

CHAPTER IX

INFRASTRUCTURE AND PROJECTS MONITORING

9.1. The monitoring of important infrastructure sectors in the country is designed to provide an overview of the performance of each of the sectors with a view to highlighting slippages, if any, before the decision making authorities. This Ministry monitors the performance of the country's eleven key infrastructure sectors, viz., Power, Coal, Steel, Railways, Telecommunications, Ports, Fertilisers, Cement, Petroleum & Natural Gas, Roads, and Civil Aviation. The performance of these sectors is analysed with reference to the pre-set targets for the month and for the cumulative period and the achievements during the corresponding month and cumulative period of previous year.

9.2 The Project Monitoring also envisages monitoring of all Central Sector Projects costing Rs.20 crore and above. In addition, it has been asked to monitor the progress of irrigation projects, which are being financed centrally under the Accelerated Irrigation Benefit Programme (AIBP). The Division, in coordination with the administrative Ministries concerned, takes up initiative to bring about systematic improvements in various areas of project implementation. The various activities of the division are described in following paragraphs:

9.3 Infrastructure performance is regularly reported through the following monthly reports:

- (i) Review Report on Infrastructure Performance.
- (ii) Capsule Report on Infrastructure Performance

Overall Performance of Infrastructure Sectors

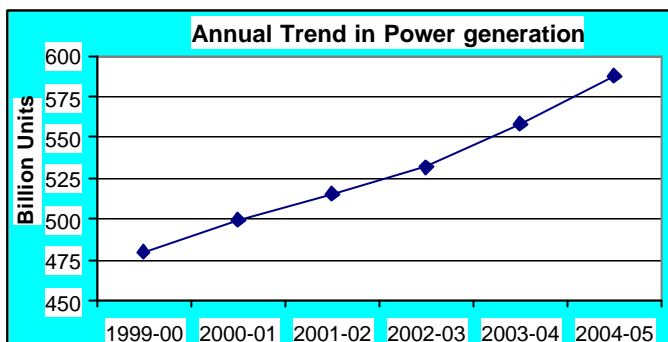
9.4 The production performance of the infrastructure sectors during the year 2004-2005 and 2005-2006 (April- December 2005) is at **Annex-IV**.

Infrastructure Performance during 2005-06 (April-December 2005)

9.5 The overall infrastructure performance during April-December 2005 has shown moderate growth. All sectors except those relating to fertilizers, crude oil and road have recorded a positive growth over the performance for the corresponding period of the previous year. However as compared to the targets set for this period, most of the sectors have lagged behind their respective targets and some corrective measure is required to be taken to prevent cascading effect on the economy. The trend in the overall infrastructure performance during April-December 2005 as compared to the targets set for the period and the performance for corresponding period in 2004 is at **Annex-IV**. Sector-wise details are given in the following paragraphs.

Power

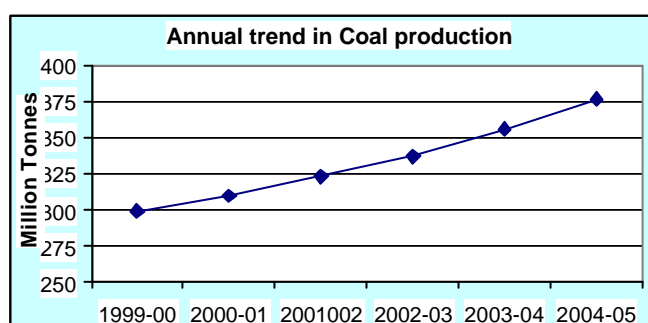
9.6 The overall power generation during past few years has shown moderate growth. During 2004-2005 the power generation at 587.36 Billion Units (BU) recorded a growth of 5.2% over the generation for 2003-2004. The All India Plant Load Factor (PLF) of the Thermal Power Stations (TPS) during 2004-2005 was 74.8%, which was higher than the PLF of 72.7% achieved during 2003-2004



9.7 The power generation scenario in the country during April - December 2005 at 456.89 Billion Units (BU) recorded a growth of 4.3% over the power generation for the corresponding period of the previous year. However, it remained 1.5% lower than the target set for the period. The thermal generation at 363.04 BU recorded a growth of 1.4%. The PLF was 71.5% as compared to 73.1% achieved during April-December 2004. So far as sector - wise thermal generation is concerned, Central and Private sectors recorded a growth of 6.8% and 5.8% respectively, but State sector recorded a negative growth of 3.6%. The Hydro power generation at 80.63 BU was 19.1% higher than the generation during April-December 2004. Nuclear power generation at 13.23 BU was 7.2% more than the generation during April-December 2004.

Coal Production

9.8 The coal production during 2004-2005 at 376.63 Million Tonnes (MT) exceeded the target by 3.3% and registered a growth of 5.9% over the production of 355.71 MT. The trend of coal production during 1999-2000 to 2004-05 is brought out in the adjoining graph .



9.9 The total coal production during April-December 2005 at 282.49MT recorded a growth of 5.7% over the production of 267.18 MT during the corresponding period of the last year. However it lagged behind its target for the period by 2.5%. The production of coking coal and washed coal in Coal India Ltd. mines was 15.95 MT and 3.72 MT respectively and recorded a growth of 3.3% and 4.8%. The overall coal despatches during April - December 2005 at 284.57 MT was 4.4% higher than the despatches of 272.63 MT during the corresponding period of the previous year.



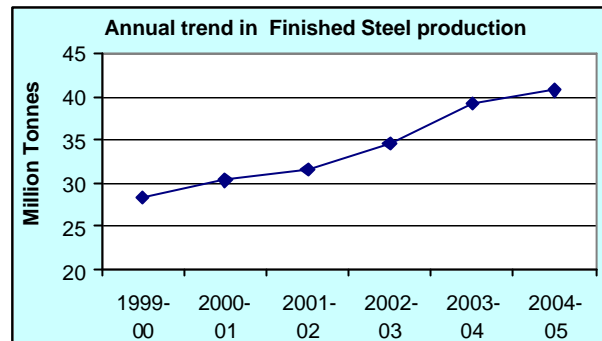
Approaching Pune City on NH-4



Cable Bridge under construction at Naini (Allahabad)

Steel

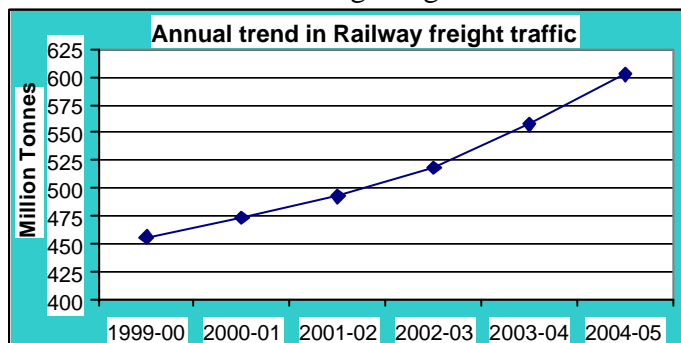
9.10 The overall production of finished steel during the year 2004-2005 was 40.74 MT, which recorded a growth of 3.8% over the production of 2003-2004. The production of finished Steel during past few years indicated the following trend:



9.11 During April-December 2005, the production of finished steel at 32.90 MT recorded a growth of 6.2% over the production of 30.98 MT during the corresponding period of previous year. As compared to the target for the period, it lagged behind by 12.6%. The overall capacity utilization during the period was 87.8%, which was marginally lower than the achievement of 89.4% during the corresponding period of the previous year.

Railways

9.12 The revenue earning freight traffic moved by the Railways during 2004-2005 at 601.89 MT exceeded the target set for the year by 0.3% and recorded a growth of 8.0% over the freight traffic movement for 2003-2004. The trend in freight traffic during last few years year is as indicated in the side chart:

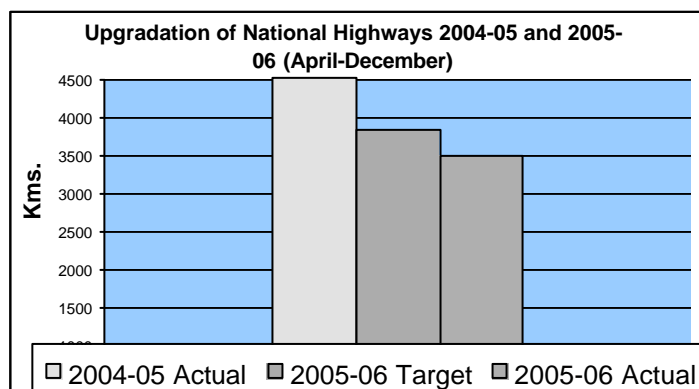


9.13 During April-December 2005, 481.09 MT freight traffic was moved, which recorded a growth of 9.7% over the

freight movement of 438.36 MT during the corresponding period of the last year. However it remained 5.1% lower than the target set for the period. The growth rate has improved from the level of 7.7% achieved during April-December 2004.

Roads

9.14 In Road sector the improvement is significant. During the year 2004-2005, total 6,913 Km of National Highways were constructed/ strengthened/improved and 105 bridges were constructed/ rehabilitated against 5,955 Km. During 2003-2004. National Highways Organisation, Border Road Development Board (BRDB) in the Ministry of Road Transport and National Highway

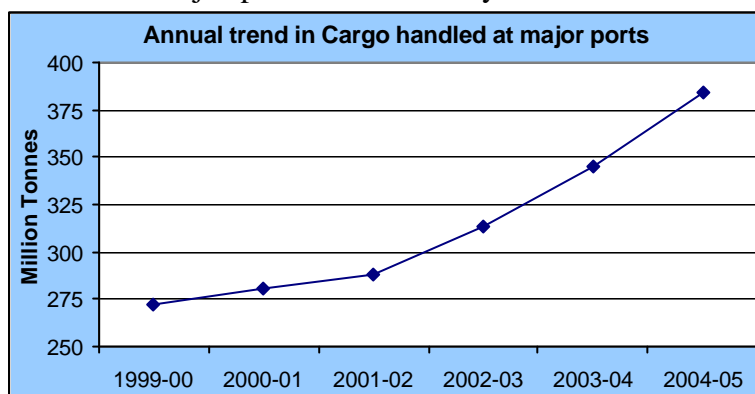


Authority of India (NHAI) are engaged in construction and up-gradation of highways.

9.15 During April-December 2005, 3505 Km highways were up-graded/strengthened/constructed, which was 8.9% lower than the target of 3,848 Km. It also remained 22.8% lower than the up-gradation/constructed of 4,542 Km highways during April-December 2004. As part of the up-gradation, 66 bridges were up-graded/constructed during April-December, 2005 as compared to 38 bridges during the corresponding period of the previous year.

Shipping and Ports

9.16 The major ports in the country handled 383.76 MT cargo during the financial year 2004-2005, which was higher than the target as well as the achievement for the previous year by 6.1% and 11.3% respectively. The trend in cargo handled at major ports is indicated in the side chart.



9.17 During April-December 2005 the major ports handled 307.54 MT cargo which was marginally lower (2.0%) than the target of 313.76 MT,

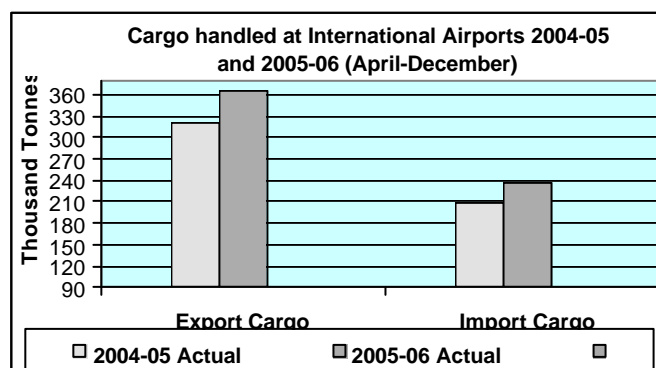
but it recorded a growth of 11.4% over the handling of 276.04 MT cargo during April-December 2004. Shortfall from target was due to decline in POL import, fall in handling of fertilizers, core commodities, containers and less materialization of general cargo.

9.18 The coastal shipment of coal to the South during 2004-05 aggregating to 16.59 MT was lower than the target by 8.6% and it was also marginally lower (0.7%) than the shipment during 2003-04. During April-December 2005 the coastal shipment of coal was 14.25 MT which was higher than the target as well as the shipment during April-December 2004 by 10.6% and 14.5% respectively.

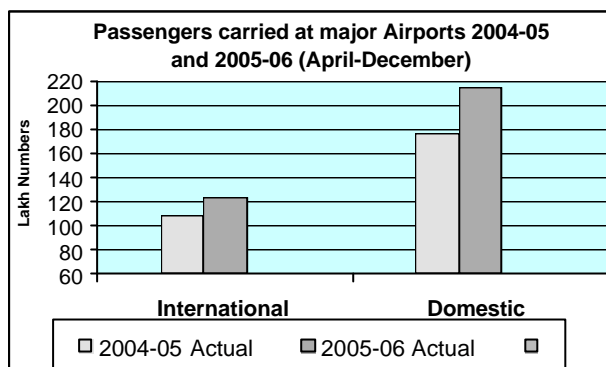
Civil Aviation

9.19 The international airports at Mumbai, Kolkata, Delhi Chennai, and Trivandrum collectively handled 4,34,998 tonnes of export cargo during 2004-2005, which was 12.4% more than 3,87,148 tonnes export cargo handled during 2003-04. Further these five international air ports handled 2,75,395 tonnes of import cargo during this year which was 24.2% higher than 2,21,734 tonnes import cargo handled during 2003-2004.

9.20 During 2005-06 (April-December 2005) these airports handled 363,756 tonnes of export cargo which registered a growth of 13.1% over 321,610 tones of export cargo handled during April-December 2004. Further these airports handled 235,366 tonnes of import cargo during this period which recorded a growth of 12.7% over 208,814 tonnes handled during April-December 2004.



9.21 During 2004-2005 the international airports at Mumbai, Kolkata, Delhi, Chennai and Trivandram handled 149.27 lakh passenger traffic at international terminals which was 14.0% higher than 130.98 lakh passenger traffic handled during 2003-2004. The domestic terminal of these air ports handled 238.08 lakh passengers during 2004-05 which remained 23.6% higher than 192.65 Lakh passengers handled during 2003-2004.

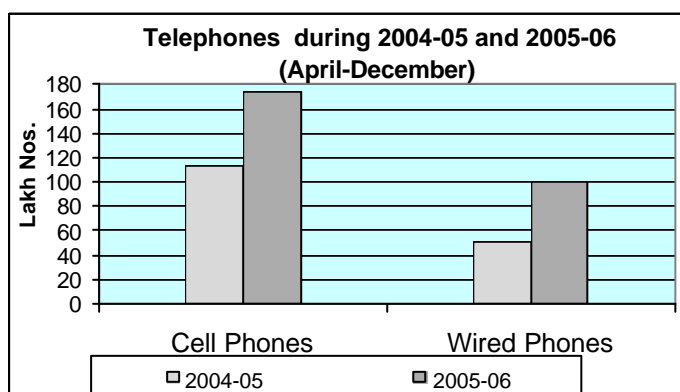


9.22 During April-December 2005 the international terminals of these airports handled 122.61 lakh passengers which was 12.7% more than 108.81 lakh passengers handled during April-December 2004. The Domestic terminal handled 214.73 lakh passengers during April-December 2005, which was 21.9% more than 176.19 lakh passengers handled during the corresponding period of the previous year.

Telecommunications

9.23 The switching capacity of telephone exchanges in the country added 67.14 lakh lines during 2004-2005. It was 49.8% higher than 44.83 lakh lines added during 2003-2004. Both public and private sectors provided 69.62 lakh new (net) telephone connections during 2004-2005, which were 14.93 lakh (17.7%) lower than 84.55 lakh phones provided during 2003-2004. Further both the public and private sectors provided 148.72 lakh cell phone connections, which were 10.4% more than 134.67 lakh cell phone connections provided during 2003-04. In all 218.34 lakh connections (fixed + cell phones) were provided during 2004 – 2005, which remained marginally lower (0.4%) than 219.22 lakh phone connections provided during 2003 - 2004.

9.24 In the current financial year of 2005-2006 (April-December 05) 68.44 lakh new telephone lines were added in the switching capacity of telephone exchanges, which was 49.6% higher than 45.75 lakh lines added during April-December 2004. Both public and private sectors provided 99.38 lakh new (net) telephone connections during April-December 2005, which were considerably higher (94.7%) than 51.04 lakh connections provided during April - December 2004. Further 174.77 lakh new Cell phone connections were provided by the public and private sectors



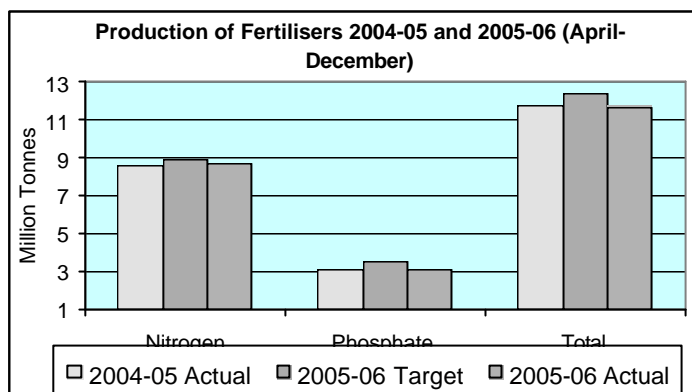
which were 55.4% more than 112.48 lakh Cell phone connections provided during April - December 2004.

9.25 The public and private sectors collectively provided 274.16 lakh telephone connections (fixed plus cellular) which were considerably more (67.7%) than 163.52 lakh phones provided during April - December 2004.

Fertilizers

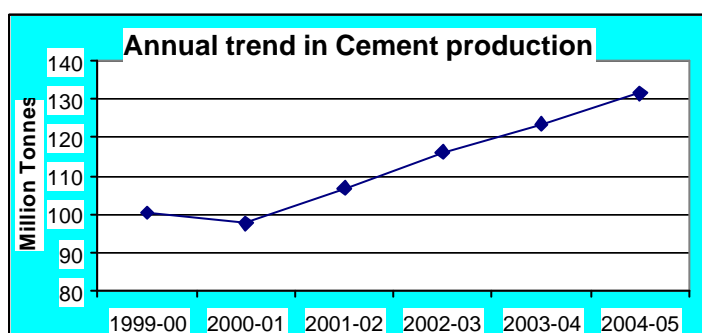
9.26 The overall production of fertilizers (nitrogen and phosphate) during 2004-2005 at 15.33 million tonnes (MT) was 7.5% higher than the production of 14.26 MT during 2003-2004. However it lagged behind its target by 6.0%. The overall of capacity utilization (Nitrogen + Phosphate) was 88.0% as compared to the target of 94.5% and the achievement of 81.9% during 2003-04.

9.27 The production fertilisers during April - December 2005 at 11.68 MT was 5.9% less than the target for the period and it was also marginally lower (0.2%) than the production for the corresponding period of the previous year. The capacity utilization was 89.4% as compared to the target of 95.0% and the achievement of 89.6% during April-December 2004.



Cement

9.28 The production of cement during 2004-2005 at 131.56 million tonnes (MT) was 6.5% higher than the production of 123.50 MT for the previous year. However, as compared to the target of 133.00 MT for the year it lagged behind by 1.1%. The overall capacity utilization at 82% was higher than the achievement of 79% during 2003 – 2004. The trend in cement production during past few years is indicated in the above chart.

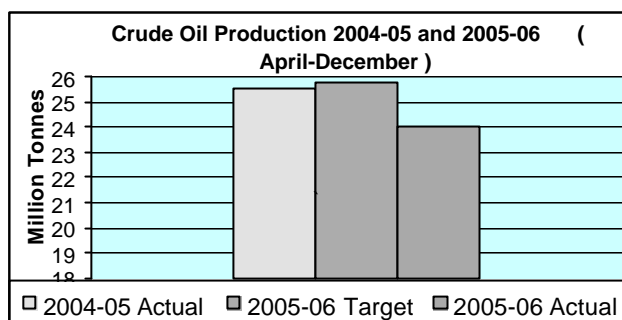


9.29 The production during April - December 2005 at 106.83 MT was higher than the target of 66.75 MT and as well as the production for the corresponding period of the previous year by 4.55 and 9.3% respectively. The overall capacity utilization at 85% remained higher than the achievement of 80% during April - December 2004. Cement consumption during April - December 2005 was 102.27 MT as against the production of 106.83 MT. Coal supply to the Cement industry during April - December 2005 was 110.70 lakh tonnes as against 109.00 lakh tonnes coal supplied during April - December 2004.

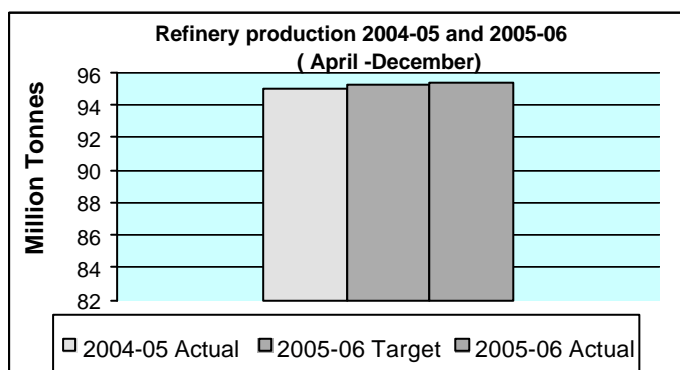
Petroleum

9.30.1 **Crude Oil:** The production of Crude Oil during 2004-2005 at 33.98 million tonnes (MT) was higher than the target of 33.14 MT as well as the production of 33.37 MT during the previous year by 2.5% and 1.8% respectively.

9.30.2 The production of Crude Oil during April - December 2005 at 24.04 MT was lower than the target of 25.74 MT as well as the production of 25.56 MT by 6.6% and 5.9% respectively.



9.31.1 **Refinery Production:** The refinery production (in terms of crude throughput) during 2004-2005 at 127.11 MT was higher than the target of 121.94 MT as well as the production of 121.84 MT during 2003-2004 by 4.2% and 4.3% respectively. All refineries except IOC Koyali and Mathura, and NRL Numaligarh have exceeded their respective targets and recorded positive growth over the production of the previous year. The overall capacity utilization at 99.7% during 2004-05 was lower than the achievement of 101.7% in the previous year.



9.31.2 The refinery production during April - December 2005 at 95.34 MT was marginally higher (0.1%) than the target of 95.24 MT as well marginally higher (0.4%) than the production of 94.95 MT for the corresponding period of the previous year. The overall capacity utilization was 99.4% as compared to 98.9% achieved during April-December 2004.

9.32.1 **Natural Gas:** The overall natural gas production during 2004-2005 at 31,774 Million Cubic Meters (MCM) was marginally lower (0.6) than the production of 31,962 Million Cubic Meters gas produced during 2003-2004.

9.32.2 The Natural Gas production during April - December 2005 at 24,096 Million Cubic Meters was higher than the target of 23,304 MCM as well as the production of 23,862 MCM during April-December 2004 by 3.4% and 1.0% respectively

Monitoring of Projects

9.33 There exists a system of monitoring of the projects costing 20 crore and above on monthly and quarterly basis. For the purpose of monitoring, the projects have been categorized as Mega, Major and Medium category. While all projects are monitored on quarterly basis, the projects costing Rs.100 crore and above are monitored on monthly basis.

Project Implementation Status during 2004-05

9.34 At the beginning of the year 2004-05 i.e. as on 1.4. 2004 there were 549 projects on the monitor of the Ministry. During the year 221 projects were taken on the monitor. By the end of the year 130 projects were completed and 18 projects were dropped leaving 622 projects on the monitor at the beginning of the year 2005-06. The details have been summarized in the **Table-9.1** below.

Table-9.1

Summary of projects during 2004-2005

S. No.	Sector	No. of Projects as on 01-04-2004	Projects Added during 2004-2005	Projects Completed during 2004-2005	Projects Dropped during 2004-2005	No. of Projects as on 01-04-2005
1.	ATOMIC ENERGY	10	1	1	-	10
2.	CIVIL AVIATION	3	18	3	1	17
3.	COAL	65	35	12	-	88
4.	FERTILISERS	3	1	1	-	3
5.	I & B	2	1	1	-	2
6.	MINES	2	2	2	1	1
7.	STEEL	6	13	3	2	14
8.	PETROLEUM	31	7	5	-	33
9.	POWER	48	13	11	1	49
10.	HEALTH & FW	3	-	-	-	3
11.	RAILWAYS	198	79	28	3	246
12.	ROAD TRANSPORT & HIGHWAYS	110	5	31	-	84
13.	SHIPPING & PORTS	37	8	14	6	25
14.	TELECOMMUNICATION	12	33	15	3	27
15.	URBAN DEVELOPMENT	17	5	3	-	19
16.	WATER RESOURCES	2	-	-	1	1
Total		549	221	130	18	622

Project Implementation Scenario during 2005-06

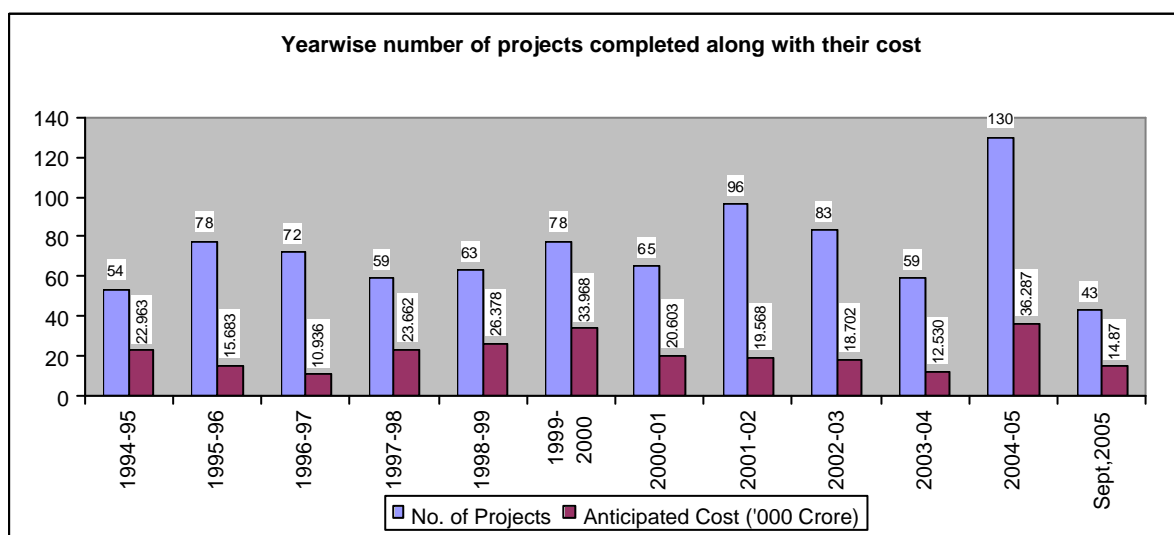
9.35 During the period April to September 2005, 86 projects were taken up for monitoring and a total of 43 projects were completed during this period and 5 projects were dropped from the monitoring. The sector wise details of the projects have been summarized in the **Table-9.2** below.

Table-9.2

**Summary of projects during 2005-2006
(at the end of 2nd Quarter)**

S. No.	Sector	No. of Projects as on 01-04-2005	Projects Added during 2005-2006	Projects Completed during 2005-2006	Projects Dropped during 2005-2006	No. of Projects as on 01-10-2005
1.	ATOMIC ENERGY	10	-	-	-	10
2.	CIVIL AVIATION	17	1	1	-	17
3.	COAL	88	6	2	-	92
4.	FERTILISERS	3	-	1	-	2
5.	I & B	2	-	-	-	2
6.	MINES	1	-	-	-	1
7.	STEEL	14	2	1	-	15
8.	PETROLEUM	33	3	6	-	30
9.	POWER	49	11	9	-	51
10.	HEALTH & FW	3	-	-	-	3
11.	RAILWAYS	246	19	4	4	257
12.	ROAD TRANSPORT & HIGHWAYS	84	27	14	-	97
13.	SHIPPING & PORTS	25	-	3	-	22
14.	TELECOMMUNICATION	27	15	-	-	42
15.	URBAN DEVELOPMENT	19	2	2	1	18
16.	WATER RESOURCES	1	-	-	-	1
Total		622	86	43	5	660

9.36 The chart below depicts the number of projects completed along with their cost, year-wise starting from 1994-95.



9.37 At the beginning of the 3rd quarter of the year, as illustrated above there were 660 projects with an anticipated cost of Rs. 281769.81 crore were on the monitor of the Ministry. For the purpose

of monitoring, the projects have been grouped into three categories, viz., (i) mega projects, each costing Rs. 1000 crore and above, (ii) major projects, costing Rs. 100 crore and above and (iii) medium projects costing between Rs. 20 crore and 100 crore each. The total number of projects in each category, and the anticipated cost, sector-wise, are given in the **Table- 9.3**.

Table - 9.3

**Sector-wise summary of Mega, Major and Medium Projects
(Status as on 01.10.2005)**

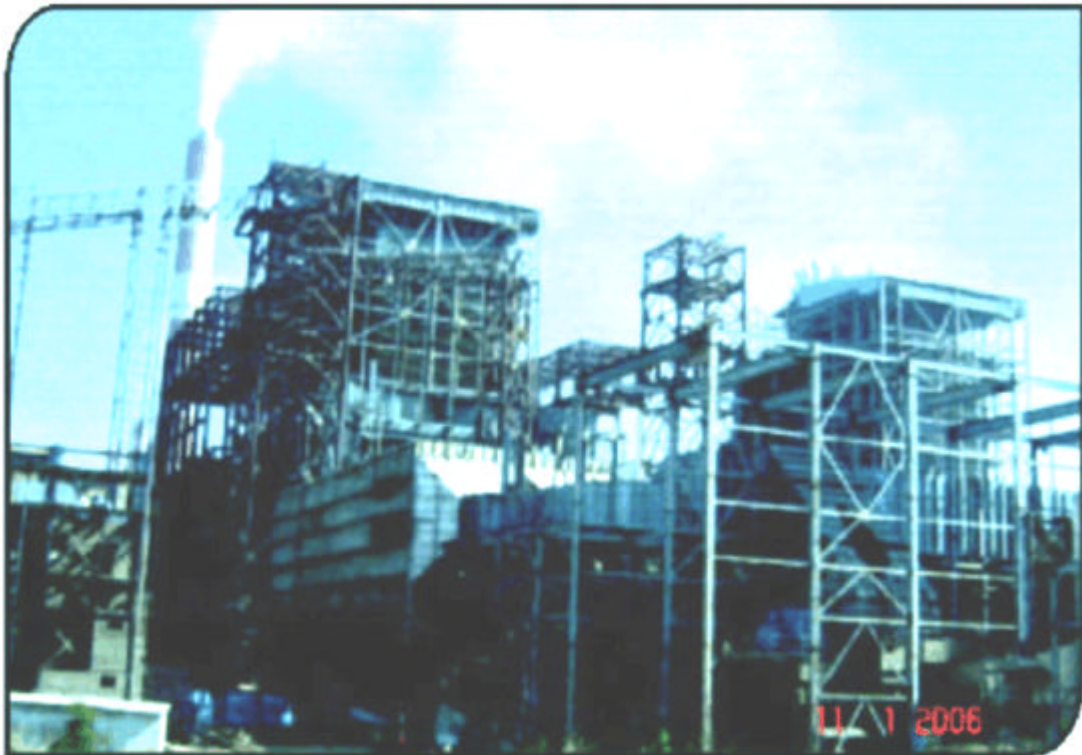
S. No. Sector	Mega Projects		Major Projects		Medium Projects	
	No. of Projects	Anticipated Cost	No. of Projects	Anticipated Cost	No. of Projects	Anticipated Cost
1 ATOMIC ENERGY	5	29542.00	1	343.26	4	231.12
2 CIVIL AVIATION	-	-	1	191.52	16	796.04
3 COAL	5	8242.32	5	1252.86	82	4083.61
4 FERTILISERS	-	-	2	859.24	-	-
5 I & B	-	-	-	-	2	94.17
6 MINES	1	4091.51	-	-	-	-
7 STEEL	-	-	8	1888.20	7	390.68
8 PETROLEUM	13	31904.59	12	5117.00	5	407.53
9 POWER	18	71601.54	29	12043.29	4	263.89
10 HEALTH & FW	-	-	2	691.84	1	89.02
11 RAILWAYS	6	14304.87	127	43220.99	124	6340.22
12 ROAD TRANSPORT & HIGHWAYS	-	-	77	21114.06	20	1529.73
13 SHIPPING & PORTS	-	-	3	645.46	19	656.23
14 TELECOMMUNICATION	-	-	28	6855.30	14	705.40
15 URBAN DEVELOPMENT	1	10571.00	-	-	17	631.92
16 WATER RESOURCES	1	1069.40	-	-	-	-
TOTAL	50	171327.23	295	94223.02	315	16219.56

Highlights of some of the Mega and Major Projects

9.38 **Nuclear Power Generation** : 2x540 Mwe Tarapur Atomic Power Project with a revised cost of Rs.6421 crore, approved in December,1997 has made a cumulative progress of 96.9% as on November,2005. Active construction work at site started in March, 2000. The scheduled date of criticality for Unit-IV reactor was October, 2005 and that for Unit-III July, 2006. The Unit-IV has been synchronized with the Western Grid in March, 2005 and now it is functioning on a commercial basis. Unit-III is expected to go critical and subsequently operational during the year 2006-07. Expenditure incurred is Rs.5163 crore till September, 2005



Spillway Chute Tehri Hydro Electric Project



Vidhyachal STPP Stage III (2 x 200MW)
(View of the main plant)

9.39 Petroleum and Natural Gas Sector

Refinery Modernisation Project at BPCL's Mumbai:

Refinery was approved in December, 2000 at a cost of Rs.1592.65 crore to upgrade the Refinery facilities for producing environment – friendly superior products in line with future requirements and also for reducing source emissions (SO₂) from the Refinery. The project has been commissioned in August, 2005 on a commercial basis. The capacity of the Refinery is now 12 MMTPA of crude throughput.

Mumbai High Uran Sub-Sea Pipeline Project of ONGCL :

- This project was approved in December, 2003 at a cost of Rs. 2792.5 crore for transporting oil and associated gas from offshore oil fields, off the coast near Mumbai, as a replacement to the sub sea Trunk pipeline installed in 1979.
- Pipeline originates from near NQ Platform in the offshore area, 171 km away from the shore.
- Project was executed on LSTK basis. The pipeline has been laid and hydro-tested for leakages etc. It is to be commissioned by the 3rd quarter of the year. Physical progress is 94.5% and expenditure incurred is Rs. 2244.02 crore.

9.40 Power Sector

Dulhasti H.E.P (3x130 MW), J &K:

The Dulhasti H.E.P(3x130 MW), Doda in J&K was approved by the GOI in July,1989 at estimated project cost of Rs.1262.97 crore with a gestation period of 60 months. It envisages construction of 65 m high concrete dam over river Jhelum 400 m long and 28 m wide diversion channel, 2 nos. 240 m each long desilting chamber, and 10.60 km long head race tunnel. Unforeseen geomining surprises, breakdown of Tunnel Boring Machine (TBM) and adverse law and order problem in the region have hampered progress of the project. It is now nearing completion. As per the indications, the project is likely to be commissioned by March, 2006.

Tarapur 3 and 4 Transmission System (300 Ckm):

The transmission project costing Rs. 237.02 crore has been commissioned one month ahead of schedule. Cumulative expenditure incurred over the project was Rs.235.31 crore.

Tehri Dam and Hydro Power Project (4x250 MW), Uttaranchal:

The project was sanctioned in March,94 at estimated cost of Rs.2963.66 crore with commissioning schedule of March,'99. It envisages construction of 260.5 m high Earth & Rock Fill Dam over river Bhagirathi with 1000 MW Underground Hydro Plant having four conventional Turbine Generators of 250 MW each. Completion of the Tehri Dam & HPP has been delayed on account of protests by the local people over rehabilitation measures, and delays in completion of the spillway chute, as also delay in completion of the rip-rap material along the dam slopes. As per the present indications, the project is likely to be commissioned in March, 2006. Tunnel-II has been closed, water impounded in the Dam for operationalisation of the project by 1st quarter of 2006-07.

9.41 Railway Sector

Guna-Etawah Railway Line:

- Project costing Rs. 400 crore laying a new line covering a route length of 348 kms.
- 312 kms route length already commissioned.
- The project is estimated to be completed by March, 2006

Ambala-Moradabad (Railway Electrification):

- The project envisages electrification of 274 kms. route length of railway line at an estimated cost of Rs. 223 crore.
- The project is in advanced stage of completion and is expected to be completed by March, 2006.

9.42 Shipping and ports

Acquisition of 2-300000 DWT Vessels by Shipping Corporation of India:

- Project was sanctioned in May, 2005 at an estimated cost of Rs. 610 crore.
- Vessels delivered and project has been completed in August, 2005.

9.43 Delhi Metro Rail Project (DMRC)

Milestones to be achieved:

- Vishwa Vidyalaya – Central Secretariat - Completion in September 2005
- Barakhamba Road – Kirti Nagar completion in December, 2005.
- Kirti Nagar- Dwarka completion in December, 2005
- Dwarka- Dwarka Sub City completion in March, 2006.
- Barakhamba Road – IP Extension – March, 2006.
- **Overall progress - 93%**

Benefits:

- Carry 31.8 lakh passengers per day with comfort.
- Relieve city from traffic congestion
- Check Pollution.
- Saving of fuel and expenditure on public transport.

The project consists of 3 main lines:

- Line1: Shahdara-Trinagar-Rithala- (Overhead –about 22 kms)
- Line2: Vishwa Vidyalaya – Central Secretariat (Under ground – 11 kms)
- Line3: Barakhamba Road – Connaught Place – Dwarka (Underground + Overhead – 23.16 kms) (Extension Barakhamba Road – IP Extension – 3 Kms.)
- Extension Dwarka More – Dwarka Sub-City – 6.5 Kms.)
- Total Length : 61.16 kms
- Estimated cost : Rs. 10,571 crore
- The project is funded through equity participation by the Government of India and National Capital Territory of Delhi to the extent of 14% each, JBIC soft loan of 64%, 5% through subordinate debt and 3% through property development.

9.44 Road Transport and Highways Sector

National Highway Development Project (NHDP) comprising of Golden Quadrilateral (GQ) linking four mega cities of Delhi, Mumbai, Chennai and Kolkata, and North-South & East-West Corridors providing connectivity between Srinagar in the North to Kanyakumari in the South, and between Silchar (Assam) in the East to Porbandar (Gujarat) in the West, which was approved by the Union Cabinet in April, 2000 for an estimated cost of Rs.58,000 crore (1999 price), is being implemented in two phases. Phase-I comprises the entire GQ and 981 km stretch along N-S & E-W corridors. Phase-II packages are all along the North-South & East-West Corridors.

Achievement/Target of NHDP:

A. Golden Quadrilateral (GQ):

- Out of 5,846 km of GQ, 5042 km 4/6-laned till October,2005.
- Barring a few packages, the entire GQ is likely to be four-laned by December,2006.
- 2627 km stretch under Phase-II still remains to be awarded.

B. North-South and East-West (N-S and E-W) corridors:

- Out of 7,300 km of N-S & E-W Corridors, 784 km 4/6-laned till October,2005.

Project Implementation Status during the 10th Plan

9.45 During the tenth plan, 315 projects have already been completed by the end of September, 2005. Out of these 272 projects were completed by the end of the year 2004-05.

Table- 9.4

Summary of Projects Completed during 10th plan (Status as on 30-09-2005)

(Units: Cost/Expenditure are in Rs.Crore)

Sector	No. of Projects	Original Cost	Latest Approved Cost	Cumulative Expenditure
ATOMIC ENERGY	1	61.07	61.07	55.53
CIVIL AVIATION	9	316.25	321.09	238.62
COAL	25	7999.01	8603.67	7004.21
FERTILISERS	3	149.05	154.78	105.13
I & B	3	109.19	156.64	130.02
MINES	3	2598.76	2598.76	1911.20
STEEL	9	1160.91	1164.21	890.14
PETROLEUM	28	17533.10	17533.10	14515.58
POWER	37	28498.01	34727.14	28343.19
RAILWAYS	56	3450.24	4660.66	5530.12
ROAD TRANSPORT & HIGHWAYS	75	13037.98	13930.22	13186.91
SHIPPING & PORTS	34	3480.05	3512.58	2927.21
TELECOMMUNICATION	25	2851.34	2973.76	1074.03
URBAN DEVELOPMENT	7	310.65	406.68	427.88
Total	315	81555.61	90804.36	76339.77

9.46 Sector-wise analysis of the time and cost overrun of projects under implementation on our monitoring system (excluding completed projects) is indicated in **Table-9.5**.

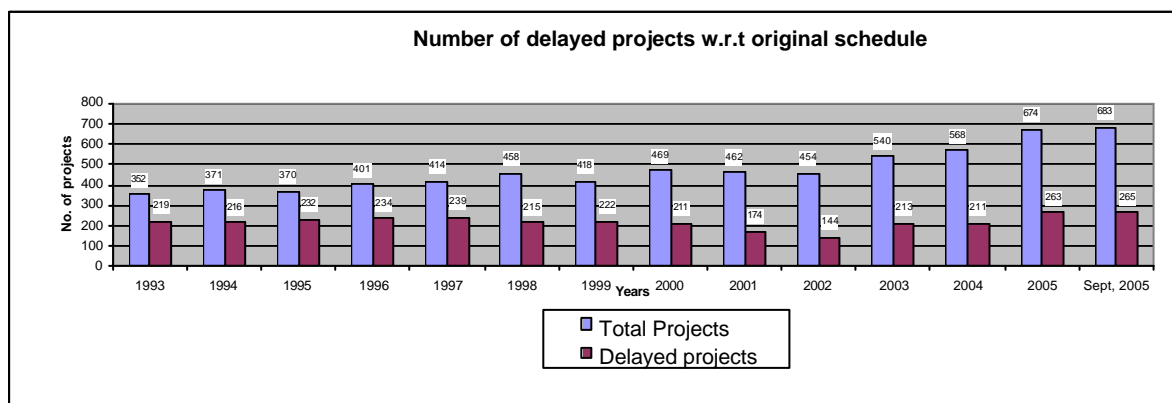
Table - 9.5

Time and Cost overrun in Projects with respect to original schedule

(Status as on 30-09-2005)

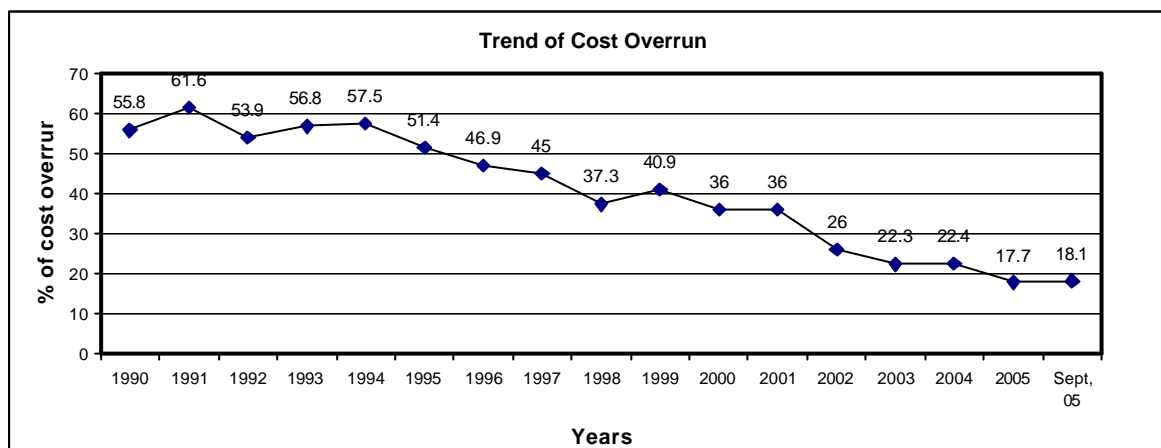
S.No.	SECTOR	NO.OF PROJ-ECTS	TOTAL COST (RS. CR.)			PROJ. WITH TIME & COST OVER RUN			
			ORIG-INAL	ANTIC-IPATED COST	COST OVER RUN(%)	NO.	ORGI. COST	ANTIC-IPATED COST	RANGE (MONTHS)
(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(1)
1.	ATOMIC ENERGY	10	27969.4	30116.4	7.7	0	0.0	0.0	0- 0
2.	CIVIL AVIATION	18	982.9	1029.6	4.7	2	63.3	109.9	2- 9
3.	COAL	93	13442.1	13600.6	1.2	8	294.1	436.1	4- 252
4.	FERTILISERS	2	599.0	859.2	43.4	1	350.0	610.2	53- 53
5.	I & B	2	94.2	94.2	0.0	0	0.0	0.0	0- 0
6.	MINES	1	4091.5	4091.5	0.0	0	0.0	0.0	0- 0
7.	STEEL	16	2371.3	2397.2	1.1	1	89.2	108.7	3- 3
8.	PETROLEUM	33	36065.2	39989.8	10.9	8	12090.8	15246.2	3- 48
9.	POWER	59	78095.0	88677.8	13.6	10	5253.3	15533.5	2- 184
10.	HEALTH & FW	3	159.9	780.9	388.2	2	140.9	691.8	87- 88
11.	RAILWAYS	260	43267.1	64708.9	49.6	30	7030.6	15635.9	3- 168
12.	ROAD TRANSPORT & HIGHWAYS	101	24148.0	23764.6	-1.6	6	1545.2	1645.3	10- 36
13.	SHIPPING	24	1934.6	1946.5	0.6	3	83.5	110.5	23- 60
14.	TELECOMMUNI	42	8004.6	7560.7	-5.5	2	113.0	144.7	9- 91
15.	URBAN DEVELOPMENT	18	5436.4	11202.9	106.1	3	4914.2	10656.0	3- 19
16.	WATER RESOURCES	1	542.9	1069.4	97.0	1	542.9	1069.4	3- 3
TOTAL		683	247204.2	291890.3	18.1	77	32511.1	61998.3	

9.47 An analysis of the total 683 projects at the end of the 2nd quarter shows that 77 projects have contributed to both time as well as cost overruns w.r.t their original schedule. While the time overrun accounted by these projects ranges from 2-252 months, the cost has resulted in 90.7% increase w.r.t original cost. The total numbers of delayed projects are 265 w.r.t their original schedule. The delay for these projects ranges from 1 to 252 months. Of the 265 delayed projects 86 (32.45%) projects are being implemented with 12 months delay, in respect of another 89 (33.58%) projects the delay ranges from 13-24 months. These projects has accounted for a cost over run of Rs. 28662 crore. The chart below depicts the number of delayed projects during the last 12 years.



Time and Cost overrun in projects

9.48 Time and cost overruns have been a major problem affecting the implementation of central sector projects. Due to close monitoring and systems improvement brought out mainly by the Ministries concerned with the support of the Ministry of Statistics & Programme Implementation, the time overrun could be controlled up to an extent which has resulted in reducing the cost overrun of the projects. An analysis of the trend in the last 14 years shows that the cost overrun has come down from 62% in March, 1991 to 18.1% in September, 2005 resulting in savings. The Chart below depicts the trend of cost overrun during the last 15 years.



Causes of Time and Cost Overrun

9.49 Time overrun, apart from upsetting the Plan targets, leads to cost overrun on account of inflationary increase, exchange rate variation and higher interest and administrative cost. Time overrun takes place due to factors such as paucity of financial resources, delay in obtaining clearances, delay in acquisition of land, poor performance of consultants, vendors and contractors, disputes and court cases, inadequate infrastructure support, resistance by land losers and poor law and order situation in certain parts of the country. Increases in the scope during construction, higher compensation for rehabilitation, higher cost incurred on environmental protection measures, judicial awards in contractual disputes are some of the reasons for cost overruns in projects. A number of projects in Railways have been sanctioned without tying up of the resources for implementation.

Remedial Measures

9.50 The measures taken to reduce delays in project implementation include stricter appraisal of projects, weeding out unviable projects, transfer of projects to private/joint sectors, re-prioritisation of projects in the light of resource constraints, appointment of a nodal officer for each project co-terminus with the gestation period of the project, formation of Empowered Committees in the administrative Ministries for periodic review of the status of Government-owned projects, quarterly performance reviews of PSUs projects by the administrative Ministries concerned, delegation of more financial power to the undertakings, strengthening of the monitoring system and improvement in contract management system.

9.51 Following specific initiatives have been taken to improve the project implementation scenarios:-

* **Amendment to Land Acquisition Act** : Proposals relating to amendment of Land Acquisition Act, 1894, after examination of all the relevant issues, have been incorporated in a Bill prepared by the Ministry of Rural Development for approval of the Parliament. Keeping in view the importance of rehabilitation and resettlement issues in project implementation, a National Policy on Resettlement and Rehabilitation has been finalized and it is being formulated in shape of legislation.

* **Standardisation of Contract Management System** : The issues relating to standardisation of Contract documents have been examined in the light of constraints faced in award of contracts, reasons for failure of contracts, poor performance record in contract management in the public sector, etc. A Standard Contract Management System consisting of Standard Contract Clauses and Standard General conditions of Contract has been devised and circulated, as guidelines for adoption.

* **Review of Major/Mega Projects at site**: Minister of State for Statistics & Programme Implementation visited 18 projects viz Tollyganj – Garia MRTS Project in Kolkatta, Ernakulam – Tiruvananthapuram Railway Electrification Project of Southern Railway, Construction of New Runway at Mangalore Airport, National Highway Development Project in Karnataka among others and reviewed the status of implementation at site. In addition, the officers of the Ministry visited projects in different parts of the country and reviewed the status of implementation at site.

* **Standing Committees** : Standing Committees have been set up by the Ministries/Departments to fix responsibility for time and cost overrun of central sector projects. These measures, along with frequent reviews at higher levels, has helped in bringing down the incidence of delays in project implementation.

* The other initiatives of the Division are as follows:-

(i) The Flash Reporting system has been modified to focus on the constraints faced in implementation and to relate the monitoring of progress with reference to completion of major milestones on the monitor.

(ii) The Project Monitoring Division has taken the initiative for introduction of On-line Computerised Monitoring System (OCMS). It is to be made operationalised by 31 March, 2006. Consultants have been appointed to study various aspects of 32 projects in different sectors to study the implementation process. The results of the study will be consolidated and manual on project implementation would be reviewed for guidance and future planning, to improve the project implementation scenario.

(iii) Follow up action on the recommendations of the Govindarajan Committee for simplification of extant procedures for project approvals and evaluation.

Accelerated Irrigation Benefit Programme (AIBP)

9.52 The Government of India announced the Accelerated Irrigation Benefits Programme during 1996-97 to extend special Central Assistance to those projects which could yield

irrigation benefits in next four agricultural seasons. These projects are being monitored by the Central Water Commission with the help of its regional offices and the release of funds are regulated on the basis of progress and utilization of funds released. The funds are released by the Ministry of Finance on the recommendations of the Ministry of Water Resources. The achievement of the AIBP since the inception of the Programme is summarized in the table below:

1. Total projects under AIBP	:	189
2. Total CLA released	:	Rs. 18102.79 cr.
3. Number of Projects completed under normal AIBP	:	45
4. Number of projects covered under Fast Track Programme	:	17
5. Number of projects completed under FTP	:	8
6. Ultimate Irrigation potential under normal AIBP	:	17429.532 Th.hectare
7. Irrigation potential created before AIBP	:	6682.586 Th. Hectare
8. Irrigation potential created trough AIBP	:	2832.580 Th. hectare
9. Irrigation potential under FTP	:	561.441 Th. hectare
10.Irrigation potential created under FTP up to 03/2005	:	417.680 Th. hectare

Infrastructure Sector Performance during 2004-05 and 2005-06 (April-December)

(Figures are quick estimates and provisional)

Sector	Unit	2004-05	2005-06	April-December 2005		Apr-Dec.04	% variation over	
		Actual	Target	Target	Actual	Actual	Apr-Dec.05	Apr-Dec.04
		1	2	3	4	5	6	7
1. Power	BU	587.37	619.90	463.65	456.89	437.95	-1.5	4.3
2. Coal	MT	376.63	410.85	289.70	282.49	267.18	-2.5	5.7
3. Finished Steel	MT	40.74	49.70	37.64	32.90	30.98	-12.6	6.2
4. Railway revenue freight	MT	601.89	670.00	506.77	481.09	438.36	5.1	9.7
5. Shipping and Ports								
Cargo handled at major ports	MT	383.77	425.00	313.76	307.54	276.04	-2.0	11.4
6. Telecommunications								
Addition in switching cap.	000 Lines	6714.752	NA	NA	6843.79	4574.86	-.	49.6
Telephone connections.	000	6962.14	NA	NA	9938.31	5104.15	-.	94.7
Cell phone connections	000	14897.54	NA	NA	17477.28	11248.07	-.	55.4
7. Fertilisers Production	MT	15.33	16.36	12.41	11.68	11.70	-5.9	-0.2
8. Cement Production	MT	131.56	142.00	102.25	106.83	97.73	4.5	9.3
9. Petroleum								
Crude Oil Production	MT	33.98	34.45	25.74	24.04	25.56	-6.6	-5.9
Refinery production	MT	127.11	128.86	95.24	95.34	94.95	0.1	0.4
Natural Gas prod.	MCM	31,774	30,986	23304	24096	23862	3.4	1.0
10. Civil Aviation								
Export Cargo handled at International Airports	Tonnes	435,982	NA	NA	251,450	224,767	..	13.1
Import cargo handled at International Airports	Tonnes	275,940	NA	NA	159,795	120,592	..	12.7
Passengers traffic handled at International terminal	Lakh	149.27	NA	NA	81.72	70.88	..	12.7
Passengers traffic handled at domestic terminal	Lakh.	238.08	NA	NA	130.29	104.19	..	21.9
11. Roads								
Up-gradation of National Highways	Kms.	6913	5640	3848	3505	4542	-8.9	-22.8

BU = Billion Units MT= Million Tonnes NA= Not available MCM= Million Cubic Meter