Asia Construct

INDIAN CONSTRUCTION INDUSTRY

2010-2011

PREPARED BY

CONSTRUCTION INDUSTRY DEVELOPMENT COUNCIL

INDIA

Contents

Annex:

1. Introduction & Construction Industry Development Council

Construction Industry Development Council (CIDC) has been jointly established by the Planning Commission, Government of India and the Indian Construction Industry. Since its inception in 1996, CIDC has initiated several activities for the benefit of construction industry. A notable few are:

- *Advice the Government on policy formulation related to construction industry.*
- *Standardization of construction contracts and procedures.*
- *Training manpower at skilled worker level and construction management level.*
- *Grading of construction entities*
- *Devise mechanisms for workers' welfare.*
- *Help evolve policies for financing.*
- *Dispute Resolution in Construction Contracts.*
- *Establishing construction equipment bank.*
- *Computation & publishing Construction Cost Indices*
- *Interaction and networking with international organisations to promote emerging technologies and best practices.*

This report presents the overview of the Indian Economy & the Indian Construction Industry. Macro economic parameters pertaining to the Indian Economy & the Construction Industry are also presented. Long term agenda for the Indian Construction Industry is highlighted through the 11th & 12th Five Year Plans. Further short term policy issues related to Construction Industry are highlighted through the Union Budgets. This report also highlights the administration & regulation of the Indian Construction Industry one of the fastest growing construction industry internationally. Key areas of construction opportunity are discussed

2. Political, Social & Legal framework:

- Secular Constitution.
- Stable Democratic environment since 1947.
- Broad consensus on Economic policy across party lines.
- Independent multi-tier judicial system.
- Judicial systems in sync with international practices.
- Preferred language of domestic business & international interactions is English.

3. Economic Overview

The macroeconomic requirements for 9% growth are challenging but not impossible. The average investment rate must rise from 32% in the Tenth Plan to around 37% in the Eleventh Plan period, reaching 39% at the end of the period. This increase is entirely feasible. Private investment, which has been buoyant in the Tenth Plan, is
expected to provide the bulk of the increased investment accounting for 78% of the total, about the same as in the Tenth Plan. The share of public investment in total investment has been declining over successive Plan periods from 34.7% in the Eighth Plan to 29% in the Ninth Plan and 22% in the Tenth Plan. In the Eleventh Plan its share is expected to stabilize at the level in the Tenth Plan implying that the volume of public investment must increase in line with private investment. This is necessary if we are to achieve the expansion in social sector investment and in infrastructure which is necessary for ensuring faster and more inclusive growth.

These rates of investment will be supported by a buoyant domestic savings rate of 34.8% and a relatively manageable current account deficit of around 2% of GDP.

The household sector is the main contributor to the domestic savings, but the public sector is also expected to contribute positively to savings reflecting a significant turnaround compared with past experience. The projected current account deficit could easily be higher because of the likely continuance of high oil prices but even so, it should remain sustainable given the likely availability of foreign inflows.

The strategy for achieving faster growth with greater inclusiveness involves several interrelated components. These are: (i) a continuation of the policies of economic reform which have created a buoyant and competitive private sector capable of benefiting from the opportunities provided by greater integration with the world, (ii) a revival in agricultural growth which is the most important single factor affecting rural prosperity, (iii) improved access to essential services in health and education (including skill development) especially for the poor, which is essential to ensure inclusiveness and also to support rapid growth, (iv) a special thrust on infrastructure development which is a critical area for accelerating growth, (v) environmental sustainability which is becoming increasingly important, (vi) special attention to the needs of disadvantaged groups, and (vii) good governance at all levels, Central, state, and local.

As in most market economies, the dominant impulse for growth will come from the private sector. India is fortunate in having a strong private sector capability ranging from agriculture, which is entirely dependent on private farmers, most of whom have modest land holdings, through small and medium entrepreneurs in industry and services to larger domestic corporate entities, many of which benefit from FDI to varying degrees. The Eleventh Plan must ensure a policy environment that is supportive of this vibrant and globalized private sector which has an important contribution to make in India’s future development.

Emphasizing the importance of the private sector is not to downplay the role of the government. On the contrary, apart from the usual role of government in providing a stable macroeconomic policy, the Eleventh Plan envisages a very large role for public policy in a number of sectors.

Size of Indian Household by Profile (Millions)

Class	2010-11	2006-07	2001-02	1995-96
Effluent	7.4	5.2	2.6	1.2
Middle Class	86.0	75.5	46.4	32.5
Aspiring	89.4	81.7	74.4	54.1

3.1 Main Macroeconomic Indicators

0.1 : SELECT INDICATORS										
	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2006-07	2007-08	2008-09	2009-10
1	2	3	4	5	6	7	8	9	10	11
ECONOMIC INDICATORS										
GDP at factor cost: at current prices in ₹ crore	9719	16512	42981	132520	515032	1925017	3952241	4581422	5282086[PE]	6133230[QE]
GDP at factor cost: at constant prices in ₹ crore	224786	329825	474131	641921	1083572	1864300	3566011	3898958	4162509[PE]	4493743[QE]
Per capita Net National Product at constant prices in ₹	5708	7121	8091	8594	11535	16172	28083	30354	31801[PE]	33731[QE]
Gross Domestic Capital Formation as percentage of GDP at current market prices	8.4	14.0	15.1	19.9	26.0	24.3	35.7	38.1	34.5	36.5
Gross domestic savings as percentage of GDP at current market prices	8.6	11.2	14.2	18.5	22.8	23.7	34.6	36.9	32.2	33.7
Index of agricultural production [Base: triennium ending 1981-82]	46.2	68.8	85.9	102.1	148.4	165.7	200.7	207.1	192.8	179.9
Index of industrial production[a] [Base: 1993-94 = 100]	7.9[b]	15.6	28.1	43.1	91.6	162.6	255.0	277.1	286.1	316.2
Wholesale Price Index average[c]	6.8	7.9	14.3	36.8	73.7	155.7	111.2	116.5	125.9	130.4
Consumer Price Index for Industrial workers average[d]	17.0	21.0	38.0	81.0	193.0	444.0	125.0	133.0	145.0	163.0
OUTPUT										
(a) Foodgrains [million tonnes]	50.8	82.0	108.4	129.6	176.4	196.8	217.3	230.8	234.4	218.2[e]
(b) Finished Steel[f] [million tonnes]	1.0	2.4	4.6	6.8	13.5	32.3	52.5	56.1	57.2	59.7[g]
(c) Cement [million tonnes]	2.7	8.0	14.3	18.6	48.8	99.2	154.7	167.6	181.4	200.7
(d) Coal and lignite[h] [million tonnes]	32.3	55.2	76.3	119.0	225.5	332.6	462.1	491.1	525.1	566.1
(e) Crude oil [million tonnes]	0.3	0.5	6.8	10.5	33.0	32.4	34.0	34.1	33.5	33.7
(f) Electricity generated [utilities only] [Billion KWH]	5	17	56	111	264	499	662	704	724	768
Plan outlay (₹ crore)	260[i]	1117	2524	15023	58369	185737	309912	371718	477243[j]	762465
FOREIGN TRADE										
(i) Exports										
₹ crore	606	642	1535	6711	32553	203571	571779	655864	840755	845534
US $ million	1269	1346	2031	8486	18143	44560	126414	163132	185295	178751
(ii) Imports										
₹ crore	608	1122	1634	12549	43198	230873	840506	1012312	1374436	1363736
US $ million	1273	2353	2162	15869	24075	50536	185735	251654	303696	288373
Foreign exchange reserves[k] [excluding gold,SDRs and Reverse Tranche Position at IMF];										
₹ crore	911	186	438	4822	4388	184482	836597	1196023	1230066	1149650
US $ million	1914	390	584	5850	2236	39554	191924	299230	241426	254685

Contd....

0.1 : SELECT INDICATORS

	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2006-07	2007-08	2008-09	2009-10
1	2	3	4	5	6	7	8	9	10	11
SOCIAL INDICATORS										
Population (million) [l]	359	434	541	679	839	1019	1122	1138	1154	1170
Birth Rate (per 1000)[m]	39.9	41.7	36.9	33.9	29.5	25.4	23.8	23.5	22.8	22.5
Death Rate (per 1000)[m]	27.4	22.8	14.9	12.5	9.8	8.4	7.6	7.4	7.4	7.3
Life Expectancy at Birth[n]	32.1	41.3	45.6	50.4	58.7	62.5	63.5	na	na	na
(in Years)										
(a) Male	32.5	41.9	46.4	50.9	58.6	61.6	62.6	na	na	na
(b) Female	31.7	40.6	44.7	50	59	63.3	64.2	na	na	na
Education: Literacy Rate[o]	18.3	28.3	34.4	43.6	52.2	64.8	na	na	na	na
(%)										
(a) Male	27.2	40.4	46	56.4	64.1	75.3	na	na	na	na
(b) Female	8.9	15.4	22	29.8	39.3	53.7	na	na	na	na
Health & Family Welfare										
Registered Medical Practitioner (RMP) (Allopathy) (Thousand) on 31st Dec	61.8	83.7	151.1	268.7	393.6	577.1	na	na	na	na
RMP per 10,000 population	1.7	1.9	2.8	3.9	4.7	5.6	na	na	na	na
Beds (All Types)[p] per 10,000	3.2	5.7	6.4	8.3	9.5	na	na	na	na	na

[PE] Provisional Estimates, [QE] Quick Estimates.

na : Not available.

[a] The Index of Industrial Production has been revised since 1993-94. The indices have been recompiled from April 04 onwards using new series of WPI for the IIP items reported in value terms.

[b] Relates to the calender year 1950.

[c] New series of WPI has been released from 2004-05 with base 2004-05=100.

[d] CPI-IW: New series is based on 2001=100.

[e] fourth advance estimates.

[f] Including secondary producers.

[g] Provisional.

[h] Coal output includes Meghalaya Coal from 2005-06 onwards.

[i] Relates to 1951-52.

[j] Revised Estimates only.

[k] As on end-March.

[l] Relate to mid-financial year (as on October 1) based on population figures of C.S.O.

[m] For calendar year. Figure shown against 1990-91 is for calendar year 1991 and so on. Source : Office of R.G.I.

[n] Data for 1950-51, 1960-61, 1970-71 and 1980-81 relate to the decades 1941-50, 1951-60, 1961-70 and 1971-80 respectively, centred at midpoints of the decade, i.e., 1946, 1956, 1966 and 1976. The estimates for 1990-91 and 1991-92 refer to the periods 1988-92 and 1989-93 respectively. The estimates for 2006-07 refers to the period 2002-06.

[o] Data for 1950-51, 1960-61, 1970-71, 1980-81, 1990-91 and 2000-01 are as per Census of India 1951, 1961, 1971, 1981, 1991 and 2001. The figures for 1951, 1961 and 1971 relate to population aged 5 years and above and those for 1981, 1991 and 2001 to population aged 7 years and above. All India literacy rates exclude Assam for 1981 and J&K for 1991. For 2005-06, data is based on National Family Health Survey (2005-06) (+ 6 years).

[p] Includes beds in hospitals, dispensaries, P.H.Cs, clinics, sanatoriums, etc.

Note: Data on GDP at factor cost at constant prices and per capita Net National Product at constant prices realates to 1999-2000 prices upto 2000-01. From 2006-07 onwards, data are based on new series (2004-05) prices.

3.2 Components of Construction Turnover & Stratified Employment Quantum:

All figures in Rs Billion

Category	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Residential (A)	**150**	**206**	**223**	**266**	**284**	**305.96**
Public	60	82.4	89.2	106.4	113.6	122.38
Private	90	123.6	133.8	1782.2	170.4	183.57
Commercial (B)	**150**	**206**	**223**	**266**	**281**	**284.62**
Public	45	61.8	66.9	79.8	84.3	85.38
Private	105	144.2	156.1	186.2	196.7	199.23
Industrial (C)	**1080**	**1483.2**	**1605.6**	**1915.2**	**2030.11**	**2172.21**
Public	756	1038.24	1123.92	1340.64	1421.3	1520.54
Private	324	444.96	481.68	574.56	609.03	651.66
Infrastructure (D)	**1620**	**2224.8**	**2408.4**	**2872.8**	**3016.44**	**3167.26**
Public	1134	1557.36	1685.88	2010.96	2111.51	2217.08
Private	486	667.44	722.52	861.84	904.93	950.17
Total Public	**1995**	**2739.8**	**2965.9**	**3537.8**	**3697.01**	**3900.34**
Total Private	**1005**	**1380.2**	**1494.1**	**1782.2**	**1880.22**	**1983.63**
Grand Total	**3000**	**4120**	**4460**	**5320**	**5577.23**	**5883.97**

<u>Stratified Employment Quantum</u>

Category	Number (in 000s) in 2010	% age
Engineers	932	2.65
Technicians & Foreman etc.	646	1.85
Clerical	834	2.38
Skilled Workers	3688	10.57
Unskilled Workers	28900	82.45
TOTAL	**35,000,000**	**100.00**

3.2 Economy in 2009-10 & during the First Half of 2010-11

1. The performance of the Indian economy in 2009/10 greatly exceeded expectations. The farm sector which was expected to contract showed resilience, growing by 0.2 per cent despite the weak South West monsoon. The non farm sector also did well. It is the assessment of the Council that the Indian economy would grow at 8.5 per cent in 2010/11 and 9.0 per cent in 2011/12. In the current fiscal year, agriculture will grow at 4.5 per cent, industry at 9.7 per cent and services at 8.9 per cent.

Global Prospects

2. The global economic and financial situation is recovering slowly. The large fiscal deficits and high debt ratios coupled with slow economic growth have created unsettling conditions for business and have potential for causing great volatility in financial markets. It is hard to visualize strong economic growth in the advanced economies in 2010 and to a large extent in 2011. The implications of this, for India's strategy to return to the 9.0 per cent growth trajectory, are that public policy must promote business confidence and facilitate increased investment.

Structural Factors

3. In 2008/09 the investment rate fell on account of the drawdown of inventories. This trend has reversed and the Council expects the investment rate to be higher at 36 per cent (of GDP) in 2009/10, rising to 37 per cent in 2010/11 and 38.4 per cent in 2011/12. Similarly we expect the domestic savings rate to pick up and reach 33.4 per cent in 2009/10, 34.3 per cent in 2010/11 and 35.5 per cent in 2011/12. These rates should enable the economy to grow in a sustained manner at 9.0 per cent.

4. Private corporate investment and total investment in fixed assets is expected to recover strongly but will not reach the previous high levels. Government Final Consumption Expenditure to GDP which hit a peak of 12.3 per cent in 2009/10 is expected to fall to 10.3 per cent in 2011/12. On the contrary, Private Final Consumption Expenditure which declined in 2008/09 and 2009/10 is expected to increase in the current and next fiscal year. Since 2001-02 the progressive decline in the Private Final Consumption Expenditure has been accompanied by a matching increase in the investment expenditure component of GDP.

Sectoral Growth Projections

5. In the backdrop of a weak South West (SW) monsoon in 2009, the Council had expected the farm sector GDP to decline by 2 per cent. However, the actual loss in farm sector output was less. The strength in horticulture, animal husbandry and fisheries, as well as higher cotton output, helped farm sector GDP to ultimately register a marginally positive growth of 0.2 per cent.

6. On the basis of a normal SW monsoon forecast by the Meteorological Department, one may reasonably expect a strong rebound in crop output in Kharif and Rabi in 2010/11. The better seed and fertilizer availability and the construction of a large number of water harvesting structures through the MNREGA lend strength to these expectations. Moreover, the expansion in horticulture and animal husbandry and a low base effect should generate a farm sector GDP growth of around 4.5 per cent in the current fiscal.

7. Industrial sector recovery became evident in June 2009 and by August 2009 the General Index of Industrial Production (IIP) registered double digit growth rate driven by similar growth rates in

output in the manufacturing and mining sector. The service sector has also shown strong recovery with GDP originating in the important sub-sector of “trade, hotels, restaurant, transport & communication” surging in the second half of 2009/10. The impact of the civil service pay hike and the arrears lifted growth of the “community personal services” sub-sector in the first half, but eased up in the second. Export related service activity (software and Business Process Outsourcing) was sluggish throughout 2009/10 but was more than offset by the recovery in domestic-oriented service activity. Overall, non-farm sector GDP grew by 8.8 per cent in 2009/10.

8. In 2009/10 the mining sector output grew at 10 per cent but a slowdown is expected in 2010/11 with a projected growth of 8.0 per cent in both output and GDP arising in the sector. Manufacturing output growth in 2009/10 was strong in all the quarters, especially in the case of capital goods and durable consumer goods. The only exception to this was non-durable consumer goods which were impacted by poor export growth and a lower output of sugar. Even though the manufacturing sector has recorded strong growth rate in April and May 2010, we expect this to ease as the base effect wears off. The projected growth rate in the manufacturing sector and the general index (IIP) is expected at 10 per cent in 2010/11.

9. The expected expansion of investment in physical infrastructure, including housing will drive the construction sector. Accordingly, the GDP arising in the construction sub-sector would rise by 10 per cent in 2010/11, which is likely to inch up to 11 per cent in 2011/12. In the “trade, hotel, restaurants, transport & communication” sub sector, growth picked up in the last two quarters of the year. We expect this trend to be reinforced with 10 per cent growth in both 2010/11 as well as 2011/12. There will be no contribution to expansion from civil service pay in the current year but the private sector component of the sub-sector “community and personnel services” will continue to register strong expansion in line with the rest of the economy. Software and BPO activity is expected to expand significantly in 2010/11, both in the domestic and export sectors. Alongwith steady expansion in the financial industry we expect this sub-sector to record growth of 9.5 per cent in 2010/11 which will rise further in 2011/12.

10. Overall, we expect GDP arising in the industrial sector to expand 9.6 per cent in 2010/11, rising to 10.3 per cent in 2011/12. The expansion in the services sector is expected to approach 9 per cent in 2010/11 and inch up to 9.6 per cent in 2011/12. Over all, the non-farm sector is expected to grow by 9.2 per cent in 2010/11 and 9.8 per cent in 2011/12.

Infrastructure- Deficit and Eleventh Plan Physical Targets

Sector	Deficit	Eleventh Plan Targets
Roads/Highways	65590 km of NH comprise only 2% of network; carry 40% of traffic; 12% 4-laned; 50% 2-laned; and 38% single-laned	6-lane 6500 km in GQ; 4-lane 6736 km NS-EW; 4-lane 20000 km; 2-lane 20000 km; 1000 km Expressway
Ports	Inadequate berths and rail/road connectivity	New capacity: 485 m MT in major ports; 345 m MT in minor ports
Airports	Inadequate runways, aircraft handling capacity, parking space and terminal buildings	Modernize 4 metro and 35 non-metro airports; 3 greenfield in NER; 7 other greenfield airports
Railways	Old technology; saturated routes; slow speeds (freight: 22 kmph; passengers: 50 kmph); low payload to tare ratio (2.5)	8132 km new rail; 7148 km gauge conversion; modernize 22 stations; dedicated freight corridors
Power	13.8% peaking deficit; 9.6% energy shortage; 40% transmission and distribution losses; absence of competition	Add 78577 MW; access to all rural households
Irrigation	1123 BCM utilizable water resources; yet near crisis in per capita availability and storage; only 43% of net sown area irrigated	Develop 16 mha major and minor works; 10.25 mha CAD; 2.18 mha flood control
Telecom/IT	Only 18% of market accessed; obsolete hardware; acute human resources' shortages	Reach 600 m subscribers—200 m in rural areas; 20 m broadband; 40 m Internet

4. 11th Five Year Plan (2007 – 2012)

For the 11th five-year plan (for the period 2007-2012) it is proposed to enhance the investment in infrastructure two folds. The estimate of additional investment for the 11th Plan period is given as follows: -

Project Investment in Infrastructure during Eleventh Five Year Plan

(Rs crore at 2006–07 price)

Sector	Tenth Plan (Anticipated Expendr.)	2007–08	2008–09	2009–10	2010–11	2011–12	Total Eleventh Plan	Share (%)
Electricity (incl. NCE)	291850	81954	101553	126380	158027	198611	666525	
Centre	102463	37808	43469	49989	57631	66420	255316	38.31
States	97553	20978	29729	41357	56670	76963	225697	33.86
Private	91834	23168	28355	35034	43726	55228	185512	27.83
Roads and Bridges	144892	51822	54789	59200	68370	79971	314152	
Centre	71534	18318	19446	20673	22618	26304	107359	34.17
States	66354	17534	18150	18889	20613	24815	100000	31.83
Private	7004	15970	17193	19638	25140	28852	106792	33.99
Telecommunications	103365	31375	38134	48593	61646	78690	258439	
Centre	49013	13525	14037	16061	17728	19401	80753	31.25
Private	54352	17850	24098	32532	43918	59289	177686	68.75
Railways (incl. MRTS)	119658	34225	40964	49525	60393	76701	261808	
Centre	108950	25925	31176	37974	46685	59693	201453	76.95
States (MRTS)	10402	1575	1788	1979	2170	2489	10000	3.82
Private	307	6725	8000	9572	11537	14519	50354	19.23
Irrigation (incl. Watershed)	111503	27497	35916	47189	62266	80433	253301	
Centre	13617	3367	4006	4782	5726	6879	24759	9.77
States	97886	24130	31911	42407	56540	73554	228543	90.23
Water Supply & Sanitation	64803	19298	22781	27323	33266	41063	143730	
Centre	42316	5152	6411	7991	9976	12474	42003	29.22
States	21465	13500	15558	18308	21995	26945	96306	67.00
Private	1022	646	812	1024	1295	1645	5421	3.77
Ports	14071	12409	14822	17374	19980	23410	87995	
Centre	2185	4898	5698	6243	6350	6700	29889	33.97
States	1530	598	658	724	796	850	3627	4.12
Private	10356	6913	8466	10407	12833	15860	54479	61.91
Airports	6771	5208	5520	5904	6646	7690	30968	
Centre	3823	1146	1369	1894	2205	2674	9288	29.99
States	12	50	–	–	–	–	50	0.16
Private	2936	4012	4151	4010	4441	5016	21630	69.85
Storage	4819	3777	4098	4446	4824	5234	22378	
Centre	577	755	820	889	965	1047	4476	20.00
States	866	1133	1229	1334	1447	1570	6713	30.00
Private	3377	1888	2049	2223	2412	2617	11189	50.00
Gas	9713	2708	3003	3332	3700	4111	16855	
Centre	8713	1714	1874	2049	2240	2450	10327	61.27
Private	1000	995	1129	1283	1460	1661	6528	38.73
Total (Rs crore)	871445	270273	321579	389266	479117	595913	2056150	
Centre	403189	112608	128305	148545	172123	204041	765622	37.24
States	296068	79499	99022	124998	160232	207186	670937	32.63
Private	172188	78166	94252	115724	146762	184687	619591	30.13

(Table 12.4 contd.)

(Rs crore at 2006–07 price)

Sector	Tenth Plan (Anticipated Expendr.)	2007–08	2008–09	2009–10	2010–11	2011–12	Total Eleventh Plan	Share (%)
Total (US$ bn) @Rs 40/$	217.86	67.57	80.39	97.32	119.78	148.98	514.04	
Centre	100.80	28.15	32.08	37.14	43.03	51.01	191.41	37.24
States	74.02	19.87	24.76	31.25	40.06	51.80	167.73	32.63
Private	43.05	19.54	23.56	28.93	36.69	46.17	154.90	30.13
Total (Rs crore)	871445	270273	321579	389266	479117	595913	2056150	
Public	699257	192107	227327	273543	332355	411226	1436559	69.87
Private	172188	78166	94252	115724	146762	184687	619591	30.13
Total (US$ bn)@Rs 40/$	217.86	67.57	80.39	97.32	119.78	148.98	514.04	
Public	174.81	48.03	56.83	68.39	83.09	102.81	359.14	69.87
Private	43.05	19.54	23.56	28.93	36.69	46.17	154.90	30.13

Comparison of 11th (Period: 2007-12) & 10th (Period: 2002-07) Plan Development Outlay

In Rs crore

Head	2007-12 11th Plan	2002-07 10th Plan	% Change
Agriculture	136381	58933	131%
Rural Development	301069	121928	147
Special Area Programme	26329	20879	26
Irrigation & Flood Control	210325	103315	104
Energy	854123	403927	111
Industry & Minerals	153600	58939	161
Transport	572443	225977	153
Communication	95380	98968	-4
Science tech. & Env.	87933	30424	189
Gen. Economic Services	62523	38630	62
Social Services	1102327	347391	217
Gen. Services	42283	16328	159
TOTAL	**3644718**	**1525639**	**139**

5. Union Budget 2009-10, Highlights on Construction Industry

The Government of India announced the Union Budget for the period 2009-10 on 7th July 2009. The issues related to construction/infrastructure in the Budget are given as follows:

Sl. No.	Item	Impact on Construction Industry
1	**Economic Revival – Short-term Measures** To counter the negative fallout of the global slowdown on the Indian economy, the Government provided three focused fiscal stimulus packages. This also included increased spending on public projects.	This will enhance the turnover of construction industry while building the much need infrastructure of the Nation.
2	**Infrastructure Financing** Indian Infrastructure Finance Company Ltd (IIFCL) to evolve a Takeout financing scheme to facilitate incremental lending to infrastructure sector. IIFCL to refinance 50% of commercial bank loans for PPP projects in critical sectors over next 15 to 18 months. IIFCL & Banks now can support projects involving total investment of 1,00,000 crore.	This will facilitate infrastructure financing which will in turn facilitate infrastructure development.
3	**Highways** Allocation to National Highways Authority of India (NHAI) for its National Highway Development Programme (NHDP) increased by 23%.	This shall boost the NHDP which has slowed down in the recent past.
4	**Railways** Allocation this year is Rs 15,800 crore up from Rs 10,800 crore last year.	This will facilitate infrastructure development in the railways and shall equally enhance the turnover of the construction industry.
5	**Urban Infrastructure:** Allocation to Jwaharlal Nehru National Urban Renewal Mission (JNNURM) increased by 87% to Rs 12,887 crore.	Shall substantially boost the JNNRUM programme and will equally enhance the turnover of the construction industry.
6	**Basic Amenities to Urban Poor** Allocation for housing & basic amenities for uraban poor enhance to Rs 3,973 crore which includes the new scheme “Rajiv Awas Yojna”	Shall build the basic urban infrastructure & equally enhance the turnover of the construction industry.

7	**Power.** Allocation under Accelerated Power Development & Reform Programme (APDRP) increased by 160%	This shall boost the reforms programme in the Power sector which is the need of the hour.
8	**Gas.** Blueprint to be developed for long distance gas pipelines across the length & breadth of the country leading to a National Gas Grid.	An excellent planning exercise in the Gas sector has been introduced in this budget. This lays the foundation of construction work of laying pipelines for the Gas Grid.
9	**National Rural Employment guarantee Scheme (NREGS)** Allocation under NREGS increased by 144% to Rs 39,100 crore. Further to increase productivity of assets & resources convergence with other rural development schemes has been initiated.	Building of assets in rural area will receive a big boost from this. This shall also equally enhance the turnover of the construction industry as most of the works under this scheme shall be construction works.
10	**Bharat Nirman** Allocation for Bharat Nirman increased by 45%. Allocation of Pradhan Mantri Gram Sarak Yojna increased by 59% Rajiv Gandhi Grameen Vidyuttikaran Yojna increased by 27% Allocation under Indira Awas Yojna increased by 63% Allocation of Rs 2000 crore to Rural Housing Fund in NHB to boost refinancing in rural housing sector.	Shall facilitate building of rural infrastructure and equally enhance the turnover of the construction industry.
11	**Welfare of Workers in Unorganized Sector** Social security scheme for the workers in the unorganized sector shall receive allocation for implementation.	Construction workers shall be benefited.
12	**Commonwealth Games 2010** Outlay stepped up from Rs 2,112 cr in Interim Budget to Rs 3,472 cr in the regular budget	Shall equally enhance the turnover of the construction industry.

13	**Goods & Service Tax (GST)** GST to be introduced from 2010.	This will streamline the taxation structure & shall benefit the industry while increasing Government revenue.

5.1 Key Features of Union Budget 2011-2012

OPPORTUNITIES

Swift and broad based growth in 2010-11 has put the economy back to its pre-crisis growth trajectory. Fiscal consolidation has been impressive.

Significant progress in critical institutional reforms that would set the pace for double-digit growth in the near future.

Dynamism in the rural economy due to scaled up flow of resources to the rural areas.

CHALLENGES

Structural concerns on inflation management to be addressed by improving supply response of agriculture to the expanding domestic demand and through stronger fiscal consolidation.

Implementation gaps, leakages from public programmes and the quality of outcomes pose a serious challenge.

Impression of drift in governance and gap in public accountability is misplaced. Corruption as a problem to be fought collectively. Government to improve the regulatory standards and administrative practices. Inputs from colleagues on both sides of House are important in the wider national interest.

Budget 2011-12 to serve as a transition towards a more transparent and result oriented economic management system in India.

OVERVIEW OF THE ECONOMY

Gross Domestic Product (GDP) estimated to have grown at 8.6 per cent in 2010-11 in real terms. Economy has shown remarkable resilience.

Continued high food prices have been principal concern this year.

Consumers denied the benefit of seasonal fall in prices despite improved availability of food items, revealing shortcomings in distribution and marketing systems.

Monetary policy measures taken expected to further moderate inflation in coming months.

Exports have grown by 29.4 per cent, while imports have recorded a growth of 17.6 per cent during April to January 2010-11 over the corresponding period last year.

Indian economy expected to grow at 9 per cent with an outside band of +/-0.25 per cent in 2011-12.

Average inflation expected lower next year and current account deficit smaller.

SUSTAINING GROWTH

Fiscal consolidation

Fiscal consolidation targets at Centre and States have shown positive effect on macro economic management of the economy.

Amendment to Centre's FRBM Act, 2003 laying down the fiscal road map for the next five years to be introduced in the course of the year.

Proposal to introduce the Public Debt Management Agency of India Bill in the next financial year.

Tax Reforms

Direct Taxes Code (DTC) to be finalised for enactment during 2011-12. DTC proposed to be effective from April 1, 2012.

Areas of divergence with States on proposed Goods and Services Tax (GST) have been narrowed. As a step towards roll out of GST, Constitution Amendment Bill proposed to be introduced in this session of Parliament.

Significant progress in establishing GST Network (GSTN), which will serve as IT infrastructure for introduction of GST.

Expenditure Reforms

A Committee already set up by Planning Commission to look into the extant classification of public expenditure between plan, non-plan, revenue and capital.

Subsidies

Nutrient Based Subsidy (NBS) has improved the availability of fertiliser; Government actively considering extension of the NBS regime to cover urea.

Government to move towards direct transfer of cash subsidy to people living below poverty line in a phased manner for better delivery of kerosene, LPG and fertilisers. Task force set up to work out the modalities for the proposed system.

People’s ownership of PSUs

Overwhelming response to public issues of Central Public Sector Undertakings during current year.

Higher than anticipated non-tax revenue has led to reschedulement of some disinvestment issues planned for current year.

Rs. 40,000 crore to be raised through disinvestment in 2011-12.

Government committed to retain at least 51 per cent ownership and management control of the Central Public Sector Undertakings.

INVESTMENT ENVIRONMENT

Foreign Direct Investment

Discussions underway to further liberalise the FDI policy.

Foreign Institutional Investors

SEBI registered mutual funds permitted to accept subscription from foreign investors who meet KYC requirements for equity schemes.

To enhance flow of funds to infrastructure sector, the FII limit for investment in corporate bonds issued in infrastructure sector being raised.

Financial Sector Legislative Initiatives

To take the process of financial sector reforms further, various legislations proposed in 2011-12.

Amendments proposed to the Banking Regulation Act in the context of additional banking licences to private sector players.

Public Sector Bank Capitalisation

Rs. 6,000 crore to be provided during 2011-12 to enable public sector banks to maintain a minimum of Tier I CRAR of 8 per cent.

Recapitalisation of Regional Rural Banks

Rs. 500 crore to be provided to enable Regional Rural Banks to maintain a CRAR of at least 9 per cent as on March 31, 2012.

Micro Finance Institutions

"India Microfinance Equity Fund" of Rs. 100 crore to be created with SIDBI. Government considering putting in place appropriate regulatory framework to protect the interest of small borrowers.

"Women's SHG's Development Fund" to be created with a corpus of Rs. 500 crore.Rural Infrastructure Development Fund

Corpus of RIDF XVII to be raised from Rs. 16,000 crore to Rs. 18,000 crore. Micro Small and Medium Enterprises

Rs. 5,000 crore to be provided to SIDBI for refinancing incremental lending by banks to these enterprises.

Rs. 3,000 crore to be provided to NABARD to provide support to handloom weaver co-operative societies which have become financially unviable due to non-repayment of debt by handloom weavers facing economic stress.

Public sector banks to achieve a target of 15 per cent as outstanding loans to minority communities under priority sector lending at the earliest.

Housing Sector Finance

Existing scheme of interest subvention of 1 per cent on housing loan further liberalised.

Existing housing loan limit enhanced to Rs. 25 lakh for dwelling units under priority sector lending.

Provision under Rural Housing Fund enhanced to Rs. 3,000 crore. To enhance credit worthiness of economically weaker sections and LIG households, a Mortgage Risk Guarantee Fund to be created under

Rajiv Awas Yojana.

Central Electronic Registry to prevent frauds involving multiple lending on the same immovable property to become operational by March 31, 2011.

Financial Sector Legislative Reforms Commission

Financial Sector Legislative Reforms Commission set up to rewrite and streamline the financial sector laws, rules and regulations.

Companies Bill to be introduced in the Lok Sabha during current session.

Infrastructure and Industry

Allocation of Rs. 2,14,000 crore for infrastructure in 2011-12. This is an increase of 23.3 per cent over 2010-11. This also amounts to 48.5 per cent of total plan allocation.

Government to come up with a comprehensive policy for further developing PPP projects.

IIFCL to achieve cummulative disbursement target of Rs. 20,000 crore by March 31, 2011 and Rs. 25,000 crore by March 31, 2012.

Under take out financing scheme, seven projects sanctioned with debt of Rs. 1,500 crore. Another Rs. 5,000 crore will be sanctioned during 2011-12.

To boost infrastructure development, tax free bonds of Rs. 30,000 crore proposed to be issued by Government undertakings during 2011-12.

National Manufacturing Policy

Share of manufacturing in GDP expected to grow from about 16 per cent to 25 per cent over a period of 10 years. Government will come out with a manufacturing policy.

Two Committees set up for greater transparency and accountability in procurement policy; and for allocation, pricing and utilisation of natural resources.

Issues relating to reconciliation of environmental concern from various departmental activities including those related to infrastructure and mining to be considered by a Group of Ministers.

National Mission for hybrid and electric vehicle to be launched.

Financial Assistance to be made available for metro projects in Delhi, Mumbai, Bengaluru, Kolkata and Chennai.

Capital investment in fertiliser production proposed to be included as an infrastructure sub-sector.

Exports

Of 23 suggestions made by Task Force on Transaction Cost, constituted by the Department of Commerce, 21 suggestions already implemented. Action to be taken on the remaining two suggestions. Transaction Cost of Rs. 2,100 crore will thus be mitigated.

Self assessment to be introduced in Customs to modernize the Customs administration.

Proposal to introduce scheme for refund of taxes paid on services used for export of goods.

Mega Cluster Scheme to be extended for leather products. Seven mega leather clusters to be set up during 2011-12.

Jodhpur to be included for the development of a handicraft mega cluster.

STRENGTHENING INCLUSION

National Food Security Bill (NFSB) to be introduced in the Parliament during the course of this year.

Allocation for social sector in 2011-12 (Rs. 1,60,887 crore) increased by 17 per cent over current year. It amounts to 36.4 per cent of total plan allocation.

Bharat Nirman

Allocation for Bharat Nirman programme proposed to be increased by Rs. 10,000 crore from the current year to Rs. 58,000 crore in 2011-12.

Plan to provide Rural Broadband Connectivity to all 2,50,000 Panchayats in the country in three years.

MGNREGA

In pursuance of last years budget announcement to provide a real wage of 100 per day, the Government has decided to index the wage rates notified under the MGNREGA to the Consumer Price Index for Agricultural Labour. The enhanced wage rates have been notified by the Ministry of Rural Development on January 14, 2011.

From 1st April, 2011, remuneration of Anganwadi workers increased from Rs. 1,500 per month to Rs. 3,000 per month and for Anganwadi helpers from Rs. 750 per month to Rs. 1,500 per month.

Scheduled Castes and Tribal Sub-plan

Specific allocation earmarked towards Schedule Castes Sub-plan and Tribal Sub-plan in the Budget.

Allocation for primitive Tribal groups increased from Rs 185 crore in 2010-11 to Rs. 244 crore in 2011-12.

Education

Allocation for education increased by 24 per cent over current year. Sarva Shiksha Abhiyan ` 21,000 crore allocated, which is 40 per cent higher than Budget for 2010-11.

Pre-matric scholarship scheme to be introduced for needy SC/ST students studying in classes IX and X.

National Knowledge Network

Connectivity to all 1,500 institutions of Higher Learning and Research through optical fiber backbone to be provided by March, 2012.

Innovations

National Innovation Council set up to prepare road map for innovations in India.

Special grant provided to various universities and academic institutions to recognise excellence.

Skill Development

Additional Rs. 500 crore proposed to be provided for National Skill Development
Fund during the next year.

An international award with prize money of Rs. 1 crore being instituted for promoting values of universal brotherhood as part of National celebrations of 150th Birth Anniversary of Gurudev Rabindranath Tagore.

Health

Plan allocations for health stepped-up by 20 per cent.

Scope of Rashtriya Swasthya Bima Yojana to be expanded to widen the coverage.

Financial Inclusion

Target of providing banking facilities to all 73,000 habitations having a population of over 2,000 to be completed during 2011-2012.

Unorganised sector

Exit norms under co-contributory pension scheme "Swavalamban" to be relaxed.
Benefit of Government contribution to be extended from three to five years for all subscribers who enroll during 2010-11 and 2011-12.

Eligibility for pension under Indira Gandhi National Old Age Pension Scheme for BPL beneficiaries reduced from 65 years of age to 60 years. Those above 80 years of age will get pension of `Rs. 500 per month instead of Rs. 200 at present.

Environment and Climate Change

Forests

Rs. 200 crore proposed to be allocated for Green India Mission from National Clean Energy Fund.

Environmental Management

Rs. 200 crore proposed to be allocated for launching Environmental Remediation Programmes from National Clean Energy Fund.

Cleaning of Rivers and Lakes

Special allocation of Rs. 200 crore proposed to be provided for clean-up of some more important lakes and rivers other than Ganga.

Some Other Initiatives

To boost development in North Eastern Region and Special Category States, allocation for Special Assistance doubled.

Rs. 8,000 crore provided in current year for development needs of Jammu and Kashmir.

Allocation made in 2011-12 to meet the infrastructure needs for Ladakh (Rs. 100 crore) and Jammu region (Rs. 150 crore).

Allocation under Backward Regions Grant Fund increased by over 35 per cent.

Funds allocated under Integrated Action Plan (IAP) for addressing problems related to Left Wing extremism affected districts. 60 selected Tribal and backward districts provided with 100 per cent block grant of Rs 25 crore and Rs. 30 crore per district during 2010-11 and 2011-12 respectively.

A lump-sum ex-gratia compensation of Rs. 9 lakh for 100 per cent disability to be granted for personnel of Defence and Para Military forces discharged from service on medical ground on account of disability attributable to government service.

Provision of Rs.1,64,415 crore, including Rs. 69,199 crore for capital expenditure to e made for Defence Services in 2011-12.

To build judicial infrastructure, plan provision for Department of Justice increased by three fold to Rs. 1,000 crore.

Census 2011

To enumerate castes other than Schedule Castes and Schedule Tribes in Census 2011, 'caste' to be canvassed as a separate time bound exercise.

IMPROVING GOVERNANCE

UID Mission

From 1st October, 2011 ten lakh Aadhaar numbers will be generated per day. IT Initiatives

Various IT initiatives taken for efficient tax administration. These include e-filing and e-payment of taxes, adoption of ‘Sevottam’ concept by CBEC and CBDT, web based facility for tax payers to track the resolution of refunds and credit for pre-paid taxes and augmentation of processing capacity.

Under Mission mode projects, funds released to 31 projects received from States/ UTs for computerisation of Commercial taxes. This will allow States to align with roll out of GST.

Bill to amend the Indian Stamp Act proposed to be introduced shortly.

A new scheme with an outlay of Rs. 300 crore to be launched to provide assistance to States to modernise their stamp and registration administration and roll out e-stamping in all the districts in the next three years.

A new simplified form ‘Sugam’ to be introduced to reduce the compliance burden of small tax payers falling within presumptive taxation.

Three more benches of Settlement Commission to be set up to fast track the disposal of cases.

Steps initiated to reduce litigation and focus attention on high revenue cases.

Corruption

Group of Ministers constituted to consider measures for tackling corruption. Recommendations to be made in a time bound manner.

Performance Monitoring and Evaluation System

In pursuance of recommendations of Second Administrative Reforms Commission, 62 departments covered under Performance Monitoring and Evaluation System (PMES) to assess their effectiveness.

TAGUP

Recommendations of Technology Advisory Group for Unique Projects (TAGUP) submitted and accepted in principle.

6. <u>Administration and Regulations of Construction Industry</u>

Construction Projects are subject to a host of Central and State laws simultaneously. Administratively and in terms of regulation, Central & State Governments have their own roles to play in Construction.

6.1 Structure and Role of Construction Administration

- Structure and Role of Construction Administration of Central Government & Structure and Role of Construction Administration of Local Government

There is focussed central machinery or structure of administration for the Construction Industry. As this sector's activities are involved with every sector of the economy, at the Central Government level, the issues related to Construction are taken up by the Planning Commission. In fact Construction was given the Identity of an Industry only two years ago.

Housing & Real Estate, constituting around 10.3% of total Construction, is the only one segment of the Construction Industry which has a Ministry called the "Ministry of Urban Affairs". Equivalent Ministries exist at State level and at Municipal/local levels. Activity at any site is governed by the State or a combination of State and Central administration, depending on the location.

Administratively the following Ministries/Departments/Organisations have operating influence over Construction Industry:

Central Government Ministries

- ✓ **Ministry of Commerce**
- ✓ Ministry of Finance
- ✓ Ministry of Urban Affairs and Employment
- ✓ **Ministry of Industries**
- ✓ Ministry of Home Affairs

Central Government Departments

- ✓ Cabinet Committee on Foreign Investment
- ✓ Secretariat of Industrial Assistance
- ✓ Foreign Investment Promotion Board
- ✓ MRTP Commission
- ✓ Registrar of Companies
- ✓ Central Excise and Customs Department

State Government

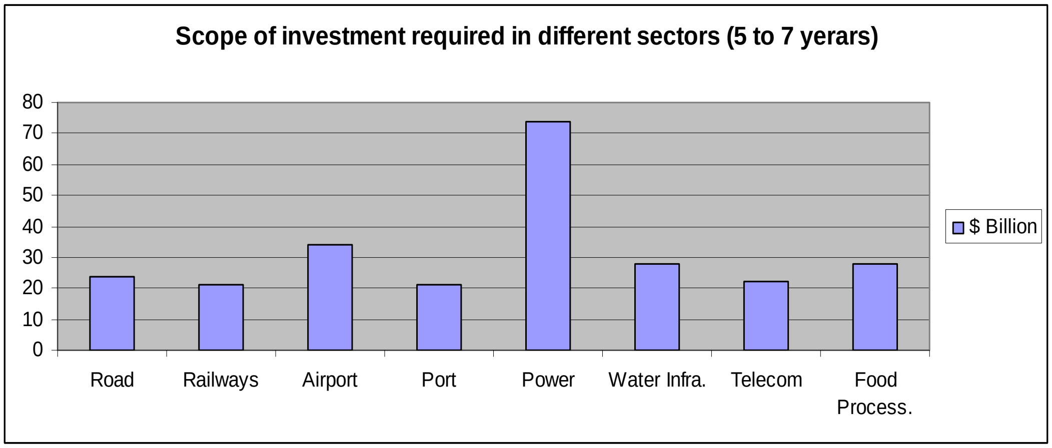
- ✓ Revenue Department
- ✓ Urban Development Authorities
- ✓ Sales Tax
- ✓ Town and Country Planning

Autonomous Statutory Bodies

- ✓ Reserve Bank of India
- ✓ Security and Exchange Board of India
- ✓ Municipal Committee

7. CONSTRUCTION OPPORTUNITY & ACTIVITY

The scope of investment as envisaged by the Investment Commission in…… is given in the following figure:-



FDI Infrastructure Equity Ceiling

Real Estate(townships)	**100%**
Roads	**100%**
Power	**100%**
Airlines	**74%**
Airports	**74%**
Banks(Private)	**74%**
Mining	**74%**
Telecom	**74%**
Defence	**26%**
Insurance	**26%**

7.1 Infrastructure Requirements of Inclusive Growth

Good quality infrastructure is the most critical physical requirement for attaining faster growth in a competitive world and also for ensuring investment in backward regions. This includes all-weather roads; round-the-clock availability of power at a stable voltage and frequency; water for irrigation; railways that are not overcrowded, which run on time and do not overcharge for freight; ports with low turnaround time to reduce costs of imports and exports; airports to handle the growing traffic; air services that provide connectivity to all parts of the country; and telecommunications and broadband connectivity to provide the benefits of the Internet to people all over the country.

The Eleventh Plan outlines a comprehensive programme for development of infrastructure, especially in rural areas, and in the remote and backward parts of the country, consistent with the requirements of inclusive growth at 9% per year. The total investment needed in infrastructure, defined to include electricity (including non-conventional energy), roads, bridges and railways (includes Mass Rapid Transit System, MRTS), ports, airports, telecommunications, irrigation (including watershed development), water supply and sanitation, storage and gas distribution will have to increase from an estimated 5.43% of GDP in 2006–07 to 9.34% by the terminal year of the Eleventh Plan. Though public investment has to be a large part of the solution, an increase of this magnitude cannot be achieved through public investment alone since there will be large demands on public sector resources from the health and education and agriculture sectors, and also from various programmes aimed at livelihood support for the poor. The Eleventh Plan therefore proposes a strategy for infrastructure development which involves a combined response—an increase in public sector investment in infrastructure as a percentage of GDP, and also an increase in private sector investment through some form of public–private partnership (PPP) or directly, where feasible.

The relative contributions of the public and private sectors in meeting the proposed investment targets are summarized in Table 1.1. It may be noted that the absolute increase in public investment is 2.22 percentage points of GDP, which is about 1.3 times the absolute increase in private investment of 1.69 percentage points. The proportional increase in private investment is much larger because of the initial low base but public investment will still constitute 70% of the total investment in infrastructure.

Public investment will have to give priority to meeting the infrastructure requirements in those subsectors and areas where private participation is unlikely to be forthcoming. These include irrigation and other general rural infrastructure (mainly rural roads, rural electrification, and water supply and sanitation), and also infrastructure development in the more backward areas and the remote parts of the country. In other areas where there is scope for private investment, the aim will be to attract private investment in a transparent manner in which the responsibilities of the private concessionaire are clearly defined and the choice of the concessionaire is determined by an open, competitive bidding process.

Attracting private investment on the scale envisaged presents formidable challenges. A good start has been made by the Central Government with PPP in many infrastructure sectors in the Tenth Plan, and many State Governments have also begun exploring this option. However, it must be recognized that it will not be easy to bring in private investment at the scale required. Much will depend on the overall investment climate as also the credibility and legitimacy of the processes, which, in turn, will be influenced by the transparency achieved in setting standards and allocating risks and the robustness of the competitive bidding process for awarding contracts. The major initiatives envisaged in each of the infrastructure sub-sectors are summarized below.

7.2 Railways

The Railways are an important part of our transport infrastructure and they have much higher fuel efficiency than trucks and cars in terms of fuel consumption per tonne kilometre or per passenger kilometre. For movement of bulk commodities, trucks cannot compete with the railways. With containerization, the railways can be competitive even for movement of other goods over long distances.

The rapid rise in international trade and domestic cargo has placed a great strain on the Delhi–Mumbai and Delhi–Kolkata rail tracks. The government has, therefore, decided to build dedicated freight corridors in the western and eastern high density routes involving construction of 7201 km of new rail tracks. This will help to decongest the two routes for freight movement and also increase the economic potential of the hinterland areas which will benefit from the reduced cost of transport. It will also provide spin-off benefits in terms of location of industrial clusters along the new corridors, thereby attracting potential investment in a number of States.

With increasing containerization of cargo, the demand for container movement by rail has grown (Percentage of GDP) 2006–07 2011–12 Public Sector (Centre + States) 4.23 6.45
Private Sector 1.20 2.89 Total 5.43 9.34

Source: Central Statistical Organization for 2006–07

Rapidly. This was hitherto a monopoly of the Container Corporation of India, a public sector entity. In a major initiative in PPP, container movement has been thrown open to competition and 15 private sector entities have been licensed for running container trains on tracks owned by the Indian Railways. Private sector container trains have commenced operations and the operators would also be expanding investment into container handling facilities, such as Inland Container Depots, etc.

The Indian Railways also proposes to take the following steps in an effort to create world-class transport infrastructure: • Strengthening of infrastructure and improvement in the design of wagons to facilitate movement of heavier freight trains. • Redevelopment and modernization of important railway stations through PPP. • A paradigm shift in the delivery of services to include quality passenger services at terminals, introduction of modern rolling stock and improvement in sanitation. • On the Delhi-Agra route, a high speed train with a maximum speed of 150 km per hour has been introduced. Similar trains will be introduced in selected city pairs. • Reduction in accidents per million train km; implementation of measures to reduce chances of passenger fatality as a result of train accidents; focus on development of manpower through major improvements in the working environment and training to reduce the accidents attributable to human failure. Introduction of a new accounting system in line with internationally accepted accounting principles. This will help to identify the unit cost of different services more accurately.

7.3 Roads

The Eleventh Plan envisages a major programme of road development covering the national highways, based on a combination of public investment and PPP and completion of rural road connectivity through the PMGSY.

PMGSY is a massive programme of expanding rural road connectivity and was begun in the Tenth Plan. This will continue into the Eleventh Plan to provide reliable road connectivity to all habitations with 1000+ population (500+ population in hilly regions) by 2009.

An expanded National Highways Development Programme (NHDP) is currently under way, involving a total investment of Rs 227258 crore. It includes fourlaning of the Golden Quadrilateral and the North–South, East–West Corridors (NHDP I and II) overing 14488 km; four/six laning of 10000 km of national highways (the total length approved subsequently has gone up to 12109 km) connecting State capitals and places of tourist importance with the national network under NHDP III; widening of 20000 km of national highways to two lanes with paved shoulders under NHDP IV; six laning of 6500 km of selected national highways under NHDP V; development of 1000 km of expressways under NHDP VI and construction of ring roads around major towns and bypasses, flyovers, etc. on national highways under NHDP VII.

During the Eleventh Plan, a comprehensive Master Plan is proposed to be formulated for construction of 15600 km of Access Controlled Expressways. Action will also be taken for determining the alignments and acquiring land for about 6000 km of the total length. stablishment of an Expressways Authority of India for implementation of the Expressways Programme should be considered by the Ministry.

A balanced development of the highway network requires that apart from expeditious completion of the expanded NHDP involving augmentation of riding quality and capacity of 46000 km of national highways, out of the total present length of 66590 km, the non- NHDP section is also kept in reasonably good shape. In addition, the following qualitative improvements will be implemented:

• The NHAI, which is the implementing agency for NHDP, will be restructured and strengthened.

• High priority will be accorded to ensure integrated development of the entire road network, that is, national highways, State highways, major district roads, other district roads and village roads.

• Higher maintenance standards will be employed in order to reduce the frequency of reconstruction of capacity and to preserve road assets already created. The strategy will focus on optimum utilization of existing capacity rather than creating new capacities.

• Based on the lessons learnt, conditions conducive for private sector participation will be created in the States.

• In order to ensure safety along with free flow of traffic, various steps will be taken in the coming years, including strengthening the institutional mechanism by setting up of the National Road Safety and Traffic Management Board as an apex body. Appropriate design of roads with interchanges, segregation of slow moving traffic and adequate provision of underpasses and overpasses and, in some cases, service lanes, will be focused on.

A Special Accelerated Road Development Programme for the North East Region (SARDP-NE) is presently under implementation for providing road connectivity to all the State capitals and district headquarters in the NER.

7.4 Ports

Indian ports suffer from inefficiency and congestion as reflected in the high turnaround time of ships. New berths and better handling facilities are needed at the existing ports and new ports also need to be developed. The draft at some ports needs deepening to permit larger ships to berth. Rail connectivity to move goods from the ports is also inadequate. The Eleventh Plan envisages a major programme of expansion in port capacity based on PPP. Many State Governments are also taking initiatives to develop their ports through such partnerships and these initiatives will be encouraged.

7.5 Airports

Growth of air traffic in recent years has been very high—an average of 30% per year between 2003–04 and 2006–07. Increased competition in air services has lowered fares and contributed to this growth. However, development of airports and related facilities has not kept pace. The Eleventh Plan will accelerate the programme launched in the last two years of the Tenth Plan to upgrade airports and related facilities. Four major airports (Delhi, Mumbai, Hyderabad, and Bangalore) are being developed by private sector entities. Modernization of Kolkata and Chennai airports and 35 non-metro and 13 other airports is underway.

Some new greenfield airports will also be constructed during the Eleventh Plan.

Civil aviation provides crucial transport infrastructure in hilly and inaccessible areas. It is therefore proposed to augment airport infrastructure in these areas during the Eleventh Plan. This will include: development of three greenfield airports and expansion/modification of six existing airports in the NER; and modernization and upgradation of Jammu, Dehradun, Agatti, and Port Blair airports under the scheme for modernization of 35 non-metro airports.

7.6 Telecommunications

The Eleventh Plan envisages continued progress towards developing a world-class telecommunications infrastructure with an emphasis on broadening access. It is an irony that the phenomenal growth in the telecom sector has also created a digital divide in terms of mobile and land line connections and Internet and broadband connections between urban and rural India. The Eleventh Plan will address this as an important issue. The targets for the Eleventh Plan period are to reach a telecom subscriber base of 600 million and a rural tele-density of 25%. Expanding rural telephony should be a priority area of the Plan.

Broadband connectivity plays an important role not only as a medium but also as a means of bringing knowledge and data though networking to the less fortunate institutions. To empower the nation, and to create a world-class ambience for education, science, technology and governance, the country should create a dynamically configurable national multi-gigabit backbone core network.

It should be our objective to connect 5000 institutions of education, science and technology to this core to enable collaborative research and development nationally and internationally. Campuses should be empowered technologically through campus-wide networks and by providing entry devices to the knowledge network in order to derive the full benefits of this effort.

India's prowess in software is world-renowned with an estimated share of 65% of global off-shore information technology (IT) and 46% of global business process outsourcing (BPO). The Indian IT and IT-enabled services (ITES)/BPO industry stands at US$ 31.3 billion in 2006–07. The addressable market for offshore BPO globally stands at US$ 300 billion, leaving enough headroom for further growth. The IT sector at present is estimated to employ over 3.08 million people and is expected to provide employment opportunity to over 14 Eleventh Five Year Plan generation and in distribution. It also limits the appetite of private investors to invest in generation owing to problems anticipated about the capacity of the unviable public sector distribution companies to pay for power.

The Eleventh Plan must aim at making a radical break from past practice in the electricity sector. The main thrust should be on the following:

• The position at the start of the Eleventh Plan is better than at the start of the Tenth Plan because the volume of generation capacity under construction or ordered in the middle of the first year (September 2007) was 52000 MW compared with only 20500 MW at the start of the Tenth Plan. Further orders amounting to 23600 MW could be placed by the end of the first year of the Eleventh Plan. In view of the shorter pipeline, concerted attention on implementation and project management could ensure higher actual additions to capacity in the Eleventh Plan than in the Tenth Plan.

• While the regulatory structure consisting of the Central Electricity Regulatory Commission and State Electricity Regulatory Commissions have been established and have begun to operate, they have yet to stabilize and achieve credibility as independent
regulators. Many of them suffer from serious staffing problems arising from an inability to attract the necessary technical expertise. Efforts must be made to strengthen the regulatory system by overcoming these constraints.

• Improvement in the efficiency of the distribution system is the most important factor for the health of the system. The Accelerated Power Development and Reform Programme (APDRP), initiated in the Tenth Plan, aimed at reducing aggregate technical and commercial losses from over 40% in 2002–03 to 15% by the end of the Plan. This target proved unachievable and excepting in a couple of States, the Aggregate, Technical and Commercial (ATC) losses were reduced by only 2 to 3 percentage points and are presently estimated at about 40%. The Eleventh Plan must aim to bring about at least a 15 percentage point reduction in these losses during the Plan period. For this purpose, the APDRP programme must be completely restructured and also expanded in scope.

• Rural electrification is an important instrument to bring about inclusive growth by making electricity available to farmers and in rural areas. The RGGVY 8.73 million by 2012. The above mentioned figure indicate the direct employment in IT sector (both software and hardware). The indirect employment generated by the sector, is approximately three times of the direct employment. This throws up a great challenge for human resources (HR) development. There is an urgent need to augment the existing educational system by introducing special IT courses and establishing finishing schools to impart soft and other important skills.

With the weakening of the dollar against the Indian rupee, the ITES/BPO industry has come under pressure and it needs to be nurtured. Necessary policy interventions need to be put in place on a fast track mode. Extending the 10A and 10B benefits for the BPO industries beyond 2009 could be one such encouragement. Otherwise, this segment of the sector, which is a huge employment generator, could move to other countries which are more cost effective. The industry also needs to shift from Dollar to Rupee denominated contracts to combat the falling dollar.

7.7 Electric Power

Rapid economic growth cannot be realized if energy is not available at reasonable costs. Electricity is a crucial energy input in this context. Substantial progress was made in the Tenth Plan in certain dimensions. The Electricity Act, 2003 provides an excellent framework for restructuring of the power sector, and allows full scope for competition within a reasonable regulatory framework. However, while a good start has been made in setting up the regulatory framework and the institutional structure necessary for an efficient market for electricity generation and distribution, much more remains to be done. The performance in the Tenth Plan in adding capacity was disappointing. Against a target addition of 41110 MW, only 21080 MW were commissioned, out of which only 18000 MW were actually made fully operational. Investment in distribution has also been inadequate.

The most important problem in the power sector is the continued unviability of the distribution segment reflected in very high transmission and distribution losses, including pilferage and also uneconomic tariff for some categories of consumers. As a result, the financial position of the distribution companies, which are in the State sector, is severely strained and this is the cause of inadequate investment by the State sector, both in Inclusive Growth 15 is an important initiative aimed at electrifying all un-electrified illages and providing access to 7.8 crore rural households. Efforts should be made to ensure that the rural electrification infrastructure thus created does not focus on households alone but is also capable of providing three phase supply which can be used to energize pump sets for agriculture.

• An important innovation of the Electricity Act, 2003 is the statutory provision for open access which allows generating stations to enter the market and sell directly to high tension consumers. They can do so through assured access to the grid to reach such consumers while paying the distribution company a reasonable wheeling charge and a surcharge in lieu of the cross subsidy element. Unfortunately, most regulators have fixed the surcharge at a very high level. It needs to be clarified that the surcharge is meant only to cover the legitimate loss of cross subsidy from high tariff paying consumers who may migrate to competing suppliers. It should not be set so high as to kill competition nor so low as to leave any uncovered cross subsidy burden on the distribution utilities. Credible steps to implement open access, with reasonable surcharge, will incentivize private investors to set up additional generation capacity while allowing the distribution system to collect the cross subsidy element.

• A major, new initiative for promoting competition and attracting private investment in the power sector launched in the last year of the Tenth Plan was the Ultra Mega Power Projects programme. Under this programme, the government would invite proposals on a competitive basis from the public and the private sector to set up nine large power projects of 4000 MW each. Three such projects have been successfully bid for and the remaining six are expected to be bid out in the first few years of the Eleventh Plan. Successful completion of this programme has the potential to add significantly to the total private sector generation capacity although the benefits would accrue mostly in the Twelfth Plan period.

7.8 Other Energy Sectors

Transport infrastructure is not of much use unless the fuel—petrol, diesel, and electricity—is available to run scooters, cars, trucks, and the railways. Thus, availability of energy at competitive prices is as important as infrastructure. One also wants clean and convenient cooking fuels to avoid indoor air pollution and the unnecessary burden of gathering and carrying head loads of wood. All households should be provided clean cooking fuel at reasonable prices. For those who cannot afford them, or need to supplement them, fuel-wood plantations within 1 km of habitations should be developed.

We are short of most energy resources. Even coal, which is our most abundant resource, may run out in 40–50 years. An integrated energy policy to stimulate efficient use and allocation of fuels is, therefore, important. A key requirement of such a policy is that relative prices of different fuels, their transportation charges, and taxes and subsidies have to be consistent so that they reflect true social costs. Such a pricing system should be established in the Eleventh Plan.

7.9 COAL

The bulk of electricity generated in the country is based on coal which is our main energy resource and will remain so in the foreseeable future. The coal industry was nationalized in 1973 and Coal India Ltd dominates in production of coal. Under the nationalization Act, only public sector units, and designated users are permitted to mine coal for their own use. There is need to bring in competition in the sector to increase efficiency and to inject new technology. The Eleventh Plan will carry forward the process initiated in the last year of the Tenth Plan of encouraging other public sector units and captive users in coal mining. At the same time, coal must be competitively priced. Sale of at least 20% of coal through e-auction, rail freight rationalization, imports without duty, and pricing of coal based on its gross calorific value will be promoted. Washing of coal to reduce its ash content and save on transport charges will also be encouraged.

7.10 OIL AND GAS

We are short on oil and gas resources and this is certain to continue. More than 70% of our oil needs are met by imports. The New Exploration Licensing Policy has met with some success in finding gas in the country and in offshore areas. The Eleventh Plan must continue to encourage national and international oil companies to come and explore for oil and gas in the country. New technology to extract more oil from known or depleted reserves will also be encouraged.

Oil and gas prices offered to producers have to be internationally competitive if we are to attract private 16 Eleventh Five Year Plan firms and encourage efficient use of oil and gas products. Since the bulk of the oil is imported, crude oil should be priced at import parity price. And, since we have large refining capacities and export a large number of products, petroleum products should be priced at trade parity price, that is, products which are significantly exported should be priced at Free on Board (FOB) prices and products which are significantly imported, at CIF prices. This will be best accomplished by competitive pricing of oil products at the refinery gate and at the retail level. These prices, in turn, must be passed on to the consumer though there is some scope for cross subsidy.

The pricing policy for petroleum products will pose a major challenge in the leventh Plan, given the sharp increase in international oil prices which is yet to be passed on to the consumers. With the present domestic petroleum prices, the extent of under recovery in the petroleum sector is estimated at Rs 100000 crore. This situation is simply not sustainable. Consumer prices of petroleum products involve a significant burden of taxes.
Either the taxes have to be reduced or consumer prices have to increase. Also, the subsidies on kerosene and LPG, which lead to substantial diversion, need to be reduced
and also rationalized. The scope for disbursing subsidy through a smart card system while shifting to market prices needs to be explored.

Gas pricing is more complex as gas is not easily tradable. While the cost of imported Liquefied Natural Gas provides a ceiling on the domestic price of gas, the FOB price of gas less the cost of liquefaction and less the risk premium associated with exports constitutes longterm opportunity cost for producers. The price itself has to reflect its opportunity cost in its marginal use. Once we have adequate gas to meet the requirement of existing stranded assets, it will be possible to move to competitively determined gas pricing. In order that there is competition in the oil and gas sector, the distribution infrastructure of pipeline networks and associated facilities would have to be under open access regulated by regulators. While the oil and gas regulator has been put in place, there is no such regulator for coal. There is need to consider whether a coal regulator should also be established.

7.11 Renewable

The importance of renewable energy in the country arises from a number of actors—it increases energy security, it provides energy at local levels, improving energy security at these levels and it involves little or no Green House Gas emissions. Appropriate policies will be pursued to encourage renewables by linking subsidies, wherever required, to outcomes rather than to outlays. The Eleventh Plan will follow an integrated energy policy to incentivize appropriate choice of fuels and technologies.

Most of the programmes for renewable energy development would continue to be promoted but with a maxim of providing subsidies or incentives which are linked to outcomes rather than capital expenditure. This is important to preserve incentives for not just setting up capacities, but also operating them and encouraging cost reduction and technology development.

Some of areas which would be pushed strongly are wind power, solar applications, biomass gasification, bio-fuels development and other clean technologies. The distributed generation based on wood gasification in rural areas, coupled with biogas plants, could provide village energy security, particularly in remote areas. Such plants can provide clean cooking energy and also electricity before the grid power reaches them and later can also feed into the grid. The programme for biodiesel and ethanol from feed-stocks that do not compete with food production will be encouraged by a well-designed policy to take care of the interests of all the stakeholders in the value chain.

7.12 Education And Skill Development

Education and skill development will receive high priority in the Eleventh Plan, both to meet the needs of a growing economy and to promote social equality by empowering those currently excluded because of unequal access to education and skills to participate fully in the growth process. Public expenditure (Centre and States) on education is only around 3.6% of GDP. The National Common Minimum Programme (NCMP) had set a target of raising it to 6%.

Several steps were taken in the Tenth Plan to expand access to primary education, especially the expansion in the Sarva Shiksha Abhiyan (SSA) and the Mid-Day Meal Scheme. As a result, the number of out-ofschool children declined from 32 to 7 million, indicating that SSA brought an additional 25 million children into the education system during the Tenth Plan period. The Gross Enrolment Ratio (GER) for elementary schools (Classes I–VIII) increased from 81.6% in 2001–02 to 94.9% in 2004–05.

However, the drop out rate has remained high. It was as high as 48.71% at the elementary level at the end of the Tenth Plan, a decline of only 5.94 percentage points from 2001–02.

The quality of teaching in our elementary schools is also not what it should be. Teacher absenteeism is widespread, teachers are not adequately trained and the quality of pedagogy is poor. The Eleventh Plan aims to correct these deficiencies and focuses on improving the quality of education at the elementary level, especially in rural areas. It also begins the process of universalizing secondary education. The massive expansion required in secondary education calls for an expansion in both public schools as well as private aided and unaided schools. While private schools must be allowed to expand and even encouraged, it should be noted that a much larger proportion of the expansion in enrolment would come from the public schools.

The action proposed in the Eleventh Plan for secondary education includes the following:

• Rapid upgradation of 15000 Upper Primary Schools to Secondary Schools, and expansion of intake capacity in 44000 existing Secondary Schools;

• Establishment of 6000 high quality model schools at the block level to serve as benchmarks for excellence in secondary schooling. About 3500 of these will be public-funded schools while 2500 would be through PPP;

• Provision for laboratories/libraries and also strengthening of the existing facilities available;

• Continuous teacher training;

• Provision for hostels and residential schools for girls; and

• A more liberal approach on the part of State Governments on allowing private schools to be set up to meet the large unmet demand for quality education.

The Eleventh Plan must also focus on the pressing need to expand capacity in our institutions of higher education and technical and professional education (engineering, medicine, law, etc.). The GER for higher education (percentage of the 18–23 age group enrolled in a higher education institution) currently is around 11% whereas it is 25% for many other developing countries.China has increased its GER in higher education from 10% in 1998 to 21% in 2005. We must aim at increasing the GER to 15% by the end of the Plan and reach 21% by the end of the Twelfth Plan. This is necessary not only to meet the needs of a growing economy, but also to meet the aspirations of younger people who see education as an essential requirement for advancement. Along with expansion, it is also necessary to aim at improvement in quality. While the best of our institutions of higher

Appendix – I

Average Construction Material Price as on 1st Nov., 2011

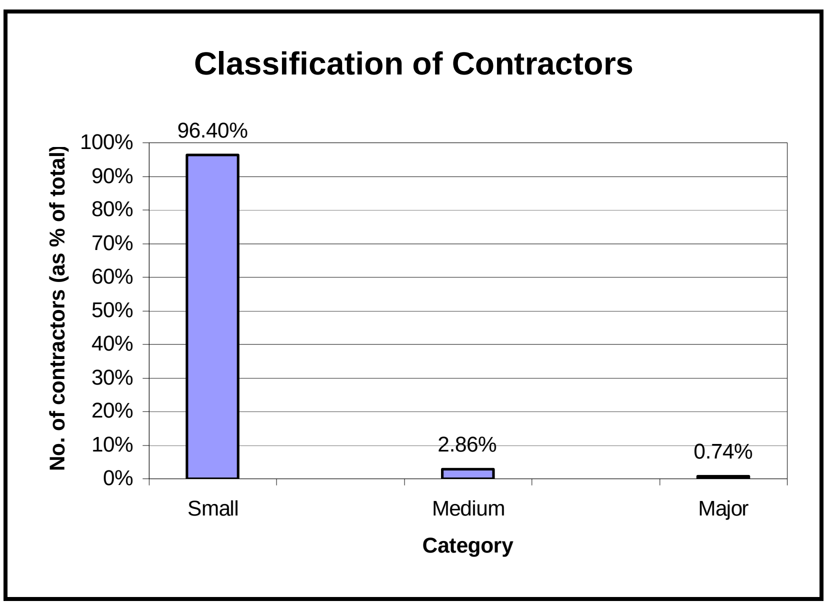
Sl. NO.	Item	Unit	Price
1.	Cement – OPC	50 kg bag	Rs. 255
2.	Reinforcement Steel TMT – 12 mm dia	1000 kg	Rs. 38,000
3.	Burnt Clay Bricks (9” x 4.5” x 3”)	Each	Rs. 3.50
4.	Sand (coarse – local)	Cum	Rs. 1000/-
5.	Stone aggregates (20 mm normal size)	Cum	Rs. 1000/-
6.	Timber (Mango country wood round)	Cft	Rs. 450/-
7.	Petrol	Ltr	Rs. 53
8.	Lubricant – Grease	Kg	Rs. 120
9.	Paint – Synthetic Enamel White	Ltr	Rs. 140/-
10.	Bitumen Grade 60/70 Bulk	Kg	Rs. 40.00
	Daily wages of Labour		
1.	Unskilled	Rs. 120 day	
2.	Semi – Skilled	Rs. 150 day	
3.	Skilled	Rs. 220 day	
	Salary		
1.	Sr. Engineer (Civil)	Rs. 50,000 pm	
2.	Jr. Engineer (Civil)	Rs. 30,000 pm	

Appendix - II

CLASSIFICATION OF CONTRACTORS

Table below gives the categorization of contractors by the size of men they employ:-

S.N	No. of people employed by the agency	No. of Agency /contractors	%age	Category
1	1 to 200 persons	27,000	96.4%	Small
2	200 to 500 persons	800	2.86%	Medium
3	500 persons and above	200	0.74%	Major



Safety Record of Indian Construction Industry

Year	Accident frequency rate (accidents / million man-hours worked)
1998	0.08
1999	0.10
2000	0.10
2005	0.10
2008	0.09
2009	0.01
2010	0.01
2011	0.01

Appendix - III

Projected Investment as Percentage of GDP

(Rs crore at 2006–07 price)

Years	Base year (2006–07 of Tenth Plan) (BE/RE)	2007–08	2008–09	2009–10	2010–11	2011–12	Total Eleventh Plan
GDP	4145810	4518933	4925637	5368944	5852149	6378843	27044506
Public Investment	175388	192107	227327	273543	332355	411226	1436559
Private Investment	49858	78166	94252	115724	146762	184687	619591
Total investment	225246	270273	321579	389266	479117	595913	2056150
			Investment as Percentage of GDP				
Public	4.23	4.25	4.62	5.09	5.68	6.45	5.31
Private	1.20	1.73	1.91	2.16	2.51	2.89	2.29
Total	5.43	5.98	6.53	7.25	8.19	9.34	7.60

Source: CSO for 2006–07, and computations of the Planning Commission.

Appendix - IV

Sector-wise Investment Anticipated in the Tenth Plan and Projected for the Eleventh Plan

(Rs crore at 2006–07 price)

	Tenth Plan (Anticipated investment)			Eleventh Plan (Projected investment)		
Sectors	Rs crore	US$ billion @ Rs 40/$	Shares (%)	Rs crore	US$ billion @ Rs 40/$	Shares (%)
Electricity (incl. NCE)	291850	72.96	33.49	666525	166.63	32.42
Roads and Bridges	144892	36.22	16.63	314152	78.54	15.28
Telecommunication	103365	25.84	11.86	258439	64.61	12.57
Railways (incl. MRTS)	119658	29.91	13.73	261808	65.45	12.73
Irrigation (incl. Watershed)	111503	27.88	12.80	253301	63.32	12.32
Water Supply and Sanitation	64803	16.20	7.44	143730	35.93	6.99
Ports	14071	3.52	1.61	87995	22.00	4.28
Airports	6771	1.69	0.78	30968	7.74	1.51
Storage	4819	1.20	0.55	22378	5.59	1.09
Gas	9713	2.43	1.11	16855	4.21	0.82
Total (Rs crore)	871445	217.86	100.00	2056150	514.04	100.00