



infrastructure review

The Indian economy continued its strong performance with advance estimates of the Central Statistics Office (CSO) indicating an 8.6% growth rate for FY 11 on the back of an 8% growth in the previous year. The infrastructure sector continues to benefit in terms of higher investments which are projected by the Planning Commission to increase from 7.2% of GDP in FY 09 to 8.4% in FY 12.

Notwithstanding continued growth, most infrastructure sectors were still unable to meet their capacity addition targets due to delays in land acquisition and environmental clearances, inability to secure fuel linkages, and inadequate project execution capacity due to a shortage of skilled workforce. Rural infrastructure, though, has progressed rapidly. In rural roads and power, the annual targets for FY 11 are likely to be achieved or bettered (see Table 1). Rural teledensity has also increased substantially from 24% in FY 10 to 34% in FY 11 on the back of greater network coverage and customer penetration.

Financing – both equity and debt was not a constraint to the planned projects. Equity financing was strong in the first half of the financial year though lackluster in the second half due to subdued equity market conditions. Debt financing expanded rapidly, driven by the demand from the telecom sector 3G and BWA auctions and power generation.

Going forward, the pace of infrastructure credit may be constrained since banks, the largest providers of debt finance, are facing asset-liability maturity mismatch (ALM) problems due to the longer duration of infrastructure loans they extend as against

their shorter duration borrowings. Banks would need to look for long-term sources (as a matter of prudential balance sheet management), such as long maturity bonds, to be able to continue to aggressively lend to infrastructure. The country's largest bank State Bank of India (SBI) has recently issued long-term (10 year and 15 year) bonds.

Further, the growth in bank lending to infrastructure has been primarily coming from the public sector banks (PSBs). These banks have their limitations in raising fresh equity capital for growth as they need to maintain a minimum of 51% government stake to retain the PSB status. So unless government infuses equity capital, PSBs cannot dilute much equity as many banks are close to the mandated 51%. This curtails their growth and restricts incremental advances to be capitalised out of the retained earnings.

The government is taking steps to maintain the financing momentum. In FY 11, government infused about ₹ 20,000 crore¹ into PSBs so that they could meet their Tier-I capital subscription as well as fund their expansion plans. It has also allowed government entities to raise funds through tax-free bonds up to ₹ 30,000 crore².

¹ Source Union Budget 2011-12

² Indian Railway Finance Corporation (IRFC) – ₹ 10,000 crore, National Highways Authority of India (NHAI) – ₹ 10,000 crore, HUDCO – ₹ 5,000 crore and Ports – ₹ 5,000 crore.

Among other initiatives, some new proposals were announced in the recent Union Budget, with an aim to attract investments from foreign institutions. First, a reduction in withholding tax rate (from 20% to 5%) on income to Foreign Institutional Investors (FIIs) from Infrastructure Debt Funds. Second, an increase in the FIIs investment limit (from \$ 5 billion to \$ 25 billion) for investments in corporate bonds of infrastructure companies with a residual maturity of over five years. FIIs can invest in unlisted bonds, even at Special Purpose Vehicle (SPV) level, and can trade among themselves during the lock-in period of three years. While this move is positive, its impact will not be significant in the short-term due to limited FII appetite currently on account of low liquidity in the corporate bond markets, inherent credit risk (absence of credit enhancement agencies) and a high withholding tax rate. The impact of these measures should be visible over the medium term.

TELECOM

The telecom sector continued to grow at a healthy pace during FY 11 adding close to 19 million wireless subscribers a month on average. The wireline subscriber base continued to decline marginally. The wireless and wireline subscriber base at the end of March 2011 was 846 million as against 621 million in March 2010. According to Telecom Regulatory Authority of India (TRAI) standard for recognition of active subscribers, India had 574 million active wireless subscribers as of January 2011, i.e. 71% of the reported subscriber base. The overall teledensity increased from 53% in March 2010 to 71% in March 2011. Urban teledensity reached 157% while rural teledensity stood at 34% as on March 2011. Broadband subscriber base also grew to reach 11.9 million in March 2011. The frantic growth in wireless subscriber base over the last few years has been fuelled by dropping call rates, growing network reach of the telecom operators (both old and new operators), increasingly affordable feature rich handsets, innovative tariff plans and growing income levels.

Apart from the unprecedented growth in subscriber base, FY 11 saw the much awaited 3G and BWA auctions. The 3G auction was conducted for 71 spectrum slots of 2 x 5 MHz

1 Progress of infrastructure in FY 11

	UNIT	FY 10	FY 11		
		ACHIEVEMENT	TARGET	ACHIEVEMENT	% ACHIEVED
Power					
Installed capacity	MW	9585	21441	12161	57%
Increase in energy generated	mn units	771173	830757	811104	98%
Roads					
National highways - road length completed	kms.	2693	n.a.	1007*	n.a.
National highways - road length awarded	kms.	3360	9000	5083	42%
Ports					
Capacity of major ports	mn tonnes	618	n.a.	645	n.a.
Capacity of non-major ports	mn tonnes	346	n.a.	375	n.a.
Rural infrastructure					
Rural roads under Bharat Nirman \$					
New connectivity	kms.	20752	14320	10947	76%
Upgradation	kms.	42438	12500	18151	145%
Habitations connected	No.	4188	3000	2463	82%
Electrification under Bharat Nirman					
Village electrification	No.	18374	17500	18306	105%
BPL households electrification	No.	4718468	4700000	3973327	85%
Rural teledensity	%	24%	n.a.	34%	n.a.

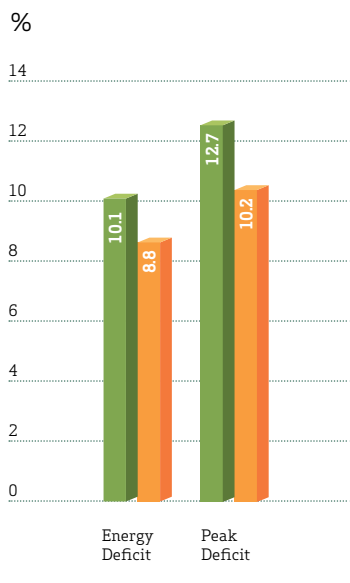
Sources: Central Electricity Authority, Economic Survey 2011, Indian Ports Association, Ministry of Power, Ministry of Rural Development, TRAI

Notes: *Up to November 2010 | \$Up to end-December 2010

each across the 22 circles. The auction closed at all-India bid for 3G spectrum at ₹ 16,751 crore. BSNL/MTNL which had already been allotted one slot of 3G spectrum in each circle matched the winning bids for their respective circles. The total revenue earned by the government from the 3G auction was ₹ 67,719 crore. In the BWA auction 44 spectrum slots of 20 MHz each (unpaired) were auctioned across the 22 circles. The auction closed with an all-India bid for BWA spectrum at ₹ 12,848 crore. BSNL/MTNL once again had received one slot in each circle prior to the auction and had to pay the winning bid price for their respective circles. The exchequer received ₹ 38,543 crore from the BWA auction, taking the overall receipts from the two auctions to ₹ 106,262 crore. The 3G and BWA auction payments resulted in significantly leveraged balance sheets for some of the telecom operators. Almost all 3G auction winners have launched 3G services in their winning circles and are in the process of entering into roaming arrangements with other players in the

A Energy and Peak Power Shortage in India

2009-10
2010-11*



SOURCE: CEA
Note *April-December 2010

The power sector continues to face energy and peaking power shortages though the level of shortage has come down in comparison to last year due to a good monsoon and improved availability of water.

remaining circles, thereby providing all-India 3G network to their customers. However none of the BWA auction winners have launched services as yet.

FY 11 was a fairly subdued year for the telecom tower sector both in terms of organic growth and M&A activities. The tower companies have been rather cautious in rolling out new towers, instead they have been focusing on increasing the tenancy on their existing towers. Roll out of 3G services by telecom operators and roll out of operations in new circles by the new telecom operators have helped the tower companies increase their tenancies impressively during this year. On the M&A front, GTL Infrastructure's acquisition of Aircel's 17,500 towers was the only notable deal during the year. GTL Infrastructure and Reliance Infratel were in discussion to merge the two entities during August-September 2010 however the discussion fell through midway.

The long awaited Mobile Number Portability (MNP) was introduced in Haryana in November 2010 and in the rest of India in January 2011. As on end-March 2011, over 6.4 million subscribers had submitted their request to various service providers for porting their mobile numbers. These are still initial days in the MNP regime and its impact is yet to be seen.

On the regulatory front, TRAI made various recommendations to Department of Telecommunications (DoT) during the financial year, most notably the "Spectrum Management and Licensing Framework" report in May 2010, "Recommendations on National Broadband Plan" in December 2010 and "Report on the 2010 Value of Spectrum in the 1800 MHz Band" in January 2011. The May 2010 and January 2011 reports provide the pricing framework for allocation of spectrum to the telecom operators. These recommendations also suggest a one-time levy on the telecom operators for the spectrum held by them over and above 2 x 6.2 MHz in various telecom circles. The report on National Broadband Plan envisages the government to play a key role in broadband growth by establishing a

fiber optic backbone across the country. TRAI recommends formation of a National Optical Fiber Agency (NOFA) and State Optical Fiber Agency (SOFA) in each state which will be responsible for establishing the backbone fiber network. The report expects broadband penetration to increase from 11 million in 2010 to nearly 154 million in 2014. DoT has not come out with any new policy guidelines based on these recommendations as yet. The new telecom minister Mr. Kapil Sibal had announced in January 2011 his plan to come out with a new National Telecom Policy 2011 (NTP 2011) which will comprehensively address various issues such as telecom licenses, spectrum management, M&A guidelines and introduction of new technologies like 4G. The telecom sector is looking forward to the new NTP 2011 which will guide the way forward for the sector.

FY 11 was a year of controversies for the telecom sector. Comptroller and Auditor General of India (CAG) presented its "Performance Audit Report on the Issue of Licenses and Allocation of 2G Spectrum by the Department of Telecommunications" to the Parliamentary Accounts Committee (PAC) in November 2010. This report alleged serious irregularities in the process followed for the allocation of new telecom licenses and spectrum during FY 08. The report estimated a loss of ₹ 1.76 lakh crore to the exchequer due to these process irregularities. The CAG report further highlighted that many of the new licenses allocated during FY 08 were given to ineligible players as they did not meet various license conditions stipulated by DoT.

The Parliament also, after much ado, had set up a Joint Parliamentary Committee (JPC) in March 2011 to look into the license and spectrum allotment process since the year 2000. Meanwhile Central Bureau of Investigation (CBI) and Enforcement Directorate (ED) have been conducting their investigation into any possible acts of corruption associated with the license allocation process during FY 08.

CBI & ED investigation is being directly monitored by the Hon'ble Supreme Court.

Looking forward, the year FY 12 is very critical for the telecom sector. During this year regulatory clarity is expected to emerge on various critical issues. Also PAC, JPC and the Supreme Court are expected to conclude their investigations and put to justice the guilty parties, if any.

ENERGY

The power sector continues to face energy and peaking power shortages though the level of shortage has come down in comparison to last year due to a good monsoon and improved availability of water (see Chart A). During FY 11, actual hydro generation was 3% more than target generation as against an 8% shortfall in the previous year (see Table 2).

However, the sector continues to slip on its capacity addition targets. Against a target of 21441 MW for the year, only 12161 MW was added, though it is the highest capacity addition in a year (see Table 3).

Further, the Mid-term Appraisal of the 11th Plan projected a revised target of 62374 MW of capacity addition as against the original Plan target of 78700 MW. But the achievement is now expected to be a little over 42000 MW, as only 7675 MW is likely to be added in FY 12, the final year of the Plan. The biggest shortfall comes from hydro power and coal-based power projects.

Several policy initiatives have been taken for the development of hydro power in the country. These include the 50000 MW hydro power development initiative, New Hydro Policy 2008 and strategy to enhance the pace of hydro power development in the North Eastern Region. But hydro power development continues to suffer due to slow progress on environment and forest (E&F) clearances for projects, lack of access infrastructure to potential sites, land acquisition and related resettlement and rehabilitation issues, lack of power evacuation infrastructure and availability of a limited number of capable contractors. The use of advanced state-of-the-art techniques for investigations have minimised but not eliminated geological risks.

E&F clearances have also been a contentious issue facing coal-based power projects. In fact, the two new Ultra Mega Power Projects (UMPPs) announced by the Ministry of Power at Orissa and Chhattisgarh have been held up due to issues

2 Energy generation during 2010-11 (MU)

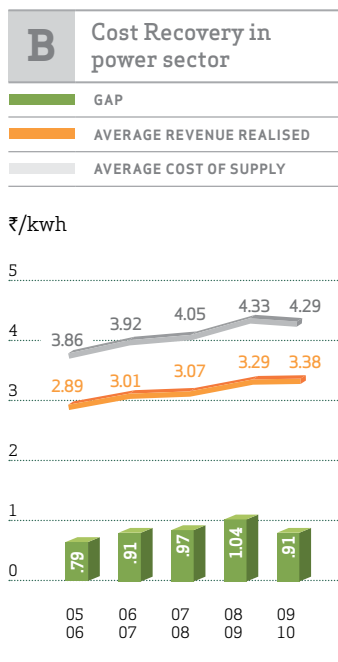
FUEL WISE/SECTOR WISE	TARGET	ACHIEVEMENT
Thermal		
Central	269999	273679
State	317093	280359
Private	103766	110875
Total	690857	664913
Hydro		
Central	41642	46032
State	63990	62924
Private	5720	5340
Total	111352	114296
Nuclear		
Central	22000	26284
Total	22000	26284
Power import from Bhutan		
Total	6548	5610
All India		
Central	333641	345996
State	381083	343284
Private	109485	116214
Total	830757	811104

Source: CEA

Note: Totals may differ due to rounding off

related to environmental clearance regarding the coal blocks for these projects and the dates for submission of qualification bids by developers have been extended. While power project and captive coal block developers cite procedural delays in and slow award of E&F clearances as a major problem facing projects, there is no denying that both hydro and coal-based projects have deleterious environmental and social impacts. Much of the hydro power potential that remains to be tapped lies in ecologically sensitive areas and the coal needed by proposed power projects lies in areas that are both environmentally and socially sensitive.

The delays in E&F clearances are expected to add to the growing shortage of domestic coal. The Planning Commission has estimated that the gap between demand for coal and supply of domestic coal is likely to widen further to 200 MT in the Twelfth Plan. In its Mid-Term Appraisal of the 11th Plan, the Planning Commission has suggested that in view of the constraints on expanding supply of domestic coal, the present nationalisation of the coal sector needs to be reconsidered in order to open up new coal mines



SOURCE: Planning Commission

3 Capacity addition during 2010-11 (MW)

FUEL WISE/SECTOR WISE	TARGET	ACHIEVEMENT
Thermal		
Central	6015	3740
State	6549	2581
Private	6191	4930
Total	18755	11251
Hydro		
Central	649	320
State	356	178
Private	461	192
Total	1466	690
Nuclear		
Central	1220	220
Total	1220	220
All India		
Central	7884	4280
State	6905	2979
Private	6652	5122
Total	21441	12161

Source: CEA
Note: Totals may differ due to rounding off

for private sector exploitation beyond the captive use currently allowed. The Planning Commission has further opined that since private sector exploitation of petroleum resources, which are much scarcer, is freely allowed, there is every reason for private sector coal development to be favourably considered.

Besides these issues related to project development, another major concern of the power sector is the sharply deteriorating viability of the distribution utilities. Financial losses of the distribution business are estimated to touch ₹ 68,000 crore this year³. The main reasons behind the rising financial losses are inadequacy of tariffs (see Chart B), inefficiency of utilities, and a slowdown in the momentum of Aggregate Technical and Commercial (AT&C) loss reduction. Growing subsidies committed by State Governments to distribution utilities have not been matched by the payout of subsidy (see Chart C). As a result, distribution utilities have now started resorting to higher load shedding to avoid the burden of extra power purchase costs and prevent their financial position from worsening.

The year saw a consolidation of the efforts being made towards energy efficiency; with the

launch of the National Mission for Enhanced Energy Efficiency (NMEEE). The NMEEE, which is one of the eight Missions under the National Action Plan on Climate Change (NAPCC), aims to devise efficient and cost effective strategies through demand side management initiatives and promotion of energy efficient processes, products and services. Proposed to be implemented over five years, it envisages a reduced need for capacity addition of the order of 19598 MW and accordingly, reduced total CO₂ emissions to the extent of 98 million tonnes. To operationalise the NMEEE, the Government of India (GoI) has set up the Energy Efficiency Services Ltd. (EESL) as a joint venture with equity participation by four Central Public Sector Units (CPSUs) viz. Rural Electrification Corporation, Power Finance Corporation, Power Grid Corporation of India Ltd. and NTPC Ltd.

One of the main initiatives under the NMEEE is the Perform, Achieve and Trade (PAT) scheme that aims at improving energy efficiency in nine industrial sectors viz. Aluminium, Cement, Chlor-alkali, Fertilizer, Iron and Steel, Pulp and Paper, Railways, Textiles and Thermal power plants. Under this scheme, units in

³ Thirteenth Finance Commission

these sectors would be given individual energy efficiency improvement targets; implying that each unit would be required to reduce its specific energy consumption (SEC) by a fixed percentage, based on its current SEC (or baseline SEC). Any additional certified energy savings would take the form of Energy Savings Certificates (ESCerts) and can be traded with other units who could use these certificates to comply with their SEC reduction targets. The ESCerts will be traded on special trading platforms to be created in the two power exchanges in the country. The first cycle of PAT scheme would be operational between April 2011 and March 2014, during which all sectors except Railways, have been included. Railways have been excluded in this phase because the sectoral energy scenario and energy usage pattern in Railways is still under study.

The other components of NMEEE include an Energy Efficiency Financing Platform involving the creation of mechanisms that would help finance demand side management programme by capturing future energy savings and a framework for Energy Efficient Economic Development which would involve the development of fiscal instruments to promote energy efficiency.

On the renewable energy front, the Gol has awarded the setting up of grid connected solar power projects of 700 MW capacity under the first phase of the National Solar Mission (NSM). The projects in the first phase (up to March 2013) are being awarded in batches. In the first batch, 620 MW capacity (470 MW of solar thermal and 150 MW of PV) was taken up. Besides this, 84 MW (30 MW of solar thermal and 54 MW of PV) of projects have migrated under the NSM from earlier schemes. The NSM was launched in January 2010 with a target of 20000 MW grid solar power in three phases by March 2022. However, several concerns have been raised about the viability of bids against which projects have been awarded. The bids involve heavy discounts on tariffs determined by the Central Electricity Regulatory Commission by many new and inexperienced players. There are apprehensions that these discounts would ultimately result in unviable tariffs, the use of cheap and unreliable technology and equipment, and lead to difficulties in financial closures of concerned projects.

TRANSPORTATION

CIVIL AVIATION

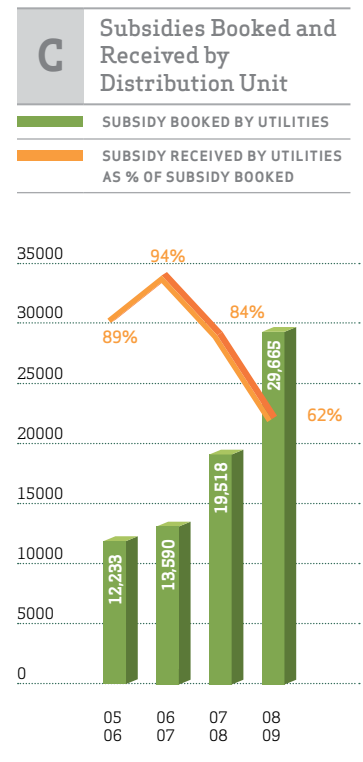
On the backdrop of strong economic growth and high demand both from travel and trade, the civil aviation sector grew robustly. However, with rising oil prices, there has been a sharp increase in the price of aviation turbine fuel (ATF). Fuel expenses comprise about 40% of the operating cost of domestic air carriers. This has added to the problems of the industry which was already under severe cost pressures.

Capacity expansion of the airports has lagged and been substantially costlier than initial estimates. In July 2010, Delhi International Airport Ltd. (DIAL) had its T3 terminal inaugurated with a capital cost of ₹ 9,000 crore and a capacity to handle 34 million passengers annually. After several months of delay, the Navi Mumbai Airport finally got its environmental clearance and construction is expected to start towards end of FY 12. The first phase is likely to have a capacity of 10 million passengers per annum.

Progress on the non-metro airports has been slow. Of the 35 non-metro airports identified in June 2006, work has been completed on 12 airports with another 23 under progress or in the planning stage. Modernisation includes technological upgrades as well as improvement of the terminal building and other facilities. Not only have the privatised airports seen cost overruns, but also airports such as Kolkata and Chennai, developed by Airports Authority of India (AAI).

These cost overruns have resulted in the developers imposing higher fees from passengers in the form of airport development fees (ADF). However, recently the Supreme Court disallowed the levy of ADF by Mumbai International Airport Limited (MIAL) since MIAL did not have the approval of Airports Economic Regulatory Authority (AERA) to levy the ADF. On the other hand, Delhi International Airport Ltd. (DIAL) continues to charge an ADF since it received AERA's approval.

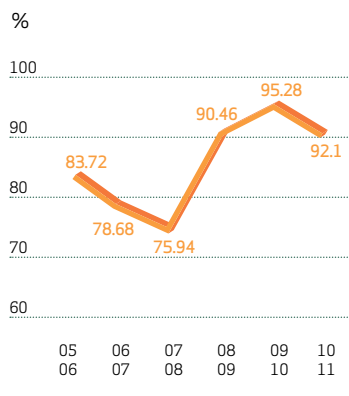
During the year, AERA also came up with tariff guidelines for airport operators of major airports (those which handle over 1.5 million passengers per annum). The guidelines also cover review of tariff proposals, procedure to determine the aggregate revenue required for the regulated service, consultation process between operators and users and the quality



SOURCES: Power Finance Corporation Ltd., IDFC analysis

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Operating ratio of Indian Railways



SOURCE: Indian Railways

of service with benchmarks. It also advocates setting up an Airport Users Consultative Committee involving representatives of airlines, passengers, cargo facility users, government representatives, among others.

With an aim to advise the Ministry of Civil Aviation on economic policy matters, the Civil Aviation Economic Advisory Council (CAEAC) has been set up under the Chairmanship of the Secretary, Civil Aviation. The CAEAC met twice during FY 11 and has formed two working groups to look at issues and advise the government on air cargo/express service and protection of consumer interests.

RAILWAYS

After a few years of upsurge, the finances of Indian Railways are once again deteriorating. The growth rate in traffic and earnings achieved in the previous years could not be sustained during FY 09 and FY 10 owing partly to the slowdown in the economy. The average annual growth rate of freight (originating tonnage) in the first three years of the 11th Plan is estimated at 6.6% against the targeted 8.6%. The lower growth of freight was primarily on account of low growth in iron ore freight. Iron ore is the second largest revenue earning item for Indian Railways, the largest being coal. In fact, iron ore has seen a negative growth during FY 11 due to the restrictions on iron ore exports imposed by the State Governments of Orissa and Karnataka, and disruption of train movement in iron ore rich areas as well as in other areas.

The financial impact of shortfall in earnings has been compounded by an unprecedented increase in expenditure due to implementation of the recommendations of the 6th Central Pay Commission (CPC) in FY 09 and FY 10. Consequently, the operating ratio of Railways has declined again (see Chart D).

Railways have planned and implemented a number of measures during the 11th Plan to improve its share in freight traffic. These measures include freight marketing of select commodities by third parties, liberalised wagon investment scheme, improved freight incentive policies and creation of capacity. Railways have revised their Railways Infrastructure for Industry Initiative (R3i) policy that aims to attract private investments into some of the last mile rail connectivity projects with the

objective of creating additional rail transport capacity and increasing rail share in freight traffic.

THE POLICY PROVIDES FOR FOUR MODELS:

- **COST SHARING:** freight rebate model where the private sector would have to make contributions towards cost sharing in advance and would be allowed to recover this advance through a freight rebate of 10%-12% on incremental outward traffic. The ownership of the lines would be with Railways.
- **FULL CONTRIBUTION:** apportioned earning model where the private sector would construct and maintain the line for a period of 25 years and would receive the apportioned earnings from the line in excess of the O&M costs incurred by the railways on the line.
- **Special Purpose Vehicle model** where the Railways would form an SPV with the private sector and Railways' share in equity would be 26%. The SPV would be given a concession to construct, operate and maintain the line for which it would get a share in the revenue generated by the project.
- **Private line model** where the private sector builds a private line on non-railway land acquired by it and seeks connectivity to the railway network. Railways would levy a fee on the gross apportioned earnings of the line.

While the applicants may choose and indicate preference for one of the models, the Ministry of Railways would decide which model would be applicable. Further, only railway lines that are 20 metres or more in length (excluding the length of siding which may take off from this line) are eligible under this Policy. Finally, the policy is not applicable to railway lines intending to provide connectivity to coal mines and iron ore mines directly or indirectly.

The accounting reforms initiated by Railways during the 10th Five Year Plan (FYP) for separating the accounts for major segments of railway services are still not complete. These reforms are critical for generating costing data on commercial lines as well as for making railway accounting in India in line with the commercial accounting requirements adopted internationally for railways. A firm time line is needed to accomplish this task.

PORTS

FY 11 has been a mixed year for the Indian ports sector. The private ports (also referred to as non-major ports) continue to perform better than the major ports (government controlled) on cargo handling as well as project execution. Cargo handled at the non-major ports in Gujarat (which account for about 50% of the country) increased by 18%. On the other hand, the traffic handled at major ports increased marginally from 561 MT in FY 10 to 570 MT in FY 11, against a target of over 600 MT for FY 11. This negligible traffic growth in major ports, just as for freight growth in the railways, has been attributed to the iron ore export ban in Karnataka and restrictions on illegal mining in Orissa.

Port capacity in India has crossed 1 billion tonnes, with non-major ports now accounting for as much as 37% of the total port capacity. Mundra Port and Special Economic Zone Ltd. (MPSEZL), the largest private port operator commenced operations in end-August at Dahej Port, a dry bulk cargo port with 20 million tonnes per annum (MTPA) capacity. In addition to commencing operations on the world's largest coal receiving terminal at Mundra Port, MPSEZL is also making its footprint on the east coast by setting up a coal import terminal at Vishakhapatnam Port. The Dhamra Port (joint venture of L&T and Tata Steel) in Orissa with a total capacity of 100 MTPA (first unit 25 MTPA) has commenced operations from May 2011. This port has the deepest draught in India and is capable of accommodating super cape-size vessels up to 180,000 dead weight tonnes.

The performance of major ports has been disappointing in the award of new projects. As against an annual target of awarding 21 projects worth ₹ 13,890 crore, until mid-March 2011, only 8 projects were awarded worth ₹ 3,250 crore. Seven of the projects awarded were for developing cargo berths and one was for development of a container terminal at Ennore. The reasons for the delays in awarding projects vary. Some of the issues include litigation, stalling bidding, lack of interest due to project structuring and rehabilitation. Despite this poor progress, the Ministry plans to award 25 projects in FY 12 (including 13 identified and unawarded in FY 11).



GUJARAT PIPAVAV PORT IDFC FINANCED PORT WAS THE 5TH FASTEST GROWING PORT ACROSS THE WORLD IN 2010

The key problems in case of major ports continue to be:

- Inadequate infrastructure – major ports lack deep drafts and adequate connectivity
- Lack of freedom on tariff fixation – unlike non-major ports, major ports are regulated by Tariff Authority for Major Ports (TAMP) which does not give them freedom to fix tariffs
- Shortage of financial resources to undertake common infrastructure development such as drafts, connectivity – major ports rely on the major port trusts for financial resources. Major port trusts undertake expansions from their own resources or from Central Government support.

It is heartening to observe that the above issues are beginning to be addressed. The Shipping Ministry is considering involvement of the private sector in capital intensive activities such as dredging, backed by viability gap funding. The recent Union Budget has proposed that the Ministry of Shipping can raise ₹ 5,000 crore of tax-free bonds. These funds would be utilised for dredging operations and infrastructure development at major ports. Further, in order to give the major ports more flexibility on tariff setting, the Ministry of

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Phase-wise balance for project award as of March 31, 2011

PHASE	BALANCE FOR AWARD (KM)	% OF TOTAL REMAINING	DESCRIPTION
Phase II	421	2%	North-South & East-West Corridor
Phase III	4,098	17%	Convert from 2-lane to 4-lane
Phase IV	14,034	58%	Improve to 2-lane standards with paved shoulders
Phase V	4,088	17%	6-laning of existing 4-lane projects
Phase VI	1,000	4%	Construction of expressways
Phase VII	659	3%	Construction of ring roads, flyovers and by-passes
Total	24,300	100%	

Source: NHAI

Shipping has released a draft Port Regulatory Bill which aims to replace TAMP by the Major Ports Regulatory Authority. With this, private port terminals operating at major ports will have freedom to price their tariffs and compete with their counterparts in minor ports that are not regulated by TAMP. Corporatisation of some of the major port trusts is on the anvil. The Ennore Port Ltd., India's first corporate port, has also got Board approval to go public and raise funds for expansion. While individual initiatives such as these are a good beginning, it is desirable to draw a road map for the sector in terms of industry structure, regulatory and institutional reforms and regulation in the days to come. This would bring about clarity for Public Private Partnership (PPP) investors and the users. Further, to avert litigation and have greater clarity on investor eligibility for bidding, it is essential to lay down a comprehensive policy map on PPP (such as investor entry criteria, eligibility).

ROADS

The current year started positively for the road sector, with several projects being awarded. For a while, the pace of projects awarded had slowed down on account of a number of issues, including controversies relating to project award, change of guard at the political level, lack of full time Chairman for NHAI for a substantial part of the year and financing plan for National Highways Development Programme (NHDP). However, ramping up the award of projects towards the end of the year led to 5,083 km being awarded in FY 11, the largest number of kilometres awarded in a year. By the end of the year, 14,270 km of the NHDP had been completed, with 34,372 km

remaining. This includes 22 km of Phase 1 (GQ) and 388 km under the Special Accelerated Road Development Programme for North Eastern Region.

As on March 31, 2011, under 25,000 km of the NHDP (~ 50% of the total programme) projects are yet to be awarded (see Table 4). NHAI plans to award these 25,000 km over the next three financial years. However, the pace of award of projects may be slower on account of likely increase in NHAI's financial commitment for the rest of the NHDP. It may be noted that a substantial number of projects are likely to come up in relatively low density road corridors leading to an increase in annuity commitments and viability gap funding requirement. Therefore, the award of new projects may be staggered in line with the financial capacity of NHAI. On the revenue side, NHAI has its recurring revenues primarily from three sources viz. share of cess from the Central Road Fund (CRF), toll collections on stretches completed with BOT-Annuity and EPC contracts and the premium that some concessionaires on BOT-Toll projects pay. To fund its expansion plans, NHAI needs to rely on budgetary allocations and bond issuances to bridge the gap. Both of these have their limitations as they have a fiscal impact.

A major issue in the sector has been the cost overruns. Land acquisition is one of the biggest causes of delays, eventually leading to cost overruns. During FY 10, NHAI had set up special land acquisition units (SLAUs) at state level to quickly resolve issues relating to land. As a result, the pace of land acquisition has improved significantly since then.

On rural roads, progress has been good. Up to December 2010, new connectivity achieved under Pradhan Mantri Gram Sadak Yojana (PMGSY) is 11,000 km as against the annual target of 14,300 km for FY 11. Upgradation of rural roads has been remarkable with over 18,000 km being achieved until December 2010 as against the annual FY 11 target of 12,500 km.

URBAN INFRASTRUCTURE

Though cities are well recognised as the drivers of economic growth, the level and quality of infrastructure remains acutely inadequate. The investment required is huge. According to an estimate by The High Powered Expert Committee (HPEC) for urban infrastructure

5 Progress of JNNURM up to end-March 2011 (₹ crore)

PROGRAMME	NO. OF PROJECTS	APPROVED COST	FUNDS RELEASED
Urban Infrastructure & Governance	532	60,215	29,474
Urban Infrastructure Development Scheme for small & medium towns	766	12,933	8,989

Source: JNNURM

services, the total investment required to meet the current backlog and future needs for eight core urban infrastructure sectors during FY 12-31 is ₹ 39.2 lakh crore (at FY 10 prices), equivalent to an annual average of ₹ 2 lakh crore. A large part of this investment is required for urban roads (about 44%) whereas water supply, sewerage, solid waste management, and storm water drains account for about 20% of estimated investment requirements. In addition, an estimated ₹ 19.9 lakh crore, or almost ₹ 1 lakh crore a year is required for O&M on urban infrastructure.

Against these requirements, actual investment has been minimal. The largest government-led programme for urban infrastructure development, the Jawaharlal Nehru National Urban Renewal Mission (JNNURM), which has supported the development of core urban services over the period 2007-2012, has disbursed ₹ 38,463 crore [centre, state and urban local bodies (ULBs)] in four years (see Table 5). About 58% of the projects that have been approved are in the water supply and sanitation (sewerage and solid waste) sectors.

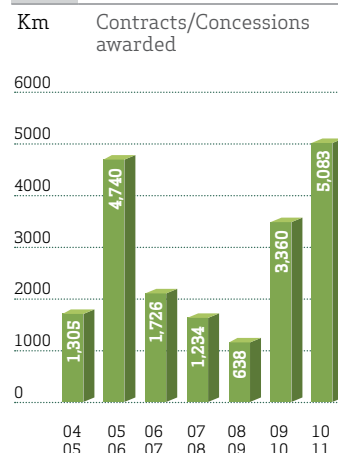
Financing the requisite investment will require a concerted effort on all fronts – increased and timely State Finance Commission transfers from state to ULBs, strengthening of own ULBs revenues and additional mechanisms for funding including market borrowings. Strengthening ULB revenue, though important for sustainability of investment in urban services is a challenge. The Ministry of Urban Development (MoUD) initiated a programme for Service Level Benchmarks (SLBs) as a mechanism for improving accountability in service delivery. The principle of benchmarking has been endorsed by the 13th Finance Commission which has included Service Level Benchmarking as one of the conditionalities for allocation

of performance based grants to ULBs, which amount to around ₹ 8,000 crore during 2010-15.

Being a reform linked scheme, JNNURM, tried to instill reforms on a number of fronts (institutional, planning, financial, community participation), but progress has been far from satisfactory. ULBs continue to reel under the problems of weak governance and poor finances that have impaired their capability to undertake any improvement in urban services. As a result, the involvement of the private sector in financing urban infrastructure has been minimal. In order to kickstart the functioning of the market, the planned PPP Urban Infrastructure Fund at the national level is expected to encourage PPP by actively engaging in capacity building, project identification, development, structuring and funding bankable PPP projects in the urban infrastructure sector.

Attempts are now being made to integrate the various components of urban infrastructure. The approval this year of the National Mission on Sustainable Habitat is an important opportunity to demonstrate holistic development of urban infrastructure across the nation. The Mission seeks to promote sustainability of habitats through improvements in energy efficiency in buildings, urban planning, improved management of solid and liquid waste including recycling and power generation and a modal shift towards public transport and conservation. It also seeks to improve ability of habitats to adapt to climate change by improving the resilience of infrastructure, community based disaster management and measures for improving advance warning systems for extreme weather events. ■

E Progress in the National Highway Development Programme



SOURCE: Ministry of Road Transport & Highways