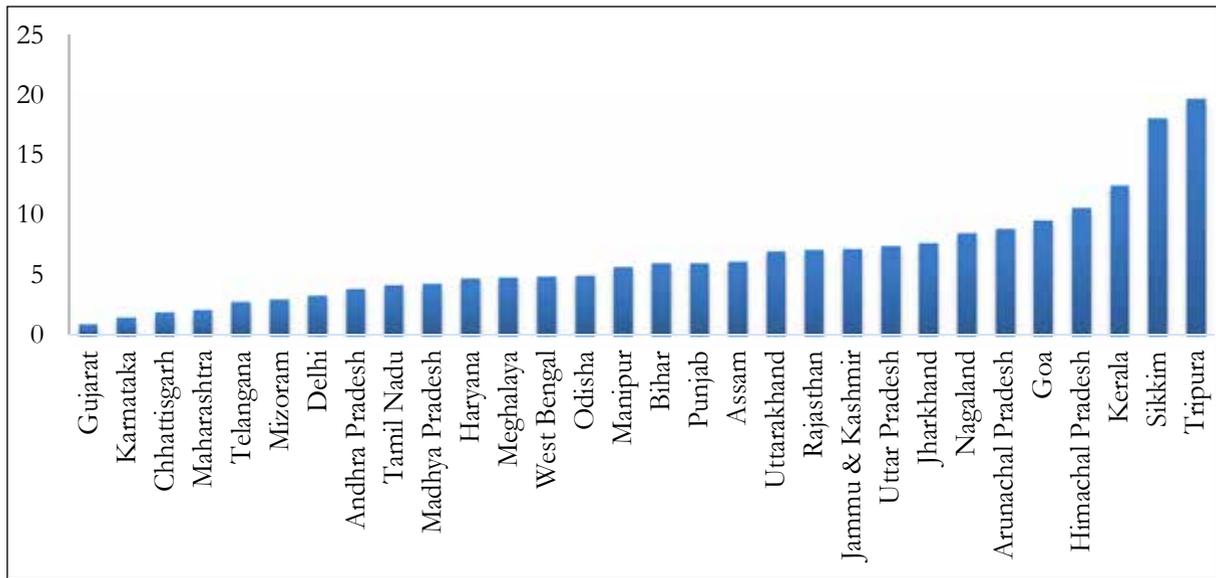
**Table 14. LFPR, WPR and UR based on Usual Principal Status (UPS), 2015-16**

Parameter	Rural			Urban			Total		
	M	F	P	M	F	P	M	F	P
LFPR	77.3	26.7	53.0	69.1	16.2	43.5	75.0	23.7	50.3
WPR	74.1	24.6	50.4	66.8	14.3	41.4	72.1	21.7	47.8
UR	4.2	7.8	5.1	3.3	12.1	4.9	4.0	8.7	5.0

Source: Report on 5th Annual EUS, 2015-16 (Labour Bureau).

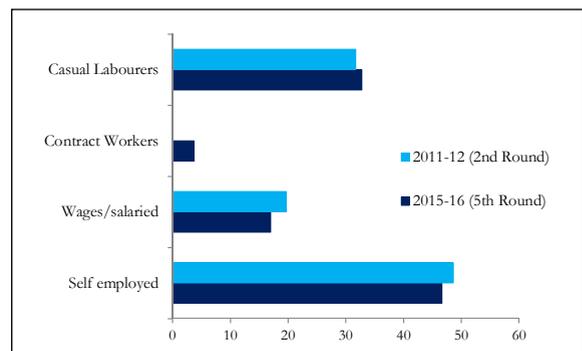
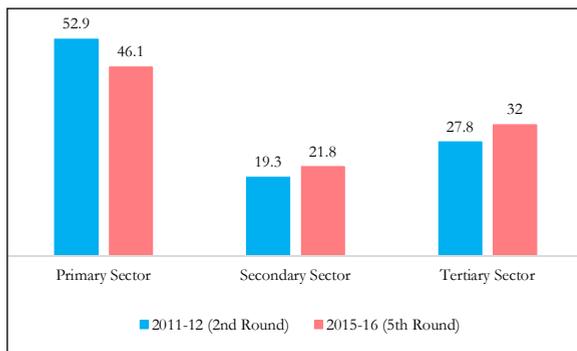
Note: LFPR- Labour Force Participation Rate, WPR- Worker Population Ratio, UR- Unemployment Rate, M- Male; F-Female; P-Persons.

**Figure 21. Unemployment Rate based on UPS approach for persons of age 15 years and above in States, 2015-16 (per cent)**



Source: Report on 5th Annual EUS, 2015-16 (Labour Bureau).

**Figure 22 A & B. All India distribution of employed persons based on UPS approach by sectors of employment and by category of employment (per cent)**



Source: Report on 5th Annual EUS, 2015-16 (Labour Bureau).

level of wages, stability of employment, social security of employees owing to the ‘temporary’ nature of employment. It also indicates preference by employers away from regular/formal employment to circumvent labour laws.

8.69 The multiplicity of labour laws and the difficulty in their compliance have been an impediment to the industrial development and employment generation. At present, there are 39 Central labour laws which have been broadly proposed to be grouped into four or five Labour Codes on functional basis with the enactment of special laws

for small manufacturing units. In a major initiative for bringing compliance in the system, catalysing the need of job creation and to ensure ease of doing business while ensuring safety, health and social security of every worker, the Government has put forth a set of labour reform measures.

**Education sector**

8.70 An important concern that is often raised in the context of school education is low learning outcomes. This has been pointed out in several studies including ASER, 2014. While there have been

improvements in access and retention, the learning outcomes for a majority of children is still a cause of serious concern. Some of the underlying causes contributing to low quality of education in the primary sector are teacher absenteeism and the shortage of professionally qualified teachers.

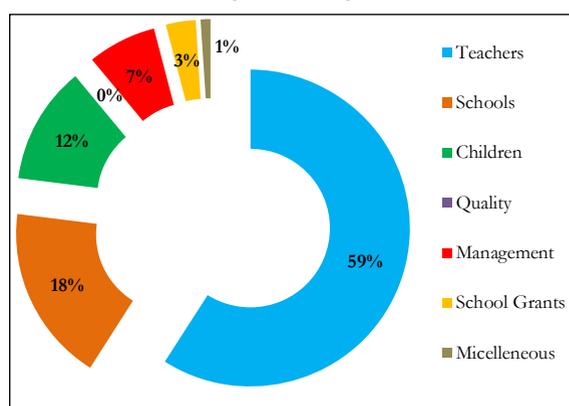
8.71 Though the share of teacher component in total Sarva Shiksha Abhiyan (SSA) budget has been increasing over the years from 35 per cent in 2011-12 to 59 per cent in 2014-15, teacher absenteeism and the shortage of professionally qualified teachers remain an issue to be addressed. The components of SSA Budget 2014-15 are given in Figure 23.

8.72 An option to address teacher absenteeism that can be explored is biometric attendance of all teachers in primary schools for each scheduled class/lecture/session/distinct from the present system, where it is morning and evening to ostensibly record arrival and departures with little control on the activities during the working hours. A pilot project in one district of every State may be commenced for six months to be expanded to all districts in three years. Apart from the biometric attendance being regularly monitored by local communities and parents, it should also be put in public domain. This should be backed by adequate teaching aids, recorded lectures, etc. to fill in for absentee teachers. The scope of implementation should leave room for flexibility at the local level so the same do not end up as top driven 'Model Schools'. The pilot of biometric attendance of teachers should be accompanied with an evaluation of learning outcomes.

### Health for all

8.73 India's health policy aims at an integrated approach which will provide accessible, affordable and equitable

**Figure 23. Per cent share of components in SSA Budget during 2014-15**



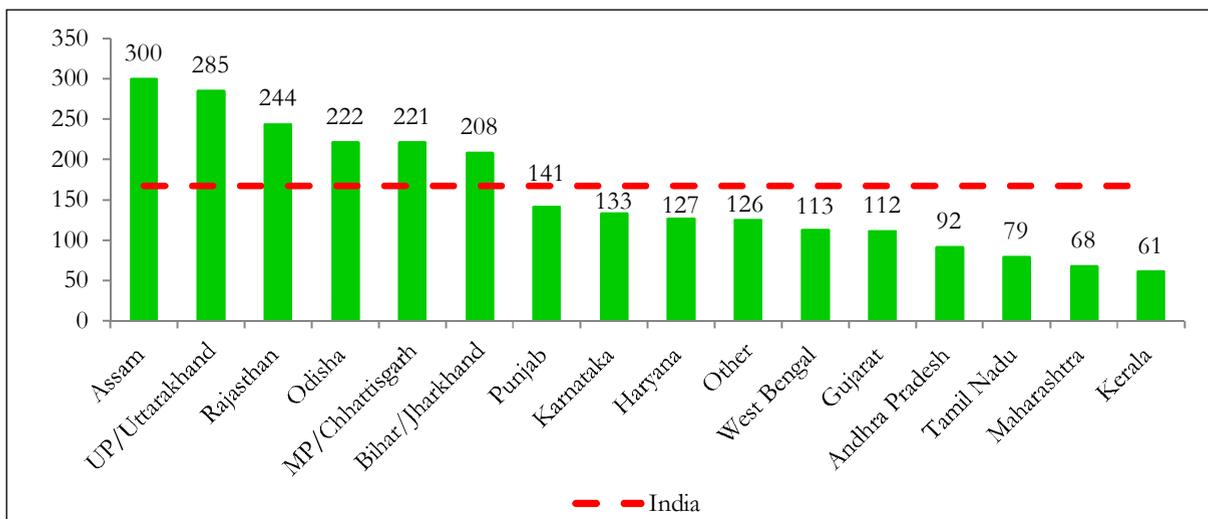
Source: SSA Portal, ASER portal.

quality health care to the marginalized and vulnerable sections. The aim of good health and well-being for all as envisaged in the Sustainable Development Goal (SDG) 3, "Ensure healthy lives and promote well being for all at all ages" should be synchronized with India's domestic targets to reap the benefits of the 'demographic dividend'.

8.74 Despite the challenges faced by the government in providing affordable health services to the population, there have been some notable achievements in the health sector. Life expectancy has doubled and infant mortality and crude death rates have reduced sharply. India's total fertility rate (TFR) has been steadily declining and was 2.3 (rural 2.5 & urban 1.8) during 2014. Infant Mortality Rate (IMR) has declined to 37 per 1000 live births in 2015 from 44 in 2011. The challenge lies in addressing the huge gap between IMR in rural (41 per 1000 live births) and urban (25 per 1000 live births) areas.

8.75 The Maternal Mortality Ratio (MMR) declined from 301 maternal deaths per 100,000 live births during 2001-03 to 167 maternal deaths per 100,000 live births during 2011-13. There are wide regional disparities in MMR (Figure 24), with States like Assam,

**Figure 24. Maternal Mortality Ratio by States, 2011-13 (per 100000 live births)**



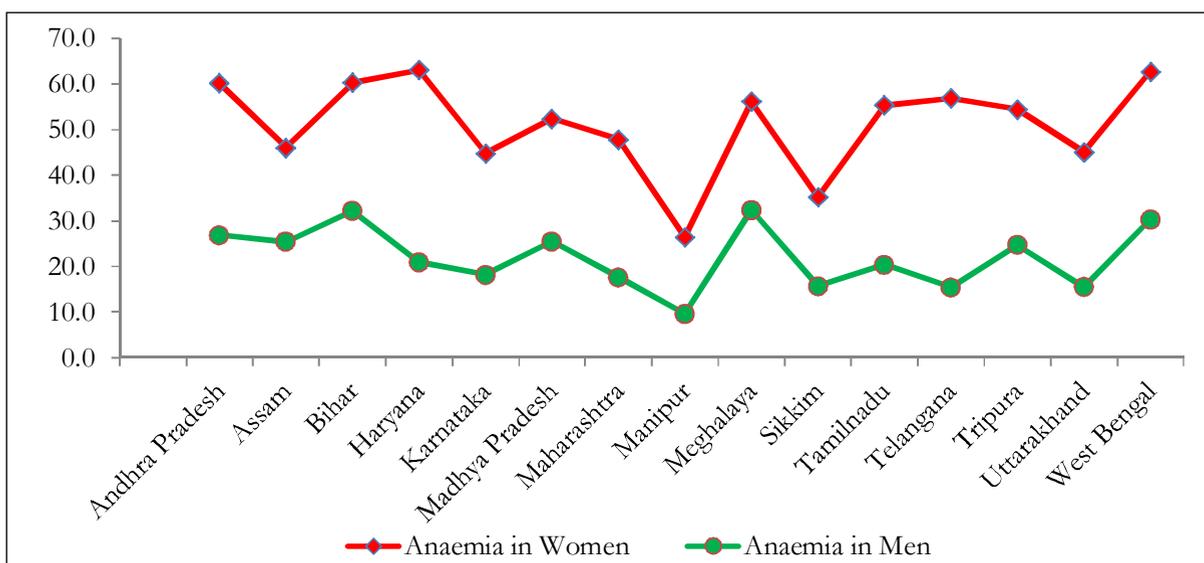
Source: MMR Bulletin, 2011-13, Ministry of Health and Family Welfare.

Uttar Pradesh, Rajasthan, Odisha, Madhya Pradesh and Bihar recording MMR well above the all India MMR of 167. Therefore, in addition to reducing the all India MMR in line with SDG 3 targets, by improving health and nutritional status of women, there is need to focus on States with MMR higher than the national average.

direct correlation with high levels of MMR. In Haryana and West Bengal more than 60 per cent of women suffer from anaemia (Figure 25). Under the National Health Mission, Government of India has programmes to address the issue of anaemia through health and nutrition education to promote dietary diversification, inclusion of iron foliate rich food as well as food items that promote iron absorption.

8.76 The high levels of anaemia prevalent among women in the age group 15-49 have a

**Figure 25. Percentage of men and women with anaemia across States**



Source: National Family Health Survey (NFHS-4) 2015-16 -State Fact Sheet.

Note: Anaemia in women excludes pregnant women.

### Box 1. Experimental Health Outcome Index

An experimental Health Outcome Index (HOI) has been computed using Life Expectancy at age 1 year (LE1), IMR and MMR as indicators. LE1 figures are from the period 2010-14. IMR and MMR figures for majority of the States are for 2011-13. The Health Outcome Indices computed by standardising the above indicators for the 18 States are plotted below.

Figure B1. Health Outcome Index



**Source:** Calculated by using Sample Registration System data, O/o RGI & Census of India.

*Note:* Standardised LE1 = (Actual value-Minimum value)/ (Maximum value-Minimum value). Standardised IMR= (Maximum value-Actual value)/ (Maximum value-Minimum value). Standardised MMR= (Maximum value-Actual value)/ (Maximum value-Minimum value). Here Andhra Pradesh includes Telangana.

As per the data, Assam has the lowest health outcome index whereas Kerala has the highest. Out of the eighteen States, nine States have recorded a health outcome index higher than the All India index (0.6). Assam which has the lowest health outcome index has reported the highest MMR as can be seen in Figure 24.

### Inclusive Policies of the Government

8.77 It is the vision of the Government to have an inclusive society in which equal opportunities are provided for the growth and development of all sections of the population including the marginalised, vulnerable and weaker sections to lead productive, safe and dignified lives. Accordingly, programmes have been initiated by the government towards attaining the objective of inclusive society like the *Accessible India Campaign* (Box 2)

8.78 The government has various schemes meant for the economic and social empowerment of people belonging to the minority communities. For social empowerment, the 'Nai roshni' scheme for leadership development of minority women, 'Padho Pardesh', a scheme of interest subsidy

on educational loans for overseas studies for the students belonging to the minority communities, etc. are being implemented. For skill development and economic empowerment of minorities, schemes like 'Seekho Aur Kamao' (Learn & Earn), Upgrading Skill and Training in Traditional Arts/Crafts for Development (USITTAD) and 'Nai Manzil'- a scheme to provide education and skill training to the youth from minority communities are in operation.

### XIII. CLIMATE CHANGE

#### Developments in international climate change negotiations:

8.79 On 12<sup>th</sup> December, 2015, 196 Parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted the historic Paris Agreement, which brings all

### Box 2. Accessible India Campaign (Sugamya Bharat Abhiyan)

As a society it is imperative to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity (UN Convention on rights of Persons with Disabilities). According to Census 2011, the number of persons with disabilities in India constituted 2.2 per cent of the population. The Department of Empowerment of Persons with Disabilities (DEPwD) launched '*Accessible India Campaign (Sugamya Bharat Abhiyan)*' as a nation-wide Campaign for achieving universal accessibility for Persons with Disabilities (PwDs) with a focus on three verticals: Built Environment, Public Transportation and Information & Communication Technologies.

The 'Inclusiveness and Accessibility Index' launched by the Government as part of the Sugamya Bharat Abhiyan helps the industries and corporates to participate in the Accessible India Campaign (AIC) by voluntarily evaluating their readiness for making the workplace accessible for PwDs. The Index is a first-of-its-kind initiative in the country and will be an ideal instrument for the integration, assimilation and inclusion of PwDs into the mainstream. The Index enables the organisations to introspect over their inclusive policies and organisational culture in aid of PwDs, employment of such workforce and adaptations to meet the needs of PwDs.

Further, the "**Rights of Persons with Disabilities Bill – 2016**" passed by the Parliament aims at securing and enhancing the rights and entitlements of PwDs. The bill has proposed to increase the reservation in vacancies in government establishments from 3 per cent to 4 per cent for those with benchmark disability and high support needs. Further details of the bill are available at <http://pib.nic.in/newsite/PrintRelease.aspx?relid=155592>.

nations into a common cause to undertake ambitious efforts to combat climate change and unleash actions and investment towards a low carbon, resilient and sustainable future. The Paris Agreement sets the path for the post-2020 actions based on the Nationally Determined Contributions (NDCs) of the Parties. The Paris Agreement entered into force on 4<sup>th</sup> November 2016.

8.80 The 22<sup>nd</sup> Session of the Conference of Parties (COP 22) to UNFCCC was held from 7-19 November 2016 in Marrakech, Morocco. The main thrust of COP 22 was on developing rules and action framework for operationalizing the Paris Agreement and advance work on pre-2020 Actions. At COP 22, Parties agreed to a deadline of 2018 for the rule book. Detailing exercise will include accounting of the NDCs, adaptation communication, building a transparency framework, global stocktake every five years, etc.

8.81 The key decision adopted at COP 22 was "Marrakech Action Proclamation for our Climate and Sustainable Development" which captured the sense of urgency to take action on climate change. The Marrakech

Action Proclamation also emphasized the need to strengthen and support efforts to eradicate poverty, ensure food security and enhance resilience of agriculture. The pre 2020 action including mobilization of USD 100 billion per year was a key element of the Proclamation.

#### India's green actions

8.82 India ratified the Paris Agreement on 2<sup>nd</sup> October 2016. India's comprehensive NDC target is to lower the emissions intensity of GDP by 33 to 35 per cent by 2030 from 2005 levels, to increase the share of non-fossil fuels based power generation capacity to 40 per cent of installed electric power capacity by 2030, and to create an additional (cumulative) carbon sink of 2.5–3 GtCO<sub>2</sub>e through additional forest and tree cover by 2030.

8.83 Currently, India's renewable energy sector is undergoing transformation with a target of 175 GW of renewable energy capacity to be reached by 2022. In order to achieve the target, the major programmes/schemes on implementation of Solar Park, Solar Defence Scheme, Solar scheme for

Central Public Sector Undertakings, Solar photovoltaic (SPV) power plants on Canal Bank and Canal Tops, Solar Pump, Solar Rooftop, etc. have been launched in recent years. A capacity addition of 14.30 GW of renewable energy has been reported during the last two and half years under Grid Connected Renewable Power, which include 5.8 GW from Solar Power, 7.04 GW from Wind Power, 0.53 GW from Small Hydro Power and 0.93 GW from Bio-power. As a result of various actions in the right direction, India attained 4<sup>th</sup> position in global wind power installed capacity after China, USA and Germany. As on 31<sup>st</sup> October 2016, India achieved 46.3 GW grid-interactive power capacity; 7.5 GW of grid-connected power generation capacity in renewable energy; and small hydro power capacity of 4.3 GW. In addition, 92305 Solar Pumps were installed and Rs.38,000 crore worth of Green Energy Corridor is being set up to ensure evacuation of renewable energy.

8.84 In January 2016, Government has amended the National Tariff Policy for electricity. The Tariff Policy amendment has a focus on the environmental aspect with provisions such as 1) Renewable Purchase Obligation in which 8 per cent of electricity consumption excluding hydro power shall come from solar energy by March 2022; 2) Renewable Generation Obligation in which new coal/lignite based thermal plants after specified date to also establish/procure/purchase renewable capacity; 3) bundling of renewable power with power from plants whose Power Purchase Agreements have expired or completed their useful life; 4) no inter-state transmission charges for solar and wind power; 5) procurement of 100 per cent power produced from waste-to-energy plants; 6) ancillary services to support grid operation for expansion of renewable energy, etc.

8.85 With India's initiative, International Solar Alliance (ISA) was launched, which is envisaged as a coalition of solar resource-rich countries to address their special energy needs and will provide a platform to collaborate on addressing the identified gaps through a common, agreed approach. 24 countries have signed the Framework Agreement of ISA after it was opened for signature on November 15, 2016. ISA is expected to become inter-governmental treaty-based organization that will be registered under Article 102 of the UN charter after 15 countries ratify the Agreement. With legal framework in place, ISA will be a major international body headquartered in India.

8.86 Government of India has established the National Adaptation Fund for Climate Change to assist States and Union Territories to undertake projects and actions for adaptation to climate change. Rs. 182.3 crore has been released for 18 projects for sectors including agriculture and animal husbandry, water resources, coastal areas, biodiversity and ecosystem services.

8.87 India is also one of the few countries in the world to impose a tax on coal. This coal cess which has been renamed as "Clean Environment Cess" in the Union Budget 2016-17 funds the National Clean Environment Fund (NCEF). The Clean Environment Cess has been doubled in the 2016-17 budget from Rs. 200 per tonne to Rs. 400 per tonne. The proceeds of the NCEF are being used to finance projects under Green Energy Corridor for boosting up the transmission sector, Namami Gange, Green India Mission, Jawaharlal Nehru National Solar Mission, installation of SPV lights and small capacity lights, installation of SPV water pumping systems, SPV Power Plants and Grid Connected Rooftop SPV Power Plants.

## A1. Summary of Balance of Payments (US \$ billion)

	2012-13	2013-14	2014-15	2015-16	2015-16	2016-17
	(April-March)				H1	H1
Exports, f.o.b	306.6	318.6	316.5	266.4	135.6	134.0
Imports, c.i.f	502.2	466.2	461.5	396.4	206.9	183.5
Trade balance	-195.7	-147.6	-144.9	-130.1	-71.3	-49.5
Services exports	145.7	151.8	158.1	154.3	77.0	80.1
Services imports	80.8	78.7	81.6	84.6	41.4	48.0
Net services	64.9	73.1	76.5	69.7	35.6	32.0
Income (net)	-21.5	-23.0	-24.1	-24.4	-11.3	-14.1
Pvt. transfers (net)	64.3	65.5	66.3	63.1	32.7	28.2
Official transfers (net)	-0.3	-0.2	-0.6	-0.5	-0.3	-0.4
Invisibles (net)	107.5	115.2	118.1	107.9	56.7	45.7
Current Account Balance	-88.2	-32.4	-26.9	-22.2	-14.7	-3.7
Capital Account						
External Assistance (net)	1.0	1.0	1.7	1.5	0.2	0.5
Commercial Borrowings (net)	8.5	11.8	1.6	-4.5	-1.3	-4.6
Foreign Investment (net)	46.7	26.4	73.5	31.9	13.0	29.4
FDI (net)	19.8	21.6	31.3	36.0	16.5	21.3
Inflows	39.8	43.6	51.8	59.9	26.8	38.3
Outflows	20.0	22.0	20.5	23.9	10.3	17.0
Portfolio (net)	26.9	4.8	42.2	-4.1	-3.5	8.2
FII (net)	27.6	5.0	40.9	-4.0	-3.8	7.9
Non-Resident Deposits (net)	14.8	38.9	14.1	16.1	10.1	3.5
Rupee Debt Service	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Other capital flows (net)	21.0	-30.1	-2.5	-4.8	3.3	-9.5
Short-Term Credits (net)	21.7	-5.0	-0.1	-1.6	-2.5	-0.5
Banking Capital (net)	16.6	25.4	11.6	10.6	18.3	-6.8
Errors & Omissions	2.7	-1.0	-1.0	-1.1	-1.5	-0.6
Others (net)	-19.9	-49.7	-13.0	-12.7	-11.0	-1.6
Total Capital/ Finance A/C (Net)	92.0	47.9	88.3	40.1	25.3	19.2
Reserve Movement (- increase) and (+ decrease)	-3.8	-15.5	-61.4	-17.9	-10.6	-15.5
Trade balance/GDP(per cent)	-10.7	-7.9	-7.1	-6.3	-7.1	-4.6
Invisible Balance/GDP (per cent)	5.9	6.2	5.8	5.2	5.7	4.3
Current Account Balance/GDP (per cent)	-4.8	-1.7	-1.3	-1.1	-1.5	-0.3
Net Capital Flows/GDP (per cent)	5.0	2.6	4.3	1.9	2.5	1.8

Source: RBI

**A2. Area coverage under select Kharif crops as on 14th October 2016**

S.No	Crops	Area Sown (in lakh hectares)		% change over last year
		2016-17	2015-16	2015-16
1.	Rice	391.24	381.09	2.66
2.	Pulses	146.24	113.21	29.18
	a. Arhar	52.81	37.66	40.24
	b. Uradbean	35.68	28.51	25.15
	c. Moongbean	34.11	25.63	33.08
3.	Coarse cereals	190.50	185.83	2.52
	a. Jowar	19.59	19.88	-1.48
	b. Bajra	70.43	70.50	-0.10
	c. Ragi	10.40	11.69	-11.01
	d. Kharif Maize	84.43	77.91	8.37
4.	Oilseeds	190.31	185.19	2.77
	a. Groundnut	47.07	36.79	27.95
	b. Soyabean	114.78	116.29	-1.29
	c. Sunflower	1.69	1.50	12.41
5.	Sugarcane	46.13	49.61	-7.01
6.	Jute & Mesta	7.59	7.73	-1.86
7.	Cotton	103.69	117.09	-11.44
	<b>Total</b>	<b>1075.71</b>	<b>1039.74</b>	<b>3.46</b>

**Source:** Directorate of Economics & Statistics, Department of Agriculture, Cooperation & Farmers Welfare.

### A3. Incentivizing Pulses Production: Summary of Recommendations

Policy	Timing
<b>1. MSP and Procurement</b>	
a. Government procurement machinery should be on high gear to ensure the procurement of 29 Kharif pulses at this season's announced MSP	Immediate
b. To ensure effective procurement, a High Level Committee comprising Ministers of Finance, Agriculture, and Consumer Affairs and Principal Secretary to PM should be constituted. There should be weekly reporting by procurement agencies on the ground with physical verification of procurement	Immediate
c. Build up 2 million tons of pulses stock with targets for individual pulses, especially tur (3.5 lakh tonnes) and urad (2 lakh tonnes). These should be built up gradually but opportunistically, buying when prices are low.	Immediate
d. MSP to be increased to Rs. 70/kg in 2018 when short duration Kharif tur is ready for commercialization. Efforts to be made to give production subsidies to farmers for growing pulses in irrigated areas of about Rs. 10-15 per kg to be given via DBT.	Kharif 2018 but planning to begin soon
e. Instruct CACP to comprehensively review its MSP-setting framework to incorporate risk and social externalities along the lines done in this report	Immediate
<b>2. Other Price Management Policies</b>	
a. Eliminate export ban on pulses and stock limits; at the very least limits on wholesalers should be eliminated. The greater the limits on procurement by the government, the greater the urgency to take these actions to ensure that market prices stabilize above the MSP. The worst case scenario for farmers is weak procurement and stock limits which force farmers to sell most of their output at market prices that are well below MSP. More generally, the use of trade policy to control domestic prices, which induces policy volatility, should be avoided.	Immediate
b. Encourage states to delist pulses from their APMCs	Immediate
c. Review Essential Commodities Act, 1955 and futures trading of agricultural commodities with a view to preserving objectives but finding more effective and less costly instruments for achieving them	As appropriate
<b>3. Institutions for procurement-stocking-disposal</b>	
a. Create a new institution as a Public Private Partnership (PPP) to compete with and complement existing institutions to procure stock and dispose pulses.	Preparation to start immediately with aim of implementation by rabi 2016. Cabinet note to be ready within 4 weeks.
b. Announce clear rules for disposal of stocks.	
<b>4. Minimizing Adverse Impacts</b>	
a. Encourage development of GM technologies. Grant expeditious approval to indigenously developed new varieties of pulses	As appropriate

## A4. Minimum Support Prices (Crop Year) of Major Crops (Rs./Quintal)

Commodity	2015-16	2016-17
Kharif Crops		
Paddy (Common)	1410	1470
Paddy (Grade 'A')	1450	1510
Jowar (Hybrid)	1570	1625
Jowar (Maldandi)	1590	1650
Bajra	1275	1330
Ragi	1650	1725
Maize	1325	1365
Tur (Arhar)	4625^	5050*
Moong	4850^	5225*
Urad	4625^	5000*
Groundnut	4030	4220\$
Sunflower Seed	3800	3950\$
Soyabean (Yellow)	2600	2775\$
Sesamum	4700	5000#
Nigerseed	3650	3825\$
Cotton		
(Medium Staple)	3800	3860
Cotton		
(Long Staple)	4100	4160
Rabi Crops		
Wheat	1525	1625
Barley	1225	1325
Gram	3425^^	4000**
Lentil (Masur)	3325^^	3950##
Rapeseed/Mustard	3350	3700**

**Source:** Commission for Agricultural Costs and Prices (CACP).

*Notes:* Figures in brackets indicate percentage increase. ^ : Included Bonus Rs. 200 per quintal, \* : Including Bonus Rs. 425 per quintal, \$ : Including Bonus Rs. 100 per quintal, # : Including Bonus Rs. 200 per quintal, ^^ : Additional bonus Rs. 75 per quintal, \*\* : Including bonus of Rs. 200 per quintal, ## : Including bonus of Rs. 100 per quintal.