Towards an Employment Strategy for India

International Labour Organization

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Table of Contents

List of Tables

List of Figures

List of Boxes

Preface

India has achieved an impressive and steadily rising economic growth since the early 1990s. And yet, the challenge of productive employment, especially of employment in the formal segments of the economy, remains a formidable one. The 11th Five-Year Plan (2007-12) of the country has emphasized an inclusive growth in which productive employment plays an important role.

Within the framework of the global goal of achieving decent work for all, one of the strategic objectives of the International Labour Organization (ILO) is to create greater opportunities for women and men to secure decent employment and income. The Global Employment Agenda of the ILO, which is designed to serve as the employment pillar of decent work, provides the framework for supporting the constituents in their endeavour to pursue the goal of productive employment and decent work. In India, promotion of productive employment is one of the key elements of the ILO's Decent Work Country Programme.

It is against this background that the ILO and the Ministry of Labour and Employment (MOLE), Government of India are working together on an employment strategy for the country. This technical report represents the output of the first round of work. The material contained in this report was used for discussions at a national consultation meeting on employment policy held in Delhi on 21-22 May 2008. Participants at that meeting were drawn from the government (both Central and States), employers' and workers' organizations, academia, research, NGOs and the donor community. It is hoped that this report and the discussions at the meeting mentioned above will provide inputs for a national employment policy which the MOLE intends to formulate.

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Abbreviations and Acronyms

ALMP	Active Labour Market Policy
ANBC	Aggregate Net Bank Credit
ASI	Annual Survey of Industries
BDS	Business Development Services
CBSP	Capacity Building for Service Providers
CDS	Current Daily Status
CIDC	Construction Industry Development Council
CSO	Central Statistical Organization
CSR	Corporate Social Responsibility
CWS	Current Weekly Status
DME	Directory Manufacturing Enterprise
ECOSOC	Economic and Social Council (of United Nations)
EDI	Entrepreneurship Development Institute (of India)
EIA	Employment Impact Analysis
EPCG	Export Promotion Capital Goods
EPWRF	Economic and Political Weekly Research Foundation
EWI	Employing Workers Index
FDI	Foreign Direct Investment
GBC	Gross Bank Credit
GDI	Gender related Development Index
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitor
GOI	Government of India
HRD	Human Resource Development
HSC	Higher Secondary Certificate
ICDS	Integrated Child Development Scheme
ICT	Information and Communication Technology
IFCI	Industrial Finance Corporation of India
IGNOU	Indira Gandhi National Open University
IIE	Indian Institute of Entrepreneurship
ILO	International Labour Organization
IMF	International Monetary Fund
ITC	Industrial Training Centre
ITES	IT enabled services
ITI	Industrial Training Institute
JQ	Job Quality

KVIC	Khadi and Village Industries Commission
LMP	Labour Market Policy
MHRD	Ministry of Human Resource Development
MOLE	Ministry of Labour and Employment
MSE	Micro and Small Enterprise
MSME	Micro, Small and Medium Enterprise
NABARD	National Bank of Agriculture and Rural Development
NAC	National Academy of Construction
NASSCOM	National Association of Software and Services Companies
NCEUS	National Commission for Enterprise in the Unorganized Sector
NDME	Non-Directory Manufacturing Enterprise
NFFWP	National Food for Work Programme
NGO	Non-Governmental Organization
NIC	National Industrial Classification
NICMAR	National Institute of Construction Management and Research
NIESBUD	National Institute for Entrepreneurship and Small Business Development
NIMSME	National Institute of Micro, Small and Medium Enterprises
NMCC	National Manufacturing Competitive Commission
NREGA	National Rural Employment Guarantee Act
NREGP	National Rural Employment Guarantee Programme
NQF	National Qualifications Framework
NSIC	National Small Industries Corporation
NSSO	National Sample Survey Organization
NVQF	National Vocational Qualifications Framework
NVA	Net Value Added
OBC	Other Backward Classes
OECD	Organization for Economic Cooperation and Development
RBI	Reserve Bank of India
RNFA	Rural Non-Farm Activities
SC	Scheduled Caste
SEWA	Self Employed Women's Association
SFC	State Finance Corporation
SGRY	Sampoorna Grameen Rozgar Yojana
SHG	Self Help Group
SIDC	State Industrial Development Corporation
SME	Small and Medium Enterprises
SSC	Senior School Certificate
SSI	Small Scale Industry
SSSBE	Small Scale Service Business (Industry Related) Enterprise

SSSE	Small Scale Service Enterprise
ST	Scheduled Tribe
TSA	Tourism Satellite Account
TVET	Technical Vocational Education and Training
UN	United Nations
UNIDO	United Nations Industrial Development Organization
UPS	Usual Principal Status
UPSS	Usual Principal and Subsidiary Status
US	Usual Status
WB	World Bank
WPI	Wholesale Price Index
WTO	World Trade Organization

Units

1 lakh = 100,000 or 0.1 million

1 crore = 10 million

Rs = Indian Rupees

$ = US Dollar

(Conversion Rate One US Dollar = 48.86 Indian Rupees as of February 2009)

Executive Summary

1. The Background and Overall Approach

India has witnessed an impressive and steadily rising economic growth since the early 1990s and is expected to remain high in the medium term. And yet, the challenge of employment, especially of productive employment in the formal segments of the economy, remains formidable[1].

The present exercise on employment strategy for India has been undertaken against this background. It addresses two major concerns regarding the employment challenge faced by India: (i) slow growth of employment in the formal sector, and (ii) a very high proportion of the labour force engaged in the informal economy in a large part of which productivity and returns to labour are rather low. The approach adopted by the present report is to address the issue on two fronts: (i) accelerating employment growth in the organized sector, and (ii) improving the quality of jobs in terms of productivity, earnings and protection of workers in the unorganized sector.

The report argues that a strategy for employment-intensive growth does not necessarily imply the adoption of labour-intensive technologies. The employment intensity of economic growth can be augmented by promoting higher growth of sectors that are by their very nature more labour-intensive. In order to pursue an employment intensive growth strategy, policies are needed on both economic and labour market fronts; and the present report focuses on both sets.

2. Economic Growth, Employment and Poverty: An Overview

India has witnessed a significant acceleration of economic growth (measured in terms of the growth of GDP) since the 1980s. The annual average growth of GDP (at factor cost) was 5.8 per cent during 1981-2005 compared to 3.5 per cent during three decades after the independence of the country. During 2003-07, growth rate has been over 8 per cent. But as a result of the global economic recession that started in 2008, the outlook for economic growth in India has changed considerably, at least for 2008-09. While official projections indicate GDP growth to be in the range of 7- 7.5 per cent, independent projections (e.g., that of the IMF) point to the possibility of drop in growth to 5.1 per cent.

Going beyond overall growth to its sector composition, one observes that growth has been oriented more towards the service sector, while growth in agriculture has been rather low. In terms of the structure of the economy, while there has been a change, it has been more towards the service sector. The share of manufacturing in GDP increased from 22 per cent in 1980-81 to 24 per cent in 2005-06, while that of trade and services increased from 38 per cent to 53 per cent during the same period.

Although the performance in terms of economic growth has been quite impressive, the performance in social aspects has not been equally so. Of course, the incidence of absolute poverty has continued to decline; the percentage of population below poverty line has been

1. India has ratified the Employment Policy Convention, No. 122 of the ILO, which promotes full, productive and freely chosen employment for all women and men.

estimated at 27.8 per cent in 2004-05. But the rate of decline in poverty could have been higher (it was 0.74 percentage points per year during 1993-94 to 2004-05). Moreover, the elasticity of poverty reduction with respect to per capita GDP growth has declined from 1.13 per cent during 1993-94 to 1999-2000 to 0.69 per cent during 1999-00 to 2004-05. Also, there has been a tendency for income/expenditure distribution to become more unequal (in both rural and urban areas) since 1993-94.

On employment also, the performance of the Indian economy has not been very impressive. Although agriculture accounts for less than a quarter of total GDP, it still supports more than half of the employed labour force. The share of manufacturing increased only slightly from 11.24 per cent in 1983 to 12.20 per cent in 2004-05.

Growth of employment has been disappointing, especially during the 1990s, declining from 2.04 per cent per annum during 1983 to 1993-94 to 0.98 per cent per annum during 1993-94 to 1999-00. That trend has now been reversed, with a growth of 2.96 per cent per annum during 1999-00 to 2004-05. But concerns remain about the type and quality of the jobs created. Also, in terms of the sector composition of employment, growth has been higher in construction and services compared to manufacturing.

The rate of open unemployment (according to the "current daily status" measure) rose from 6.1 per cent in 1993-94 to 7.3 per cent in 1999-2000 and to 8.3 per cent in 2004-05. However, the figures for 2004-05 may not adequately reflect the current situation for at least two reasons. First, as GDP growth accelerated during 2005-07, employment growth during recent years must have been higher than before, unless of course there was a decline in the elasticity of employment with respect to output. To that extent, there may have been an improvement in the employment situation. On the other hand, the downturn in output growth that the economy has recently been witnessing since the last quarter of 2008 is having an adverse effect on the labour market with substantial numbers being laid off in the sectors that are being affected by the global economic recession. To what extent the latter is offsetting the former, is difficult to judge at the moment. What is, however, clear beyond doubt is that there is not much room for complacency about the employment and labour market situation. If one adds to open unemployment the number of those who are working and yet do not earn enough to rise above the poverty line (the so-called working poor), the challenge of employment would appear to be quite formidable.

The qualitative aspect of employment can be illustrated with the help of a few indicators. First, the share of casual employment has declined, but that has not been associated with a significant increase in the share of regular employment. It is the share of self-employment that has gone up. Second, there has been an increase in the share of contract workers in industry (from 20 per cent in 1999-2000 to 25 per cent in 2004-05). Third, a large part of the gain in employment has been in the informal part of the economy (in the informal sector as well as in the informal segment of the formal sector). Fourth, while the long-term trend in wages shows a rise in real wages during 1983 to 2004-05, there was a decline during 1999-00 to 2004-05 for most categories of workers, except rural male regular employees. Wages are coming under further pressure due to the adverse effects of the current global economic recession. Moreover, the share of the 'working poor' is still significant – about 19.1 per cent as per the NCEUS estimate.

Coming to the gender dimension of employment, a few points are worth noting. First, increase in the growth of employment appears to be much higher for female workers

compared to male workers. Second, in rural areas, over four-fifths of the women remain in agriculture, although the share of male workers has declined considerably (from 74 per cent in 1993-94 to 66 per cent in 2004-05). Thus it seems that women in rural areas are finding it hard to shift away from agriculture. Third, in urban areas, they have achieved substantially higher growth of employment in manufacturing, and have been able to increase their share (from 24 per cent in 1999-2000 to over 28 per cent in 2004-05). Thus, in urban areas, the share of female workers in manufacturing has increased substantially while that of male workers has not. Fourth, gender differential in wages has widened in both rural and urban areas. The differential is quite stark for casual workers in both rural and urban areas and for regular workers in rural areas.

3. The Employment Challenge

In order to form an idea about the employment challenge faced by an economy, it would be necessary to estimate the number of jobs that would need to be created in order to absorb all new additions to the labour force as well as the backlog of unemployment. One could also add to that number those who are underemployed (the latter being usually measured by using a time criterion). However, in an economy like that of India, the incomes of a large number of the employed population fall below poverty line and they are usually referred to as working poor. It would be important to find ways and means of transferring such workers to more productive and remunerative employment; and that has to be regarded as part of the employment challenge. In other words, in order to get a quantitative idea about the number of jobs required, at least a part of the working poor would have to be added to the number of new entrants to the labour force and the backlog of the unemployed and underemployed.

In order to obtain a reasonable quantitative idea of the employment challenge being faced by India in the medium term, the present report adopts the above mentioned approach and assumes that one-fourth of the working poor (or around 28 million) would be vulnerable in their present employment and would need alternative employment opportunities during the five years beginning 2007 (i.e., during 2007-12). The number of new employment opportunities required during that period would thus be 92.8 million rather than 64.8 million as officially estimated.

By using the above figure for employment requirement, the growth of employment required to achieve the goal of employment for all by 2012 has been estimated to be 3.9 per cent per annum (compared to 2.7 per cent per annum if only the new addition to the labour force and the unemployed were to be counted). The present report constructs alternative scenarios of employment growth that can be achieved by India during the Eleventh Five Year Plan period (2007-12) and beyond by using alternative figures for employment elasticity and GDP growth rate. It is seen that unless employment elasticity rises substantially, the GDP growth required to attain the growth of employment mentioned above turns out to be much higher than even the high rates achieved recently. Only if the overall elasticity can be raised to 0.41, would the economy be able to achieve the required growth in employment with a GDP growth of 9.6 per cent (the latter being somewhat close to the growth achieved in recent years).

If the official view of employment requirement (of 64.8 million for the period 2007-12) is used and the elasticity of employment is assumed to be 0.32, the required GDP growth per annum works out to be 8.6 per cent

It may, of course, be argued that a 3.9 per cent annual growth in employment provides an unrealistically high estimate of the employment requirement. But it needs to be understood that in order to achieve a transfer of a sizeable number of the poor engaged in low productivity jobs, the growth of employment has to be substantially higher than the sum of labour force growth and the backlog of unemployment. The view taken in the present report is that this would not be achievable with an employment growth of less than 3 per cent per annum. One of the scenarios that would yield such an employment growth consists of a GDP growth of 9.3 per cent and output growth of 4 per cent, 11 per cent and 10 per cent respectively in agriculture, industry and services, and employment elasticities of 0.45, 0.68 and 0.58 in these sectors. Of course, these elasticity figures are much higher than levels observed in the recent past. These figures illustrate the importance of making economic growth more employment intensive in an economy like that of India.

4. A Diagnostic Framework for Employment Policy

The present report adopts a diagnostic approach to employment policy. The idea behind a diagnostic framework is to develop an understanding of the factors responsible for the slow growth of employment, especially in the organized sector, and the often poor quality of employment in agriculture and non-agricultural informal segments, and based on such understanding, find answers in terms of possible policy responses. The process of diagnosis should follow a framework of possible policy areas. The present report adopts a simple framework indicated below:

- Economic policies
  - Macroeconomic policies
  - Policies relating to specific sectors
- Enterprise development, with particular focus on micro and small enterprises
- Labour market policies
  - Labour market institutions and reforms
  - Active labour market policies
- Skills and employability

5. Macroeconomic Policies

A review of macroeconomic policies indicates that both at the central and the state levels, there are fiscal and monetary incentives (e.g., capital investment subsidy, interest subsidy, export promotion capital goods scheme, credit-linked capital subsidy for technology upgrading of small scale industries, etc.) that may have played a role in encouraging an excessive use of capital relative to labour. Some of these measures may have ostensibly been conceived as instruments for encouraging investment and growth of industries; but an indirect effect of such measures has been to distort the relative prices of the critical factors of production. Between 1995-96 and 2003-04, monetary wages (in industries) rose by 36.6 per cent while the "index of the cost of capital" (which represents the combined effect of the rate of interest and an index of the price of capital goods) fell by 17.6 per cent. Thus, there appears to have been a 55 per cent negative shift in the price of capital relative to labour; and that represents a major distortion in factor prices that may have favoured capital intensity.

To the distortion in relative factor prices mentioned above needs to be added the incentive to use capital arising from investment subsidies offered on the basis of the level of capital investment. Such subsidies are offered by both the central and the state governments, especially the latter. Since the subsidies vary from state to state, and are often on a case by case basis, it is difficult to arrive at a single figure on how much these subsidies add to the

cheapening of capital relative to labour. But that there is a significant additional element to distort the relative factor prices further cannot be denied.

Another element in the macroeconomic policy that may have had an impact on the capital intensity of the manufacturing sector is consumer credit expansion resulting from financial liberalization. This mechanism operates through the demand side. Debt financed demand for manufactured commodities tends to be concentrated in a narrow range of items that are usually products of metal- and chemical-based industries, and therefore, tends to be more capital intensive as well as more import intensive. The impact of such demand pattern gets transmitted to the production structure by favouring the growth of output in larger enterprises. And that, in turn, has implications for technology choice and employment generation because capital intensity at the higher end of the size tends to be higher than in smaller scale firms.

The above findings have implications for policy, especially because all the incentives appear to be for encouraging the use of capital while there is practically nothing to encourage the use of labour which is the more abundant factor of production. One way of correcting for the bias in favour of capital-intensive production (that is implicit in the distorted relative price of capital and labour) is to provide an employment subsidy or making investment subsidies conditional on realizing a targeted level of employment per unit of investment. The present report suggests a move away from across-the-board subsidies towards a package more targeted at products and sectors that can serve the employment objective (because, as mentioned at the outset, there are sectors and sub-sectors that, by their nature, are more employment intensive). Subsidies in such a package could be in the nature of employment subsidies rather than investment subsidies. As illustrations, the present report cites the possibility of employment subsidy in two manufacturing industries, viz., handloom weaving, and leather and footwear. Broad calculations indicate budgetary feasibility of such subsidies. More detailed calculations would obviously be required if such a policy were to be pursued seriously.

6. A Sector-focused Approach to Employment-Intensive Growth

As mentioned at the outset, the overall employment intensity of economic growth can be influenced by varying the sector composition of growth in the economy (because different sectors are characterized by different degrees of employment intensity, and the overall employment intensity is a weighted average of the sectoral employment elasticities).

Based on recent studies of the organized manufacturing industries, the present report shows that no discernible shift has taken place in the structure of industries in terms of the share of various sectors in output. Indeed, the share of the top five labour-intensive sectors, viz., food products, beverage and tobacco, leather products, wood products and furniture, and other textiles (including apparel) has declined between 1990-91 and 2003-04. Some labour-intensive sectors, e.g. indigenous sugar, weaving and finishing of cotton textiles on handlooms, wooden industrial goods, cork and cork products, and jute pressing and baling, have registered negative value added growth. On the other hand, a good percentage of the relatively capital-intensive industries, e.g. man-made textiles, plastic products, petroleum products, cement, transport equipment, domestic consumer products like refrigerators and air conditioners have registered fast growth. One positive feature is the growth of some labour intensive sectors like textiles, garments, footwear, jewellery, etc.

The present report shows that there are employment intensive sectors with high employment elasticity with respect to output that could be targeted in order to achieve a more employment-intensive growth. They include: various food processing industries, knitwear and other garments, handloom weaving, sugar, industrial machinery, leather and leather products, footwear, furniture, jewellery, bicycle and cycle rickshaws, etc. Outside manufacturing, construction and tourism are important sectors with growth and employment potential. The approach suggested here is in line with that suggested by the Government of India of promoting the development of sectors and sub-sectors with greater employment potential. What is needed in the context is to undertake, for key sectors, detailed analysis of various aspects of production and factor use, identification of constraints faced by them, and introduction of corrective measures to overcome the constraints and ensure higher growth.

In addition to the employment potential, an important issue for consideration in the context of a sectoral approach would be the market for products and the income elasticity of demand. It would be important to start from an analysis of markets/demand and the linkages of the sector with the rest of the economy.

7. Enterprise Development with particular focus on Micro and Small Enterprises (MSEs)

MSEs are a major source of employment in both rural and urban areas of India. According to the Economic Census of 1998, over 97 per cent of the enterprises have less than ten workers and account for about 67 per cent of total employment. In recent years (2002-06), small scale industries have done better than the overall industrial sector in terms of output growth. During the 1990s, the share of the service sector in MSEs has increased sharply (from 3.2 per cent in 1987-88 to 34.5 per cent in 2001-02).

But MSEs as a whole have been lagging behind in terms of growth and productivity. Labour productivity in smaller units (with less than ten workers) is much lower (almost half) than in larger units (with more than ten workers). The quality of jobs in terms of conditions of work and social protection is also low.

Due to a variety of reasons, MSEs are characterized by high rate of mortality. Amongst the factors responsible for such high mortality, "market related problems" and "shortage of working capital" appear to be the most important. The linkages between large enterprises and MSEs are rather weak. There are indications that such linkages are forged when demand for a product is high, only to be severed when demand declines.

Policies relating to MSEs have evolved from a protectionist approach (like reservation of products for small scale units) to more promotional measures (e.g., through financial assistance, credit, infrastructural facilities, assistance with marketing and exports, and assistance for modernization and technological upgrading). Measures have also been taken to simplify rules and administrative procedures, especially for tiny enterprises. While there are a large number of measures aimed at promoting the growth of MSEs, following suggestions are offered for improving the effectiveness of such measures:

- As for definition of MSEs, an investment-based definition is used for promotional purposes while an employment-based definition is used for purposes of labour legislation. Consideration may be given to unifying the definition by using an appropriate criterion, e.g. capital-labour ratio.

- Policy and regulatory environment for MSEs would need to combine policies for promoting growth and productivity with compliance to regulatory frameworks for improving the working conditions and protection of workers. Approaches developed by the ILO in this field (through work in selected clusters of MSEs) may be worth replicating.
- Business linkages between MSEs and larger enterprises can help the former in achieving sustained growth through market access and access to modern business practices and technology. While such linkages exist in some sub-sectors, it would be worthwhile examining how such linkages can be promoted in other sectors so that a larger number of MSEs can share the benefits of growth in the economy.
- The effectiveness of the policy of "priority sector lending" needs to be examined and corrective measures undertaken. In addition, recommendations made by the NCEUS for improving the access of MSEs to finance need to be pursued.
- Despite various efforts at providing infrastructure facilities (e.g. through industrial estates and common facility centres), this remains an area of concern. In assessing alternative models for improving access to infrastructure, attention would need to be given to various issues, e.g. political consensus at various levels, agreement on regulatory frameworks, as well as clarifications on arrangements for various utilities like power, telecommunication, etc.
- The effectiveness of the existing arrangements for providing business development services needs to be examined with particular attention to their outreach, efficiency in service delivery, overlaps between various institutions and coordination amongst them. Based on such assessment, an action programme may be prepared for improving the effectiveness of such institutions. In that context, consideration may be given to a possible role for the private sector and public-private partnership in providing business development services.

8. Labour Market Institutions and Policies

Labour market institutions and reforms

Like elsewhere in the world, in India too, there is an ongoing debate on the effects of labour market regulations on growth, employment, unemployment and informality. On the one hand, there are those who believe that rigidities in the labour market act as obstacles to growth and employment, and liberating the labour market from various regulations would spur growth and job creation. There are others who contend that these regulations are here for a cause and bring benefits to workers as well as to enterprises employing them. However, given the very small size of the formal/organized sector (less than 10 per cent of the workers); one wonders whether scrapping of regulations in that segment would entice massive job creation to make a difference to the numbers engaged in the informal economy. While there may be effects of regulations (e.g. those relating to dismissals, severance pay, etc.) at the margin, the existence and growth of the informal economy cannot perhaps be explained fully by the existence of such regulations.

This is, however, not to say that there is nothing in India's labour laws that could hinder adjustment needed for economic reasons. It is indeed important to identify the specific aspects of the legal framework that are in need of reforms. At the same time, one has to recognize that in the absence of much social protection outside (formal sector) employment, it may be rational to protect employment. However, beyond the simple alternatives of

deregulation and employment protection, there is a relatively new reform agenda (which has its origin in Europe) that links employment and social protection explicitly. This reform agenda, under the rubric of "flexicurity", asserts that for labour market reforms, it is not only labour market flexibility that is important, but also workers' security. This links the regulation of the labour market with protective devices of the labour market such as unemployment benefits and training, and requires a careful balancing of employment and social protection.

Application of the concept of flexicurity in the Indian context may have to reverse the sequencing of reforms enacting first protection of workers through passive and active labour market policies before tackling the rigidity in employment protection. The balancing act involved in applying the concept of flexicurity would require an effective social dialogue.

Active labour market policies (ALMPs)

ALMPs (defined as interventions by the government to provide work to or increase the employability of specific groups in the labour market) can serve as useful instruments for supporting structural change in an economy by facilitating allocation and re-allocation of labour between various sectors of an economy. Although such policies can play an important role in job creation, they should not be looked at as substitutes for macroeconomic and sectoral policies discussed earlier to promote employment-intensive growth.

In India, ALMPs could be seen as a means of creating jobs through special programmes as well as a means of improving the employability of the workforce (through maintenance and upgrading of skills). A good example of an ALMP aimed at job creation is the National Rural Employment Guarantee Programme (NREGP) which was started in 2006 as a means of implementing the National Rural Employment Guarantee Act (NREGA). The main distinguishing features of this programme is a rights-based approach (in the sense that employment is recognized as a right and is guaranteed through the Act) and its integration with the concept of social protection through the provision of an unemployment allowance in the event of the inability of the government to provide jobs stipulated under the Act.

Given the time that has elapsed since the starting of the Programme, it is perhaps somewhat early to make an assessment of its implementation record. However, there have already been attempts to evaluate its performance; and the findings from such evaluation vary from the positive to critical. Two points may be made on the basis of such exercises. First, there are formidable challenges in the implementation of the programme, and a number of conditions need to be fulfilled for achieving success. Second, given the positive experience regarding implementation in many states, it seems that the Programme can indeed succeed in achieving its goals.

As for skills and employability of the workforce, there is an enormous challenge as is indicated by the fact that the proportion of the labour force in the 20-24 year age group with vocational training is only 5 per cent (compared to, for example, around 90 per cent in the Republic of Korea). In addition, the marketability of the skills that are produced is also an important issue. These and other relevant issues with reference to skills are discussed briefly in the next section.

Financing of ALMPs is an important issue. Total allocation for rural employment programmes amounted to 0.327 per cent of GDP for 2007-08, while it was 0.339 per cent in 2006-07. Total expenditure on "labour and employment" by the central and the state

governments together is less than 0.15 per cent of GDP. Thus, one can perhaps conclude that government's expenditure on ALMPs does not exceed 0.5 per cent of the GDP of the country.

In addition to the instruments and financing of ALMP, institutions for an effective and efficient delivery of programmes are also critical. In that regard, there is a great deal that can be done. To give an indication of the gap in quantitative terms, India has 938 employment service centres – an average of 2.1 centres per million of active population, whereas the corresponding number in China is 5.3. Apart from numbers, the effectiveness of the service is also an area of concern.

9. Skills and Employability

The challenge of skills development is of paramount importance in India today. Barely 2 per cent of the youth (in the age group of 15-24 years) are reported to have had formal vocational training and about 6 per cent had informal training. While there are 12.8 million new entrants to the workforce each year, the total capacity of TVET programmes under various ministries is 2.5 million. However, the potential target group for skill development comprises all those in the labour force – 457 million in all, who need to acquire new skills or upgrade skills at various stages of their working life.

Almost the entire TVET system is focused on the organized sector, despite the large size of the unorganized sector (over 90 per cent of the workforce) and its substantial contribution to GDP growth. Women, youth (in particular, school drop-outs), the poor and other disadvantaged groups have limited access to training. Many skilled artisans and craft persons exist in India but their skills are not formally recognized (certified).

The challenge of scale is compounded by the problems of quality and the relevance of training. There is a major discrepancy between skills acquired in training and skills required in employment –a problem commonly known as the 'skills mismatch'. The involvement of social partners, in particular employers, is largely responsive and ad hoc and there is no mechanism to systematically facilitate their active involvement in strengthening the skills system. There is very little labour market information available which is collected systematically and made available regularly to guide skills provision.

The challenge of quality is also systemic. There is currently no unified mechanism for validating qualifications/certifications to ensure that they reflect the needs of employers. Training offered by various providers is of varying quality and certificates are based on different standards, which make it difficult to articulate the competencies of the holders of certificates to employers.

Coordination within the TVET sector is also a concern. There is, in fact, a wide range of training providers and programmes in the country. The skills development effort remains, however, divided between different line ministries, central and state governments. Numerous NGOs and other private organizations provide skills training but they are not fully integrated into the national TVET system. The absence of a 'national policy on skills development' makes it difficult to seek or achieve coordination, although the work towards developing the policy on skills development is currently underway.

These challenges can be addressed by the following measures, many of which suggest changes or additions to the existing skills development infrastructure:

- *Expansion of training provision:* There is a need for a rapid and large-scale expansion of training provision. It will be important to ensure that the expansion of facilities (hardware) is coordinated with an adequate increase in qualified teachers, trainers and instructors (software).
- *Promotion of equal access and addressing needs of the unorganized sector:* A massive effort will be required to overcome the long years of underinvestment in skills of workers in the unorganized sector, as well as to improve access to training for women and disadvantaged groups. Interventions for the unorganized sector should promote a convergence approach where skills development is combined with literacy, soft skills training and entrepreneurship development and other livelihood support programmes.
- *Establishment of a national quality assurance mechanism while embracing diversity:* The current scenario of weak quality assurance would need to be addressed by the establishment of a set of new institutional mechanisms. Such mechanisms can include a national accreditation authority, a National Vocational Qualifications Framework (NVQF) and assessment and certification bodies, coordinated by a national apex body.
- *Strengthening public-private partnerships:* Given the magnitude of the skills challenge, a greater and more active role for employers', workers' organizations as well as civil society groups and professional societies is a way forward in building the skills development system.
- *Involvement of the private sector through a sector-based approach:* The active and systematic involvement of employers will need to be underpinned by an adequate institutional structure such as sector-based skills councils, which are primarily led by employers.
- *Achieving better coordination:* Better coordination in skills development should be sought by the establishment of a national apex body with the mandate of overall coordination, development and implementation of a national skills strategy in coordination with the line ministries, states and sector-based skills councils.
- *Promotion of lifelong learning and the continuous skills upgrading:* The establishment of the National Qualifications Framework (NQF), which includes qualifications for both education and training, can promote vertical and horizontal learning across education and training pathways.
- *Creation of sustainable funding:* A National Skills Development Fund, financed by a combination of public and private funds, can be established to promote the private sector-led training as well as to provide financial support to the disadvantaged groups. The increased funding for skills development needs to be combined with measures to improve efficiency and effectiveness of the existing training infrastructure.
- *Regular review and development of best practices:* A mechanism for regular monitoring, evaluation and review needs to be built in the system to meet the changing needs of society and the economy. Research and the promotion of good practices are vital activities that enable stakeholders to meet emerging needs.
- *Development of a national skills development policy:* Planned and concerted efforts in skills development needs to be anchored in a 'policy', which is both comprehensive and national in character.

10. Mainstreaming Employment into Policy Making

While special programmes for employment generation are important, especially in situations where employment generated through the normal process of growth falls short of the requirements, from a long-term point of view, it is through the process of economic growth that productive employment can be generated in a sustained manner. Hence it is important to work towards making economic growth more employment-intensive. In order to achieve that goal, it would be necessary to mainstream employment in the country's development strategy and in the process of policy making. The latter, in turn, would require action on at least two fronts: (i) analysis of the impact of output growth on employment (at various levels _ macro, sectoral, sub-sectoral and project), and (ii) incorporation of the employment perspective in decision making in various organs of the government.

Employment impact analysis (EIA) involves not only an assessment of changes in employment resulting from a given expansion of output in a particular sector or sub-sector, but also the indirect employment effects that result from the linkages of the sector with other parts of the economy. The present report outlines a methodology of EIA using the input-output technique. Utilizing the input-output transaction table for 2003-04 (the latest year for which it is available) and the employment data from the 61st round of the NSS (2004-05), an EIA analysis has been carried out to illustrate the application of the methodology. The results indicate that when only direct employment effects are considered, agriculture and wood, furniture, paper, leather and leather products turn out to be the most employment generating sectors. They are followed by textiles, food processing, and construction. When both direct and indirect employment effects are considered, food processing emerges as the most employment-friendly, followed by textiles, wood, furniture, paper, leather and leather products, agriculture and construction.

The next level at which mainstreaming of employment would take place is in the framing of policies _both at the macroeconomic and sectoral levels. With a view to illustrating how employment could be mainstreamed at those levels, the present report develops a framework consisting of a series of checklists/questions that need to be addressed by the concerned agencies, separately for the Planning Commission, the Ministry of Finance, the banking sector, and other line ministries. The kind of data that would be required for undertaking the tasks mentioned above has also been outlined.

Even if there is a commitment on mainstreaming employment in policy making, the question of implementation and monitoring would remain to be addressed. Given the cross-cutting nature of the employment issue and the importance of ensuring appropriate action and of coordination, the present report considers it appropriate to create a national level institution (in the shape of central authority) with necessary mandate and technical capacity to handle the tasks involved.

Chapter 1

Introduction

1.1 The background

India has witnessed an impressive and steady economic growth in the last few years. Prospects of a continuation of such growth in the coming years are promising. And yet, the challenge of employment, especially of productive employment in the formal segments of the economy, remains formidable.

The Government of India has been concerned that high growth in the formal sector has not been associated with similar rates of employment generation, and that the fruits of growth and opportunities created by globalization have not had the desired trickle-down effect. Most of the new jobs have been created in the informal economy, a large part of which is characterized by low labour productivity and returns (both wage income and returns to self-employment). Labour market access, mismatch between the demand for and supply of skills, youth unemployment, increased casualization, lack of voice and representation remain the main challenges for women and men in both formal and informal sectors.

With over 10 million people expected to enter the labour force each year for the next few years, it is recognized that not only could the rate of output growth be higher, but it could be more employment-intensive as well. Indeed, the challenge of translating the benefits of high rate of economic growth into a faster pace of poverty reduction through the generation of *productive employment and decent work* remains formidable. And what appeared to be a challenge even in normal circumstances assumes an added dimension when periodic fluctuations in economic activities are taken into account. Market-oriented economies with a good degree of integration with the global economy are open to external shocks of various kinds as is demonstrated by the impact of the current (i.e., 2008-09) global economic downturn on India. Of course, policy makers in India are very much aware of these challenges as indicated by statements made officially and in various informal discussions.

In the field of employment, there have been a number of special programmes for the creation of wage and self-employment. But the Government of India has now shifted its strategy from a 'welfare approach' to a 'rights-based approach' as evident in programmes and policies, e.g. the National Rural Employment Guarantee Programme (NREGP) etc.

An important aspect to consider in the current growth scenario is the gender dimension of employment and growth. The share of women in employment has been steadily increasing. In the agriculture sector, for example, the labour force is becoming increasingly female. Yet a large part of this increase is believed to be happening predominantly in the unorganized sector where wage discrimination is wide and working conditions are often exploitative. The low human capital accumulation of low assets, land, credit facilities, alternative employment, skills training and technology over the years, has led to the crowding of women in the lowly paid jobs of most sectors (11^{th} Plan, p198). Marking a positive shift in approach, the 11th Plan for the first time recognizes women not just as equal citizens, but agents of economic and social growth and emphasises that a multi pronged approach is required to address issues

of concern to women workers including provision of basic entitlements and strengthening of institutional mechanisms.

Current discussions on the need to evolve an employment policy and strategy for India are also relevant in the context of the Employment Policy Convention, No. 122 of the ILO, which India has ratified, and which promotes full, productive and freely chosen employment for all women and men.

1.2 The Present Report

It is against the above background that the present exercise of looking at an employment strategy for India has been undertaken. The basic approach adopted in it follows from two major concerns mentioned above: (i) slow employment growth in the formal sector, and (ii) a very high proportion of the labour force engaged in the informal economy where productivity and returns are rather low. Hence, an employment strategy has to approach the issue on two fronts: (i) accelerating the growth of employment in the organized sector, and (ii) improving the quality of jobs (in terms of productivity, earnings, conditions of work, and protection of workers) in the unorganized sector.

A question that is often raised is whether a strategy for employment-intensive growth necessarily implies the adoption of labour-intensive technologies (which, in turn, is often equated with "backward" technology) in the process of production. The answer to this question is: not necessarily. While labour-intensive technology is certainly an important way of augmenting the employment outcome of economic growth, employment intensity of economic growth as a whole can be augmented by promoting the growth of sectors that by their very nature are more labour-intensive. High growth of such sectors would naturally contribute to a growth of employment even if entrepreneurs in those industries do not deliberately opt for labour-intensive technologies[2]. There are of course sectors, e.g. infrastructure, where there may be a choice of technology; and labour-based approaches may be effective without a need to compromise on efficiency and quality _ especially in countries where there is surplus labour and wages are low (Islam and Majeres, 2001). In such countries, labour-based approaches may be relevant in providing a variety of infrastructure like rural feeder roads, irrigation channels, primary health care and education complexes.

In order to pursue an employment-intensive growth along the lines mentioned above, policies would be required on both economic and labour market fronts. On the economic front, policies at the macroeconomic level as well as the sectoral level can have important implications for the employment outcome of economic growth. Of particular importance in this regard are policies relating to small and micro enterprises where a huge share of total employment is currently created. In other words, employment needs to be mainstreamed into policy making[3]. On the labour market front as well, there are a number of issues to be considered. There is an ongoing debate on whether labour market institutions act as a hindrance on employment growth. On the other hand, active labour market policies that combine job creation measures with training and re-training and job facilitation could have a

2. This argument has been elaborated in Auer and Islam (2006). See, also, section 5.1.2 of the present report.

3. It may be mentioned in this connection that the role of productive employment and decent work in achieving the Millennium Development Goals has been recognized in the conclusions adopted at the UN General Assembly of 2005. And, the ECOSOC Ministerial Declaration of 2006 goes further and mentions: "an employment strategy should constitute a fundamental component of any development strategy … and that macroeconomic policies should, *inter alia*, support employment creation".

positive impact on the labour market and the employment outcome of economic growth. The present report focuses on both economic and labour market policies.

Even a high rate of growth of productive employment may not be sufficient to enable the poor to benefit from high growth. It is important for them to have the necessary capacity to integrate into the growth process and have access to the productive jobs that are created. From that point of view, access to education and skill training can be critical. In fact, the availability of skills could be important even in decisions regarding investment. Thus, rather than treating skill simply as a supply side variable, the present report considers this to be an integral part of an employment strategy.

The approach to women workers in this report stems from the position that women's work and labour market outcomes are qualitatively different due to their primary responsibility over household work, and therefore needs some additional policy measures to make the outcome of their employment on par with men's. Some of the policy measures need to go beyond the traditional economic and labour market policy boundaries. However, they are raised here to emphasize the need to seek synergies with policies and programmes of other Ministries as well as to stimulate debate on how these can be addressed through specific programmes such as the NREGS.

The present report is organized as follows. Chapter 2 is devoted to providing a brief overview of the situation regarding economic growth, employment and poverty in India, with a focus on the inter-linkages. In Chapter 3, an attempt is made to provide a quantitative picture of the employment challenge faced by India during the medium term. Chapter 4 briefly outlines the "diagnostic approach" and Chapter 5 provides an elaboration of that approach by going into selected policy areas. Chapter 6 deals with the issue of mainstreaming employment into policy making and develops a framework for doing so. Concluding observations are covered in Chapter 7.

Chapter 2

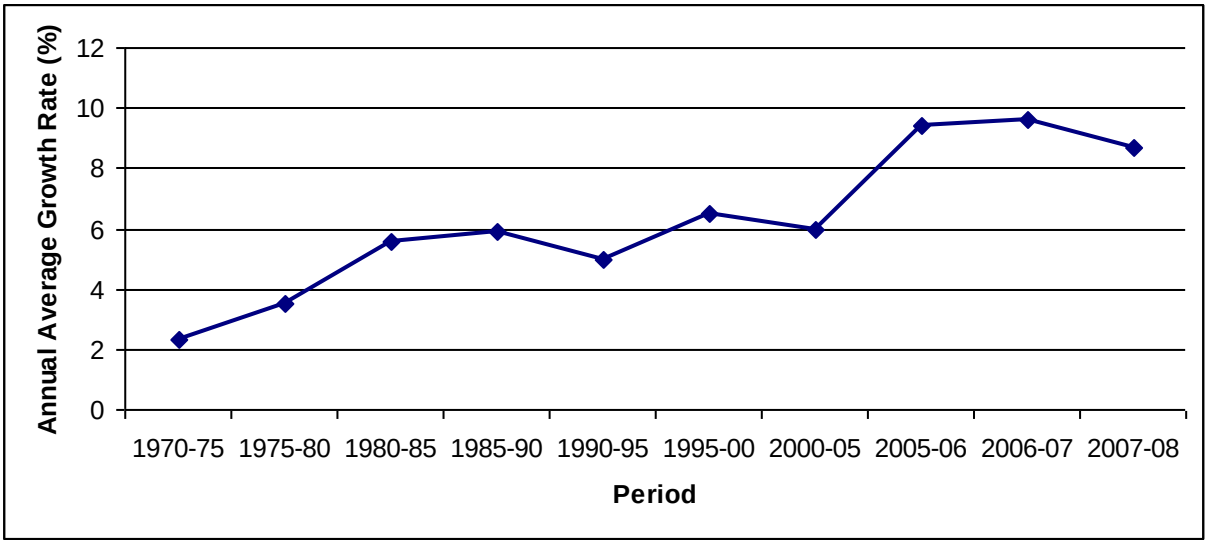
Economic Growth, Employment and Poverty: An Overview

2.1 Economic Growth

With a per capita GDP of US$1,033 (in 2007, according to the EIU report of April 2008), India can now be regarded as a middle income developing country. The structure of the economy has undergone significant changes during the past two decades, with the share of agriculture in GDP declining from 40 per cent in 1980-81 to 23 per cent in 2005-06. However, the share of manufacturing sector has not increased correspondingly – the figure being 24 per cent in 2005-06 compared to 22 per cent in1980-81. The share of trade and services in GDP exceeded 53 per cent in 2005-06 compared to nearly 38 per cent in 1980-81[4].

In terms of the acceleration of economic growth, the performance of the Indian economy has been quite remarkable, especially in recent years. Even if one considers the two decades since the early 1980s, a shift in the rate of growth achieved is noticed. This becomes clear when one notes that the annual average growth of GDP (real GDP at factor cost) during 1981-2005 was 5.8 per cent compared to just 3.5 per cent achieved during the three decades after independence of the country[5]. The growth rate for GDP has consistently been above 8 per cent after 2005 (9.7 per cent and 9.4 per cent in 2005 and 2006 respectively). For 2007-08, this figure was projected at 8.7 per cent[6]. Figure 1 shows the acceleration in growth quite clearly.

Figure 1: India GDP Annual Average Growth 1970 to 2008



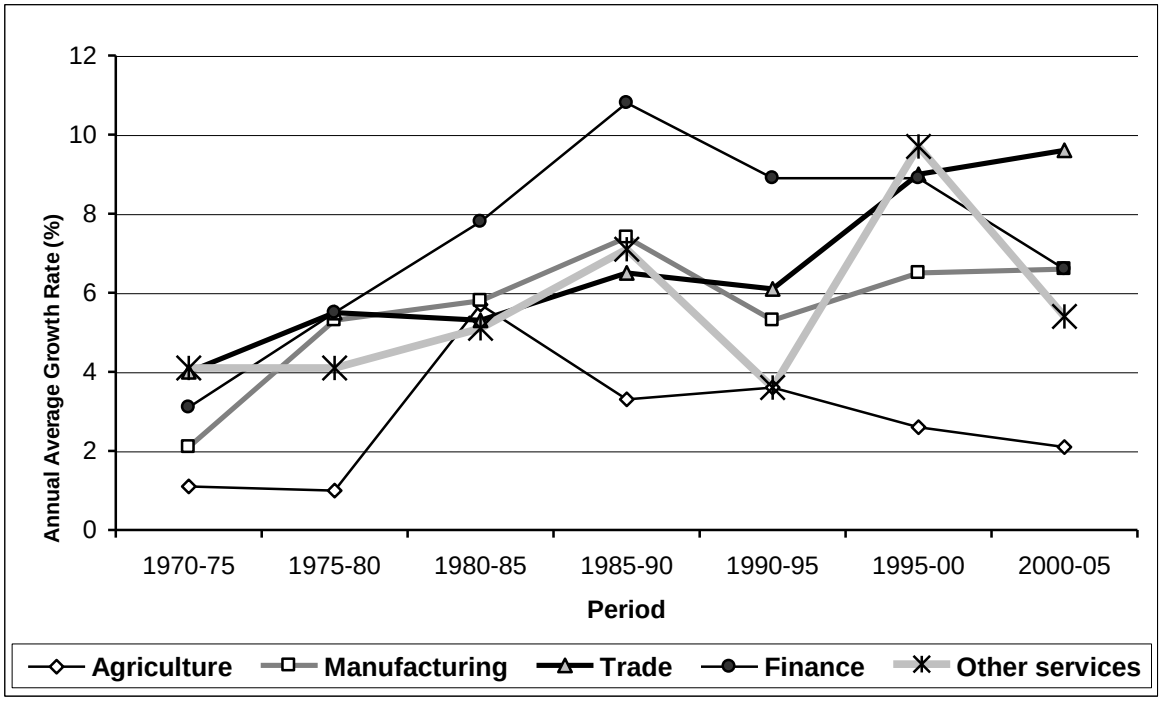
The growth scenario outlined above has changed considerably during 2008-09 as a result of the global economic downturn. It may be mentioned in this regard that global economic growth declined from 5 per cent in 2007 to 3.8 per cent in 2008 and is projected to

4. Data from Basu and Maertens (2007).
5. Data from EIU, Country Profile India 2006. See, also, Basu and Maertens (2007).
6. Government of India, Ministry of Finance: *Economic Survey 2007-08*.

fall to only 0.5 per cent in 2009[7] as a result of recession in the major economies of the world. India's economy has not remained unaffected by this sharp downturn of the global economy. Projections of GDP growth for 2008-09 range from around 7 per cent (official) to a low of 5.1 per cent (by IMF). Such a substantial decline in economic growth is naturally affecting the labour market and is going to add to the employment challenge which is discussed further in Chapter 3.

Interesting features of the pattern of growth come out when one goes beyond the overall figures to sectoral growth figures. For example, agriculture registered 2 per cent and 1.7 per cent annual growth respectively during the 9th Plan and 10th Plan periods (1997-98 to 2001-02 and 2002-03 to 2006-07). The services sector, on the other hand, registered annual growth rates of 8.1 per cent and 9 per cent respectively during the two periods. Industrial growth accelerated from 4.6 per cent during the 9th Plan period to 8.3 per cent during the 10th Plan period[8]. Figure 2 provides a picture of the sectoral growth pattern over a longer period – from 1970 to 2005. The above figures appear to lend support to the contention that growth in the Indian economy in recent years has been more oriented towards the services sector.

Figure 2: India Sectoral Growth Rate 1970 – 2005



Has the impressive growth performance of the Indian economy been translated into the social dimensions? In that regard, it would be important to see what has been happening to poverty, income distribution and employment.

2.2 Poverty and Income Distribution

The incidence of absolute poverty has continued to decline. The percentage of population below the poverty line in 2004-05 was 'provisionally' estimated at 27.8 per cent, and the average decline in the incidence of poverty during 1993-2004 was estimated to be

7. IMF: World Economic Outlook Update, January 2009.
8. The figures quoted in this paragraph are from Government of India, Planning Commission: *Towards Faster and More Inclusive Growth: An Approach to the 11th Five Year Plan*. New Delhi, India, 2006

0.74 percentage points per year. The official estimate for the rate of decline in poverty during 1999-2005 is 0.79 percentage points per year.[9] The elasticity of poverty reduction with respect to per capita GDP growth has declined from 1.13 per cent during 1993-94 to 1999-00 to 0.69 per cent during 1999-2000 to 2004-05.[10]

An important aspect of the social dimensions of economic growth is what has been happening to the distribution of income/expenditure. While equity consideration warrants attention to changes in income distribution, it is important also from the point of view of the impact of economic growth on absolute poverty. This is because the poverty reducing effect of economic growth could be countered by an increase in the degree of inequality in the distribution of income/expenditure. In India, there has been a clear tendency since 1993-94 for consumption/expenditure distribution to become more unequal. Given the changes in the survey methodologies, it is difficult to obtain comparable measures of poverty and inequality in India. But one study (Himanshu, 2007) has presented data for years that are comparable; and his estimates clearly show a worsening of the distribution of expenditure in both rural and urban areas during 1993-94 to 2004-05 (see Table 1)[11]. What makes this change even more noticeable is that it has come after a slight decline in inequality between 1987-88 and 1993-94. This implies that the economic forces operating after 1993-94 were so different from those in the earlier period that not only was the tendency towards improvement in income distribution stopped, it was reversed.

Table 1. Gini Coefficients of Expenditure Distribution

Year	Rural	Urban
1983	30.4	33.9
1987-88	29.9	35.0
1993-94	28.6	34.4
2004-05	30.5	37.6

Source: *Himanshu (2007).*

Decomposition of changes in poverty into growth and distributional effects shows that during 1993-94 to 2004-05 economic growth had a positive effect on poverty reduction but the impact of inequality was negative, thus implying that the overall reduction in poverty would have been more had income distribution not worsened. Indeed, for many states, the actual decline in poverty during 1993-05 was substantially less than what would have been the case without change in inequality (Dev and Ravi, 2007).

2.3 Employment Trends

Employment growth over a longer period, 1993-94 to 2004-05 shows an increasing trend, though between 1993-94 and 1999-00 it showed a sharp decline and thereafter a significant increase between 1999-00 and 2004-05. Employment grew by 1.17 per cent in the 1993-94 to 1999-00 period in comparison to 1.78 per cent from 1983 to 1993-94. There has however been a marked improvement in recent years (1999-00 to 2004-05) with the overall employment picking up by 2.46 per cent annually in the first five years of the decade. As Table 2 shows, employment growth rates in the 2000 - 05 period has also been higher than population growth, which was not the case in the previous years.

However, before concluding that the challenge of job creation in the Indian economy is no longer so serious, a few points need to be noted. The elasticity of employment growth with

9. These figures are also from the source mentioned in footnote 6.
10. These figures have been estimated by using the *annual rate of decline* in poverty and the growth rates of per capita GDP for the respective periods.
11. Dev and Ravi (2007) also shows that inequality in the distribution of expenditure has increased during that decade.

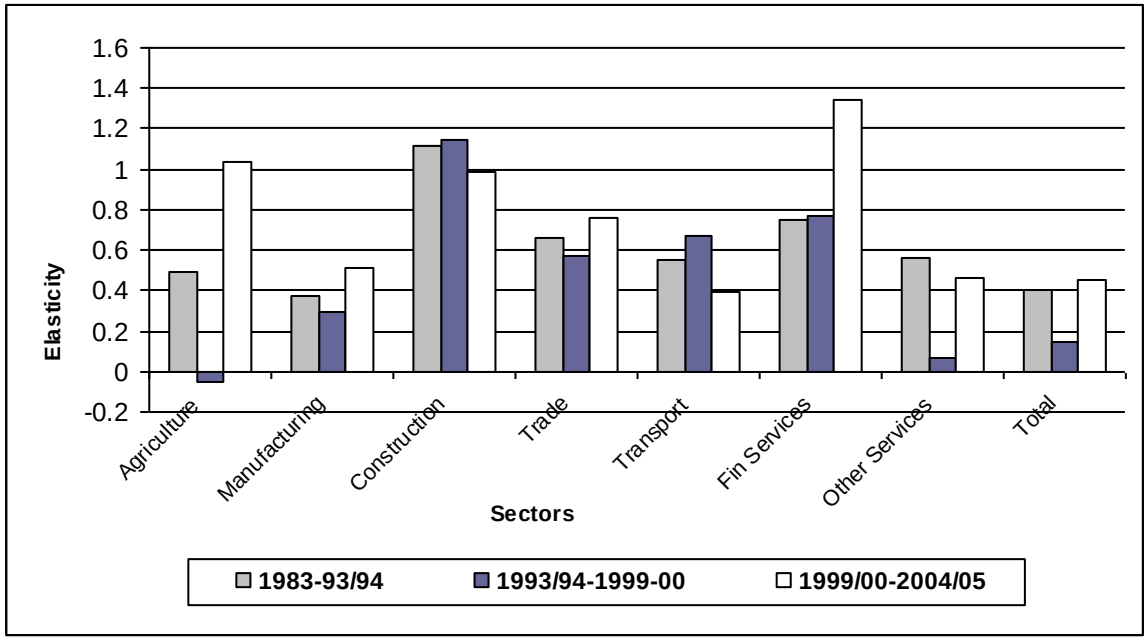
respect to output growth during the latter period just returned to the level attained during 1983 to 1993-94 (approximately 0.40; see Figure 3).

Table 2. Growth of total population and total employment (usual: principal and subsidiary) (% per annum)

Period	Growth of population			Growth of employment		
	Male	Female	Total	Male	Female	Total
Total						
1983-94	2.11	2.07	2.09	1.99	1.34	1.78
1994-2000	1.94	2.01	1.97	1.47	0.51	1.17
2000-05	1.68	1.69	1.69	2.10	3.25	2.46
Rural						
1983-94	1.81	1.73	1.77	1.73	1.09	1.50
1994-2000	1.64	1.72	1.68	1.09	0.35	0.84
2000-05	1.37	1.39	1.38	1.59	2.81	2.01
Urban						
1983-84	2.97	3.12	3.04	2.81	3.03	2.85
1994-2000	2.74	2.82	2.78	2.54	1.46	2.32
2000-05	2.46	2.48	2.47	3.41	5.66	3.87

Source: Calculated from NSSO, Unit level data, various rounds (38th, 50th, 55th, 61st) & Registrar General of India

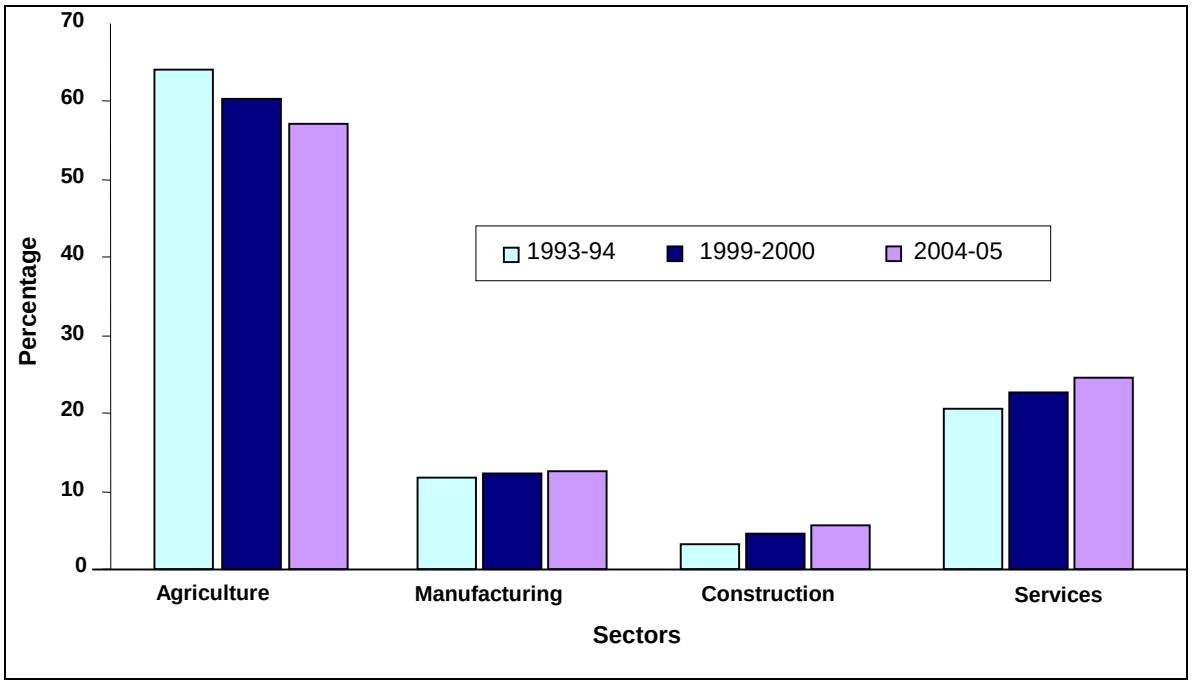
Figure 3: Employment Elasticity



In terms of employment growth and changes in the structure of employment, the performance of the Indian economy has been less impressive compared to that in overall economic growth. The share of agriculture in total employment has declined from 68.45 per cent in 1983 to 56.67 per cent in 2004-05, whereas that of manufacturing increased from 11.24 per cent to 12.20 per cent during the same period. Thus, although agriculture accounts for less than a quarter of the total GDP, it still supports more than half of the employed labour force (Table 3 and Figure 4). Clearly, labour productivity and incomes of people engaged in that sector continue to remain low. Data also reveals an increasing feminization of labour in the agriculture sector. The rest of the change has taken place in construction, trade, and

services sectors, thus providing further support to the comment made earlier about the service sector orientation of growth of the Indian economy. The construction sector has also witnessed fast employment growth in recent years, and its share of total employment has also increased as shown in Figure 4.

Figure 4: Sectoral composition of employment



A rural-urban break up shows that most of the employment growth has been in urban areas. Employment growth rate witnessed in rural sector was 2.03 per cent during the period 1987-88 to 1993-94; it fell sharply to 0.66 per cent during the early nineties but improved again to 1.97 per cent between 1999-2000 and 2004-05. The corresponding figures in the urban sector were higher at 3.39 per cent, 2.27 per cent and 3.22 per cent respectively.

India's total workforce has grown to 457 million over the last two decades. The gender ratio of the workforce (principal status) is weighed heavily in favour of males who account for about two-thirds of the total. About half of the male population is working. In contrast just about one-fifth of the female population is working and the figure has largely remained stable for over two decades.

The pick up in employment in the recent years is significant, and the change in trends in the gender segments of the workforce sharp. The female workforce, whose employment grew at a rate which is a third of that of the male workers, has now picked up to a rate which is about three-fourths higher than that of the male workforce. While the number of employed men picked up from 1.47 per cent in the nineties to 2.10 per cent in the first half of the current decade that of the women workers shot up from 0.51 per cent to 3.25 per cent during the same period. The trends have been much more significant in the urban sector where the increase in female workers picked up from 1.46 per cent during the period 1994 –00 to 5.66 per cent during the period 2000 - 05.

2.3.1 *Sectorwise Patterns*

The broad trends indicate some structural shifts but at a slow pace. Though share of agriculture in total value added has declined by almost half to 23 per cent in the last quarter

of a century, the workforce continues to dominate the sector with the share of the workforce going down only marginally from 68 per cent to 56 per cent. The share of manufacturing output also fell marginally to less than one-fourth during the period while its share of employment went up only from 11.24 per cent to 12.09 per cent during the period. Sectors which went up sharply during the period include trade, hotels, transport, storage and communication as well as financing, real estate and business services. Trade, transport, storage and communications registered a growth of more than 9 per cent in the 2000-01 to 2004-05 period in value added (1993-94 prices) as compared to 6.98 per cent in the 1995-96 to 2000-01 period. Financing, insurance, real estate also registered a growth rate of more than 7 per cent in both the periods. The employment share of services including electricity, gas and construction, went up from 21 per cent to 31 per cent during the period.

Employment growth in agriculture rebounded 1.09 per cent after the decline registered in the nineties. But a comparison of the growth rates during 1993-94 to 2004-05 and 1983-84 to 1993-94 shows that growth in the latter period was lower (2.60 per cent per annum) than in the earlier period (3.08 per cent) (Chadha, 2008). Manufacturing employment growth picked up by one percentage point over the nineties to 3.94 per cent.

In the urban sector, the trends show that male employment share in manufacturing has stabilized around 23 per cent over the last decade while the share in manufacturing of the female workforce has gone up by 4.76 percentage points and stands at 28.20 per cent in 2004-05. But the share of male workers in the services sector has shrunk to 20.8 per cent despite the marginal improvement in the first half of the current decade. Though the share of the female workers employed in services was a high at 35.9 per cent by 2004-05, the share has been stable for over a decade.

A closer look at the rural sector shows that two-thirds of the male workforce continued to be in agriculture while the share of the female segment was more than four-fifths. The agriculture share of the male workforce has dipped more sharply in the first half of the decade as compared to the female. In terms of share of women and men in agriculture, women constitute over 40 per cent of the agricultural labour force. Share of manufacturing employment in rural India has gone up marginally for both male and female workers over the last decade to 7.9 per cent and 8.4 per cent respectively. But in the case of services, the male share has steadily declined to 5.9 per cent from 7 per cent while that of females has improved marginally to 3.9 per cent from 3.4 per cent over the decade.

Table 3. Percentage distribution of usually employed persons by broad industry division (principal +subsidiary status)

		1983		1993-94		1999-00		2004-05	
		M	F	M	F	M	F	M	F
Rural	Agriculture	77.50	87.50	74.10	86.20	71.40	85.40	66.50	83.30
	Mining & Quarrying	0.60	0.30	0.70	0.40	0.60	0.30	0.60	0.30
	Manufacturing	7.00	6.40	7.00	7.00	7.30	7.60	7.90	8.40
	Elec. Water	0.20		0.30		0.20		0.20	0.00
	Construction	2.20	0.70	3.20	0.90	4.50	1.10	6.80	1.50
	Trade, Hotels	4.40	1.90	5.50	2.10	6.80	2.00	8.30	2.50
	Transport, Communication	1.70	0.10	2.20	0.10	3.20	0.10	3.80	0.20
	Other Services	6.10	2.80	7.00	3.40	6.10	3.70	5.90	3.90
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Urban	Agriculture	10.30	31.00	9.00	24.70	6.60	17.70	6.10	18.10
	Mining & Quarrying	1.20	0.60	1.30	0.60	0.90	0.40	0.90	0.20
	Manufacturing	26.80	26.70	23.50	24.10	22.40	24.00	23.50	28.20
	Elec. Water	1.10	0.20	1.20	0.30	0.80	0.20	0.80	0.20

	Construction	5.10	3.10	6.90	4.10	8.70	4.80	9.20	3.80
	Trade, Hotels	20.30	9.50	21.90	10.00	29.40	16.90	28.00	12.20
	Transport, Communication	9.90	1.50	9.70	1.30	10.40	1.80	10.70	1.40
	Other Services	24.80	26.60	26.40	35.00	21.00	34.20	20.80	35.90
	Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Mitra. A. (2008)

The gender disaggregated sectoral employment growth rates (Table 4) show that the rate of growth of women's employment in both rural (9.12 percent) and urban (4.88 percent) manufacturing sector has outstripped that of men's. There has also been an 18 per cent rate of growth, perhaps from a very low base, of women's employment in rural transport. In urban construction on the other hand, there has been a 4.58 per cent rate of growth of men's employment. The rate of growth of men's employment continues to be higher than that of women in the urban trade, hotel and restaurant sector. Rural construction employment has grown at high rates for both women and men.

Table 4. Growth rates of (principal +subsidiary status) workers by industry during 1999-00 to 2004-05

Industrial Classification	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Agriculture etc.	0.16	2.30	1.00	1.80	6.13	3.59	0.21	2.44	1.09
Mining & Quarrying	1.59	2.81	1.85	3.41	-8.02	2.51	2.26	1.09	2.07
Manufacturing	3.21	4.88	3.81	4.41	9.12	5.45	3.86	6.47	4.62
Electricity, water etc.	1.59	-	1.59	3.41	5.66	3.55	2.70	5.66	2.81
Construction	10.33	9.38	10.23	4.58	0.83	4.16	8.06	6.02	7.83
Trade, hotel & restaurant	5.72	7.50	5.96	2.41	-1.01	2.02	3.72	2.77	3.60
Transport etc.	5.14	18.09	5.41	4.00	0.48	3.87	4.52	5.89	4.56
Other Services	0.91	3.89	1.66	3.22	6.69	4.24	2.24	5.65	3.19
All	1.57	2.79	1.99	3.37	5.66	3.83	2.07	3.23	2.44

Source: Calculated from NSSO, Unit level data, various rounds (38^{th}, 50^{th}, 55^{th}, 61^{st}) & Registrar General of India

2.3.2 *Unemployment*

In spite of the significant pick up in employment growth, unemployment rates continued to increase between 1999-2000 and 2004-05. As can be seen from Table 5, open unemployment for the country as a whole, measured according to the "current daily status", increased from 6.1 per cent in 1993-94 to 7.3 per cent in 1999-2000 and to 8.3 per cent in 2004-05 (Planning Commission, 2006). Unemployment rates went up both in urban and rural areas and for both women and men whether measured in terms of US, CDS or CWS[12]. At a general level unemployment rates for women were higher than that for men in both the rural and urban sectors. And in the case of women, the urban unemployment rate was much higher than in the rural sector. In contrast, in the case of the men, the rural unemployment rate was higher than the urban[13].

It is however clear that the available data on unemployment does not reflect the current situation. Two factors need to be taken into account. First, on the positive side, there was acceleration in economic growth in India since 2005; and unless the relationship between employment and output changed for the worse, one can expect the employment situation to

12. US: usual status; CWS: current weekly status; CDS: current daily status

13. Though figures on unemployment have to be treated with caution for a number of reasons, the main being that in India, the long term unemployment rates (captured by UPS and UPSS) are not high as large section of India's labour force who are poor cannot afford to be unemployed for longer duration in the absence of unemployment allowance, hence unemployment by CDS and CWS has been analysed. The detail table is given in Annex 1 to Chapter 5.

have improved during 2005-07. On the other hand, there has been a sharp decline in GDP growth in recent months (as mentioned earlier), and the projected GDP growth for 2008-09 is substantially lower than that achieved in recent years. Hence, unless there is 'labour hoarding' on a large scale, the labour market (especially in sectors where output growth is declining) is likely to reflect the effects of the downturn in economic growth. Indeed, evidence available points to sizeable lay-off of workers in various sectors, one official survey (by the Ministry of Labour and Employment) showing half a million job losses during the last three months of 2008[14]. Thus, although it is not possible to arrive at a definite conclusion about the current rate of unemployment, it seems that any improvement that may have occurred in recent years is in danger of being reversed.

Table 5. Unemployment rates by usual status, current weekly status and current daily status

Year	Rural male			Rural female		
	US	CWS	CDS	US	CWS	CDS
1983	2.1	3.7	7.5	1.4	4.3	9.0
1993-94	2.0	3.1	5.6	1.3	2.9	5.6
1999-00	2.1	3.9	7.2	1.5	3.7	7.0
2004-05	2.1	3.8	8.0	3.1	4.2	8.7
	Urban male			Urban female		
1983	5.9	6.7	9.2	6.9	7.5	11.0
1993-94	5.4	5.2	6.7	8.3	7.9	10.4
1999-00	4.8	5.6	7.3	7.1	7.3	9.4
2004-05	4.4	5.2	7.5	9.1	9.0	11.6

Source: Mitra, Arup (2008)

As Table 6 shows, youth unemployment rates for women were worse than that of men. The unemployment rate amongst young rural women more than doubled in 2004-05 as compared to 1999-2000, and was two to three times larger than the unemployment rate of the all rural women. But the highest level of unemployment among all categories of youth was found amongst urban women -15.6 per cent in the case of the 15-19 age group and 25.8 per cent in the 20-24 age group in 2004-05.

Table 6. Unemployment rates among young people (usual status)

Year	Male					
	Rural			Urban		
	15-19	20-24	All 15+	15-19	20-24	All 15+
1993-94	3.3	4.9	2.0	11.9	12.6	5.4
1999-00	5.5	5.2	2.1	14.2	12.8	4.8
2004-05	7.9	6.2	2.1	14.0	12.5	4.4
	Female					
	15-19	20-24	All 15+	15-19	20-24	All 15+
1993-94	1.9	2.8	1.3	12.8	21.7	8.3
1999-00	3.2	4.9	1.5	13.2	19.4	7.1
2004-05	6.7	9.3	3.1	15.6	25.8	9.1

Source: C.P. Chandrasekhar, Jayati Ghosh and Anamitra Choudhury, The 'Demographic Dividend' and Young India's Economic Future, EPW, December 9, 2006, p.5060

2.4 Employment Quality

14. Ministry of Labour and Employment, Government of India: *Report on Effect of Economic Slowdown on Employment in India* (October-December 2008). Labour Bureau, Chandigarh, January 2009.

2.4.1 *Status of Employment*

A striking feature of the changing composition of the workforce (see Tables 7 and 8) is the reversal of trends in the self-employed category in the first half of the decade. The share of self employed went up by 4.24 percentage points in the first half of the current decade – though it has been steadily declining since the early eighties – while that of casual labour went down by 5.24 percentage points. Share of regular employment also went up, but at a slower rate (0.42 percentage points). The highest increase in self-employment was for rural female workers (6.4 percentage points) and the least for the urban female workers (2.4 percentage points). In the NSSO data, contributing family workers are included in the self-employment category, so it is likely that a part of the increase in self employment for women in rural areas is in the contributing family worker category.

The latest round of the NSSO asked workers who were self employed if they found self-employment to be remunerative (see Table 9). Only about half of all self employed men and women in rural areas found their earnings to be remunerative, while in urban areas there was a clear difference between the perception of women and men. As many as 60.9 per cent of all urban men and 50.9 per cent of all urban women found self-employment remunerative,

The trends in the case of regular employment were mixed in the first part of this decade. While the urban female component registered the highest increase (2.3 percentage points) the urban male segment registered a decline (1.1 percentage points). In the case of the rural sector there was some marginal improvement in regular employment for both male and female workers.

In sharp contrast, the share of casual labour registered a decline with the trend being the sharpest in female workforce in rural areas (7 percentage points) and urban areas (4.7 percentage points). The share of casual employment also registered a relatively slower decline in the case of males in both rural (2.2 percentage points) and urban areas (3.3 percentage points).

Table 7. Sectoral growth rates by status

Nature of Employment	**1993-94 to 1999-00**	**1999-00 to 2004-05**
Agricultural self-employment	-0.53	2.89
Agricultural wage employment	1.06	-3.18
Total agricultural employment	0.03	0.83
Rural non-agricultural self-employment	2.34	5.72
Rural non-agricultural wage employment	2.68	3.79
Rural total non-agricultural employment	2.26	5.27
Urban non-agricultural employment	3.13	4.08
Secondary employment	2.91	4.64
Tertiary employment	2.27	4.67
Total non-agricultural employment	2.53	4.66

Source: Chandrasekhar and Ghosh (2007)

Table 8. Distribution of workers by gender, activity status and rural urban location

	Self Employment				**Regular**				**Casual**			
	83	**93-94**	**99-00**	**04-05**	**83**	**93-94**	**99-00**	**04-05**	**83**	**93-94**	**99-00**	**04-05**
	Rural											
Male	60.5	57.9	55.0	58.1	10.3	8.3	8.8	9.0	29.2	33.8	36.2	32.9

Female	61.9	58.5	57.3	63.7	2.8	2.8	3.1	3.7	35.3	38.7	39.6	32.6
	Urban											
Male	40.9	41.7	41.5	44.8	43.7	42.0	41.7	40.6	15.4	16.3	16.8	14.6
Female	45.8	45.8	45.3	47.7	25.8	28.4	33.3	35.6	28.4	25.8	21.4	16.7

Source: NSS Report No. 515: Employment and Unemployment Situation in India, 2004-05

Table 9. Percentage of self-employed persons reporting their earning from self employment as remunerative and distribution by amount regarded as remunerative: Self employment by usual status (primary + subsidiary)

	% finding self employment remunerative	Percentage finding amount of earnings as remunerative					
		0-1000	1001-1500	1501-2000	2001-2500	2501-3000	>3000
Rural							
Male	51.1	12.9	17.5	16.5	11.4	12.9	27.3
Female	51.4	34.2	23.5	15.4	8.9	7.2	9.9
Persons	51.2	21.2	19.7	16.0	10.5	10.7	20.5
Urban							
Male	60.9	4.9	8.2	9.9	7.2	12.2	56.5
Female	50.9	32.8	20.2	12.6	7.7	8.1	18.3
Persons	58.6	10.4	10.6	10.4	7.4	11.5	48.9

Source: Jeemol Unni and G Raveendran, Growth of Employment (1993-94 to 2004-05): Illusion of Inclusiveness, Economic and Political Weekly, January 20, 2007, p. 199

2.4.2 *Informal Employment*[15]

The report of the National Commission for Enterprise in the Unorganized Sector brings out the bias in the growth of employment with almost all gains occurring in the informal/unorganized segment. It was informal employment (mainly in the informal sector enterprises but also in informal employment within the formal sector) which accounted for almost all the gain with 61 million new informal jobs being created as total informal employment rose by 17 per cent (Table 10) from 362 million to 423 million during 2000 to 2005.

Table 10. Trends in employment in the formal/organised and informal/ unorganised sector employment

Worker/Sector	Informal/ unorganised sector		Formal/ organised sector		Total	
	1999-00 (million)	2004-05 (million)	1999-00 (million)	2004-05 (million)	1999-00 (million)	2004-05 (million)
Informal/unorganised worker	341.2 (99.6)	393.5 (99.6)	1.4 (0.4)	1.4 (0.4)	342.6 (100)	394.9 (100)
Formal/organised worker	20.5 (37.8)	29.1 (46.6)	33.6 (62.2)	33.5 (53.4)	54.1 (100)	62.6 (100)
Total	361.7 (91.2)	422.6 (92.4)	35.0 (8.8)	34.9 (7.6)	396.8 (100)	457.5 (100)

Note: Figures in parentheses denote percentages

Source: National Commission for Enterprise in the Unorganised Sector, Report on Conditions of Work and Promotion of Livelihoods in the Unorganised Sector, 2007, p.4

Table 11. Distribution of workers by sex in formal and informal employment (2004-05)

Organised and Unorganised employment by gender (million)

15. Section 5.5 provides a more detailed discussion on informal enterprises.

Category	Female	Male
Organised	6	28.8
Unorganised	142	280.6

Source: (ibid)

The distribution of informal workers by their status of employment shows that 253.1 million workers are self-employed; 26.4 million are regular workers and 115.5 million working as casual workers. Over 30 per cent of self employed women are home-based workers and 32 per cent of women contribute as unpaid family worker; corresponding figure for men is a mere 6.5 per cent and 10 per cent respectively (NCEUS, Table 5.1, pp 78).

It is interesting to note in this context that data from the Annual Survey of Industries also show that the share of contract labour to all workers increased from 20 per cent to 25 per cent between 1999-00 and 2003-04[16].

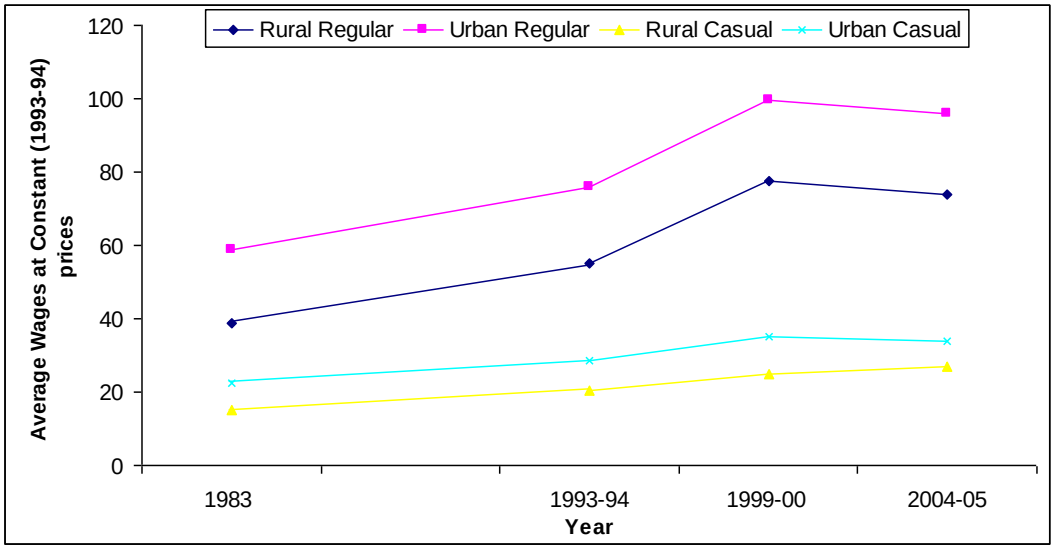
2.4.3 *Income and Wages*

The long-term rate of wage growth shows an increasing trend in both rural and urban areas between 1983 and 2004-05, though there was a decline in the rate of growth of wages for regular workers in the more recent period 1999-00 to 2004-05. However, there has been a deceleration in rate of wage growth during the post liberalization period across both regular and casual segments, and it has been sharper in case of casual as compared to regular wages.

In the case of regular salaried workers in the rural sector (see Figure 5 and Table 12) real wages declined for the female workforce between 1999-00 and 2004-05 while it increased only marginally for the male workers, with the annual average wage increase decelerating to one-ninth of the rates notched between the previous rounds. The highest fall in real wages in the rural sectors was registered by female workers in the non-agriculture sector which fell by more than one-tenth annually. In contrast, the real wages for regular salaried workers in the agriculture sector rose marginally. The trends were equally bad for male workers in the rural sector with real wages of both the agricultural and non-agricultural workers falling, the latter a bit faster than the former. But, the sectors that have demonstrated a higher rate of growth for female workers also have one of the largest wage gaps between men and women, such as rural and urban manufacturing and agriculture.

16. Apart from the status of employment and employment in the informal economy, an important aspect of the type of employment generated in recent years is part-time employment. One study (Unni and Raveendran, 2007) shows that the acceleration of employment growth during 1999-00 and 2004-05 basically reflects growth in part-time employment and of low-quality jobs in the informal economy.

Figure 5: Average daily wages/earnings of regular and casual workers in rural and urban areas at constant 1993-94 prices, 1983, 1993-94, 1999-2000 & 2004-05 – All India



Source: Karan and Selvaraj (2008)

Table 12. Growth rates of (principal +subsidiary status) workers by industry during 1999-00 to 2004-05 and female wages as percentage of men's (2004-05)

Industrial Classification	Employment Growth				Female wages as percentage of men's	
	Rural		Urban		Rural	Urban
	Male	Female	Male	Female		
Agriculture etc.	0.16	2.3	1.8	6.13	70.29	41.89
Mining & Quarrying	1.59	2.81	3.41	-8.02	31.44	58.13
Manufacturing	3.21	4.88	4.41	9.12	33.87	59.00
Electricity, water etc.	1.59	-	3.41	5.66	111.54	85.22
Construction	10.33	9.38	4.58	0.83	105.52	104.97
Trade, hotel & restaurant	5.72	7.5	2.41	-1.01	92.02	132.48
Transport etc.	5.14	18.09	4	0.48	81.59	119.33
Other Services	0.91	3.89	3.22	6.69		
All	1.57	2.79	3.37	5.66	89.55	82.65

Source: Growth rates calculated from NSSO, Unit level data, various rounds (38th, 50th, 55th, 61st), Registrar General of India and wage gap calculated from NSSO 2004-05

A comparative scenario (Table 13) of wage rates among casual workers vis-à-vis regular wage rates reveals that casual workers both in rural and urban areas receive wage rates that are slightly above one-third of what the regular workforce are paid.

Table 13. Average daily wage (in rupees) of regular and casual workers (Age 15-59 years)

	1983	1993-94	1999-00	2004-05
Regular workers at constant prices (1993-94)				
Rural	38.80	55.12	77.47	74.01
Urban	58.94	75.77	99.73	96.12
Casual workers at constant prices (1993-94)				
Rural	15.21	20.54	24.87	27.04
Urban	22.51	28.77	35.03	34.08

Source: Karan and Selvaraj (2008)

Female casual workers not only receive lower wages but the differential is quite stark, roughly 40 per cent less in urban areas and 25 per cent less in rural areas for regular workers during 2004-05 (Table 14). Gender differential of regular wages has increased in rural areas while it shows a mixed trend in urban areas over the years.

On the whole, the gender differential in wages seem to have largely declined, implying a higher wage growth of female workers as compared to that of male workers over the years. Rural-urban duality is less stark among the casual women workers.

Table 14. Average Daily Regular and Casual Wages (in Rupees) and Ratio of Female to Male Wages

	1983	1993-94	1999-00	2004-05
Female/male ratio regular workers				
Rural	0.72	0.60	0.62	0.59
Urban	0.76	0.80	0.83	0.75
Female/male ratio casual workers				
Rural	0.63	0.66	0.65	0.63
Urban	0.50	0.57	0.60	0.58

Source: Karan and Selvaraj (2008)

ASI data pertaining to the organized factory sector also shows that the growth rate of wages is almost similar to what is seen from the NSS, despite the fact that NVA per worker has increased substantially in both rural and urban areas. ASI estimates are for factory sector which is defined as enterprises with more than 10 workers with electricity and more than 20 workers with or without electricity. Using the same criterion, the number of regular workers in rural areas by NSS is 1.96 million for 1999-00 and 2.35 million for 2004-05. The net increase in workers by NSS is 393 thousand as compared to 366.3 thousand in ASI. There is also close similarity between the wage estimates reported by NSS for regular workers and ASI for both these years. In other words, despite NVA per worker increasing substantially, in real terms, wages of regular workers in these industries has declined. These figures also confirm the fact that of the 0.7 million increase in regular employment in industries of the ASI sector, almost half of them are not in factory sector but are in enterprises of less than 10 employees or in informal sector.

Further disaggregation (Table 15) also shows that this has been accompanied by an increasing share of managerial compensations and profits as ratio of net value added. Profits as percentage of net value added increased from 23 per cent in 1981-82 to around 31-32 per cent for most of the 1990s, but jumped substantially to more than 56 per cent by 2004-05.

Table 15. Wages, emoluments and wages per NVA and profits per NVA

	Wage per worker	Managerial emoluments	Wages per man days worked	Wage per NVA	Profits per NVA
1981-82	19.72	39.05	26.06	0.47	0.23
1993-94	72.69	145.76	86.03	0.32	0.32
1999-00	114.74	311.87	138.15	0.31	0.31
2004-05	139.64	472.56	168.58	0.25	0.56

Source: Data extracted from EPW Research Foundation CD, Annual Survey of Industries, 1973-74 to 2003-04 and http://mospi.nic.in/stat_act_t3.htm

However, the picture in the urban sector is different with not only the total number of factories declining but also the number of workers declining between 1999-00 and 2004-05. At the same time, the rate of growth of rural wages is also higher than the rate of growth of urban wages. However, this is not confirmed by the NSS estimates which suggest that workers in factory sector using ASI definition increased by around 1.9 million during 1999-

00 and 2004-05. On the other hand, wage rates from NSS do confirm that rural wages have grown faster than urban wages, even though both have seen sharp deceleration.

2.4.4 *Wage differentials and trends in real wages in states*[17]

All India average wages do not reflect the level of variation in wage levels across regions. In general, it has been argued that wages are highly suppressed in the poorer regions, while the developed regions have fairly high wage levels (see Table 16). Apart from the fact that general wage levels (particularly rural casual wages) are very low in the poorer states, the rural-urban and casual-regular dualisms are stark in most of the poorer states in India. Rural casual wages vary from a high of Rs 120 per day in Kerala to a low of Rs 34 in Chhattisgarh, followed closely by Rs 36 in Madhya Pradesh and Rs 38 in Orissa and Maharashtra. Most of the developed states, such as Punjab, Haryana, Gujarat, Himachal Pradesh, and Tamil Nadu, have higher casual wages in both rural and urban areas as compared with those in the poorer states and the all India average. Although two poorer states, Chhattisgarh and Madhya Pradesh, have very low casual and regular wages, most of the poorer states such as Assam, Bihar, Jharkhand, Karnataka, Orissa, and Jammu & Kashmir have high urban regular wages.

The evidence suggests that most of the poorer states, which have a large proportion of the country's unskilled and less educated workforce, exhibit strict labour market segmentation reflected by wide differentials across different types of wages. In all the less developed and poorer states, the urban regular wages are higher than in many developed states such as Punjab, Haryana, Gujarat and Kerala, leading to very high disparity across casual and regular wages. These states also show very high rural–urban differentials in both the casual and regular wage segments. The rural casual to urban regular (the two extremes of the labour market segmentation) ratio is as low as 0.18 in Bihar, Jharkhand, and Maharashtra. This implies that in these states, the average rural casual wage is less than one-fifths of the average urban regular wages.

Table 16. Relative position of different major states in daily wages/earnings, 2004–05

	Low	Medium	High
Rural			
Regular	Andhra Pradesh, Assam, Chhattisgarh, Karnataka, Madhya Pradesh, Tamil Nadu, Uttar Pradesh, West Bengal	Gujarat, Rajasthan, Orissa	Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Maharashtra, Punjab, Uttarakhand
Casual	Chhattisgarh, Madhya Pradesh, Karnataka, Bihar, Andhra Pradesh, Orissa, Maharashtra	Jharkhand, West Bengal, Uttar Pradesh, Gujarat	Kerala, Jammu & Kashmir, Himachal Pradesh, Punjab, Haryana, Rajasthan Tamil Nadu, Assam, Uttarakhand
Urban			
Regular	Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, Madhya Pradesh, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal	Kerala, Orissa, Uttarakhand	Assam, Bihar, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Maharashtra, Punjab
Casual	Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Orissa, Uttar Pradesh, West Bengal	Himachal Pradesh, Maharashtra, Rajasthan, Uttarakhand	Assam, Gujarat, Karnataka, Haryana, Tamil Nadu, Punjab, Jammu & Kashmir, Kerala

Note: Low, medium and high has been defined in comparison to all-India wage rates
Source: Karan and Selvaraj (2008)

17. This section is based on Karan and Selvaraj (2008).

2.4.5 Working Poor

The share of the 'working poor' has been calculated using varying definitions and the NSSO data. Estimates vary from 19.3 percent (NCEUS, 2007) to 21.6 (Karan and Selvaraj, 2008) to 24.5 per cent (Papola, 2008). See Table 17.

Table 17. Percentage of Working Poor

Source	Rural	Urban	Total
NCEUS. 2007	18.7	21	19.3
Sundaram. 2007.	23.2	21.7	22.8
Karan, A; Selvaraj, Sakthivel. 2008.	20.8	24.4	21.6
Papola, T S .2008			24.5

Source: 1.Government of India. 2007. Report on conditions of work and promotion of livelihoods in the unorganised sector, National Commission for Enterprises in the Unorganised Sector.

2. Sundaram. 2007. Employment and Poverty in India, 2000-2005, EPW, Vol.42, no.30

3. Karan, Anup; Selvaraj, Sakthivel. 2008. Trends in wages and earnings in India: Increasing wage differentials in a segmented labour market, Working Paper, ILO, SRO-New Delhi.

4. Papola, T S; Sahu P P (forthcoming) Mainstreaming employment in macro-economic and sectoral development: A framework for analysis and policy, ILO, New Delhi.

If we consider the Karan and Selvaraj (2008) estimate, the total number of working poor in India during 2004–05 is estimated to be around 99 million (74 million in rural areas and 25 million in urban areas). The percentage of poor workers to total poor population in 2004–05 is around 37 per cent. Given the loss of direct comparability of poverty data over a long period of time, although a long term comparison of incidence of poverty among workers and total number of working poor is not possible, a broad approximation shows that over the years, the poverty ratio among workers has declined (Table 18). However, the share of working poor to the total number of poor has remained more or less stagnant, particularly between the periods, 1999–00 and 2004–05.

Karan and Selvaraj (2008) estimate the poverty amongst casual workers to be 32 per cent as against 18 per cent among the self-employed and 13 per cent among regular wage earners. Further, it is important to note that the poverty ratio among casual labourers has been higher in urban areas than in rural areas from 1993-94 to 2004-05. In urban areas, any significant decline in the poverty ratio during the post-liberalization period can be noticed only among the self-employed, in which segment the poverty ratio declined from 31 per cent in 1993-94 to 25 per cent in 2004-05.

Table 18. Poverty ratio (%) among workers by status of activity

Location and activity status of workers	1993–94	1999–2000	2004–05
	Rural		
Self-employed	30.64	27.47	16.97
Regular	19.22	16.53	10.62
Casual	52.07	47.20	29.94
	Urban		
Self-employed	30.93	28.83	25.25
Regular	16.17	14.45	14.76
Casual	53.42	50.58	47.50
	Combined		
Self-employed	30.68	27.72	18.43
Regular	17.30	15.19	13.16
Casual	52.24	47.85	31.97

Source: Karan and Selvaraj (2008)

The above discussion may be summarised as follows:

1. While India has witnessed an impressive and steadily rising rate of economic growth since the 1980s, and while prospects for future growth remain high, the challenge of employment creation, especially good quality remunerative employment, remains formidable.
2. There has been a reversal of employment decline from the 1993-94 to 1999-00 period to the 1999-00 to 2004-05 period. However growth in employment generation has not kept pace with labour supply and open unemployment rates have risen. They are particularly significant amongst certain groups such as young women and men, graduates, etc.
3. Over half the workforce continues to depend on agriculture for their livelihood, but productivity in agriculture remains low. It is also relatively more difficult for women to move to other sectors than men.
4. Sectors which have been increasing their share of employment are those in the services, especially construction and trade.

Chapter 3

The Employment Challenge

3.1 On Estimating the Employment Requirement

In order to formulate an employment strategy, it would be essential to have a quantitative estimate of the magnitude of the employment challenge as well as an idea about the nature of the challenge beyond the quantitative magnitude. One approach to mainstreaming employment in development strategy and policies is to start by treating it as the primary objective of development and make other dimensions viz. growth rate, technology, balance of payments etc. dependent upon it. For this approach to be applied, the amount of employment required to be generated has to be assessed as also the employment likely to be generated by any given rate and structure of growth. Such an approach has, however, not been found feasible and has, therefore, never been attempted. For one, the growth rate required to generate the needed employment during a given period of time may be much higher than the available resources are able to generate. Then, the structure of output resulting from purely employment-oriented growth may not correspond to the pattern of demand, domestic and external. Moreover, in an economy characterised by low levels of income and high incidence of poverty, a primarily employment oriented approach without due regard to productivity may prove self-defeating, as it may not serve the primary purpose of employment, namely, realization of a reasonable level of income from work.

If, however, employment is seen to be a major concern, attempt needs to be made to examine whether the problems associated with the approach to treat it as the primary objective are really difficult to surmount. A realistic assessment of the magnitude of the challenge of employment and of the employment potential of varying rates and structure of growth is nevertheless required if employment is accepted as an objective irrespective of whether primary or secondary-- of growth and development. It is argued below that the approach adopted to assess both the problem and the prospects in the exercises on employment planning in India suffers from some limitations, resulting in underestimation of the problem and overestimation of the prospects.

The magnitude of the challenge of employment is commonly assessed in terms of the number of unemployed estimated on the basis of unemployment rates observed in the NSSO surveys. One of the three concepts by which unemployment is defined and measured, namely, Usual Status, Weekly Status and Daily Status, is chosen for this purpose. The choice made by official agencies, specially the Planning Commission, has not always been explained in terms of the rationale and justification of the selected concept. And different concepts have been used at different times. Usual Principal Status (UPS) was used in early exercises, but Current Daily Status (CDS) has found favour with the planners in recent years. In between, in one or two Five Year Plans, Current Weekly Status (CWS) was adopted. It may be noted that the Usual Status concept that uses one year as reference period and Weekly Status using a week as reference period, yield estimates of number of persons, while Daily Status concept using a week as reference period provides estimates of unemployment in terms of person days. The latter concept is useful for planning short-term employment programmes but not for planning new full time employment opportunities. Between Usual Status and Weekly Status former has the advantage of a longer reference period, but both the employed and unemployed under this concept also include underemployed by various extents. Current Weekly Status on the other hand, clearly defines unemployed as those available for but finding no work at all

during the week, while the employed also include those with underemployment of various degree. It makes possible to estimate those who could be severely underemployed (virtually unemployed) in terms of having work only a small part of the week (say 3.5 or less days of the week) and in need of not just supplementary but full-time alternative employment. According to this approach, the magnitude of the problem will be seen to consist of those unemployed plus the severely underemployed. Thus if the unemployment rate by Weekly Status is 4.5 per cent and another 2.3 per cent are found to be severely underemployed, the requirement of new employment opportunities to achieve employment for all in a *five year period*, would be estimated in 2007 as follows (Table 19).

Table 19. Estimates of additional employment required

(a) Unemployed – 4.5% of the Labour Force =	479.6 x 0.045 = 21.6 million
(b) Severely Under Employed – 2.3% of the Work Force =	457.9 x 0.023 = 10.5 million
(c) Additions to Labour Force-1.8 % per year =	479.6 x 0.018 x 5 = 43.2 million
Total	75.3 million

Note: Although during 1993-94/2004-05 labour force registered a growth rate of 2.2 per cent per annum, following Planning Commission's estimates, a rate of 1.8 per cent has been applied expecting a deceleration in the labour force growth in coming years. Estimates in this and Table 20 are made applying rates as observed in 2004-05 on the projected labour force for 2006-07.

This procedure, however, does not fully take account of the employment challenge in so far as it still does not take care of the problem of the "working poor". Many of those having work for all or most of the time, in fact need alternative employment in so far as their work brings them an income which is much lower than what is considered to be the poverty line. Incidence of poverty is several times higher than the rate of unemployment: by the latest count, the former is around 22 per cent while the latter, even by the widest definition is around 8 per cent. A large part of those counted as employed are poor; according to one estimate about 23 per cent of the those working are poor (Sundaram, 2007), that means over 100 million persons are employed but poor. Income from their work is low due to low wages if working for others, or, if self employed, due to non-realisation of full potential of their work due to difficulty in accessing the inputs, credits, technology and markets, or low current and future potential of their activities due to low and declining demand for their product.

One can safely assume that those earning only a fraction (say less than one third or one half) of the poverty line income from their current work, either as wage earner or self employed, will not be able to sustain themselves in their current activity, or, at least, not able to raise their income above the poverty line, and will, therefore, need alternative employment. The magnitude of the requirement of employment generation thus becomes larger by their number, added to the currently unemployed and additions to labour force. During 2004-05, 24.5 per cent (112.2million) of the workforce were estimated to be poor. If one takes one half of the poverty line from current activity as the critical minimum to sustain and eventually cross the poverty line, about one fourth of the working poor (around 28 million) will be too vulnerable in their present employment and will need alternative work opportunities. The number of new employment opportunities (on CWS basis) required to be generated during the five years, beginning 2007, (2007-2012), on this basis would be 92.8 million[18] (Table 20).

18. It might appear from the above that there is an element of "double counting" in the number of additional jobs required when a part of the working poor are added to the new members of the labour force. But this number has been taken out of the total benchmark number when counting the number of jobs required. Hence, there is no double counting involved in the procedure adopted here.

Table 20. Employment opportunities to be generated

(a) Unemployment in 2007	21.6 million
(b) Addition to Labour Force (2007-2012)	43.2 million
(c) Working Poor in need of alternative employment	28.0 million
Total	92.8 million

Alternatively, (c) in Table 20 could be estimated on the basis of an analysis of reasons why incomes of the working poor are so low. One may separate those who could sustain and raise their income levels with adequate infrastructure, input and technological and marketing support, as their produce is in demand, from those in activities producing commodities and services with fast declining demand. Growth of incomes in general may result in decline in demand for products with high and negative income elasticity of demand. Trends in growth and decline of the number of establishments and workers in different activities can also be analysed to estimate such displacements. Many small producers may not be able to withstand the competition from larger producers, domestic and international. For instance, the unorganized manufacturing sector lost 2.7 million units during 1984-85 to 2000-01. Most of these units were in the category of own account enterprises, essentially self-employed, family-labour based and using no hired workers (Sahu, 2007). Most workers in them would have been part-time household workers, yet disappearance of these units led to a loss of 1.42 million of full time jobs. A loss of another 1.40 million full time jobs has been reported in the subsequent quinquennium, 2000-05 (Government of India, 2007b).

There could also be policy induced displacements: e.g., allowing large marketing companies to enter retail sector would lead to loss of livelihood of a large number of small traders. Acquisition of land for industrial projects and SEZs, for example would render many farmers and agricultural labourers jobless. It may not be easy to arrive at estimates of these displacements leading to need for alternative employment opportunities. But in a dynamically changing income and market scenario in a globalizing and competitive economic environment, this phenomenon needs to be clearly recognized and taken into account for planning employment opportunities for all over a period of time.

Another factor that could have implications for the employment challenge arises out of various kinds of shocks that an economy faces from time to time. Shocks may be inflicted by severe natural calamities (e.g., droughts, floods, etc.) and by economic factors. One example of the latter is the sharp economic downturn that India's economy is experiencing currently (during 2008-09) as a result of the global economic recession. Market based economies are likely to face such fluctuations in economic activities which, in turn, may have serious implications for the labour market and the employment challenge. During the current economic downturn, the economy has already started experiencing lay-off of workers on a large scale (see Chapter 2). Moreover, there are some categories of workers (e.g., those who are working as "informal workers" within the formal sector, or employed under sub-contracting arrangements), who are particularly vulnerable to immediate knock-on effects on the labour market (Kannan, 2009). While it is difficult to predict external shocks, it would appear prudent to prepare the economy in general and the labour market in particular to be able to absorb such shocks. High rates of employment growth through the adoption of an employment-intensive growth strategy during periods of high economic growth associated with a strong social protection mechanism for workers would be critical from the point of view of achieving a strong labour market that can withstand shocks of the kind mentioned above.

In this regard, mention must be made of the "stimulus packages" adopted by the Government of India to tackle the adverse effect of the global economic recession on India's economy. The measures under the policy packages are expected to help the economy regain strength and should have a positive impact on the employment and labour market situation[19]. However, rather than taking the latter as granted, it would be useful if recovery in the labour market is given explicit consideration in policies adopted to tackle economic fluctuations of the kind mentioned above.

It is argued here that the methodology commonly used and factors considered in estimating the magnitude of the task in employment planning have tended to underestimate the employment challenge. The number of employment opportunities required to be generated to meet the goal of employment for all by 2012 beginning with 2007 for example, will be much larger than the 65 million (22 million unemployed in 2007 and 43 million new entrants in labour force) currently being officially estimated. Previous paragraphs have given some illustrative ways of how to estimate the additional components. The methodology needs to be sharpened and available data used to firm up the estimates. Data are not available to apply these methodologies in all aspects. Therefore, proxies and approximations would need to be used at present. But it would be useful and desirable to collect such data for future exercises.

There may, of course, be disagreement on the issue of employment requirement, because while the official estimate for the period of 2007-12 is 65 million, the present exercise suggests a number of 92.8 million. However, this debate does not need to detain the reader here because in what follows, different scenarios are presented based on alternative estimates of employment required and elasticities of employment. With the lower figure of employment requirement, the challenge will, naturally, look less daunting.

3.2 Assessing the Employment Potential of Growth: Choice of Employment Elasticities

Assessment of the employment likely to result from a given rate and pattern of GDP growth is made on the basis of labour coefficients (labour to GDP ratio) applied to absolute value of additional output projected to be produced, or employment elasticities (ratio of change in employment to change in GDP) applied to the projected rates of growth of different sectors and subsectors. Since assessment is commonly made in respect of rates of growth, employment elasticities are used most often for this purpose. Elasticities (or for that matter labour coefficients) to be applied on projected growth (or additional output) are obviously to be based on past values as revealed by the experience of recent growth. A judgement is, however, needed to be made whether to apply the elasticities of the recent past straightaway, or project them using trends over a longer period, or then, adjust them further on an assessment of any breakthrough in respect of technological and productivity changes in the future years under consideration.

Employment elasticities may be expected to show a secular decline in the process of growth. Historical experience shows that an increasingly larger part of economic growth over the long period is contributed by technological change resulting in increase in productivity, thus leading to a decline in the use of labour per unit of output. This may be true, however, of the individual sub-sector and item of output, not necessarily in aggregate. Employment elasticities may decline at the disaggregated sectoral or product level, but aggregate elasticities may show a different trend, due to changed composition of output with varying

19. See Kannan (2009) for a discussion on this issue.

proportion of different sectors and subsectors having different values of employment elasticity. In regard to what value of elasticity to use for assessing employment impact of a given growth rate in a sector, a balance also needs to be struck between employment and productivity considerations. In an economy characterized by low productivity in many activities, and widespread poverty, a very high employment elasticity may, in fact, imply perpetuation of low productivity and low income per worker. An elasticity of higher than one means employment generation at a declining productivity level and should not generally be considered for any operational planning purposes.

A look at the estimates of employment elasticities in India by major sectors of economic activity and in aggregate, over the different periods since 1972-73 confirms some of the above propositions (Table 21). Aggregate elasticity showed a secular tendency to decline from one quinquennium to another, till 1999-00. The period 1999-00 to 2004-05, however, showed a sharp upward movement. Taking longer time period of a decade for comparison, however, the decline has been continuous, from 0.53 during 1972-73 –1983 to 0.40 during 1983–1993-94 and to 0.32 during 1993-94–2004-05. The long term elasticity for the entire period 1972-73 to 2004-05 works out to 0.41.

Elasticities differ significantly across divisions of economic activity. The long term elasticity for 1973-05 has been the lowest at 0.45 in agriculture to over one in construction. But the long term elasticities have varied to a smaller extent than the short-term ones, among sectors. Ignoring construction with a 1.14 elasticity, the long-term elasticities of other sectors have ranged from 0.46 for services (including finance, insurance, real estate, community, social and personal services) to 0.70 for trade, hotels and restaurant. Short-term elasticities for the period 1993-94 to 1999-00, when aggregate elasticity was observed to be the lowest, varied between 0.02 for agriculture to one for construction (or 0.68 for trade). For the period 1999-00 to 2004-05, when the aggregate elasticity was observed to be 0.53, sectoral elasticities varied from 0.41 in transport to over one in agriculture (or 0.96 in construction).

Table 21. Elasticity of Employment with respect to GDP

Sector	1972-73/	1977-78/	1983/	1987-88/	1993-94/	1999-00/	1972-73/	1983/	1993-94/	1972-73/
	1977-78	1983	1987-88	1993-94	1999-00	2004-05	1983	1993-94	2004-05	2004-05
1	2	3	4	5	6	7	8	9	10	11
Primary Sector	0.41	0.60	-11.63	0.46	0.02	1.12	0.46	0.50	0.33	0.45
Mining & Quarrying	0.88	0.98	0.96	0.36	-0.53	0.57	0.86	0.59	-0.07	0.51
Manufacturing	1.12	0.61	1.01	0.01	0.24	0.82	0.78	0.41	0.49	0.57
Utilities	-0.43	2.73	0.78	0.52	-0.84	0.82	1.00	0.64	-0.31	0.52
Construction	0.29	5.09	3.23	-0.02	1.00	0.96	1.38	1.16	0.98	1.14
Secondary Sector	0.95	0.92	1.29	0.04	0.36	0.91	0.86	0.53	0.61	0.68
Trade, Hotel etc.	1.07	0.61	0.72	0.65	0.68	0.52	0.80	0.68	0.61	0.70
Transport & Communication, etc.	1.00	0.91	0.50	0.66	0.62	0.41	0.88	0.59	0.50	0.64
Services*	0.88	0.70	0.05	0.94	-0.17	0.78	0.70	0.54	0.19	0.46
Tertiary Sector	1.00	0.69	0.32	0.79	0.32	0.59	0.77	0.58	0.44	0.58
Non-Agricultural	1.00	0.82	0.60	0.46	0.33	0.71	0.84	0.52	0.50	0.61
Total	0.57	0.57	0.37	0.42	0.15	0.53	0.53	0.40	0.32	0.41

Note: * includes finance, insurance & real estate, community, social and personal services etc.
Source: NSS data on employment and unemployment for various rounds and National Accounts Statistics (various years).

Given these features of aggregate and sectoral elasticities, which set of elasticities should be used as the basis for assessment of employment potential of growth, say, during the Eleventh Plan (2007-2012)? Elasticities for the last two quinquennial periods for which data are available, show rather abnormal features which raise doubts about their usefulness for this purpose. Elasticities for the period 1993-94 to 1999-00, though in line with the declining trend over the years, showed a very sharp decline, from 0.42 in the earlier quinquennium to 0.15, in aggregate, mainly because of a still sharper decline from 0.46 to 0.02 in agriculture and from 0.94 to -0.17 in services. Both these two sectors showed an upward jump to over one and 0.78 during 1999-00 to 2004-05 propelling the aggregate elasticity up to 0.53.

The fact that a large part of employment growth responsible for the jump in employment elasticity was recorded to have taken place in agriculture and in self-employed category during this period, suggests to a large extent at 'spurious' rather than really 'productive' employment. It appears that new entrants in labour force, not finding full time wage employment elsewhere, had joined other members of the family in household farming and other activities and reported self-employed, thus adding to the category of the employed rather than the unemployed. Table 22 clearly shows that the incidence of self-employment has sharply increased particularly in agriculture during 1999-00 to 2004-05 after experiencing a declining trend in earlier periods.

Data on unorganized manufacturing sector also suggest a similar phenomenon as reflected in the rise in the proportion of part-time workers. The proportion of part-time employment has increased from 12 per cent in 1984-85 to 16 per cent in 2000-01 and to 18 per cent in 2005-06 (Sahu, 2007 and Government of India 2007b). The rise is more marked in own-account enterprises; the share of part-time employment in own-account enterprises increased from 14 to 24 per cent during 1984-85 to 2005-06. The level of productivity in such enterprises is also very low; in 2000-01, the productivity in own-account enterprises is estimated to be Rs 2548 and Rs 4235 (at constant 1980-81 prices) in rural and urban areas respectively (Sahu, 2007). There is also a rise in home-based work. In the textiles and garments sector, data (organized and unorganized combined) shows that men's employment remained stagnant but women's employment increased. In textiles, women's employment increased by 1.5 per cent per year from1994-95 to 2000-01 while in the case of garments, women's employment had increased at 33.1 per cent per year, which is more than four times the rate of men's employment, and mostly informal. Likewise, the share of women in home based workers also increased dramatically, again for the garment sector, after 1994-95 from 18.2 per cent to 49.8 per cent in 2000-01 (Hirway, 2008).

In view of these limitations of the elasticity estimates for the recent periods, one needs to be careful in using them for projecting elasticities for the future. What set of elasticities should then be used? Given the problems with the short-term elasticities, one option is to use the long-term elasticities, with adjustment for the trends in them. Looking at the figures for consecutive quinquennium as well for ten-year periods since 1972-73, an aggregate elasticity around 0.20 or 0.25 appears to be reasonable to assume. Sectoral elasticities may be taken to be in the range of 0.20 for agriculture, 0.35 for industry and 0.30 for services.

One might, of course, argue that the assumed overall elasticity of 0.20 or 0.25 is rather low, especially in the light of recent experience, and is going to result in low estimates of employment growth for given output growth. That, in turn, may make the employment challenge look more daunting than it actually is. The present exercise, therefore, constructs

different employment scenarios under alternative assumptions of employment elasticity (aggregate as well as sectoral) and output growth.

Table 22. Percentage Distributions of (UPSS) Workers by their Status of Employment

Sector/Year	Status of Employment		
	Self-employed	Regular Employees	Casual Labour
1	2	3	4
1993-94			
Agriculture	59.9	1.5	38.6
Non-agriculture	44.9	35.4	19.7
1999-00			
Agriculture	57.6	1.6	40.8
Non-agriculture	45.3	34.6	20.1
2004-05			
Agriculture	64.2	1.1	34.7
Non-agriculture	46.4	33.6	20.0

Source: NSS data on employment and unemployment for various rounds.

3.3 Setting growth and employment targets: an illustrative exercise for the Eleventh Plan period (2007-2012) and beyond

This exercise has India's Eleventh Five Year Plan (2007-2012) in the background. In this section, an attempt is made to illustrate how to assess the likely impact of different rates and sectoral pattern of growth on employment and what rates and pattern of growth would be required to achieve employment for all in a given time frame. It tries to accommodate the points regarding the limitations of the usual estimates in respect of the employment potential of growth using observed elasticities and employment requirements based on the direct measures of unemployment and labour force as described in the earlier section. It presents different scenarios with varying rates of growth-- sectoral and aggregate, and different sets of elasticities.

Let us first present the estimates of requirement of employment generation according to three different assumptions about the backlog of unemployment in 2007: (i) only the recorded unemployment and addition to labour force; (ii) also adding severely under-employed to (i); (iii) also adding 'working poor' wanting alternative employment ('very poor') to (i). Estimates for the period 2007-12 and 2007-17 are presented in Tables 23, 24 and 25.

Table 23. Estimates of Requirements of Employment Generation during 2007-2012 and 2007-2017 (in millions)

If backlog of unemployment in 2007 is seen	2007-2012	2007-2017
(i) in terms of recorded unemployed only	21.6 (U) + 43.2 (L) = 64.8	21.6 (U) + 93.7 (L) = 115.3
(ii) to include severely underemployed also	21.6 (U) + 10.5 (SU) + 43.2(L) = 75.3	21.6 (U) + 10.5 (SU) + 93.7 (L) = 125.8
(iii) to include the 'very poor' employed	21.6 (U) + 28.0 (VP) + 43.2 (L) = 92.8	21.6 (U) + 28.0 (VP) + 93.7 (L) = 143.3

Note: U = Unemployed in 2007 L = Addition to labour force SU = Severely underemployed
VP = Very poor employed

On this basis the rates of growth of employment required to achieve the goal of employment for all by the estimated data by different measures of backlog will be as follows.

Table 24. Estimates of employment requirement under alternative scenarios

Alternative Scenarios (Employment in 2007: in million)			Employment Requirement in			
			2007-12		2007-17	
			Number (million)	Per cent growth	Number (million)	Per cent growth
(i)	As recorded in 2007 (CWS)	457.9	64.8	2.7	115.3	2.3
(ii)	Excluding severely underemployed	447.4	75.3*	3.2	125.8*	2.5
(iii)	Excluding 'very poor employed'	429.9	92.8@	3.9	143.3@	2.9

* include SU @ include VP

Given overall employment elasticities of say 0.25, 0.32, 0.41 and 0.51, the economy would need to grow at following rates in the three different scenarios and four assumed elasticities.

Table 25. Required employment growth rates under alternative scenarios

Alternative Scenarios	2007-2012				2007-2017			
	Level of Employment Elasticities							
	0.25	0.32	0.41	0.51	0.25	0.32	0.41	0.51
(i) Unemployment as recorded in 2007 (CWS)	11.0	8.6	6.7	5.4	9.1	7.1	5.5	4.4
(ii) Including severely underemployed	12.9	10.1	7.9	6.3	10.0	7.8	6.1	4.9
(iii) Including 'very poor employed'	15.8	12.3	9.6	7.7	11.5	9.0	7.0	5.6

Growth rates under scenario (i) with 0.32 level of employment elasticity, i.e. 8.6 per cent is currently regarded as feasible: the Eleventh Plan targets a 9 per cent growth. But that takes care of only those currently recorded as unemployed to form the backlog of unemployment which as argued earlier, is an underestimate of those requiring alternative employment. Also an employment elasticity of 0.32 may turn out to be over-estimation if the past trend continues. Ideally, estimates under scenario (iii) need to be considered for employment planning in a medium term perspective. Rates of economic growth required in these scenarios, however, may be considered as unrealistically high, practically unachievable. And lower rates of growth would require high employment elasticities, which again may not be realizable, if the current trends are to continue. If, however, the employment elasticity could be raised to 0.41 or 0.51 from 0.32 assumed in the above estimates, it is possible to get closer to the employment target even without such high rates of economic growth. Employment goal as in scenario (iii), requiring 3.9 and 2.9 percent rate of employment growth in 5 and 10 year period respectively, could be achieved with 9.6 per cent and 7 per cent growth, if employment elasticity is raised to 0.41. Requirements of GDP growth will be lower at 7.7 and 5.6 per cent if employment elasticity is higher at 0.51.

Aggregate growth rates and employment elasticity are, of course, functions of the sectoral rates and elasticities. A few scenarios illustrating how different sectoral and aggregate GDP growth with the same or varying sectoral and, therefore, aggregate elasticities would produce different employment growth rates are presented in Table 26. It may be noted that raising sectoral employment elasticity need not necessarily imply declining productivity at individual sub-sectoral and product level; it could be achieved by retaining the existing productivity levels (and even raising them), but changing composition of sectoral output in favour of sub-sectors and products with higher employment elasticity. That could be illustrated by attempting these exercises at a more disaggregated level.

Different scenarios presented in Table 26 yield employment growth rates varying from 2.21 to 4.27 per cent. The lowest is with the assumption of 0.25 employment elasticity in aggregate with 8.84 per cent GDP growth, with 4 per cent growth in agriculture, 10.50 per cent in industry and 9.50 per cent in services – more or less corresponding to what has been projected for the Eleventh Five Year Plan. On the other hand, if GDP growth rate is higher at 10.41 and sectoral growth rates 4, 11 and 12 per cent, with high employment elasticity of 0.45, 0.58 and 0.41 in agriculture, industry and service sectors, employment would grow at 4.27 per cent per annum.

Table 26. Alternative Sectoral Employment Scenarios

	Alternative Scenarios	Employment in 2006-07 (in million)	GDP Growth Rate	Elasticity	Employment Growth Rate
Scenario 1					
(a)	Primary Sector	249.1	4.00	0.21	0.84
	Secondary Sector	93.3	10.50	0.40	4.20
	Tertiary Sector	115.6	9.50	0.37	3.52
	Total	457.9	8.84	0.25	2.21
(b)	Primary Sector	249.1	4.00	0.21	0.84
	Secondary Sector	93.3	11.00	0.35	3.85
	Tertiary Sector	115.6	10.00	0.39	3.90
	Total	457.9	9.30	0.25	2.33
(c)	Primary Sector	249.1	3.00	0.21	0.63
	Secondary Sector	93.3	10.50	0.47	4.94
	Tertiary Sector	115.6	9.70	0.40	3.88
	Total	457.9	8.84	0.27	2.39
Scenario 2					
(a)	Primary Sector	249.1	4.00	0.30	1.20
	Secondary Sector	93.3	10.50	0.61	6.41
	Tertiary Sector	115.6	9.50	0.44	4.18
	Total	457.9	8.84	0.32	2.83
(b)	Primary Sector	249.1	4.00	0.30	1.20
	Secondary Sector	93.3	11.00	0.61	6.71
	Tertiary Sector	115.6	10.00	0.44	4.40
	Total	457.9	9.30	0.32	2.98
(c)	Primary Sector	249.1	4.00	0.30	1.20
	Secondary Sector	93.3	10.50	0.56	5.88
	Tertiary Sector	115.6	9.50	0.50	4.75
	Total	457.9	8.84	0.34	3.01
Scenario 3					
(a)	Primary Sector	249.1	4.00	0.45	1.80
	Secondary Sector	93.3	11.00	0.68	7.48
	Tertiary Sector	115.6	10.00	0.58	5.80
	Total	457.9	9.30	0.41	3.81
(b)	Primary Sector	249.1	4.00	0.45	1.80
	Secondary Sector	93.3	11.00	0.68	7.48
	Tertiary Sector	115.6	12.00	0.58	6.96
	Total	457.9	10.41	0.41	4.27
(c)	Primary Sector	249.1	4.00	0.45	1.80
	Secondary Sector	93.3	11.00	0.68	7.48
	Tertiary Sector	115.6	10.00	0.58	5.80
	Total	457.9	9.30	0.44	4.09

Source: NSS data on employment and unemployment for various rounds

Growth rates of employment, even at the current rates of GDP growth and low levels of employment elasticity are reasonably high, and not much lower than estimated earlier as required for achieving employment for all in five, and certainly in ten-year period. For example, a 2.7 per cent annual growth in employment will meet this goal in five years and 2.3 per cent employment growth, in ten years. And, except the low employment elasticity case of different variants in Scenario 1, all the other variants yield growth rates higher than these. It must, however, be noted that these scenarios are estimated with the most conservative, and in our view unrealistic estimates of the backlog of unemployment in the base year. Here, all those recorded as employed in the survey are assumed as not requiring alternative employment, even if they are unemployed for most of the time or even though fully 'employed', earn below poverty line income. Employment would need to, grow at a much higher level if the severely underemployed and/or the 'very poor' employed, are also taken as candidates for new employment. If the backlog of unemployment in 2007 is estimated in terms of those unemployed plus employed but earning less than one half of the poverty line income, employment would need to grow at a rate of around 4 per cent per annum, if all these along with the new entrants in the labour force are to get employment by 2012 and by about 3 per cent per annum if this goal is to be achieved by 2017. This is seen achievable only in scenarios, 3b and 3c (and quite close in scenario 3a), with GDP growth rates of 10.41 and 9.30 per cent, high sectoral employment elasticities and a secondary sector oriented pattern of growth.

The above discussion may be summarized as follows:

(i) Depending on the assumption regarding additional employment required by 2012 (i.e., whether only the unemployed, or including the severely unemployed, or half of the working poor are added as backlog to the additional labour force), the annual growth of employment required would be 2.7 per cent, 3.2 per cent and 3.9 per cent respectively. The first of these figures (i.e., 2.7 per cent) is very close to the official position based on an employment requirement of 65 million.

(ii) If overall employment elasticity is assumed to be 0.25 (which seems realistic, given the long-term trend), 11 per cent GDP growth per annum would be required just to absorb the new labour force and the backlog of the openly unemployed (i.e., 2.7 per cent employment growth as mentioned in (i) above).

(iii) If overall employment elasticity is assumed to be 0.32, GDP growth required for 2.7 per cent growth in employment turns out to be 8.6 per cent. Thus, this GDP growth should be adequate to meet the employment requirement of 65 million that is officially postulated. But GDP growth will have to be 10.1 per cent for achieving employment growth of 3.2 per cent (i.e., for absorbing the unemployed and the severely underemployed. Higher GDP growth (12.3 per cent) would be required if the backlog is assumed to include half of the working poor.

(iv) If employment elasticity at the sector level is considered and sectoral pattern of growth can be altered (i.e., to achieve higher growth of manufacturing and services), there is a scenario (3c in Table 26) where an employment growth of 4.09 per cent p.a. can be achieved with a GDP growth of 9.3 per cent (which is not far above the GDP growth achieved in recent years) and an overall employment elasticity of 0.44. In this scenario, primary, secondary and the services sectors would have to grow at rates 4, 11, and 10 per cent respectively, with employment elasticities of 0.45, 0.68, and 0.58.

The employment elasticity figures mentioned in (iv) above (under scenario 3c) may seem somewhat optimistic in the context of India's experience. But looking at in the context of some East and South East Asian countries (e.g., Republic of Korea in the 1970s, and Malaysia in the 1980s and 1990s), which were successful in achieving development and absorbing surplus labour through labour-intensive industrialization, these figures are not unrealistic. However, in order to achieve such results, the pattern and strategy of growth itself would have to change.

Chapter 4

A Diagnostic Framework

4.1 A Diagnostic Framework for Employment Policy

Slow growth of employment in the formal (or organized) sector, vis-a-vis the high rate of output growth that has been achieved in recent years, is one of the main concerns with regard to the employment scenario in India. It does not, however, imply that issues relating to agriculture and the unorganized sector can be ignored. In order to accelerate the rate of poverty reduction, t is important to raise the levels of labour productivity and earnings for workers engaged in the unorganized segments of the economy. Also, given the small share of the organized sectors in total employment, transfer of labour from low productivity unorganized sectors to the organized sectors will be a long-drawn process. Hence, the need for a strategy of transforming the quality of jobs in the unorganized sector in terms of labour productivity, earnings, workers' protection, and other aspects of working conditions.

A framework for employment policy would, therefore, need to approach the issue on two fronts: (i) accelerating the growth of employment in the formal segment, and (ii) improving the quality of jobs (in terms of productivity, earnings, and protection of workers) in the agriculture and non-agricultural informal segment. There is a need to formulate policy responses based on the understanding of the factors that have been responsible for the slow growth of employment. The diagnosis should follow a framework of possible policy areas. A simple framework is indicated below[20]:

- Economic policies
  - Macroeconomic policies
  - Policies relating to specific sectors
- Enterprise development with particular focus on SMEs
- Labour-market policies
  - Labour-market institutions and reforms
  - Active labour-market policies
- Skills and employability

The following questions are relevant for the diagnostic framework as for the slow growth of employment in the organized sector, especially manufacturing:

- What has been the rate of growth of employment-intensive sectors, compared especially to the average growth of the overall manufacturing sector and its relatively less employment-intensive sectors?
- Has there been a discernible trend towards the use of more capital-intensive technology, especially in industries which are known to be labour-intensive in nature?

20. This is a simplified version of the employment policy framework and the checklist of key policy areas presented in ILO: *Implementing the Global Employment Agenda: Employment Strategies in Support of Decent Work.* ILO, Geneva, 2006.

- Has the country identified specific employment-intensive sectors as 'thrust sectors' for particular attention in terms of policy? Has there been an analysis of constraints faced by them and, of policies needed to overcome those?
- What are the economic factors or policies responsible for changes in the relative shares of employment-intensive sectors in total manufacturing, and for the observed trend towards capital deepening, if any?
- What labour-market factors or policies have been responsible for the above-mentioned changes?
- How are small and medium scale industries/enterprises performing vis-a-vis their larger counterparts?
- Are there elements in the overall policy environment of the country that adversely affect the growth of SMEs? If so, what are they?
- Do economic and labour-market policies relate in a way that is relevant to the employment outcome of economic growth? If so, what type of reforms would be needed for each?
- Have there been any conscious efforts (i.e. through policy measures) towards the adoption of more labour-intensive technologies where they could be used without compromising on efficiency, quality and productivity (e.g., in the construction of infrastructure)?
- Do the supply side characteristics of the labour-market, e.g., skill and educational levels of the labour force, have any implication for the employment outcome of economic growth (either through their influence on the technologies adopted or choice of sectors for investment)?
- What specific strategies are to be followed to ensure that women's employment issues are mainstreamed into macro and sectoral policies so that there is recognition of the contribution that women make to the economy and a concerted effort to improve the productivity and working conditions of a majority of women workers?
- What role, if any, can be played by employment service in facilitating the functioning of the labour market, and eventually, in improving the employment outcome of economic growth?
- Has there been any attempt to bring together various aspects of labour-market intervention (e.g., skill training and re-training, job matching, and specific measures for job creation, especially for specified groups in the labour force) into the integrated framework of 'active labour market policies' (ALMPs), and if so, with what results? Is there a scope for strengthening the ALMPs?

A similar diagnostic exercise needs to be carried out for addressing issues relating to labour productivity, earnings, conditions of work and protection of workers in the unorganized sector, and for formulating policies based on that analysis.

Chapter 5

Applying the Diagnostic Framework

A thorough analysis of the current situation will be required to formulate answers to the questions listed under the diagnostic framework mentioned in Chapter 4 though tentative answers to some of them can be provided on the basis of existing knowledge. A look at employment in the organized sector of manufacturing where concerns have been voiced over slow growth of employment will be useful.

5.1 Economic Policies

India's post-reform policy environment has often opted to let market prices (as opposed to State policy) determine the allocation of investment. Two sets of decisions adopted in stages after 1991 were seen as crucial to this shift in policy. One was the liberalization of trade, the opening up of the financial sector and the dilution of controls on capacity creation, production and prices. The other was the limitation of the pro-active role of the State through a process of fiscal reform that not only curbed the fiscal deficit of the government but abolished the practice of financing that deficit by borrowing from the central bank.

It was largely expected that liberalization of trade and an increased role for market signals would generate a higher rate of output growth and lead to a restructuring of production in favour of labour-intensive activities and therefore also substantially to an increase in employment. However, evidence presented in Chapter 2 and in section 5.1.2 of this report indicates that the expectation has not been realized, despite relatively high growth. And even though there has been acceleration in employment growth between 1999-00 and 2004-05, the rates of growth recorded between 1987-88 and 1993-94 have not been equalled, and there are concerns about the quality of this employment.

The 11th Plan notes that trade liberalization has led to a paradigm shift in the country's economy. It further notes that India has moved towards technology dominated sectors. This has provided not only many opportunities, but has also created challenges; e.g., by letting many traditional livelihoods with high employment potential like handlooms and other home-based non-agro enterprises becoming unviable.

Furthermore, to raise competitiveness in the global market, industries adjust in several ways, often by cutting down on labour costs by reducing wages and lowering labour standards and often environmental standards, i.e., lowering the social floor (Hirway 2008). The alternative is to increase the value of products by technological improvements and by product differentiation, and thus honing their competitive advantage. In the textile and garments' industry, this has manifested in different employment practices and modes of production. On one end, there is a segment of the industry that has resorted to sub-contracting and outsourcing where labour is characteristically dominated by homeworkers and contract casual workers, mainly women. On the other are the high value added products, utilizing high level of technology and high skills. This segment requires skilled and stable workers, and gains have predominantly accrued to men (Hirway, 2008)[21].

21. Like all economic policies, trade policies are likely to have gender differentiated effects because of women's and men's different access to, and control over resources and economic opportunities and because of the different roles played by them in the market and the household

A large and diverse set of factors, therefore, go into explaining these aggregate trends in employment. But an inevitable corollary that follows from the decline in the elasticity of employment with respect to output is that there has been an increase in labour productivity which must be driven by a combination of an increase in the capital intensity of production within individual sectors and changes in the sectoral composition of output towards less labour-intensive production.

5.1.1 *Effects of the policy environment: The price of capital goods*

The policy environment could have contributed to a decline in the responsiveness of employment growth to the growth in output by raising capital intensity in individual sectors. It could, in a number of ways, have altered relative prices, cheapened capital relative to labour, and encouraged the use of labour displacing machinery (Palit 2007). To start with, since trade liberalization not merely removes quantitative restrictions on import of capital goods but reduces import duties on them as well, the costs of investment goods are immediately reduced. This could change the structure of relative prices.

Second, investment costs have been reduced in the post-reform period through policy changes aimed at keeping interest rates low and through greater flexibility to borrow from abroad at lower interest rates. Low interest rates serve a double purpose in the new context. On the demand side, they encourage credit-financed spending on housing, automobiles and goods and services, which helps spur demand in a context in which the fiscal stance of the government is contractionary. On the supply side, they reduce the cost of borrowing for investment, encouraging credit financed investment.

Finally, with the government taking on the role of a facilitator of private investment under liberalization, pecuniary concessions are linked to investment as incentives. With limits set on the fiscal stance of the government, its ability to encourage private investment by directly influencing the demand for manufacture is constrained. This results in a shift to supply-side measures to encourage investment. One set of such measures, favoured in the context of constraints on State spending, is to offer a host of explicit or implicit subsidies to investors to improve their profitability of investment, and to rationalize and reduce direct taxes, allowing corporations to convert a larger part of their surpluses into retained or distributed profits.

Such incentives are often not noticed because they are implicit and "off-budget" in nature or are provided by state governments. With fiscal decentralization being such as to skew the distribution of tax resources in favour of the Centre, states have had to increasingly rely on private investment to keep development going. This has resulted in competition between states to attract investment, resulting in substantial concessions being offered to private investors in the form of investment subsidies.

The relative significance of each of these sets of measures is considered below.

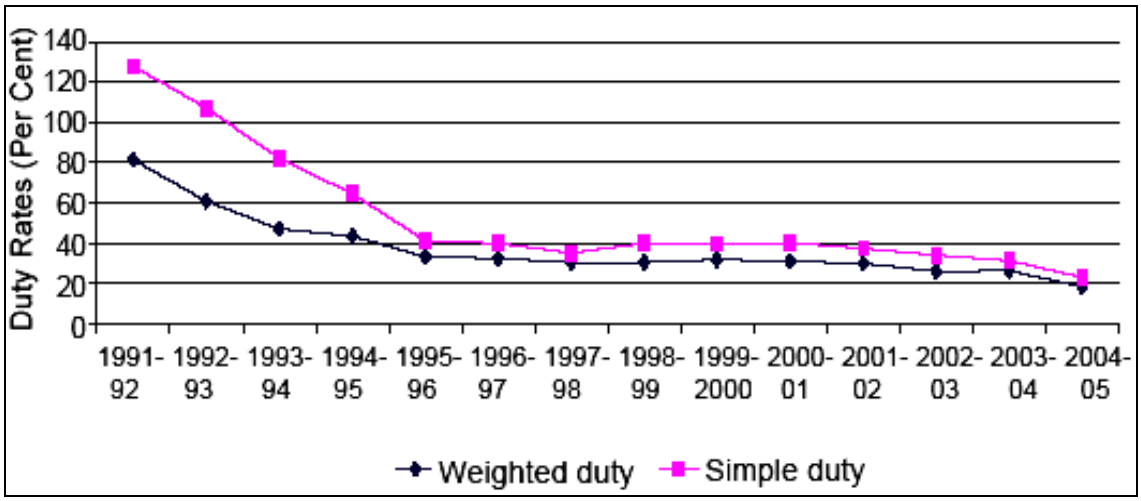
Import tariffs

External trade liberalization in India, which marked a departure from the import substitution strategy, began in the mid 1980s, but received a major impetus with the launch of the "economic reform" strategy in 1991. Not only were import controls lifted and quantitative restrictions removed, but import tariffs were continuously lowered. Figure 6 indicates the extent of reduction in import duties, which were down to an average of around 20 per cent by 2004-05, though India's commitments at the WTO implied average tariff bindings of around 80 to 100 per cent tariff bindings and as much as 150 per cent in particular sectors. .

In the case of manufactured goods, the changes were significant since 1991. Tariff reduction affected capital goods as well, with the effective rate of protection for manufactured goods being halved over the subsequent two decades (Table 27). This implied increasing competition for domestic producers as a direct result of the trade policy chosen by the government. In fact, the stated purpose of liberalization was to align domestic and world prices so as to subject domestic producers to the cutting edge of international competition, while providing them easy access to imported capital goods, intermediates and technology that can help restructure and improve the competitiveness of domestic production.

In sum, the reduction in nominal and effective rates of protection would have reduced the prices of both imported and domestically supplied capital goods, bringing down the costs of investment. In addition, the government has been implicitly permitting imports of capital goods duty free or at concessional rates of duty under various schemes, such as the Export Promotion Capital Goods (EPCG) scheme. Very often this does not involve any additional obligation in practice for the importer. During the period 1994-95 to 2003-04, as many as 33,169 EPCG licences, valued at Rs. 61,075 crore on cif basis in one set of cases and at Rs. 2,95,125 crore on fob basis in another set, had been issued. Of these, a total of 31,181 licences valued at Rs. 2, 83,053 crore required fulfilment of export obligations, since the others were surrendered or cancelled. However, the export obligations have been fulfilled only in the case of 54 per cent of the licences, which together accounted for just 25 per cent of the value of the capital goods import permitted (Srinivasan 2007).

Figure 6: **Simple and weighted average import duty rates**



Source: Mathur and Sachdeva, 2005

Table 27. Indices of Protection

Industry Group	Phase-1	Phase-2	Phase-3	Phase-4	All Phases
	1980-85	1986-90	1991-95	1996-00	1980-2000

Average Effective Rate of Protection (Per cent)					
Intermediate Goods	147.03	149.18	87.58	40.13	112.36
Capital Goods	62.77	78.45	54.23	33.3	61.87
Consumer Goods	101.51	111.55	80.55	48.28	87.47
All- Industries	115.11	125.93	80.18	40.43	95.19
Average Import Coverage Ratio (Per cent)					
Intermediate Goods	98.31	98.26	41.77	27.6	71.47
Capital Goods	95.11	77.21	20.47	8.15	54.37
Consumer Goods	98.69	87.85	45.69	33.43	68.77
All- Industries	97.59	91.64	37.97	24.82	67.11

Source: Das 2003, p.18.

Notes: 1. Period averages are computed as a value-added share weighted average of the yearly figures.

2. The import coverage ratio is defined as: Cj = S DiMi / S Mi, where Di is a dummy variable defined as: Di=1, if the product is included in banned/restricted, limited permissible or canalized lists and =0 if the product is under OGL

Interest rates

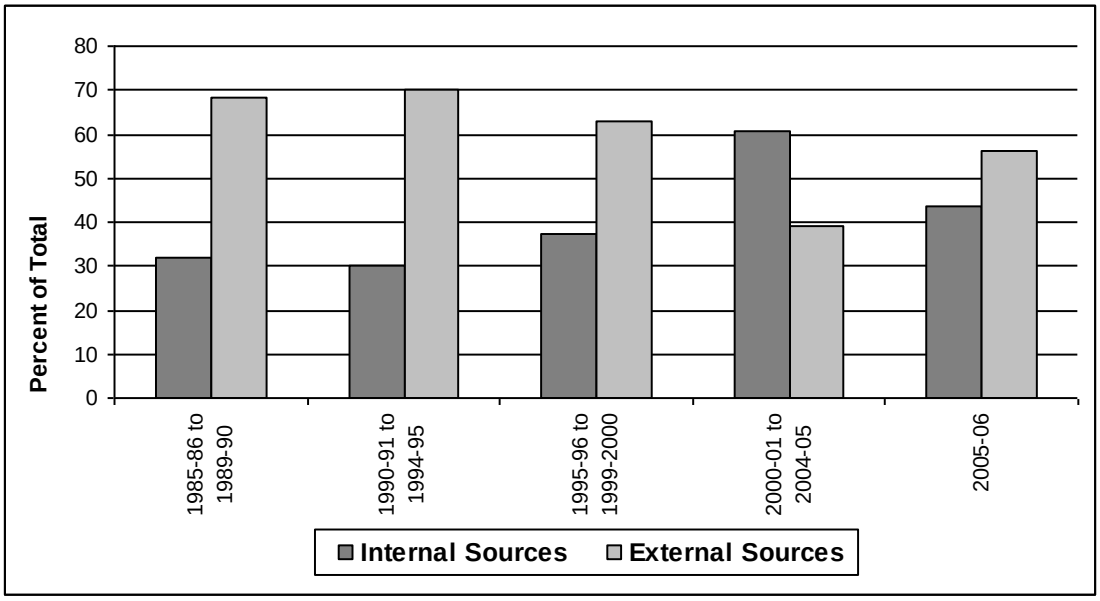
Besides a reduction in the prices of imported and domestically produced capital goods, the cost of capital has been reduced during a part of the post-liberalization period through a reduction in interest rates. A feature of financial policy since the beginning of financial liberalization is an effort to reduce nominal and real interest rates on loans provided to industry. That reduction has partly been engineered by (i) reducing administered interest rates offered in small savings schemes such as the National Savings Scheme; (ii) keeping deposit rates low; and (iii) allowing banks to compete for borrowers in a situation of excess liquidity.

However, the degree to which it has affected investment and the choice of technology may have been limited for three reasons. First, internal sources such as retained profits and depreciation reserves have accounted for a much higher share of corporate finance in recent times. According to RBI figures, internal sources of finance which accounted for about 30 per cent of total corporate financing during the second half of the 1980s and the first half of the 1990s rose to 37 per cent during the second half of the 1990s and a record 61 per cent during 2000-01 to 2004-05 (Figure 7). Though that figure fell during 2005-06, it still stood at a relatively high 44 per cent.

Second, even though borrowing remains an important source of finance for corporations, cheap finance from the financial institutions has been replaced increasingly by borrowing from banks. With the decline of development banking and therefore of the provision of finance by the financial institutions (which have been converted into banks), the role of commercial banks in financing the corporate sector has risen sharply to touch 24 per cent of the total funds used in 2003-04 (Figure 8).

Finally, even in the case of long-term finance from institutions like the Industrial Finance Corporation of India (IFCI) is concerned, while nominal rates have been coming down from the high they touched during the 1991-92 crisis, the decline in inflation rates has implied that the real rate of interest has remained high and has actually been rising (Figure 9).

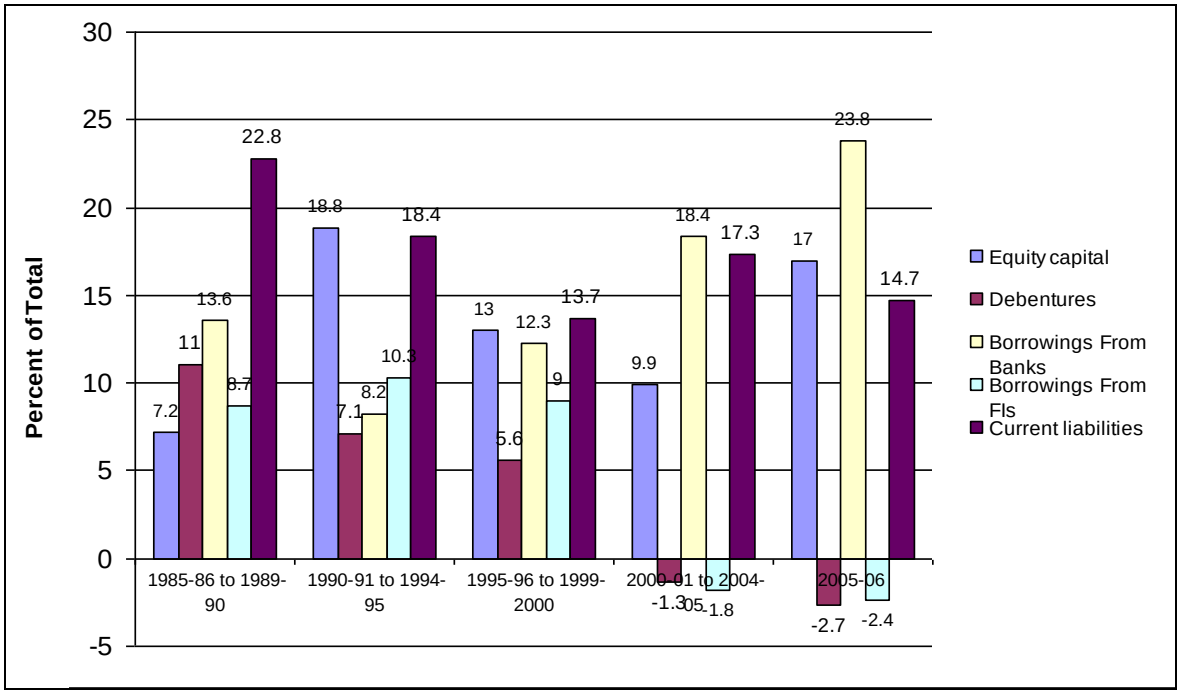
Figure 7: Sources of Funds for Indian Corporates



Source: Reserve Bank of India (2007), Report on Currency and Finance, 2006-07, Mumbai: Reserve Bank of India, p. 268.

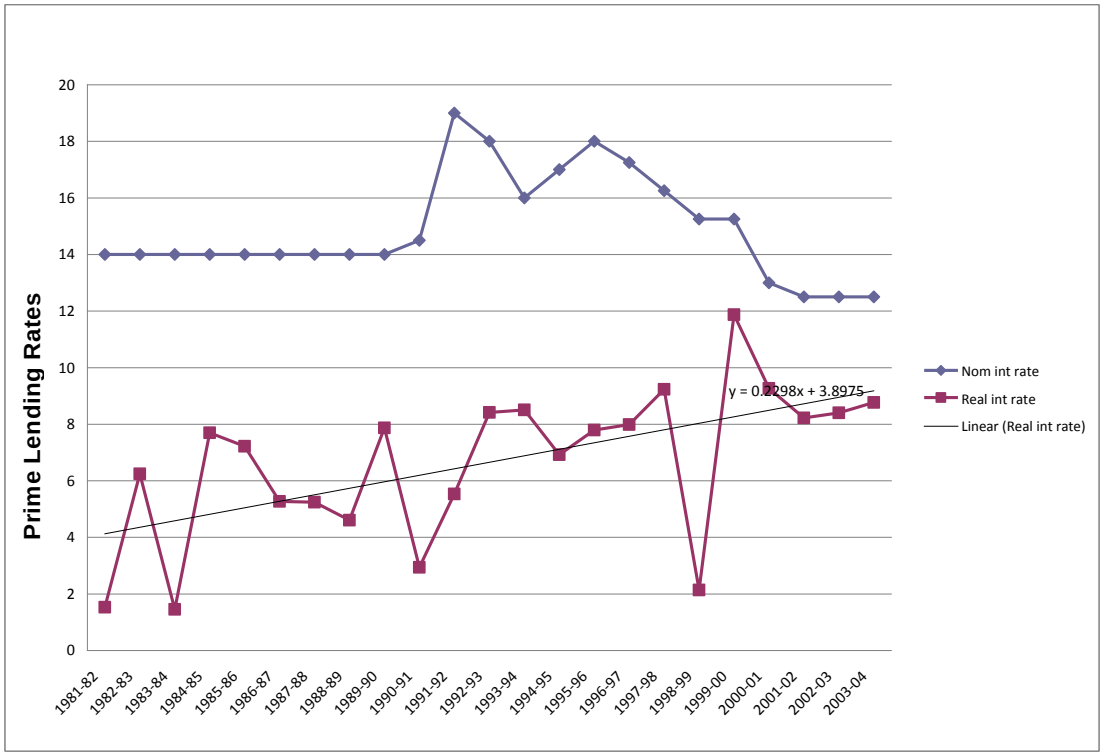
Thus the ways in which the interest rate policy of the government would have affected investment is: (i) by reducing the nominal cost of borrowed capital; and (ii) by contributing to increased financing of investment from internal sources. The lower interest burden resulting from the decline in nominal interest rates would have increased corporate surpluses.

Figure 8: **Components of External Capital**



Source: Reserve Bank of India (2007), Report on Currency and Finance, 2006-07, Mumbai: Reserve Bank of India, p. 268.

Figure 9: Long-Term Prime Lending Rates (IFCI)



Source: Reserve Bank of India, Handbook of Monetary Statistics of India, available at http://www.rbi.org.in/scripts/AnnualPublications. Handbook of Monetary Statistics of India accessed 15 December 2007.

Impact on relative prices

If wages rose when investment costs are being reined in, these price and interest rate trends would alter the ratio of the prices of capital goods to the price of labour. If so, the new economic regime would be altering price relatives in ways that encourage reduced labour intensity within individual sectors. This would be contrary to the idea that liberalization and economic reform encourage a shift to labour intensive production, including labour intensive exports.

A priori there is no reason why liberalization should result in a fall in the price of capital relative to labour, since competition from imports in the domestic market and competition from alternative exporters in world markets would through actual unemployment or the threat of potential unemployment keep wages in check. As a result, even if the price of capital goods falls initially due to cheaper imports, it would result in a trend where capital goods prices rise faster than wages encouraging greater labour use.

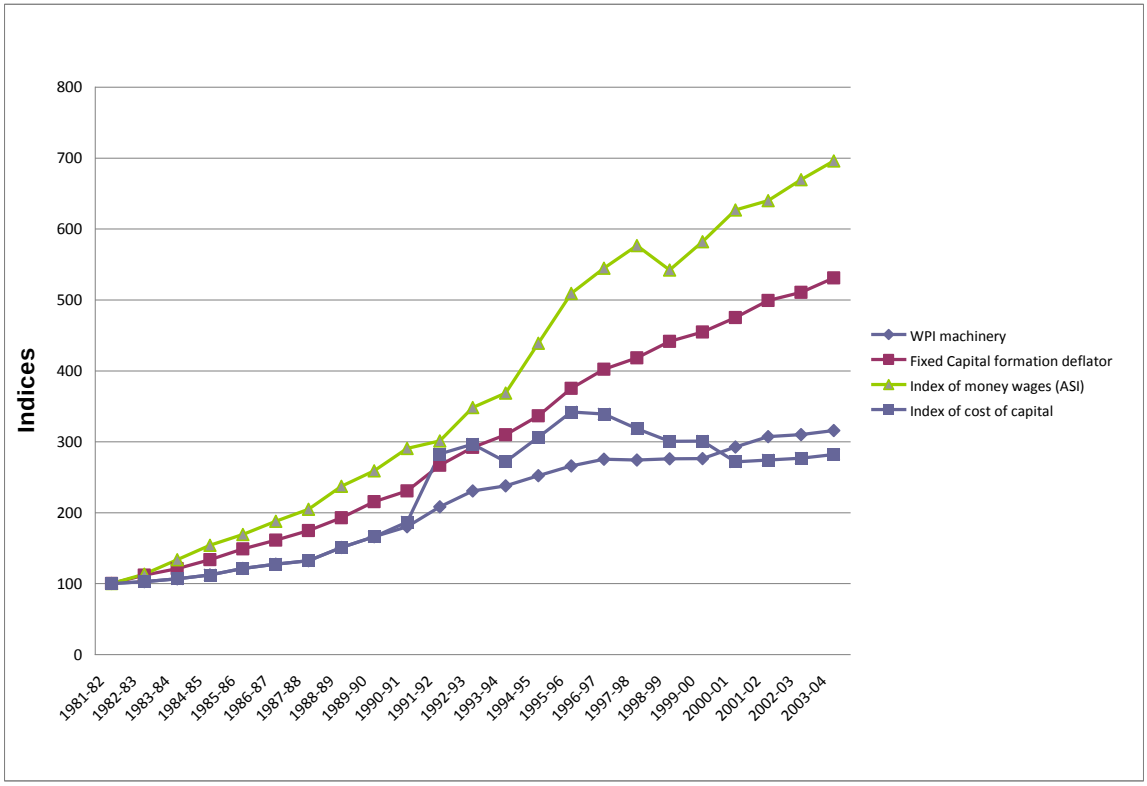
In actual fact, however, the money wage rate has risen much faster than the prices of capital goods measured either in terms of the wholesale price index for machinery or the deflator for gross fixed capital formation in the National Accounts Statistics, as emerges from Figure 10. During the 1980s (between 1981-82 to 1991-92), when the Wholesale Price Index for Machinery rose by a factor of 2.1 and the fixed capital formation deflator by a factor of

2.6, the index of money wages rose by a factor of 3.0. During the period 1991-92 to 2003-04, this trend persisted with the corresponding figures standing at 1.5, 2.0 and 2.3 respectively.

The "cost of investment" is captured not just by the trends in the prices of capital goods, but also by the opportunity cost of capital as captured by the prevailing rate of interest. One way to represent the combined effect of these two elements is to apply the rate of interest on an index of the price of capital goods, say the wholesale price index of machinery, and build an index of the resulting values. This is what has been done to construct the "index of cost of capital", also presented in Figure 9. What is interesting is that when we consider this composite index, the trend has been more complex than revealed merely by the relative movements of the prices of capital goods and money wages. The high interest rate regime that kicked in after the balance of payment crisis of 1991-92, and remained in place till the second half of the 1990s (see Figure 10) meant that the "cost of capital" rose sharply during the first half of the 1990s, often at a rate much faster than the rate of rise in money wages. However, after the government managed to engineer a low interest rate regime starting from the late 1990s, movements in money wages and the cost of capital diverged with the former rising at fast rate while the latter stagnated or declined.

Thus between 1995-96 and 2003-04, while money wages rose by 36.6 per cent, the index of the cost of capital fell by 17.6 per cent. This is close to 55 percentage point negative shift in the price of capital relative to labour points to a major bias in prices that favours capital intensity.

Figure 10: Movements in the Prices of Capital and Labour



Sources: Central Statistical Organization, National Accounts Statistics 2007 and National Account Statistics – Back series 1950-51 to 1999-2000, New Delhi CSO available at http://www.mospi.nic.in/mospi_cso_rept_pubn.htm and Reserve Bank of India, Handbook of Monetary Statistics of India, available at http://www.rbi.org.in/scripts/Annual Publications. Handbook of Monetary Statistics of India accessed 15 December 2007.

Role of investment incentives

To this bias in favour of capital implicit in prices should be added the incentive to use capital arising from investment subsidies offered on the basis of the level of capital investment. Such subsidies are offered by the central and state governments, especially the latter. Central schemes apply to special category states in the northeast and Jammu and Kashmir, Uttarakhand and Himachal Pradesh. But as noted earlier, forced to rely on private investment for industrial development, states compete with each other to attract such investment by offering a range of subsidies and tax concessions.

For example, an industrially successful state like Tamil Nadu offers the following capital subsidies based on employment and investment in eligible fixed assets made within three years, irrespective of location:

- New units investing between Rs 5 crore and Rs 50 crore and employing more than 100 direct workers are eligible for a capital subsidy of Rs 30 lakh;
- New units investing between Rs 50 crore and Rs 100 crore, and employing more than 200 direct workers are eligible for a capital subsidy of Rs. 60 lakh;
- New units investing between Rs 100 crore and Rs 200 crore and employing more than 300 direct workers would are eligible for capital subsidy of Rs 100 lakh;
- New as well as Expansion Units investing Rs 200 crore and above and employing more than 400 direct workers are eligible for a capital subsidy of Rs 1.50 crore.

New manufacturing facilities set up in any district other than Chennai, Thiruvallur and Kanchipuram with an investment in fixed assets of over Rs. 250 crore in a period of 3 years are eligible for a structured package of incentives to be decided on a case-by-case basis. In case of Chennai, Thiruvallur and Kanchipuram districts, the minimum investment is set at Rs. 350 crore.

Even though the subsidy offered appears to be a small share of the investment, it does have an important bearing on the profitability of the project. Consider, a situation, for example, where the prevailing interest rate is 10 per cent and a Rs. 100 lakh (or Rs. 1 crore) subsidy is being provided on a Rs. 100 crore investment. This amounts to a 0.1 per cent interest subsidy through the life of the project.

In fact, many states also offer an interest subsidy. Besides this, the states (including Tamil Nadu) offer a range of other incentives, varying from exemption from payment of electricity tax to exemption from stamp duty for lease or purchase of land.

When a successful state does this, the pressure on governments in less successful states is all the greater. Consider, for example, West Bengal, which had lost its colonial pre-eminence in industry and has recently seen a revival, with large investment flows into the State. The Government of West Bengal offers state-level capital and investment subsidies as follows:

- Investment subsidies on investment made in fixed capital of 15 per cent (with a ceiling of Rs. 150 lakh) in Group B districts and of 25 per cent (with a ceiling of Rs. 250 lakh) in Group C districts.
- Interest subsidies of 50 per cent of interest liability (with a ceiling of Rs. 100 lakh) provided for 5 years in Group B districts and 7 years in Group C districts.

However, even this has proved inadequate to attract many projects leading to a wide variety of concessions at the expense of the state exchequer provided on a case-by-case basis. Thus in the case of the Tata small-car project in Singur, the state government (of West Bengal) had, inter alia, provided the following concessions, but the entire project has since been revoked:

- One thousand acres of land on a ninety-year lease without any down payment. For the first five years of the lease, the investor will pay only Rs. one crore as lease rent. For the next twenty-five years, the payment will increase by 25 per cent at five-year intervals; for the next thirty years payment will be raised at five-year intervals by 33 per cent; for the final twenty years, the rent will be Rs 20 crore per year. It has been estimated that the discounted present value of what the investor would pay will be in the range of Rs 50 crore as compared to the acquisition cost of the land of Rs. 150 crore.
- A loan worth Rs 200 crore at a nominal interest rate of only 1 per cent.
- Provision of a loan at a nominal interest rate of one per cent of a sum equal to the proceeds for the first ten years from value-added tax (of 12.5 per cent) on the sale of cars produced by the plant within the state of West Bengal.

Schemes like these amount to a huge subsidy on investments made in the state.

Since the subsidies offered vary from state to state and are often on a case-by-case basis, it is very difficult to arrive at a single figure on by how much these subsidies add to the cheapening of capital relative to labour as a result of movements in machinery prices, money wages and interest rates. But that there is a significant bias in favour of capital intensity cannot be denied.

More recently, the practice of provision of huge explicit and implicit investment subsidies has been adopted at the central level as well, as exemplified by the tax concessions being offered on units being set up in the special economic zones (SEZs). Based on alternative assumptions of the likely investment that would occur in the SEZs being set up in the country, the total revenue foregone has been estimated at anywhere between Rs. 1, 00,000 crore and Rs. 2, 00,000 crore.

Demand side effects

The capital intensity of domestic production is affected not only by a change in capital intensity within each sector, but by a change in the pattern of production in the direction of more capital intensive products and sectors.

The nature of the stimuli underlying recent industrial growth does have implications for the pattern of demand. An important implication of debt-financed manufacturing demand is that it is inevitably concentrated in the first instance in a narrow range of commodities that are the targets of personal finance. Commodities whose demand is expanded with credit finance vary from construction materials to automobiles and consumer durables. These commodities, which serve or deliver products that can serve as the collateral for the debt that finances their purchase, must be in the nature of durables and are more-often than not the products of metal and chemical-based industries and therefore tend to be more capital intensive and are characterised by relatively high productivity and high rates of growth of productivity.

Conventionally, the pattern of industrial growth is analysed on the basis of the used-based indices of the Index of Industrial Production. This, however, is not too enlightening because it just suggests that Basic, Intermediate and Consumer Non-durable Goods each contributed about a quarter of the aggregate industrial growth rate over 1993-94 to 1999-00, with Capital and Consumer Durable Goods contributing the rest (Table 28). Since each of these sectors is very diverse, it is difficult to infer much from this evidence the nature of demand and its biases in terms of capital intensity.

Table 28. Pattern of Growth as per Use-Based Indices: 1993-94 to 2007-08 (Per cent)

	Basic goods	Capital goods	Intermediate Goods	Consumer goods			General Index
				Total	Durables	Non-durables	
Trend rate of growth 1993-94 to 2007-08	5.2	8.8	6.5	7.5	9.7	6.8	6.6
Weighted contribution to aggregate growth	1.9	0.8	1.7	2.1	0.5	1.6	6.6
Proportionate contribution to aggregate growth	28.1	12.3	26.1	32.4	7.9	24.1	100.0

A more disaggregated picture of the pattern of organized industrial sector growth can be drawn based on movements in net value added at the three-digit level in industries covered by the Annual Survey of Industries (ASI). One difficulty is that changes in the industrial classification adopted by the Central Statistical Organization (CSO), impairs direct inter-temporal comparison of the three-digit level figures. Thus, in the recent period, since 1998-99 the ASI has shifted from an industrial classification based on the National Industrial Classification (NIC) 1987 to the NIC 1998. Since, NIC 1998 has a more detailed classification of industrial activities than NIC 1987, establishing concordance between the two at the three-digit level requires matching of industrial activities at the four-digit NIC level for 1998 with the three-digit NIC 1987 groups. This has been done by the Economic and Political Weekly Research Foundation (EPWRF) (EPW Research Foundation 2007) which provided a comparable series for the period 1973-74 to 2003-04.

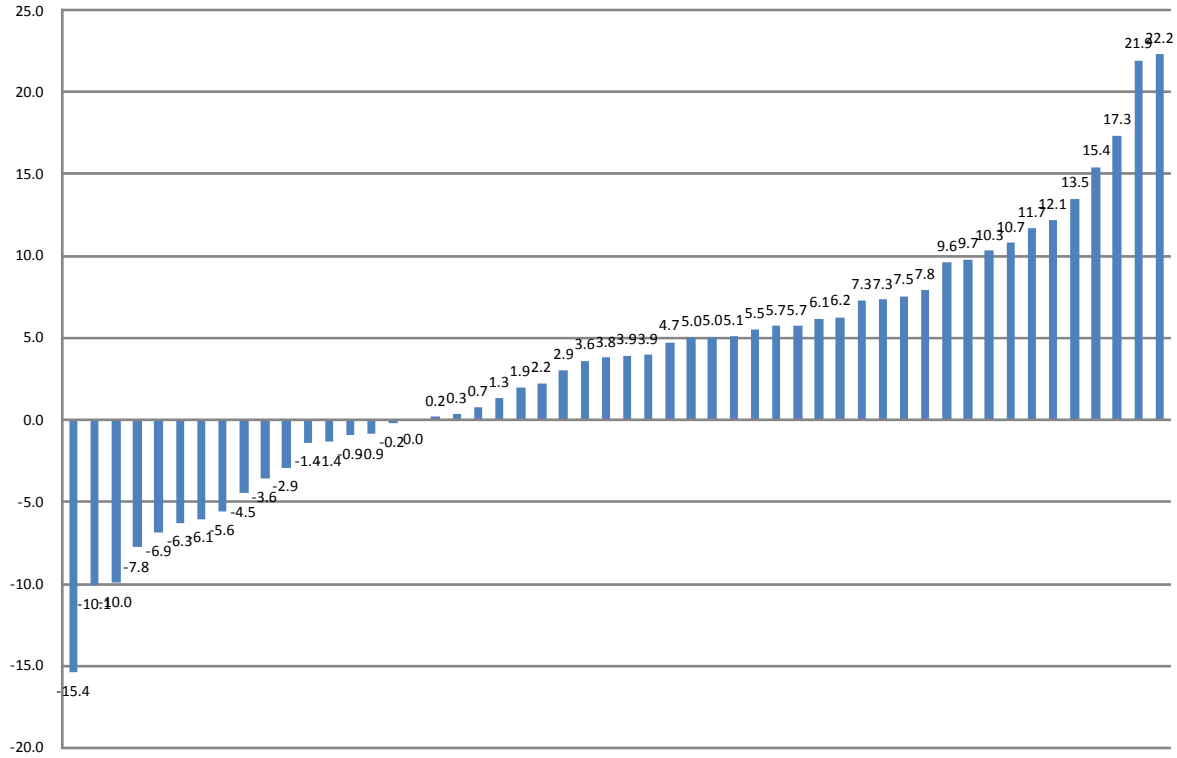
To adjust the series for changes in prices, the three-digit level industries have been matched with appropriate combinations of commodities covered in the series on Wholesale Price Indices with base year 1993-94 published by the Office of the Economic Adviser in the Ministry of Commerce and Industry, Government of India.[22] Where a perfect match for a particular three-digit industry group was not available, price indices for three-digit groups have been arrived at by weighting the index of each commodity within the group with the relative weight attached to it in the WPI. Using these indices, figures on value added at the three-digit level have been deflated to compute inflation-adjusted values for each year. Figures on capital formation have been deflated in the case of all industries using the implicit deflator for capital formation derived from the National Accounts Statistics of the CSO. Analysis has been restricted to the period 1993-94 to 2003-04 and to those three-digit industries for which data are available from the ASI and price indices can be computed from the WPI series with 1993-94 as base.

One feature which emerges from the resulting series on net value added is the wide variation in growth at the three digit level with high growth being concentrated in relatively

22. These figures are available at http://www.eaindustry.nic.in/.

few industries. Consider Figure 11 which gives the distribution of the trend rates of growth in the real net value added by three-digit industry groups in the registered manufacturing sector for the period 1993-94 to 2003-04. It is obvious that there is wide variation in growth performance with a few sectors recording remarkably high rates of growth, though data problems may be exaggerating figures at the two tails.

Figure 11: Distribution of Rate of Growth of Net Value Added 3-Digit Industrial Groups (%) for the period 1993-94 to 2003-04



One way of calculating the contribution of the fastest growing industries to the overall rate of growth of these 52 three-digit level industries, is to multiply the compound rate of growth in any particular three-digit industry (implicit in the real net value added in 1993-94 and 2003-04) with the share of value added in this industry relative to all 52 industries in the base year, and divide the resulting figure by the sum of the weighted growth rates of net value added all 52 industries. The top three growth contributing industries during the period 1993-94 to 2003-04 accounted for 38 per cent of the growth in all industries, with the figure for the top 5 rising to close to 55 per cent, the top 10 to almost 75 per cent and for the top 15 to almost 90 per cent. There were 39 industries that recorded a positive rate of growth for this period. If we restrict our analysis to *those industries that registered a positive rate of growth* over the period, the picture of concentration still persists (Table 29). The top three growth contributors over the period 1993-94 to 2003-04 accounted for more than a third of growth in all industries with a positive rate of growth, with the figure for the top five rising close to 50 per cent, the top 10 to more than two-thirds and for the top 15 to almost 80 per cent. This pattern of growth distribution characterised the two sub-periods into which the whole period has been divided.

Table 29. Contribution of Fastest Growing Industries to the Aggregate Rate of Growth

	Contribution to VA Gr 1993-94-2003-04	Contribution to VA Gr 1993-94-1998-99	Contribution to VA Gr 1998-99-2003-04
Top 3	34.21	38.97	37.36
Top 5	49.00	47.66	52.50
Top 10	67.19	63.45	75.43
Top 15	79.12	74.40	85.60

Table 30 identifies the industries that fall in the category of highest growth contributing industries. It should be clear that these consist largely of the metal and chemical industries gaining from the credit-financed construction and consumption boom, including areas like automobiles, television receivers and computing equipment. The leading sectors also include many chemical industries that feed luxury consumption, like refined petroleum products. Finally, the leaders include those industries that may have benefited from new export opportunities such as iron and steel and chemicals.

Table 30. Three-Digit Industries with the Fastest Rates of Growth of Real Net Value Added During 1993-94 to 2003-04

Code	Industry Name
271	Manufacture of Basic Iron & Steel
242	Manufacture of other chemical products
232	Manufacture of refined petroleum products
241	Manufacture of basic chemicals
359	Manufacture of transport equipment n.e.c.
269	Manufacture of non-metallic mineral products n.e.c.
341	Manufacture of motor vehicles
291	Manufacture of general purpose machinery
272	Manufacture of basic precious and non-ferrous metals
289	Manufacture of other fabricated metal products; metal working service activities
252	Manufacture of plastic products
300	Manufacture of office, accounting and computing machinery
251	Manufacture of rubber products

323	Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, etc.
160	Manufacture of tobacco products

Implications for Productivity

Thus, there appears to have been a shift in the pattern of demand that results partly from the increases in income inequality that are associated with more liberalized and open economic regimes, partly from the role of credit-financed consumption and partly from the effects of the kind of imports that have been occurring in the more liberalised environment.. As noted earlier, industries producing commodities whose demand is driven by factors such as these, tend to be more capital intensive and are characterised by relatively high productivity and high rates of growth of productivity.

Higher labour productivity is also the outcome of the combination of import liberalization and rising inequality. This is because (i) tastes and preferences of the elite in developing countries are influenced by the "demonstration effect" of lifestyles in the developed countries, and therefore new products and processes introduced in the latter very quickly find their way to the developing countries when their economies are opened, and (ii) technological progress in the form of new products and processes in the developed countries is inevitably associated with an increase in labour productivity, so that increased imports of technology imply increased productivity. Hence after trade liberalization, labour productivity growth in developing countries is exogenously driven and tends to be higher than prior to trade liberalization, leading to a growing divergence between output and employment growth. Prabhat Patnaik (Patnaik 2006) argues that for these reasons a combination of high output growth and low employment growth is a feature characterising many developing countries during the years when they opened their economies to trade and investment.

This lack of correspondence between output and employment growth must be because average labour productivity in manufacturing has grown so fast, that the effects of the higher rate of increase in output on employment growth would have been more than neutralized. This indeed appears to be the case. According to estimates quoted in the Eleventh Plan Document, GDP per worker in manufacturing which grew at 2.29 per cent per annum during 1983 to 1993-94 accelerated to 3.31 per cent between 1993-94 and 2004-05 (Planning Commission, Government of India 2008: 83). It is to be expected that this acceleration would have been sharper in the case of organized manufacturing, because of the effects of reform.

This factor, together with the industrial "restructuring" associated with liberalization, has resulted in a sharp and persistent increase in labour productivity (as measured by the net value added at constant prices generated per worker) in the organized manufacturing sector during the years of liberalization. As Figure 12 shows labour productivity rose more than two-and-a-half times between the years 1981-82 and 1996-97, stagnated and even slightly declined during the years of the industrial slowdown that set in thereafter, and has once again been rising sharply in the early years of this decade.

There are two factors that would have contributed to this sharp increase in labour productivity. First, an increase in capital-intensity in individual industries that have associated with it an increase in labour productivity and, second, a faster rate of increase in the demand for and production of capital intensive commodities, resulting in an increase in the share of capital intensive production in the total. Our concern here is with the latter set of changes, as a result of shifts in the pattern of demand.

Therefore, Table 31 attempts to relate changes in product mix directly to labour productivity. This it does by relating the ranks of individual three-digit industries in terms of the rates of growth of net value added with their ranks in terms of Average productivity at the beginning of the period, Productivity growth during 1993-94 and 2003-04 and Average capital intensity at the end of the period. (Capital intensity has been calculated using capital estimates based on the perpetual inventory accumulation method.)

The role of credit

This tendency is exaggerated by the demand-side effects of financial liberalization. Credit has had an important role to play in the expansion of the market for manufacturers during the years of reform: through a boom in housing and consumer credit. One consequence of financial liberalization and the excess liquidity in the system created by the inflow of foreign capital, has been the growing importance of credit provided to individuals for specific purposes such as purchases of housing property, consumer durables and automobiles of various kinds.

An important implication of debt-financed manufacturing demand is that it is inevitably concentrated in the first instance in a narrow range of commodities that are the targets of personal finance. These commodities are more often than not the products of metal and chemical-based industries and therefore tend to be more capital intensive as well as more import intensive. Commodities whose demand is expanded with credit finance vary from construction materials to automobiles and consumer durables. Their importance in terms of contribution to growth is corroborated, however tangentially because of the nature of aggregation, by the data provided in Table 31. The skew in the pattern of consumption resulting from credit-finance growth has adverse implications for the elasticity of employment with respect to output.

Table 31. IIP-Based growth in seventeen major industry groups (1994-95 to 2003-04)

Industry Group	Growth Rate	Contribution
Food products	3.60%	0.41%
Beverages, tobacco and related products	12.70%	0.38%
Cotton textiles	1.47%	0.10%
Wool, silk and man-made fibre textiles	8.33%	0.24%
Jute and other vegetable fibre textiles (except cotton)	0.59%	0.00%
Textile products (including wearing apparel)	5.50%	0.18%
Wood and wood products; furniture & fixtures	-4.53%	-0.15%
Paper and paper products and printing, publishing and allied industries	6.17%	0.21%
Leather and leather & fur products	6.76%	0.10%
Basic chemicals and chemical products (except products of petroleum and coal)	7.83%	1.38%
Rubber, plastic, petroleum and coal products	6.56%	0.47%
Non-metallic mineral products	9.00%	0.50%
Basic metal and alloy industries	4.36%	0.41%
Metal products and parts (except machinery and equipment)	5.27%	0.19%

Machinery and equipment other than transport equipment	7.19%	0.87%
Transport equipment and parts	8.95%	0.45%
Other manufacturing industries	3.86%	0.12%
Manufacturing (Total)	6.14%	6.14%

Source: Computed from Index of Industrial Production data released by the CSO.

There are a number of other reasons why manufacturing outputs sucked out by a credit boom tend to have these characteristics. First, the liberalization of policy with regard to foreign direct investment has meant that much of the credit-financed, 'new' market for manufactures is catered to by transnationals, endowing these products with a greater degree of import-intensity. This tendency has been helped along by the fact that those favoured with credit fall in the middle classes, which too is characterised by a pent-up demand for "foreign" goods that could not be satiated earlier, not just because of protection but also because they lacked the means (including credit) to acquire these commodities rapidly. Any increase in the import intensity of domestic production reduces the share of domestic value added and the extent of domestic linkages in most commodities with potential negative effects for the employment elasticity of output growth.

A second reason why domestic linkage and employment effects would tend to be low is that a combination of import competition, the induction of larger firms into the small-scale sector through the redefinition of 'small', liberalization of imports of commodities that compete with those reserved for small scale production and 'dereservation' of areas earlier reserved for small scale producers has undermined the ability of smaller firms to service certain markets. Further, with the end of the era of development banking in general and directed credit in particular, the possibility of such firms obtaining the finance to emerge and survive has declined.

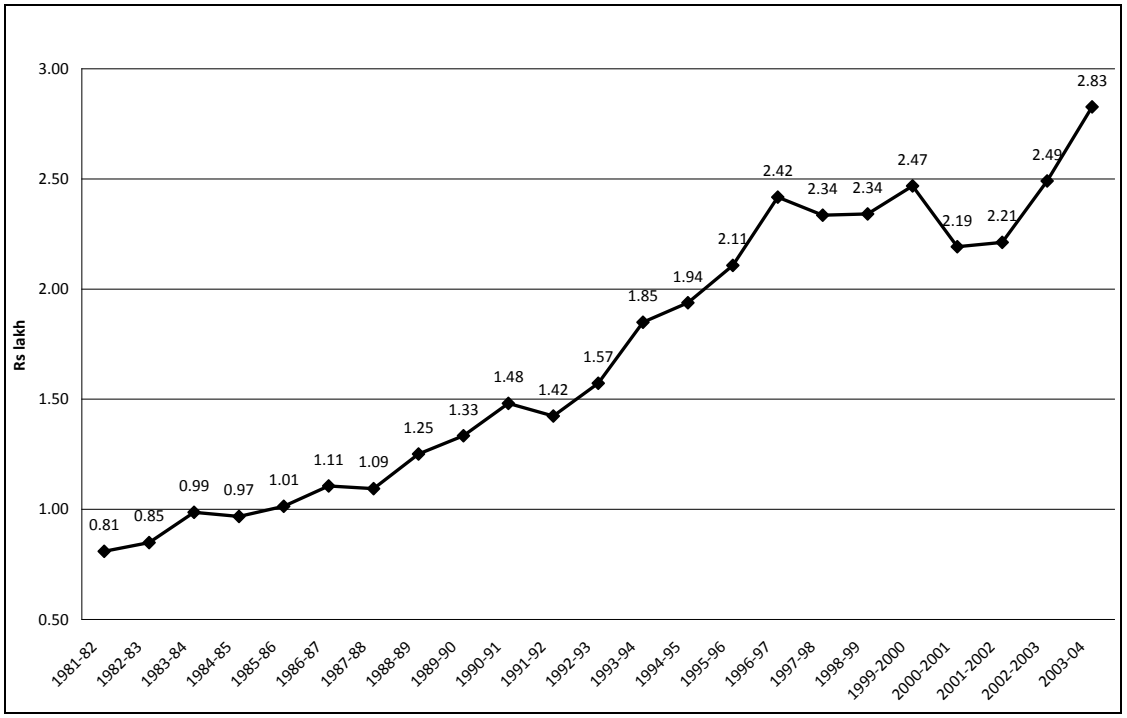
The net effect of all these has been as follows: To start with, there are some signs of the "hollowing of the small and lower-middle" in Indian industry, with growth occurring in the upper-medium and large scale sector, while the modern small and lower-middle scale industries have witnessed slow growth and high rates of mortality because of competition from imports or import intensive "domestic" products, recessionary environment, waning state support and inadequate credit access in times of distress. The small scale industries that tend to persist are those that cater to the ancillary needs of large firms, to niche markets and to low margin markets that persist because of low per capita income and high poverty. Second, there are clear signs of consolidation within the large industrial sector, in which foreign firms encouraged by liberalization of rules governing foreign direct investment, play a major part.

This has some implications for technology choice and employment generation. As argued below the evidence seems to suggest that capital intensity in smaller lower-middle firms tends to be lower than in the case of upper-middle and large scale firms. One consequence of these features of industrial development during the 1990s is the inadequate contribution of output growth in the organized sector to employment growth. While it is known that the manufacturing sector tends to be far less labour absorbing than agriculture or services, this feature of growth in organized industry is extremely disturbing and needs correction.

Features of organized manufacturing in the post-Reform period

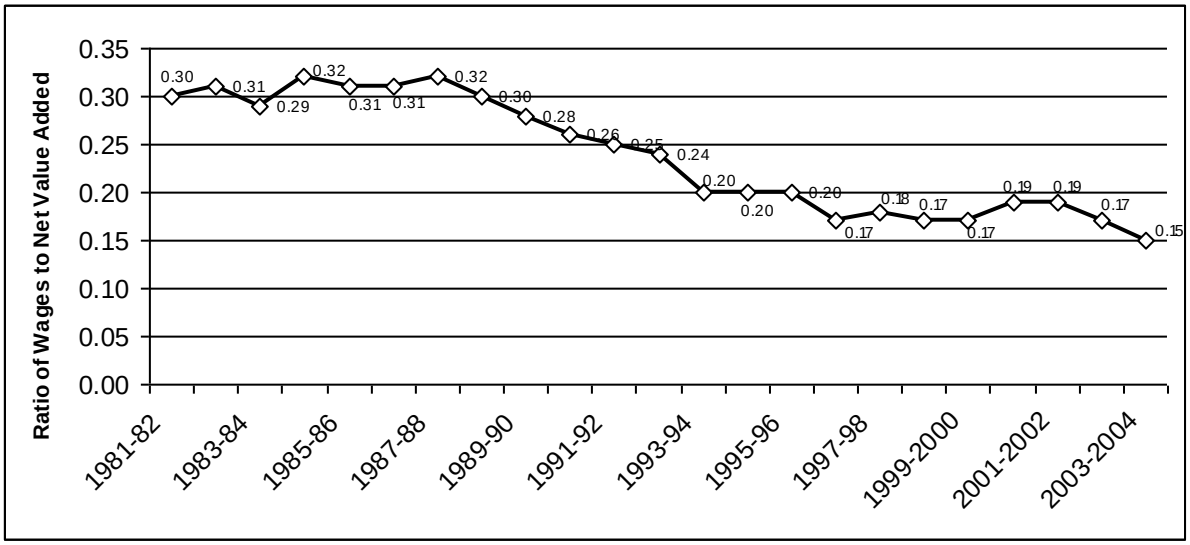
What has been the trend with regard to labour and capital intensity in the context of changes in the relative costs of investment and labour? The evidence is overwhelming that labour use per unit of production (which is the inverse of labour productivity) in the organized manufacturing sector has been coming down quite sharply during the reform years. One striking feature of the organized manufacturing sector during the years of liberalization has been a sharp and persistent increase in labour productivity as measured by the net value added (at constant prices) generated per worker. As Figure 12 shows labour productivity tripled between 1981-82 and 1996-97, thereafter stagnated and even slightly declined during the years of the industrial slowdown that set in, and has once again been rising sharply in the early years of this decade. However, the benefits of this labour productivity increase went largely to those deriving rent, interest and profit incomes, rather than workers. The share of wages in value added which was stable through much of the 1980s (Figure 13) has been declining almost consistently since the late 1980s till 1996-97 and then after a period of stability fell sharply to touch less than half its mid-1990s level.

Figure 12: Value Added Per Worker at Constant 1993-94 Prices: Organized Manufacturing



Source: Central Statistical Organisation, Annual Survey of Industries data deflated by GDP deflator for manufacturing. Data available at www.mospi.nic.in.

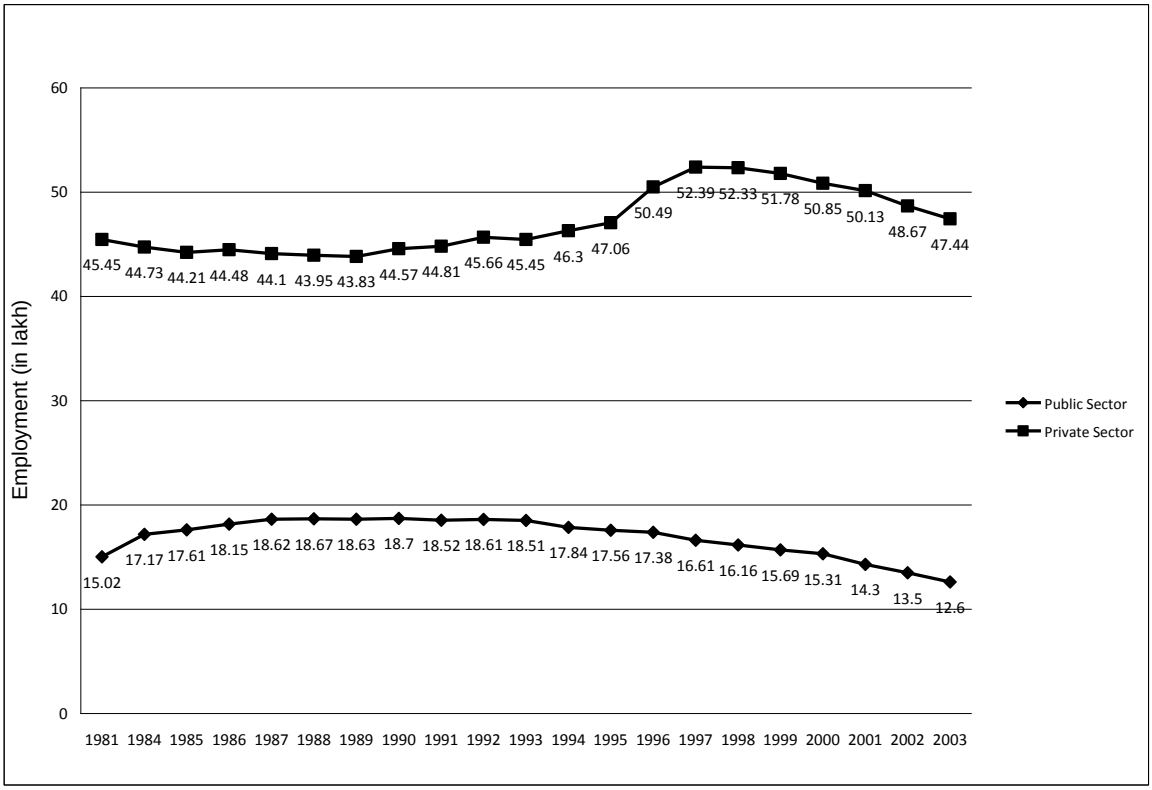
Figure 13: **Ratio of Wages to Net Value Added in Organized Manufacturing**



Source: Central Statistical Organisation, Annual Survey of Industries data available at www.mospi.nic.in.

This was the result of two developments. The restructuring of the public sector has meant that public sector manufacturing employment which was rising during the 1980s (Figure 14), was on the decline during the years of liberalization and fell sharply after 1997. Private organized manufacturing employment which was stagnant during the 1980s rose marginally during the early 1990s and sharply during 1995-97, after which it has declined to its mid-1990s level by 2003. Aggregate (public and private) organized manufacturing employment rose from 6.1 million in 1981 to 6.4 million in 1994 and 6.9 million in 1997, and then declined sharply to 6 million in 2003.

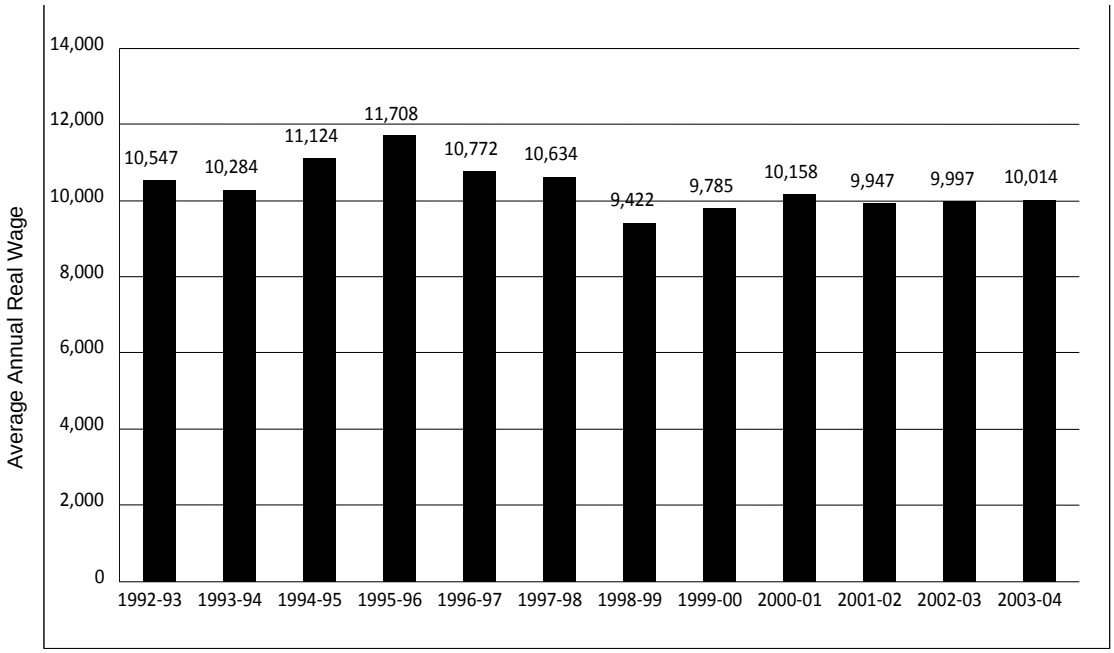
Figure 14: **Employment in Organized Manufacturing**



Source: Ministry of Finance, Economic Survey, Various issues.

The second significant development is that the average real wage of workers in the organized manufacturing sector has been more or less constant right through the 1990s (Figure 15).

Figure 15: **Average Annual Real Wage Per Worker: Organized Manufacturing**



Source: Central Statistical Organisation, Annual Survey of Industries data deflated by CPI for industrial workers.

That is, the relative price of capital with respect to labour has shifted in favour of capital not because workers are being paid high and *real* wages are rising, but because the prices of capital goods have been reduced and kept cheap as part of the policy of facilitating private investment.

Table 32 provides information on the top 25 three-digit sectors in terms of trend rates of increase in labour productivity among those for which data is available. It should be clear that they cover all of the sectors associated with the credit-financed and inequality-driven household demand boom, suggesting that the pattern of growth associated with the more open and liberalized regime of the 1990s has been significantly responsible for the extremely poor showing in terms of employment growth of an otherwise buoyant organized manufacturing sector.

Table 32. Top 25 industrial categories in terms of rate of growth of labour productivity

Industry	Code	RoG
Manufacture of railway and tramway locomotives and rolling stock	352	76.6
Manufacture of coke oven products	231	48.3
Manufacture of watches and clocks	333	41.2
Dressing and dyeing of fur; manufacture of articles of fur	182	21.7
Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	322	21.4
Manufacture of glass and glass products	261	20.9
Publishing	221	17.3
Manufacture of motor vehicles	341	15.1
Manufacture of domestic appliances, n.e.c.	293	13.3
Manufacture of other electrical equipment n.e.c.	319	13.0
Manufacture of structural metal products, tanks, reservoirs and steam generators	281	8.8
Manufacture of non-metallic mineral products n.e.c.	269	6.8
Manufacture of refined petroleum products	232	6.4
Manufacture of electric motors, generators and transformers	311	6.4
Manufacture of office, accounting and computing machinery	300	6.1
Manufacture of rubber products	251	6.0
Manufacture of tobacco products	160	5.4
Spinning, weaving and finishing of textiles	171	4.6
Saw milling and planing of wood	201	4.3
Manufacture of paper and paper product	210	4.2
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods	323	4.0
Manufacture of accumulators, primary cells and primary batteries	314	4.0
Manufacture of dairy products	152	3.5
Manufacture of man-made fibres	243	3.4
Production, processing and preservation of meat, fish, fruit vegetables, oils and fats	151	3.1

It is indeed true that establishing a direct link conclusively between the process of growth, the pattern of demand and the stagnation in organized employment is difficult. But the elements of evidence pieced together above do suggest that the initial level of income and expenditure inequality, the increase in that inequality, and the shift in the stimulus for growth

from public expenditure and investment to debt-financed private consumption and exports during the liberalization period has delivered a pattern of demand for manufactures and a process of industrial growth that is biased in favour of capital-intensive sectors and technologies. Together with the factors that encourage increase in capital intensity in individual sectors discussed elsewhere (Chandrasekhar 2008); this is bound to have contributed to the tendency for organized sector employment to stagnate even as production growth in the sector accelerates, or to the phenomenon of "jobless growth".

Together, these two developments have ensured that the benefits of the rise in labour productivity have largely gone to the surplus earners in the organized manufacturing sector. They have been the main beneficiaries of the policies of liberalization in general and trade liberalization in particular.

The "evidence" on capital intensity

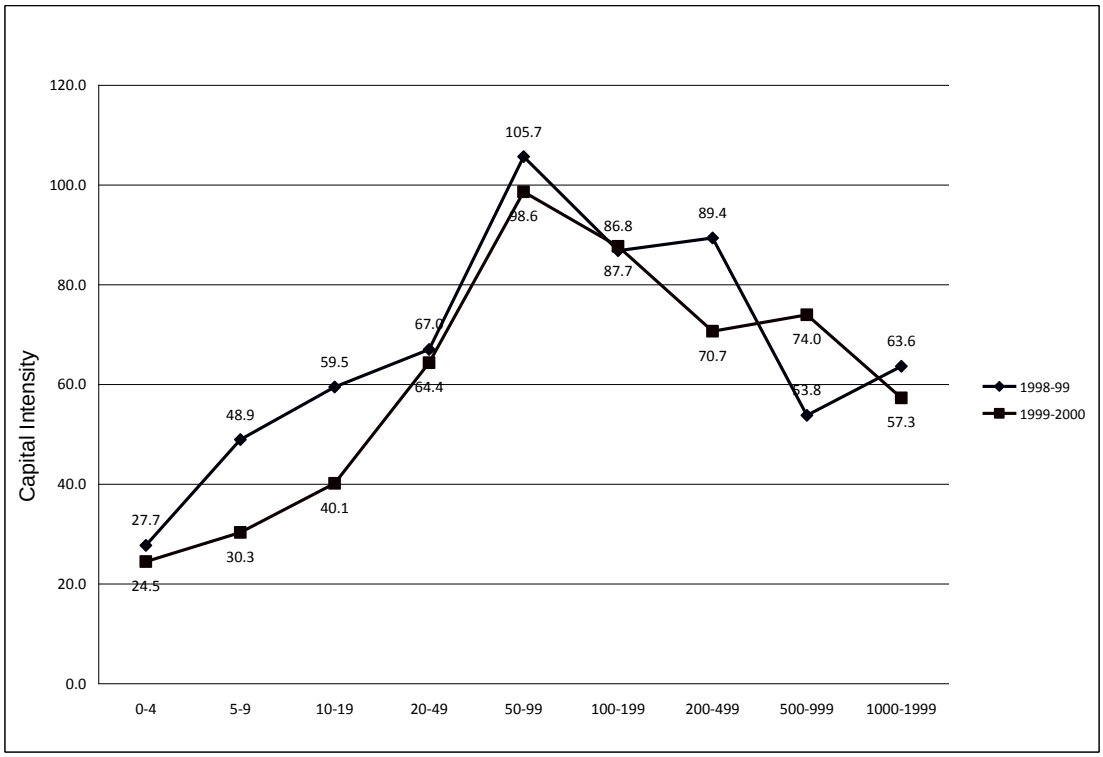
A corollary of the increase in labour productivity is the "evidence" that fixed capital used with each worker has been on the rise in the organized manufacturing sector. It hardly bears stating that there are innumerable theoretical problems associated with measuring the "capital" component in capital intensity measures. There are numerous empirical problems as well, since most figures on fixed capital are based on historical cost. When ratios of the stock of fixed capital to the total number of workers are computed for inter-temporal comparisons, we need to make strong assumptions regarding movements in the age structure of machinery and the structure of technology vintages that coexist in different industries at different points in time. Finally, to the extent that there exists some component of the workforce in individual industries that is "flexible" and can be retrenched when demand falls or decelerates, inter-temporal comparisons of ratios of capital to labour make sense only under the assumption that capacity utilization remains unchanged.

One could, however, assume that despite these problems, figures on the ratio of fixed capital (deflated by an index of machinery prices) to workers employed in the organized manufacturing sector would give an indication of the broad trend over time of labour requirements per unit of investment. What then has been the trend with regard to capital intensity?

Taking averages over a three-year period (Annex 1 to this Chapter) we find that in most three-digit industry categories for which figures are available from the 1970s, there was no clear definable trend in capital intensity between the early 1970s and early 1980s. Capital intensity then appears to rise moderately in most industries between the early 1980s and early 1990s. Subsequently, over the 1990s, capital intensity registers a sharp rise. The last of this is true in as many as 47 out of the 51 three-digit industry categories for which continuous figures are available.

What is also interesting is the capital intensity of firms according to different size classes (Figure 16). While the data suggest that the inter-temporal increase in capital intensity seems true of firms in all size classes, the intra-class distribution points to an inverted-U profile, with capital intensity rising as we move from the smallest size classes (0-5 workers) to the relative large size class of 50-99 workers. However, at size classes beyond this, capital intensity tends to fall, even if the capital intensity in the highest size class (1000-1999 workers) is well above that in the smallest size classes. This would imply that increased morbidity and mortality among small and medium sized firms would affect the level of capital intensity.

Figure 16: **Fixed Capital per Worker by Employment Size-class of Firms**



Some policy implications

Thus while factors influencing the pattern of demand growth and determining the relative price of capital vis-à-vis labour are inducing a labour-saving bias in the development process, the benefits of the resulting increase in labour productivity do not benefit workers but are largely distributed in favour of profits. This does have some implication for policy. In particular, it suggests that policy aimed at ensuring higher employment growth must be multi-track in nature.

One obvious way of correcting for the bias in favour of capital-intensive production implicit in the relative price of capital and labour is to provide an employment subsidy or making investment subsidies conditional on realizing a targeted level of employment per unit of investment. But this presumes that for any given pattern of production, it is possible to induce an across-the-board shift in favour of labour-intensive technologies. This, however, is not true. In case of many products and even areas of production, the choice of technology is limited and range of capital intensities relatively small. Thus what is required is to induce a combination of: (i) a shift in favour of labour-intensive technologies in products and areas where the choice of technology and the range of such choice is significant and relevant from the point of view of employment generation; and (ii) a shift of the production structure in favour of those commodities and areas where such choice can be exercised. If combined with a gender sensitive approach, there could be significant benefits for decent and productive employment creation for women.

This requires a shift away from across-the-board subsidies as is true currently in the case of investment subsidies. Subsidies need to be targeted at products and sectors that can serve the employment objective. Further, even within these sectors subsidies could be in the nature of employment rather than investment subsidies. Declaring these to be subsidies aimed

at realizing employment targets is crucial, since they otherwise are seen as subsidies aimed at supporting less productive sectors and technologies and therefore adverse from the point of view of growth and "efficiency".

The case of textiles

One industry where this has happened in practice is the textile industry, where efforts at sustaining the viability of handlooms with the objective of employment generation have been interpreted as subsidies aimed at protecting handloom weavers at the expense of productivity growth.

Developments during the colonial period had been interpreted to conclude that, besides certain advantages in the production of specialised fabrics (like Kancheepuram sarees), the survival of the handloom sector was linked to the extremely low levels of wages of weavers, who remained in their hereditary occupations for lack of alternative employment opportunities. In spite of this, the competitiveness of this sector vis-à-vis the mills was seen as being continuously challenged by technological developments in the latter. In 1966, it was estimated that the productivity of a mill loom was about 30-35 yards per shift of 8 hours, as against 6-8 yards per day on a handloom (Government of India, Ministry of Commerce 1956: 89). Thus the continued survival of handlooms was seen as uncertain and as necessitating substantial support, in the form of reservation of areas of production and other concessions, from the State.

However, even at that time, the protection for the handloom sector was not seen as driven by purely welfare considerations. P.C. Mahalanobis in his model of industrialization, argued for combining a higher allocation of investible resources to the investment goods sector, with forms of production of consumption goods, especially manufactured consumption goods that ensured a higher output per unit of investment (Patnaik 1995). This logic of strengthening domestic capital goods production by "saving" on capital diverted to the consumption goods sectors amounted to a defence of protection for handloom and other similar forms of production as part of an appropriate and balanced growth strategy, rather than on welfare grounds.

The importance of handlooms in a strategy of promoting non-agricultural employment, especially in rural areas, hardly bears emphasising. Protection for the sector on such grounds is by no means based on "compassion" for the weaving community, since employment generation is a prime goal of any development strategy. In fact, even today, the survival of units in the declining handloom sector is the result as much of low wages, of reservation, duty concessions and rebates. Yet the impression has gained ground that the sector survives only because of subsidies. The criticism of such subsidies has meant that with liberalization even the minimal support that is being provided is being withdrawn. There is real danger that weavers would be driven to desperation and forced out of their hereditary occupation.

There is a strong case here for providing subsidies, which will use the sector as a vehicle to realize employment targets. The objection that such subsidies would prove a drain on the exchequer is also not warranted. They can partly be obtained from the abolition of across-the-board investment subsidies. There would also be amounts that would anyway have to be spent under the National Rural Employment Guarantee Programme if the employment that these subsidies are expected to generate fails to materialise.

Consider the following. Currently, the number of handloom weavers is placed at around 3 million. Since some households may have more than one weaver, the number of households with one working member dependent on handlooms would be lower, say 2 million. We can reasonably assume that if the current decline of handlooms is allowed to continue, there would be at least 40 per cent (or 800,000) of these households that would be deprived of their livelihood. The government is now committed to ensuring each rural household a minimum of 100 days of employment a year at an annual cost estimated at Rs 10,000 per household. If, therefore, 800,000 handloom households are deprived of their livelihood and avail of the government's employment guarantee, the cost to the government would be Rs. 800 crore a year. Thus, spending up to Rs 800 crore a year for a few years (say five years) to render handlooms sustainable, would implicitly not involve any additional burden on the exchequer.

This is not to say that employment subsidies are a substitute for a rural employment guarantee programme. They should be supplemented by measures that directly create public sector employment catering to sectors such as health and education and activities that can help revitalise agriculture, so as to garner additional human development benefits. The government should finance these employment generating initiatives by taxing the large additional surpluses that accrue to the organized sector.

The leather and footwear sector

Another labour-intensive industry with significant growth potential is the leather and footwear industry. India has been a major global exporter in this area and has become an important production source for leading global suppliers of footwear, leather garments, and leather goods and accessories. About 50 percent of the domestic production is exported. Annual export earnings from the Footwear and Leather sector were US$ 2.1 billion in 2003-04 and the sector ranks eighth among the top 10 sectors in India's export list at 2.74 per cent.

According to a study by the National Manufacturing Competitiveness Council, the leather industry employs about 2.5 million people and records an annual turnover of around Rs 25,000 crore. Nearly 60-65 per cent of the production originates in the small/cottage sector. Assume that the government provides an employment subsidy of Rs 500 per month for every worker engaged in this sector and that results in a doubling of employment as a result of enhanced competitiveness. That would imply a subsidy bill of Rs 3000 crore a year. This compares with the average duty foregone of anywhere between Rs 10,000 crore and Rs 20,000 crore a year over ten years for firms being set or (perhaps) just moving into a special economic zone.

These back of the envelope calculations are only indicative of the budgetary implications of alternative forms of support for labour-intensive sectors. What they do suggest is that neither is the cost likely to be prohibitive, nor is it large relative to the large investment subsidies that could be skewing investment in a capital investment direction.

Pattern of production

Besides employment subsidies in labour-intensive sectors, policy should also seek to influence the pattern of development so as to counteract the bias in favour of import- and-capital intensive sectors. This it could do, for example, by reducing dependence on credit-financed household spending to stimulate industrial growth. This is not only an unsustainable trajectory with implications for financial stability, but also one that skews the pattern of development away from sectors that are potentially more labour using in nature. Other

industrial policy initiatives aimed at stalling the process of concentration in Indian industry could also help in this regard.

There are two difficulties that would be confronted when attempting to do away with the current system of promoting industrialization with the help of low capital goods prices and investment subsidies and correct for the bias in development in favour of capital-intensive sectors. First, it is bound to meet with opposition from sections of industry because it would reverse the trend towards an almost continuous increase in the ratio of profits to value added resulting from a combination of labour productivity increases and stagnant real wages. Second, it is bound to meet with opposition from state governments who would be required to refrain from offering large investment subsidies to attract investment, since such a strategy inevitably implies a race to the bottom. This may be seen as one more effort to diminish the power of the states and encroach on their policy independence. These are political economy constraints that would need to be handled. In the case of state support for these measures, it would be necessary to build consensus through inter-state discussions and consultations in bodies such as the National Development Council. In the case of sections of industry wanting to protect abnormal profits, political will is important. But these are hurdles that must be crossed because the problem at hand is too pressing to warrant neglect.

Conclusions

The evidence provided in this section supports the argument that the post-reform policy environment is likely to have influenced technology choice and production patterns in ways that affected the employment generated for every unit of investment and output. This bias appears to have been the result of policies that directly influenced the choice of technique as well as those that influence the growth dynamic of the system. To start with, even though real wages have not been buoyant, the policy environment has served to cheapen capital relative to labour. This it did through import liberalization and tariff reduction that cheapened capital equipment, through interest rate reductions that encouraged capital intensity and through explicit or implicit investment subsidies that encouraged higher investment per unit of output. Secondly, the shift consequent to fiscal reform and financial liberalization from public to private expenditure-led growth and from investment-led to consumption-led growth has been predicated on a sharp increase in credit-financed consumption. This too in myriad ways affects the pattern of production in directions that are more import- and capital-intensive, with attendant implications for employment growth.

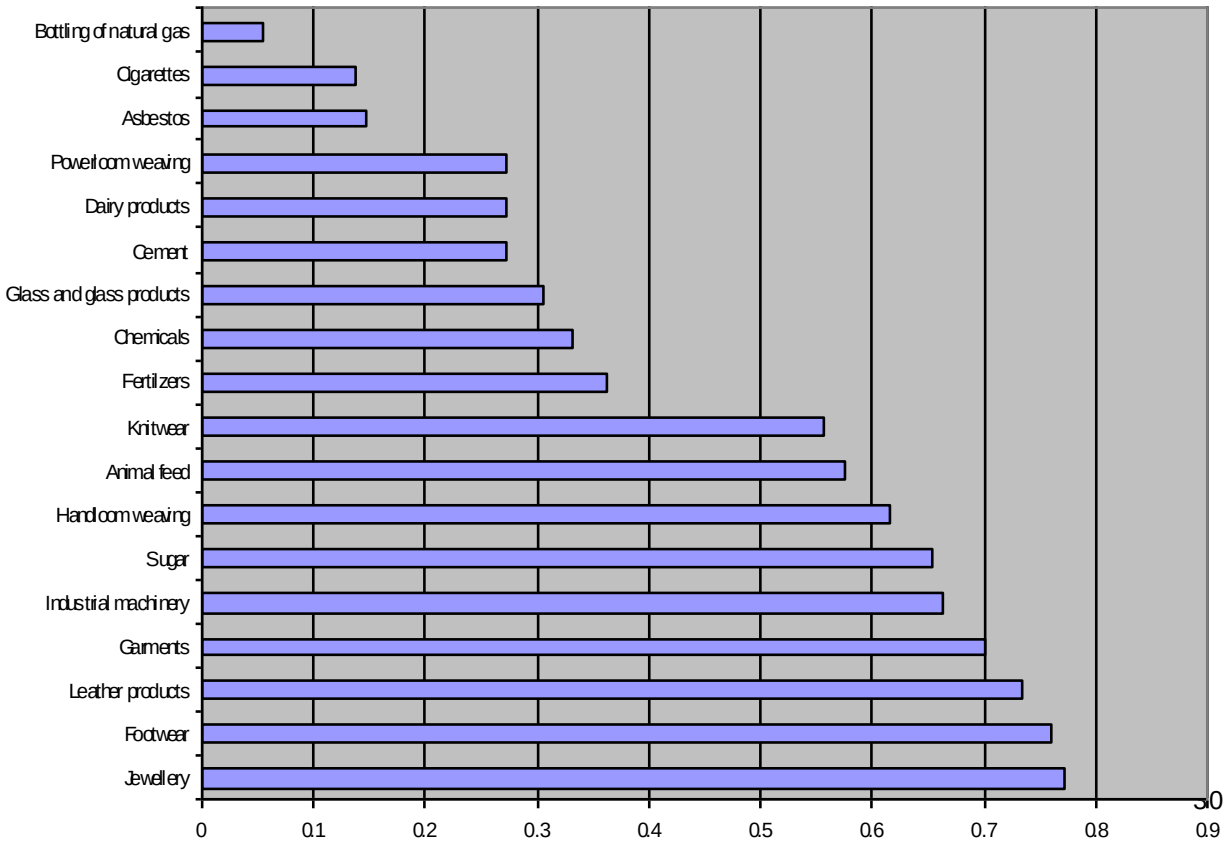
Given these circumstances, policies for accelerating employment growth and increasing the elasticity of employment growth relative to output growth in manufacturing should aim at reducing investment subsidies and using part of the resources thus saved for enhancing employment for women and men. This could be done with financial support to employment-intensive industries as well as subsidies that encourage greater labour use, which if well targeted can have substantial effects at costs that are not prohibitive. Such measures need to be combined with macroeconomic policy initiatives which correct for an excessive shift away from investment to consumption-led growth on the basis of financial policies that support a credit-financed housing and consumption boom.

5.1.2 *A sector-focused approach to achieving employment-intensive growth*

Employment-intensive growth is sometimes considered to imply the use of labour-intensive technology which, in turn, is considered to be synonymous with “backward” or inefficient technology _ for all economic activities. But this is not necessarily the case. A

typical economy consists of different sectors and sub-sectors that are characterized by different combinations of capital and labour. If sectors requiring more labour per unit of capital or output grow at higher rates compared to those requiring less labour, the overall employment intensity of growth will be higher without requiring an adoption of labour - intensive technology in all sectors. Likewise, a single sector (e.g., manufacturing) may consist of sub-sectors that require different combinations of labour and capital (see below and Figure 17).

Figure 17: Sectoral Variation in Employment Elasticity in India's Manufacturing 1990-98



The employment elasticity for the sector as a whole is the weighted average of the elasticity of its components. If the more labour-intensive components have a greater weight, the overall elasticity would also be correspondingly higher than in a situation where more capital-intensive sectors dominate and have a higher weight. So, if the country's policy environment is such that its labour intensive industries have a greater incentive to grow at a faster rate, it is quite possible for such industries to assume a greater weight within the manufacturing sector. And hence, the overall employment elasticity for the manufacturing sector as a whole may rise without requiring any individual sub-sector to adopt more labour-intensive technology than it is employing at present. All that would be needed to achieve such a result would be to ensure that the policy environment is conducive or at least does not discriminate against the growth of the relatively more labour-intensive sectors[23]. Hence, from the point of view of policies for promoting a more employment-intensive growth, it would be important to look at the employment potential of the major sectors and sub-sectors of the economy. Given the continued importance of agriculture in both the GDP and employment of

23. This argument was already made in Auer and Islam (2006) with illustrations from India and Indonesia's manufacturing sector.

the economy of India, the sector-focused discussion is now taken up in respect of agriculture, followed by manufacturing, and other sectors, e.g., construction, trade, tourism, and ICT.

Agriculture

As already mentioned in Chapter 2, growth of output in agriculture during the 1980s and 1990s has been low and unstable. Thus, the necessary condition for a high growth of productive employment in the sector was not there. Not surprisingly, the rate of growth of employment during 1993-94 to 2004-05 was lower than the period of 1983 to 1993-94. It could, of course, be argued that as economy develops, the share of employment in agriculture is expected to fall and that of other (and more modern) sectors with higher productivity is expected to rise. However, data presented in Chapter 2 show that such a structural transformation of employment has not yet taken place in India, and that the growth of employment in the organized sector has been rather low, especially during the 1990s. Moreover, there are studies to show that at early stages of development, while manufacturing and other modern sectors grow and start absorbing labour in productive activities, agriculture also has the potential to create productive employment through a combination of high growth in output and adoption of practices that are employment-friendly. It would, therefore, be useful to examine the reasons for the disappointing employment performance of Indian agriculture and identify policy options, if any, to reverse the trend.

As mentioned already, the major factor limiting productive employment in agriculture is low and unstable output growth. It would, therefore, be important to examine the factors responsible for the observed growth performance. While inadequacy of investment is usually considered to be the cause of low growth, this does not seem to have been the case in India. One study (Chadha, 2003), for example, shows that the rate of investment growth has been higher during the period 1993-94 to 1999-2000 compared to the period 1983-84 to 1993-94. That study, of course, pointed out that the share of agriculture in total investment declined during the latter period and that the share of public investment in total investment in agricultural investment has declined. However, the reasons for a decline in the growth of output in India's agriculture are probably more complex and needs to be examined. One possible factor could be the inter-state variation in investment and the resulting variation in the growth of output. A recent study (Chadha, 2008) shows that during 1983 to 1993-94 and 1993-94 to 2004-05, growth of agricultural output declined in 12 states of India. They include Andhra Pradesh, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu, Uttar Pradesh, and West Bengal. The same study mentions that there has been a steep decline in the yield rate for major crops like rice, wheat, pulses, and oilseeds during the 1990s and per hectare productivity has fallen. And there are studies (cited by Chadha, 2008) that blame the decline in public investment and the resulting slackening of technological improvements in irrigation, use of chemical fertilizers, and of extension services for the decline in productivity in agriculture.

Apart from yield and productivity per hectare, the other reasons for the slow growth of agricultural employment could be a decline in the rate of growth of cropped area and of per hectare labour use. The latter, in turn, could be caused by (i) a change in cropping pattern towards crops that require less labour per unit of land, and (ii) the adoption of labour-saving technology, e.g., tractors and other machines. The picture with respect to the growth of cropped area is somewhat mixed (Chadha, 2008); but there has been decline in the growth of area under paddy in several states (e.g. Andhra Pradesh, Assam, Bihar, Haryana, Karnataka, Orissa, Punjab, Tamil Nadu and West Bengal). As paddy is more labour-intensive than other grains, a shift away from paddy may have an adverse employment implication. Of course,

there are crops, e.g. fruits and vegetables of different kinds, and plantation crops (e.g. tea, coffee, pepper, cardamom, coconut, etc.) that are more labour-intensive than paddy. If the area under such crops expands to such an extent that increased labour demand created by them compensates for the loss of labour input due to a decline in the area under paddy, there should not be an overall adverse effect on labour use per hectare[24]. But the expansion of area under such crops has been rather slow. The critical question is what has been the exact direction and magnitude of changes in the cropping pattern.

The pace of mechanization has accelerated in recent years. And despite its positive effect on cropping intensity and per worker agricultural productivity, the overall impact on employment has been adverse. Moreover, the productivity boosting effect of tractors became somewhat weaker over time (Chadha, 2008).

In sum, to reverse the declining trend in the growth of employment in agriculture (especially if productive employment has to increase), attention would need to be devoted to a number of areas:

- The declining trend in crop yields will have to be reversed. And for that purpose, action on a number of fronts is required: further improvement in the effectiveness of irrigation and fertilizers, improvements in dry land farming, strengthening of the extension service, and an overall improvement in public investment in both quantitative and qualitative terms.
- Specific attention would need to be given to constraints that may be faced in the cultivation of crops that are more labour-intensive, e.g., paddy, plantation crops, fruits and vegetables, etc.

Rural Non-farm Activities (RNFA)

In contrast with agriculture, there has been a small increase in the growth of employment in rural non-farm activities during 1993-94 to 2004-05 compared to 1983-84 to 1993-94. At a further disaggregated level, the increase in employment growth has been substantial in construction and transport. Agro-based manufacturing in rural areas has also witnessed a significant acceleration in employment growth. What is also positive is that during the second period, there has been an increase in the growth of output of rural non-farm sector as a whole. And that implies that there has been a growth of *productive* employment in the sub-sector. However, a few aspects relating to RNFA may be mentioned here. First, the share of income from RNFA varies inversely with farm size (indeed, it's the highest for the landless), thus indicating their importance from the point of fighting poverty where it is caused by lack of access to land. Second, for female workers, agriculture still remains a much more important source of employment than for male workers. One reason for this could be the level of education and skills required for getting access to the RNFA and the disadvantage suffered by female workers in that respect. Third, there is a wide variation in productivity between different activities within the sub-sectors and even within sub-sectors like manufacturing. In other words, a kind of duality (with one segment characterized by decent

24. Although there may not be an adverse effect of such changes in the cropping pattern on employment, the issue of the impact on food grain production and food security cannot be ignored altogether. This question has regained importance in view of the recent (especially in early 2008) sharp increases in the global prices of food grains and the various response mechanisms (including control on trade) adopted by both food importing and exporting countries. Whether trade can be relied upon to ensure the availability of food grains has come into question.

productivity and incomes, and another by low productivity and earnings) still characterizes the RNFA.

The policy implications that follow from the above are rather simple. First, action would be needed to raise the productivity of workers engaged at the lower end of the RNFA; and that may involve:

- support in upgrading the type and quality of products and in accessing markets; and
- improvement in levels of education and skill, especially among female workers.

Manufacturing

As growth rate of the economy rises, it is expected that investment in the manufacturing sector will also increase leading to further growth in output and employment. This has focused attention towards examining the employment elasticity of organized manufacturing. Based on the CSO estimates of GDP and NSS figures on employment, one study shows that the elasticity of employment with respect to output in manufacturing has declined from 0.37 during 1983 to 1993-94 to 0.29 during 1993-94 to 1999-2000 (Mitra and Bhanumurthy, 2007).

The share of wages to all employees declined from 41 per cent of the gross value of output in 1981-82 to 32 per cent in 1991-92 and further to 25 per cent in 2003-04. The share of wages to workers declined from 27 to 21 to just 13 per cent respectively. Such a situation indicates a decline in the employment content of growth, accumulation through technological change and a shift in the balance of power towards capital (Kannan and Raveendran 2008)

Data relating to the unorganized manufacturing is limited. Kannan and Raveendran (2008) calculate that during the period 1989-90 to 1994-95, the whole sector presented a picture of jobless growth with an employment elasticity of minus 1.12. However, this situation seems to have changed in the subsequent period of 1994-95 to 2000-01 when the overall employment elasticity increased to 0.19. Therefore the overall situation is one of recovery for unorganized manufacturing although the employment growth is a low 1.39 per cent. Table 33 presents a general picture of the performance of both the organized and unorganized sectors in generating employment in relation to output growth.

Table 33. Number of industries (two-digit level) with different employment and growth performances

Period	Organized	Unorganized
Employment Creating Growth		
Period I (1989-90 to 1994-95)	16	13
Period II (1994-95 to 2000-01)	10	13
Jobless Growth		
Period I (1989-90 to 1994-95)	4	3
Period II (1994-95 to 2000-01)	12	5
Neither Growth Nor Employment		
Period I (1989-90 to 1994-95)	2	7
Period II (1994-95 to 2000-01)	Nil	4
Employment Without Growth		
Period I (1989-90 to 1994-95)	Nil	Nil
Period II (1994-95 to 2000-01)	Nil	1

Source : Kannan and Raveendran (2008)

According to standard trade theory, a country would enjoy comparative advantage in the production of goods requiring more of the factors that are abundant in the country. And since India has been pursuing a policy of trade and economic liberalization since the early 1990s, one would expect the country to achieve higher growth in export and hence production of more labour-intensive goods

(because labour is the factor which is relatively more abundant in the country). That should result in an increase in the share of such goods in total output. As Figure 17 shows, there are indeed industries (e.g., jewellery, footwear, garments, leather and leather products, industrial machinery, etc.) that are more employment intensive than others. But the key question is: what has been the actual experience with regard to the growth of the relatively more employment-intensive industries?

Data presented in Table 34 throw some interesting light on this issue. First, no discernible shift appears to have taken place in the structure of organized manufacturing in terms of the share of various sectors in output. Indeed, the share of the top five labour-intensive sectors, viz., food products, beverage and tobacco, leather products, wood products and furniture, and other textiles (including apparel) has declined between 1990-91 and 2003-04. Some labour-intensive sectors, e.g., indigenous sugar (like *khandsari* and *gur*), weaving and finishing of cotton textiles on handlooms, jute pressing and baling, wooden industrial goods, cork and cork products, have registered negative value added growth. On the other hand, a good percentage of relatively more capital-intensive industries (e.g., man-made textiles, plastic products, petroleum products, cement, transport equipments, domestic consumer products like refrigerators and air conditioners) have registered fast growth. Two recent ILO-sponsored studies (Chandrasekhar, 2008; Palit, 2007) find that the manufacturing sector in India on the whole has become more capital-intensive over time. One positive feature that comes out is the growth of some labour-intensive sectors like textiles, garments, footwear, jewellery, etc.

Table 34. Share of Different Manufacturing Industries in Total Manufacturing Output, 1990-91 to 2003-04

Industry	1990-91	2003-04	Rank in labour-intensity (2003-04)
Food products	26.06 (1)	21.64 (1)	5
Beverages and tobacco	1.9 (12)	1.68 (14)	3
Natural fibre textiles (excluding apparel)	9.3 (5)	5.13 (8)	8
Other textiles (including apparel)	1.52 (13)	2.29 (9)	1
Wood products and furniture	0.32 (16)	0.44 (16)	7
Paper and paper products	2.62 (10)	2.05 (11)	12
Leather and fur products	1.03 (14)	0.75 (15)	2
Chemicals and chemical products	11.78 (3)	11.7 (3)	14
Rubber, plastic, coal and petroleum	10.49 (4)	14.28 (2)	16
Non-metallic minerals	3.28 (9)	2.26 (10)	13
Basic metal	12.05 (2)	10.35 (4)	15
Fabricated metal products	2.08 (11)	1.78 (13)	6
Machinery and equipment	5.22 (8)	8.33 (5)	9
Electrical machinery and equipment	5.92 (6)	8.33 (5)	9
Transport and vehicle equipment	5.65 (7)	6.67 (7)	11
Other manufacturing industries	0.78 (15)	1.96 (12)	4
Total.	100	99.64	

Source: Palit (2007), based on data from the Annual Survey of Industries.

The experience mentioned above is contrary to what is predicted by conventional economic theory. Clearly, there is a case for looking at the factors that may have been responsible for the sectoral pattern of growth that has been observed in India.

Industries that are relatively more labour intensive and have elasticity of at least 0.5 could be targeted for more employment friendly growth. These would include various food processing industries, handloom weaving, knitwear, garments, sugar, industrial machinery, leather and leather products, jewellery, footwear, jute and mesta textiles, coir, bidi industry, furniture, bicycle and cycle rickshaws. It may be worth its while to target those that, in addition to being labour intensive and employment elastic (elasticity greater than 0.5), also have a growth potential, as these could certainly be potential sources of new jobs.

Certain industries that are highly labour intensive but have registered a significant decline in the employment elasticity of growth include indigenous sugarcane and palm juice products' industry, weaving of cotton textiles on handlooms, jute and mesta pressing, waterproof textiles, cork and cork products and footwear manufacturing. These industries also need to be developed in order to utilize the workforce engaged in these sectors.

The unorganized manufacturing sector grew rapidly and has been employment intensive but has a vast self-employment category. The high employment elasticity here might represent expansion of activities with low productivity. Special attention needs to be given to improve technology, productivity and earnings in the unorganized sector to reduce poverty. Industries like food products, beverages and tobacco, textiles and leather and chemical products mark a huge growth in employment generation coupled with growth in the production level over the nineties in both rural and urban areas. Some industry groups which show rapid growth in the non-directory manufacturing enterprises (NDME) and directory manufacturing enterprises (DME) categories include basic metals, machinery and transport equipment and non-metallic minerals. Though textile and leather industries do not show huge improvement in terms of employment elasticities, these industries show a very marked increase in the employment growth per se.

Given the fact that the degree of employment intensity of growth varies significantly between broad sectors and between sub-sectors within sectors (e.g. different industries within manufacturing), the approach adopted by the Government of India for promoting the development of sectors/sub-sectors having greater employment potential is on the right track[25]. What is needed in that context is to undertake, for key sectors, detailed analysis of various aspects of production and factor use, identify constraints faced by them, and introduce corrective measures to ensure high growth. In addition to employment potential, an important issue for consideration in the context of a sectoral approach would be the market for products and the income elasticity of demand. There are certain sectors whose products are characterized by low income elasticity of demand; and it may not be worth promoting their growth. In pursuing a sector-based approach, it would be important to start from an analysis of markets and the linkages of the sector with the rest of the economy.

An ILO study on the food processing sector shows that on the basis of elasticities of employment, the unorganized segment is doing better than the organized segment in the creation of jobs. The segment created 93 per cent of the 0.88 million jobs created between 1994-95 and 2000-01 in the sector. While the sector provides jobs at a much lower (viz. 30 per cent) capital investment than the manufacturing sector as a whole due to its labour intensive nature, the quality of employment is poor, with low wages and low productivity. Sub-sectors like macaroni, noodles and other food products, and grain mill products create

25. See Government of India, Planning Commission: *Eleventh Five Year Plan*. The list contained in the 11th Plan document includes, in addition to manufacturing, services and other sectors.

employment at a capital investment that is 75 per cent less than that in the total manufacturing sector. The jobs in the manufacture of bakery products come at a 55 per cent lower capital requirement. The fixed capital in the organized sector is one third of that in the total manufacturing. The study mentioned above could form the basis of action on the policy front.

The services sector has grown rapidly and contributed to the employment reversal in the last few years. Construction, trade, hotels, transport have high employment elasticity, particularly in the urban sector. All these sectors, except trade, show increasing employment elasticity in the nineties. The S.P. Gupta Committee Report mentions that total additional job opportunities created over the Tenth Plan in these sectors were above 50 per cent. Trade, Hotels and Restaurants registered the highest increment among all the industries.

Within services some specific sectors that need special focus are the following:

Tourism

Tourism is an employment intensive activity. The share of tourism in employment at 8 per cent is greater than its share of GDP which is 5 per cent. Employment estimates are derived from the methodology[26] prescribed in the Tourism Satellite Account (TSA) adopted by the United Nations Statistical Commission, which includes both direct and indirect effects. Direct tourism specific jobs are generated in tourist accommodation services, food and beverage serving services, passenger transport services, transport equipment rental, travel-agencies and similar other recreational and entertainment activities. Tourism related products in which employment is generated include clothing and garments, processed food, tobacco products, alcohol, travel related consumer goods, footwear, toiletries, gems and jewellery, medicines, health related products and printing and publishing. The number of jobs contributed by tourism specific services is much larger than the number of jobs created through consumption of tourism related products.

India witnessed a rapid growth in terms of foreign tourists, domestic tourism and in terms of foreign exchanges abroad. However, main constraints in sustaining this growth in the future are infrastructure to ensure comfort and skilled manpower for the tourism sector. To enhance the employment potential of the tourism sector a two-pronged strategy is required:

- On the demand side – Improve infrastructure in key tourist destinations – this includes hotels, roads, transport and other comfort facilities. There is also a need to offer incentives to promote private investment in quality accommodation, and further promote the Bed and Breakfast scheme started by the government. This also includes the need to link one tourist destination to another to improve connectivity and develop civic amenities. All these would contribute towards enhancing the volume of tourists in India which would increase the employment size.

26. The method is based on a survey of tourist expenditure in different sectors and then estimating expenditure equivalent value added based on a coefficient of value added to expenditure that can be calculated for different sectors of the economy by relating value added data available in national accounts statistics to the results of the consumer expenditure survey undertaken by the National Sample Survey Organization (NSSO). Once value-added by tourism sector is estimated (sector-wise), employment generated is arrived at by multiplying value-added by employment coefficients of different sectors calculated from the national accounts statistics and employment unemployment survey of the NSS. Since value added and employment coefficient is calculable for all the sectors for which sectoral break up is available in the national accounts statistics and employment-unemployment survey, direct plus indirect contribution of the tourism sector in GDP and in employment is calculated through the use of input-output table.

- On the supply side – Training facilities for the tourism sector need to be improved. In spite of being a high employment growth sector, there is shortage of about 204,000 trained workers in the hospitality industry. At present, the government sponsored training institutes provide training to about 12,000 persons, so there is a huge shortfall of trained and skilled workers in this sector. To address the growing need of skilled manpower, the government is providing financial assistance for modernization and capacity enhancement of institutes relating to Hotel Managements and Food Craft. New Institutes are being set up. A scheme of "earn while you learn" has been launched for capacity building in hospitality sector. A scheme of Capacity Building for Service Providers (CBSP) is also being implemented to impart hospitality training to those employed in this sector including the informal economy at the lower end of the value chain.

Construction

Faster growth of economy has put increasing stress on physical infrastructure such as roads, ports, railways, airports, dams, canals, power, irrigation, housing, urban utility, watershed development works, building special economic zones, etc. All these infrastructure facilities involve construction activities. The construction sector is a key link between the major upstream activities of core sector industry such as cement, bitumen, steel, quarries (road and building aggregates), industrial products, services (engineering, technology transfer) and downstream activities such as creation of social infrastructure, agriculture, defence, transportation and other spin off effects. Large-scale investment through public and/or private funding has been recognized as critical to the industrial and socio-economic growth of the country. Cognizant of this, the governments at the central and state levels have, particularly during the past over 10-15 years, accelerated the development of physical infrastructure. Table 35 gives a snapshot of sector-wise investment projected for the Eleventh Plan, 2007-12. For enabling an appreciation of these projections, investment levels achieved in the Tenth Plan are also shown.

Table 35. Sector-wise Investment Anticipated in the Tenth Plan and Projected for the Eleventh Plan

(2006-07 prices)

Sectors	Tenth Plan (2002-07)		Eleventh Plan (2007-12) (Projected Investment)	
	Rs Crore	**Share (%)**	**Rs Crore**	**Share (%)**
Roads	144 892	16.63	314 152	15.25
Railways (including MRTS)	119 658	13.73	261,808	12.71
Ports	14,071	1.61	87,995	4.27
Airports	6,771	0.78	30,968	1.50
Irrigation including watershed	111,503	12.80	257,344	12.49
Water Supply and Sanitation	64,803	7.44	143,730	6.98
Electricity and Power	291,850	33.49	666,525	32.35
Telecommunication	103,365	11.86	258,439	12.54
Storage	4,819	0.55	22,378	1.09
Gas	9,713	1.11	16,855	0.82
Total	**871,445**	**100**	**2,060,193**	**100**

Source: Eleventh Plan Document – Planning Commission

As a modest estimate, about 40 percent of these investments would directly contribute to construction activities implying an expenditure of Rs 160,000 crore in construction sector per year. This does not include real estate and other construction activities.

The construction industry is a mix of government and public sector organizations, organized and unorganised unorganized players in the private sector, right from construction workers to site supervisors, junior and senior engineers in the government, consultants and contractors, material manufacturers/suppliers, equipment manufacturers/suppliers, real estate developers and architects engaged in the housing and commercial development businesses. According to the construction industry estimates, the employment figures have shown a steady rise. It is estimated that at present the construction sector employs 31 million persons. Table 36 gives a broad estimate regarding different levels of personnel engaged in the construction sector.

Table 36. Estimated Number of Personnel in Construction Sector

Sl.No	Category	1995		2005		Percentage Growth in 10 Years
		Number	Share (%)	*Number*	Share (%)	
1	Engineers	687,000	4.70	822,000	2.65	19.66
2	Technicians and Foremen	359,000	2.46	573,000	1.85	59.61
3	Secretarial	646,000	4.42	738,000	2.38	14.24
4	Skilled Workers	2,241,000	15.34	3,267,000	10.54	45.78
5	Unskilled Workers	10,670,000	73.08	25,600,000	82.58	139.92
	Total	14,603,000	100.00	31,000,000	100.00	112.28

Source: Report of the Working Group on Construction for Eleventh Plan: Planning Commission

This table brings out the following aspects:

(i) There is drop in the percentage proportion of qualified engineers employed in the construction sector.

(ii) The strength of skilled work force has also experienced decline.

(iii) The structure of employment in construction is bottom heavy with over 80 per cent workers being unskilled and seeing the past trend, this is going to rise.

(iv) Manual unskilled labour in large numbers has entered the construction sector. This indirectly implies need for upgrading of skills to improve productivity and quality in construction.

The Working Group on construction sector set up by the Planning Commission for the Eleventh Plan has estimated the growth in demand for employment at a rate of 8 to 9 per cent per annum implying addition to existing stock by around 2.5 million persons per year. Another issue facing the construction sector is that 78.9 per cent of workers are casual. There is high correlation between being a subsidiary status and casual status – about 31.38 million persons are engaged as subsidiary status worker.

Majority of the job opportunities to workers are provided by the contractors engaged in the construction sector. The contract documents incorporate provisions for adherence to various labour laws that are enacted by the Ministry of Labour and Employment and State

Governments and applicable to construction industry. Being a member country of the United Nations, these Acts incorporate various objectives of the ILO viz., promotion of rights at work, employment, social protection, social dialogue so that decent work conditions are provided. The contractors and their sub-contractors are expected to abide at all times by these existing labour enactments and rules made there under. Since most of the employment is in the informal sector, it calls for special attention to aspects such as occupational health, safety of workers, social protection, timely payment of wages and non-discrimination due to gender as per the various labour laws. Some improvement is seen towards arrangements by some of the large corporates and contractors with regard to providing safety and tool kits to workers. Overall, however, working conditions continue to be poor. There are still several states which are yet to implement the Building and other Construction Workers Regulation of Employment and Conditions of Service and the Welfare Cess Acts, enacted in 1996.

Per worker output in this sector is the lowest among all non-agriculture sectors with a discernible declining trend. Labour productivity grew at -1.53 per cent annually during 1993-99; it dropped to -0.25 per cent during 1999-2004. There has been a marked decline in wages among urban casual workers. Decent work deficit is high in this sector with virtually no job security or any form of social security. Any written contract is available only to 1.72 per cent of the construction workers against 52 per cent in financial intermediaries, 70 per cent in utilities etc. A mere 1.56 per cent of construction workers benefit from social security. Social security benefits and secured job contract increases with education level. Only about 12.4 per cent of the workers had formal skills training and only 2.3 per cent received formal training.

For skill development of construction workers, some bigger corporate houses are providing training to unskilled workers in trades like plumbing, masonry, electrical and sanitary works. Mention may also be made of the National Institute of Construction Management & Research (NICMAR) and the National Academy of Construction (NAC) Hyderabad. The former is recognized by the Government of India as a Scientific and Industrial Research Organization. It has its own centres in Pune, Delhi, Hyderabad, (also Nepal and Dubai). It offers full-time courses on construction and management. The NAC, Hyderabad is a model training centre for the construction workers at the state level – created as a joint initiative of the State Government of Andhra Pradesh and the private construction industry (Box 1).

The Construction Industry Development Council (CIDC) is also undertaking a number of initiatives for promotion and strengthening of skills in the construction sector. It has an on-going arrangement with the Indira Gandhi National Open University (IGNOU) to jointly design and implement continuing and extension educational programmes for workers, supervisors and managers engaged in construction. It covers various trades through several training centres spread across the country. The scheme is supported by the Ministry of Labour and Employment, who have recognized CIDC as a nodal centre for imparting training to construction workers. These trades include surveyor, excavator operator, motorized grader operator, stone crusher operator, laboratory technician, earth moving equipment operator, road roller operator etc. Other trades like hot-mix plant operator, concrete mixer operator, mate, and spray man are also being covered to meet the huge demand.

Box 1: National Academy of Construction (Hyderabad)
(A Model Agency for Training in Construction)

Initiative:		Government of Andhra Pradesh set up the Academy in 1998 as a Society; managed by Board of Governors chaired by the Chief Minister, Andhra Pradesh.
Mission:		Improving efficiency and productivity of the Indian Construction Industry
Core Activity:		Training of workmen, supervisors, managers, contractors and engineers in the field of construction.
Funding:		0.25% deduction from the bill payments of contractors in the state.
Objectives:	(i)	Basic skill training for general/specialized construction trades
	(ii)	Upgradation of skills in contract management practices of government, corporate and contractor managers.
	(iii)	Quality supervision, stores management and surveying.
	(iv)	Training of Trainers
Methodology:		
	(i)	Structured courses for training (theory and practice)
	(ii)	Group discussions
	(iii)	Workshops, seminars, conferences, symposia
	(iv)	On-job experience, visit to project-sites
Constituent Units:	(i)	Construction Technicians Training Institute (CTTI)
	(ii)	Construction Industry Staff College (CISC)
	(iii)	Transport Infrastructure Training Institute (TITI)
	(iv)	Contractors Development Institute (CDI)
	(v)	Construction Methods and Materials Research Institute (CMRI)
	(vi)	Institute of Architecture & Design (IAD)
	(vii)	Housing Development Institute (HDI)
	(viii)	Water & Rural Development Institute (WRDI)
Faculty:		Both core and guest faculty
Infrastructure:		Spread over an area of 167 acres (land allotted by the state government), the Campus has a very good infrastructure consisting of class rooms, workshops, auditorium, seminar halls, office block, Board room, hostel, canteen, recreation facilities, shopping centre, exhibition halls, etc.

Considering these immense skill development needs, it is felt that there should be several such centres, at least at the regional levels. A few ITIs in each state need to be identified and encouraged to provide trades as per demand specific to various sub-sectors of construction sector.

Long working hours, poor working and living conditions, absence of paid leave and occupational hazards are rampant in this sector. No compensations are available in case of accidents or injuries although regulations exist. It is one of the sectors providing highest employment to women though physical safety of women workers is often at stake. There is high concentration of migrant workers, particularly seasonal migrant workers. Major challenges in this sector relate to raising productivity and earnings of labour, providing training to improve productivity and earnings as well ensuring that labour standards and regulations are respected.

ILO's work has demonstrated that a substantial part of the construction sector offers a choice of technology without any compromise on quality, efficiency and productivity (e.g., rural roads, irrigation and watershed works, construction of low-cost housing and social facilities, such as education and health care). It would, therefore, be appropriate to tap the employment potential of this sector through increases in investment as well as through the

adoption of labour-based approaches where feasible. However, the construction sector is currently facing shortage of skilled workers, equipment operators and site managers. It may, therefore, be useful to study in detail the employment potential, skill requirements as well as constraints faced by the sector. Such an exercise could provide inputs into the government's efforts to make skill training system more demand-driven. Also important would be to demonstrate how labour-based approaches can be used without compromising on efficiency, productivity and considerations of basic labour standards.

Retail

India has a $250 billion retail market, growing at the rate of 7.2 per cent a year. Retailing employs about 40 million people in India. Disguised employment is highest in retail sector. Retail trading is mainly dominated by unorganized sector. Small retailers (12 million outlets) operate in the unorganized sector. However, unorganized shares have declined slightly over the 1990s with the entry of corporate players. It is estimated that entry of corporate giants in this sector can lead to job losses ranging between 432,000 to 620,000 (worked out to 1 one per cent to 1.5 per cent of current workforce of 40 million engaged in retail trade). Though as a policy, FDI is not yet allowed, foreign retailers are already in operation through joint ventures wherein Indian firm was an export house or through franchising, sourcing from small-scale sector, cash and carry operations and non-store formats.

In the rural sector, retail trade accounts for a small proportion of male and female employment as compared to urban areas. However, recently rural sector has shown an increase in the employment share whereas urban sector has shown a decline, particularly among women. This may be because agricultural employment has declined and with the continuing crisis conditions, agriculture has become less viable forcing the farmers to seek alternative employment. Urban areas, on the other hand, are characterized by entry of large corporate retailers along with urban laws and policies like zoning restrictions and other rules that constrain relatively small and unstable traders to function freely. Self-employment in the retail sector shows an increase, particularly in urban India.

Table 37. Growth rates of retail trade employment between 1999–2000 and 2004–2005 by Current Weekly Status, Current Daily Status, Usual Principal Status and Usual Principal +Subsidiary Status (compound annual percentage rate)

	CWS	CDS	UPS	UPSS
Rural males	6.44	6.08	5.48	5.55
Rural females	9.54	8.36	7.77	7.95
Urban males	-0.31	2.68	1.24	1.24
Urban females	-6.6	1.57	-1.18	-3.22

Source: Ghosh, Sengupta and Roychowdhury

Major problems faced by the small retailers are lack of access to institutional credit, legal insecurity, official harassment and lack of unionization. In organized retailing, firms hire workers on short-term contracts, generally migrant workers and women. Workers are put on long hours to meet deadlines. The advent of large scale organized retail trade is likely to have some impact on jobs created and lost in different segments of the retail sector, but on the whole, the retail sector is likely to continue to be a major employment generator. The major focus of government policy would need to be on the quality of employment in retail –particularly labour standards and security.

ICT

India's IT sector has shown a continuous high growth rate in terms of its contribution to GDP. Indian software and services exports are expected to touch $40 billion mark in 2008 fiscal, approaching the $100 billion mark by end of 2012. In terms of employment, however, the ICT sector employed only one million workers in 2004-05, while rate of growth of employment in rural areas in the late nineties was only 0.67 per cent and in urban areas it was 1.34 per cent. Further growth in the IT sector is likely to raise employment in this sector, but much of that would depend on how well the Indian industry is able to capitalize on global market niches, expand domestic demand and offer good quality employment.

The challenges facing Indian IT sector are many. Attrition and frequent job switches are prevalent in this sector. There are fears that high attrition rate and skill shortages will constrain the growth and drive wage inflation that wipes out India's global cost advantage. A recent survey of Morgan Stanley and NASSCOM reveals that there is actually a surplus (197,000) of qualified but untapped IT talent in India. A mere 32 per cent of suitable talent gets hired, thus creating a talent surplus. About 70 per cent of technical graduates passing out every year do not have adequate language skill or market oriented technical training.

While there are fears that the ICT industry is urban oriented, a NASSCOM survey found that 33-50 per cent employees from non-metro/ rural areas, 64 per cent of companies employ people with disabilities and 75 per cent of indirect employment are filled by SSC/HSC or less educated persons. Women comprise 30 per cent of total employment in this sector and it is likely to increase to 45 per cent by 2010. However, other surveys also confirm that women are concentrated towards the low-skilled end of the spectrum, with women's work often reproducing the existing gender stereotypes. About 70 per cent of workers in IT enabled services (ITES) are in the organized sector. Entry at low end of this segment is relatively easy. Most of the companies offer flexible hours and option to work from home – both of which are attractive for women with family responsibilities.

The large informal segment within ITES is expanding and is likely to create more jobs. But there are concerns about the quality and sustainability of such jobs since upgrading of skills is essential to encompass IT skills and knowledge content. IT needs to be mapped on to other growing sectors. Since women's participation in this sector is huge, there is a need to provide them with adequate support structures and facilitate them with credit, technical and business skill upgrading and reduce other forms of hindrances. Collective voice needs to be enabled even when location of work is dispersed and home- based.

5.2 Micro, small and medium enterprise development

This section discusses issues of micro, small and medium enterprise (MSME)[27] development in the context of employment policy with particular focus on micro and small

27. There is no single definition of micro-, small and medium enterprises and employee numbers may not be the sole defining criterion. However, SMEs are generally considered to be non-subsidiary, independent firms which employ less than a given number of employees. This number varies across countries. The most frequent upper limit is 250 employees, as in the European Union. However, some countries set the limit at 200. Small firms are considered to be firms with fewer than 50 employees, while micro-enterprises have at most ten, or in some country cases, five. Financial assets and turnover are sometimes also used to define SMEs. OECD, 2002: *Small and medium enterprise outlook*. In this section, we use the terms such as "small businesses," "small enterprises," "small firms," "micro and small enterprises (MSEs)," "small and medium enterprises (SMEs)" and "micro, small and medium enterprises (MSMEs)" interchangeably unless otherwise specified. When making reference to other source of information, the original terms in the source document will be retained.

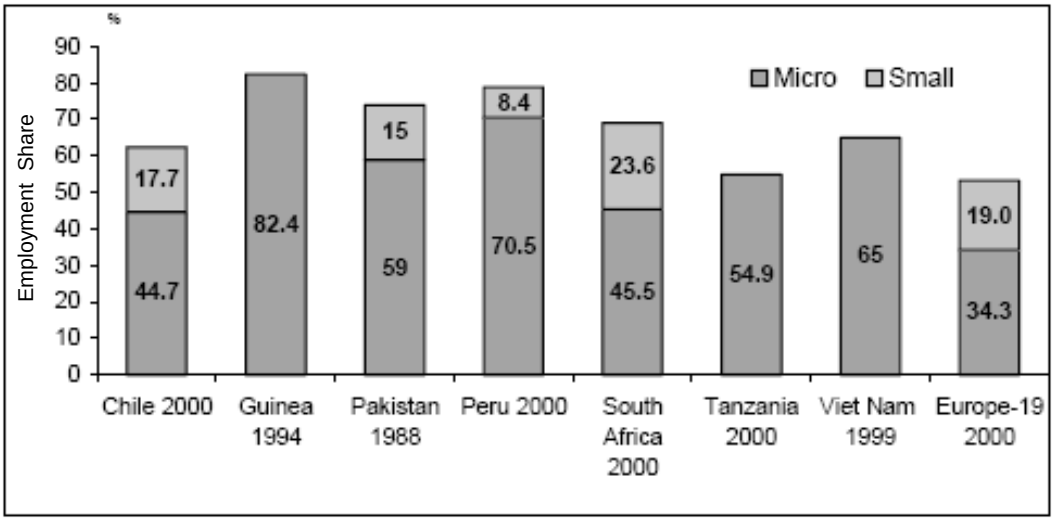
segment. Discussion of small enterprise development for a given country requires comprehensive approach beyond a review of MSME sector and targeted promotion policies. It often covers policies on taxation, trade and finance, and business and labour laws. This section does not provide comprehensive review of policies affecting the growth and job creation potential of MSMEs. Instead, the issues that appear of major concerns of policy makers and social partners in the context of the national employment policy are addressed. It is expected that subsequent discussion of enterprise development issues in the context of national employment policy would lead to a more comprehensive review later.

To serve the discussion by the constituents towards National Employment Policy, the section has the following structure. First, we revisit the discussion of small businesses as source of employment generation. Next part will cover definition of small enterprises in India and overview of the sector with basic statistics. This will be followed by review of thematic areas including: access to finance, access to infrastructure services and access to business development services. Then, the current policies will be reviewed. Finally, knowledge gaps that need to be filled for effective policymaking in relation to the employment-intensive growth will be discussed.

5.2.1 *Role of small enterprises in employment generation*

Small enterprises have been the focus of development policies in many countries as major part of employment can be found in MSMEs. Among OECD economies, the MSE sector comprises over 95 per cent of all enterprises and accounts for two-thirds of private sector employment. An ILO study (Reinecke and White 2004) on seven developing countries found overall higher share of MSEs in terms of employment (54.9 per cent to 82.4 per cent) compared to that of Europe (43.3 per cent) (See Figure 18). The MSE sector also plays a significant role in women's employment promotion. Reinecke and White (ibid) found that the share of female employment is much higher in MSEs than in larger enterprises in the seven countries under study. Across the globe, women-owned businesses account for 25 to 33 per cent of all businesses. In Europe, women create one third of all new businesses, with 9.5 per cent of women officially counted as self-employed compared to 18.9 per cent of men (Kantor 2001).

Figure 18: Employment share of micro- and small enterprises in non-agricultural employment



Note: MSEs include self-employed persons.
Source: G. Reinecke and S. White: Policies for small enterprises. Creating the right environment for good jobs, ILO, Geneva, 2004.

These enterprises are also considered important in unlocking the capacity of entrepreneurship and providing for dynamism in an economy. However, they are extremely heterogeneous, including survivalist operations with very low profit margins to high-tech enterprises in emerging service sectors (ILO 2006 GB.297/ESP/1).

The very heterogeneity of the sector makes it difficult to interpret the numerical weight of MSMEs into policies conducive to productive and gainful employment in the sector. Three inter-related arguments have been presented regarding the role of small businesses in the creation of decent employment in India.

First, it is important to recognize that a growing share of MSEs is not a policy goal in itself. It often happens in times of recessions that MSEs grow in response to the employment losses in larger enterprises and the public sector,[28] or simply due to lack of employment alternatives. These enterprises can be very important in "helping a large number of very poor people become a little less poor," but they often do not provide employment of sufficient quality to be a path out of poverty. MSEs are not a panacea that automatically solves the pressing problems of unemployment, underemployment and poverty. Policy objectives should therefore focus more on enhancing the job quality for their owners and workers as well as graduating from micro- to small or medium-sized enterprises (Reinecke and White 2004).

Second, recent entrepreneurship research suggest that there may be a need to develop different sets of policies to support "opportunity entrepreneurs" and "necessity entrepreneurs." Since 2001, the Global Entrepreneurship Monitor (GEM) has discussed these two different types of entrepreneurship (e.g. Reynolds et al., 2002; Sternberg et al., 2006). Opportunity-based entrepreneurship involves those who choose to start their own business by taking advantage of an entrepreneurial opportunity. Necessity-based entrepreneurship involves people who start a business because other employment options are either absent or unsatisfactory. It has been argued that opportunity entrepreneurship is more likely to have a higher contribution to the economy in terms of innovation and job creation (Reynolds et al., 2002). This conceptual distinction sparked a series of research looking into profile of opportunity and necessity entrepreneurs.

Third, growing importance of informal economy and rising informality in the formal sector pose a new challenge to policymaking on MSME development. It is no longer realistic for many developing economies to presume that growing formal sector MSEs will solve the informal economy problem, at least in short-term. The discussion on decent work and informal economy at the International Labour Conference in 2002 recognized importance of promoting basic rights for those who have no other option but to work in the informal economy. Nonetheless, it was part of a broad range of policies to deal with informal economy, e.g., regulatory reform, job creation in formal economy, better governance and elimination of child labour, active support for formalization of informal enterprises, education and training, access to credit.**5.2.2** ***Analytical overview of MSME sector in India***

28. Findings are not unilateral, though. A study in Jakarta, Indonesia, found that informal economy expanded more rapidly under economic boom than economic downturn because formal economy could not respond swiftly to the changes in market or increase in demand due to constraints imposed by bureaucratic procedures and commercial practices (ILO 2001 "The role of informal sector through the stages of development and cycles of economic growth").

MSME Definition

The definition of small enterprises may influence the decision of firms on employment through regulations and promotional measures associated to the definition. Regulations may have negative impact on employment by firms if the cost of compliance is too high compared to effective cost of non-compliance. Incentives and subsidies may drive firms to stay within certain size limit to remain eligible for access to the schemes. It is generally recommended that these policies are devised in a manner that they avoid creating such "growth traps" and instead incentivize informal MSEs to formalize. In India, coordination between regulatory policies and promotional policies are seeking respective sub-optimization. A related issue is the definition of the formal economy as "organized sector" associated with the labour regime but dissociated with other types of definition.

There has been a confusing array of criteria for defining MSEs in India. The Industries (Development and Regulation) Act of 1951 provided six criteria for identifying small enterprises engaged in manufacturing. These criteria are: investment in plant and machinery (and buildings), nature of ownership, size of workforce, nature, cost and quality of products and the use of foreign exchange for purchase of machinery. Of these criteria, the first three listed here have been used in the policy to promote the small enterprises to varying degrees.

Terms describing MSEs (micro and small enterprises) are defined differently by different agencies. On the one hand, regulations aimed at regulating conditions of work and employment use employment size as a criterion to define enterprises covered by them. The Factories Act requires that all manufacturing enterprises employing ten workers and more are registered and are regulated for certain conditions of work. Similarly several other labour and social security regulations apply to enterprises employing either ten or more workers or 20 or more workers. Thus enterprises that employ less than ten workers are by implication micro enterprises and not covered by these labour and social security regulations.[29] The exception is the Shops and Commercial Establishments Act which does not distinguish enterprises by size. On the other hand, fiscal agencies and tax authorities have used a definition that is based on sales or turnover for providing incentives, concession and tax relief to small enterprises.

Important sources of data on employment and enterprises in India, i.e., the National Sample Surveys, provide data on the size of an enterprise by giving the number of workers employed. Thus, micro and small enterprises are identified based on the definition of the number of workers. Enterprises employing less than five workers can be termed micro enterprises and those employing between five and ten workers as small enterprises in these surveys.

The government agencies that are directly involved in activities promoting the micro and small enterprises, however, define them on the basis of investment threshold. Enterprises with an investment in plant and machinery below a certain investment ceiling are eligible to participate in the promotional activities of these agencies.

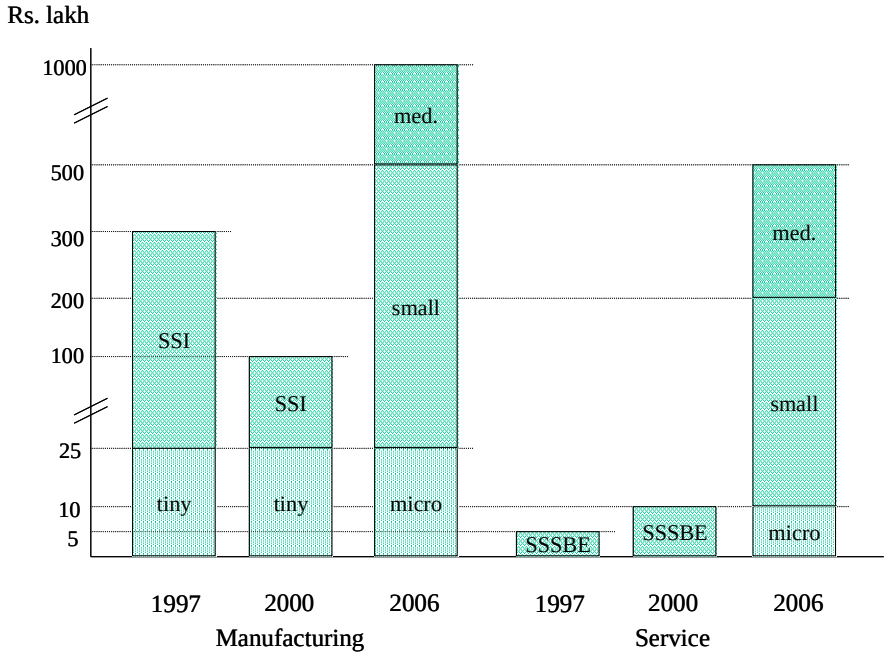
In 2006, with the passing of the Micro, Small and Medium Enterprises Development Act (MSME Act of 2006), a number of changes have been made to the categorization of

29. Enterprises with less than ten workers may opt to register under one or more of these regulations, however, in general it is noticed that very few actually do. Data from the factories sector from the ASI show that give some numbers from ASI and compare with total number of enterprises with less than ten workers. Alternatively, only about 0.6 per cent of all small-scale enterprises covered by the third census were registered under the Factories Act.

small enterprises along with an increase in the scope of the policy initiative. Figure 19 compares the definitions used in the MSME Act of 2006 with earlier definitions. Notable changes observed are: major increase in the ceiling of "small" segment and addition of "medium" category, both in manufacturing and service sectors.

The jump in the upper limit of MSME definition for promotional policy is expected to favour growth-oriented SMEs by allowing them access to various incentives and subsidy schemes without worrying for graduation from the eligibility criteria. It might also mean that micro segment may receive smaller share of the government resources, though it would also depend on the size of resources available vis-a-vis the whole MSME sector, number of new SMEs making use of the resources, level of accession by the MSEs of previous definition, and the level of transaction cost associated with the accession. Besides that, the increased ceiling could mean less probability of growth trap; small enterprises may be less inclined to limit the size of employment. Indeed, the Ministry of MSME sees this as employment-friendly definition because there is no upper limit in terms of number of employment for a firm to be considered as MSME. Nevertheless, these remain hypothetical. The employment generation effect of the incentives and subsidy schemes at different segments for MSMEs need to be evaluated as discussed in 5.2.1.

Figure 19: Recent changes in the MSME definitions



Note: SSI stands for Small Scale Industry. SSSBE stands for Small Scale Service Business (Industry Related) Enterprise.
Source: Elaborated from the definitions provided in Handbook of Statistics on the Indian Economy, RBI 2006-07, Notes on Tables, pp. 631

MSE Sector in India

In India, small enterprises including micro enterprises (MSEs for Micro and Small Enterprises) have provided livelihood and incomes for millions of people otherwise without any prospects of employment in larger enterprises. As noted in the 11th Plan, "in India, MSEs account for almost 40 per cent of the total industrial production, 95 per cent of industrial units (along with medium industries) and over 6,000 products ranging from handloom sarees,

carpets and soaps to pickles, papads and machine parts for large industries". Furthermore, the MSEs are more than just GDI (Gender-Related Development Index) earners. The 11th Plan notes prominently that MSEs are instruments of inclusive growth which touch upon the lives of the most vulnerable, the most marginalised- women, Muslims, Scheduled Castes and Scheduled Tribes- and the most skilled. It also acknowledges that it is the largest source of employment after agriculture which enables a large population – most often poor women and men- in both rural and urban areas to sustain their lives. It highlights the need to use this sector as a means to break out of the cycle of poverty and deprivation and ensure their empowerment.

A large number of enterprises are actually microenterprises (those with five or less workers), comprising over 96 per cent of all MSE enterprises in manufacturing.[30] In terms of employment, the micro enterprises account for about 82 per cent of all MSE employment, while in terms of value added, the share of micro enterprise is about 67 per cent. However given their size, capital intensity and technology, micro enterprises are positioned at the weakest point in terms of the job quality and income generating capacity.

The initial policy regime aimed at protecting and promoting the small enterprises focused solely on the manufacturing sector. Small scale industries were defined as those engaged in production of goods. However, over the years, with an increasing share of services in the economy as a whole and near stagnant share of manufacturing, it was realized that a large number of small enterprises were also engaged in provision of services. Hence, a new category called small scale service enterprises (SSSE) was defined in 1985.

In the rural and semi-urban areas, traditional artisanal clusters including handlooms (khadi) and handicraft industries have been providing an important avenue of employment opportunities to those seeking jobs in the non-farm sector, particularly women, often in the form of home-based work. The importance of this sector lies in the fact that establishments are set up at relatively low costs and use locally available raw materials, skills and technology in addition to providing employment opportunities to the local population.

Low investment required for each job creation in the MSEs has been a distinct and attractive feature. In 2001, estimates from the third census on small enterprises show that on an average about Rs. 70,000 of fixed investment has resulted in creation of one job. In the same year about Rs. 550,000 of fixed investment resulted in one job in the large organized factories' sector.

In terms of sectoral distribution of manufacturing MSEs, in 2000-01, the manufacture of food products and beverages had maximum number of enterprises. This was followed by manufacture of wood and wood products, apparel, textiles and tobacco products. The five categories of industries together accounted for 77.2 per cent of the total number of enterprises. In 2001-02, MSE activities in the services were: (a) road transport and related activities, (b) restaurants and eateries and (c) services such as domestic help, sewage, garbage picking and disposal and so on.

The third Census of Small Scale Industries (which includes micro enterprises as well) has estimated that over 6000 products are manufactured in this sector.[31] These products range

30. NSS surveys on unorganized manufacturing, 2000-01 and services 2002-03.

31. Elsewhere, the estimates from the Ministry of SSI indicate that an even larger number of items are produced in this sector.

from the most sophisticated components used in space programmes, nuclear power generation systems, to items made with simple hand tools without the use of machinery such as handicrafts, handlooms, coir products and leather goods. The performance of the MSE sector has also been spectacular in some industries such as the automobile components, pharmaceuticals, information technology and biotechnology, industries that have experienced large and sustained growth in output and exports in the last decade.

Employment in MSEs

Table 38 provides the distribution of workers by enterprise size. Over 97 percent of the enterprises are with below 10 workers providing 67 percent of employment. There is curiously low density among enterprises with 10-19 workers (8.2 per cent of employment) in view of the much larger percentage in larger enterprises.

Table 38. Share of enterprises and employment by size class of employment, 1998

Item	Size of Employment			
	1-9	10-19	20+	Total
Number of enterprises (% distribution)	97.2	1.8	1.0	100
Employment (% distribution)	66.9	8.2	24.9	100
Total number of enterprises (million)	29.51	0.53	0.31	30.35
Total employment (million workers)	55.75	6.79	20.76	83.30

Source: Government of India (2001), Economic Census of 1998.

According to NSS surveys of non-agricultural informal sector enterprises, in 1999-2000, there were as many as 44.4 million enterprises and 80.0 million workers in the sector. Of these, about 99.3 per cent of the enterprises and 94 per cent of the employment were in the micro enterprises. As per the Third Census of Small-scale Industries, the number of enterprises in 2001-02 was 10.5 million, again 98 per cent of them belonging to enterprises less than ten workers. Thus, we can safely assert that micro enterprises form an overwhelming share both in terms of number of enterprises as well as the amount of employment.

The change in the structure of MSE sector over time can be inferred from data on unorganized manufacturing surveys of the NSS, the data from the small scale industries, the census of small-scale enterprises and sources in the Ministry of Small Scale Industries. As presented in Table 39, there was not much change in the structure of the unorganized manufacturing sector between 1984-85 and 2005-06. The growth of enterprises and employment was negative in this period.

A notable change, however, was in labour productivity. The labour productivity grew steadily from about Rs 7,105 in 1984-85 to Rs 14,022 in 2005-06, at an annual growth rate of about 3.3 per cent.[32] This growth is, however, due to the growth of labour productivity in the rural areas; while the annual growth of labour productivity in urban areas was only about 1.8 per cent, the corresponding rate for rural areas was about 4 per cent.

Table 39. Changes in MSEs over the years

Growth (% per yr.)

	1984-85	1994-95	2000-01	2005-06	1984-05	2001-05

32. These estimates are in constant 1993-94 prices.

Number of Enterprises (million)	19.7	14.5	17.0	17.1	-0.69	0.05
Employment (million)	36.9	33.2	37.1	36.4	-0.06	-0.35
Value added/ worker (Rs per year constant 1993-94 prices)	7105	8657	11451	14022	3.3	4.1

Source: Sahu PP (2007)

The other important change over time is the increasing share of the services in MSE. The most striking difference between the two periods, 1987-88 and 2001-02, is the large increase in the share of the small enterprises involved in providing services (small scale services business establishments - SSSBEs). The number of SSSBEs increased from about 18,000 in 1987-88 to about 0.47 million in 2001-02. Correspondingly, the share of SSSBEs in total small scale sector enterprises increased from about 3.2 per cent to 34.5 per cent. Thus, a large part of the additional employment in the MSE sector has happened in services.

Women's employment in MSEs

A majority of women are employed in the unregistered segment of the MSME sector such as food processing enterprises, manufacturing enterprises and weaving. In many a case, they work part time in family enterprises- paid and unpaid. In the handloom sector alone, 60.6 per cent of weavers are women; 10.76 per cent belong to SCs, 25.5 per cent to STs and 42.65 to other backward classes (11th Plan quoting figures from Joint handloom and power loom census conducted in 1995-96).

Women also operate own account enterprises as outsourced homeworker[33]. Among the nearly 22 million manufacturing sector workers about 32 per cent are homeworkers, while among the 9 million women manufacturing workers, nearly 50 per cent are homeworkers. There is a predominance of home work among women in both rural and urban areas in the manufacturing sector. In urban areas more than half the women manufacturing workers are homeworkers (NCEUS 2007a). The 11th Plan identifies handlooms and handicrafts as one of the areas that present opportunity for exports. In this regard, increasing home based workers productivity through skills upgrading, better information and knowledge of markets, better access to credit, infrastructure upgrading such as water, electricity and sanitation, support towards child care and health of the family would be essential.

Women's entrepreneurship development has been identified as one of the priorities in the 11th Plan, which states that in line with the support for Women's Empowerment and Minority Development which has been stressed upon in the Prime Minister's 15-point programme and in other flagship schemes of the government, a considerable effort will be placed by the government in organizing the micro-enterprise sector, create clusters and SHGs of weavers and / artisans to improve women's bargaining power and enable them to pool resources. Furthermore, such strategies must be based on an understanding of why it is more difficult for women to make a success of self employment. There are several reasons for this: (a) on an average they have had less access to education and training in modern skills than men; b) they have greater difficulty in getting access to information about new products and markets, and tend to crowd into the few openings they know of and as a result the rates of return from those activities are pushed down even further.

33. The definition of homework in C.177 on Homework would make these workers "employees", however in the case of India and many countries, the intricate and the layers of intermediaries make the establishment of an employment relationship almost impossible and the situation of homeworkers is de facto much closer to the self employed than waged employees.

On the other hand, women appear to be more willing to join self-help groups and promote tiny enterprises. This is because working in own ventures without fixed working hours makes it easier for them to combine paid activity with their huge burden of housework ("Towards Inclusive Growth: The Gender Dimension- Submitted by the Committee of Feminist Economists during the formulation of the Eleventh Five Year Plan (2007-12) Part II, 2007). The influence of household work and the women's role in it, are the main reasons why they enter the official labour market as inferior workers. Hence measures to address women's employment should look at support structures to alleviate the burden of housework, secure access to credit and markets but most importantly, increase productivity of women's work through innovation and technological changes as well as shift them out of low productive work to new kinds of work.

Dualism and mortality

Although the economy, in a large measure represented by the formal sector, has registered impressive growth rates as stated elsewhere, the MSEs where most people work has been a laggard in terms of growth and value addition. There has been an economic disconnect between the MSEs, particularly those operating in the informal economy, and the formal growing economy. The growth and prosperity have not been accessible for the MSEs for various reasons, with policy and regulatory environment as an important factor. While the size, skills and technology associated with these enterprises have been responsible for low productivity and incomes, MSEs with their mortality rates and the sheer number of survival-oriented activities have been locked into a kind of 'Growth Trap.'

The Third Census of Small Scale Industries probed into the causes of industrial sickness and eventual closure of MSEs resulting in high mortality rates. As presented in Table 40, the reasons for high mortality rates were influenced by the legal status (registration) of the MSEs. The registered small enterprises had better market access than the unregistered enterprises, while in every other sphere the unregistered enterprises faced larger constraints than the registered ones. The main reasons for sickness were identified as market related problems (66 per cent) and shortage of working capital (46.1 per cent).

Table 40. : Reasons for high mortality rates of MSEs

S. No.	Reasons for mortality	Proportion of sick SSI units*		
		Regd.	Unregd.	Total
1	Market related problems	58.0	69.0	66.0
2	Shortage of working capital	57.0	43.0	46.1
3	Non-availability of raw material	12.0	12.0	12.0
4	Power shortage	17.0	12.0	13.0
5	Equipment problems	9.0	12.0	11.0
6	Management problems	5.0	3.0	4.0
7	Labour problems	6.0	4.0	5.0

Note: The totals in each column exceed 100 per cent, as several units have reported more than one reason. Source: Third Census of SSI, GOI (2004c).

Productivity and contribution to GDP

Although the share of the MSEs in total gross value added varies from sector to sector, contribution to GDP by the MSEs has not been commensurate to their employment share. The share of gross value addition by the small-scale industries has accounted for about 46 per cent of the total, and the corresponding share has been 71.7 per cent for the unorganized

services. For the unorganized manufacturing and the non-agricultural informal sector, the share of MSEs has been over 85 per cent. Over the years, MSEs have contributed over six per cent of GDP as a way of value addition. The growth rate of output in the MSEs during 2002-06 though has been estimated at about 8.87 per cent per year.

The rate of growth of industrial output in the SSI sector is larger than that of the growth rate of the overall industrial sector for several years. Most recently, between 2002 and 2003, the annual percentage change in the output of the SSI sector was about 8.7 per cent compared to 5.7 per cent for the entire industrial sector. The growth of the SSI output increased further to 12.3 per cent per annum in 2005-06 when compared with the overall industrial growth of 8.1 per cent (Table 41).

Table 41. Growth of output, SSI and overall industrial sector *(in per cent)*

Year	Annual percentage change in output	
	SSI	Overall industrial Sector
2002-03	8.68	5.7
2003-04	9.64	6.9
2004-05	10.88	8.4
2005-06	12.32	8.1

Source: Annual Report 2006-07, Ministry of Small-Scale Industries

Labour productivity of the MSE sector, measured as gross value added per worker, is lower than that in the non-MSE sector and in the larger enterprise sectors. The estimates for labour productivity of MSEs presented in Table 42 shows that the productivity of MSE was about half of the productivity in the larger enterprises. For example, in the non-agricultural informal sector, the estimated labour productivity was Rs 23,020 while in the same sector the labour productivity for larger enterprises was Rs 43,537. The difference in labour productivity between MSEs and larger enterprises in the services sector is larger.

Table 42. Value added per worker by enterprise size

Employment size	Non-agri informal sector (1999-2000)	Unorganised mfg (2000-01)	Unorganised services (2001-02)
1	22183	12846	23484
2-5	20782	13363	21882
6-9	42915	30649	30342
MSEs (less than 10)	**23020**	**15087**	**23333**
Above 10	43537	27812	59263
All	24243	16233	28160
Micro enterprises	**21297**	**13239**	**22598**

Source: NCEUS 2007

Job Quality in MSEs

Agencies which promote job creation through small enterprise development should be as concerned about the quality of employment generated, as they are about the quantity of the jobs (Harper and Finnegan 1998).

Low productivity and incomes among MSEs, mostly operating in the unorganized sector (informal economy) have been largely due to marginal activities with low job quality and challenges in accessing market, credit, modern technology and skills. Low job quality has meant hazardous working conditions without adequate workers' protection. Such situation is more prevalent in precarious, survival oriented activities and traditional artisanal clusters. Among those, the situation of home based workers is particularly precarious as the living and work place are integrated and poses many risks ranging from health to exploitation due to isolation and invisibility. Also of concern is the heightened risk of child labour. Earnings of home based workers are among the lowest compared to other workers in the informal

economy, and due to number of intermediaries and the bargaining strength of the homeworker, the share of the final consumer price that accrues to the homeworker is considerably low. There may also be sector-specific technology-related factors, which determine the homeworkers' earnings. It was found that for a commodity that costs Rs.100 to a consumer, homeworkers receive Rs.15 in zardoshi; Rs.17 in beedi, and Rs.2.3 in incense sticks/agarbatti. The latter is said to be so low because the cost of perfuming the incense stick is high (NCEUS 2007 a)

The Report on Conditions of Work and Promotion of Livelihoods in the Unorganized Sector (NCEUS 2007a) has examined the implementation of labour regulations in the MSEs sector and found implementation to be "abysmally poor". Studies on the effectiveness of labour regulations have pointed to the inadequate enforcement and implementation machinery (Pais 2007).

Labour regulations that apply to MSEs are very few. An important regulation for the MSEs is the Shops and Commercial Establishments Act by the State Governments.[34] There have been efforts at the state level legislations to provide for social security and welfare to selected workers in the unorganized sector. Kerala State is in the forefront of such legislations and establishment of welfare boards and funds for providing some social security (for details see, NCEUS 2006). The Second National Commission on Labour (2002) recommended the enactment of a law for unorganized sector workers.

A large number of other labour regulations such as the Factories Act (on conditions of work) or the Employees Provident Fund Act (on social security) are applicable only to enterprises that have a certain minimum size (ten workers). Further, most of these laws apply only to regular permanent jobs and not to casual or contract workers. Thus, large number of MSEs and consequently their workers are out of the purview of these regulations.

Lack of awareness, non-compliance to regulatory requirements and intense competition have all contributed to bad working conditions and low job quality resulting in low productivity and incomes. While regulatory environment influences the legal standing of the informal enterprises, the overall policy environment encourages the enterprises to increasingly realize that improved job quality can enhance their productivity and incomes.

The Job Quality (JQ) concept contributes to the ILO's Decent Work Agenda by emphasizing business growth through workers' protection and workers' rights. The JQ concept emphasizes the long-term business advantage in improving workers' protection whereby the absenteeism, injuries and loss of skilled workers are reduced, while a better working environment contributes to higher productivity and reduced wastages.

Business linkages

Business linkages in a supply chain or franchise arrangement between MSEs and larger enterprises can provide much effective access to technology, market and inputs that can spread growth beyond larger enterprises and thus help in further job creation. CSR (Corporate Social Responsibility) of the larger firms has been also helpful in enhancing worker safety and protection.

34. The Shops and Establishment Acts varies from state to state, however, in general it regulates hours of work, payment of wages, overtime, holidays with pay, annual leave and so on. It also prohibits the employment of children below 14 years of age and women at night.

The low level of linkages between and among the enterprises is indicated by the share of ancillary units in the subsectors. Studies on MSEs have shown weak linkages between large enterprises and MSEs; such as, supply chain relationships are weak and forged mainly on market demand (ILO 2005). In Uttar Pradesh, a study of MSEs found that when demand increases, larger firms contract out work to smaller firms only to break the relationship when market conditions deteriorate (Singh, et. al. 2004). Such practice has been prevalent across subsectors and clusters of MSEs.

The increased shared of ancillary units during 1987-88 and 2001-02 indicate increased links between MSEs and larger enterprises. In 1987-88 the share of ancillary units in total was less than one per cent, this increased to over five per cent in 2001-02. However, if this increase is due to prevailing, short-term market conditions, then the benefits to MSEs in terms of access to improved techniques and technology, quality inputs may still remain restricted.

5.2.3 *Thematic areas of MSME development*

This subsection will cover the following thematic areas which in turn affect the growth patterns of MSMEs in India: access to finance, access to infrastructure services, access to business development services (BDS), access to aggregation services, etc.

MSE Policy

As in the case of industrial policy in India in general, the national policy on small enterprises can be distinguished into two distinct phases. The first phase of the policy regime begins from the time of independence and goes on to 1990s, while the second phase begins with the economic reforms initiated in 1991.

In the first phase, a large number of industrial activities were sought to be guided by the State. To achieve this end, a system of industrial licensing was introduced for an industrial activity. The policy, initiated in 1967, sought to protect and promote MSEs through a system of reservation and support, which also kept MSEs from growing beyond the reservation threshold.

Through the 1970s, the policy of reservation was emphasised and more items were added to the list which grew to 504 items by 1978 besides providing direct subsidies and concessions and tax benefits.[35] The reservation policy resulted in distortions in the growth of small enterprises and kept them apart from the formal economy. These sets of policies became untenable with the opening up of Indian markets to imports after 1991.

The second phase saw a reversal of State control towards a more liberal industrial policy. The Abid Hussain committee (1997) for the first time strongly argued for the change in the policies of promotion rather than protection of the small enterprises. On the recommendation of the committee, a gradual de-reservation of items from production in small scale sector has been undertaken beginning with the de-reservation of 15 items in 1997.

The national policy statement on small scale industry in 1991 suggested measures for promoting the MSEs. These included providing financial assistance, credit, infrastructural

35. The number of reserved items increased from 504 to 807 due to change in the classification system to new National Industrial Classification (NIC) and not due to fresh additions to the list of reserved items.

facilities, assistance with marketing and exports and assistance for modernization and technological upgradation.

Taking note of the cumbersome laws and procedures, the government policy called for simplification of rules and procedures for the small enterprises. The policy statement recognised, for the first time, the importance, vulnerability and distinctness of the tiny enterprises sector and announced a separate policy package.

Fiscal incentives

Fiscal incentives have been provided to the small scale sector from time to time in the form of tax exemptions, refunds, postponement of direct and indirect taxes besides special tax concessions. Small scale enterprises set up in certain backward and rural areas were given tax holidays from income tax for a period of ten years. Exporting enterprises are given incentives in the form of duty drawbacks. Duty drawbacks are revised from time to time by the government. Small scale industries are also exempted from customs duties on imported capital goods and imported intermediary goods that are exported.

A longstanding and consistent policy of the Government has been the exemption of small scale enterprises from excise duties. Earlier, (prior to 1995) SSI units with turnover of less than Rs 2 crore were eligible for excise exemptions. In 1995 this limit was revised to Rs 3 crore SSI units whose sales were less than Rs 30 lakh in a financial year were exempted from payment of excise duty. The exemption limit was revised to Rs 150 lakh with effect from April 1, 2007.

Taxes on services were first introduced in India in 1994.[36] In 2005, small service providers with gross annual turnover of less than Rs. 4 lakh were exempted from the purview of service tax; and service tax is also exempted for small subcontractor engaged in producing/ processing goods, from inputs received from larger manufacturer.[37] This threshold has been increased to Rs 8 lakh in April 2007.

Institutional framework

Several agencies are currently involved in providing support and human resource development for the MSEs through training and skills upgrading. Programmes involve training in manufacture of leather goods, handloom (khadi), coir products to general training in managing a small enterprise, bookkeeping, accounting, etc. In recent years, with the opening up of the economy with globalisation, the importance of standardization and quality has been realised and a number of agencies offer training programmes on quality control. At the moment, these training programmes are provided by different agencies at the Central and State levels, and by NGOs and autonomous bodies.

In the public domain, there are several institutes and organizations across the country offering similar and specialized services and training programmes. There are 30 Small Industries Service Institutes (SISIs), 28 Branch SISIs, one Hand Tool Design Development Training Centre (HTDD&TC), and two Small Entrepreneurs Promotion and Training Institutes (SEPTI) under the office of the Development Commissioner (erstwhile SIDO).

There are also other specialized and localized institutes, such as, National Institute of Micro, Small and Medium Enterprises (NIMSME), Hyderabad; National Institute for

36. The imposition of service tax on the service provider is similar to excise duties charged on manufactured goods.
37. Annual report 2005-06, Ministry of SSI

Entrepreneurship and Small Business Development (NIESBUD), Noida; Indian Institute of Entrepreneurship (IIE), Guwahati; National Coir Training and Design Centre, Cochin and other training centres at different regional offices of the Coir Board. Various subsectoral training and support services are provided through the Khadi and Village Industries Commission; Central Silk Board; extension centres of Central Leather Research Institute (CLRI); National Science and Technology Entrepreneurship Development Board (under the Ministry of Science and Technology); NABARD (National Bank for Agriculture and Rural Development) and SIDBI (Small Industrial Development Bank of India).

Apart from the above organizations, several central government ministries such as Ministry of Social Justice and Empowerment, Ministry of Rural Development, Ministry of Human Resource Development and entrepreneurship development institutions sponsored by State Governments are also involved in providing support to the MSEs.

The impact and contribution of the above institutions and organizations has not been well documented and well known. The impact on the growth of the MSEs has been however so far mixed and their roles have often been confused for want of their awareness and access to the services.

Agencies in the autonomous/private domain, including NGOs, are also engaged in training programmes for micro and small enterprises. Entrepreneurship Development Institute of India (EDI), Gandhinagar and the Self Employed Women's Association (SEWA) are two of the larger agencies. Several of the prominent institutions set up by the Government for promoting and supporting the MSEs are given in Box 2.

Box 2: Institutions established for promotion of MSEs

1. *Office of the Development Commissioner (MSME) (formerly SIDO)* - set up in 1954 with tool rooms, training institutions and project-cum-process development centres with facilities for testing, training for entrepreneurship development, preparation of project and product profiles, technical and managerial consultancy, etc.
2. *The National Small Industries Corporation Limited (NSIC)* - established in 1955 activities in the areas of marketing, technology, financing and information support to small enterprises in the country.
3. *The Khadi and Village Industries Commission (KVIC)* - setup in 1956 with a large marketing setup containing sales outlets and large departmental stores all over the country, conducting exhibitions and an export promotion scheme.
4. *National Institute of Micro, Small and Medium Enterprises (NIMSME)* - set up in 1960 for entrepreneurship development related training programmes, training research and consultancy, including the methodology of cluster development.
5. *National Institute for Entrepreneurship and Small Business Development (NIESBUD)* - established in 1986, involved in developing model syllabi for training of various target groups, designing effective training strategies, methodology and manuals and tools.
6. *Indian Institute of Entrepreneurship (IIE)* - established in 1993 for training, research and consultancy activities in the small industry sector focusing on entrepreneurship development.
7. *National Commission for Enterprises in the Unorganised Sector (NCEUS)* - set up in 2004 as an advisory body and a watchdog for the enterprises in the unorganized sector.

Infrastructure: Industrial estates and cluster development

The provision of specialized and focused infrastructure for the small enterprises began with the Industrial Estate Programme in India and the establishment of the first industrial estate in Maharashtra in 1952. The programme of developing industrial estates was continued till 1979 with the support of the Central government and 796 industrial estates were established throughout the country. Its main objectives were to encourage and support the creation, expansion and modernization of the small industries through the provision of infrastructure such as factory sheds, common facility centres and power.

The programme envisaged that small entrepreneurs would set up enterprises in the industrial estates and those already existing would shift to the industrial estate to benefit from infrastructural facilities such as power, water, roads, banks, canteens, communication facilities and so on. Through the industrial estates programme, small scale enterprises engaged in manufacture were encouraged to build sub-contractual relationships with large industries.

The programme of developing industrial estates was also used to bring about the development of semi-urban, rural and industrially backward regions. Industrial estates were established in regions where private capital was not likely to invest and thus the programme aimed to contribute to overall balanced regional growth.

In 1998, the Technology Upgradation and Management Programme (UPTECH) was initiated as a move to promote clusters. The UPTECH programme was mainly technology-focused comprising diagnostic studies, setting-up of demonstration plants and organizing workshops, seminars, and so on for greater and quicker diffusion of technology across the cluster of small enterprises.

The Abid Hussain Committee suggested that policy for promotion of the small enterprises should focus on 'Clusters,' providing them with infrastructure and other support. More recent policy initiatives for the provision of infrastructure to the MSE sector are in the form of support for development of industrial clusters. Table 43 lists the interventions with government financial assistance primarily going for infrastructure.

There are several estimates of the number of clusters in India. The UNIDO has estimated 388 clusters of modern, small enterprises. The Development Commissioner for Small Scale Industries has estimated 2,042 clusters of small-scale industries. The Entrepreneurship Development Institute, Ahmedabad has estimated 3,511 clusters including 1,820 rural clusters. Besides, other departments have estimated 3,332 artisan clusters and 372 handloom weaving clusters.

The National Commission for Enterprises in the Unorganized Sector (NCEUS) has recommended providing infrastructure and services for super clusters called 'Growth Poles.' In 2006, according to the office of the Development Commissioner (SSI), 105 new clusters have been taken up to identify the area of interventions required in these clusters. The results of these initiatives to upgrade clusters have yet to be seen although evidences from the ILO's programmes in a few clusters (brassware and handloom) have been encouraging.

Table 43. Cluster Development Programme in India

Cluster Dev Scheme	No. of clusters	Ministry/Dept	Financial assistance
Small Industry Cluster Dev Programme (SICDP)	218 (as of 2007)	Ministry of MSMED	90% of project cost per cluster subject to a ceiling of Rs.90 million
Scheme of Fund for Regeneration of Traditional Industries (SFURTI)	104 (as of 2007)	Ministry of Agro and Rural Industry	Rs.8.5 to 11 million per cluster.
National Programme for Capacity Building in Textile Clusters	23 (as of 2007)	Ministry of Textiles	Technical support including training – no financial assistance.
Integrated Handloom Cluster Development Scheme (IHCDS)	20 (as of 2007)	Ministry of Textiles	Rs.20 million per cluster.
Cluster development under the Rural Self-Emp Scheme	5	Ministry of Rural Development	
Cluster Development Programme	67	Small Industry Dev. Bank (SIDBI)	Technology upgradation, credit and marketing support.
Upgradation of Technology in selected Clusters	29	State Bank of India	Technical support and financial package for working capital
National Programme for Rural Industrialisation	56	National Bank for Agriculture and Rural Dev. (NABARD)	Support for resource mobilisation, raw material supply, marketing strategy, management and skill dev.
Cluster Development Programme	Developing expertise for Cluster Dev.	UNIDO in collaboration with MSMED.	

Access to credit

Access to credit is frequently pointed out as the major reason constraining growth of MSEs and their inability to create jobs. The argument can be considered in view of collateral oriented practices of the commercial banks, absence of effective institutional intermediaries and lack of legal legitimacy of most of the MSEs. However, there is also risk of ignoring the approach of market induced instead of the state induced growth in the MSEs.

Nonetheless, the issues of collateral requirements of most lending agencies and the failure of the Central Bank (RBI, -Reserve Bank of India), despite many efforts, to encourage collateral-free lending are genuine. The absence of legal recognition among the MSEs operating in the informal economy has also constrained the access to credit while the reach of the intermediary institutions has been minimal.

The policy of providing priority sector credit to agriculture and small scale industries in India has its origins in the study group constituted by the RBI in 1971. In 1974, RBI set a target of 33.33 per cent of the gross credit as the target for priority sector lending, which was increased later to 40 per cent in 1985.

Banks were given autonomy following the recommendations of the Narasimham Committee. The Government and RBI regularly review the credit policy towards SSI and announce certain measures for stepping up credit. Recognizing that the requirement of providing collateral had turned out to be a bottleneck in the flow of bank credit to very small units, RBI in its annual policy statement of April 2000, announced dispensation of collateral

requirement for loans up to Rs 5 lakh for tiny enterprises' sector with an increase of the limit to Rs 15 lakh on the basis of the track record of the enterprises.

However, the outcome of the priority sector lending to the MSE sector has not been credible. The share of the MSE sector in gross bank credit stagnated at around 15 per cent in the 1980s, reduced marginally to an average of 14 per cent in 1990s and further reduced drastically to an average of 8 per cent between 2000 and 2007. The share declined from 15.3 per cent of the gross bank credit (GBC) of commercial banks in 1991 to just 6.3 per cent in 2006-07. The Reserve Bank of India issued its revised guidelines in April 2007 requiring public sector banks to provide at least 60 per cent of total credit to MSEs.

The Abid Hussain committee suggested restructuring of the financial support system through the restructuring of the State Finance Corporations(SFCs) and the State Industrial Development Corporations (SIDCs), extending credit rating services to small scale enterprises and addressing credit needs of tiny enterprises by earmarking a certain minimum (70 per cent) from the priority sector lending for tiny enterprises.

Financial assistance from NSIC (National Small Industries Corporation) and to some extent from SIDCs (Small Industries Development Corporations) is available in the form of supply of machinery on hire purchase basis/deferred payment basis. Long term loans are provided to the small scale industrial units by SFCs (State Financial Corporations) mainly through Single Window Scheme and National Equity Fund. The Small Industries Development Bank of India (SIDBI) is charged with the responsibility of re-financing these institutions. In case of rural non-farm enterprises, credit is provided by scheduled commercial banks and the re-financing is undertaken by NABARD (National Bank for Agriculture and Rural Development).

The latest scheme for technology upgrading through credit schemes is the Credit Linked Capital Subsidy Scheme (CLCSS). The scheme aims at facilitating technology upgrading by providing upfront capital subsidy to small scale units, including tiny, khadi, and village and coir industrial units. Before revision, the scheme provided for 12 per cent capital subsidy to SSI units, including tiny units, on credit availed by them for modernization of their production equipment. The total sanctioned subsidy for disbursement under this scheme by March 2007 was Rs 600 crore. However, the estimated subsidy disbursed till March 2006 was only about Rs 36 crore.[38]

5.2.4 *Policy conclusions*

As discussed in preceding sections, creation of productive, remunerative decent jobs by the MSEs in increasing numbers would require policy measures and facilitating role by the Government. Policy and regulatory environment needs to be simple, efficient providing legal empowerment and access to market and resources for the MSEs. Stimulus for business linkages promoting spread of modern business practices along with skills and technology upgrading would require active involvement of both the employers and workers. Public-private partnership in creating infrastructure and other support services can ease the role of the Government in creating employment.

Based on the preceding discussions, policy conclusions can be drawn around the following points:

38. Two Hundredth Report of the Parliamentary Standing Committee on Industry, May, 2007

1. ***Definitional Issues:*** Since there has been a general absence of employment promoting criteria in the definition of MSEs, they may need to be re-defined by introducing a capital-labour ratio, in addition to the number of workers. This would remove the existing anomaly of investment-based definition for promotional purposes and employment-based definition for labour legislation. The actual capital-labour ratio as of 2005-06 was Rs 39,245 per worker in manufacturing and Rs 83,386 in services (2001-02).[39]

2. ***Policy and regulatory environment:*** India has witnessed reversal of the earlier policy of protection to promotion of MSEs. But mere growth of MSEs would not necessarily contribute to the creation of quality jobs and does not assure that they are able to participate in the overall economic growth thus spreading prosperity.

   Hence, on the one hand, the policy and regulatory environment has to take into account the promotional policy of facilitating growth of the MSEs through policy stimulus and ease of compliance to regulatory requirements. In enhancing compliance to various regulatory requirements, highest importance ought to be given in improving working conditions and workers' protection in the way that MSEs realize the benefits in terms of increased productivity. Methodology and approach for such linking of the workers' protection to productivity improvement have been developed by the ILO in working with the clusters, like Moradabad Brassware. But such policy environment has to go beyond and legally empower the MSEs for access to market and resources as well as motivate larger enterprises in improving their own business efficiency by actively participating in upgrading business practices, skills and technology along their respective supply chains.

   Thus, the role of the Government has to be in examining the ways of facilitating the functioning of the legal and market mechanisms in a way that they create quality employment in increasing numbers by the MSEs. The ILO has reviewed the policy environment and has on-going studies on application of labour law in South Asia. It has further developed tools for policy and labour law reviews. They can be utilized to further discuss the critical issues in these areas.

3. ***Business linkages:*** The examples of few modern, growth-oriented subsectors; such as, automotive components, information technology, pharmaceuticals and biotechnology, provide the lessons that sustained market induced growth can be achieved through business linkages. It is essential to examine the kind of policy environment and the supportive role of the Government that have facilitated such linkages.

   Access to market, modern business practices, technology, skills and resources could be efficient and practical if the business linkages facilitate such upgradation. As a matter of fact, such linkages do exist in several other subsectors, such as garments, leather and MSEs operating in modern and artisanal clusters. But not all subsectors have been able to benefit from such linkages in terms of their own upgrading. It would be worthwhile to examine how such linkages can be advanced

39. The corresponding estimate for fixed assets per worker in own account enterprises in the services sector was much lower at Rs. 28,405.

so that the MSEs can share the growth and prosperity generated in the formal economy. An ILO Resource Guide on Upgrading Informal Enterprises will become available for member states to examine the strategies for building such linkages.

4. ***Access to finance:*** There exists a priority sector lending enunciated by the Reserve Bank of India in the form of Aggregate Net Bank Credit (ANBC – 40per cent of the available credit) assigned to specified sectors/activities. The NCEUS has recommended that the entire 12 per cent of ANBC should be assigned to the micro enterprises.

   The other recommendations include (i) provision of adequate safety nets to the banks to encourage lending to micro enterprises by bringing suitable changes in the credit guarantee scheme and introducing a specially tailored credit rating arrangement, (ii) fix a uniform rate of margin money support for the different government sponsored programmes at 25 per cent, (iii) encouraging banks to adopt the Agency Model with its Business Facilitators and Business Correspondents thereby utilizing the service of civil society organizations, and (iv) encouraging microcredit institutions to move to livelihood finance and support capacity building of SHGs and Microfinance Institutions, besides introducing innovative financing instruments such as factoring, venture capital, credit rating, etc. NCEUS has also recommended creation of a National Fund for Unorganized Sector.

5. ***Infrastructure building:*** In the past, attempts were made in creating industrial estates and common facility centres. . However, the enterprises in general suffered from lack of basic infrastructure services such as, power, water, and access to raw materials, transport and communication links. . Lately, the Government has been acutely aware of the lack of such basic services. NCEUS has proposed creating infrastructure, among other initiatives, around several clusters, termed as 'Growth Poles' (2007a; for details see, Sengupta, et.al.2007).

   Various models are being tried, including public-private partnerships in growth-oriented subsectors and BOT model of infrastructure construction. Lately, economic free zones are also being promoted. Success of such infrastructure building, which in itself can be employment intensive, depends on a few critical conditions:

   (i) Political consensus and commitment from central to state and local levels and most importantly, consensus among the social partners (workers and employers) and the Government.

   (ii) Agreed framework of regulatory reform in several subsectors relating to infrastructure building _ from financial reform to land use policy reform to business models that allow return on investment.

   (iii) Deeper sectoral regulatory reform. For instance, power reforms should examine the regulatory reforms dealing with power generation, transmission and distribution.

(iv) Stability and consistency in regulatory environment and efficiency and integrity of the governance and administration, which may pose challenges in local level implementation.

6. ***Institutional support:*** Ideally, the BDS (business development services) providers need to operate in a market economy. But the access to such services by the MSEs has been constrained due to various reasons. Therefore, the Government has established certain institutions that have been described in the earlier section.

What have been not so clear are the following: a) any possible overlapping of the activities and 'blind spots' in providing services; b) outreach and effectiveness of such institutional support; c) efficiency of service delivery under market conditions; and d) coordination of service provision. A mapping exercise needs to be undertaken followed by detailed assessment of the effectiveness and impact.

Reform in institutional support should proceed with the examination of whether the previous protectionist and paternalistic support policy has been continuing in the functioning of these institutions. The contribution of the institutions to the better functioning of the market for the MSEs should be the primary concern under the current promotional policy. What can and should be carried out is best left to the private sector or some sort of partnership with it. Sufficient attention however needs to be placed in balancing market efficiency with creation of productive, remunerative jobs by the MSEs.

5.3 Labour Market Institutions, Regulations and Policies[40]

5.3.1 *Labour market institutions*

Ever since the "Washington consensus" was formulated in the 1990s, particularly since an "augmented" form of the consensus exists (this classification stems from Rodrik, 2006)[41], labour market flexibility is in the midst of the labour market reform discussion in both developed and developing countries. Rodrik shows that while the World Bank (or at least some quarters in the World Bank) took a much more cautious and diversified approach to development in its influential report "Learning from Reform", the IMF "augmented" the consensus in integrating new items such as labour market flexibility and contended that reforms of the 1990s failed because they did not go far enough[42] in terms of deregulation.

Whether or not this is the birth moment of the strong focus on labour market reform to "flexibilize" the labour market in developing countries remains to be seen.[43] But what is sure is that the idea that labour markets in many developing countries are more rigid than in

40. This section is based on three reports/books: one is a background study for the present report which was done by Praveen Jha: "The well being of Labour in Contemporary Indian Economy: What's active labour market policies got to do with it" first draft, ILO/ Geneva April 2008, the second Paul Vandenberg's report "Is Asia adopting flexicurity? A survey of employment policies in six countries" Economic and Labour Market Papers 2008/4, ILO, Geneva and the third Peter Auer, Umit Efendiolgu et Janine Leschke "Active Labour Market Policies around the World" Second edition, ILO, 2008.

41. Rodrik, D (2006) "Goodbye Washington Consensus, Hello Washington Confusion?" Paper prepared for the Journal of Economic Literature, mimeo version, January 2006.

42. «Meant well, tried little, failed much» (Krueger 2004, cited by Rodrik, 2006).

43. Criticism that Europe's labour markets are sclerotic and need to be flexibilize stem already from the early 80s. This is to be put in the context of EU-US comparisons that live well on as shown by the IMF's World Economic Outlook of 2003, which proposes US type of low level labour market institutions, which would spur growth and employment. (Auer, 2007)

developed countries has gained ground. Such interpretation has not spared India, which is for some time now in the midst of a debate on the impact of labour market institutions on growth, employment and unemployment. Despite a certain change in the World Bank's attitude towards reforms and a turn towards country specific "binding constraints" for growth and employment in some quarters of the Bank, the rigidity of labour markets in terms of hiring and firing is considered an extraordinary important constraint. This can be seen by the several rounds of country rankings along the Employing Workers Index (EWI) of the WB (IFC) Doing Business Report. It is assumed that removing the constraints would bring a substantive growth and employment dividend and would also reduce the size of the informal economy (Djankov, et al. 2002)[44].

In this regard it is interesting to see where India stands in rankings of the Doing Business EWI: In the period covered by the 2008 report (April 2006 to June 2007) India ranks 85 among 177 countries, being in close vicinity of China (rank 86) and Vietnam (rank 84) and far ahead of European countries like Germany (137) and France (144) somewhere in the middle between the frontrunner USA (Rank1 with Singapore and Marshall Islands) and the tail runner Venezuela (177). In the hiring and firing index of the Global Competitiveness Report 2005/2006 (GCR) of the World Economic Forum, India is even classified 111 of 117 (in good company of France and Sweden and Germany which rank 112 to 114).[45]

While in the "DB doing business report" law firms are asked to classify countries, the GCR ranking is done according to business executive views. Labour legislation is also seen as one binding constraint on India's labour market in the WB investment climate report (see World Development Report 2005) and it appears from these sources that labour market regulation is seen as a problem in India, which has led to some reform activity in the field, as shown among others by Jha and Golder (2007).

However, while these classifications seem to be part of the "augmented" Washington consensus, they remain largely implausible as to their alleged effects on the labour markets. There are a number of reasons why this is so: one is simply a fact that the results would apply only to the organized sector, which is small in India.[46] A second reason is that if labour regulation would be a major constraint for doing business, the overall low rank of India in the doing business report (120 among 177, with China coming on rank 83) and the high ranks of countries ranked even lower than India in the EWI (Germany, France which are respectively ranked 20 and 31), and the role that alleged labour market rigidities play had to be explained.

In the case of India there is one particular implausible assumption made by those researchers that ascribe a large role to the EWI in explaining informality on labour markets: that regulations pertaining to about 4 to 5 per cent of workers (those in the private organized sector) would explain the 90+ per cent of informal activities in a major way. It needs also a

44. Djankov, S., Lieberman, I., Mukherjee, J., and Nenova, T. (2002), "Going Informal: Benefits and Costs", Draft: World Bank.

45. There is a recent study of the "Independent Evaluation Group" of the World Bank that found the doing business report "biased towards deregulation" without any substantial proof that deregulation brings about benefits and claims that it does not take into account any benefits of regulation that may exist. World Bank, Independent Evaluation Group "Doing Business: an independent Evaluation." WB, Washington, 2008.

46. This stems from the fact that in the DB EWI law firms report on a hypothetical worker with 20 years of tenure in a private firm with more than 200 employees, which clearly could only be found in the formal sector. In the GCR, executives of predominantly large firms are asked, again biasing the results towards the formal sector. However, there are general conceptual and methodological flaws in these indicators and the most important of them were reported on in a recent paper by Berg and Cazes (ILO, 2007)

heroic attitude to explain that the scrapping of these regulations would entice massive job creation for the 60 per cent or so rural labour force. While there are effects of regulations on the margin (e.g. the costs of formalization in terms of taxes, including labour taxes and tight dismissal regulations with severance pay) the existence and growth of the informal sector requires other/additional explanations than the "rigidity of labour market institutions", such as poverty, illiteracy, asymmetric information, low organizational capacity, non enforcement of rules, inadequate bureaucracy, corruption and so on.

The above should also tone down any great expectations that there will be a big economic and labour market bang in the wake of the de-regulation of employment regulations. This said Indian laws should of course be screened on particular aspects that for example could hinder adjustment, when this is needed for economic reasons. As an example there are some worries about chapter V-B of the Industrial Dispute Act of 1948, which seeks for example, government authorization for dismissals in enterprises with more than 100 workers. A recent report, friendly to de-regulation, shows that this chapter applies only to about 2 per cent of the Indian labour force, but that administrative laws apply to many more people also in the informal sector and is seen as hindrance to development.[47] As for chapter IV, Vandenberg (2008) shows, that if firms ask for permission, the government has to communicate its decision within 60 days. If such is not the case, the law stipulates that permission is granted automatically, which clearly diminishes the deterring effect of such a regulation. Vandenberg also reports on the practice of VRS (voluntary retirement scheme) a sort of voluntary redundancy scheme that is widely applied and avoids government dismissal authorization altogether. While the stipulation of the law and actual practice may diverge, there is no clear empirical evidence from India that there have been long delays in the decision for dismissal and that there are many denials of permission, although employers assert –but did not prove as Jha notes- that there are.[48,49]

There is, of course, reason for tight dismissals' regulation in economies that have low levels of labour market risk insurance, such as unemployment insurance schemes and active labour market policies: indeed, in the absence of much social protection outside (formal sector) employment, it is rational to protect employment at the level of the internal labour markets of the formal firms and the public sector, simply because there is no alternate way of protecting income and livelihood otherwise.

Beyond the simple "de-regulate and be efficient" paradigm as proposed by the "augmented" Washington consensus[50] there is a relatively new reform agenda that is popular among European employment specialists, which makes the link between employment and social protection explicit. The reform agenda comes under the name of flexicurity[51] and asserts that for labour market reforms it is not only labour market flexibility that is important,

47. Teamlease, India Labour Report 2006.

48. Vandenberg (2008) shows that in Sri Lanka, whose labour law also foresees government authorisation, and a decision within 60 days, delays in the decision for allowing retrenchments may last up to 10 months. There seems to be an important difference though, as there is no automatic authorisation (like in India) when the delay is surpassed. This difference seems not to have been taken into account in the DB/EWI ranking as Sri Lanka has a lower difficulty of firing index than India.

49. However, there are also anecdotic cases of corruption reported: the "fee" paid serves to have the civil servant do nothing on the case to allow lay-off after the 60 days threshold.

50. Although it seems that « it is fair today that nobody really believes in the Washington consensus anymore" (Rodrik, 2006, p. 2). However, he also notes that "there is little evidence that operational work at the Bank has internalized these lessons (of the Learning from reform, which goes beyond the consensus) to any significant extent (idem, p.7).

51. But also under other names such as transitional labour markets and protected mobility (see Auer, 2007).

but also workers' security. It requires a double focus: on required adjustment to economic challenges and on the security and welfare of workers. Only such an agenda would be compatible with decent work principle. Because of the double nature of the challenge (labour market adjustment is sought primarily by employers, workers' welfare by workers) the balancing act requires also an effective social dialogue and collective bargaining.

While the idea is attractive and is part and parcel of the European Employment Strategy, it might well be that such a solution is good for rich countries like the "old" Europe with its highly developed labour market institutions, but less for poorer countries that could not spend the amounts that European countries spend on workers' welfare.

However, there are arguments for dismissing the cost argument: First, that the concept is now also part of the reform agenda of the new member countries of the European Union, which cannot spend as much on the security devices needed (LMPs) as the "classical" flexicurity countries do. For example, with spending close to 4-5 per cent of GDP on labour market policies, Denmark and the Netherlands (the classical Flexicurity countries) can protect their otherwise flexible labour markets quite effectively as can be seen by the good labour market performance and the high degree of perceived security among the workforce (Auer, 2007). A study of the European Commission shows that all new member countries taken together would have to increase their LM spending (both active and passive) by about four percentage points on average and some much more (EU Commission 2006). This, of course, seems impossible because of the otherwise rather tight financial policy goals of the European stability and growth pact. Indeed, in the newly established "common principles of flexicurity" that were adopted by the European council of ministers in Lisbon in December 2007, solutions conforming to sustainable budget deficits are prescribed. However, the principles[52] can be implemented also with a better organization of existing institutions and do not need always exorbitant amounts of fresh public money (see below).

The second argument against the high cost barrier is that while countries like India do not spend anything comparable to "old" European counties (which are very heterogeneous in spending terms themselves), there are quite substantive amounts spent on social security; and the extension of the NREGA, for example, will actually increase such spending considerably and at the same time add a more employment-centred focus. Of course, it is only with great caution that schemes like the NREG, the newly introduced Unemployment insurance scheme on the planned extension of social security could be viewed as an element of an emerging home grown form of flexicurity. Indeed the NREG concerns agriculture and water conservation works and thus the informal sector. It also concerns the more immediate needs in terms of subsistence of people and families, so that viewing it through the flexicurity lenses might be simply wrong.

As flexicurity has a labour law dimension and looks at adjustment of labour laws to changes in the economic environment, which require flexibility and contends that lower degrees of employment security can be compensated by more social protection, the concept seems less relevant for economies like India with large informal sectors, where labour laws are by definition not particularly relevant. The divide is important: in the formal sector labour laws and unemployment insurance training schemes, severance pay, etc. could be the

52. Eight principles were adopted: these include among others the social dialogue, no one-size-fits –all solutions but country adapted models of flexicurity, gender sensitivity, outlays in line with sustainable public budgets, internal and external adjustment, reliable and flexible contracts, active labour market policies, lifelong learning policies and modern social protection.

embryonic elements of flexicurity if they are discussed together. The informal sector is by definition flexible and relatively unprotected. For the formal sector the concept can be applied and is useful as it allows looking at both sides of the issues at the same time and may give a boost to negotiations between the social partners (see also Vandenberg, 2008).

So the elements of an analysis of the Indian labour markets in terms of flexicurity seem to exist in the formal sector; but even there a clear cut analysis of real rigidities and of security issues is still to be done.

Flexible informal sector

However, the flexibility/security issue is much broader. It concerns not only external numerical flexibility (basically through hiring and firing and the use of temporary contracts) but also internal numerical and functional flexibility. The first of these two latter forms of flexibility concerns the variation of working time, while the second is achieved through variation in the organization of work. In internal forms, the security issue is partially addressed through the maintenance of the (formal or informal) employment relationship, but can involve an issue of income insecurity (for example when hours of work are cut without compensation).

Table 44. Configurations of flexibility

	Numerical Flexibility	Functional Flexibility
External Flexibility	Hiring/firing Temporary jobs (incl. temporary agencies)	Outsourcing/insourcing
Internal Flexibility	Working time reductions/prolongations	Work organization changes Polyvalent skills Working time arrangements (shift work, etc.)

Source: Auer (2007)

Research has found that while efficient companies use all of these forms of flexibility (Capelli and Neumark, 2004[53]) there can be trade-offs between the forms. The most frequent is the trade off between internal and external flexibility but there can be trade-offs between the other forms. On a country level, the US labour market is known to prefer external numerical adjustment through variation of workforce levels, while Japan and Germany are known to use internal forms of adjustment. A recent study showed that in Germany –across firms of all sizes- about 80 per cent of adjustment to business cycle fluctuations are internal (most often working time variation) (Hohendanner and Bellman, 2006)[54]

This is quite relevant for labour markets and their regulation even in countries like India. If firms have this possibility of hours variation (eventually backed up institutionally by compensation for hours not worked through the unemployment[55] benefit system), then dismissals can be avoided, which could be a flexibility element even if dismissal is tightly regulated. However internal functional flexibility for enhancing productivity is important and should be sought even quite independently from the question of dismissals. Employment protection triggers job security and this spurs worker's motivation to engage in productive work.

53. Capelli, P. and Neumark, D. (2004) "External Churning and Internal Flexibility: Evidence on the Functional Flexibility and Core-Periphery Hypotheses", *Industrial Relations* 43, 1, pp. 148-182.

54. Hohendanner, Ch. and Bellmann,L. (2006) Interne und externe Flexibilität, in: WSI Mitteilungen 5/2006

55. For example in Japan unemployment insurance is called "employment insurance", as Japanese labour market policies are geared to maintain jobs at the firm level. (See Chatani, ILO, forthcoming).

But is internal flexibility at all relevant for the informal sector? We would contend that it is, because it touches on the subject of work and productivity that is imperative for putting countries on more promising development pathways. Leaving aside the agricultural sector (which also needs better work organization to trigger higher productivity and better working conditions), the informal sector is composed of many small shops and handicraft enterprises. Many observers assert that increasing flexibility in this sector amounts to "bringing coal to Newcastle" as the sector is flexible at will. This is probably true when having only external numerical flexibility in mind. There is no protection against dismissal in this sector and there are not many protective devices anyway (in terms of social security, safety and health of workers, maternity benefits etc.).[56] But there is also an absence of internal functional flexibility, of good work organization and polyvalent skills and skilling that act as a trap for efficient production of goods and services. There could be a sort of trade off here, because of the external flexibility at will, no one can engage in the kind of upgrading associated to internal functional flexibility. Or, in other words, it needs some stability for progressing and for higher productivity also in the least of the activities of the informal sector.[57]

If we then accept a wider notion of flexibility along the lines of what the European Commission's common principles are, including external and internal forms of flexibility and a wide range of labour market securities, including active and passive labour market policies, social security and social rights, a home-grown Indian version could be developed. At least the flexicurity angle could be used to find out gaps in both the flexibility/adjustment and the security dimensions and this could be the first step for developing policies to fill gaps, which very often coincide with decent work gaps.

Conclusions and recommendations

The effects of labour market regulations and their de-regulation on growth, employment, unemployment and informality are also debated in India. Especially those believing in the "augmented" form of the Washington consensus believe that liberating the labour market from much regulation would spur growth and job creation. Others contend that these regulations are here for a cause and bring benefits to workers, but also to firms and are in the public interest.

Some pretend that the de-regulation discourse is "barking at the wrong tree" (Jha, 2008) as the real problems lie somewhere else, e.g. in macroeconomic and industrial policies, investment, etc. True, looking at the large informality in Indian labour market comprising a large share of agricultural employment, the effects of regulation on informality are exaggerated. Agricultural informal labour markets are not concerned with rules that affect formal industrial firms, which come in relatively small numbers.

It may be that some of the controversial items of present labour regulation, such as the obligation for third party consultation and authorization have more of a symbolic role than a real one. It may however be that the whole regulatory framework has some effect on the structural transformation of the Indian economy. Again regulations do not seem to be the main problem here. But pervasive poverty, lack of skills, administrative red tape and inadequate administrative structures seem more likely reasons for putting breaks on the

56. There might however be functional equivalents, as informal employers might grant such protection.

57. We have shown this also for the "old" Europe: without core stability, firms would suffer, excessive flexibility is not in employers' interest. Excessive stability might also bring some problems but without a fair share of stable and productive jobs, around which flexibility is organized, productivity would decline. (Auer, Berg and Coulibaly, 2005.)

required adjustment. However, some of the regulations might play a role on the margins of the labour markets, e.g., at the point of transition between informal and formal employment. And as Indian sources note, there is obviously a need to "simplify, rationalise and consolidate the different pieces of labour legislation" (Sharma, 2006)[58] with the help of the social partners. This is certainly a recommendation that deserves to be supported.

Still, cutting employment protection could be a bad idea carrying high political economy costs as changes such as these are opposed by an important part of Indian constituents. A way out of political stalemate could be negotiations around flexicurity, which is a relatively new mode of looking at both the adjustment needs in the economy and the security of workers. It links the regulation of the labour market with protective devices of the labour market such as unemployment benefits and training and requires careful balancing of employment and social protection. A genuine Indian form of flexicurity, taking into account the precise nature of barriers to growth and jobs would probably require an inverse sequencing of reforms, enacting first protection on the labour markets through passive and active policies before tackling any rigidity in the employment protection. Flexicurity is achieved if an effective network of social protection is available and when firms and workers are "socially embedded". Or in other words: "Any change in labour law in favour of flexibility and efficacy, however, leads to a blind alley in the absence of social security…." and labour market flexibility can be implemented alongside economic and social security (both quotes from Sharma, 2006). Again such a proposition that negotiates flexibility in its many forms together with the necessary security devices for allowing a high degree of labour market security should be recommended.

5.3.2 *Labour market policies*

In the optic adopted here, both active and passive labour market policies are not independent from the general framework of labour market regulations, although they also have a life of their own, addressing issues that are of immediate concern such as food security and subsistence.

But for analyzing labour markets through an institutional and "flexicurity" lens, labour market policies are indeed an essential ingredient for providing the security that cannot be granted through employment security triggered by stable formal employment contracts with companies, which is only provided for in the small formal sector of a country like India.

What are labour market policies and what divides passive from active policies? In the paper that is used as a background paper to this section, Jha (2008) provides some classification. He distinguishes between protective and promotional labour market policies that are almost identical with the passive/active divide that is usually provided for in the literature on the subject. In our own work we have distinguished passive from active by the simple fact that in both instances social transfer benefits are paid, but in one case (passive) without a work or training conditionality attached and in the other case (active) with such an "activation" conditionality attached. Alternatively, welfare and workfare are also two definitions used for a distinction of passive and active policies, but workfare has a negative connotation as it could imply to force people to work for benefits. Both forms have a function of insuring labour market risks (and are, therefore, protective) but it is true that employment promotion is usually stronger in active than in passive measures.

58. Sharma Alakh N., Flexibility, Employment and Labour Market reforms in India in : Economic and Political Weekly, May 27, 2006 p 2078 to 2085

Classical passive measures are unemployment benefits, severance pay, early retirement schemes and any (cash) benefits that are handed out to individuals without stipulating a condition of activity. Of course, unemployment benefits have also the ultimate aim of integrating beneficiaries into the labour market and often foresee (and sometimes enforce) a job search conditionality. Classical active measures are labour market training, employment subsidies, enterprise creation schemes and public works schemes.

In recent years, unemployment schemes in Europe have been "activated", e.g. regulations stipulate that incumbents have to take up work or training after x[59] month of benefit reception, indicating a shift from welfare to work-or learnfare.

While all European Union countries and all OECD countries have unemployment insurance schemes, only few developing countries have one. Korea has introduced one at the time of the Asian crisis, when it was already an industrialized nation and could afford to set up such a scheme. Worker's militancy was also a factor that pushed the introduction of the scheme. China is also setting up a scheme and we find schemes in various countries like South Africa, Algeria, Thailand and an attempt to set up a scheme in Sri Lanka. But most developing countries have none and the argument against it are frequently that they would only work in the (small) formal sectors; as for unorganized workers the handing out of money through the schemes would be ineffective in labour market terms. Many countries use some form of active labour market policies (e.g. public works) instead. However, Berg and Salerno (2008) show that the introduction of unemployment insurance scheme in many of the now developed countries occurred at a time when they had large shares of agricultural employment (e.g. Finland, which introduced a first voluntary insurance in 1917 had a share of agricultural employment higher than 60 per cent) and low GDP per capita rates, lower in some than currently in India.

India has recently introduced an unemployment insurance scheme for the organized sector that pays wage replacement in case of lay-off for six months. This is an important initiative, but the coverage rate is estimated only at around 2 per cent of the entire workforce.[60] Still, the initiative is worthwhile to be pursued, but the effects of the scheme on the labour market have to be carefully evaluated, both in terms of workers' welfare and labour market efficiency. In particular there are moral hazard issues both from the employer and the employee side. While the worker's moral hazard (such as remaining voluntarily on a scheme, despite work opportunity being available) is minimal with a six-month long and low wage replacement scheme, employer's moral hazard (such as putting workers on the scheme to save labour costs) may exist. Seen from workers' welfare, the short duration of benefit payment is indeed a serious problem in labour markets with surplus labour supply. Thus it could be advisable to add an active labour market policy component, once the "passive" benefit has expired and no regular work was found. As unemployment insurance schemes are not only conceived for increasing workers' security but also to allow for better matches on the labour market, job search with the help of an effective public (or private) employment service has to be encouraged.

59. In the EU the time frame is usually 4 to 6 month for youth and 12 month for adults, but there is also an attempt to shorten the time frame, in particular for youth.

60. Low coverage figures (if available at all) exist for almost all schemes. However, while low coverage is usually interpreted as the sign for the insignificance of policies, this might not be the case. If closely targeted, programme coverage is always low. Only broad and untargeted programmes have usually higher uptake. There is a general trade-off between targeting and take-up of programmes that policy planners have to take into account. But targeted programmes are generally more effective because they have lower side effects like deadweight (see Auer et al. 2008)

There are other passive schemes in India that act as social protection for jobless workers, such as provident funds (Kannan, 2002)[61] or employer paid severance pay for dismissal. There is also a growing practice of using voluntary early retirement schemes for retrenched workers (above),[62] that allow also avoiding "rigidities" in the labour law (above and Jha, 2008). However, from research we know that while such cash payments are effective in terms of poverty alleviation, they are usually not in terms of labour reallocation (Auer, *et al*., 2008).

Active labour market policies

Therefore such "passive" or protective schemes should be supplemented by active labour market policies (ALMPs) that can be defined as purposive, selective interventions by governments, acting directly or indirectly, to provide work to, or increase the employability of specific groups in the labour market. The following are possible elements of a package of ALMPs: (i) skill training and re-training for the unemployed and the employed, (ii) public employment services, and (iii) subsidized employment (e.g., wage subsidies, and direct job creation measures such as public works schemes). These measures could be applied universally or targeted to specific groups in the labour market (e.g. the youth).

ALMPs can serve as useful instruments for enhancing structural change in an economy by facilitating allocation and re-allocation of labour among various sectors of an economy. They can, on the one hand, serve as a way of temporarily meeting the employment/income needs of the workers, and on the other, play a more permanent role of facilitating structural change in a dynamic economy, and thus serve the need of both workers and employers.

Active labour market policies have been prominent in many countries of the world for quite a long time. While the term in its contemporary understanding has been coined during the late 50s, the 60s and 70s, when Scandinavian countries, especially Sweden, designed and implemented large-scale programmes as part of their economic policy packages, much earlier during the great depression of the 1930s, large public work relief schemes were implemented in the USA (New Deal) and in many European countries.

While the relief aspect remained attached to ALMPs, particularly to public works programmes, the Swedish model of development reserved a large role to active policies with an objective of easing labour reallocation in a phase of accelerated structural change in industry. ALMP should help in fostering geographical and occupational mobility through training and employment subsidy programmes. There was also an important part of the policies which were to be used during business cycle downturns (e.g. relief schemes administered by municipalities) and in general ALMP had an anti-cyclical stance, expenditures being higher during downturns than during economic upswings. During the 70s US had large active labour market programmes (CETA), used very often to tackle the employment access barriers of minorities.

61. Kannan, K.P (2002): The Welfare Fund Model of Social Security for Informal Sector Workers: The Kerala Experience, *The Indian Journal of Labour Economics*, Vol. 45, No.2.

62. Early retirement schemes were/are the number one scheme used for managing retrenchment in the developed world and in particular in the EU. They were largely favoured by all social partners (employers, workers and governments) for maintaining social peace, giving substantive wage replacement and allowing firms to adjust, while shifting large parts of the cost to public budgets. In contemporary discourse (and much less in practice, as the schemes are still used) on labour market management they have lost their favour. Especially their impact on public budgets and on labour market supply in an ageing society has been underlined.

Under the advent of mass unemployment after the mid 80s and early 90s, the policy framework changed. ALMP were no more part of a larger development framework but became much more narrowly targeted at specific groups on the labour market. There was also a marked reduction in the demand side programmes like public works and wage subsidies – although enterprise creation programmes became prominent- and a concomitant increase in supply side oriented policies such as training schemes. This was in line with the general trend from demand to supply side economics. The general trend differs with countries, but as a general "ground wave" it is still at work in today's ALMP programmes, albeit the activation strategy also has a workfare component.

ALMP programmes also faced two controversial challenges. On the one hand, as ever sophisticated programme evaluations became available, it appeared that the net employment and earning effects of programmes were sometimes blatantly small. Given the new context that favoured private over public action, and small government over big government, public spending was getting out of favour. In Europe, the Maastricht criteria, continued with the Stability and Growth Pact, also prescribed tight fiscal policies. In this context, ALMP (and LMP spending in general) was not much appreciated.

On the other hand, the European Employment Strategy, which included active labour market policies, gave them a role somewhat reminiscent of the role they played in Swedish model, although it can both be seen as a policy mix based on workfare principles (tackling moral hazard) and on an accompaniment of structural change. In addition, the challenge of globalization that needed a policy response to manage both positive and negative effects on labour markets also gave a push to ALMPs (Auer et al., 2008).

Despite active labour market policy gaining higher profile in recent policy debates, it should be seen as a tool for creating (access to and sometime maintenance in) regular employment. In that sense, it is always a second best solution. It also cannot substitute growth and employment creating macroeconomic policies, which are of vital importance for the economy and the labour market.

One might ask the question, where India stands in reference to such a development in the developed world. Of course, one needs also to write the indigenous history of the changes in India's approach to the question of active labour market policies from the time it embarked in a state led, centrally planned autarkic industrialisation policy in the 50s and 60s to the present much more liberal framework.[63] But in addition we also can take reference to what has happened to ALMPs in the developed world as they went through different phases of development.

Is India in the midst of a large scale transformation from an agricultural labour market to one going towards industrialization and the service sector? In this regard then, ALMP might be seen in the context of general development and industrial policies as *an economic policy tool* allowing the allocation of labour across sectors through enhancing the mobility of labour; and this would need a big push for skills. If seen as structural transformation accompaniment instruments, ALMP can be seen as *a social policy tool device* that gives

63. As we notice path dependency in labour market reforms and the design of active labour market policies (change in reference to national development paths and labour market institutions) such an indigenous history of programmes seems particularly relevant.

temporary income and employment and employability (skill maintenance and upgrading, re-skilling) opportunities with an income focus for those displaced.

However, looking at some figures on the changing employment share, it is seen that structural transformation in India is slow, though it is accelerating lately[64] and there is up to now no big shake-out of employment in agriculture or industry although the service sector has grown, probably through new entries. It could, therefore, well be that in India the relief and social aspect of programmes that has historical roots [65]are to be put in the foreground. Perhaps the function of such a programme in the Indian context is literally more down to earth and serves the primary purpose of subsistence for the rural poor with some positive effect on their labour supply behaviour.

The National Rural Employment Guarantee Programme (NREGP)

We can only partially follow up on this question in taking reference to the most important employment generation scheme in India, the National Rural Employment Guarantee Programme (NREGP), but at least give some pointers. The NREGP has its antecedents in the rural manpower programmes of the 60s [66] and similar schemes that existed since 1972 in the state of Maharashtra (and was consequently extended to the whole state in 1977) and also some of the schemes that are now subsumed under its umbrella like the Sampoorna Grameen Rozgar Yojana (SGRY) or the National Food for Work Programme (NFFWP).

Implementation of the programme started in February 2006 in 200 backward districts with the objective of providing 100 days per year of unskilled work in basic infrastructure (in areas such as forestation, water conversation, flood-control, rural connectivity etc.) to each rural household opting for it. It is a central government funded scheme that is locally administered, with the states contributing 10 per cent to its costs (Jha, 2008). Payment should be not less than the minimum wage (Rs 60 = about US$ 1.20 a day). The scheme was expanded to another 130 districts in 2007 and since April 2008 it has been expanded to cover all remaining districts in the country.

It is seen as the most important programme to address poverty and under-employment in India, but much depends on its successful implementation. It has an impressive face value record: according to official numbers, in its first full year of operation (2006-2007), the NREG provided employment to 21 million households which represents about 15 per cent of rural households and 50 per cent of all households classified as being below the poverty line. In the first year about $2.15 billion were spent with $ 2.8 billion and about $ 3 billion allocated respectively for fiscal years 2006-07 and 2007-08.

64. Employment share in agriculture declined by about 9 per cent point between 1985 and 2005, less than 0.5 percentage points per year, but accelerated to 0.85 point per year between 2000 and 2005. The relative share of agriculture in GDP declined quicker at around 0.8 points yearly in the 20 year span, also accelerating in the 2000s. The employment share in Industry remained more or less stable until 2000 (yearly average change of 0.03 point per year) but also accelerated since 2000 with an increase of 0.65 points per year. The GDP share in industry remained flat (change of 0.05 points per year over the 20 years and 0.23 point in the years 2000 to 2005. Service employment increased 0.23 point per year from 1985 to 2005 but only 0.15 point since 2000. However, value added increased more rapidly (0.72 point per year during 1985-2005 and 0.8 during 2000-2005). In 2005, percentage of the Indian labour force employed in agriculture was 55.3. The figures for industry and services were 19.2 and 54.37 respectively

65. This was also the objective of such large programmes as the New Deal and similar programmes in many countries of the Western world during the "great depression" in the 1930s

66. Indeed public works as relief programmes have an ancient history and for India Dev (1995) dates they even back to the fourth century BC. See www.ifpri.org/pubs/books/vonBraun95/vonBraun95ch05.pdf

In spite of excellent central guidelines on implementation of the programme and the impressive numbers of people who benefited from the programme in the initial years of implementation, first evaluation reports, point to a number of challenges. While in general 100 days of work per household are guaranteed, the average days spent in the programme per household amounted to 43. This in itself is no problem if the other days were spent in regular work, or demand itself did not amount to 100 days but part of the reason lies in the delays in effective programme implementation (Jha, 2008, Indian School of Women's Studies and Development, 2008). These studies show that there are challenges of low awareness levels, problems with allocation of funds, low number of days of employment, payment below minimum wage and unpaid work when using contractors. The obligation of states to pay unemployment allowance to applicants of the NREG scheme when employment cannot be offered in 15 days from the time of application, seen as a tool to enforce local implementation, does not appear to have been implemented properly. However, there are better results in some regions where this programme is being better implemented (Drèze and Oldiges, 2007)[67].

Drèze reports corruption issues with intermediary contractors extorting money from the programme. There is also a targeting problem, with non-poor also participating in the scheme. Asymmetries in information about the programme lead to participant's "creaming", as "untruly needy" get access to the programme because they are better educated and belong to higher castes than the truly needy (Jha, 2008)[68].

Therefore in terms of effectiveness of this programmes that might trigger a "silent revolution" (Drèze, 2007) in rural India, attention has to be paid to programme delivery and to monitoring and evaluation. The government has set up a Commission in this regard in 2008 with the objective of critically evaluating the provisions of the NREGA in light of the experience gained in its implementation and propose revisions.

There is also a vibrant debate in India on the advantages and disadvantages of "workfare vs. welfare" programmes with supporters claiming that programmes with a work conditionality are superior, as they create assets (e.g. in terms of dams, reservoirs and roads) that would help the poor better than cash benefits. Others argue that handing out cash benefits would involve less waste and administration and more money would reach the poor.[69] Based on econometric research, some experts think that price reductions and agricultural wage increases would even be a better alternative, as their studies show that with rising wages people leave the public works scheme to take up market work (Gaiha and Kulkarni, 2007)[70].

However, the present programme is new and vast in scale and size and it may be overloaded with expectations. It needs some time to be rooted in the consciousness of the poor households and the local administrators. It needs tight monitoring and control and sanctions against corruption.

67. Jean Drèze and Christian Oldiges "Commendable Act" in: Frontline, volume 24-Issue 14: July 14-27, 2007
68. For example, Jha also shows slow and declining disbursement of funds from the central government.
69. See for example an article in Business world which cites Amartya Sen (and to a certain extent also Jean Drèze) as a defender of the NREG scheme and Surjit Bhalla of O(x)us research as a critic who suggests a cash transfer scheme. www.businessworldindia.com/feb1405/indepth02.asp
70. Raghav Gaiha & Vani S. Kulkarni, How successful are anti-poverty schemes? In: http://www.rediff.com/money/2007/nov/03guest.htm

The proof of the success in the programme is the true and sustainable relief that the programme gives to the poor, the value of the assets that are created and the sustainability of the assets through maintenance. Public works usually get bad marks in labour market policy evaluation. However, it can be shown that the bad evaluation results are not only due to poor results of programmes but due to inadequate evaluation as well. As evaluation usually looks at the before and after programme participation employment and wage rates, in PW programmes they very often see no improvement in both. However, for relief type of work it would be surprising to find such effects, at least immediately after participation. Only if there would be a general recovery and an exogenous wage hike such effects would occur, as labour market integration is no real objective of relief type of programmes. Another limit in evaluation is to ignore the value created through assets. So the scheme also needs adequate evaluation instruments that can check programme objectives and results (Auer, et al. 2008).

Equal employment opportunity promotion and developing appropriate support structures

An important function of labour market policies is to reduce the inequalities in the quantity and quality of work participation between women and men. There are several reasons for women's low labour force participation and gaps in working conditions. Although there is a great degree of diversity among women workers, in general societal attitude concerning women's economic potential and their domestic responsibilities provide women with less socialization and human capital to enter into productive sectors than men, and the situation is more pronounced for the illiterate, the semi-literate and uneducated female population, and particularly if they are Scheduled Caste and minority women.

Primary responsibility over household care work is a trait that runs through women of all social groups in India. For the educated, women's labour market participation is highest among the non-married population. Women exit the labour market upon marriage, reflecting own choice due to an income effect on one hand and the expectation from the household on the other (Sudarshan, Das, 2008). For the low income groups, due to the need for income, women are more likely to continue working, however, due to their limited knowledge and skills, women crowd into a few labour market openings they know of or have the skills for; and these result into the rates of such activities getting pushed down further (Banerjee, 2008). Their low human capital and low mobility due to domestic responsibilities and lack of local opportunities give them practically no choice but to remain in sectors that are low in productivity and poor in working condition and pay.

Gender inequality in the labour market is rooted in inequalities within the households; women perform the majority of care work for the household, including drudgeries, such as collecting water. Likewise, women balance household responsibility with remunerated work, adding to their time burden or causing slow career development or interruption.

Another factor that impedes women's labour force participation is the quality and conditions of work. Despite a slight increase in employment, the average earnings for rural women has declined between 1999-2000 and 2004-05 while remaining the same for men across all categories, leading to a widening of the wage disparity ratio from 0.89 in 1999-2000 to 0.59 in 2004-05 for rural and 0.83 in 1999-00 and 0.75 in 2004-05 in urban areas, for all categories (NSSO 55 and 61 Round). Sexual harassment is a reality, and it affects women of all age groups, in various establishments, such as educational institutions, formal and informal, small and large workplaces.

In many workplaces- formal and informal- the physical infrastructure such as poor lighting, lack of female toilets, rest rooms to be used, for instance, for nursing breaks can pose a major problem for women since it raises the risk of harassment, abuse and violence. For informal economy workers, the problem is compounded as many operate in slums where under-developed infrastructure, particularly electricity, water and space, also limits productivity. One of the reasons men predominate in street vending is because street vendors are much more open to abuse from rent seekers. Women opt for other forms of work such as domestic work, home-based work.

Current employment situation of women poses a great challenge to equal employment opportunities for women. Hence assistance for women to engage in productive work performed in conditions of equity, security and dignity must be an integral part of a labour market policy. Labour market policies for women workers in India should be focused on alleviating the household care burden of women while promoting skills development including soft skills in addition to vocational and entrepreneurial skills. Life-long learning is essential to encourage women, who have dropped out of the labour market to care for their children and family, to be able to re-enter with appropriate skills. Life-long learning should also have a focus on career upgrading of existing women workers. As for care roles, maternity protection is a source of discrimination for women and measures are needed to strengthen public and employer efforts to provide quality maternity protection free from bias.

Given that childcare is a significant reason why women do not enter or exit the labour force, quality and affordable childcare systems must be developed. Innovative schemes could be established to promote enterprise development in the area of childcare centres with certification of quality standards by competent bodies. Existing schemes such as the ICDS need to be strengthened and promoted so that they are utilized by women workers. Promotion of primary school enrolment of girls and their completion of primary education should take priority to ensure women of the future are educated. It is also essential for promoting gender equality in the labour market.

An important support structure for women's work is better infrastructure and amenities for urban and rural poor women. Today, over 30-40 per cent of India's population lives in slums. Over 62 per cent of this population does not have access to sanitation services and 25 per cent does not have access to water (11^{th} Plan). In rural and urban areas, women generally spend much of their time and energy walking to water pumps or water queues. Synergy with other ministries and policies is needed to progressively eliminate the time spent on drudgeries and make time available for productive work.

The 11^{th} Plan notes that it will promote women's participation, especially in areas where there is a poor gender ratio. This will entail special tax incentives for women-headed enterprises, women employees, firms employing more women and women entrepreneurial ventures. In addition, private public partnerships will be encouraged as also corporate social responsibility programmes for training and, capacity building and empowerment, including women in the informal economy.

Training programmes[71]

While the NREG scheme is today the most important active labour market scheme for the poor rural population in India, there are many other programmes, both in the formal and

71. A more thorough analysis of the skills and training dimension in India is found in the next chapter.

informal sector that are important planks in a more general policy to address India's employment and poverty problem. A major bottleneck for productive work and structural change is the lack of education and training. Jha (2008) shows that India faces a general and quite enormous skill challenge; more than 50 per cent of the labour force are illiterate, the rate of vocational training of the 20-24 years old in the labour force is only 5 per cent while it is over 70 per cent in many developed countries and around 95 per cent in Korea (Jha, 2008).

Several sources confirm that the skill needs are huge and millions of people need training to sustain high growth rates. Lack of marketable skills is indeed one of the reasons for the slow transformation of the Indian economy.

Vandenberg (2008) shows that there are some initiatives of the Indian central government and the states, such as the Skills Development Initiative, and the centres of excellence.[72] With the skills initiative the government hopes to train about one million school leavers and school dropouts per year over the next five years. There are special programmes for re-training redundant public sector workers (NRF) but implementation of the re-training options does not seem to have been a big success. New generations of the NRF that closed down, showed apparently better success. Vandenberg, (2008) and Jha (2008) cite many other initiatives, but the question remains if the skills-need can be adequately addressed by these programmes.

However, vocational training is only one side of the coin. There is also a lack of education at lower levels. According to Jha (2006), out of approx. 200 million children, only 120 million were enrolled in primary schools and attendance was a mere 60 per cent. Child labour accounts for some of these, especially in agriculture. Lower level education is important. It is known that as money attracts money, skills attract skills. It is those who already have some skills who are eager to progress by education and training, whereas the least skilled are usually those hard to train.

Certainly, active labour market policy in the form of training and re-training can help, but probably not to the proportion needed. Still targeted programmes are helpful and while they sometimes just look at the tip of the iceberg, they are badly needed.

Again, the bottleneck is often not the non-availability of programmes, but a lack in the capacities to implement programmes, to find teachers and trainers, and monitor and evaluate the programmes for achieving better results.

Programme delivery institutions

As the problem often lies in programme implementation, efficient programme delivery institutions are important. This point will not be fully developed here, but it seems quite obvious that delivery institutions such as an effective employment service, training centres, programme delivery agents etc. are crucial. It seems also, like in many other countries of the developed world that India has to invest heavily in its labour market institutional network. These institutions are as important in the informal as in the formal sectors. However, while they exist in the formal sector, they are often absent in the informal sector, or if they exist, their quality may be uncertain.

72. The government runs about 5,100 training institutions, which accommodate about 750 000 students. 5000 of these will be transformed in centres of excellence.

To cite some numbers on what looks as a gap compared to other countries: India runs 938 employment centres (labour exchanges) but has on average only 2.1 centres per million of active population, whereas China has 5.3 centres and Singapore 9.3 centres. Also the area covered by each centre is large with about 3200 km^2 (China 2300 km^2 per million).[73] Vandenberg (2008) notes that while registration of vacancies is in principle compulsory, exceptions and poor enforcement, as well as the emergence of private agencies and internet services have halved the number of vacancies registered and lowered placement rates between 1991 and 2002. However, there is at present, a rising trend in both indicators again, after the government has made an effort to improve the service.

Conclusions and Recommendations

India does have an array of labour market policies, both active and passive. The most important programme in India is of an active kind and serves the subsistence needs of poor households in agriculture. Relief through economically and socially useful workfare activities are centred on agriculture such as irrigation, roads and forestation. While there are also active labour market policies which aim at accompanying structural change (e.g. in retrenchment situations) a strong active labour market policy for accelerating the speed of transformation of the Indian economy is absent.

While there is ample labour supply of unskilled workers, there are skill bottlenecks that have to be addressed and as yet attempts and initiatives seem to be much below the level of what is required. However, it is often in implementation and follow up that the problems arise. While both challenges (programme availability and weak implementation) co-exist, a strong effort to tackle implementation problems of existing programmes seems as more important than designing new ones. There is also a lack of programme monitoring and evaluation. An effort in this area could produce the information necessary to re-direct programmes on their targets and contribute to better programme effectiveness.

There is also a lack of concise programme by programme information and their employment and poverty alleviating effects and even effects of sustainability of livelihood through asset building. In sum, it needs an effort to typologize programmes in order to provide a systematic overview of what exists, what works and what does not, the costs, integrating design features of programmes, their targets and the fulfilment of targets. More than creating new programmes, it calls for a consolidation and increased effectiveness of existing programmes and their implementation. Such a study could be a first step for a deeper analysis of the many programmes that exist in India to designing more effective policies.

5.4 Skills and Employability

The challenge of skills development is of paramount importance in India today. The increased interest and sense of urgency on skills issues has been fuelled, to a large extent, by the country's strong economic growth (see Chapter 2). The lack of an adequately skilled workforce is now regarded as one of the main obstacles to sustaining the current rate of growth. The concern over skills development is also of social importance. A majority of the workforce has been left behind, untouched by the benefits of the current economic boom because their low education and skills level prevent them from seizing gainful employment opportunities.

73. Data provided by Vandenberg (2008)

The skills deficit has been debated at various forums in the last few years and a number of recommendations have been made. Such forums include, for example, the Taskforce on Skills Development (Planning Commission, 2007) and the 11th Plan Working Group on Skills Development and Vocational Training. A number of new government initiatives have been launched including the Prime Minister's National Skill Development Mission. The 11th Plan places skills upgrading of the workforce as a critical component in achieving rapid and inclusive growth.

The challenge of skills development in India is broad, complex, multi-dimensional and multi-sectoral, covering both quantitative and qualitative aspects. It is complicated by the large size of the population combined with vast geographical, cultural and social diversities. The country's economic duality –dynamic and competitive parts of the economy, on one hand, and a weak, uncompetitive unorganized sector on the other– generates different demands in the skills' development system. Achieving rapid and inclusive growth hangs largely on a careful balancing of the two priorities.

Challenge of Scale

One of the foremost challenges in skill development is the sheer magnitude of the task. The vast majority of workers has a low level of education and has received little or no training. Only 2 per cent of the youth (in the age group of 15-29 years) are reported to have had formal vocational training and about 8 -per cent had non-formal training (NSSO, 2006). Another NSS data indicates that in urban areas 80.4 per cent of men and 88.8 per cent of women, and in rural areas, 90 per cent of men and 93.7 per cent of women possess no marketable skills. The potential target group for skill development comprises all those in the labour force – 457 million in all, who need to acquire new skills or upgrade skills at various stages of their working life. Training should be available not just to those entering the labour force for the first time, or to those currently unemployed to help build their employability. It needs to be available also to the existing workforce in order to maintain their employability, improve productivity and insulate them from redundancy as current skills become obsolete and irrelevant to the emerging requirements in the world of work (Chandra, 2008).

The need for training can be contrasted with the current level of training provision. Each year there are 12.8 million new entrants to the workforce; while the total capacity of TVET programmes under various ministries is 2.5 million. While a portion of new entrants will have completed other forms of higher education, there are still almost 10 million people who enter the workforce annually without skills. Only 5 per cent of those in the age group 20-24 are reported to have vocational skills in India, while these figures are 28 per cent in Mexico, 78 per cent in Germany, 79 per cent in Canada, 80 per cent in Japan and 96 per cent in Korea (ILO, 2003).

Skills for the unorganized sector – equity and access

Almost the entire TVET system is focused on the organized sector. The unorganized sector had not received due attention for a long time. Given the large size of the unorganized sector (over 90 per cent of the workforce), the need for training in this area is crucial to enhancing productivity, raising incomes and contributing to GDP growth.

Very few opportunities for skills development are available for young people who have dropped out of school or for workers in the unorganized sector. The problem is most severe for women and vulnerable groups such as people with disabilities, ST/SC/OBC, minority

communities and migrants (Chandra, 2008). Public training institutions cater mostly to the organized sector and are often standardized up to the point of being rigid and inflexible. Most formal training requires a minimum of 10^{th} standard as an entry requirement, which preclude a large number of school drop-outs and other people with no or limited education from receiving formal training. The duration of the training is too long, often 2-3 years, and requires full-time attendance, which workers cannot afford. Training materials are often not accessible for the illiterate or those with limited schooling. The uneven regional distribution of training institutions compounds the problem of accessibility. In terms of ITIs/ITCs, the seating capacity in the South and Western regions is much higher than in other regions, forming 43 per cent and 30 per cent of the total seating capacity (ibid.). There is also strong urban bias in terms of training provision. Improving access to training is thus a major challenge in skills development.

Despite limited formal training opportunities, people do acquire skills in an informal manner. Many of them acquire their skills through self-learning or on-the-job training – most often through parents, relatives or informal apprenticeship training in small workshops. Hence, many skilled artisans and craft persons exist in India but their skills are not formally recognized (certified). This limits their chances of gaining access to formal training and improving their career prospects.

Quality and relevance

The challenge of scale is compounded by the problems of quality and the relevance of training. Even when people can access education and training opportunities, the quality and relevance of the skills obtained are often questioned by employers and young people struggle to secure employment as a result. There is a major discrepancy between skills acquired in training and skills required in employment –a problem commonly known as the 'skills mismatch'. The Task Force on Skills Development highlights that "*The central paradox is that while the country faces a shortage of skilled personnel on one hand, there is widespread unemployment of the 'educated' on the other*" (Planning Commission, 2007).

Employers are increasingly voicing their concern that the quality of graduates of colleges, polytechnics is not meeting the needs of the industry (NMCC, 2006, USAID, 2006). Those with qualifications, whether they are technicians, engineers or MBA-holders, are reported to have few employable skills (MeritTrack, 2005, 2007). Ironically, there is a higher rate of unemployment among those with higher education (NSSO, 2006), although wages are higher for those who are better educated (Venkata Ratnam and Chaturvedi, forthcoming). There is very little labour market information available or collected systematically and made available regularly in the TVET sector (with the exception of higher engineering education) (Chandra, 2008)

The focus of VET programmes is driven more by supply-side considerations and fulfilling certification requirements that are largely academic, than by needs of employers (ibid.). With the exception of a small number of private institutions, the involvement of employers is ad hoc and there is no mechanism to systematically facilitate active involvement of employers in identifying skills needs, designing qualifications and setting the training curriculum. The strengthening of a mechanism that regularly assesses and disseminates labour market demands is indeed a major challenge for improving the relevance of skills training. At present, there is also no system for monitoring the types of skills training provided nationally (or the number of training places), which makes it difficult to assess skills gaps and guide training provision.

As far as public training is concerned, the system is largely centralized in the sense that there is little autonomy for training institutions to adjust their training courses, the number of trainees, and curricula according to local employment demands. Many of the training institutes have limited linkage with and awareness of local labour market demands, and, for the most part, not accountable for ensuring training and employment linkages.

The challenge of quality is also systemic. There is currently no unified mechanism for validating qualifications to ensure that they reflect the needs of employers. Unlike in the higher technical education sector[74], there is no single authority which is responsible for quality control of vocational education and training. Training provided by various providers is of varying quality and certificates are based on different standards, which make it difficult to articulate the competencies of the holders of certificates to employers (i.e. the value of certificates). The system also exhibits an academic and vocational divide where there is no provision which allows a person to move between academic and vocational streams (Planning Commission, 2007; Chandra, 2008).

The current system limits vertical mobility in that the graduates of Industrial Training Institutes (ITIs) cannot progress onto polytechnics or other institutions of higher education. While the need to regularly upgrade the skills of trainers is a major concern, there is currently no mechanism to ensure the quality of VET trainers against benchmarks or to monitor the availability of qualified trainers in the system (ibid. FICCI). There is also a lack of mechanism to monitor and timely update the physical infrastructure including equipment (FICCI, 2006). Given the geographical and social diversities of India, skills development also requires a diversified approach. The system is rather fragmented, and lacks a sense of national coherence supported by a unified system of quality assurance.

Coordination

Coordination *within* the TVET sector is also a concern. There is, in fact, a wide range of training providers and programmes in the country. The skills development effort remains divided between different line ministries, although this problem applies to many other countries as well. Among central ministries, there are altogether 17 ministries which offer training, with the Ministry of Labour and Employment and the Ministry of Human Resource Development being the main providers. There is a division between vocation *education* and vocational *training*, as the former is covered by MHRD and the latter by MOLE. The division between central and state governments is another. The State governments run a scheme of their own design more suited to their needs, while central governments develop certain schemes and fund them and even have them implemented in different States (Chandra, 2008). The absence of a 'national policy on skills development' makes it difficult to seek, or achieve coordination (ibid.).

There are numerous NGOs and other private providers offering skills training, although their operations tend to be limited to specific localities and trades. The information regarding their activities is rather scattered and limited. Some large companies also offer well-structured training for their employees, or have begun providing training for communities and disadvantaged groups as part of their corporate social responsibility efforts (e.g. TATA, Coal

74. Technical education refers to higher and middle level technical education in the fields of engineering, management, pharmacy, architecture and urban planning and applied arts that is offered at post-graduate, graduate degree and diploma levels (Chandra, 2008). The quality of this sector is overseen by the All India Council of Technical Education (AICTE).

India, Larsen & Toubro, Steel Authority of India). However, there is no mechanism to coordinate these various initiatives to generate impact on a large scale in terms of outreach, or to standardize and harmonize the quality of training, as noted above. The issue has been highlighted in many debates and in the main government recommendations, including those of the Taskforce of Skills Development (Planning Commission, 2007).

The key challenge in making skills development effective for employment creation and economic growth is policy coordination and coherence. The level of skills is a major driving force in the development of priority economic sectors and in attracting foreign direct investment, particularly high value-added manufacturing and services. In terms of policy, the importance of skills is widely acknowledged. However, skills development remains largely a 'supply side' matter and is yet to become an integral part of employment, economic and industrial policies and strategies.

Policy options

India faces formidable challenges to meet the needs of employers now and in the coming years. To that end, there is a need to expand training provision, improve quality of delivery, strengthen coordination and ensure adequate funding. These challenges are addressed in the following recommendations, many of which suggest changes or additions to the existing skills development infrastructure:

- ***Expansion of training provision:*** A large portion of the workforce has very limited or no education and skills. Training opportunities are too limited to prepare those who are entering the labour market or to promote continuous skills upgrading and lifelong learning for those already in the labour market. There is thus a need for a rapid and large-scale expansion of training provision. The GOI has outlined such an expansion through the PM's Skill Development Mission. It will be important to ensure that the expansion of facilities (hardware) is coordinated with an adequate increase in qualified teachers, trainers and instructors (software).

- ***Promotion of equal access and addressing needs of the unorganized sector:*** Women, youth, the poor and other disadvantaged groups, as well as those working in the unorganized sector, should gain greater access. A massive effort will be required to overcome the long years of underinvestment in skills of workers in the unorganized sector. Expansion of the capacity of the overall system, as well as special programmes for meeting the specific needs of target groups, are needed. Literacy and soft skills training are crucial elements. Interventions for the unorganized sector should promote a convergence approach where skills development is combined with entrepreneurship development and other livelihood support programmes.

  Greater operational autonomy at the level of training institutions can be promoted to respond to diversified needs of trainees and local areas. The idea is also recommended by the Task Force on Skills Development (Planning Commission, 2007). However, greater autonomy must be promoted along with quality control in terms of accreditation, and a measure to build the capacity of training institutions in undertaking demand-driven training described above. Otherwise, it will risk further fragmentation and deterioration in the quality of delivery of training programmes.

- ***Establishment of a quality assurance mechanism:*** The current scenario of weak quality assurance would need to be addressed by the establishment of a set of new institutional mechanisms. Currently, training providers offer training of varying quality and standards in the VET sector. There is a need to establish a national accreditation agency to provide quality assurance of skills providers. A National Vocational Qualifications Framework (NVQF) can be set up to set nationally agreed skills/competency standards for qualifications and certification, so that the certification offered by different bodies is comparable, transparent and quality assured. Skills/competency standards need to be developed with the substantial involvement of employers so that certifications closely reflect the needs of employers. This will help ensure that trainees are confident that they have received recognized certification and that employers can better match recruits and existing workers to employment requirements.

  The NVQF ideally should be established as part of the larger National Qualifications Framework which includes the education sector. This would ensure the comparability of qualifications/certification between academic and vocational streams and facilitate horizontal and vertical mobility across the two streams. The institutional mechanisms suggested above will need to work in conjunction with a national apex body which has a mandate for overall coordination and monitoring of the system.

  The establishment of a labour market information system is also critical for making training provision more relevant to labour market needs.

- ***Strengthening public-private partnerships:*** There is a clear recognition that the magnitude of the skills challenge is such that the government must be supported by other actors. A greater and more active role for industry, workers' organizations as well as civil society groups and professional societies is needed to build the skills development system. Several government programmes have been initiated to promote such public-private partnerships (e.g. Centre of Excellence Scheme, MoLE). The active involvement of industry through public-private partnership is a critical factor in facilitating greater linkage between training and employment.

  The role of trade unions is crucial in the private sector-led initiatives to ensure equal access to training opportunities for all types of employees, in particular for women and those with limited education and skills and thus most in need of skills upgrading. Many of these groups are not 'regular' learners so it is crucial that trade unions sensitize them to the importance of skills training and to facilitate their involvement in training. The role of trade unions in skills development has so far been limited but they have good potential as provider and facilitator of training.

- ***Involvement of the private sector through a sector-based approach:*** Despite the increased importance of social partners, particularly employers, in skills training, their active and systematic participation is unlikely without an adequate institutional structure. Sector-based skills bodies which are led primarily by employers can provide such a mechanism. This would assist industry and service sectors to better situate skills development in their overall sector development

strategies. These councils can also help employers respond to technological change, to assess new employment, productivity and competitiveness challenges, and to incorporate those challenges into the sectoral, state and national planning of skills provision.

Given that organized and unorganized sector enterprises are closely linked sub-contracting and value chains, a sector approach can also help in assessing skills demands and responding to other needs of the unorganized sector. In addition to identification of sector skills demands, development of sector HRD strategies and the promotion of enterprise-led training, sector-based skills bodies can also play a leading role in reviewing and developing qualifications for the National Vocational Qualifications Framework (NVQF).

- ***Achieving better coordination:*** Better coordination is needed of skills training programmes offered by different ministries, States, agencies and private providers so that these efforts support the overall national skills, social and economic agenda. To this end, a national apex body with the mandate of overall coordination, development and implementation of a national skills strategy in coordination with the States and sector-based skills councils can be established. Such an apex body should also oversee the national accreditation system, assessment and certification and the development and implementation of the NVQF. Another critical role of such agency would be better integration of skill development efforts in broader employment, social and economic development strategies.

- ***Promotion of lifelong learning and the continuous skills upgrading:*** The system needs to facilitate the movement of individuals between education and training, and between learning pathways. The establishment of the National Qualifications Framework (NQF), which includes qualifications for both education and training, can promote both vertical and horizontal learning across education and training pathways. The NVQF forms a part of the NQF as mentioned.

- ***Creation of sustainable funding:*** The magnitude of the task ahead will require considerable investment. One approach can be to set a benchmark, such that investment in skills would be set as a percentage of GDP. A National Skills Development Fund can be established which would be financed by a combination of public and private funds. The funds should be used not only to promote skills development efforts by the private sector, but also to provide a range of financial support schemes to promote access to training among women and disadvantaged groups. Incentive mechanisms for private sector investment will also need to be set, such as tax breaks for private contributions. This will need to be combined with a range of measures to improve efficiency and effectiveness in the system. The introduction of, or increase in, training fees can be one of the cost-recovery measures, while performance-based funding can be applied to training institutions.

- ***Regular review and development of good practices:*** A dynamic system promotes excellence by meeting the changing needs of knowledge economy. Regular monitoring, evaluation and review are essential to adapt the system to the changing needs of society and the economy. Research and promotion of good practices are vital activities that enable stakeholders to meet emerging needs.

- ***Development of a national skills development policy:*** It is imperative that the planned and concerted efforts in skills development be anchored in a 'policy', which is both comprehensive and national in character. Instead of piecemeal or simple operational policies, a national policy should provide a vision that sets the agenda, provides strategies, and reconcile the needs and perceptions of different stakeholders across the country. The Government of India, led by the Ministry of Labour and Employment in partnership with the ILO, has initiated the process of developing such a policy and national consultations on the draft policy are currently underway (MoLE and ILO, 2008).

The implementation of the above recommendations presents an immense challenge. It requires the commitment of resources, strengthening the existing facilities and the establishment of new institutions. Above all, it requires a great deal of political will and human effort by stakeholders to implement and activate what essentially amounts to a new national skills development system. Fortunately, the political will is in sight backed by a strong and committed bureaucracy. The challenges are enormous but the benefits, in terms of economic performance and improvements in the lives of millions of working women and men, are equally huge.

Annex 1

Ratio of Fixed Capital to Workers Employed by Three-Digit Industry Category

	014	151	152	153	154	155	160	171	172	173	181	182	191
1973/74-75/76	0.18	0.73	2.46	0.54	0.53	1.78	0.11	0.46	0.53	0.44	0.27	0.40	0.49
1981/82-83/84	0.17	1.02	2.03	0.75	0.53	1.57	0.05	0.76	0.69	0.56	0.32	0.58	1.00
1991/92-93/94	0.25	2.51	2.33	0.85	1.30	3.16	0.12	1.66	1.79	0.79	0.63	1.27	1.08
1997/98-99/00	0.42	4.41	4.95	1.23	2.20	6.94	0.24	3.56	2.57	2.46	1.00	1.52	1.65
	192	201	202	210	221	222	231	232	241	242	251	252	261
1973/74-75/76	0.37	0.25	0.46	2.14	0.65	0.63	4.12	17.03	9.09	1.65	1.32	1.01	0.62
1981/82-83/84	0.41	0.54	0.60	3.58	0.79	0.94	1.69	17.60	10.52	1.58	2.02	1.44	0.66
1991/92-93/94	1.14	0.28	1.23	4.39	1.35	1.26	3.05	33.22	16.76	3.11	4.48	3.62	2.42
1997/98-99/00	1.46	0.36	1.94	7.41	5.06	4.30	4.42	75.30	28.69	5.44	5.26	7.66	6.68
	269	271	272	281	289	291	292	293	300	311	312	313	314
1973/74-75/76	1.05	3.05	6.20	0.83	0.71	1.13	1.34	0.91	1.34	1.80	2.10	2.18	1.25
1981/82-83/84	1.48	4.90	4.72	1.02	1.02	1.52	1.32	0.90	1.23	1.73	2.03	2.51	1.12
1991/92-93/94	3.62	12.50	12.10	1.58	2.15	3.10	2.31	1.81	5.20	2.13	2.22	5.19	2.46
1997/98-99/00	8.28	17.59	20.77	2.17	3.52	3.35	4.05	4.85	4.27	3.45	4.15	8.70	5.28
	319	321	323	331	332	333	341	342	351	352	359	361	369
1973/74-75/76	0.60	1.34	0.89	1.03	0.51	1.32	1.54	0.80	0.99	0.51	0.83	0.50	0.45
1981/82-83/84	0.80	1.99	1.39	1.04	0.98	1.72	1.96	1.42	2.32	1.34	0.97	0.69	0.71
1991/92-93/94	1.02	4.91	4.40	2.93	5.70	3.97	3.91	1.76	1.13	1.05	2.32	1.06	0.96
1997/98-99/00	3.40	7.58	9.14	3.36	10.21	2.67	17.90	4.08	2.53	1.31	3.02	1.99	1.62

Chapter 6

Mainstreaming Employment into Policy Making

It is well-known that policy makers in India attach a high priority to the objective of employment. In pursuing that objective, a number of programmes (including the nationwide programme of guaranteeing 100 days of employment per family per year) have been and are being implemented. However, for an employment strategy to be effective, it is important to mainstream employment in the country's development strategy. The latter would imply going beyond special programmes and integrating employment concerns into policy making at various levels _ at macroeconomic as well as sectoral. One can think of several tasks in such an approach. The first would follow from the suggestion made earlier (Chapters 4 and 5) that one way of increasing the employment-intensity of economic growth is to identify sectors that are more employment-friendly and pursue policies and programmes conducive to their growth. Indeed, the Government of India has already adopted such an approach and has identified several sectors as possible thrust sectors. Identification of such sectors and sub-sectors could be based on an analysis of the employment impact of growth of such sectors. Second, at the levels of policy making _ both macroeconomic and sector level _ it is possible for policies to have an impact on the employment outcome of output growth. An important question in that regard would be whether such possibilities are taken into account while formulating policies. Once the above two tasks are considered to be important, the issue of data requirements would arise. The present chapter deals with the two specific issues relating to the task of mainstreaming employment in development strategies as well as that of data requirements.

6.1 Employment Impact Analysis (EIA): Application of Input-Output Analysis

Analysis of the earlier chapters of the present report (especially Chapter 3 which contains a projection of alternative growth scenarios with varying employment outcomes) demonstrates that while high economic growth is important, the composition of growth in terms of contribution of various sectors plays a key role in rendering growth more or less employment-intensive.

For drawing operational implication of this proposition, it is however, necessary to assess the relative employment content of sectors and sub-sectors of economic activity at such disaggregated level that is relevant for policy and programme application. In other words, it is necessary to broadly quantify the employment that would be generated in producing a given quantum of output in different lines of activities so as to suggest as to which sectors if made to grow faster would make a larger contribution to employment. And such quantification at broad aggregated level of three sectors may not be adequate because the policy actions that may be utilized to facilitate higher growth of some lines of production than others could only be applied at the level of sub-sectors and individual commodities.

Thus prioritizing agriculture for employment generation may, in fact, imply emphasizing sub-sectors like specific crops, horticulture, animal husbandry and fisheries. In the case of industry, it may imply promoting generally the growth of labour-intensive industries, and specifically of textiles, light engineering, agro-based products etc. Assessment of the employment impact at the appropriate level of dis-aggregation of economic sectors is, therefore, required for determining the output structure of growth and evolving suitable

policy intervention to ensure its realization, in order to bring employment into focus in growth strategy.

Employment impact analysis (EIA) involves not only an assessment of changes in the employment numbers resulting from a given expansion of output in a particular sector/industry, but also the indirect and induced employment effects such expansion produces in each of the other sectors and industries through backward and forward linkages. It involves an analytical framework to assess the direction and magnitude of impact on employment and also identify the transmission channels due to a change in policy at macro and/or sectoral level.

To undertake EIA, various tools are used such as Time Series and Cross-Sectional Analysis, Location Quotient, Shift-Share Analysis, and Economic Modelling. Economic Modelling encompasses a variety of analytic approaches, such as input-output analysis and economic simulation. Input-output analysis is among the most direct and relatively simple tool to undertake EIA. Besides the direct effects, it enables measurement of the effects from suppliers of inputs (raw materials, etc.) and thus gives a measure of the total effect of the activity in question. For example, direct employment in manufacturing activities of X product is seen as the first link in a chain of employment effects. Secondary links are employment associated with the production of components and raw materials used in the production of X. The ratio of the total employment generated in all linked sectors together as a result of a unit of investment/increase in output in the reference sector is also referred to as its employment multiplier. What one actually requires to estimate the total employment impact (or employment multiplier) of a sector is (a) amount of output of each of the other sectors required as input for a unit of output in this sector; and (b) the employment coefficient of each sector defined as the number of persons employed in that sector for a unit of value added/output. Aggregate employment coefficient of a sector is derived as the ratio of employment generated directly in it and in other linked sectors as a result of a unit expansion of output in the reference sector and the amount of output in other sectors required as input in the reference sector. It may be noted that employment coefficients or employment multipliers estimated using input-output analysis account for direct and indirect employment effects and not the "induced" effects. Also for a sector, these estimates include employment effects of output and its backward linkages only (output of other sectors used as input), and not the forward linkages (output of the other sectors resulting from use of this sector's output as input).

The present analysis is based on the input-output table for the latest available year, i.e. 2003-04, which gives data for 130 sectors. To estimate the employment coefficient, the employment data have been taken from the 61st NSS round (2004-05) on employment and unemployment. Since the Input-Output table and the employment data are based on different industrial classification, adjustments have been made to have one-to-one correspondence at two digit level of classification. The lack of complete symmetry of data from the two sources and given that the present exercise is illustrative and exploratory in nature, we have aggregated the130 sectors into 19 broad sectors.

Table 45 gives the direct employment coefficient (number of persons per million rupee of gross value added in the sector) and indirect employment coefficient which is the sum of employment coefficient in all other sectors. For instance, one million rupees of gross value added in manufacturing sector directly creates around 15 employment opportunities and another eight employment opportunities due to changes in the production/demand of other

sectors linked to manufacturing. Thus one million rupees of gross value added in manufacturing will create a total of 23 employment opportunities in the economy. Within manufacturing, the agro-based industries such as food and food processing and textiles have higher direct and indirect employment impact as compared to the non-agro based industries. Unlike many sub sectors of manufacturing, the indirect employment effects in service sector are very low. Among the 19 sectors, food products, textiles, and wood and paper products top the list with over 60 jobs created directly and indirectly for each million rupees of value added, while real estate, banking and insurance, mining and quarrying figure at the bottom with only five or less jobs for similar value added. Based on future growth scenarios, these employment coefficients can be used to forecast corresponding employment growth for the entire economy as well as for various sectors.

Table 45. Direct and Indirect Employment Coefficient (Employment per million rupees of Gross Value Added)

Sl. No	Sector Description	Direct	Indirect	Total
1	**2**	**3**	**4**	**5**
1	Agriculture, Livestock & others	50.15	0.96	51.11
2	Forestry & logging	6.27	0.49	6.76
3	Fishing	5.58	0.70	6.28
Agriculture & Allied (1 to 3)		46.25	5.18	51.43
4	Mining & Quarrying	4.13	0.91	5.04
5	Food, food processing, beverages & others	24.71	95.84	120.55
6	Textiles (Cotton, Wool, Jute etc.) & Products	39.51	20.93	60.44
7	Wood, Furniture, Paper & leather and their Products	50.36	10.05	60.41
8	Rubber, plastic & their Products	8.50	17.94	26.44
9	Chemical, Petroleum & Non-metallic Mineral Products	5.87	8.27	14.14
10	Basic Metal	6.62	6.62	13.24
11	Machine Tools and Non-electrical machinery	6.47	7.03	13.50
12	Electrical machinery & other transport Equipments	2.73	6.80	9.53
Manufacturing (5 to 12)		14.75	7.77	22.52
13	Construction	16.59	6.00	22.59
14	Utilities	2.49	4.87	7.36
15	Transport, storage and communications	8.85	4.22	13.07
16	Trade, Hotels, and Restaurants	12.40	3.34	15.74
17	Banking and insurance	1.91	0.89	2.80
18	Real Estate etc.	0.79	0.30	1.09
19	Education, Health & other services	9.75	0.67	10.42
Services (15 to 19)		8.55	5.11	13.66

Source: Input-output table, 2003-04 and NSS data on employment and unemployment, 2004-05.

6.2 Framework for Evaluating Policies from an Employment Perspective: Check List for Different Sectors and Agencies

Employment impact analysis, as illustrated above, helps in ordering of sectors, sub-sectors and activities by their respective employment generating potential. Actual translation

of the concept of mainstreaming of employment will, however, depend on the extent to which sectors with high employment potential are given importance in overall growth strategy and how they are sought to be encouraged to grow faster. In other words, mainstreaming of employment, in the first place, would require that the pattern of economic growth favours high employment potential sectors. In the economies like that of India, where planning is still used as a mechanism to determine the rate and pattern of economic growth, the state can play a direct role in this respect through allocation of public investment which continues to be a significant part of the total investment. Besides, the planning authority can also influence the sectoral policies in so far as it has the mandate for determining overall direction of policy and advising the sectoral ministries to work towards the achievement of overall objectives of growth (employment being one of them in the present case) set by it on behalf of the state.

The next level at which mainstreaming of employment would take place is in the framing of macro-economic – fiscal, monetary (credit) and trade-policies. As mentioned earlier, each of these policies have their own objectives, but employment generation could also be one of them: or at least, it could be ensured that they do not militate against the objective of employment generation. For example, tax policy would have increased revenue as its main objective, along with discouragement of production and consumption in some cases, but it could also include a structure of incentives for employment intensive sectors or technologies. It could also ensure that taxation structure does not discourage employment generation by levying higher tax rates on establishments employing more people *per se*. Similarly, credit policy, both in respect of providing access, and, interest rates on loans to employment intensive units, sectors and technologies, can be used to meet employment objective. Trade policy that favours exports in general over imports and import of raw material and export of final products in particular; and has a tariff structure that provides incentives and disincentives to suit these objectives, can be seen as serving the cause of mainstreaming employment, even though the major objectives of trade policy may lie in achieving trade balance, macro-economic balances and high economic growth.

A major part of the effort for mainstreaming employment in development, however, would lie in the rate and pattern of growth of different sectors of the economy, particularly those assessed as having high employment potential. Here, besides the strategies and policies at the aggregate and macro level, sectoral policies have an important role to play. These sectors besides being capable of generating more employment than others at a given growth rate of output, also offer choices of products, technology and production systems with varying employment implications. Some important examples of such sectors and subsectors are: agriculture, small scale industry, tourism, construction, information technology and other services sectors. Sectoral policies, on the one hand, may aim at faster output growth of these sectors which will lead to correspondingly high employment growth as these sectors are employment intensive; and on the other, strive to further increase their employment intensity by influencing their product composition and technologies.

With a view both to explaining and illustrating how employment could be mainstreamed in development strategy and micro and sectoral development policies, and also to assessing whether and to what extent that is done in prevalent policies, it is useful to develop a framework consisting of checklists/questions that need to be addressed to concerned agencies, e.g. the Planning Commission for development strategy; finance and trade ministries for fiscal, credit and trade policies respectively and ministries like agriculture, industry, tourism, information technology for sectoral policies. There are ministries that do not deal with any economic activity sector such as the ministries of human

resource development and labour but influence employment through their activities in the areas of development and regulation of the use of human resources. These also need to be brought into the framework for mainstreaming employment in development. It is towards this end, an attempt has been made here to identify a checklist of questions that could be addressed to different authorities, agencies and ministries in respect of the policy area under their jurisdiction and also to illustratively note the situation as exists in case of the set of questions addressed to each of them.

6.2.1 *Strategy of Economic Growth*

Let us begin with the basic area of planning for economic growth, a subject that is the responsibility of the Planning Commission. The Commission sets and lays down strategies for achievement of various goals and objectives of development through the instrumentality of successive Five Year Plans. Box 3 lists the key questions that need to be addressed to the Commission in respect of the importance assigned to employment in the plans.

Box 3: Economic Growth Strategy and Employment

Policy Area	Responsible Ministries/ Agencies	Questions
Economic Growth Strategy	Planning Commission	• Is employment an explicit objective of development plans? • Are time-bound targets for employment growth set for each plan? • Is employment taken into consideration while deciding upon the sectoral pattern of growth? • Is employment a consideration in deciding sectoral investment allocations? • Are special programmes and policies framed as part of the plan to increase employment potential of economic growth? • Does the plan lay down a mechanism to evaluate the impact of economic growth on employment creation? • While allocating funds/grants to individual states, whether the state-level employment/unemployment situation, policies and programmes are taken into account?

Status relating to most of these questions has been indicated in earlier section dealing with employment in development strategy in the Indian plans. It may, however, be added that though employment has featured as an objective and quantitative targets for employment generation have also been set in recent plans, employment does not feature as an explicit consideration in the allocation of plan investments across the sectors. There have been instances when the sectoral ministries, departments and agencies have been asked to provide estimates of employment likely to be generated in the growth and plan programmes of sectors in their respective jurisdiction. Such estimates are not always reliable and realistic as the concerned agencies are not necessarily familiar with the methodology of making them. In any case, these estimates are not used for deciding outlays and investment allocations.

Similarly, growth rates of different sectors are projected on the considerations of desirability and feasibility of attaining certain levels of output, and not on the criterion of their employment potential. Also, no mechanism is set as a part of the plan to assess the

impact of plan investment and programmes on employment. Assessment of employment growth is made on the basis of data collected independently as part of the periodical surveys carried out by the national statistical authority. Periodicity of such surveys does not necessarily coincide with that of Five Year Plan, and thus the data do not enable a direct estimate of the employment generated during a plan period or, for that matter, as a consequence of plan activities.

6.2.2 *Macro-economic Policies*

The next area of policy intervention that needs to be assessed with respect to their role in and impact on employment relates to fiscal, credit and trade policies. Each one of them has their own objectives, but they could be used to contribute towards or at least prevented from adversely affecting employment growth.

Budgetary Policies

Let us first consider the questions that can be addressed to the Ministry of Finance regarding budgetary policies in relation to employment objective (Box 4).

Box 4: Budgetary Policy, Taxation and Employment

Policy Area	Responsible Ministries/ Agencies	Questions
Budgetary Policy Taxation and Employment	Ministry of Finance	• Does employment consideration weigh in deciding on issues of fiscal balance (e.g. inflation vs. employment)? • Does government spending on different sectors/programmes have employment as an objective? • Does the budget provide for special programmes for employment generation? • Do tax rates/slabs differ by size of employment of an enterprise? • Are there special tax concessions/exemptions on employment intensive activities, generally or specially linked to employment size? • When tax exemptions and holidays are granted to new enterprises, is employment generation also a consideration?

The issue of fiscal balance/deficit does not feature in direct relation to employment in the Keynesian sense. While using budgetary policy as an instrument of controlling inflation, the question of employment does not seem to come into reckoning directly. Sectoral and item-wise budgetary allocations are not based on employment criterion; but for a long time now the budget includes outlays for special employment programmes in the form of subsidy in self-employment programmes and direct public expenditure on wage employment programmes. Tax rates on enterprises are not directly related to employment size (in the past there have been instances of excise duty rates being higher for large sized enterprises, size measured in terms of employment, thus discouraging expansion of employment!). Direct taxes (e.g. corporate income tax) may have a rate structure with higher incidence on larger enterprises, income-wise, not employment-wise.

Certain tax concessions/exemptions are provided for activities and sectors that happen to be employment intensive. Employment is one of the explicit objectives of such incentives.

The rate of concession or exemption are, however, uniform and not related with employment size of an enterprise. Small scale industry and tourism are some examples of the beneficiaries of such a tax policy. New enterprises are often given tax holidays in certain sectors/activities; the benefit is not necessarily related with employment potential of the sector or enterprise.

Credit Policy

Some important questions on policy relating to provision of institutional credit are given in Box 5.

Box 5: Credit Policy and Employment		
Policy Area	**Responsible Ministries/ Agencies**	**Questions**
Credit	Finance/ Department of Banking/RBI	• Is there any targeting/allocation of credit for employment intensive sectors? • Are interest rates lower for such activities/enterprises? • Do interest rates and other terms promote employment-intensive over capital-intensive technologies? • Are there subsidized credit based targeted programmes for employment creation?

Credit policy has long been used in India to specially provide easier access to credit and on softer terms to certain sectors which quite often also happen to be relatively more employment-intensive. Agriculture, small scale industry and exports are among such activities for which provision of credit has been accorded priority over other sectors and often a percentage of total bank credit has been mandated for allocation to them. Interest rates have also been lowered/subsidized. In so far as those activities are employment-intensive, credit policy can be said to have been used for meeting employment objective, though the provision had other, often more important and explicit objectives in each case. At the same time, greater ease and softer conditions at which the term loans (for acquiring fixed assets) have been available in comparison with the working capital loans (for meeting material and labour costs), use of labour-intensive technology may have been discouraged and that of capital-intensive technology encouraged.

Direct use of credit for employment generation has been made in respect of the special programmes for self-employment in rural and urban areas and for promotion of micro-enterprises. Under these programmes provision of loans by banks has assumed a mandatory character once the candidates are selected and become eligible for a direct government subsidy.

Trade Policies

Policies relating to exports and imports influence employment by encouraging and discouraging domestic production particularly of the employment-intensive products. Specific questions that need to be addressed to trade policy in this regard are illustrated in Box 6.

Trade, to the extent it is based on comparative advantage, is likely to have a positive impact on employment in a labour abundant economy like India. Trade liberalization measures, therefore, can be seen as steps towards mainstreaming of employment in economic policy. Employment generation has been recognized as an objective of trade policy in the recent, post reform period The latest trade policy (2004-09) emphasizes making of trade policy as an effective instrument of economic growth by giving a thrust to employment generation; identifying special focus areas which would generate additional employment opportunities particularly in semi-urban and rural areas and incentivize export of such products, which have high employment intensity in rural and semi-urban areas (Government of India, 2007c). There are, however, several other measures that may need to be taken as supplement to the overall liberalization policy so as to make it more employment oriented. Incentive structure is required to specially favour export of labour-intensive products. Tariff structure should favour import of material and intermediate products rather than final products and instances of 'inverted' duty structure need to be avoided. International agreements may restrict freedom to impose quantitative and tariff based restrictions on imports and pricing of exports, yet it needs to be seen as to what measures can be devised to effectively utilize the comparative advantage and thus increase employment through promotion of trade.

Box 6: Trade Policy and Employment		
Policy Area	**Responsible Ministries/ Agencies**	**Questions**
Trade Policy	Ministry of Commerce and Industry	• Is employment an objective of trade policy? • Does the policy, in general, encourage exports and discourage imports, and specially encourage export of labour intensive products and imports of capital intensive products? • Does the policy discourage import of capital intensive technologies? • Whether export incentives specially benefit the labour intensive industries? • Are there any specific export promotion policies subsidies/tariff concessions for labour-intensive industries? • Does the tariff structure (product-specific import duties) generally tend to promote domestic labour intensive industries? • While undertaking trade reforms, is employment impact of trade liberalization measures taken into consideration?

Sectoral Policies

It is at the level of different sectors / sub sectors of economic activities at which the employment objective would get mostly operationalized. The fact that different major sectors, (e.g. agriculture, industry, construction, manufacturing, trade, financial services, community and social services etc.) have different employment intensities and elasticities can be used by application of strategies and macro-economic policies to favour faster growth of high employment-intensive sectors. But within individual sectors also, employment consideration can further be pursued by use of policies, incentives and disincentives to promote growth of activities and technologies that can improve the overall employment impact of a given volume of output or rate of growth of the sector as a whole. Following are illustrations of questions that need to be asked with regard to two major sectors with a view

to assessing whether employment has been made a consideration in deciding the policies for the growth of a sector. Similar questions with appropriate modifications and additions could be asked with regard to other sectors and sub sectors.

Agriculture

Agriculture employs the majority of Indian workers. Most of them have low productivity and earnings. The concern, therefore, is greater for improving their incomes, rather than adding to the workforce. In fact, the planners have now started talking of net reduction in the number of workers engaged in agriculture (Planning Commission, 2007). Yet diversification of agriculture into high value crops like horticulture and increase in the volume of agricultural output processed, are expected to lead to an increase in employment as well as improvement in labour productivity and earnings. The questions that need to be asked in this context from an employment perspective would be as follows (Box 7):

Box 7: Agriculture and Employment

Policy Area	Responsible Ministries/ Agencies	Questions
Agriculture	Ministry of Agriculture	• Do considerations of employment generation and increasing productivity and income of agricultural labours feature among the objectives of agricultural policy? • How is employment issue viewed in the largest employing sector of agriculture? Is it seen as a sector overburdened with labour or a possible source of additional employment? • Are there specific strategies and policies in place to shift labour from agriculture? • Is diversification aimed at improving the quantitative and qualitative potential of agriculture? What specific policies are in place to facilitate diversification? • Are there policies and incentives to encourage farm production aimed at processing and to facilitate and encourage increase in the processing of agricultural produce, through promotion of linkages with processors and marketing agencies?

Industry

Industry, especially manufacturing, has always been seen as an important source of employment growth. Within the sector, there are sub-sectors which have high employment intensity while others tend to use more capital than labour. And within a given sub-sector, there are often choices available for the use of labour-intensive or capital-intensive technologies depending on the relative cost of labour and capital. These facts could have been potentially used for employment promotion in a direct manner in the earlier regulatory and licensing regime. Even now, employment can be used as a priority consideration in assessing cases for investment approvals. Then, there are products which can be produced with similar efficiency on a large or small scale basis; the latter generally expected to be more employment generating.

This explains why a policy of specially promoting small scale industry, using various instruments such as product reservation, easier access to material, machinery and markets, cheaper and targeted credit and tax incentives has been followed in India for several decades.

With the advent of a liberalized policy regime, the policy has got diluted particularly with progressive reduction in the number of products in the list of those reserved for exclusive production in small units. Yet a number of other measures for promotion of small scale industries continue.

Box 8 indicates the relevant questions to assess the extent and manner in which employment features in industrial policy.

Box 8: Industry and Employment		
Policy Area	**Responsible Ministries/ Agencies**	**Questions**
Industry	Ministry of Commerce and Industry and Ministry of MSME	• Is employment potential of the project given due weight in the assessment of the proposals for industrial/investment approvals by domestic and foreign investors? • Do product lines with high employment potential get taxation, credit and other concessions/ incentives as a part of the industrial policies? • Are the benefits under small scale industry (SSI) policy specifically related to employment and differentiate among products and enterprises within the SSI sector by employment size and capital-employment ratio? • Is the employment implication of de-reservation assessed, as also the expected expansion of employment through competition- induced growth of those products? • Does the interest rate policy for industry take account of its employment implications by making credit cheaper/costlier in relation to labour?

Special Programmes for Employment Generation

These programmes are by definition aimed at employment creation directly – either of the self or wage employment variety. Most of them, implemented by the Ministry of Rural Development and the Ministry of Urban Areas and Employment are conceived as poverty alleviation programmes, but provision of employment is the means through which their objective is sought to be achieved. The question that needs to be posed with regard to these ministries could relate to the design and assumptions, implementations and sustainability of employment as illustrated in Box 9.

Box 9: Special employment generation programmes		
Policy Area	**Responsible Ministries/ Agencies**	**Questions**
Special employment generation programmes	Ministry of Rural Development and Ministry of Urban Areas and Employment	• What is the central objective of the programme? How does employment relate to it? • How is the nature and extent of employment generation envisaged in the programme, related to the assessment of unemployment/ employment requirements undertaken prior to its introduction? • Does the programme result in adequate quantity and quality of employment? • What are the major constraints in creating the envisaged

		employment, self – or wage-based? • Is the employment generated under the programme sustainable? Are there mechanisms to periodically evaluate and introduce mid-course corrections, if necessary in the programme?

Development of Human Resources and Regulation of Employment

Employment is expected to be a consideration in policies and programmes of education and training and by improving employability, these programmes contribute to employment. Laws and rules regulating conditions of work on the other hand, affect the quantity and quality of employment. Employment policies, therefore, cannot be thought of independent of the education, human resource development and labour policies. The questions that need to be addressed to the agencies concerned with education and skill development policies and programmes (e.g. Education and Labour Ministries in India) are (Box 10):

Box 10: Education and Skill Development

Policy Area	Responsible Ministries/ Agencies	Questions
Human Resource Development	Ministry of Human Resource Development	• Is expansion of educational and skill development facilities planned keeping in view the requirements of educated and skilled manpower in coming years? • Is creation of training capacities in respect of different kinds of skills based on the projection of demand for them? • How flexible is the human resource development system to respond to the changing demand for skills?

To the agencies regulating employment of labour (e.g. Ministry of Labour and Employment in India), the questions that need to be asked are (Box 11):

Box 11: Labour Policies

Policy Area	Responsible Ministries/ Agencies	Questions
Human Resource Development	Ministry of Labour and Employment	• Is regulatory system flexible enough to ensure qualitative improvement without adversely affecting the quantitative expansion of employment? • Does it provide incentives for increase in employment or at least, for not restricting employment expansion? • Does the labour administration system promote systematic information and mobility across places and skills to ensure matching of demand and supply? • Does it aim at striking a balance between protection of labour rights and creation of more jobs, and if yes, how? • Does it provide incentives for increase in employment or at least, for not restricting employment expansion?

6.3 Data Requirements and Monitoring of Employment Impacts

It is quite clear from the account of various aspects of mainstreaming employment in development planning and economic policy that systematic data with definite periodicity needs to be available for such an exercise. Data are required at the disaggregated level, but in a way that they are collapsible at different levels of aggregation as required for analysis and policy making. For example, data on manufacturing industries could be available at three- to-four digit level that can also be aggregated by different policy relevant categories, e.g. export dominating, agro-based, labour-intensive etc. Besides data on employment, those on other variables such as output, value added, capital are also required at corresponding levels of dis-aggregation and categories to arrive at meaningful ratios and coefficients for the purpose of studying differential employment performance of different lines of activities and products.

Our exercise on estimation of the employment and unemployment for operational planning purposes also revealed that the concept of employment needs to be related with income. Often time-based measure of employment tends to conceal the qualitative aspects, particularly productivity and earnings. And, at closer examination, employment often turns out to be 'spurious'. Given the fact that a large majority of employment is in the informal sector, a comprehensive and multi-variable database needs to be built for this sector with a view to improving policy relevant understanding of employment characteristics and evolving policy packages for expanding productive and quality employment in its different segments.

Comprehensive data from labour force, employment and unemployment surveys and special sector survey, as above, are necessary for analyzing employment for the purposes of formulating development policy, macro-economic and sectoral policies and programmes; and once these surveys are undertaken with regular periodicity, they also facilitate analysis of overall and sectoral trends. Such data are, by and large, available from the periodical surveys conducted by the NSSO. Data on macro-economic and sectoral variables are also available from the National Accounts Statistics and other sources as collected and complied by Central Statistical Organization (CSO). What is, however, missing is the correspondence and matching of concepts and sectors as also the coverage of data from different sources to relate different variables with each other. Thus, greater symmetry needs to be ensured among different data sources.

For assessing the impact of policies however, data would need to be specifically collected for the sectors and segments of the economy that are covered by them. It is also important that regular collection of data on the employment outcomes of policies and programmes is made a part of the scheme by the ministries, departments and agencies implementing them. Information on the aspects illustratively indicated in the checklist of questions for evaluation given in this chapter need to be regularly collected as part of departmental activity.

Availability of comprehensive and policy relevant data system is necessary, but it will not by itself ensure an effective mechanism for mainstreaming employment in economic policy. For this, it is necessary that ministries, departments and agencies are made aware of the importance of employment objective and are assisted in framing employment friendly policies and programmes as well as in the methodology of assessing the potential and impact of the activities in respect of employment. Still employment may only remain a secondary concern. An effective mechanism to evaluate the activities of sectors and departments from the viewpoint of employment and monitoring their employment performance may be necessary. And, a system of incentives and disincentives through the plan and budget

allocations can also be used for this purpose. Above all, it would be necessary to constitute a suitably empowered National Employment Authority, under the leadership of the Head of the Government if employment is to be truly and effectively mainstreamed into the development strategies and economic policies.

Chapter 7

Some Concluding Observations

India faces a formidable employment challenge in both quantitative and qualitative terms. While there may be differences of opinion as to the precise extent of employment growth required to fully match the growth of labour force, the backlog of the unemployed and the underemployed as well as those at the low end of the working poor, undoubtedly employment growth has to be substantially higher than obtaining currently. Employment growth would depend primarily on the growth of output and the degree of employment intensity of output. As for the former, India's economy has already achieved eight to nine per cent growth in recent years, and it may be difficult not only to push that higher but also to sustain such growth rates. Hence, the issue of higher employment growth hinges critically on achieving higher employment intensity of growth. The present report provides ideas on how that could be achieved.

The other challenge is to move vast numbers engaged in employment involving very low productivity and returns (both wage and income from self-employment) to employment where productivity and income are higher and conditions (in terms of physical environment as well as other aspects such as social protection) are better. And that would require a few actions. First, the growth of such employment has to be much higher than the growth of labour force so that a part of the labour force can move from their existing jobs to such new and better jobs. Second, those who need to move to better jobs have to have the qualifications (in terms of general education as well as skills) to be able to get access to such jobs when available. That, in turn, poses challenges to the country's skill development system. That is an area which also has been covered in the present report and in a separate exercise.

The quality issue mentioned above can be addressed in two ways: (i) through the creation of new jobs that are more productive, and (ii) through upgrading of existing jobs by raising productivity and other aspects. The first of these again adds to the quantitative challenge mentioned above; the economy needs to be able to create jobs in sectors that are characterized by higher productivity, like manufacturing, finance, modern services (e.g., in wholesale and retail trade, international trade, tourism, IT related work, etc.) and modern transport. The present report outlines a sector-focused approach in order to address this challenge of more and better quality jobs.

The issue of upgrading existing jobs brings one to the issue of jobs in the informal economy (or to use the terminology used in India, the unorganized sector). As the proportion of workers employed in the organized part of the economy is very small, even high rate of growth of output and employment in that segment may not produce the desired shift in the structure of employment in the short- or medium-term. Hence, from the point of view of utilizing productive employment as a route out of poverty, it would be essential to find ways and means of upgrading the quality of jobs in the unorganized sector. Work in that regard will have to include action on raising productivity and incomes as well as providing social protection. While the present report has dealt with issues relating to productivity, the National Commission on Enterprises in the Unorganized Sector has already come up with several useful suggestions on actions needed in both the areas.

A corollary of the predominance of the unorganized sector is the role of self-employment. As pointed out in Chapter 2, self-employment is not only the major mode of employment in India (in both rural and urban areas), but its importance has increased in recent years. The issue of raising productivity and earnings of the self-employed is obviously linked to that of investment and skills. These issues would need to be addressed in a more focused manner.

In the area of labour market, the present report has addressed the issues of active labour market policies and labour market reforms. On labour market policies, the National Rural Employment Guarantee Programme can potentially play a very important role in providing employment as well as social protection to the poor. The Programme is still in its early days, and thus observations on its performance have to be taken as tentative. However, since it seems to have performed well in certain states, it would be useful to look at the factors that have contributed to good performance and draw lessons for other states from such an analysis.

As for labour market reforms, even though there may not exist convincing evidence that flexibility in the labour market would lead to significantly higher employment growth, it may still be important to examine areas where reforms are needed in order to bring the country's labour laws in line with the requirements of a modern economy operating in an environment of increasing globalization and liberalization. However, in doing so, flexibility in the labour market would need to be combined with security for the workers. Moreover, in terms of sequencing the pace of reforms, priority may be given to ensuring security and protection for the workers.

In order to achieve the objective of making economic growth more employment intensive, it would be necessary to mainstream employment into the policy making process. That, in turn, would imply taking into account the employment factor in formulating and implementing policies and programmes at various levels __ macroeconomic as well as sectoral. The present report has outlined possible methodologies for doing so. The critical question, however, is: even if there is an intention of pursuing such a strategy, how can that be done. In seeking answers to this question, it would be necessary to look at the functioning of the government and the place of employment in that framework. It goes without saying that employment is a cross-cutting issue and is the result of activities covered by a large number of government agencies (as well as the private sector). It would, therefore, be unrealistic to expect a single agency to be in a position to handle the policies and strategies that are required and that have been outlined in the present report. On the other hand, given the cross-cutting nature of the issue, the importance of ensuring that appropriate action is undertaken by the relevant agencies, and the need for coordination of such actions, it may be appropriate to consider the creation of a national level institution (in the shape of a central authority) that would be mandated to handle the subject. To be effective, such an authority must not only have the mandate but also the necessary technical capability to perform the tasks that would be involved.

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