

# Maharashtra – Your gateway to India

A guide to Foreign Investors on the opportunities and challenges



SPARTA

“They say the world is your oyster, for us the India is the world”

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## INDIA

The Indian economy has witnessed unprecedented growth. Booming services and industry sectors are providing the required impetus to economic growth.

- Fastest GDP growth of 9.4 percent in 2006-07, since last 18 years (at constant prices)
- India's GDP has witnessed high growth, and was the second fastest growing GDP after China in 2006-07
- The sound performance of each industry segment is leading to the overall robust performance of the Indian economy
- India's Forex reserves have increased from 199 USD billions in 2006-2007 to 309 USD billions in 2007-2008 (till 28 March).
- In 2007-08 (till 28 March), Forex reserves witnessed a growth of approximately 55 percent over 2006-07.
- The Forex Reserves are in excess of the External Debt to GDP ratio the decreasing external debt to GDP ratio indicates that India has a sound economic platform.

## MAHARASHTRA

It is located in the western region of India; Maharashtra is India's 3rd largest state in area and 2nd largest in population. The State stretches over 3, 07,690 sq km with a total population of 96.9 million (Census 2001). Shares borders with Gujarat, Madhya Pradesh, Chhattisgarh, Andhra Pradesh, Karnataka, Goa and the Union territory of Dadra and Nagar Haveli. The Arabian Sea makes up the state's western coast. The state capital Mumbai is the 6th largest Metropolitan area in the world and India's largest and most populous city.

### Economic profile of the state

Net State Domestic Product (NSDP) of the state at Current Prices (2004-05) was US\$ 34.3 billion. During 1993-94 and 2002-03, Maharashtra's real NSDP increased from US\$ 22.6 billion to US\$ 34.3 billion, registering a growth rate of 4.7%. The Gross State Domestic Product (GSDP) of the state is growing at a rate of 8.6%. State contributes 40% of the national fiscal receipts and 8.17% to the total GDP. Accounts for 20% of the country's Investment, 20% of its Industrial output, 40 % of its exports. Annual per capita income at current prices is US\$ 621. The state's economy grew at a rate of 13.8% in 2004-05. IMD Switzerland's World Competitiveness Report 2006 ranked Maharashtra ahead of countries like Korea, South Africa, Brazil, Russia and Italy. According to a recent Reserve Bank of India bulletin, Maharashtra alone accounted for over 20% of the FDI coming to India, for the period between January 2000 and November 2005. The "Mega Project Policy" of the State attracted over US\$ 11.5 billion in investment commitments

## Infrastructure Status

### Physical infrastructure

Most cities in Maharashtra are well connected through an efficient railway network. The Central Railways, one of the zones of the Indian Railways, has its headquarters in Mumbai, at the Chhatrapati Shivaji Terminus. Maharashtra also has an intra-city network of railways. The suburban railways are responsible for carrying 6.1 million passengers everyday. Maharashtra has air connectivity from 10 cities, the main airports being- Mumbai, Pune, Nagpur and Nasik. Mumbai is India's busiest airport. Further an additional airport is being proposed at Navi-Mumbai. A Greenfield Airport is proposed near Pune. Has the largest road network in the country with a total road length of over 267,000 km. National highway length: 4,176 km State Highways length is 33,705 km under the on-going National Highway Development Programme (NHDP), 721 km is being converted into 4/6 lane highways. The Mumbai – Pune Expressway forms an important link between the financial and the cultural capital of the state.

### Ports

Two principal ports, at Mumbai and Nhava Sheva (JNPT) along the State's 720 km coastline, in addition, there are 48 smaller ports. JNPT is the country's largest container port, with container traffic of over 2.2 million TEUs in 2003-04. It also ranks among the top 30 container ports in the world. JNPT has a container terminal operated by P&O, UK, developed through private investment on a Build-Operate-Transfer (BOT) basis. The road connectivity to the JNPT port shall significantly improve on completion of the on-going expansion of the national highway.

## Power

Largest installed electricity generation capacity in the country. During 1998-99 and 2005-06, the total installed capacity increased from 11717.11 MW to 13838.34 MW. Installed capacity of thermal stations continued to form the largest share of the installed generating capacity followed by hydro. The state has a favorable power policy to facilitate investments in the power sector. The requirement for power in the state stood at 16069 MW for the year 2005-06, the State suffered a shortage of around 23.10%.

## Telecom

The state witnessed rapid development in telecommunications services during the past decade. Maharashtra is the 2nd largest GSM market with 11.2 million subscribers in 2006-07. The growth in mobile telephony has been equally strong with total number of 4913 telephone exchanges with 2, 75,533 mobile phone subscribers.

## Social infrastructure

### Education

Maharashtra has 2nd highest literacy rate in the country. Education network consists of 10 Universities, over 1,800 Higher education institutions, 67,800 Primary and 17,530 Secondary schools. Maharashtra has 344 Engineering colleges, with an annual intake of over 88,000 students and 612 Industrial Training Institutes (ITIs) and 34 Architecture colleges with an annual intake of over 93,000 and 1,000 respectively.

There are 212 Medical institutes and 136 nursing colleges with an annual intake of over 13,000 and 3,500 respectively, the network of Public and Government-aided health facilities in the state comprise 964 Hospitals, 2,081 dispensaries and 1,806 Primary Health Centers. The number of beds in various public and government aided health institutions in the state are 92,106 which is 930 beds per million populations.

## FOREIGN DIRECT INVESTMENT (FDI)

Government of India embarked upon major economic reforms since mid-1991 with a view to integrate with the world economy, and to emerge as a significant player in the globalization process. Reforms undertaken include decontrol of industries from the stringent regulatory process; simplification of investment procedures, promotion of foreign direct investment (FDI), liberalization of exchange control, rationalization of taxes and public sector divestment. The FDI policy was liberalized progressively through review of the policy on an ongoing basis and allowing FDI in more industries under the automatic route.

### Infrastructure, construction and Water Recycling

FDI up to 100% under the automatic route permitted in Construction Development projects including housing, built-up infrastructure, commercial complexes etc. subject inter-alia, to minimum capitalization; minimum area condition and lock-in period of original investment (Press Note 2/2005 refers). These conditions are not applicable to Hospitals, Hotels, SEZs, and Nonresident Indians. FDI cap in basic and cellular telecom services has been enhanced from 49% to 74%. Detailed guidelines have been notified vide Press Note 5 (2005 series) substituted by Press Note 3 (2007). FDI up to 100% under automatic route is permitted in projects for construction and maintenance of roads, highways, vehicular bridges, toll roads, vehicular tunnels, ports and harbors. FDI up to 100% in both manufacture of pollution control equipment and consultancy for integration of pollution control systems is permitted on the automatic route.

### Retailing

FDI has been allowed up to 51% for 'Single brand' product retailing which requires prior Government approval. Specific guidelines have been issued for governing FDI for 'single brand' product retailing.

### Media and entertainment

FDI up to 49% allowed with prior Government approval for setting up-linking HUB/Teleports. FDI up to 100% allowed with prior Government approval for up-linking non news TV channels. FDI up to 26% allowed in up-linking of news and current affairs TV channels. Broadcasting: TV Software Production 100% foreign investment allowed subject to all future laws on broadcasting and no claim of any privilege or protection by virtue of approval accorded, and not undertaking any broadcasting from soil without Government approval. Publishing/printing scientific & technical magazines, periodicals & journals FDI is approved up to 100% FIPB approval is required. Advertising sector: FDI up to 100% allowed on the automatic route. Film sector (film production, exhibition and distribution including related services/products) FDI up to 100% allowed on the automatic route with no entry level condition.

## MEDIA AND ENTERTAINMENT

The media and entertainment (M&E) industry continues to outperform the country's growth rate. For the quarter January to March, 2008, it is estimated that the industry registered a growth of 14.86% in revenues compared to the corresponding quarter of previous year.

This is mainly due to the increase in revenues that came from advertising and television, the print media and the music industry also contributed significantly to the total revenues of the industry.

The net profit margin (NPM) for the quarter improved from 18.88% to 23.95%. The operating profit jumped from Rs 559.94 crore to Rs 668.03 crore, which is almost 19.30% more than the previous year. The operating profit margin increased from 33.86% of last year to 35.17%.

Cygnus Business Consultant, a Hyderabad-based research firm, estimates that the domestic entertainment and media industry will record a cumulative annual growth of 18% over the next four years to reach a size of Rs 1,15,700 crore.

### Television Industry

Amongst the segments of the industry, the television industry segment will continue to contribute the largest share as in the last three years. The television industry revenues are expected to grow Rs.519 billion by 2011, implying a 22 percent cumulative annual growth over the next few years. Subscription revenues are projected to be the key growth driver for the Indian television industry over the next five years. Subscription revenues will increase both from the number of pay TV homes as well as increased subscription rates. The buoyancy of the Indian economy will drive the homes, both in rural and urban (second TV set homes) areas to buy televisions and subscribe for the pay services. New distribution platforms like DTH and IPTV will only increase the subscriber base and push up the subscription revenues.

## Filmed entertainment

The Indian Filmed Entertainment industry is projected to grow to Rs. 175 billion by 2011, implying a 16 percent cumulative annual growth over the next five years. Indians love to watch movies. Advancements in technology are helping the Indian film industry in all the spheres – film production film exhibition and marketing. The industry is getting increasingly corporatized several film production, distribution and exhibition companies are coming out with initiatives to set up more digital cinema halls in the country are already underway. This will not only improve the quality of prints and thereby make film viewing a more pleasurable experience, but also reduce piracy of prints. More theatres across the country are getting upgraded to multiplexes

## Radio

The Radio industry, fuelled by the positive FM-II Radio Policy is projected to grow to Rs. 17 billion by 2011, implying a 28 percent cumulative annual growth over the period of years. The cheapest and oldest form of entertainment in the country, which was hitherto dominated by the AIR, is going to witness a sea-change very shortly. In 2005, the Government opened up the sector to foreign investment along with migration to a revenue-share scheme. These factors along with privatization of a large number of frequencies as part of the FM II Radio Policy will drive growth in this sector. As many as 338 licenses were given out by the Indian government for FM radio channels in 91 big and small towns and cities. This deluge of radio stations results in opportunities for content and trained talent. New concepts like satellite radio, visual radio and community radio have also begun to hit the market. Increasingly, radio is making a comeback in the lifestyles of Indians.

## Music

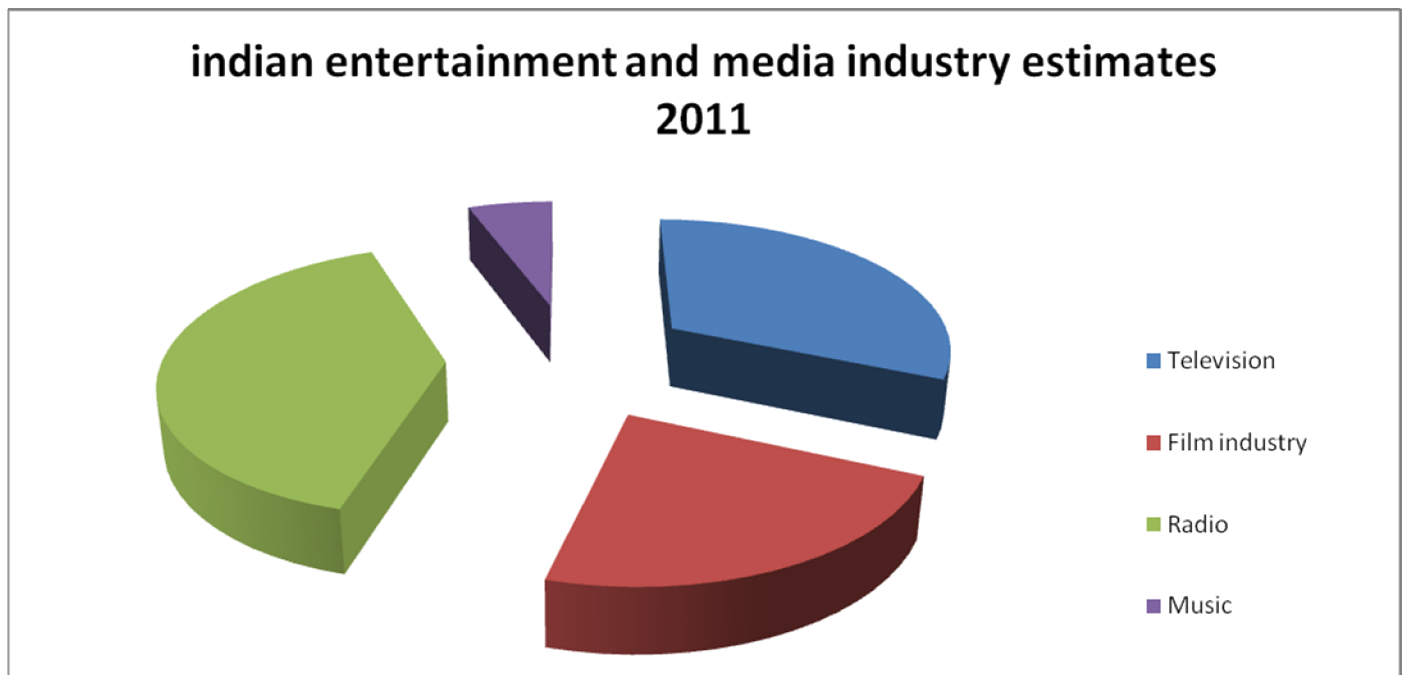
While physical sales in the music industry continue to be hampered by piracy and falling prices, digital music has witnessed a surge that will propel this industry in the next few years. The music industry is expected to grow at the rate of a CAGR of 4% in the next few years propelling it to Rs. 8.7 billion by 2011 on an overall basis. The growth in Digital Music is expected to grow by 25 percent to Rs. 1.8 billion by 2011.

### Growth rate and revenue of the industry

(Rs in Billions)

Particulars	2008F	2009F	2010F	2011F	CAGR
Television	266	331	431	519	22%
Filmed Entertainment	112	126	146	175	16%
Radio	8.5	11	14	17	28%
Music	7.5	7.6	8	8.7	4%
Total	394	475.6	599	719.7	18%

Sources: Industry estimates. The figures taken above include only the legitimate revenues in each segment.



## Convergence Trends in India

The term convergence describes two trends: the ability of different network platforms (broadcast, satellite, cable, and telecommunications) to carry similar kinds of services; and the merging of consumer devices such as telephones, televisions, or PCs. From a technology perspective, the twin forces accelerating convergence are increased broadband penetration and increased standardization of networks and devices to use the Internet Protocol (IP).

Convergence collapses previously distinct media distribution channels (for example, broadcast/cable television, radio, print, online) into a single media delivery chain. A converged infrastructure supports a range of interaction modes between users and content. Moreover, the open transport and interface protocols of IP mean that access to content has become largely network and device independent.

Fundamentally, convergence affects the two-step process at the heart of any media-based industry: content creation and transport. The first step entails selecting, packaging, and encoding content into a medium. The second step transports content to its destination and then decodes it for use. In most instances, it is the second step that defines a particular media market, which influences the form taken by the content in the first step. Content owners are both facilitators and beneficiaries of convergence. They make converged media experiences possible by offering consumers their content libraries in digital format through any access device and network. They benefit from convergence by serving consumers' new media needs with the appropriate distribution and business models.

Digital Cinema Combination of three phases: digital production or postproduction, digital delivery and digital projection for enhanced movie viewing experience to audiences. Approx. 10% of about 12,000 movies theatres have turned digital with digital projectors and servers to run digital prints.

Ancillary revenues earned by film producers estimated to increase by 20 per cent a year by selling their digital rights to mobile companies and satellite rights to TV broadcasters and distributors (cable companies and DTH players).

Mobile Ads are currently text-based and appear along with search results Delivered to mobile devices and they contain either a link to a mobile website or a phone number which users can click on to generate a call example Google has started testing mobile ads for advertisers in India.

Mobile VAS Industry (excluding SMS) is thriving on Ringtones and Ringbacktones, which are the primary revenue drivers. Voice based and Text based information services are also significant. Mobile Music and Mobile Gaming market is small but is expected to grow faster than other services.

IPTV is set to pose a significant challenge to established cable and DTH operators with its 'Triple Play' promise of high-speed Internet, television (video on demand or regular broadcasts) and telephone service over a single broadband connection. Launched by MTNL last year, other operators like Bharti and Reliance are also undergoing trials.

Mobile TV: It works by receiving a digital TV broadcast signal optimized for mobile devices in much the same way as televisions do at home. Operators and broadcasters have to put up towers across cities. Nokia has tied up with Doordarshan, the State Broadcaster, to conduct a pilot test using digital video broadcaster-handheld (DVB-H) technology for rollout of services. Trials are also being conducted by Mobile Operators.

Mobile Operators and Movie hall chains have started tying up for purchase and payment of movie tickets through mobile. E.g. AirTel tie up with PVR Cinemas for mobile ticketing services.

Equipment vendor Nokia has tied up with a Film training institute and announced a Mobile Film Award aimed at promotion of a new mobile model that will judge entries for short movies produced using the particular handset model.

### Current Market trends

Walt Disney investing US\$ 202.2 million in UTV: Walt Disney has offered to invest Rs 805 crore to increase its stake to 32.1 per cent in media and entertainment company UTV. The California-based family entertainment and media enterprise, at present, has 13.7 per cent stake in UTV.

Modern multiplexes redefine experience: Adlabs Cinemas, an arm of the Reliance-Anil Dhirubhai Ambani Group's Adlabs Films Ltd, is raising the stakes in the battle for cinema goers' wallets by launching a chain of stand-alone luxury lounges centered on film. The cinema chain will open up to a dozen independent 6,000-10,000 sq. ft lounges over the next year, loosely based around the concept of its existing "ebony lounge" format that offers audiences reclining leather chairs and waiter service. Adlabs has also launched India's first "6D cinema" in Agra, allowing audiences the simultaneous experience of sight, smell, sound, touch and motion.

Fame limited plans: to open at least six so-called gold class lounges within multiplexes this year, in addition to the four it runs currently.

India's Reliance Entertainment in Hollywood deal: Reliance Entertainment, a unit of Reliance ADA group, controlled by billionaire Anil Ambani said it has signed deals with eight Hollywood production houses, as it seeks a bigger global presence. The deals are with production houses including George Clooney's Smokehouse Productions, Tom Hanks' Playtone Productions, Brad Pitt's Plan B Entertainment, Chris Columbus' 1492 Pictures and Nicolas Cage's Saturn Productions

India leisure and entertainment trends report 2008: The study being carried out by The Knowledge Company, a division of Technopak. The study shows fun is very serious business today and there is a blurring of lines between leisure and de-stressing. While TV viewing is the most favorite past time with 75% indulging in it, music too has become very popular with the coming of FM.

Move over multiplexes - now megaplexes are here: Adlabs Cinemas has drawn up a plan to build 12 megaplexes in India where you can not only see movies but also cricket and soccer matches on screen! Unlike five to six screen multiplexes,

the megaplexes will have 11 to 15 screens with a seating capacity to accommodate 4,000 to 5,000 people in each of them

**Corporates float funds to capitalize on film boom:** With over 250 films releasing a year and that number growing continuously entertainment companies are floating film funds, to finance film productions or buy film rights, to capitalize on the boom in film-making. The first such film funds was the Indian Film Company (IFC) set up by Network18. IFC is an investments and intellectual property rights firm, which last year raised over Rs 445 crore from the Alternative Investment Market of the London Stock Exchange. Now others, among them Pyramid Saimira, Australia's Charter Pacific Corporation Cinevistaas, and a group of Bollywood financiers, are joining the bandwagon Chennai-based Pyramid Saimira Theatre, a production to multiplex company, plans to float a film fund of around Rs 250-300 crore this year.

**Mobile TV: The next big thing:** Indians are now warming up to the idea of mobile television (TV), according to a recent report by Springboard Research that predicts 12 million subscribers will use the mobile TV service in the first year of its launch. Currently in India, only Doordarshan offers mobile TV service, however according to the report, in recent months the market has seen increased activities from various stakeholders including technology providers, network equipment vendors and mobile service providers like Nokia, Spice Telecom, Qualcomm and Samsung.

**Warner Bros Motion Picture in pact with Prime Focus:** Warner Bros Motion Picture Imaging (MPI), the Hollywood studio's 4k post production facility, with films like Ocean's 13 to its credit, has entered into a strategic alliance with Prime Focus, the India-based post production house with operations in UK US, Canada and India. The tie-up will allow both companies to move content seamlessly from facility to facility using the most cost efficient method, which will allow them to process work in the time zone that most closely meets individual filmmaker's needs and schedules.

**Digital TV to become more popular by 2010:** The domestic television market is moving towards digital platforms. By 2010 28 per cent of the estimated 100 million pay TV households will migrate to digital pay TV platforms such as digital cable, DTH (direct-to-home) and IPTV (internet protocol TV). DTH may emerge as

the leader among the digital platforms in the next three years, said an Ernst & Young report - "India Digital Revolution: Impact on Film & Television" - released at the Assocham global summit on the media and entertainment industry in Delhi. The report expects India's television advertising market to grow by 14 per cent annually for the next three years. According to the report, by 2010, 28 per cent of the 100 million pay TV households will switch over to digital TV platforms.

**Indian music labels gear-up for online sales:** Music industry bigwigs like Sony BMG, Saregama India, and T-Series have made a total of over 5 million tracks available on their own websites and other portals for full song downloads in a bid to monetize their content through the internet, and fight piracy. Saregama India, for instance, has been test marketing the service for over two months now. By December end, it plans to make available 4.6 million tracks it has acquired, apart from the 0.3 million music tracks it owns under its banner. The songs will be available on the company-owned website for around Rs 12 for five minutes. T-Series and Sony BMG too are in the race, and Tips is expected to soon join the pack. While some music companies have the tracks loaded on their own portals, others like T-Series and Sony BMG have their tracks available in association with other portals like MSN, Sony Connect, and Hungama Mobiles among other portals. In most cases, the pricing for Internet downloads vary.

## Major Players in the Film Industry

### Adlabs

Adlabs is by far the largest entertainment conglomerate in the country. Thought leaders in every sense of the word, we are the defining force in every sphere of the entertainment industry production, distribution, processing or in cinemas - having started as a laboratory for processing ad films over three decades ago. Be it pioneering the concept of multiplexes, giving a corporate face to movie making, or introducing the IMAX experience, it has always been Adlabs first – in short, 'never a dull moment' for the industry.

June 2005 marked the milestone in Adlabs when Reliance ADAG stepped into the company and became majority promoter shareholders. With this move Adlabs was catapulted to being part of one of the leading business groups in India with a combined market capitalization exceeding one lakh crore.

### Mukta arts

Started 28 years ago, Mukta Arts is one of the most reputed companies in the Indian entertainment industry and has pioneered many firsts, which has been a benchmark for other companies in this sector. Mr. Subhash Ghai, the name behind Mukta Arts and an institution in him, is the founder and creative head of the company, the present business of Mukta is the generation and distribution of contents for the entertainment industry. It has to its credit a long list of commercially successful Hindi films. These films have been extensively appreciated by the audiences both in India and overseas. These films also have considerable archival value, which ensures a steady flow of revenue into the company. During the last 28 years, the company has produced over 20 films and growing, all of which have generated tremendous profits for the company. Most of these films have been directed by Mr. Ghai and some of them are amongst the most popular Hindi films in recent times. Films like Karz, Hero, Karma, Ram Lakan, Saadagar, Khalnayak, Pardes, Taal and Yaadein are memorable blockbusters.

## Yash Raj Films

YRF Studios started out as a film-making company in 1970. In the last three decades it has grown from strength to strength and today has to its credit India's most enviable film catalogue – some films of which have been the highest grosser in the entertainment business. YRF Studios has also been involved in production of television software, ad films, music videos and documentaries. YRF Studios has its own Post-production facilities, Television Division, Design Cell, and Equipment Division, Marketing Division, Internet & New Media Division, Licensing & Merchandising Division – all in-house facilities, which make it one of the most coveted creative houses in the country. Collectively, 12 of the recent YRF productions have grossed in excess of 200 Million US Dollars worldwide. The 6 highest selling music albums of all times include 4 YRF productions.

## Shringar Films

In the value chain of film making, Production, Distribution and Exhibition are the three key segments, of which, the distributor is the key stake holder. Shringar Films Limited, one of the leading film distributors in India. SFL was founded in 1999 and it took over the business of Shringar Films which was founded in 1975, a partnership firm of the Promoters, with the objective of bringing in the highest quality of entertainment to Indian movie audience.

## Pritish Nandy communications

Pritish Nandy Communications is one of the first corporate entities in Bollywood. Founded by Pritish Nandy, well-known poet and journalist, PNC has been professionally managed from its very inception. It was one of the first media and entertainment companies to go public in 2000, when it listed on India's two best known stock exchanges, the BSE and the NSE, where it is among the few listed stocks in the sector. Well known global funds like Soros, Oppenheimer Alliance and Lloyd George hold PNC stock.

## Key Challenges

Though the Entertainment and Media industry is growing in leaps and bounds, the full potential is yet to be tapped. One of the ways of realizing the potential is not only the removal of certain obstacles in the industry but also the provision of certain incentives to key segments of the industry in order to fuel the industry growth drivers further and thereby realize its full potential. Some of the recommendations as provided are as below:

### Digitalization of Television Networks

India, today, does not have a national digital policy or plan. Though the regulator TRAI came out with recommendations for digitalization of cable networks, there are several more measures that are required to be taken in order for the industry to truly benefit from Digitalization:

- Conversion to digitalization should be mandatory and not left on a completely voluntary basis
- A clear time frame needs to be defined for transition to digital including a launch date and a sunset date
- Licensing process for allocation of spectrum should be made stringent to subscriber base, area of operation etc.
- Fiscal incentives such as waiver of service and entertainment tax, income tax holiday, etc. to be provided to operators for transition to digital.

### Uniform Entertainment Tax across all states

Since levy of entertainment tax and regulation of cinemas is a State subject, the Centre presently has a limited role to play. The long-standing demand of the film industry is to shift 'Entertainment and Media' from the State List to the Concurrent List through a constitutional amendment. This will enable uniform policies for Cinema Construction Bye-laws and Entertainment tax. There is a need to implement uniform tax policies across the country, to enable standardized

growth. The recommendation is to have a uniform Entertainment tax so as to stop reportage of short box office collections resulting in a loss to the ex-chequer

### Customs Duty

Customs duty is levied on import of equipment and other hardware used in the production and post production of filmed entertainment programmes. At a time when India is trying to position itself as a hub for production of entertainment and competing in the International market on an equal footing, the necessary infrastructure and equipment is of vital importance. To provide impetus to the technological up gradation of facilities and infrastructure, the necessary equipment and hardware must be allowed to be imported without the additional burden of customs duty.

### Multiplexes

An Income Tax Concession under Sec. 80 –1B of the income tax act was introduced with effect from 1st April 2002, allowing Multiplexes commissioning before 31st March 2005, an income tax rebate to the extent of 50% on book profits. It is requested that this concession be reintroduced so as to enable growth of exhibition sector in the country.

### Piracy

As India moves into knowledge based economy, a strong Intellectual Property regime which provides adequate safeguards to the holder of copyright becomes increasingly important. The menace of piracy is rapidly eating away into the foundations of the entertainment industry. The piracy issue should be handled at three levels; Policy, Enforcement and Prosecution. The Industry recommends allocation of specific funds to fight piracy of entertainment content. This fund should be utilized in Advocacy and awareness of the piracy issue and also enforcement & legal matters.

## Export Promotion

To promote Brand India, it is important that Indian companies and producers participate in global festivals and markets such as the Cannes & Berlin Film Festivals, MIPCOM, MIDEM, MIPTV, IBC, NATPE, NAB, Interbee, AFM and CASBAA under a common India umbrella. The Ministry of Information and Broadcasting has taken initiative by deciding to set up the task force with the specific aim of export promotion. This council supported by adequate funding will act as a catalyst for exponential growth in exports of Indian Entertainment and Media Industry.

## Co- Production Treaties

Signing of Co-production Treaty with Canada, UK is already being looked at by the Information and Broadcasting Ministry. The Industry recommends that the Government takes on further initiatives to enter into more such treaties with many more countries so as to provide a further boost to the Indian Film industry.

## Education & Training

The Entertainment and Media industry today faces an acute shortage of professionals. It is recommended that suitable incentives should be provided by the Government for setting up polytechnics, institutes and film schools. It is recommended that existing universities should include Film, Broadcast, Event Management and Digital technology in their curriculum. Similarly, institutes of Higher Learning like the IITs and the IIMs should be encouraged to offer LD are encouraged to offer specialization in Media & Entertainment.

## Single window clearance for shooting in India

Today, India lacks a single-window clearance system not only for the Entertainment and Media Industry but for other industries as well. Setting-up of such a system could prove to be a great revenue earner for the country as a hub for production of entertainment content.

## CONSTRUCTION

### Construction industry – A growing opportunity

The Indian infrastructure, industrial, and real estate sectors are experiencing strong capacity growth. We believe this investment boom is driving strong growth in the industry. We estimate INR34,385 billion worth of construction opportunities in India for the next five years, representing a CAGR of 20% versus a CAGR of 14% for the past five years

The Planning Commission of India estimates that total investment in various infrastructure sectors for the next five years will be INR20,271 billion (USD494 billion), which is 2.3x more than that for the past five years (INR8,085 billion) under the Tenth Five-Year Plan. Similarly, we expect corporate capex during FY08-FY12 to be 2.6x more than that for FY03-FY07. We believe robust demand, high commodity prices, and a strong balance sheet are driving this investment we also expect India's real estate sector to witness robust growth given that the expected investment for the next five years more than doubles that of the past five years.

According to the Construction Federation of India (CFI), construction is the second largest employer after the agriculture sector. Currently, the construction industry directly or indirectly employs approximately 33 million workers, representing 14% of the workforce. It also accounts for nearly half of the fixed capital formation.

## Major players in construction

### Archivista Engineering Projects Pvt. Ltd., Pune

Archivista started in 1975 as a partnership firm to render Architectural Design, Structural Design and Construction Supervision Services. It was incorporated into a Private Limited Company in 1989 as "Archivista Consultants Pvt.Ltd." Sister concern for Engineering Services & Turnkey solutions is established as "Archivista Engineering Projects Pvt.Ltd." in the year 2004. Over the years Archivista has matured into an Integrated Consultancy, Project Management & Turn Key Execution organization.

### B. G. Shirke Construction Technology Ltd., Mumbai

B.G. Shirke Construction Technology Limited (BGS) was established in 1955 as B.G. Shirke & Company, a partnership firm. While construction of residential and other buildings is the main line of business for BGS, the company is also into the manufacture of structural components and construction equipment such as tower cranes. The manufacturing facility is located in Pune, Maharashtra. Traditionally, BGS' major operations have been in Maharashtra, but of late the company has entered States like Karnataka and got into the roads and highways sector as well. BGS' existing clients include City & Industrial Development Corporation of Maharashtra Limited (CIDCO), Maharashtra Housing & Area Development Authority (MHADA), National Highway Authority of India (NHAI), and Maharashtra State Road Development Corporation Limited (MSRDC).

### Devi Construction Co. Pvt. Ltd., Pune

Group of Companies specializes in construction of Housing Projects as commercial / schemes and Industrial Construction and Heavy and Complicated Machine foundations. Group is also engaged in Real Estate; Construction of ownership Housing and Commercial Schemes the Company has been versatile in carrying out specialized works like Bull-sheds, Artificial Insemination centers, Gobar gas plants etc., for Animal Husbandry, Fish rearing ponds for Fisheries Department and Swimming pools for the Elite clientele. The Company has in-house Transport Division. Company owns Excavators cum Loaders, Vibratory Rollers, Tractors and

Tremix Dewatering System, which is extensively used for heavy Industrial floorings

Hindustan Construction Co. Ltd., Mumbai

HCC is an integrated group spanning Construction, Real Estate and Infrastructure development. The HCC Group of companies comprises of HCC Construction, HCC Infrastructure, HCC Real Estate (HREL) and Lavasa Corporation. The group specializes in technically complex, new-age construction in infrastructure projects, as well as EPC, BOT Integrated projects and townships. HCC has made an unmatched contribution to civil engineering landmarks, having executed over 300 Bridges, 42 Dams and Barrages, 13 Hydel and 4 Nuclear Power plants, 140 Kms of Tunneling and 1,000 Kms of Roads and expressways. Its Wholly Owned Real Estate Subsidiary, HREL, is developing LEED certified, state-of-the-art, 1.8 million sq ft multi-tenanted IT Park located at Vikhroli, Mumbai's emerging IT hub. HREL is also developing free India's largest Hill Station, Lavasa, spread across a picturesque landscape of 12,500 acres, located 45 minutes away from Pune. HCC has been entrusted with the construction of high value projects across segments like transportation, power marine projects, oil and gas pipeline constructions, irrigation and water supply, utilities and urban infrastructure. The first construction company in India to be certified for ISO 9001, ISO 14001 and OHSAS 18001 for its Quality, Environmental and Occupational Health & Safety Management System

Hiranandani Developers Pvt. Ltd., Mumbai

Hirco PLC is one of India's largest real estate investment companies. The company was formed in 2006 to co-invest in large scale mixed-use township developments in suburban areas outside city centres in India. These townships will be predominately residential and provide high quality affordable housing for India's growing young and affluent working population. Hirco is listed on the London Stock Exchange AIM market. At the time of its admission to trading, Hirco was the largest ever real estate investment company IPO on AIM and the largest AIM IPO in 2006.

## Unity Infraprojects Ltd., Mumbai

With over a quarter century of excellence in diverse areas of infrastructure development, Unity Infraprojects is today one of the largest civil contractors in India. We have successfully completed some of the most challenging infrastructure projects in the country. Many of the best dams, tunnels, bridges flyovers, subways, roads and buildings of India bear the Unity Infraprojects stamp of quality, reliability and timely project completion. Unity Infraprojects is an ISO 9001-2000 and 14001-2004 company, with accreditation from The ANSI-ASQ National Accreditation Board and Orion Registrar Inc. Company gone for Public issue in the year 2006 by listing both in BSE as well as NSE. It is the flagship unit of the Mumbai based KK Group of Companies which has its interests spread across a wide spectrum of businesses such as concrete block manufacturing and quarrying, hotel and organized retailing industries Unity Infraprojects has done the city of Mumbai proud - with an array of glittering landmarks. Utilitarian projects like the impressive Chhatrapati Shivaji Domestic Airport Terminal 1B, Khodadad Circle flyover at Dadar, the ultramodern CST Subway, the new generation Millennium Business Park and the imposing Seawoods Estate for NRI's at Navi Mumbai; Unity Infraprojects Limited has ushered in a sea change in the city's landscape.

## Simplex Infrastructures Ltd., Mumbai

Ground engineering encompasses activities related to 'foundation engineering' – a thorough understanding of various soil types, their load-bearing capacity and the specialized alteration required to enable the soil to withstand pressure for years to come Having been present in this space since inception in 1924, mastery of this space enabled Simplex to forward integrate to provide services across civil and structural engineering and end-to-end infrastructure solutions. Till date Simplex Infrastructure has installed over two million piles. Simplex introduced the patented Geopiers technology in piling and soil densification during as assignment for the Group Housing Project in Sector 61, Noida. Simplex also accepts contracts in the area of sand drains, band drain, sand piles, rammed stone columns, geo grid and geo-textile applications, reinforced earth applications, CNS technology, earth applications and special problem shooting. Simplex evolved different methods of piling to meet ever changing construction needs such as: Driven cast-in-situ RCC piles, Bored cast-in-situ piles, Pre-cast single length RCC piles, Pre-cast jointed RCC piles, Under reamed piles, Steel / RCC sheet piles, Diaphragm walls

The Company's major achievements in foundation engineering comprise the following: Largest single contract in piling, fastest installation rate for cast-in-situ piles ever installed in India, deepest cast-in-situ piles and the deepest jointed pre-cast driven piles.

### Shapoorji Pallonji & Co. Ltd., Mumbai

Mumbai was largely an uninhabited cluster of islands. To fulfill the water supply needs of the city a reservoir was built, in the famous Malabar Hills. Not only did the reservoir sustain the needs of Mumbai for the next 100 years, it also witnessed the growth of Mumbai as the Commercial Capital of India. The reservoir was built by a company called Littlewood Pallonji & Co., which today is Shapoorji Pallonji Co. & Ltd. one of the leading construction giants in India and abroad. , the company's expertise has been repeatedly showcased on projects which involved a major advance in construction technology or whose size was beyond the capacity of most others Blessed with a rich legacy and heritage, it has marched into the new millennium with modern management skills, state-of-the-art technology and the ideals of innovation and customer satisfaction. Shapoorji Pallonji has built diverse civil and structural engineering masterpieces like factories nuclear research establishments, nuclear waste handling, scientific and research establishments, stadia and auditoria, airports, hotels, hospitals, giant skyscrapers, housing complexes, townships, water treatment plants, roads, expressways, power plants and biotech facilities. When the Sultan of Oman decided to build a palace around his throne, he placed his trust in Shapoorji Pallonji. Shapoorji Pallonji & Co. Ltd. is just one of the jewels in the SP crown. It draws vital support from other group companies to be able to execute turnkey projects swiftly and efficiently. These include SP Fabricators AFCONS, Forbes, Sterling and Wilson, SP Construction Materials Group, SP Real Estate and Samalpatti Power Company Private Limited. Together, this conglomerate continues to strive towards perfection, quality and commitment virtues. Shapoorji Pallonji is the largest private shareholder (18.5%) of TATA SONS LIMITED, the Holding Company of the TATA Group. The Annual turnover of the TATA Group is over \$15 billion.

## Patel Engineering Ltd., Mumbai

A dynamic and progressive Indian Engineering company committed to providing the entire range of civil engineering services involved in the design, construction of Power Houses, Hydroelectric Projects, Commercial Building, Industrial Complexes, Dams, Tunnels, Underground Structures, Steel and Concrete Structures, Bridges Marine Works, Flyovers and National Highways in India and abroad. PATEL ENGINEERING LTD has a track record of over 350 projects, unique working concepts ISO 9002 : 2000 accreditation established in India in 1949, and access to internationally renowned Licensors & Contractors, make us the ideal engineering solutions partner for a wide spectrum of services covering a variety of industries.

### Industries which would affect construction

#### Cement industry

The Indian cement industry with a total capacity of 151.2 million tones (including mini plants) in March 2003 has emerged as the second largest market after China, surpassing developed nations like the USA and Japan. Per capita consumption has increased from 28 kg in 1980-81 to 110 kg in 2003-04. India is the second largest cement producing country in the world Cement demand in the country grows at roughly 1.5 times the GDP growth rate the demand for cement is closely related to the growth in the construction sector. Consequently, cement demand has been posting a healthy growth rate of around 8 per cent since 1997 propelled by the increased thrust on infrastructure development and the higher demand from the housing sector and industrial projects. This trend is likely to continue in the coming years

## Cement - Varieties and Technology in Indian markets

There are different varieties of cement based on different compositions according to specific end uses, namely, Ordinary Portland Cement, Portland Pozzolana Cement, and White Cement Portland Blast Furnace Slag Cement and Specialized Cement the basic difference lies in the percentage of clinker used.

- Ordinary Portland cement (OPC): OPC, popularly known as grey cement, has 95 per cent clinker and 5 per cent gypsum and other materials. It accounts for 70 per cent of the total consumption
- Portland Pozzolana Cement (PPC): PPC has 80 per cent clinker, 15 per cent pozolona and 5 per cent gypsum and accounts for 18 per cent of the total cement consumption. It is manufactured because it uses fly ash/burnt clay/coal waste as the main ingredient.
- White Cement: White cement is basically OPC - clinker using fuel oil (instead of coal) with iron oxide content below 0.4 per cent to ensure whiteness. A special cooling technique is used in its production. It is used to enhance aesthetic value in tiles and flooring. White cement is much more expensive than grey cement
- Portland Blast Furnace Slag Cement (PBFSC): PBFSC consists of 45 per cent clinker, 50 per cent blast furnace slag and 5 per cent gypsum and accounts for 10 per cent of the total cement consumed. It has a heat of hydration even lower than PPC and is generally used in the construction of dams and similar massive constructions
- Specialized Cement: Oil Well Cement is made from clinker with special additives to prevent any porosity.
- Rapid Hardening Portland cement: Rapid Hardening Portland Cement is similar to OPC except that it is ground much finer, so that on casting, the compressible strength increases rapidly.

- Water Proof Cement: Water Proof Cement is similar to OPC, with a small portion of calcium stearate or non- saponifiable oil to impart waterproofing properties.

### Major domestic players

- Associated Cement Companies Ltd (ACCL)
- Birla Corp
- Century Textiles and Industries Ltd (CTIL)
- Grasim-UltraTech Cemco
- Gujarat Ambuja Cements Ltd (GACL)
- India Cements
- Jaiprakash Associates Limited
- JK Synthetics

### Construction equipment industry

The Industry spans a range of products and services. Products and spare parts constitute the bulk of the industry. Services segment is still nascent and presents good opportunities for growth. The unorganized sector contributes about 15% by value, though the majority of players belong here.

The industries wide range of products is as below:

### Earth moving equipment

- Backhoe Loaders
- Excavators
- Loaders
- Bulldozers
- Skid-Steer Loaders
- Wheeled Loading
- Shovels
- Wheel Loaders
- Motor Graders

- Motor Scrappers
- Dump Trucks
- Wheel Dozers
- Draglines

### Concrete equipment

- Concrete Breaker
- Paver Finisher
- Concrete Batching Plants
- Concrete Mixers
- Hot mix plants

### Material handling equipment

- Telescopic Handlers
- Crawler Cranes
- Mobile Cranes
- Truck Cranes
- Forklifts
- Pick & Carry Cranes
- Slew Cranes
- Tower Cranes
- Conveyors

### Material preparation

- Crushing Plants
- Jaw Crushers

### Road construction equipment

- Compaction Equipment
- Vibrator Rollers
- Pavers

### Construction vehicles

- Dumpers
- Articulated Haulers

### Tunneling and drilling

- Rotary/ DTH Drilling
- Hammer Track Drill
- Boring Equipment
- Demolition Equipment

Earthmoving Equipments constitute the biggest segment and Excavators, the largest product line within the segment. Earthmoving Equipments constitute the biggest segment and Excavators, the largest product line within the segment. The Excavator market is estimated at US\$ 1.4 billion, growing at 30% CAGR, driven by 22-60 tone excavators.

New areas are emerging, that present good growth potential for the future

**Rentals:** Currently, equipment rentals contribute to just about 2% of the market; this is expected to grow to about 25% by 2010.

**Leasing:** Equipment leasing expected to grow from about 2% to around 8% by 2010

**Financing and end-to-end services:** Some of the large players are looking at providing end-to-end services to the users throughout the equipment lifecycle – financing, user training, maintenance and buy-back of used equipment

**Exports:** Exports of Construction Equipment (CE) from India grew by 30% CAGR over 2001-05 and are expected to sustain this growth in the future.

## Major players

- JCB India
- Bharat Earth Movers Ltd. (BEMML)
- L&T Case, L&T Komatsu
- Ingersoll-Rand India Ltd.
- Tractors India Ltd. (TIL)
- Telco Construction Equipment Company
- Voltas
- Godrej & Boyce Mfg. Co. Ltd.
- Escorts Construction Equipment Ltd. (ECEL)
- Action Construction Equipment Ltd. (ACE)

## Steel industry

India's rapid economic growth is being built on a frame of steel. Soaring demand by sectors like infrastructure, real estate at home and abroad, has put India's steel industry on the world steel map. The rapid rise in the production has resulted in India becoming the fifth largest producer of steel in the world, up by two places, on the back of 50.71 million tones (mt) production of crude steel and 51.9 mt of finished steel. The production of finished steel grew by 16.52 per cent, from 44.54 mt in 2005-06 to 49.39 mt in 2006-07. It is estimated that by 2015-16, India would become the second largest steel producer globally with an annual production of 137 mt. Driven by a booming economy and concomitant demand levels, consumption of steel has grown by 12.5 per cent during the last three years, well above the 6.9 per cent envisaged in the National Steel Policy. The scope for raising the total consumption of steel in the country is huge, as the per capita steel consumption is only 35 kgs compared to 150 kg in the world and 250 kg in China. With this surge in demand level, steel producers have been reporting encouraging results. For example, the top six companies, which account for 70 per cent of the total production capacity, have recorded a year-on-year growth rate of 11.4 per cent, 12.7 per cent and 9.7 per cent in net sales, operating profit and net profit, respectively, during the second quarter of 2007-08.

## Current Market Trends

Construction technology evolving rapidly for faster delivery: Construction technology is evolving rapidly driven by the growth in demand for developed space which calls for faster delivery while controlling costs and maintaining quality. One-fourth of the foreign investments in 2006-07 were into the real estate sector, and demand for corporate space and built-up space across all segments of the market continues to grow, this is expected to drive the domestic real estate market to \$90 billion in 2015 up from about \$12 billion now. The construction industry is evolving with application of IT for project management and pre fabricated cost effective building components for faster delivery and cost conservation .The industry is growing rapidly and the demand across segments commercial and office complexes, hospitality, residential and retail is growing rapidly

Deutsche Bank arm to invest US\$ 1 billion in India realty: A unit of Deutsche Bank aims to invest more than \$1 billion over three years in Indian construction and real estate projects. The federal government has estimated India will need about \$500 billion between 2007 and 2012 to modernize and expand the country's rag-tag power and transport networks. India's largest lender, State Bank of India plans to partner Australia's Macquarie Capital to raise \$2 billion to fund infrastructure projects.

L&T bags US\$ 330.9 million Cairn-ONGC order: Larsen and Toubro Ltd has bagged two major contracts worth Rs 1,300 crore from Cairn India-ONGC joint venture for the construction of civil works and the consolidated construction works for the Northern Area Development Project located near Barmer in Rajasthan. The scope of the work covers the development of infrastructure facilities, the construction of 18 well pad structures, detailed engineering and construction of all civil and electromechanical works at the Mangala and Raageshwari fields, offsite infrastructure facilities, supply, installation and commissioning of 33 KVA high voltage power line system and the telecom network.

Potential for higher growth seen: The earth moving and construction equipment (ECE) industry has the potential to expand five-fold from the revenues of \$2.3 billion last year to \$12-13 billion by 2015, which is equivalent to China's current level of \$13-14 billion, with a significant export contribution

Tata Power signs US\$ 1 billion deal with Korean firm: Tata Power Company, which is developing India's first 4,000 mw ultra mega power project (UMPP) in Mundra has signed up a contract worth \$1 billion with Korea's Doosan Heavy Industries & Construction Company for supply of super-critical boilers and development of ancillary civic structures. The contract to Doosan was awarded on an engineering, procurement and construction (EPC) basis. The company's scope of work would, therefore, include civil works in the areas housing the super-critical boilers, which would be used for the first time in India. These boilers and associated super-critical technology would help in the generation of 800 mw of power from each unit of the project, which is 300 mw more than the highest generating unit in existence at present.

Morgan Stanley invests US\$ 152 million in Oberoi Constructions: Morgan Stanley Real Estate has invested Rs 675 crore in Mumbai-based Oberoi Constructions for an undisclosed stake there were a total of fourteen funds in the bid for the stake - Blackstone, Carlyle and GE. Oberoi Constructions has projects lined up for Pune, Hyderabad and Bangalore for which it will acquire land.

## INFRASTRUCTURE

As India continues to grow at more than 8%, a balanced increase in the gross capital formation (GCF) in infrastructure as a proportion of the GDP emerges as the most important key in sustaining high economic growth. Though recently there have been investments in the infrastructure sector, the GCF as a proportion of GDP continues to be lower at around 5%. As far as the physical infrastructure is concerned, there exists a huge deficiency, in our view. Inadequate infrastructure is identified as one of the biggest constraints of doing business in India. The main constraint of doing business in India was infrastructure. Based on case studies of fast-growing Asian economies, the gross capital formation in infrastructure (GCFI) in India should rise to 11% of GDP for sustaining GDP growth at 9%. However, given that the current investment rate is only at around 5%, a steep jump in investment rate may not be feasible over the next five years. Therefore, the Planning Commission of India estimates build in a gradual increase in infrastructure investment-to- GDP ratio to increase to 9% by the end of the Eleventh Five-Year Plan. The Planning Commission document states that investment in the Asian economies has been higher than required, and, hence, the projected investment in infrastructure can also help sustain GDP growth of 9% over the Eleventh Plan period.

### Investment in infrastructure according to the Planning commission

It is well acknowledged by the Planning Commission that to sustain GDP growth in excess of 9%, investment in infrastructure needs to accelerate. Currently, the GCFI is at 5% of GDP. As per the planning commission, the GCFI need to be increased to 9% of the GDP to sustain growth momentum in the economy. According to a recent consultation paper, 'Investment in Infrastructure' in the Eleventh Plan period (FY07-FY12) issued by the Planning Commission, the total investment in infrastructure is expected to be INR20, 271 billion (USD494 billion). This estimate assumes a 15% cut on the total investment estimates by the Planning Commission due to likely spillovers. The total Investment in infrastructure, which is based on sectoral analysis initially projected by the Planning Commission, was INR23, 849 billion (USD582 billion). The projected investment in infrastructure in the Eleventh Plan is 2.3x the amount in the Tenth Plan. The largest inflection in investments is expected to be in ports, airports, railways, and water supply and sanitation over the next five years. The Planning Commission estimates private sector share in the total investments to increase from 17% in the Tenth Plan to 30% in the Eleventh Plan. Strong private participation is expected in roads, power, ports and airport sectors. The Central government and state government budgets are estimated to contribute around 31% of the total planned investments in the Eleventh plan. An analysis of the Central budget documents indicates a CAGR of 24% in Central budget allocation towards infrastructure. According to government estimates, private participation in infrastructure currently is at 1% of GDP. The level of private participation in India is higher than some developing economies like China and Indonesia, but it is substantially lower Malaysia and Brazil... A large portion of the private participation has been in the telecommunications sector. If we were to exclude the investment in telecommunications, then private sector investment in infrastructure would have been only 0.3% of GDP since 2001.

Sector-wise investments in the Eleventh Plan working document

(INR in billions)

Particulars	Expenditure Xth plan	Investments planned X1th plan (initial estimates)	Investment targets (after 15% cut)	Inflexion over Xth plan	PPP opportunity	% Private share
Power	2,919	7,253	6,165	2.11	1,625	26
Roads	1,449	3,668	3,118	2.15	1,125	36
Telecom	1,234	3,141	2,670	2.16	1,777	67
Railways	1,197	3,035	2,580	2.16	505	20
Irrigation	1,115	2,625	2,231	2.00	----	0
Ports	41	870	739	18.05	545	74
Airports	68	409	347	5.13	212	61
Storage	48	263	224	4.64	112	50
Water Supply and Sanitation	648	2,343	1,991	3.07	54	3
Gas	87	241	205	2.35	65	32
Total Investment	8,805	23,849	20,271	2.30	6,020	30

Source: The Planning Commission of India

### Extent of private participation

Particulars	Centre (%)	State (%)	Private (%)
Power	35	38	26
Roads	36	28	36
Telecom	33		67
Railways	77	4	20
Irrigation	11	89	0
Water Supply and Sanitation	57	40	3
Port	21	5	74
Airport	39		61
Storage	20	30	50
Gas	68		32
Total	39.68	30.62	29.69

#### Roads

The Indian road system has been the first area within infrastructure to gain serious attention from the government. The sector has gained political consensus across the board as against the stiff opposition seen in other areas, such as airports and power. The Planning Commission of India has estimated an investment of INR3, 118 billion under the Eleventh Plan versus the INR1, 448 billion spent under the Tenth Plan. The estimate is 15% lower than projections of the Working Group, which has put the figure at INR3, 668 billion.

The Indian government has taken up ambitious program for road development (the NHDP) for the next ten years, which will involve around 53,000 kilometers of roads, entailing investment of around USD62 billion. The NHDP program has been divided into various phases to manage project execution. More than 12,000 kilometers of national highways have been four-laned under the NHDP program in the past six years.

### NHDP Phase I

The project was scheduled to be completed by 2006. More than 96% of the project has been completed with the remaining nearing completion.

### NHDP Phase II

Of the 7,300 kilometers to be constructed under this phase, 20% has been completed, 56% is under construction, and the remaining is yet to be awarded. Jammu & Kashmir (J&K) Andhra Pradesh (AP) and West Bengal (WB) account for a combined 70% of the roads yet to be awarded. At present, there is only limited visibility on the award of the remaining roads. Hence, we think it is unlikely that Phase II can be completed on schedule (deadline 2009).

### NHDP Phase III

Of the 12,109 kilometers, 4,815 kilometers under Phase IIIA and 5,800 kilometers under Phase IIIB on a BOT basis have been approved by the ministry. So far, 260 kilometers has been completed and 1,555 kilometers is under implementation. The award activity under this phase has fallen behind schedule. For instance, 3,278 kilometers was supposed to be awarded in 2008

#### Scenario of NHDP Phase III A for Maharashtra

Particulars	National highways	Length kilometers	Funds	Project status
Chhattisgarh / Maharashtra Border Wainganga Bridge	6	80.05	BOT	Under Implementation
MP/Maharashtra Border-Dhule	3	97	BOT	Balance for award
Nagpur- Wainganga Bridge	6	60	BOT	Balance for award

Pimpalgaon Nasik - Gonde	-	3	60	BOT	Balance award	for
Solapur Maharashtra/ Karnataka Border	-	13	30	BOT	Balance award	for
Pune - Khed		50	30	BOT	4 LANED	
Kondhali Telegaon	-	6	50	BOT	Under Implementation	
Nagpur kondhali	-	6	40	BOT	Under Implementation	
Dhule Pimpalgaon	-	3	118	BOT	Under Implementation	
Gonde-Vadape (Thane)		3	100	BOT	Under Implementation	

Current project offers of Road development in Maharashtra (NHDP)

STATE:	National highways	Length kilometers	Cost in INR Crore	Cost in USD Millions
Maharashtra				
Nagpur Bypass	7	21.26	183.48	40.77
MP/MH Border to Manasar	7	37.40	157.90	35.09
Manasar to Nagpur I/C Kamptee Kanoon	7	36.46	227.00	50.44

Twelve states have been in the forefront of road development through private participation. They are Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Karnataka, Tamil Nadu, Uttar Pradesh, Kerala, Haryana and Tamil Nadu. The development is also supported by aid from multilateral agencies and the Central Road Fund (CRF) scheme. Private investment of INR300 billion has been mobilized by the states. Of this, almost half comes from the state of Maharashtra as it can be seen in the table below:

State	Investment (INR billion)
Maharashtra	150
Andhra Pradesh	32
Rajasthan	29
Tamil Nadu	26
Karnataka	25
Haryana	24
Madhya Pradesh	23
Punjab	7
Gujarat	7

## Ports

India has around 12 major ports and 187 minor ports, with the major ports handling around 73% of the traffic. In FY07, ports in India handled 650 million tones of traffic, which witnessed a CAGR of 10% over the past three years. Over the past five years, traffic growth in minor ports has outpaced growth in the major ports. While the traffic at major ports recorded a CAGR of 10% over FY02-FY07, the minor ports recorded a CAGR of 12% in the period. This has resulted in increased shares in minor ports over the years. All of the major ports in India are currently operating at close to 100% capacity and congestion at ports has worsened over years. Six out of the twelve major ports had capacity utilization of greater than 100%. Overall capacity utilization of Indian ports had increased from 86% in FY03 to 92% in FY07. All areas of port operation are now open to private

participation. Also, 100% foreign direct investment (FDI) has been allowed in Indian ports. Opportunities for private players exist in construction of berths/terminals, warehousing facilities, installation of cargo handling equipment and construction of dry docks. Major international players, such as Maersk, Port of Singapore Authority, Dubai Ports International, and P&O Ports Australia, among others are already present in India. Private participation is very dominant in container terminal with 58% of the total container traffic being handled by privately operated berths.

The Jawaharlal Nehru Port Trust (JNPT) container terminal was the first container terminal to be privatized in 1997. Since then, 16 private projects with total investment of INR43 billion have been put under operations. Currently, eight additional projects with investment of INR55 billion are under implementation. Furthermore, the ministry has identified projects worth approximately INR200 billion that are likely to be available for bidding until FY12.

The new MCA that is being put in place shall continue to encourage private participation in the sector. We list below some of the key features of the agreement:

Encumbrance free land to concessionaire: The Port trust would be responsible for handing over encumbrance free land to the concessionaire for construction. Getting all the necessary approvals like environmental and others would be the responsibility of the Port trust.

Revenue share as only criteria for award: The new MCA simplifies the award criteria with revenue sharing being the single parameter on which bid would be awarded. In the earlier MCA, a bidder was required to bid on numerous parameters like revenue sharing, lease rental for the land, fees for other facilities and NPV over the concession was calculated to decide the winner.

Traffic risk sharing: The new MCA for BOT projects in ports sector provides for traffic risk sharing with the concessionaire, on the lines of suggested in roads. The

MCA provides for traffic growth and stipulates an increase up to seven years in the concession period if the growth rate is lower than the projected one.

Indexation of tariff increase to Wholesale Price Index (WPI): The annual increase in tariff would be indexed to 40% of WPI. As debt servicing is largely inflation neutral, only 40% indexation to WPI is considered adequate.

### Ports – Proposed investments under the Eleventh Plan

		2007-08	2008-09	2009-10	2010-11	2011-12	Total
Major ports	Public	26	31	37	44	49	186
Major ports	Private	41	53	68	89	116	366
Major ports	Total	66	83	105	133	162	552
Minor ports	Public	7	8	9	9	10	43
Minor ports	Private	41	47	54	62	71	275
Minor ports	Total	48	55	63	71	81	317

Source: Planning Commission Document

### Major ports in Maharashtra

1. JNPT
2. Mumbai port

### Minor ports in Maharashtra

Maharashtra has 48 minor ports spread over a distance of 720 km. of sea coast. It is the most industrialized state in the country. The completion of Konkan Railway along the West coast from Mumbai to Mangalore has added further impetus for the development of the coastal area. The Government of Maharashtra has selected seven sites from the 48 minor ports for development of port facilities in the first phase of the program. They are Vadhavan, Dighi, Dabhol, Jaigad, Ganeshpule, Redi and Vijaydurg. All these sites have adequate natural depth and a fairly protected area for developing port facilities. They have adequate land available for construction of storage areas warehouses or industrial parks.

Minor ports of state available for development are Alewadi (Dist. Thane), Anjanvel (Dist. Ratnagiri), Ganeshgule (Dist. Ratnagiri), Jaigad (Dist. Ratnagiri), Vijaydurg (Dist Sindhudurg), Redi (Dist Sindhudurg)

## Airports

Air traffic in India has witnessed substantial growth in the recent past. The growth rate in passenger traffic is on the rise. For e.g., in FY07 Indian airports handled 71 million domestic passengers, which grew by 40% compared with 10-25% over the earlier three years. International passenger traffic also is growing at a steady pace of 15%. The Center of Asia Pacific Aviation expects domestic traffic to grow at 25-30% and international traffic at 15% until FY10. Currently, 45% of the traffic is based out of Delhi and Mumbai and around 70% out of the top five airports. This has led to inadequate parking, runway and terminal capacity problems. Hence, there is a pressing need to develop regional hubs and modernize existing airports. The Indian government has stated that the total funds requirement for the modernization program of airports is INR408 billion by 2011, out of which around INR300 billion will be invested by private players. However, according to the recent Planning Commission consultation paper, the total investment in the Eleventh Plan is expected to be around INR348 billion (a 15% cut from the initial estimate of INR408 billion) against INR68 billion spent in the Eleventh Plan (2008-2012).

### Indicative investments by 2011

Airports	Total (INR billion)	PPP (INR billion)
Mumbai	61	61
Navi Mumbai	25	25
Goa	15	15
Pune	15	15

Source: The Working Plan Document, Airports

## Railways

The Indian Railways currently handles 40% of freight and 20% of passenger traffic. Growth rates in both passenger and freight traffic has seen accelerating in the recent past. Annual passenger traffic growth, which was at 2% between fiscal years 1991-2004, has increased to 8% between FY05-FY07. During the same period, annual freight traffic growth increased from 4% to 9%. Historically, the elasticity of the rail traffic to GDP has been between 0.6-0.75. However, in the Tenth Plan, growth in freight traffic was in line GDP growth. According to the Ministry of Railways, freight traffic growth is expected to be around 8%-9% in the Eleventh Plan. It also estimates that passenger growth will be around 6% per year over the Eleventh plan

### Key thrust areas of the Eleventh Plan:

Freight business: The Indian Railways plans to increase its market share in both bulk and non-bulk freight traffic by improving the quality of service with reduction in transit times and better reliability and availability. The Railways will facilitate building of logistic parks, container and other freight terminals through the PPP route to encourage movement of non bulk commodities by rail.

Passenger business: Growth in passenger traffic in the Railways is facing some competition from low cost airlines in the upper class segments, and from improved roads to its other passenger segments. The Eleventh Plan strategy is to consolidate the rail share in passenger business, particularly, in long-distance and medium-distance segments by increasing the commercial speed of passenger trains, and introducing fast services between metropolitan cities at speeds up to 150 kilometers per hour. A key step in this regard would be the development of the high speed corridors on select routes

Capacity enhancement: The rolling stock availability will be a key factor as per the proposed increase in passenger and freight traffic in the Eleventh Plan. In addition

to augmenting existing production capacities, new production facilities for coaches, locomotives and wagons would be required.

Dedicated freight corridor: The Indian Railways has announced the construction of dedicated freight corridors separating freight traffic from passenger traffic on trunk routes. The existing trunk routes along these dedicated freight corridors will also be upgraded to improve speeds and capacity. Dedicated freight routes will be constructed between Mumbai-Delhi (the Western corridor) and between Ludhiana- Kolkata (the Eastern corridor). Ministry of Railways estimates the total cost of constructing the corridor will be INR299 billion. However, a recent report by the Japanese International Cooperation Agency (JBIC) puts the cost at INR500 billion. JBIC has agreed to fund INR180 billion for the corridor. Work on both routes has been initiated. The freight corridor will finally add around 11,500 kilometers to the existing rail network.

The government has identified areas for private participation in the Railways these include modernizing railway stations, rolling stock units, operating container trains utilizing surplus land, setting up dedicated freight corridors and high speed rail corridors through hospitality, tourism and catering, creating logistic parks, cargo handling and warehouse. Private participation is already allowed in operations of containers. In January 2007, the Indian Railways signed a concession agreement with 14 container operators. It has set up a dedicated PPP cell to mobilize private investments. Few areas that have been identified for PPP are:

- SPV for rolling stock units;
- Modernization of stations
- Operation of container trains;
- Commercialization of surplus land;
- Dedicated freight corridor;
- High speed rail corridors; and
- Hospitality, tourism, catering

The Planning Commission estimates an investment of INR505 billion under the PPP scheme during the Eleventh Plan. However, in the recent budget, the government has announced that projects worth INR1, 000 billion to be announced under the PPP model over the next five years for developing world-class stations, rolling stock and multi-modal logistics parks. Around INR250 billion out of this amount would be awarded during the next year for developing New Delhi, CST Mumbai, Patna and Secunderabad railway stations.

### Total annual investment outlay – Railways

(INR billion)

Particulars	2007-08	2008-09	2009-10	2010-11	2011-12	Total
Rolling Stock	81	93	107	123	141	545
Capacity Augmentation and Development	77	102	134	177	235	725
Safety and other works	163	189	219	254	295	1119
Investment in PSUs	19	20	22	24	26	110
Dedicated Freight Corridor	13	24	44	74	145	300
Metro Rail Projects	37	42	47	51	59	235
<b>Total</b>	<b>391</b>	<b>470</b>	<b>572</b>	<b>703</b>	<b>900</b>	<b>3035</b>

Source: The Planning Commission Document

## Current Market Trends

Core sector to see insurance flush: Insurance funds will soon start flowing to special economic zone (SEZ) projects, agro processing and infrastructure projects, domestic satellite services and social infrastructure like educational institutions and hospitals. This follows an internal redefinition by insurance regulator Insurance Regulatory Development Authority of India (IRDA) of the infrastructure sector to align it with that of the Reserve Bank of India (RBI). Life insurance companies are required to invest 15 per cent of their premium income from traditional (non-ULIP) policies in the infrastructure and social sectors. For non-life companies the proportion is 10 per cent. At present, IRDA allows insurers to lend to infrastructure companies that develop a road highway, bridge, airport, port and railway projects, road transport system; water supply projects irrigation projects, industrial parks, water treatment system, solid waste management systems sanitation and sewerage systems, generation, distribution and transmission of power, telecommunication and housing projects. Sectors to be included under the new definition would be companies operating and maintaining roads, airports and port projects, SEZs, internet services, broadband networks, agro-processing and supply of inputs to agriculture, preservation and storage of processed agro-products construction of educational institutions and hospitals. India needs investment close to \$350 billion for infrastructure over the next five to seven year. Long-term investors like insurance companies and pension funds can play a vital role in infrastructure development. The total premium of 15 life insurance companies in 2006-07 was Rs 1, 56,042 crore. Their total investment in infrastructure as on March 31, 2006, was Rs 49,636 crore which increased to Rs 78,000 crore as on March 31, 2007. The total premium of 12 non-life insurance companies in 2006-07 was Rs 25,000 crore.

2008 data: SEZs deliver on all counts: special economic zones (SEZs), which its supporters backed by arguing that they will boost exports, investments and employment delivered on all these three counts during 2007-08. They are expected to improve their performance in the current fiscal. Exports from these tax-free industrial enclaves nearly doubled from Rs 34,615 crore in 2006-07 to Rs 66,638 crore in 2007-08. This is marginally short of the target on account of delays in the commissioning of some zones. The commerce ministry has projected exports from the zones at around Rs 1, 25,950 crore in 2008-09, growth of 89 per

cent over the previous year. India established export processing zones in 1965. These were renamed as SEZs in 2000 under a new policy. These were bought under the SEZ Act and its related rules from February 2006 to assure investors of a stable policy regime. The impact of this is evident in the latest data, which show a 191 per cent rise in exports from these zones between 2005-06 (Rs 22,840 crore) and 2007-08.

Particulars	Incremental Employment*	Total Employment	Total Investment	Incremental Investment*
Notified SEZs (206)	97,993	97,993	Rs 69,350	Rs 69,350
State/Private SEZs	32,300	44,768	Rs 39,60.44	Rs 2,204.13
Government SEZs (7)	71,238	1,93,474	Rs 3,899.49	Rs 1,620.29

Exports contributed 84 per cent to total turnover of the zones in the last financial year. The seven government zones (earlier EPZs) and 19 other SEZs accounted for 92 per cent exports from the tax-free enclaves. The 39 operational zones set up after the SEZ Act became operational accounted for the rest. Sectors which contributed to export growth from the tax-free zones are gems and jewelries (Rs23, 006 crore), trading and services (Rs 20,866 crore) and electronic hardware (Rs 11,121 crore). Investments in 232 zones stood at Rs 77,210 crore, out of which 97 per cent were incremental flows since 2006. According to the commerce ministry, Rs 3, 63,367 crore investments are lined up for 206 new zones in the country.

Investments in SEZ may touch US\$ 68.22 billion: Investments in special economic zones (SEZs) across the country are likely to touch around Rs 2.84 lakh crore by December 2009. . Exports are likely to touch around Rs 1 lakh crore. Around 453 SEZs have formally been approved by the commerce ministry, of which 282 are IT/ITeS/electronic hardware.

Reliance plans logistics parks in all its SEZs: Reliance Logistics Ltd (RLL) plans to set up logistics parks within all the upcoming special economic zones (SEZs) being established by the Reliance Industries group. The SEZs include the ones coming up in Navi Mumbai, Mumbai, Haryana Jamnagar and port-based one at the Rewas in Maharashtra.

Railways open gate for private players in wagon business: the railway ministry has unveiled two big schemes for wagon procurement by private companies. The wagon leasing scheme (WLS) and the liberalized wagon investment scheme (LWIS) that will permit private companies to own and lease wagons, so far the mandate of the Indian Railway Finance Corporation. Under the WIS, high capacity wagons (HCWs) with a payload of at least 2 tones more than the prevalent 25 tone and 22.9 tone axle load wagons or special purpose wagons (SPWs) for specific commodities can be owned and leased out by private companies. Companies with a net worth of at least Rs 250 crore and with a minimum experience of 5 years will be eligible for the scheme and will have to pay a one-time registration fee of Rs 5 crore to the railways. It will be prevalent for a period for 20 years, following which it can be extended by another 10 years based on the performance of the leasing company. The wagon leasing contracts will be a bi-partite agreement between the wagon owner and the end user. The wagon leasers will pay a maintenance fee to the railways. Wagon leasing firms will also get freight discounts between 12 and 15 percent. HCWs with a payload of 2 tones or more will get a freight discount of 12% and 0.5% for every additional tone for 20 years based on the current freight rate. Similarly SPW rates will attract a 15% discount. The liberalized wagon investment scheme will also work on similar lines as the WIS. Private companies manufacturing commodities such as flyash, fertilizer, etc can invest in HCWs or SPWs to transport them. However, profitable commodities such as coal, coke, ores and mineral are exempt from the scheme. The companies will procure wagons rake wise along with a few spare wagons directly from manufacturers or import them. They will then have to be certified for safety and specifications. Their wagons however will not be merged with the Indian Railway rolling stock. The LWIS scheme will enjoy the same freight discounts as the WIS.

Country's first monorail in Mumbai by 2010: Maharashtra government planning to introduce the country's first Monorail in Mumbai by 2010. The estimated cost of the project, proposed on four separate routes is Rs 1800 crore. The first route covering 25 km is Malabar Hill- Gopalrao Deshmukh Marg-Haji Ali-Keshavrao Khade Marg-Jacob Circle-Sane Guruji Marg- S Rao Marg-Dattaram Lad Marg-GD Ambedkar Marg-Wadala Truck Terminus-Antop Hill-Sion Hospital- Dharavi-Bandra Kurla Complex. The second route is of 10 km is Chembur-Mahul-Gidwani Marg-Gowandi-Chembur. The Lokhandwala Complex- Oshiwara-Jogeshwari-Vikhroli Link Road-Kanjur Marg (10 km) is the third route and Thane-Kalyan-Bhiwandi is fourth route (25 km).

Private players to manage stations for first time: the railway ministry had maintained that the private players would earn their revenues by developing additional commercial space in the station complexes they are developing. The model concession agreement being prepared by the railways in consultation with the Planning Commission, the nation's top planning body will incorporate clauses to extend these rights to the private players. The Indian Railways will allow private companies that are mandated to modernize railway stations to also maintain, and earn revenue from, waiting rooms, parking lots, sanitation facilities and other services at the stations.

Infrastructure private spending will be US\$ 100billion by 2012: Private investment to build India's infrastructure will top 4 trillion rupees (\$101.8 billion) by 2012 consultancy Ernst & Young said in a study. Private equity funds and other investors from the United States and the European Union will lead the investment while developers and contractors will be primarily from Asia, Australia and the European Union, it said.

## WATER RECYCLING

India is now the second largest urban system in the world after China. According to the Ministry of Urban Development, the proportion of the urban population is expected to increase from 30% currently to 40% by 2030. This means an increased pressure on urban infrastructure. The government estimates that 91% of its urban population has access to drinking water, but only 58% have availability within their premises. The coverage of sewerage and sanitation is at a mere 63%. It is estimated that the sewage generation in Class I cities and Class II towns is 33,212 million liters per day, and the current treatment capacity is only 6,190. Currently, only a tenth of the sewage generated is treated before discharge.

The Tenth Plan estimates that for 100% coverage for drinking water and 75% for sanitation the total requirement was INR537 billion. However, the outlay for the Tenth Plan was INR200 billion. The Eleventh Plan aims at covering 100% of the urban population for drinking water, sanitation and waste management. There is a substantial increase in the estimates because the total funds requirement for the Eleventh Plan is INR1, 276 billion which is 6.3x the allocation in the Tenth Plan. Almost 55% of this outlay is scheduled to be met through the Jawaharlal Nehru Urban Renewal Mission (JNNURM) and the Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT).

### Investments – Water supply and sanitation

(INR Billion)

particular	2007-08E	2008E-09E	2009E-10E	2010-E11E	2011E-12E	Total
Rural	152	175	205	243	293	1,067
Urban	152	191	241	305	387	1,276
Total	152	366	446	548	679	2,343
Water Supply	193	229	274	333	409	1,438
Sanitation	111	137	171	215	271	904
Total	304	366	446	548	679	2,343

Source: The Planning Commission of India

### Private participation in water and sanitation projects is limited

Most water and sanitation projects are not considered bankable as utilities are generally loss-making with high distribution losses and low tariffs. Water consumption in most cases is not metered, and revenue is not related to consumption.

#### Private Player participation

Sector	No of projects	Cost (INR billion)
Water supply	3	2.47
Sewerage	1	0.31

Investments in the irrigation sector are likely to increase by 2x to INR2, 231 billion in the Eleventh Plan compared with the Tenth Plan. Historically, the sector has witnessed substantial slippages. For e.g., in the Tenth Plan, the irrigation potential created was 8.8 million hectares compared with 16.7 million hectares planned initially. The plan for the Eleventh plan is also aggressive at 16 million hectares.

There is a large bank of projects that are scheduled to be implemented over the next five years. States with large project banks include: Andhra Pradesh (INR774 billion), Gujarat (INR784 billion), Karnataka (INR119 billion), Madhya Pradesh (INR120 billion), Maharashtra (INR322 billion) and Orissa (INR116 billion). The outlay under the Accelerated Irrigation Benefit Programme (AIBP) is likely to increase by 72% in the Eleventh Plan. AIBP is the flagship scheme through which the Center provides assistance to states for major irrigation projects. The Planning Commission has targeted a total investment of INR2, 625 billion in the Eleventh Plan compared with INR1, 115 billion spent in the Tenth Plan. However, in a recent consultation paper, the Planning Commission estimates a targeted investment of INR2, 231 billion (a 15% cut from initial estimates of INR2, 625

billion). We also note that in the Tenth Plan total expenditure was INR1, 115 billion.

### Irrigation – investments planned in the Eleventh Plan

(INR Billions)

Particulars	Major and medium irrigation	Minor irrigation	Command area development	Flood control	Watershed development	Total
2007-08	197	46	18	15	42	318
2008-09	256	58	21	17	45	398
2009-10	334	74	26	19	48	501
2010-11	435	93	33	22	52	635
2011-12	567	83	41	26	56	773
Total	1,789	354	139	99	243	2,625

Source: The Planning Commission document

There is a large pipeline of irrigation projects that are under implantation. There is also a substantial spillover of projects in the Eleventh Plan. Of the 477 projects that spilled over from earlier plans, 63% aren't approved by state governments. Some states with a large pipeline of irrigation projects include AP (INR774 billion), Gujarat (INR784 billion), Karnataka (INR119 billion), MP (INR120 billion), Maharashtra (INR322 billion) and Orissa (INR116 billion).

## Major players

Aquachem Enviro Engineers Pvt. Ltd.

Aquachem started off with Consultancy and Operation & Maintenance Projects in the field of Waste Water Treatment. In two decades, it has gained extensive experience by handling Turnkey Waste Water Treatment plants for:

- Chemical
- Pharmaceutical,
- Petrochemicals,
- Food & FMCG,
- Electroplating,
- Textiles industries,
- Domestic Sewage (STP)
- CETP

Aqua chem. Enviro Engineers have completed nine hundred successful pollution control assignments under our belt and are ready to handle new challenging assignments with full confidence.

The company has its Head Office is located in the city near Domestic air port. Its premises in Navi Mumbai admeasuring 5000 sq.ft of constructed area and substantial space for future expansion at is a two storied building houses Design Office, modern Laboratory and Work Shop facilities.

Lars Enviro Private limited

A professionally managed environmental Engineering company providing concept to commissioning cost effective solutions by offering state of the art innovative and proven technologies to their client's to meet their environmental needs with a thrust on recovering the valuable resources like biogas, heavy metals and waste-water recycling ,thus making its systems a vital part of the respective industry. Technological progress and value added are really the substitute of ideas, skills,

and knowledge and experience for physical work and physical resources. The company has collaboration with Larsen Engineers, Rochester, USA, and a multi disciplinary firm with technical excellence in biomethanation, water treatment, sewage treatment, Solid and Hazardous waste management has put us on the continual learning and improvement in our expertise. The company expertise's in the following offerings as below

- Biomethanation Systems (Fixed film and suspended growth)
- Effluent treatment Plants
- Sewage treatment Plants
- Water treatment Plants
- Wastewater re-use and recovery systems
- Municipal Solid Waste Management
- Biocomposting
- Sludge Management
- Supply of Pollution Control Equipments

## Current Market Trends

Maharashtra takes a lead in water reforms: the state has launched its water policy with the objective of sustainable development and optimal management of its water resources. A policy decision to form cooperative water users' associations (WUAs) and to hand over to them the irrigation management on all irrigation projects has already been made. The state government's efforts to carry out administrative reforms has paid off, as irrigation efficiency has increased to 117 ha per million cu.m from 101 ha per million cu.m. There also has been a substantial rise in revenues over the past three years. The World Bank has acknowledged the state's efforts in reforming the water sector and has recently provided a loan. Maharashtra has pioneered in the establishment of a water resources regulatory authority. The authority would regulate sectoral allocation, water rates, changes in water use/diversion of water use and compensation for such changes in water use. There has been no major initiative to involve the private sector at the state level. However, there have been scattered instances at district or municipality levels. Meanwhile, the government is striving to mobilize additional funds of Rs 33,750 crore for the completion of 1,076 ongoing irrigation projects.

Degremont signs deal with Mumbai civic body for water treatment: Degrémont, a subsidiary of Suez Environment, has signed a contract with Municipal Corporation of Greater Mumbai for the design, construction and a four-year operation of one of the largest water treatment plants in the country. The project cost is estimated at Rs. 340 crore. The Mumbai plant will treat 9.9 lakh cubic meters of water and supplement the Bhandup plant. Degrémont will provide the plant with its own filtration and decantation technologies. The contract is to be executed in 48 months. The order includes a treatment process and about 160 tones of sludge will be treated per day by a thickening and centrifugation process.

Private-public partnerships in water taking off: public private partnership (PPP) model is common in most sectors; the water sector is just opening up to this idea. PPP in the water sector has been just initiated and a beginning has been made by the Government. And to ensure that citizens do not suffer check points have been introduced. The step would also aid in achieving 100 per cent access to water as targeted in the Eleventh Plan. And levying user charges would help in sustaining the departments in a better and efficient manner.

## Conclusion:

Over the last 15 years India has changed much faster than many predicted. The door to foreign investment is now open, and the ambition to make investments work is tangible. The task of building an efficient economy remains an enormous one, but companies agree that, whatever the faults in execution, India's policymakers are moving in the right direction.

Maharashtra is justly proud of its investor-friendly environment. It has consistently been ranked the best among major Indian states in our own Investment Climate Assessment surveys, especially in terms of having better infrastructure, less corruption and a relatively deregulated business environment.

But persistent challenges like a large migrating population , poverty and the urgent need for improved infrastructure still exist.

## Sparta Strategy Ventures

**Sparta Strategy Ventures** is India's only dedicated inward investment enterprise actively engaged in accelerating Foreign Direct Investment.

Sparta leads the way in driving Inward investment to SEZ's, Industrial parks, State Governments (Greenfield) and Mega Commercial projects.

- Globally proven partners across the Investment promotion spectrum
- Existing clientele network of Trade commissions and Foreign embassies
- Strong knowledge on Investor perceptions
- Experience in identifying potential locations/SEZ's for clients
- Experience in identifying co-developers for client projects
- Experience in identifying investment opportunities for foreign investors in Joint ventures, Greenfield and Private placement.
- Strong relationships with the DIPP (Department for Industrial production and promotion) and the Commerce ministry of India.

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