CHAPTER – III

GROWTH OF CONSTRUCTION WORK FORCE

It is well established that influence of construction industry spans across several sub-sectors of economy as well as the infrastructure development, such as industrial and mining infrastructure, highways, roads, ports, railways, airports, power systems, irrigation, telecommunication, hospitals, townships and other buildings; urban infrastructure, including water supply, sewerage, and drainage, and rural infrastructure. Thus, it becomes the basic input for socio-economic development. The importance of construction activity in infrastructure, housing, and other asset-building activities can be seen from the fact that the component of construction comprises nearly 60%-80% of the project cost of certain infrastructure projects such as roads, housing, etc. In terms of magnitude, construction activity is second only to agriculture. The construction material account for nearly two-third of the average construction costs and the industry also has major linkages with the building material manufacturing industry including cement and steel, bricks and tiles, sand and aggregates, fixtures and fittings, paints and chemicals, construction equipment, petrol and other petro-products, timber, mineral products, aluminum, glass, and plastics etc.

The construction industry is experiencing a great upsurge in the quantum of the work load, and has grown at the rate of over 10% annually during the last five years. It is admitted fact that growth of construction sector is prevalent in many parts of the country and there needs a specific mention that its impact could be strongly noticed in the metropolitan cities like Delhi, Mumbai, Bangalore etc. In Bangalore city the demand for labour force in the construction industry is on the raise and a press column supports the fact.

The share of construction in GDP has increased from 6.1% in 2002-03 to 6.9% in 2006-07. The increase in the share of construction sector in GDP has primarily been on the account of increased government spending on physical infrastructure in the last few years, with programmes such as National Highway Development Programme (NHDP) and PMGSY/Bharat Nirman Programme receiving a major fillip of late. [43]

Table-1Gross Domestic Product by Economic Activity [44]

(At Current Prices) **(in crores)**

Sector/Sub-sector	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07 (0)	2006-07(A)
1	2	3	4	5	6	7	8	9	10
Agriculture, Forestry & Fishing	446515	449565	486617	472060	532342	552422	615845	695424	754561
Agriculture Forestry & Logging	409660	408932	442464	425521	483030	501415	557118	634519	-
Fishing Mining &	17915	19298	20913	21048	22374	23351	25839	26855	-
Quarrying	18939	21336	23240	25491	26938	27656	32888	34050	- 110757
Manufacturing	41594	45706	47871	62742	63882	84776	94153	101816	708748
Electricity, Gas & Water Supply	264113	300392	315314	346029	388549	453603	519387	617954	76505
	44526	46040	47482	54531	56675	59892	64406	70563	
Construction	**102007**	**111999**	**120865**	**135172**	**156806**	**212812**	**264616**	**319497**	**365140**

Building The Future

Spending on infrastructure projects drives growth

Katherine Sierra

Do clouds really have silver linings? As they deepen over the world economy it is hard to see any silver in sight. Yet in thinking of how to emerge from this economic downturn, it is important not just to dissipate today's clouds but also to turn crisis into opportunity and lay the foundations for tomorrow's cloudless growth.

Policymakers have not always followed this prescription. During previous financial crises, infrastructure investments suffered. In Latin America and the Caribbean, for instance, half of government fiscal adjustments in the 1990s (in response to falling tax receipts) came through reductions in public infrastructure spending. A similar investment shortfall during the Asian crisis led to the same kind of cuts in infrastructure financing.

This turned out to be a short-sighted solution, making it all the more difficult for Latin American and Asian countries to emerge from recession. Undermining this engine for growth was the wrong policy move.

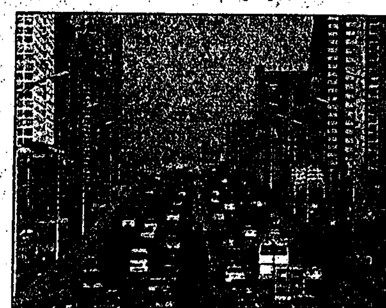
The reasons why are clear: access to infrastructure services is crucial for economic growth and poverty reduction. Energy to drive industry and create jobs, water to support agricultural production, and roads and ports to transport products to the market are critical to any country at any time but especially so in an economic downturn. Infrastructure projects, however, often take years to prepare. Postponing them has a drastic knock-on effect for medium-term growth.

The precipitous declines in infrastructure spending during the Asian crisis, for example, saw long-gestation projects postponed in many countries. This significantly retarded economic growth and led to what is called the 'lost decade' for those same countries. We now appreciate better the vital need to maintain public spending on infrastructure maintenance and asset replacement, keeping in mind that these investments must achieve economic, social and environmental objectives in tandem.

Many countries today, from the United States to Russia to China, plan to accelerate infrastructure spending to respond to the crisis. China demonstrated 10 years ago that wisely chosen infrastructure projects can create jobs while building a foundation for productivity growth and poverty reduction.

Policymakers know that improvements in basic physical infrastructure can help reduce disparities between regions and communities and promote inclusion, particularly among the most vulnerable. The right infrastructure financing can also open doorways to the 'green' economy' of the future that many nations are examining with interest and hope.

In India, the need for infrastructure investment is widely recognised as a critical priority for ensuring more — and more inclusive — growth. Inadequate power supply, for instance, remains a key constraint, with people, businesses and factories in many areas hampered by inadequate electricity supply.



The national and state highway networks have failed to keep pace with the tremendous growth in demand for road transport: only about 30 per cent of state highways are two-lane, more than 50 per cent are in poor condition, and the average travel speed is about 30-40 km/h. One analysis estimates that the economic losses incurred on account of congestion and poor roads alone run as high as $6 billion a year.

Antiquated urban infrastructure is a severe constraint to the expansion of key growth centres and the enhancement of living standards. With 40 per cent of India's population expected to live in urban areas by 2021 and expected to create about 65 per cent of the nation's GDP, it is urgent to ensure that modern water supply, public transportation, sanitation and solid waste management are in place to support this growth.

The government of India's 11th Five-year Plan (2007-12) places a strong emphasis on improving the country's physical infrastructure, and contains aggressive targets on infrastructure investment, from its current 5 per cent of GDP to 9 per cent by 2012. This presents a formidable challenge, however, with the sharp slowdown in the availability of financing (particularly long-term funds) for new infrastructure projects.

India's assessment of its need for such investments is mirrored by the needs of many other countries worldwide. The World Bank Group is fast-tracking commitments under the International Development Association, while also making more funds available for lending globally, with a particular attention to investments that protect or produce jobs and support growth.

The bank has responded to requests for help from India by supporting government efforts to shore up long-term financing at reasonable rates for infrastructure projects. Recently, there have been two major lending operations. The bank is providing a $1.2 billion loan of credit to the India Infrastructure Finance Company Limited — a wholly government-owned institution — to help it catalyse long-term debt for infrastructure projects built on public-private partnerships. It is also providing about $1 billion to the Power Grid Corporation so that it can expand its interstate transmission network.

Some of the bank's new instruments, such as the Clean Technology Fund and the Carbon Partnership Facility, can provide additional resources and improve the financing terms for 'green' infrastructure investments that have significant local benefits and lower greenhouse gas emissions, such as in urban waste management or renewable energy.

There may be more clouds over the Indian economy in the months ahead. Together, though, with the national, state and local governments, the bank stands ready to enable India to "see the silver", not just by responding to the immediate needs of the financial crisis but also by helping put in place the bases for longer-term sustainable economic growth and continued poverty reduction.

The writer is a vice-president with the World Bank.

The road sector has made the transition from being a government-dominated arena to a private sector-friendly one in the last decade. Large scale programmes and proactive policy initiatives have created improved road networks and increased investor interest. India's road network now spans some 3.3 million kms and is the second largest in the world. From 2.7 million km in 1998 the network currently comprised primary roads including 64,354 kms of national highways, secondary roads including 131,899 kms of state highways and 487,763 kms of major district roads and rural roads. Indian roads carry around 85 % of passenger traffic and 61 percent of freight traffic. Private investment at national level has gained momentum since the launch of national Highway Development Programme under which 86 contracts covering 5607 km worth of Rs. 375.82 billions have been awarded in the last ten years. The NHDP aims to develop a massive 50,000 km of national highways under seven phases by December, 2015. This is the most ambitious union government plan. The project entails an investment of about Rs.2,400 billion during 2005-2015 and the Government has incurred an expenditure of Rs. 441.36 billion over 1999-2006.

A rural roads programme, the Pradhan Mantri Gram Sadak Yojana (PMGSY) was launched by the Union Government in December, 2000. This centrally sponsored project aims at developing 369,386 km in rural areas at an estimated cost of Rs. 1,320 billion. As on February, 2008, about 143,000 kms of roads have been developed and wok on another 135,000 kms is in progress. A key development that improved funding for the sector has been the promulgation of the Central Road Fund Act. 2000. Multilateral Aid for PMGSY ($ millions)

Agency	Aid
World Bank	400
Asian Development Bank	1,150
Total	1,550

The Act specifies the cess to be charged on petrol and diesel and the percentage of cess allocated for development and maintenance of national highways, rural roads and other state highways. Another step forward was the relaxation of the foreign direct investment (FDI) limit from 74 % to 100% in 1999 for construction, maintenance and operations of national highways. This aimed at attracting international construction players. Indian companies were permitted duty free import of high capacity and modern road construction equipment.

Over the past ten years the urban infrastructure sector has emerged as an area of focus. This is a big change from the past when most of its issues were place on the backburner. Currently, India has the second largest urban system in the world. As per the 2001 Census, over 285 million people constituting nearly 29 % of the total population reside in urban areas. The share of urban population is expected to increase to 40 % by 2021. At the central level, the Ministry of Urban Development (MoUD) and Ministry of Housing and urban poverty alleviation (MoHUPA) are the two nodal agencies responsible for formulating the policies and its implementation.

In the process of urban development and its reforms, the Government has taken the initiative to launch the Jawaharlal Nehru National Urban Renewal Mission (JNNURM). The programme covers water supply, and sanitation, sewerage and solid waste management, urban transport etc. [46]

This project which is for a seven-year period from 2005-06 has two main components-Basic Services to the Urban Poor (BSUP) Programme and Integrated Housing & Slum Development Programme (IHSDP). The BSUP was launched to assist cities and towns in taking up housing and infrastructural facilities for the urban poor in 63 selected cities in the country. The IHSDP which was launched simultaneously with BSUP in December 2005 is taking up housing and slum up gradation programmes in non-BSUP cities. A budgetary provision of Rs. 4,987 crore has been made in 2007-2008. [47]

An investment of over Rs. 1000 billion is envisaged during 2005-2012 under the JNNURM. As on July 18, 2008, costs of 330 projects worth Rs. 305.87 billion have been sanctioned under the JNNURM. These include 66 road/flyover projects (Rs. 26.42 billions) and 14 mass transport system projects (Rs. 33.52 billions) and 12 other urban transport projects (Rs. 5.94 billions). Other major programmes under the mission, the urban infrastructure Development scheme for small and medium towns and integrated housing and slum development programme have also been initiated. For urban transport, the National Urban Transport policy was introduced in April, 2006 with the objective of providing a unified framework. [48]

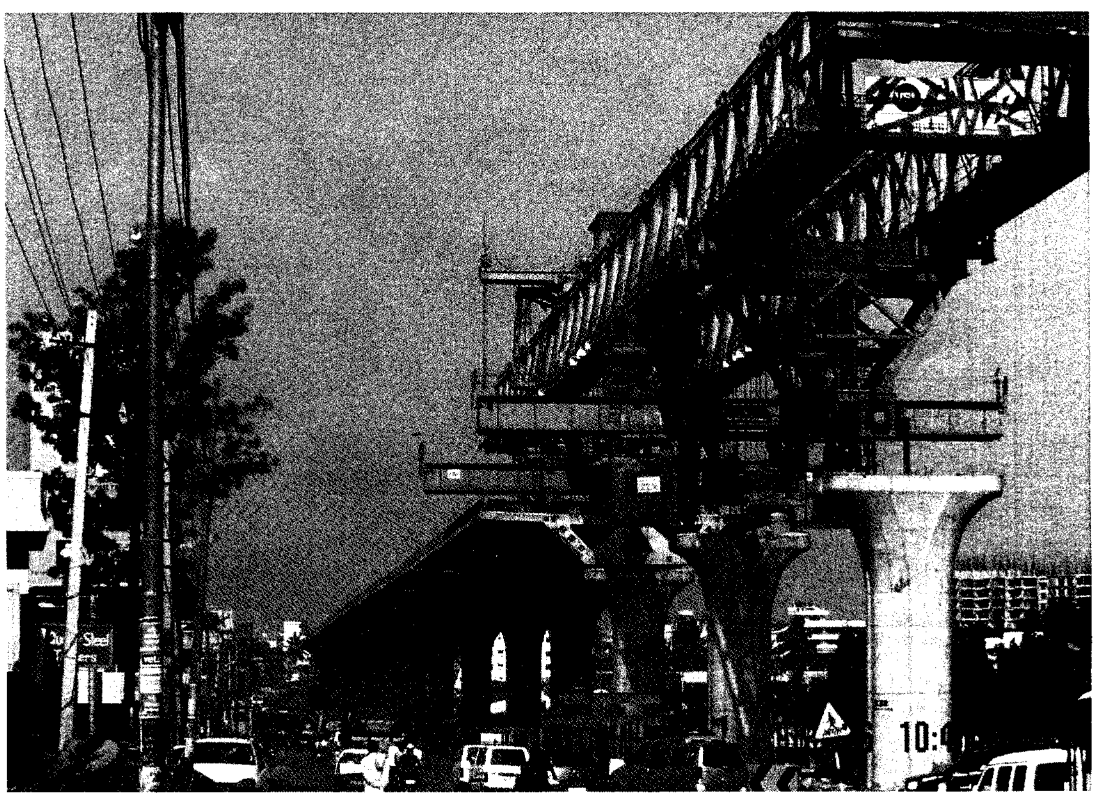


Table -2

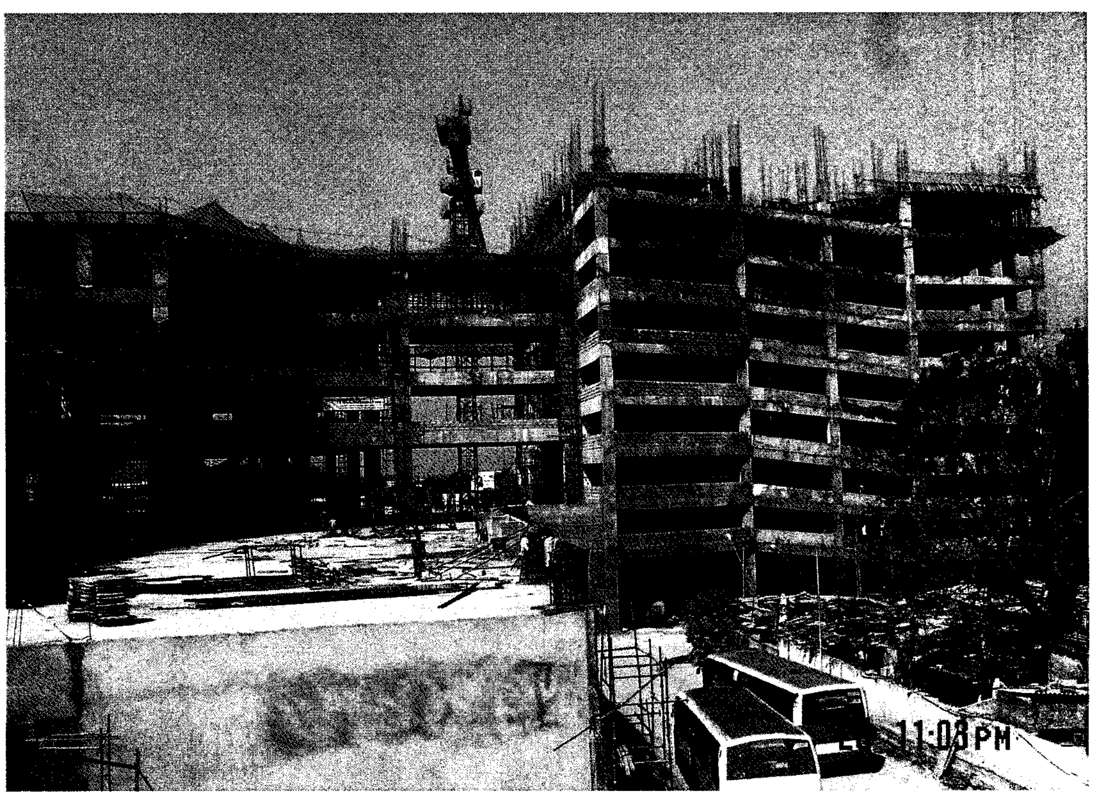
Projects sanctioned and funds released to cities under JNNURM) [49]

(As on July, 18, 2008)

City	No of Projects	Total project Cost (Rs. Million)	Amount released (Rs . million)
Bangalore	37	22,453.1	2,017.0
Mysore	4	6,076.4	895.3
Total			
Projects sanctioned and funds released by sector (All India)			
Road/flyovers	66	26,420.65	4171.68
Mass rapid transport system	14	33,525.75	4756.72
Other urban transport	12	5947.35	358.36

It is noticed that in Bangalore City the State Transport Corporation has undertaken the job renovating the present Bus Terminals. A glimpse of the ongoing construction project is placed here in.


nurm



Across the world, public transportation systems is heavily populated cities are rail based, known as mass rapid transit (MRT) systems or metro systems. They can carry up to 90,000 passengers per hour per direction of traffic. At present India have only two cities with MRT systems, Delhi and Kolkata.

As the first modern Metro Rail Project to successfully start operations, the Delhi Metro emerged as an exemplary trendsetter. Similar Rail Metro projects are in progress in the Metro cities i.e. Bangalore, Mumbai, and Kolkata. Today taxes and duties account for about 15 % of the total cost of metros in India. [50]

With the anvil of infrastructure projects, as it is evident from the preceding paras that involvement of labour force in the form of skilled, semi-skilled and unskilled is stupendeous in strengthening the construction sector. It is imperative that construction work force who contribute to the Indian economy is required to be taken care of by providing the social security and welfare benefits as envisaged under the Construction workers Act,1996.

Having noticed the impact of construction sector on the Indian economy, there needs mention about the involvement of work force in the construction industry. Before going into the two forms of work force potential namely the unorganized and the organized sector, the data relevant to the demography and categories of work force needs a glimpse.

Table - 3

Classification of Workers – Census 2001. [51] **(In Numbers)**

India/ State/ Union Territory	Total Rural Urban	Persons Males Females	Workers (Main+ Marginal)	Cultivators	Agricultural Laborers	Household Industry workers	Other workers
2	3	4	5	6	7	8	9
INDIA	Total	Persons	402,512,190	127,628,287	107,447,725	16,395,870	151,040,308
		Males	275,463,736	86,328,447	57,354,281	8,312,191	123,468,817
		Females	127,048,454	41,299,840	50,093,444	8,083,679	27,571,491
	Rural	Persons	310,655,339	124,682,055	103,122,189	11,709,533	71,141,562
		Males	199,199,602	84,046,644	54,749,291	5,642,112	54,761,555
		Females	111,455,737	40,635,411	48,372,898	6,067,421	16,380,007
	Urban	Persons	91,856,851	2,946,232	4,325,536	4,686,337	79,898,746
		Males	76,264,134	2,281,803	2,604,990	2,670,079	68,707,262
		Females	15,592,717	664,429	1,720,546	2,016,258	11,191,484
Karnataka	Total	Persons	23,521,533	6,936,121	6,209,153	935,712	9,440,547
		Males	15,272,725	4,909,653	2,595,871	388,441	7,378,760
		Females	8,248,808	2,026,468	3,613,282	547,271	2,061,787
	Rural	Persons	17,129,318	6,704,656	5,890,452	581,561	3,952,649
		Males	10,274,566	4,719,336	2,434,992	237,772	2,882.466
		Females	6,854,752	1,985,320	3,455,460	343,789	1,070,183
	Urban	Persons	6,392,215	231,465	318,701	354,151	5,487,898
		Males	4,998,159	190,317	160,879	160,879	4,496,294
		Females	1,394,056	41,148	157,822	157,822	991,604

The spectrum of work in India is generally divided into two broad segments, one is work in the organized sector and the other in unorganized sector. While the former is characterized by its homogeneity, reasonable bargaining strength of workers, applicability of labour laws and clear visibility, and the latter lacks all of these. The unorganized sector is generally recognized by its heterogeneity, employment in small and scattered units, jobs involving low skills and low wages, casual nature of work, lack of unionization, etc. [52]

The unorganized sector refers to collection of those operating units whose activity is not regulated under any statutory Act or legal provision and/or which do not maintain any regular accounts. Non-availability of regular accounts has been the main criteria for making the sector as unorganized. This definition provides a convenient base to demarcate organized from unorganized activities. [53]

The unorganized sector includes India's vast informal sector. It is relatively resource and income poor sector, with a limited, feeble voice in public affairs, including developmental endeavors. A large number of marginal and poor workers, tiny own-account enterprises, traditional artisans and craftsmen, floating and regular rural migrants who throng the urban and metropolitan centres, form parts of the unorganized and informal sector. Thus the informal sector is a manifestation of the multiple unevenness, diversity and inequalities and lack of real, sufficient dynamism on the part of the most concentrated, high-tech, 'modern' organized sector in the Indian economy and is itself similarly full of diversity. It is the sector, which absorbs and supports India's vast reserve army of labour and thus helps the large organized sector to acquire low cost supply of labour. [54]

The total employment in India has increased from 397 million to 457 million between 1999-2000 and 2004-05. The change in the organized or formal employment has been nil or marginally negative. The entire increase in the employment in the organized sector over this period has been informal in nature.

Given the twin problems of unemployment and unemployables in a situation where there is no social protection for the unemployed, there is this dilemma of whether jobs first and decent job later or should the approach is decent jobs alone. A significant proportion of labour force has low-level of literacy, low skills and employment in low value adding unorganized sector occupations. Together these account for a vicious cycle of low-skill, low-cost, low-productive labour. [55]

Table – 4

Distribution of workforce by Type of employment and sector [56]

Sector/Worker	unorganized workers	organized workers	Total (in millions)
	1999-2000		
Unorganized	341.3	1.4	342.6
Organized	20.5	33.7	54.1
Total	361.7	35.0	396.8
	2004-2005		
Unorganized	393.5	1.4	394.9
Organized	29.1	33.4	62.6
Total	422.6	34.9	457.5

Source: NSS 61st Round 2004-05 and NSS 55th Round (1999-2000) Employment-unemployment survey, as computed by NCEUS (2007)

Table -5

Comparison of Characteristics of the Formal and Informal Sectors [57]

Particulars	Formal sector	Informal sector
Job security	High	Low
Working hours	Fixed/regulated	Not fixed/not regulated
Wages minimum	Regulated/minimum wages	Not regulated/no
Social security including Medical and sick leave	Most provided	None or little
Labor laws including right To freedom of association And collective bargaining protection	Protective	No or little legal
Employee-employer's Relation with employment Control safe work letter	Issue of appointment letter	Without appointment
Safe work environments dangerous	Safer and secure working conditions	Vulnerable to and hazardous work
Unionization and better unorganized Networked	Homogeneous, highly organized and scattered	Heterogeneous,

The terms organized and unorganized sector in India are used interchangeably with formal and informal sector at the international level as recommended by the International Labour Organization (ILO).The Central Statistical Organization defines unorganized or informal sector consisting of enterprises which producing for the market do not have more than 20 employees (without power) or 10 employees (with power).

The NCEUS defined unorganized or informal employment as follows: "Unorganized workers consist of those working in the unorganized enterprises or households, excluding regular workers with social security benefits, and the workers in the formal sector without any employment/social security benefits provided by the employers."

Size of the Unorganized Sector

As on January 2005, the total employment in the Indian economy was 458 million, of which the unorganized sector accounted for 395 million, that is, 86 per cent of the total workers in 2004-05. Data reveals that out of 458 million workers, the proportion of self-employed workers is 56.5 per cent (258 million) and casual workers are 28.3 per cent (130 million). Taken together, these two categories, which are the most vulnerable among workers constituted about 85 per cent. The remaining 69 million workers were regular workers (15 per cent). However, the proportion of self-employed in the unorganized sector was 64 per cent (253 million) out of a total of 395 million workers and that of casual workers was 29 per cent (116 million). Taken together, these two most vulnerable groups accounted for 93 per cent among the unorganized sector. Regular workers accounted for only seven per cent. This provides a vivid overview of the pathetic state of unorganized workers in which 93 per cent of workers suffered from job as well social insecurity. Among the organized workers, the situation was relatively better where 69 per cent were regular workers and barely 31 per cent were self-employed and casual workers.

Table -6

Size and Distribution of the Organized and Unorganized Sector Workers by Industry and Status 2004-05

	Agriculture			Non-agriculture			All		
Status	Orgd	Unorgd	Total	Orgd	Unorgd	Total	Orgd	Unorgd	Total
			Number of workers (Million)						
SE	2.3	163.9	166.2	2.9	89.2	92.1	5.2	253.1	258.2
RW	1.3	1.5	2.8	41.9	24.8	66.7	43.2	26.4	69.5
CW	2.5	87.4	89.9	11.7	28.1	39.8	14.2	115.5	129.7
Total	6.1	252.8	258.9	56.5	142.1	198.5	62.6	394.9	457.5
			Percentage distribution of workers						
SE	38.1	64.8	64.2	5.1	62.8	46.4	8.3	64.1	56.5
RW	20.1	0.6	1.1	74.3	17.4	3.6	69.0	6.7	15.2
CW	41.8	34.6	34.7	20.7	19.8	20.0	22.7	29.2	28.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.
Percent Age of Total	2.4	97.6	100.0	28.4	71.6	100.0	13.7	86.3	100.0

Note: SE=Self-employed; RW=Regular worker; CW=Casual worker.

The overall scenario that emerges is: In the economy, the unorganized sector workers constituting 86 per cent of the total workforce suffer from very insecure working conditions. It is this group that deserves maximum support for improving their living conditions.

In terms sectoral division of labour force, out of a total of 458 million workers, agricultural workers constituted 259 million (56.6 per cent of the total) and non-agricultural workers were about 199 million (43.4 per cent of the total).Out of 458 million workers, males constituted 310 million (67.7 per cent of the total) and females accounted for 148 million (32.3 per cent of the total). [58.]

These facts reveals that unorganized sector comprising construction workers strive hard in contributing their energies for the growth and development of Indian economy without being able to protect themselves under the cover of social security schemes. With a birds eye view of the magnitude of labour force of our country, there needs a mention about the strength of construction work force in the industry.

EMPLOYMENT IN THE CONSTRUCTION INDUSTRY

The employment figures have shown a steady rise from 14.6 million in 1995 to more than double in 2005 that is 31.46 million personnel comprising engineers, technicians, foremen, and skilled and unskilled workers. Larger investments in infrastructure have resulted in an increased demand for construction and, consequently, for construction engineers and technicians. The strength of unskilled workers has gone up from 73.08% in 1995 to 82.45% in 2005. The workers community accounted for 93% of the total employment in the construction sector in 2005, with a predominance of migrant labour workforce. With several ambitious projects on anvil and the demand for construction manpower is going to grow at a consistent pace of at least 8%-9%, thereby resulting in an annual accretion of around 25 lakh persons to the existing stock.[59]

Estimates on employment and unemployment on CDS basis indicate that employment growth during 1999-2000 to 2004-05 has accelerated significantly as compared to the growth witnessed during 1993-94 to 1999-2000. During 1999-2000 to 2004-05, about 47 million work opportunities were created compared to only 24 million in the period between 1993-94 and 1999-00. Employment growth accelerated from 1.25 per cent annum to 2.62 per cent per annum. The incidence of unemployment on CDS basis increased from 7.31 per cent in 1999-00 to 8.28 per cent in 2004-05.

Table -7Employment and Unemployment in million person years (by CDS basis)

(%)	Million	Million	Million	Million			Growth p.a.
	1983	1993-94	1999-00	2004-05	1983 to 1993-94	1993-94 to 1999-00	1999-00 to 2004-05
Population	718.10	893.68	1005.05	1092.83	2.11	1.98	1.69
Labour Force	263.82	334.20	364.88	419.65	2.28	1.47	2.84
Workforce	239.49	313.93	338.19	384.91	2.61	1.25	2.62
Unemployment Rate (Per cent)	9.22	6.06	7.31	8.28			
No. of Unemployed	24.34	20.27	26.68	34.74			

Source: Various rounds of NSSO survey on employment and unemployment/Planning Commission.

Employment in Organized Sector

The employment growth in the organized sector, public and private combined, has declined during the period between 1994 and 2005. However, the latter decline was mainly due to a decrease in employment in public sector establishments, whereas the private sector had shown acceleration in the pace of growth in employment from 0.44 per cent to 0.58 per cent per annum

Rate of growth of employment in organized sector **(%per annum)**

	1983-1994	1994-2005
Public Sector	1.53	-0.70
Private Sector	0.44	0.58
Total Organized	1.20	-0.31

Source: Eleventh Plan Document.

As per the National Commission for Enterprises in the Unorganized Sector (NCEUS), which uses different classification of organized/unorganized sector, the organized sector employment has increased from 54.12 million in 1999-00 to 62.57 million in 2004-05. However, the increase has been accounted for by increase in unorganized workers in organized enterprises from 20.46 million in 1999-00 to 29.14 million in 2004-05. Thus, increase in employment in organized sector has been on account of informal employment of workers. [60]

SEZs will fuel demand for housing

The large-scale employment that SEZs generate will see more demand for housing in the vicinity. Leena Mudbidri presents the picture

Special Economic Zones (SEZ) not only give the manufacturing and IT sectors a boost, they also add up to large-scale employment opportunities within their campuses. This in turn will create the need for housing and workplaces, hence giving commercial and residential real estate an impetus.

Currently, the Karnataka Udyog Mitra has cleared the way for 35 SEZs around the city. While 26 of these have been earmarked for IT development, the rest are manufacturing sectors like textiles, auto components as well as the biotech segment. Most of these SEZs are primarily located on the suburbs of Bangalore in Devanahalli, Doddaballapur, Anekal, Electronics City, and along the Bangalore - Mysore Highway and Kanakapura.

Employment

According to industry sources, assuming that a minimum development of 25 acres in an IT/ITeS SEZ translates into an equivalent employment potential of 7,000 employees, this reveals that even the smallest IT/ITeS SEZ development would lead to employment generation that is highly promising in the years to come. Moreover, a textile factory needs to employ at least 3,000 workers in its varied departments, thus creating a reservoir of employment opportunities in the expansive international brands apparel parks being set up on the city outskirts.

Residential belts:

Bangalore North

The outcome of the announcement of these SEZs is already reflected in the emerging residential buildings coming up along the NH 7 and areas of Sadahalli, Doddajala near Doddajala Lake. The international airport too has catapulted the areas around it, especially Devanahalli and Doddaballapur, into the realty spotlight in a short time. Widescale residential developments including a township in Yelahanka, is taking place along Doddaballapur Road too. Townships and layouts are coming up at Nandagudi where an integrated township by the BMRDA is being proposed. The BDA too has proposed the K Shivarama Karanth residential layout. When the SEZs become operational, more residential and retail developments are foreseen in this zone.

Sai Manohar K J

Bangalore South

Two biotech SEZs, one at Anekal and another at Electronics City, will see hectic residential neighbourhoods in the vicinity. Sprawling residential options are being offered along Attibele - Sarjapur Road, Anekal, KHB Suryanagar, and off Hosur Road. BDA planned residential layouts like D Devaraj Urs Layout between Airport Road and Varthur village, S Nijalingappa Layout between Varthur Village and Sarjapur Road, and K C Reddy Layout between Hosur Road and Sarjapur Road are also being proposed.

A host of villas, row houses, and three-four bedroom apartments are being planned on this stretch.

The Devaraj Urs Layout will have around 32,000 residential sites predicted to accommodate one lakh people. In the Nijalingappa Layout, 35,000 sites will be allotted, with residential occupation for about 1.5 lakh people. K C Reddy Layout will be able to accommodate nearly one lakh people on its 26,000 sites.

The two textile parks, one at Ramanagaram and the other at Kanakapura, are not only expected to create vast employment but also a demand for residential units near by. According to Karnataka Udyog Mitra sources, the 400 acre textile and apparel park in Kanakapura is expected to house 50 factories with a total employment of 50,000 workers. The BMRDA planned Ramanagaram Township on 4,013 acres, and Bidadi Township on 9,684 acres, BDA layouts like Banashankari 6th stage layout, Anjanapura Layout near Kanakapura Road, and the Kempegowda Layout are expected to meet the housing demand for the workers employed at these textile parks.

Times of India 12/12/2008

A successful transition to inductive growth requires migration of surplus workers to other areas for productive and gainful employment in the organized or unorganized sector. While non-agricultural employment expanded at a robust annual rate of 4.7% during the period 1999-2000 to 2004-05, this growth was largely in the unorganized sector. It is only through a massive effort at employment creation, of the right quality, and decent conditions of work for all sections of population and at all locations that a fair redistribution of benefits from growth can be achieved. The dependence of the work force on agriculture and allied sectors declined from 61% in 1993-94 to 52% in 2004-05, that is, a decline of 9 percentage points as compared with a decline of only 4 percentage points in the period 1983 to 1993-94. Thus, work opportunities diversified away from agriculture at a faster pace during the latter period 1993-94 to 2004-05. [62]

Table-8

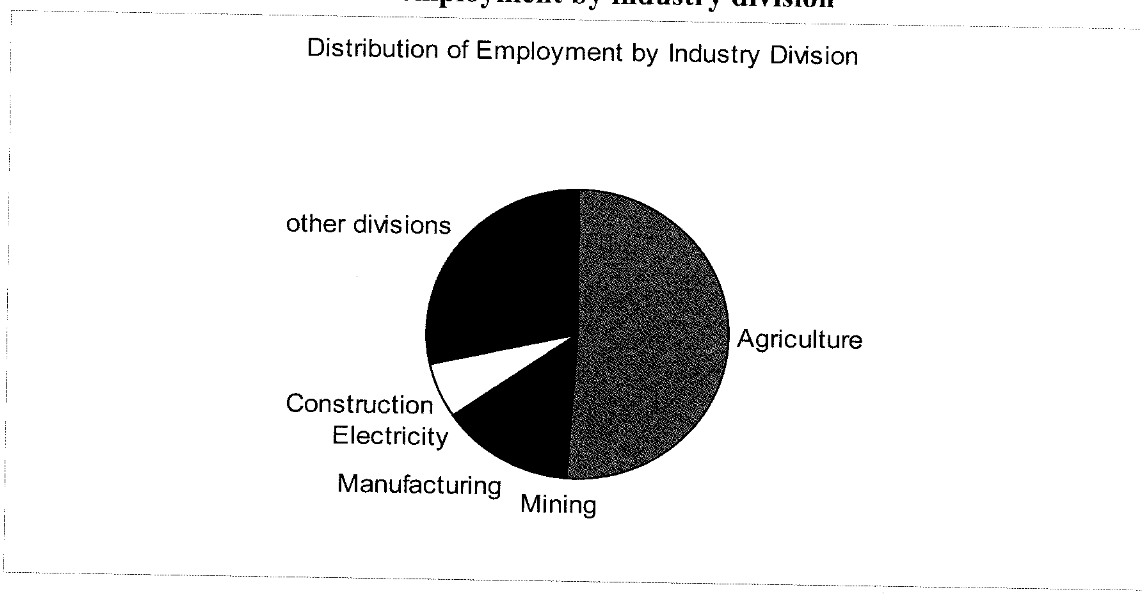
Percentage Distribution of Sector-wise Share of Employment by **Industry Division.**

(Current Daily Status)

	Total				
	1999-2000	2000-01	2001-02	2004-05	2006-07
Agriculture, forestry, fishing and hunting	61.7	59.3	60.8	58.5	50.19
Mining and quarrying	0.6	0.5	0.5	0.6	0.61
Manufacturing	10.6	12.5	11.9	11.7	13.33
Electricity Gas and water	0.3	0.3	0.2	0.3	0.33
Construction	**4.3**	**4.9**	**4.5**	**5.6**	**6.10**
Others divisions	22.5	22.4	22.1	23.6	28.43
Total	100	100	100	100	100
Total Employment (in millions)	372.1	396.8	411.5	428.2	

Chart- 1

Distribution of employment by industry division



According to W. Arthur Lewis, roads, viaducts, irrigation channels and buildings can be created by human labour with hardly any capital investment to speak of. Therefore, it could be said that construction activity has a significant role to play in any economic planning geared to the achievement of a reduction of mass poverty and unemployment. Most of the developing countries are said to be labour surplus countries and the construction activity provides outlet to absorb this surplus. According to Ragnar Nurkse, "Under-employed" or "surplus" labour could be used with little capital in building community development projects or self-help dwellings, since this is an industry which has relatively little in the way of supply difficulties.

According to Adam Smith and the classical Economists, no species of skilled labour easier to learn than that of masons and bricklayers. If their wages were double the pay of common labourers in other trades that was merely compensation for the irregularity of building work, plus something extra for the worry caused by that irregularity. If surplus workers cannot find jobs in manufacturing or agriculture they will most likely drift into services of marginal significance unless they can find work in construction.

This industry is often the only significant alternative to the farm labour in the off season. Further, construction is a labour intensive activity and uses larger number of workers per unity of output than, say, manufacturing. Despite the obvious importance of construction, it appears that only scant attention is paid by the economists and researchers to a study of the construction industry's potential in employment creation and income generation and to assist the work force by providing welfare benefits.

The construction workers are not easily identifiable as a strictly homogeneous group; they constitute essentially an 'easily entered' and 'easily left' pool of labour force. They are to be found moving among jobs and geographical locations. Implicity, mobility marks the mainspring of the supply side of the construction workers. The construction industry plays a significant role in employment, but it also plays an equally important role in unemployment due to the seasonal character of the work and the instability of market demand.

In a developing country like India, the amount of construction work which is desirable is almost unlimited. The question is whether there is any real limit to the amount of construction work which could and should be done in India in view of the large amount of surplus labour A review of these studies shows that a majority of them are descriptive in nature. They narrate the life and woes of construction workers and suggest effective implementation of minimum wages, social security benefits to construction workers. Agriculture, household cultivation, and petty trade are the important trades/sectors where these people get employed during the lean season of construction employment.

Though construction sector now employs only about six per cent of non-agricultural workforce in India, it is capable of generating comparatively much higher rate of employment in relation to many other sectors like manufacturing, mining, etc. In fact, on an average over the last three decades, employment in the total economy has increased by 65 per cent whereas in the construction sector employment has risen by 150 per cent.

A study by S.N. Guha Thakurta, in the Union Territory of Tripura in India, indicates that the demand for construction workers is not as irregular as it is generally believed. The industry alone, it appears, needs the service of workers for an aggregate period of 8.33 months a year; the break-up between skilled and unskilled is 9.30 and 7.48 months respectively out of 12 months. [64]

These facts and statistics help us to understand that the construction sector is capable of providing employment opportunity to the work force for a optimum period though not in the form of regular employment.

Lastly the involvement of construction workers needs to look at with reference to their identity and participation through the establishments engaged in the construction sector.

As per the results of the Economic Census 2005 [65] there are 41.83 million establishments in the country engaged in different economic activities other than crop production and plantation. Out of which, 25.54 million establishments are in the rural areas and 16.29 million establishments in the urban areas. Among these establishments, 35.75 million were engaged in non-agricultural activities while the rest 6.08 million were engaged in agricultural activities other than crop production and plantation. About 100.90 million persons, 52.07 million in rural areas and 48.83 million in urban areas were reported to be working in the establishments found during the census. About 89.99 million workers constituting 89.18% of total employment worked in non-agricultural establishments and only 10.82% constituting about 10.91 million worked in agricultural establishments. The results revealed that there are around 65.17 million persons working in establishments with hired workers in the country and the rest 35.73 million persons were working in own account establishments i.e. without any hired workers.

Table -9

Distribution of Non-agricultural establishments by Major Activity Groups location and Type. (Figures in absolute number)

Sl. No.	Major Activity Group	Rural			Urban			Combined		
		OAE	Estt with hired workers	Total	OAE	Estt .with hired workers	Total	OAE	Estt.with hired workers	Total
1	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Constn.	116,402	54,755	171,157	88,476	60,700	149,176	204,878	115,455	320,333

By looking at the numeric of construction work force with reference to their identity with establishments works out to be 1,71,157 (as on 2005), whereas the magnitutde of construction workers touches 3.6 crores (as on 2009 . The data reveals that identification of construction workers with an establishment is an ardent task as the very nature of construction industry is engulfed with the inherent features such as mobility of labour, high turnover etc.

The culmination of the data of construction work force viewed from the angle of their participation in terms of Sector wise, Establishment Wise etc makes explicit that attention of the law makers in bringing out separate legislation was a move in the right direction for improving the working conditions of construction workers and honoring of welfare benefits. Efforts in identifying the hiccups in the implementation part of the Construction Workers Act, 1996 and by bringing out possible solutions helps in extending the social security and welfare benefits to the construction work force in a more rational manner as also lead to uphold the dignity of construction work force in particular and the labour force at large.