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**SKILL FORMATION  
AND  
EMPLOYMENT ASSURANCE  
IN  
THE UNORGANISED SECTOR**

**DRAFT REPORT**



Government of India

**NATIONAL COMMISSION FOR ENTERPRISES IN THE  
UNORGANISED SECTOR**

19<sup>TH</sup> FLOOR, JAWAHAR VYAPAAR BHAWAN,  
1, TOLSTOY MARG,  
NEW DELHI

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## **CONTENTS**

	<b>Name of Chapters</b>	<b>Page</b>
<b>1.</b>	<b>Introduction</b>	<b>1 - 4</b>
<b>2.</b>	<b>Skill Formation, Productivity and Growth-Issues in a Developing Economy</b>	<b>5 - 15</b>
<b>3.</b>	<b>Skill Profile of the Indian Workforce</b>	<b>16 - 45</b>
<b>4.</b>	<b>International Experiences of Skill Development and Training</b>	<b>46 - 57</b>
<b>5.</b>	<b>System of Skill Development in India</b>	<b>58 - 92</b>
<b>6.</b>	<b>Summary and Recommendations</b>	<b>93 - 115</b>

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## **Chapter 1**

### **Introduction**

1.1 India's achievements on the growth front in the economic reform period have been documented extensively, with recent years having seen the country grow at more than 9 per cent per annum and real national income growing by 125 per cent during the economic reform period of 1992/93 - 2005/06 compared to 93 per cent during the previous period of the same duration. While these achievements are no doubt remarkable from a macroeconomic perspective, this Commission's work has documented another aspect of the development pattern seen in India, the overwhelming preponderance as well as perpetuation of the informal economy. The Commission estimated that the informal or unorganised workers constituted 86 per cent of total workers in 2004-05 and that the increase in total employment between 1999-2000 and 2004-05 was in informal employment, both in the organised as well as the unorganised sectors. More than three-fifths of this workforce is self-employed while of the remaining who are regular or casual wage workers, only half are employed in the organised sector. Given these trends, in the years to come, the bulk of employment is likely to be in the unorganised sector of the economy.

1.2 This Commission has, in its earlier report (NCEUS 2007) also highlighted the need for developing the potential and productivity of this huge workforce, both from the point of view of the economy as well as that of the individual. At the level of the economy, many studies and policy documents have highlighted the acute mismatch between the workforce needs and availability of skilled manpower to sustain growth rates. With a very low level of labour productivity, the need for large numbers of skilled people is felt more acutely in the context of the country's need to compete internationally in manufacturing as well as services and to emerge as a significant player in the knowledge economy. From the demand side, with the economy experiencing rapid growth, skill shortages are being experienced across the board, drawing attention to the problem of skill development and engaging the attention of industry federations, international organizations and national bodies. One estimate indicates a need for a 20 million increase in skilled workers by 2015 (CII-McKinsey Report '*Made in India: the next big manufacturing export story*' (October 2004) or an incremental skilling of 1.5 million people every year.

1.3 This report of the Commission brings out various aspects of the need and ways to enlarge the skill base of the economy, keeping in mind the large size, nature of growth and dynamics of the unorganised sector. It highlights the fact that while it is necessary to increase the number of skilled people in the economy, the overwhelming preponderance of the informal sector necessitates a view of the issue from the point of view of those in the informal sector. The skill requirement of the unorganised sector has to be visualized quite differently from the organised sector. In other words, in order to increase the productivity of more than 9/10ths of the workforce in India, the nature of their participation in and linkages with the economy have to be explicitly kept in mind.

1.4 The role and performance of the existing skill development and training system have been extensively reviewed by a number of organizations and a number of proposals have been made within the governmental system to strengthen and expand the skill development system in the country. The Prime Minister also made an announcement of a four-fold increase in the skilled manpower training capacity of the country on August 15, 2007 as an integral part of the National Skill Development Mission.

1.5 In keeping with the urgency of expanding the skill base of the economy massively, the NCEUS constituted a Task force on June 9, 2005 on Skill Formation in the Unorganised Sector to look into the following aspects.

- Identify the characteristics and specificities of skill formation in the Unorganised Sector.
- Review the existing arrangements for skill formation in the Unorganised Sector at the Central and State levels.
- Examine the adequacy of the training and skill development component of the current programmes of wage employment and self-employment and recommend measures for improving their effectiveness.
- Recommend measures for optimally utilizing the existing infrastructure for training and skill formation for addressing the needs of the Unorganised Sector.
- Identify the unmet as well as emerging demand for skill sets in an expanding and globalising economy and devise an institutional framework to rectify the mismatch between demand and supply of skills.
- Study the characteristics of urban employment and under employment and assess the potential of programmes of skill development as a strategy of employment generation in urban areas.
- Identify the best practices in the programmes of skill formation in the Unorganised Sector operated by Government and Non-government organizations.

- Design a National Skill Development Initiative for the Unorganised Sector and suggest a strategy for its implementation.

1.6 The Task Force included several eminent people and received many valuable suggestions which are incorporated in this Report.

1.7 The Report is structured as follows. As an introductory section, the present chapter provides a brief introduction to issues in skill development in the informal sector, outlines the methodology of preparing the Report and gives an overview of other chapters. At an analytical level, Chapter 2 reviews the role of knowledge based inputs (i.e. education, skills and technical education) in promoting growth, especially in the emerging knowledge economy, by highlighting the cases where the skills-productivity linkages have been experienced in developing economies such as those in East Asia. However, the Commission also lays out a framework for looking at the issue of skills in the unorganised sector, from the point of view of those who are part of the unorganised sector.

1.8 A significant aspect of this report is a detailed skill profile of the Indian workforce, presented in Chapter 3. The idea of skill that the Commission uses to construct a skill profile of India's workforce encompasses both education as well as any knowledge acquired, through formal or informal means, that prepares an individual for a vocation or occupation. This profile bases itself on information regarding the level of marketable skills, both formal and informal, that are possessed by people in India according to NSSO surveys and assessments of how many people are trained through the various formal vocational skill acquisition programmes. It attempts to evaluate the level and kind of skill availability with estimates of the level and nature of demand for skills in the economy. It also looks at the relationship between the level of skills and educational profile of the workforce, that between skill availability, education and poverty. It demonstrates that on the one hand, a large part of the Indian workforce has low educational attainment and even lacks basic foundational skills in the form of literacy and numeracy and on the other, the skill base in India is mostly informal and thus it is difficult to adapt to the changing market and technological environment.

1.9 We have presented the salient features of different models of international skill development and training experiences in Chapter 4, which lays special emphasis on initiatives that have been seen for the unorganised sector.

1.10 The existing system of skill development and training in India, consisting of a large number of institutions, programmes and initiatives of the Central and State governments, as well as the private and NGO sector, are reviewed in Chapters 5. The aim of the Commission has been, through this

review, to collate a huge corpus of information collected from diverse sources and present it under a coherent framework, but more crucially to bring out the key features of the skill development system in India. It also aims to locate the possible reasons for the existing narrow skill base through this systemic review. Our review of the existing system in India also critically engages with the issues raised by several governmental and international organizations.

1.11 On the basis of the Commission's focus on the unorganised sector and the perceived need to view skill development a little differently given the preponderance of this sector in the Indian economy, the Commission has laid out a detailed strategy and set of recommendations for revamping, expanding and reorienting the existing skill development system in India which is presented in the last chapter of this report. It envisions the setting up of a system that lays out clear guidelines and a coherent organizational framework for the country as a whole, while focusing on decentralized, representative and need based delivery systems at the local level. The Commission believes that this suggested structure will be able to address the needs of a growing economy on the one hand and the huge workforce on the other.



## **Chapter 2**

### **Skill Formation, Productivity and Growth – Issues in a Developing Economy**

2.1 It is being increasingly argued that one of the prerequisites to enhancing the quantum and quality of employment in developing countries is adequate skill formation and training of the workforce. In more contemporary experiences of development, the case that is quoted widely is that of the countries of East Asia where beginning from very low levels of training and skill acquisition, several countries made spectacular progress in providing these to very large segments of the workforce. This has also been held up as a textbook case of extraordinary achievements in human capital formation. In turn, the large scale training and skilling of the workforce is seen to have contributed substantially to the sustained economic success of these countries.

2.2 The term ‘skills’ is used to refer to a wide range of attributes in the literature and to that extent, there is no clear definition of a Skilled Worker. According to the World Employment Report (1998), the term ‘**skill**’ refers to an acquired and practiced ability or to a qualification needed to perform a job or certain task competently. It is a multidimensional concept as most jobs require a combination of skills for adequate performance, ranging from physical abilities to cognitive skills and interpersonal skills.

2.3 The Planning Commission’s Committee on India Vision 2020 points out that **skill** can also be perceived as the ability to direct human energy efficiently to achieve desired goals. It is one of the attributes that generate knowledge resources, the others being technology, organisation, information and education skill. While material resources are consumed when they are utilised, knowledge resources increase when shared and can be stored at negligible cost. (GOI/Planning Commission 2003:46).

2.4 In practical terms, the term that is used is **Marketable skill** which is commonly understood to refer to any skill / expertise / ability that has market value, that is, has the potential of being utilised for generating income/employment. According to the National Sample Survey Organisation (NSSO), any marketable skill, whether acquired through formal or informal means, irrespective of whether it is being marketed or not, whether the intention is to market it or not, is considered skill. In this sense, an

inventory of such marketable skills provides information on the kinds of work that people can do, irrespective of whether it has been acquired formally or not.

2.5 However, when reference is made to levels of availability of skilled labour in the context of economic development, it is processes of formal skill acquisition and training for employment that become important and the fact that developing countries tend to lag behind in making these processes available to their populations. These processes of formal skill acquisition and training come from general educational systems and systems of technical and vocational education and training (TVET) that are linked to specific occupations. It includes learning designed to develop the skills for practising particular occupations, as well as learning designed to prepare for entry or re-entry into the world of work in general. TVET includes both initial vocational training undertaken by young people prior to entering the labour market and continuing vocational training undertaken by adults whilst in work or during periods when they are economically inactive. In other words, it encompasses both **initial skills** development and various forms of '**Re-skilling**' and '**Up-skilling**'.

2.6 While retaining the practical definition of 'marketable skills' for detailing the skill profile of the Indian workforce in the following chapter, the Commission understands the issue of skill acquisition in its widest sense, to encompass education, pre-employment training, on-the-job training, continuous learning and retraining in this analytical review of the linkages between skills, productivity and growth.

### **Rationale for Skill Formation – The Skills-Productivity-Growth Link**

2.7 In contemporary analyses of systems of skill development in developing countries, the following issues are raised: the importance of developing effective skill development and training systems in the interest of enhancing productivity and sustaining high rates of growth, the changing skill requirements of economies that are witnessing fast changes in the nature of economic activity and work, the need to match skills to markets, the financial sustainability of different skill formation systems and the role of different agents (firms, private actors and the government) in delivering skill and training efficiently and effectively.

2.8 First, it is known that skills development is important because of its contribution to enhancing productivity at the individual, industry and also national levels. Enhanced skills enable individuals to be more productive and potentially generate higher incomes. Workforce skills make enterprises more productive and profitable, and help national economies raise production and create wealth. This takes

place because of complementarities that exist between physical capital and human capital on the one hand and between technology and human capital on the other. A higher level of skills which results in a higher level of human capital formation enables plants and machinery to be used more efficiently, raising the rate of return on investments. Similarly, without a skilled workforce, the returns from technological progress remain low. With the advancement of technologies, necessitating a high rate of labour turnover across industries and occupations, adaptability is crucial to keeping labour and capital employed and maintaining competitiveness.

2.9 The case of several countries in East Asia demonstrates the necessity as well as possibilities in this area for developing countries. Apart from universalizing primary education, achieving very high levels of secondary education and also vocational education within the secondary education system, countries such as South Korea, Singapore and Malaysia have achieved formal training of the majority of their population as well as high rates of employment of the trained workforce. A vast volume of literature on the sources of sustained high growth in these economies have located this growth in 'endogenous' processes that enable a highly skilled workforce to adapt technology to country requirements, innovate at the level of the enterprise and meet ambitious targets in a short period of time. While many of these systems were put into place at an early stage of their contemporary development, with some of these countries experiencing crisis, they also undertook overhauling of systems in tune with the needs of a globalised economy. In other words, the need for the skill mix to change at different levels of development and in response to different degrees of openness was recognized and responded to.

2.10 In contemporary production systems, the demand for skills has changed to some extent because of extensive changes that economies have seen as a result of greater integration with the world economy. Increased competition and the introduction of ICT have prompted enterprises to make fundamental changes in their internal organization and work practices, necessitating the existence and acquisition of specific skills in workforces that are required to be increasingly adaptable and flexible. Improved access, universal basic education and foundations of literacy offer essential first steps on the path to becoming successful knowledge economies. But knowledge economies demand not just more education, but education and training that is also better and different. In the context of knowledge economy aspirations, the challenge of educational and vocational reform is therefore not just to *increase access* or even raise conventional tested achievement, but also to *change the nature and improve the quality* of learning, teaching and training so that they address knowledge economy objectives.

2.11 Fast changing knowledge economies call for new core competencies among all learners in the society. At the heart of these are longstanding “soft skills” such as communication, collaboration and teamwork. To these, can be added others such as the ability to create, apply, share and distribute knowledge; to convert tacit knowledge into explicit and formally codified knowledge that is easily transferable to others; to employ effortless use of advanced information technology; to work in teams that may be socially and psychologically heterogeneous; to have the capacity to reskill and retrain as circumstances demand; to be able to participate in networks and develop the social capital that creates the learning and develops the resilience to cope with change; to cultivate a positive, opportunistic and entrepreneurial orientation to change; and to become committed to continuous and lifelong learning far beyond the years of formal education. This effort to see a change in the skill mix in fast changing economies has been recognized by South Korea, which has a Comprehensive Plan for Lifelong Education and Learning, which allows local communities in provinces to enter and exit the learning and training process in line with the requirements of the economy on the one hand and with their own need for improvement. Similarly, Singapore has made major changes in its skill strategy through the introduction of a National Continuing Education and Training Framework and a Lifelong Learning Endowment Fund.

2.12 Second, it is well documented in the literature that skill development is an area where typically markets might not deliver optimum volumes of skill that economies need. This is because of ‘externalities’ in skill and training provision, where if a private firm undertakes skilling of its workers, it might not be able to reap the benefits sufficiently if the worker leaves the firm. Another firm, on the other hand, might benefit without bearing the cost if the worker joins the firm. Even though the specific industry will benefit if workers are trained for its specific needs, no particular private firm within it might be interested in providing skills and training, resulting in the ‘under – provision’ of skills if it is left entirely to market forces. While this is an argument that is considered crucial for any economy, this is considered to be especially relevant in small firm contexts. It is argued that the under-provision of formal training found in small and microenterprises is either due to ‘ignorance’ on the part of employers or ‘market failure’ due to a variety of supply and demand side features such as their short-term perspective which prevents the recognition of the longer term benefits of training. Therefore, even though there might be an explicit recognition about the need for skills enhancement, the issues of who will provide it, where it will be provided, who will bear the costs and so on become crucial considerations.

2.13 Third, while the area of skill development is considered one where public or collective institutions become necessary due to the externalities mentioned above, where the basic stimuli will

come from in signaling the extent of skill requirements, i.e., whether it should be demand led or supply led, are extremely important, particularly when we consider the financing aspect. Existing systems of formal skill provisioning in most developing countries are found to cover a very small proportion of enterprises and create large supply-demand mismatches, resulting in skill shortages even in the presence of significant unemployment. In the context of 'new' needs being perceived in a globalised economy, these skill shortages are considered to pose a potential hindrance to sustained economic growth. The issue of matching skills to markets has led to a call for dismantling existing systems of skill provisioning in many countries or an overhaul of TVET systems.

2.14 It is against this overall background that this report looks at the overall picture of skill acquisition and development and its link to employment and markets in the case of the unorganised or informal sector in India.

### **Skill Acquisition and Development – The Specific Case of the Informal Sector**

2.15 In India, the discussion on the impact of existing skill delivery systems and what needs to be done hinges critically on two major characteristics of the workforce: the overwhelming preponderance of employment in the informal sector of the economy and a very large proportion of youth in the population, again mostly belonging to the informal sector. It is also well known that the proportion of people who have had access to some kind of formal skill acquisition process is very low and that of those who have acquired employment as a result of this is even lower. While these aspects are presented in the next chapter, here we examine the specific characteristics of informal workforces with respect to the issues raised above.

2.16 This Commission's work has highlighted the salient features of the Indian workforce and brought out the structure of the large informal sector and workforce in India. In order to be able to focus the discussion on the skill needs of the informal sector and the workforce engaged in it, we briefly present these structural characteristics here.

2.17 The Commission has estimated that in 2004-05, total employment (principal plus subsidiary) in the Indian economy was 458 million, of which the unorganised sector accounted for 395 million, constituting 86 per cent of total workers. The Commission's estimates are direct ones from the NSSO, based on a consistent definition of the unorganised sector (NCEUS 2007). Our estimates showed that between 1999-2000 and 2004-05, of the total incremental employment generated, only about 14 per cent was absorbed in the organised sector while 86 per cent was

absorbed in the unorganised sector. In the years to come, as the Eleventh Plan document points out, the bulk of incremental employment is likely to be created in the unorganised sector.

2.18 Within this unorganised sector, wage workers (i.e. those employed by others), constituted only 36 per cent of the workers, and the remaining 64 per cent were self employed.

2.19 While the agricultural sector still contributed the largest numbers in the unorganised sector, the proportion of non-agricultural workers rose from 32 per cent to 36 per cent between 1999-2000 and 2004-05. While the agriculture sector, in turn, is constituted by unorganised workers who are self-employed (65 per cent) and casual workers (35 per cent), even in the non-agriculture sector, nearly 72 per cent of the workers are in the unorganised sector, an increase of 4 percentage points from 68 per cent in 1999-2000. These workers, in turn, are mainly the self-employed (63 per cent). The rest of the workers in the non-agriculture unorganised sector are more or less equally distributed between the regular (17 per cent) and casual categories (20 per cent).

2.20 In the same period, employment in the organised sector of the economy increased by 8.5 million or 16 per cent (from 54.1 million to 62.6 million), but the change in organised or formal employment was nil or marginally negative. Therefore, it was pointed out that the entire increase in the employment in the organised sector over this period has been informal in nature i.e. without any job or social security. The Commission argued that this can be termed as informalisation of the formal sector, where any employment increase consists of regular workers without social security benefits and casual or contract workers again without the benefits that should accrue to formal workers.

2.21 *Three major structural features of employment in the Indian economy that were highlighted by the Commission, therefore, are that first, the informal sector is hugely preponderant in the Indian economy, second, that the increases in employment have been of the informal kind and third, that within the informal sector, there is a huge preponderance of self-employed workers.* Informalisation of the workforce is probably a feature that is here to stay, making the discussion below especially relevant.

2.22 Another structural feature that the Commission's work has highlighted is the heterogeneity of the informal sector itself. It analysed in detail the incidence and conditions of different types of informal workers, i.e., wage workers in the unorganised sector, self-employed workers in the unorganised sector and unprotected wage workers in the organised sector. Within the category of the self employed, there are different categories such as persons who operate farm or non-farm enterprises or engage in a profession or trade, either on own account, individually or with partners, or

home-based workers which include unpaid family workers also. The former have been referred to as independent self employed workers and the latter as dependent. The Commission estimated that within the 395 million people that constituted the unorganised sector in 2004-05, about 344 million were self- employed, of which 69 million were in the non-agricultural sector.

2.23 Recognising homeworkers as a special category in terms of poor conditions of work and high levels of vulnerability, they were estimated at nearly 8.2 million workers (or 12 per cent of the non-agricultural self employed workers) of whom about 4.8 million were women. What this highly heterogeneous picture of the informal sector points to is the fact that the nature and conditions of work in the informal sector are very different, which leads to a wide range of training needs, requiring analysis that is different from that of the formal sector. The different kinds of workers in the informal sector are employed in production units with widely differing features and in a wide range of economic activities and consist of different kinds of people (i.e. workers, producers, employers) working in service activities or producing under many different types of employment relations and production arrangements. The basic questions of skill-building and training for whom, for what, what kind of training and how it can be provided have somewhat different dimensions given this diversity in the informal sector. This Commission wishes to lay stress on this aspect, something that has been relatively neglected in the vast literature on existing skill development systems in India.

2.24 In the international literature on training needs of and possibilities in the informal sector of developing countries, several sets of issues have been identified. The first set relate to motivations of the various people in the informal sector for training. Those working in the informal sector very often see little need for further skills acquisition and have little knowledge about where to go even if the skills are acquired. This is true even for enterprises in the informal sector, which is very often dismissed as 'ignorance' on the part of enterprise owners as well as workers. The principal problems of poor literacy and numeracy often prevent informal sector workers from participating successfully in conventional training programmes, even if they perceive the need. Training can also be prohibitive in terms of costs. Even token fees for the training can form a real barrier for participating in training. Working hours are often long and any time off from the productive work means less income, which would affect the willingness of workers to join a training programme, even if it is relevant and easily available. It is also unlikely that informal sector entrepreneurs will provide their workers time off for training. In fact, skilling workers may appear threatening for the entrepreneurs because skilled and trained workers may demand higher pay, leave to work for competitors or establish enterprises themselves. The motivation issue, therefore, has to be kept in mind when designing training programmes for the informal sector.

2.25 The second set of issues relate to who the people are who require training and for what. Broadly, we can distinguish between own-account workers, workers in enterprises and entrepreneurs. In the informal sector, apart from the training needs of workers of different kinds, which might be essential for increased productivity, most of those who fall under the category of entrepreneurs may themselves need training, facing the same kinds of motivational problems as the ones talked about above. It has often been argued that non-specialisation, avoiding concentrating on a single trade, is the most commendable strategy for those who exist on the broad "underside" of the labour hierarchy and education and training need to be able to cater to this need because, very often, survival requires constant search for new sources of income and the will and ability to be as flexible as possible. In the context of self- help organisations and networks, such training would imply that learning is not only generated in the process of production, but also takes place through other external mechanisms such as 'learning by negotiating' and 'searching for openings'. Learning would imply a process of becoming aware of the potential of a network or cluster of enterprises to solve problems, and acquiring those competencies that are needed to implement solutions. Additionally, the training would need to build up capabilities to shift from one profession to another, to obtain the freedom to make choices without losing status.

2.26 Third, the competencies that are required in the informal sector in a range of trading activities or also in microenterprise based production are a combination of 'social competencies' and technical skills that might be industry or trade based. Social competency, defined as 'the ability to co-operate, communicate and represent collective interests' is central to conducting a business as much as the technical aspects of the industry itself. All training programmes for such enterprises have to necessarily also develop literacy and cognitive competencies, as they facilitate the organisation of economic activities and are used to develop communicative skills. Further, even within small enterprise based entrepreneurship, two distinctive categories are of 'survivalist' entrepreneurs lacking even basic literacy and women entrepreneurs who, in addition to most often lacking basic literacy and numeracy, have specific problems requiring a matching of home duties and training. Training would involve, for all sets of people, a combination of 'social competencies' and technical skills and at different levels. For example, in many categories, a range of skills that enable mere survival or the ability to shift professions are essential as argued above. Systems of skill development keeping informal sector workers in mind would need to provide the whole range of these skills, from basic literacy and numeracy to technical training. This, in turn, is unlikely to be taken up by the private sector, as the workers concerned are at the bottom rung in the production hierarchy and encounter the



worst terms of trade. In such cases, directed skill programmes, maybe focusing on a group approach, can not only enhance their productivity but also enable them to bargain for better terms.

2.27 Underlying all the issues raised above, however, especially in the case of the informal sector, is a basic question: do the skills that are perceived or found necessary in the informal sector have to be 'formally' provided? In other words, should skill development programmes for all these sets of workers be subject to processes of trainer accreditation and trainee certification? Should these be done at a centralized, nation-wide or state-wide level or should it be decentralized? Is the mode of working of existing systems of informal skill acquisition that might be acquired on the job, by traditional methods and so on sufficient and is it informal processes that need to be strengthened? Apart from recognizing the heterogeneity of the informal sector, an understanding of the role that different segments of the sector play in the economic process is crucial to be able to provide an answer to this. This report puts forward concrete recommendations that deal with the centralisation-decentralisation issue as well as the formal certification versus informal provision, but here we flag off the analytical issues that are important in this discussion.

2.28 The previous section outlined the rationale for skill development in general and noted that it has been known to enhance productivity at the individual, industry and national levels. However, in the case of India, the results of studies that examine this relationship are ambiguous. This ambiguity notwithstanding, there are some reasons why one might argue that formal skill acquisition in the informal sector, whether it is through general education, vocational education or work-place related skill acquisition with certification, can lead to enhanced productivity. First, the informal sector contributes substantially to national output in India and the organizational structures of the informal sector are very important in determining the structure of national output. In a situation where production technologies are changing very rapidly in both the manufacturing and service sectors, entrepreneurs and workers are very often required to adapt to changes and also acquire new skills. With changing technologies, the ability to cope with change is given by the skill base of the economy which has to expand, permitting increase in productivity across the board. Strengthening and widening of the education system as well as provision of skills to be able to adapt and change production systems or switch jobs become essential even for informal sector entrepreneurs and workers. For example, in a range of industries and services that use ICT technologies, it might be broad based computer skills, communication and cognitive skills and knowledge of English that might be needed to access the labour market or even continue to undertake production in specific industries. Although the level at which skills have to be imparted might not be very advanced,

certification becomes very essential in order to ensure minimum levels of skill that have the potential to enhance productivity.

2.29 Second, while the informal sector contributes substantially to national output, the heterogeneity of the sector results in a large range of vintages of technology used and products produced. Even across different market and consumer segments, standardization of quality is essential to ensure effective marketing of the products of the sector and upgradation of skills is essential, along with other inputs, to achieving standardization. The viability of large parts of the informal economy might itself be contingent on the existence and provision of formal, standardised skills.

2.30 *Together, the above two aspects suggest that for many in the informal sector, the acquisition of formal skills might be a necessary condition to gain entry into segments of the labour market that can potentially generate greater income or to be part of viable production systems that can potentially result in better livelihoods. The Commission's analysis in the rest of this report strongly suggests that formal systems of skill imparting are essential for the informal sector.*

2.31 It is reasonably well established that in India, systems of formal skill acquisition, through VET systems, have been hardly successful in helping those in the informal sector to get jobs, even at the very low levels at which they have been provided

2.32 Literature looking at the reasons for low levels of skill formation in developing countries, in examining the shortcomings of state run vocational education and training systems, identify them as being too supply driven and far-removed from market demand. In suggesting reforms in VET systems in developing countries, it is suggested that they should be responding to market demand with a greater role for the private sector and for enterprises. There is an assumption that by virtue of their closer contact with the market, an employer-operated training could be more efficient with private firms and small enterprises at their centre, coordinated through business associations and other such intermediary institutions. To use existing patterns of market demand alone to signal what the training needs of the economy are and also determine the outcomes of training initiatives will, however, bypass most members in the informal sector. Especially with regard to informal economy, the extent and quality of training is constrained by the nature of the economy and level of enterprise development. The largest part of the informal sector consists of workers/enterprises where private initiative would not be forthcoming for skills upgradation, as they are either out of the loop vis-à-vis the formal sector or are involved in ways that provide the cushion against adversity for the formal sector. In these cases, leaving them as they are, forming the base of the low cost economy, will serve

the needs of the organised sector best. Further, even if private actors perceive the need for training, they might be too small in size to garner resources to provide/undertake training.

2.33 There are also a range of activities in the informal sector where there is scope for upgradation where existing markets will not generate conditions conducive for training. These markets can be tapped only once the interventions have been made, requiring the active participation of public agencies. In a sense, therefore, a distinction has to be made between existing patterns of demand and potential demand which does not get expressed or is even perceived as existing. In fact, this typically exists in services like cleaning, housemaids and so on which are often considered low quality, low productivity work. Therefore, despite all their weaknesses, we stress strongly that there is a need for public technical and vocational education establishments or other forms of collective organizations to play a definite role in finding new ways of teaching and learning to make them more relevant to the informal sector's needs. Given the large numerical presence of such self-employed workers, as has been pointed out earlier, this point is especially relevant.

## **Chapter 3**

### **Skill Profile of the Indian Workforce**

3.1 This chapter looks at the overall picture of skill acquisition and development of the unorganised or informal sector in India. In this report, we have used different measures of skill - the first is the level of education of the individual and the other is having undergone any form of vocational training. Vocational training is broadly defined as training that prepares an individual for a specific vocation or occupation. The main objective of vocational education and training is to prepare persons, especially the youth, for the world of work and make them employable for a broad range of occupations in various industries and other economic sectors. VET aims at imparting training to persons in specific fields through providing significant 'hands on' experience in acquiring necessary skills, which make them employable or creates for them opportunities of self-employment. Vocational training may be non-formal or formal. Since acquisition of skills through non-formal training is, by definition unstructured and since it is difficult to have a clear definition of skills, it is very likely the case that the surveys on which our analysis is based underestimate the extent of non-formal skill acquisition, especially in certain sectors such as agriculture. This caveat should be borne in mind while using the results below.

3.2 There has been no special effort on the part of the government to collect data on skills regularly as part of the administrative process. The main source of data at the National level is the Directorate General of Employment and Training (DGE&T), Ministry of Labour. The other sources of data on skills are recent adhoc surveys conducted by the National Sample Survey Organization (NSSO). The NSSO has asked questions relating to possession of skills in surveys of 1993-94, 1999-2000 and 2004-05. Each survey had a different scope, but taken together they give us some idea of the skill profile of the population.

3.3 This chapter bases itself on information regarding the level of marketable skills, both formal and informal, that are possessed by people in India according to NSSO surveys and assessments of how many people are trained through the various formal vocational skill acquisition programmes. It attempts to evaluate the level and kind of skill availability with estimates of the level and nature of demand for skills in the economy. It also looks at the relationship between the level of skills and educational profile of the workforce, that between skill availability, education and poverty.

## **Foundational Requirements: Literacy, Numeracy, Education**

3.4 Education may be treated as the foundation for acquiring formal skills and as also creating generic skills. Education prepares a person to acquire different types of skills and higher forms of cognitive skills may require high levels of education. Thus, general education is highly important in itself. However, we do not see general education as a substitute for skill acquisition since the latter prepares people to carry out specific tasks. But it is important to recognize the complementarity between different levels of education and different types of skills. In other words, some level of education may be seen as foundational for acquiring a specific type of skill. In order to emphasize on skill training it is important to have an idea whether the people have the basic foundational skills in terms of literacy and numeracy as well as absorptive capacity in terms of a particular level of education for a specific type of formal training.

3.5 Thus, level of educational attainment of the population tells us about the generic and foundational skills residing in a population. In 2004-2005 the share of 15 & above population who were illiterate or below primary education comprised of 47 per cent (Table 1). The share was higher among women (58 per cent) and in rural areas where more than 50 per cent of population were illiterate & below primary. While 13 per cent of population had primary education 16 per cent had middle level of education. The share of educated persons i.e. those with secondary & above education was higher at 24 per cent. The share of educated persons is higher as expected among men and in urban areas.

3.6 One can expect a certain pace of cohort-wise improvement, but even among the 15 -29 years population, in 2004-05, educational attainment was still quite low with 31 per cent of population having below primary level of education and 38 per cent population with primary or middle level education only (Table 1).<sup>1</sup>

**Table 1: Educational Attainment of Persons, 2004-2005**

	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
	<b>15 and Above Years</b>								
Illiterate & Below Primary	44.5	67.7	56.0	19.7	35.6	27.1	36.7	58.3	47.2
Primary	15.3	10.8	13.1	12.6	12.1	12.3	14.4	11.2	12.8
Middle	19.1	11.3	15.3	19.4	16.8	18.2	19.2	12.9	16.2
Secondary & Above	21.1	10.2	15.7	48.3	35.6	42.3	29.7	17.6	23.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

<sup>1</sup> There is some improvement over the years. In 1993-94, in the age group 15-29 years, the share of persons educated up to below primary was 45.2 per cent while 32 per cent had passed primary or middle classes.

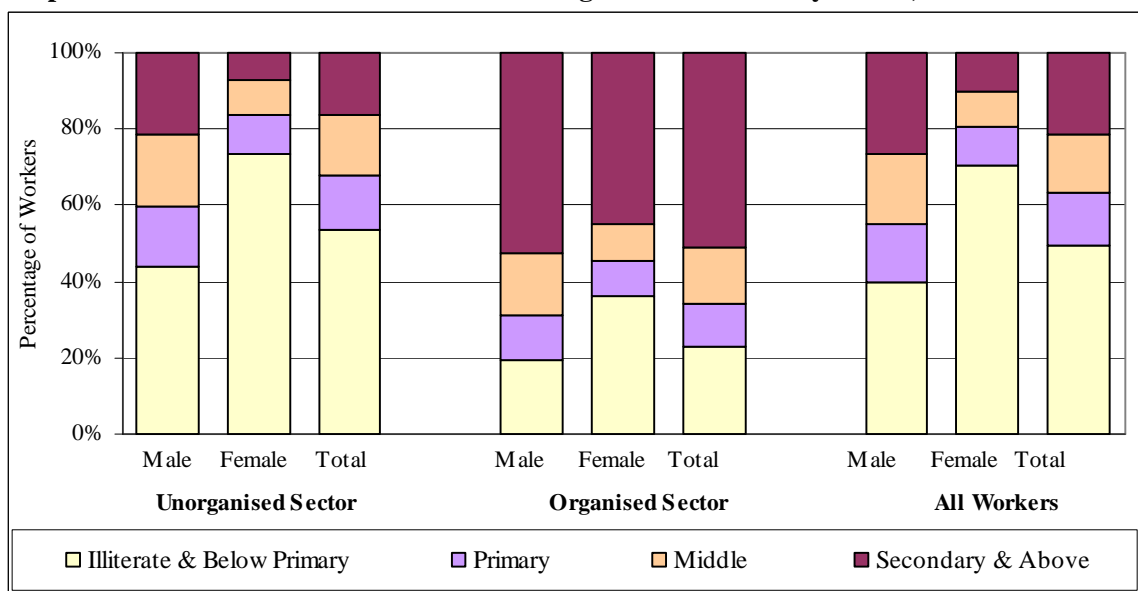
	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>15 -2 9 Years</b>									
Illiterate & Below Primary	27.8	47.7	37.6	13.7	20.1	16.6	23.2	39.6	31.0
Primary & Middle	43.9	33.8	38.9	37.6	33.2	35.6	41.8	33.6	37.9
Secondary	15.4	10.3	12.9	19.1	17.7	18.5	16.6	12.5	14.6
HS & Above	12.9	8.1	10.6	29.6	29.0	29.3	18.4	14.3	16.4
Technical	1.7	1.0	1.4	6.7	4.4	5.7	3.4	2.0	2.7
Total	100	100	100	100	100	100	100	100	100

Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

### Workforce and Educational Attainment

3.7 The Commission has, in its 2007 Report on Working Conditions, analysed the educational status of various groups of workers i.e. workers in the organised and unorganised sectors, formally and informally employed workers, by social and gender status etc. The educational status of workers in the organised and unorganised sector of the economy is given in Graph 1. The Commission, in this Report had taken the view that low levels of education and skills are one of the primary reasons leading to a hierarchy of work relationships, segmentation of the workforce and vulnerability. *Improving the access of all sections of the population to quality education at least up to the secondary level must therefore be highlighted as one of the most urgent developmental requirements.*

**Graph 1: Educational Attainment of Workers aged 15 and above by Sector, 2004-2005**



Source: Computed from unit level data of NSS 61<sup>st</sup> Round, 2004 - 2005, Employment-Unemployment Survey and adjusted for population

### **Skill Base of Population in 1993-1994**

3.8 The National Sample Survey on Employment and Unemployment, 50th Round, 1993-94 canvassed a separate question on skill along with the questions on education and technical education. The question was thus put to the whole population. The question on skill involved asking the individuals to choose from a given list of 31 skills types including an option to choose 'No skill' and a miscellaneous category of 'Others'.<sup>2</sup>

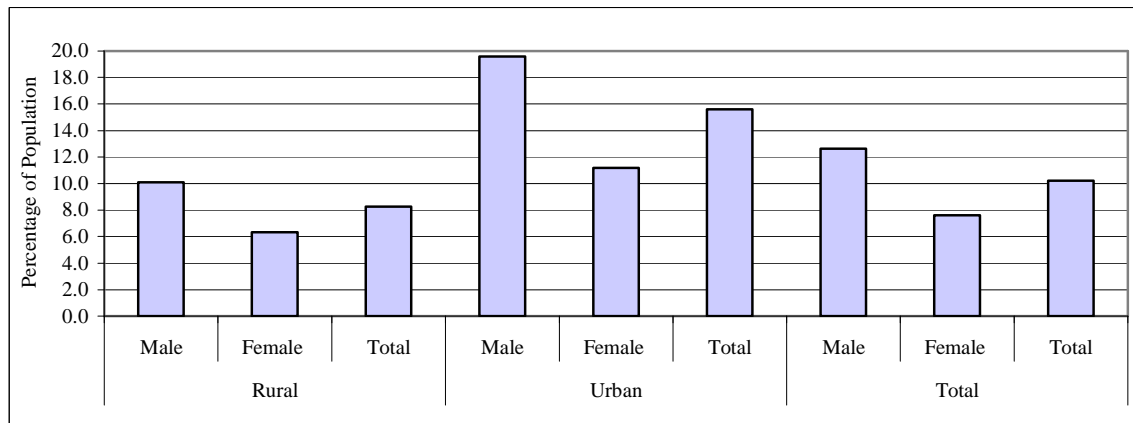
3.9 The above question on the one hand enabled a categorisation of the population into those with skills and those without. On the other hand, it enabled analysis of the distribution of population among select skill types and helped to identify predominant skills. Besides as it pertained to the entire population the skill of all segments of the population could be ascertained. However, the question on skill had two limitations. Firstly, it limited the skills to be chosen from into a select 30 categories, leaving no scope for individuals to specific skills outside the given list, leaving them with no option than to classify it with 'others'. Secondly, the skills asked in 50th round were more in line with traditional skill set, barring certain exceptions, and the skill set associated with the newer trades were not adequately represented. The survey did canvass a separate question on technical/vocational education leading to certificates, diplomas or degrees which could be used to glean information on upper end skill acquisition.

3.10 Analysis of this data reveals that nearly 90 per cent of the total population did not have any skills. Approximately 10 per cent of population reported as having skills (91.2 million). The proportion of skilled workers in the work force was very low (Graph 2). In rural areas, only about 10 per cent of the men (34.2 million) and 6.3 per cent of the women (20.3 million) possessed specific marketable (formal or non-formal) skills. The percentages are reported higher in urban areas, but still quite low -- only 19.6 per cent for men (24.3 million) and 11.2 per cent for women (12.4 million). However, as discussed earlier, these only refer to the lower level skills and not the skills of professional and more qualified workers.

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<sup>2</sup> The various skills included in the list were Stenographer; machineman; fitter, die-maker; electrician; repair of electronic goods; motor vehicle driver; fisherman; miner, quarryman; spinner including charkha operator; weaver; tailor, cutter; carpenter; mason; bricklayer; shoemaker, cobbler; moulder; blacksmith; goldsmith; silversmith; boatman; potter; nurse, midwife; basket maker, wick product maker; toy maker; brick maker; tile maker; bidi maker; book-binder; barber; mud-house builder & thatcher and Others.

**Graph 2: Percentage distribution of persons with marketable skill, 1993-94**



Computed using unit level data of NSS on Employment and Unemployment, 50th Round, Schedule 10, 1993-94

3.11 Among the population with skills, the predominant skill was tailoring (17.1 per cent), followed by weaving (8.2 per cent). Other skills with share above 5 per cent were Motor Vehicle Driver, Stenographer and Bidi maker (Appendix Table A1). Some other skills with a relatively high share of more than 2 per cent of the total were Carpenter, Mason, Mud house builder/thatcher, Washerman and Basket/Wick Product Maker.

3.12 For the purpose of analysis the skills reported in the 50th round, have been classified by us into predominantly formal and predominantly informal skills. The general educational attainment levels of the persons with skills was examined and taken as a guideline to classify the skills. For each skill, the educational distribution of the population was explored to determine the educational level where majority of persons in each skill were there. The skills wherein majority of population were illiterate & below primary educated and primary & middle educated, while low share of population were educated at secondary and above level were considered as skills which were predominantly informal. The skills wherein a substantial proportion of population had even secondary and higher education were classified as predominantly formal. The only exception was nurse and midwives which was classified as predominantly informal for rural and predominantly formal in urban areas.

3.13 Based on the above analysis the skills *considered predominantly informal* are: fisherman; miner, quarryman; spinner including charkha operator; weaver; tailor, cutter; carpenter; mason; bricklayer; shoemaker, cobbler; moulder; blacksmith; goldsmith; silversmith; boatman; potter; midwife (rural); basket maker, wick product maker; toy maker; brick maker; tile maker; bidi maker; book-binder; barber; mud-house builder & thatcher and Others. Skills considered *predominantly formal* are: Stenographer; machineman; fitter, die-maker; electrician; repair of electronic goods; motor vehicle driver and midwife (urban). According to our categorization, in 1993-94,



approximately 2 per cent of the population had predominantly formal skills, while 8.2 per cent of the population had predominantly informal skills. The corresponding shares among the labour force were 4.2 and 15.3 per cent.

**Table 2: Skills of Population in the age group 15 -29, 1993-94**

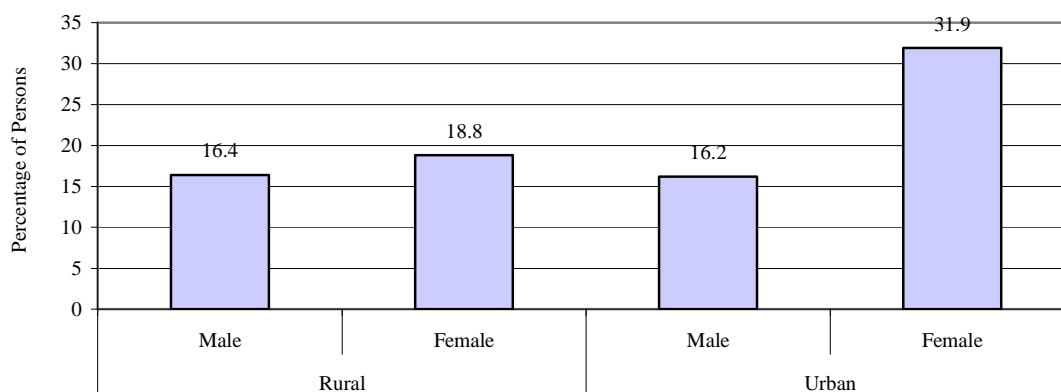
Educational Level	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Formal	3.9	0.5	2.2	9.7	2.7	6.4	5.6	1.1	3.4
Informal	10.6	10.7	10.7	16.3	15.0	15.7	12.3	11.9	12.1
No Skill	85.5	88.8	87.1	74.0	82.3	77.9	82.1	87.0	84.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Computed using unit level data of NSS on Employment and Unemployment, 50th Round, Schedule 10, 1993-94

### **Skill Base of Unemployed, 1999-2000**

3.14 The NSSO Survey on Employment and Unemployment (1999-2000) had sought information on the skill levels of the unemployed only. The results showed that in rural areas, only 16.4 per cent of the male unemployed and 18.8 per cent of female unemployed workers possessed specific marketable skills (Graph 3). The percentage for males unemployed in urban areas was almost identical to that of rural areas. However, a significantly higher proportion of about 32 per cent of the female unemployed workers in the urban areas are reported to possess some skills. Among the rural male unemployed, 17 per cent possessed skills of stenographer, 12 per cent of drivers (vehicle or tractor), 9 per cent of mechanic and 8 per cent of electricians. Of the female unemployed in rural areas, 37 per cent possessed tailoring/cutting skills while 22 per cent could work as stenographers. Among the urban unemployed males, 18 per cent could work as stenographers, 9 per cent as mechanics, 8 per cent as electricians and 7 per cent as drivers. Of the females unemployed in urban areas, 30 per cent could work as stenographers and 22 per cent as tailors. More than 5 per cent of each of the four categories of unemployed had computer programming skills. However, on the whole more than 18 per cent of the unemployed possessed marketable skills.

**Graph 3: Percentage distribution of unemployed by possession of marketable skill, 1999-2000**



Source: NSS 55<sup>th</sup> Round, 1999-2000, Employment-Unemployment Survey. Computed

### **Skills among the Youth in 2004-2005**

3.15 The NSS round 2004-05 collected information about the skill profile of youth (15-29 years population), with enquiries as to whether the individuals had or were undergoing non-formal or formal training. Non-formal training includes both hereditary and other training. When the expertise acquired in a vocation or trade enabled him/her to carry out the trade or occupation of their ancestors over generations, it was considered a 'hereditary' source. Any other 'non-formal' vocational training received through other than the household members to pursue a vocation that might either be hereditary or not was considered to have received the training through 'other' sources. Formal vocational training is the training that took place in educational and training institutions which followed a structured training programme and led to recognized certificates, diplomas or degrees. Formal vocational training had the following characteristics: (i) Structured training programme towards a particular skill, and (ii) Certificate / diploma / degree received have recognition by State / Central Government, Public Sector and other reputed concerns.

3.16 The 15-29 years age-group comprised of 27 per cent of the total population of 1089 million as on 1st January, 2005 which is marginally lower than in 1993-94. It is estimated that on the whole, only 11.5 per cent of those in the age-group 15-29 have received (or were receiving) any training, whether formal or informal. Of those with informal or formal skill training, 33 per cent have received or were receiving formal training accounting for 11 million (Table 3). A total of 3.9 m persons in this age group (about 1 per cent of the total) were receiving formal vocational training while about 2 per cent reported to have received formal vocational training, constituting about 3.8 per cent of the population with formal training (Graph 4).

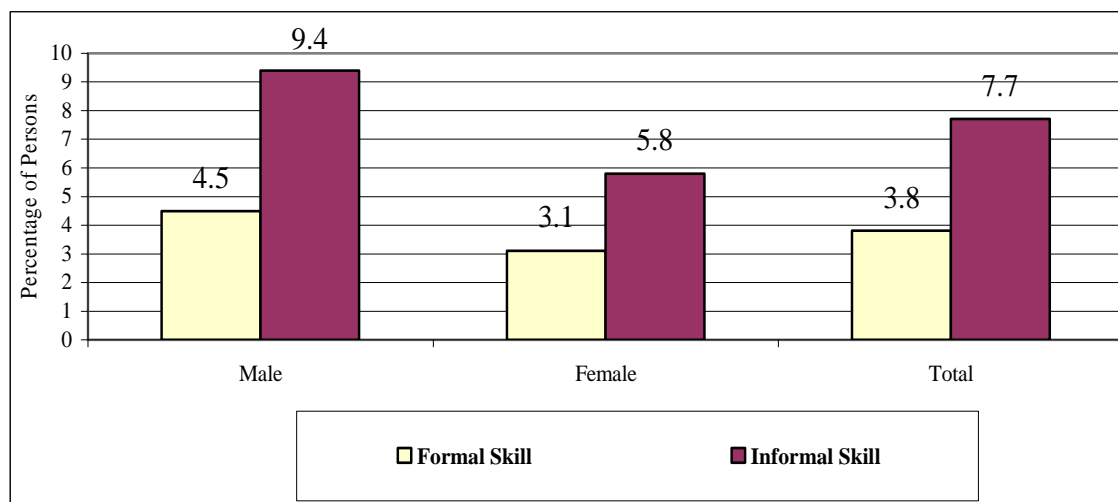
3.17 Gender differences in skill training are quite significant, both among the informally trained as well as the formally trained. A lower proportion of women (8.9 per cent) than men (13.9 per cent) in both the rural and urban areas received vocational training (formal and informal) (Graph 5). Formal skills were confined to 3.1 per cent women in this age group, compared to 4.5 per cent men. Considering youth with informally acquired skills, 5.8 per cent women had informal skills compared to 9.4 per cent men. (Graph 4).<sup>3</sup>

**Table 3: Skill Levels of Population in the age group 15 -29, 2004-05 (in millions)**

Skill	Rural			Urban			Rural + Urban		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Receiving formal training	1.1	0.5	1.5	1.7	0.8	2.4	2.7	1.2	3.9
Received formal training	1.5	1.2	2.7	2.6	1.8	4.4	4.1	3.1	7.1
<b>Formal</b>	2.6	1.7	4.3	4.2	2.6	6.8	6.8	4.3	11.1
Hereditary	5.9	3.1	9.0	1.5	0.7	2.2	7.4	3.8	11.2
Others	3.8	2.9	6.7	3.0	1.3	4.3	6.8	4.3	11.0
<b>Informal</b>	9.6	6.1	15.7	4.6	2.0	6.6	14.2	8.1	22.3
No training	88.3	88.9	177.3	40.4	36.1	76.5	128.7	125.0	253.7
Total	101.4	97.7	199.1	49.4	41.0	90.4	150.8	138.7	289.5

Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

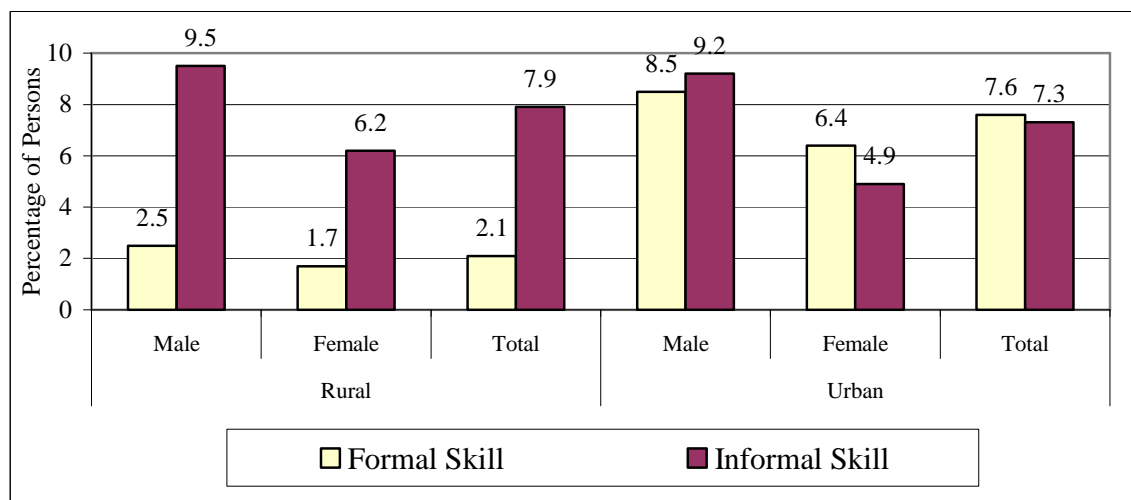
**Graph 4: Percentage of Population with Skills in the age group 15 -29, 2004-05**



Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

<sup>3</sup> In 1993-94, approximately 3.4 per cent of persons in the age group of 15-29 years had predominantly formal skills while 12 per cent of population had predominantly informal skills (Table 2). These cannot be strictly compared with 2004-2005 as the criteria of skill are different.

**Graph 5: Percentage of Population with Skills in the age group 15 -29 by Place of Residence, 2004-05**



Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

3.18 Urban/rural location provides another element of difference. While only 2.1 per cent of the youth population had acquired (or was acquiring) formal skill training in rural areas, in urban areas, this percentage was much higher at 7.3 per cent. This difference, however, does not persist with respect to informal skill acquisition (which is in fact somewhat higher at 7.9 per cent of the youth population in rural areas, compared to 7.3 per cent in urban areas).

3.19 Across states, as well, the pattern of skill acquisition varies quite considerably. We have focused (in Table 4 below) on formal skill acquisition.

3.20 The largest share of youth population with formal skills was in Kerala (15.5 per cent), followed by Maharashtra (8.3 per cent), Tamil Nadu (7.6 per cent), Himachal (5.60 per cent) and Gujarat (4.7 per cent). The lowest incidence of formal training was in Bihar (0.5 per cent).

3.21 Among those trained or undergoing formal training, Maharashtra accounted for 21.7 per cent share. Kerala and Tamil Nadu had more than 10 per cent share in the skilled youth population of population with formal skills. Gujarat and Andhra Pradesh too have a relatively higher share of skilled population in 15 – 29 age groups. Thus, the southern and western states form a continuous zone wherein the share of population with formal skills is relatively higher and together the above six states account for 63 per cent of formally trained people. These are primarily states which either have more industries, a higher level of education, and a higher availability training infrastructure and training capacity both in the public and private sectors.

**Table 4: Percentage of Persons in Age-group 15 – 29 Years with Formal Training in each State, 2004-2005**

State	Per cent of Persons with Formal Training	Percentage of Persons with Formal Training to Total Population
J&K	0.4	2.0
Himachal Pradesh	1.0	5.6
Punjab	2.8	4.1
Uttaranchal	0.8	3.9
Haryana	2.8	4.5
Delhi	1.7	4.1
Rajasthan	2.5	1.7
Uttar Pradesh	6.9	1.7
Bihar	0.8	0.5
Assam	0.8	1.4
West Bengal	6.9	3.2
Jharkhand	0.8	1.3
Orissa	1.9	1.9
Chhatisgarh	2.0	3.5
Madhya Pradesh	3.4	2.2
Gujarat	6.6	4.7
Maharastra	21.7	8.3
Andhra Pradesh	6.6	3.2
Karnataka	4.6	3.1
Kerala	12.2	15.5
Tamil Nadu	11.3	7.6
North-east	0.4	1.3
Union Territories	1.3	12.6
Total	100.0	3.9

Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

### **Acquisition of Formal Training within Unorganised and Organised Sector**

3.22 In India, the discussion on the impact of existing skill delivery systems and what needs to be done hinges critically on the characteristics of the workforce and overwhelming proportion of which is employed in the informal sector of the economy. The estimates of formal/organised and Informal/unorganised sector workers as per 55<sup>th</sup> and 61<sup>st</sup> Round NSSO Surveys show that more than 86 per cent of the employment was in the unorganised sector.

3.23 The Commission has estimated that, based on the definition of unorganised sector as proposed by it, 88 per cent or 135 million workers in this sector were in the age group 15-29. Among the 5.4 million workers who received formal training in this age group, 3.4 million workers, accounting for 63 per cent of total trained people, belonged to the unorganised sector. This shows that the organised sector is, for some reason, unable to absorb a majority of the formally trained youth

who find a place in the unorganised sector. Given the characteristics of the formally trained at this point of time, these individuals undoubtedly form an upper segment of the unorganised workforce.

3.24 Among the informally trained, 17 m were in the unorganised sector, compared to 1.9 m in the organised sector. As a percentage of the workforce, only 2.5 per cent of total unorganised sector workers had formal training while 12.5 per cent had non-formal training. In the organised sector, 11 per cent workers had formal training and another 10.4 per cent had informal training (Table 5). It appears that a range of formal skills can be absorbed both in the upper segment of the unorganised sector as well as the organised sector, and due to reasons of employment, a majority of such workers do get absorbed in the unorganised sector. Later in this chapter we identify the characteristics and spread of skilled workers across the organised and unorganised sectors.

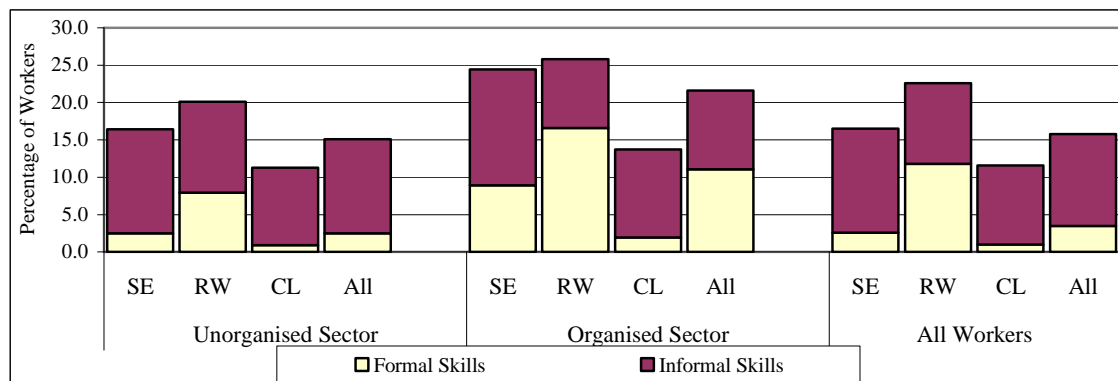
3.25 Among the youth in the age group 15 to 29 years about 53 per cent were workers, 3 per cent were unemployed, 20 per cent attended educational institutions and 24 per cent were non-workers. While 11.5 per cent of all youth received vocational training, about 17 per cent of the unemployed and 16 per cent of the workers did so. Among the workers 22 per cent of the regular workers and 16 per cent of the self employed received training (Graph 6). Across employment status, formal training is highest for regular workers, followed by the self-employed, and lowest among the casually employed. Non-formal training is, however, the highest among the self-employed followed by the regularly employed and then the casually employed. It is noteworthy that the difference in informal training status across activity status is much smaller than formal training status.

**Table 5: Percentage of Workers in Age-group 15 – 29 Years by Status of Vocational Training, Age-group in each Sector of Employment, 2004-2005**

Usual Status	Formal	Non-formal	Total
<b>Male</b>			
Unorganised	2.6	12.9	15.4 (86.9)
Organised	10.1	10.7	20.8 (13.1)
<b>Total</b>	<b>3.6</b>	<b>12.6</b>	<b>16.1</b>
<b>Female</b>			
Unorganised	2.3	11.7	14.03 (91.5)
Organised	14.2	9.4	23.61 (8.5)
<b>Total</b>	<b>3.3</b>	<b>11.5</b>	<b>14.84</b>
<b>Persons</b>			
Unorganised	2.5	12.5	15.0 (88.4)
Organised	11.0	10.4	21.4 (11.6)
<b>Total</b>	<b>3.5</b>	<b>12.2</b>	<b>15.7</b>

Computed from unit level data, NSS 61<sup>st</sup> Round, 2004 - 2005, Employment-Unemployment Survey, adjusted for population.

**Graph 6: Skills of Workers (15 – 29 years) by Employment Status and Sector, 2004-2005**



Se

= Self-employed; RW = Regular Workers; CW = Casual Workers

Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

3.26 One can see that this pattern replicates itself across both the unorganised and organised sectors, though the level of formal as well as overall training is higher in the organised sector.

3.27 The share of those with formal skills across industrial category also indicates that there are certain industries, across both the unorganised and organised sectors, which absorb more formal training. This is evident by the fact that the share of the workers with formal skills is higher in Health & Social Work, Real Estate, Finance, Education and Public Administration (Appendix Table A2). It is however interesting to note that the share of formally trained in a few sectors such as education, public administration and construction is estimated as being higher in the unorganised sector. In the case of manufacturing, although formal skills are more prevalent in the organised sector, workers with any skill are more prevalent in the unorganised sector. The analysis also shows that the share of those with formal skills is negligible in several sectors including agriculture and private households with employed persons.

3.28 Industries in which formal skills are low but the percentage of workforce with any skills is quite high, such as manufacturing, construction, trade, hotels, and community and personal services are clearly those where there is *prima facie* requirement of developing expanded formal training systems.

## **Education and Skill Acquisition**

3.29 If education and training are examined in conjunction a pattern emerges. Non-formal training is higher among those with smaller levels of education (up to middle) and declines thereafter. But the proportion of formally trained persons is higher among the higher educated youth. The incidence of

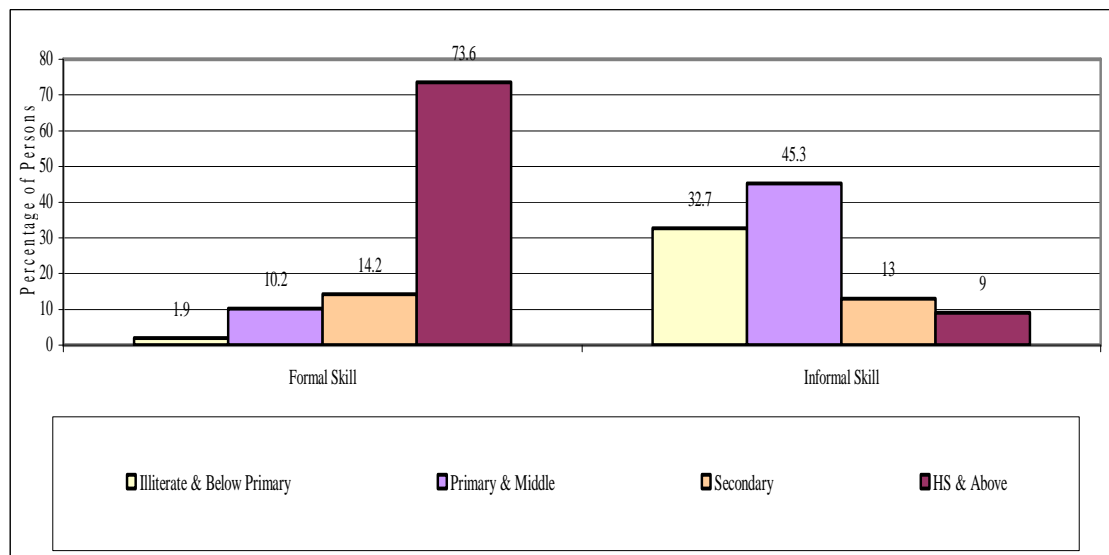
formal skill training was only about 0.2 per cent among the illiterate youth, rising to 17.5 per cent of those with graduate and above formal education had vocational training (Table 6). The difference by gender in this pattern is not high, though men at all levels of education tend to have a higher incidence of training.

**Table 6: Percentage of Persons in 15 – 29 Years with Vocational Training by Educational Attainment Level and Gender, 2004-2005**

Educational Attainment Levels	Males			Females			Persons		
	Formal	Non-formal	Total (With Skill)	Formal	Non-formal	Total (With Skill)	Formal	Non-formal	Total (With Skill)
Illiterate & Below Primary	0.3	10.7	11.0	0.2	6.4	6.7	0.2	8.1	8.3
Primary	0.6	12.2	12.7	0.5	6.7	7.3	0.6	9.7	10.3
Middle	1.2	10.6	11.8	1.5	6.4	8.0	1.3	8.9	10.2
Secondary	4.1	8.1	12.2	3.2	5.0	8.2	3.7	6.8	10.6
HS	9.8	5.6	15.4	7.3	3.5	10.8	8.7	4.7	13.5
Diploma/ Certificate	70.4	2.9	73.3	68.3	2.7	71.0	69.7	2.8	72.5
Graduate & Above	17.5	4.5	22.0	17.4	2.8	20.2	17.5	3.7	21.2
<b>Total</b>	<b>4.5</b>	<b>9.4</b>	<b>13.9</b>	<b>3.1</b>	<b>5.8</b>	<b>8.9</b>	<b>3.8</b>	<b>7.7</b>	<b>11.5</b>

Computed from unit level data, NSS 61<sup>st</sup> Round, 2004 - 2005, Employment Unemployment Survey, adjusted for population.

**Graph 7: Distribution of Population across Educational Attainment Levels by Skill Level in the age group 15 -29, 2004-2005**



Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

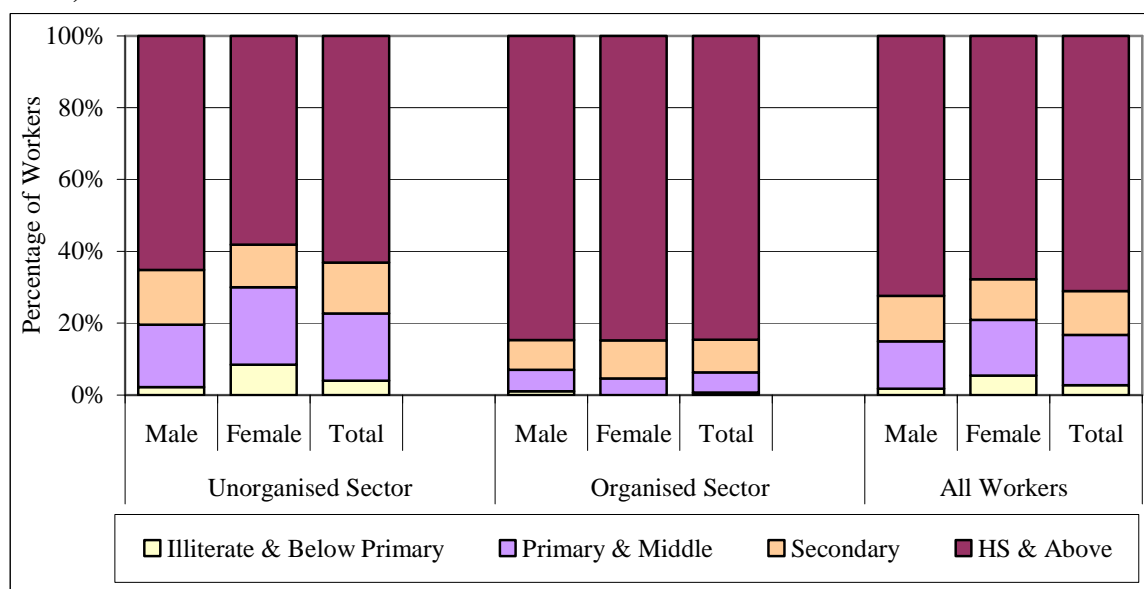
3.30 As Graph 7 shows, 74 per cent of formally trained persons have higher secondary or higher levels of education while on the other hand 78 per cent persons with informal skills have middle or lower level of education. The issue therefore is not that persons with levels of education can not acquire skills, but that our existing training systems are oriented towards providing formal training



only to persons with higher levels of education.<sup>4</sup> Most vocational training programmes, including the ITIs, require at least secondary or higher secondary level of education to be able to enroll in the programme.

3.31 The education and skill relationship prevails even within unorganised and organised sector. But as one might expect, there are some differences. In the organised sector, 94 per cent of formally trained workers had secondary or higher educational levels (Graph 8). But in the unorganised sector, this percentage was lower at 77 per cent i.e. in the unorganised sector slightly less than a quarter of the formally trained workers had middle or lower education. This percentage was higher among women among whom 30 per cent of the formally trained workers have middle or lower education (compared to a figure of about 20 per cent for male workers).

**Graph 8: Educational Attainment Levels of UPSS Workers with Formal Skills (15-29 years) by sector, 2004-2005**



Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

## Trades and Formal Training

3.32 The NSSO provides information regarding the trades for which formal skill training has been provided to the persons in 15 – 29 years age group.

<sup>4</sup> However, in spite of the improvement in the educational profile, there has been a fall in the level of overall skills, during the 11 year period for all categories of education and sex except for higher secondary and above.

3.33 The most sought after field of formal vocational training was ‘computer trades’ (nearly 30 per cent). For men the next most popular trades were electrical and electronic (18.2 per cent), followed by mechanical engineering (12.3 per cent), ‘driving’ (9.4 per cent), ‘civil engineering’ (4.7 per cent), health and paramedical (4.3 per cent) and office and business work’. Among women there was a concentration of vocational training in computers followed by ‘textile related trade’ (22 per cent). The next most popular trades among women are ‘health and paramedical and office and business work. While the overall preferences were not very different among men in rural and urban areas, the demand from rural female was a little different (Table 7). Among female youth in rural areas, the first preference for vocational training was textile and related trades (31 per cent), followed by computer trades (21 per cent), and health and paramedical trades (10 per cent). Among urban women it was computer related trades (39 per cent) followed by textile related (18 per cent) and health and paramedical trades (9 per cent).

**Table 7: Percentage of Persons Receiving/ Received Formal Vocational Training in Age-group 15 – 29 Years by Field of Vocational Training and Sex, 2004-2005**

Field of Vocational Training	Population (15-29 Years)			Workers (15-29 Years)		
	Persons	Male	Female	Unorganised	Organised	Total
Mechanical Engineering	7.9	12.3	1.0	7.5	12.1	9.2
Electrical & Electronic Engineering	12.5	18.2	3.5	12.8	13.8	13.1
Computer Trades	30.0	29.9	30.0	23.5	32.3	26.8
Civil engineering and building construction related works	3.3	4.7	1.2	3.9	<b>2.1</b>	3.3
Chemical Engineering	0.3	0.5	0.0	<b>0.1</b>	<b>0.2</b>	<b>0.1</b>
Leather Related	0.2	0.3	0.1	<b>0.4</b>	<b>0.0</b>	<b>0.2</b>
Textile Related	9.8	1.9	22.2	11.7	4.4	9.0
Catering, nutrition, hotels and restaurant related work	0.9	1.1	0.6	<b>0.6</b>	<b>0.9</b>	0.8
Artisan/ craftsman/ handicraft and cottage based production work	1.9	1.5	2.5	2.8	<b>0.9</b>	2.1
Creative arts/ artists	1.2	0.8	1.9	<b>0.4</b>	<b>1.3</b>	<b>0.8</b>
Agriculture and crop production related skills and food preservation related work	0.6	0.7	0.4	<b>0.6</b>	<b>0.3</b>	<b>0.5</b>
Non-crop based agricultural and other related activities	0.5	0.5	0.5	<b>0.7</b>	<b>0.5</b>	<b>0.6</b>
Health and paramedical services related work	6.4	4.3	9.9	4.9	8.6	6.3
Office and business related work	4.8	4.1	5.8	2.9	4.3	3.4
Driving and motor mechanic work	5.9	9.4	0.5	13.0	5.6	10.3
Beautician, hairdressing & related work	1.7	0.0	4.3	1.7	<b>0.2</b>	1.1
Work related to tour operators/ travel managers	0.1	0.0	0.0	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Photography and related work	0.1	0.2	0.1	<b>0.4</b>	<b>0.0</b>	<b>0.2</b>
Work related to childcare, nutrition, pre-schools and crèche	1.0	0.0	2.6	<b>1.3</b>	<b>1.4</b>	1.3
Journalism, mass communication and media related work	0.3	0.3	0.1	<b>0.1</b>	<b>0.5</b>	<b>0.2</b>
Printing technology related work	0.5	0.6	0.5	<b>0.9</b>	<b>0.5</b>	<b>0.7</b>
Other	9.1	7.9	10.9	9.9	10.2	10.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

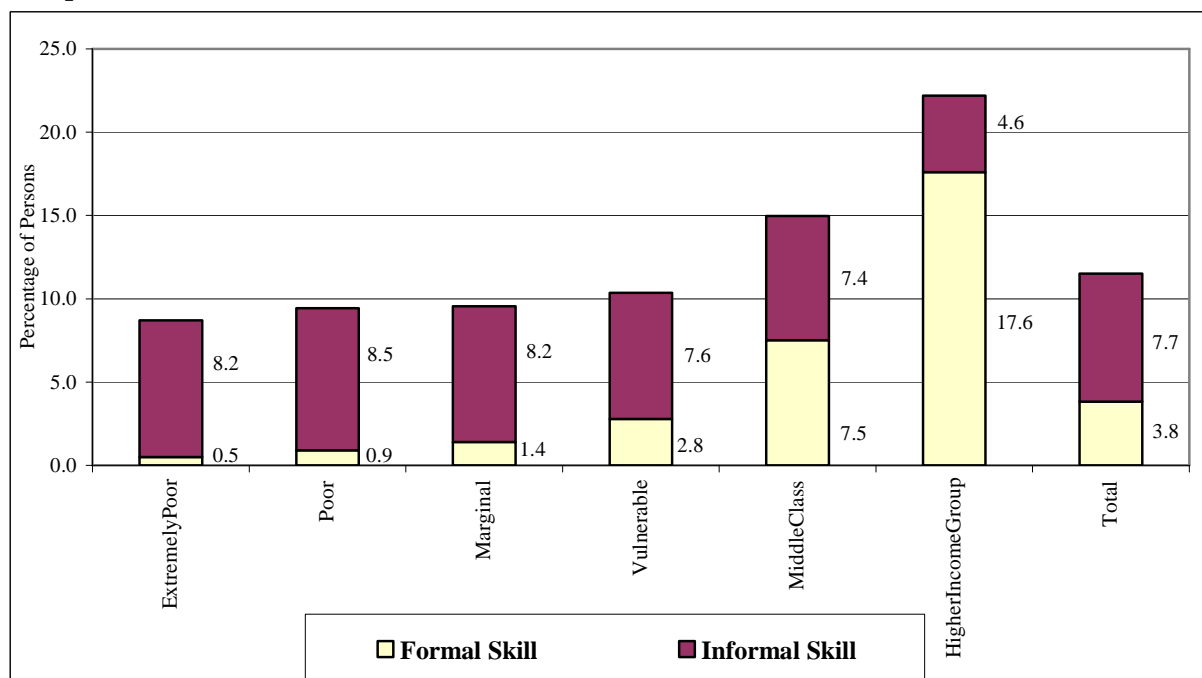
Source: Computed from unit level data of NSS 61<sup>st</sup> Round, 2004 - 2005, Employment-Unemployment Survey and adjusted for population

3.34 An analysis of formal training among workers in the organised and unorganised sectors shows that there are quite a few trades where training is concentrated among both organised and unorganised sector workers (Appendix Table A4). However, there are a handful of trades where the incidence of formal training is higher in the informal sector. These are: textile related trades; handicraft/artisan/cottage based production; and driving and motor mechanic work.

### Poverty and Formal Skills

3.35 Poverty is undoubtedly a significant barrier in acquiring skills. A poor or very poor person has hardly any chance of acquiring formal skills. The incidence of training is fairly high only for the middle and high income groups. Our analysis shows that 7.5 per cent of the middle and 17.6 per cent high income group were formally trained (Graph 9). As one can see from the figure, such a systematic association between income and training status is not the case with non-formal training which is fairly dispersed across the lower income groups. It is quite clear that while, on the one hand, any formal training system has to overcome the barrier posed by the economic status of the potential trainee, on the other hand, possession of informal skills does not provide workers a way out of poverty.

**Graph 9: Percentage of Persons in the age group 15 -29 with Formal Skill in each Poverty Group, 2004-2005**

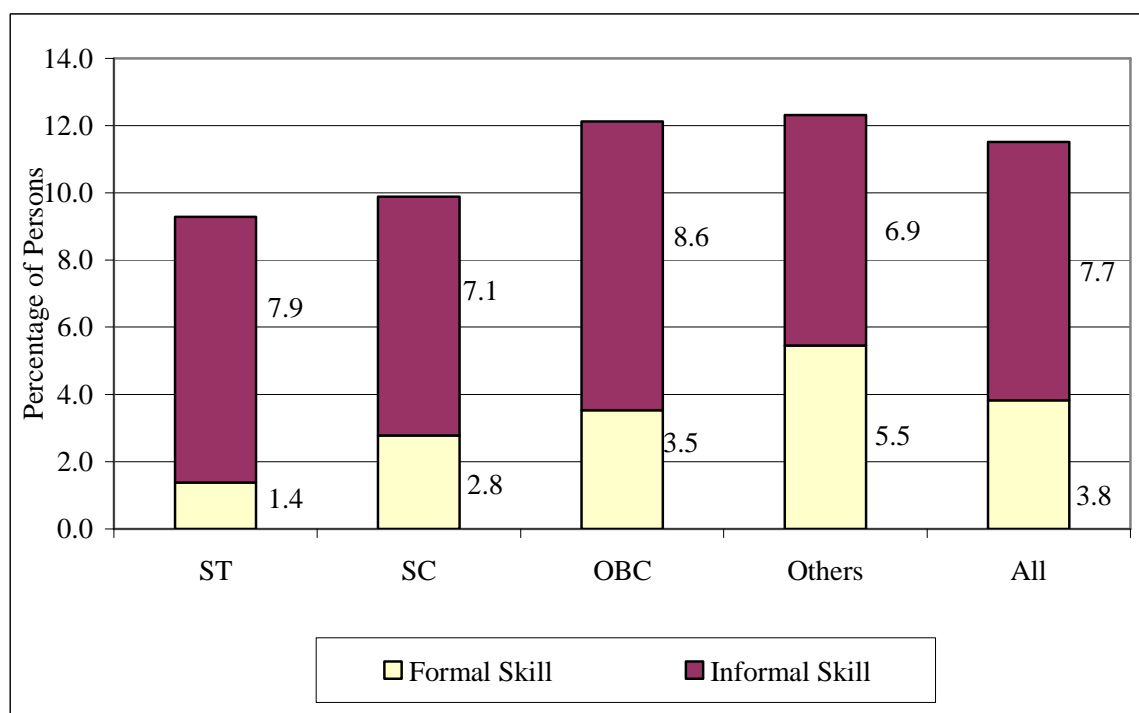


Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

## Social Group and Formal Skills

3.36 The relationship between education levels and skills also vary across social groups. The share of persons with formal skills increases from STs, SCs, OBCs to Others in that order. Indeed it is only the general caste categories for whom the incidence of training is higher than the average of 3.8 per cent (Graph 10). As far as informal skills are concerned, the difference across social groups. As one would expect, these are highest among OBC persons (who form a large proportion of non-agricultural self-employed workers) and relatively the lowest among persons belonging to the general caste groups.

**Graph 10: Percentage of Persons with Skills in the age group 15 -29 for each Social Group, 2004-2005**



Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

## Multivariate Analysis of the Factors Influencing Formal Skills Acquired

3.37 Our analysis above shows quite clearly that the likelihood of being formally trained is higher for those with high levels of education, the economically better off, males, those living in urban areas, and those belonging to upper castes. One may like to know whether each of these factors exercise an independent influence on the probability of being formally trained after accounting for the influence of the other factors. Table A3, given in the appendix, represents the likelihood of certain variables

which impact the formal training by sex, residence education. The reference variables are rural areas in place of residence, females among sex, illiteracy among education and below poverty line among poverty status. We observe that the likelihood that an individual gets formal training is 91 per cent more if he comes from an urban area in comparison to his rural counterparts. Similarly, a male has a greater chance to be trained in comparison to his opposite sex. The likelihood of an educated person being trained is 300 per cent if he is educated up to middle and jumps to 2500 per cent if he is secondary educated as compared to illiterate persons. The social group also has an influence on the chances of being formally trained. The SC, OBC and Others all have a higher likelihood of being formally trained as compared to the STs.

### **Supply of training: Training providers & Types**

3.38 Given the requirement of availability of skilled labour in the context of economic development, it is processes of formal skill acquisition and training for employment that become important and the fact is that developing countries tend to lag behind in making these processes available to their populations. These processes of formal skill acquisition and training come from general educational systems and systems of technical and vocational education and training (TVET) that are linked to specific occupations. It includes learning designed to develop the skills for practising particular occupations, as well as learning designed to prepare for entry or re-entry into the world of work in general. TVET includes both initial vocational training undertaken by young people prior to entering the labour market and continuing vocational training undertaken by adults whilst in work or during periods when they are economically inactive. In other words, it encompasses both initial skills development and various forms of 'Re-skilling' and 'Up-skilling'.

3.39 The field of formal training obtained by the youth is related to the supply of training through the existing institutes of training. The NSS survey also enquires into the institutes from where the formal training was currently being obtained. The Industrial Training Institutes (ITIs) and the Industrial Training Centres (ITCs) provide the largest formal training base for about 7.88 lakh persons. Vocational education schools provided around 2 lakh training places, Institutions affiliated to the UGC and the polytechnics provided about 6.15 lakh training places. About 2.2 lakh persons were being trained in tailoring, embroidery and stitch craft. Other details are provided in the table. Altogether, 39.2 lakh or 3.92 million persons were receiving formal training at the time of the survey (Table 8).

**Table 8: Percentage of Persons Receiving Formal Vocational Training in Age-group 15 – 29 Years by Institute of Training and Sex, 2004-2005**

<b>Institute of Training</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
	<b>(in thousands)</b>			<b>(in per cent)</b>		
ITI/ ITC	704.31	84.60	788.91	26.1	6.9	20.1
Schools with Vocational Course	142.55	58.28	200.83	5.3	4.7	5.1
UGC	287.57	65.66	353.22	10.7	5.3	9.0
Polytechniques	219.27	<b>44.34</b>	<b>263.61</b>	8.1	<b>3.6</b>	<b>6.7</b>
Janshikshan	<b>15.69</b>	<b>25.09</b>	<b>40.78</b>	<b>0.6</b>	<b>2.0</b>	<b>1.0</b>
National Open	<b>2.39</b>	<b>4.80</b>	<b>7.18</b>	<b>0.1</b>	<b>0.4</b>	<b>0.2</b>
Hotel Management	<b>28.35</b>	<b>3.13</b>	<b>31.48</b>	<b>1.1</b>	<b>0.3</b>	<b>0.8</b>
Food Craft, Catering	<b>13.34</b>	<b>0.27</b>	<b>13.60</b>	<b>0.5</b>	<b>0.0</b>	<b>0.3</b>
CSISI/ DIC	<b>12.90</b>	<b>6.73</b>	<b>19.63</b>	<b>0.5</b>	<b>0.5</b>	<b>0.5</b>
Fashion Technology Institutes	<b>0.47</b>	<b>9.56</b>	<b>10.03</b>	<b>0.0</b>	<b>0.8</b>	<b>0.3</b>
Tailoring, Embroidery, Stitch Craft	<b>21.16</b>	201.80	222.96	<b>0.8</b>	16.4	5.7
Nursing Institutes	<b>35.01</b>	59.58	94.59	<b>1.3</b>	4.9	2.4
Physiotherapy, Ophthalmic, Dental Institutes	<b>7.19</b>	<b>10.85</b>	<b>18.05</b>	<b>0.3</b>	<b>0.9</b>	<b>0.5</b>
Institute Diploma Pharmacy	<b>41.81</b>	<b>7.49</b>	49.29	<b>1.5</b>	<b>0.6</b>	1.3
Hospital & Medical Training Institutes	47.75	44.76	92.51	1.8	3.6	2.4
Nursery Teachers' Training Institutes	<b>5.31</b>	<b>25.32</b>	30.63	<b>0.2</b>	<b>2.1</b>	0.8
Training for Agricultural Extension	<b>13.75</b>	<b>4.71</b>	<b>18.46</b>	<b>0.5</b>	<b>0.4</b>	<b>0.5</b>
Carpet Weaving Centres	<b>0.00</b>	<b>4.82</b>	<b>4.82</b>	<b>0.0</b>	<b>0.4</b>	<b>0.1</b>
Handloom, Handicraft, KVIC	<b>0.07</b>	<b>0.63</b>	<b>0.70</b>	<b>0.0</b>	<b>0.1</b>	<b>0.0</b>
Recognised Motor Driving Schools	73.18	<b>0.15</b>	73.33	2.7	<b>0.0</b>	1.9
Institute for Secretariat Practices	<b>5.85</b>	<b>26.27</b>	<b>32.11</b>	<b>0.2</b>	<b>2.1</b>	<b>0.8</b>
Recognised Beautician Schools	<b>0.00</b>	<b>28.97</b>	<b>28.97</b>	<b>0.0</b>	<b>2.4</b>	<b>0.7</b>
Institutes run by Companies, Corporations	91.69	45.81	137.50	3.4	3.7	3.5
Institutes for Journalism, Mass Communication	<b>32.98</b>	<b>2.46</b>	<b>35.44</b>	<b>1.2</b>	<b>0.2</b>	<b>0.9</b>
Other Institutes	895.11	461.32	1356.43	33.2	37.6	34.6
Total (excluding Unspecified)	2697.69	1227.36	3925.05	100.0	100.0	100.0
Total	2709.37	1234.36	3943.73			

Bold figures inadequate sample size below 30

Source: Computed from unit level data of NSS 61<sup>st</sup> Round, 2004 - 2005, Employment-Unemployment Survey and adjusted for population

3.40 We have also analysed the type of institutions through which formally trained workers in the unorganised and organised sectors received training (Appendix Table A4). Here again we notice that the formally trained in both the organised and unorganised sectors have a fairly similar training background. For example, 24.8 per cent of the formally trained in the unorganised sector and 22.4 per cent of the formally trained in the organised sector come from the ITIs. At another end, 4.1 per cent of the formally trained in the unorganised sector and 3.8 per cent of the formally trained in the organised sector come from the vocational schools. There are a few differences, however. A higher proportion of the trained workers in the organised sector are from the UGC institutions and the

polytechnics. On the other hand, a higher proportion of those trained in tailoring, embroidery and stitch craft, and in handloom, handicraft are in the unorganised sector.

3.41 The source of formal training is quite different for young men and women. While about 45 per cent of formally trained men received their training from ITI/ITC, Polytechnics, or UGC recognized institutions, this percentage was only 15.8 for women (Table 8). On the other hand, 27 per cent women received training from tailoring, stitchcraft and embroidery institutes; nursing institutes; medical training institutes and teachers' training institutes.

3.42 Besides NSS, information on supply of training institutes and infrastructure is also available from government sources. The details are provided later in this report. While higher end technical education is provided by IITs, engineering institutions, medical colleges, polytechnics and so on, the ITIs/ITCs have formed the backbone of the system providing lower end formal training. There are around 5465 ITIs/ITCs in India with a seating capacity of about 0.75 million throughout the country. Of this, ITIs/ITCs in the southern states comprised of nearly 45 per cent, with Andhra Pradesh accounting for around 10 per cent and Tamil Nadu around 12 per cent. The Apprenticeship Training Scheme of the government is available to 25.8 lakh workers. Vocational Schools offer places to about 1 million persons while polytechnics offer about 3 lakh places. There are a host of other public and private training providers for formal training.

3.43 MoLE estimates that there are only 2.5 to 3 million vocational education and training places available in the country. As shown earlier, our direct estimates are that about 3.8 m were undergoing formal training at the time of the survey. Given that the duration of such training is often less than a year, we have estimated the annual training capacity to be about 5 million. Out of these, very few places are for those with low levels of education. While, as shown in this chapter, the overall formal skill levels are very low, the large numbers of people who drop out of school, in particular, do not have the necessary education and skills to be productively employed in the economy. This is undoubtedly a very serious challenge to the current growth and development process.

### **Demand for training**

3.44 There is no systematic assessment of the demand for training in the unorganised sector of the economy. Most assessments of such demand have been made by, or on behalf of segments of (organised) industry. These do not go into the overall need to educate and train the predominantly

informal sector labour force in India. However, almost all available reports (reviewed later in this report) pinpoint skill shortages and mismatches between demand and supply.<sup>5</sup>

3.45 We have examined the recent characteristics of the workforce in the organised and unorganised sectors, including characteristics such as average education level, technical education, present incidence of formal and non-formal skills and growth rate of employment (Appendix Table A5). Broadly speaking, at the high end of the workforce, we have segments requiring high levels of general education and/or technical education. Our primary focus is on segments of the workforce which have comparatively low levels of education, and which are currently with or without (formal/non-formal) skills. Among these segments, those with a fairly high incidence of skills (predominantly non-formal) and rapid growth of employment are clearly those on which formal training initiatives would need to focus. Our analysis (based on Table A4, in the appendix) identifies the following trades on a prima facie basis as those in which an intensive effort to expand training would be required: Construction Workers, Stone Cutter; Salesmen, Shop Assistants, Related; Transport Equipment Operators; Tailors, Dress makers, Sewers, Upholsterers, Related; Production, Related (Others); Carpenters, Cabinet, Related Wood; Tobacco Preparers, Tobacco Product Makers; Hair Dresser, Barber, Beautician, Related; House Keeper, Matron, Steward, Cooks, Waiters, Bartenders; Stationary Engines, Equipment Operators, Material Handling, Loaders; Plumber, Welder, Sheet Metal, Structural, Metal Preparers, Erectors; Painting; Arts and Journalists. There are other sectors/segments which are also growing rapidly but where current levels of training are low. Examples of these trades are: Maids, Related House keeping Service (Others); Professional Workers, Others; Building Caretaker, Sweeper, Cleaner, Related. The potential/need of training in these sectors needs to be carefully examined.

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<sup>5</sup> The CII – McKinsey Report ‘Made in India: the next big manufacturing export story’ (October 2004) points out the big mismatch between the needs of the industry and availability of skilled human resources in India. The Reports states that if the Indian manufacturing sector has to grow at about 12 per cent per annum, it will be necessary for the education and training system to produce at least 1.5 million technically skilled people every year. It estimates that the country would need an incremental requirement of about 20 million skilled people by 2015. Similarly, the apparel industry alone requires 2 million skilled workers by 2010 and the present institutional structure is inadequate to meet with the demand. The Retail sector is another sector that reportedly requires large numbers of skilled people. The Retailer’s Association of India has signed an MOU with Ministry of Labour and Employment to train the youth registered with the State Employment Exchanges. An estimate says (reported in Economics Times dated June 19, 2007) that there is an immediate requirement of 1.5 lakh skilled people on the shop floor. A recent Study undertaken by Ernst &Young (Source: Financial Express dated June 8, 2007), reports that ‘by targeting the youth population in India, the Retailers will be investing in the future as they will be able to influence and create loyalty from the start’.



## **Training Targets**

3.46 As discussed earlier in this report, the level of vocational skills in the labour force in India compares poorly with the position in other countries (Table 9). The Commission is of the view that the percentage of formally trained labour force should be raised to about 50 over the next three five year plans.

**Table 9: Proportion of vocationally trained youth in Labour Force International Comparison**

Country	Age Group	Vocationally Trained ( per cent of those in labour force)
<b>India</b>	<b>20-24</b>	<b>5.06</b>
<b>Developing Countries</b>		
Botswana	20-24	22.42
Colombia(1998)	20-29	28.06
Mauritius(1995)	20-24	36.08
Mexico(1998)	20-24	27.58
<b>Developed Countries</b>		
Australia(1998)	20-24	64.11
Canada(1998)	20-24	78.11
France(1997)	20-24	68.57
Germany (1998)	20-24	75.33
Israel(1998)	18-24	81.23
Italy (1997)	20-24	43.88
Japan (1997)	15-24	80.39
Korea Republic (1998)	20-24	95.86
New Zealand (1997)	20-24	63.03
Russian Federation (1998)	20-24	86.89
Singapore (1998)	20-24	66.24
United Kingdom(1998)	20-24	68.46

Note: Only those who have received formal vocational training are shown as trained in this table. To the extent that training and skills in India are acquired through informal methods, including training in the family, the Indian figures are understated.

@ Estimates are based on NSSO Report No. 409 on results of 50th round (1993-94) survey on Employment and Unemployment; Table 20, *Source: Report of the Task Force on Employment Opportunities set up by the Planning Commission*

3.47 In order to work out the annual and plan-wise targets, the Commission has estimated the labour force for the years up to 2025-26 using the last three rounds of the NSS and the population projections prepared for the Planning Commission. In order to provide formal skill training to half the labour force considerable expansion of training would be required. We estimate that during the Eleventh Plan, the annual training capacity would need to about 12.5 million (up from about 5 m currently). A further increase to 16 m would be required during the 12<sup>th</sup> Plan which will go up to 18 m

during the 13<sup>th</sup> Plan. If these targets are achieved, then by the end of the 13<sup>th</sup> Plan, about half the total labour force of 623 million in 2021-22 would acquire formal skills.

3.48 It may be mentioned that the annual increase in the labour force is presently estimated at about 9.2 million which would fall to about 7 m by the end of the 13<sup>th</sup> Plan. The medium term strategy proposed by us would involve provision of training both for new entrants as well as those already in the labour force. As shown elsewhere in this report, the training of workers in the unorganised sector would require flexible delivery models which do not bank on fixed institutional capacity/infrastructure. The permanent training capacity in the system may not need to be raised beyond 10-12 m workers in the medium term.

## **Conclusion**

3.49 Although the Indian economy has experienced rapid growth over the recent period, the low levels of education and formal training of the workforce are a matter of concern. From the point of view of the workers those without education and skills are stuck at the bottom of the labour market with low productivity and earnings. From the point of view of the economy, the lack of skills, the inability of the workers to adapt to changing technological and market conditions, and the existence of low productivity sectors can not but constrain the growth of the economy and lead to a lop sided growth structure in which the majority of workers are not able to participate effectively in the development process.

3.50 The economy has a small organised sector and a large unorganised sector. Workers – waged as well as self-employed in the unorganised sector are worse off in terms of their educational and skill endowments. As the Commission has shown in its other reports, most of the addition to the labour force is likely to be absorbed in the unorganised non-farm sector.

3.51 The formal skill training system in India was created to meet the needs of a growing factory system. It catered to a few trades and persons with secondary or higher education were eligible to undergo training. Over the years, this system itself has not been able to meet the changing needs of the organised sector. Moreover, since the organised sector itself has not shown significant growth in terms of employment, a majority of the trained persons have found employment in the upper segments of the unorganised economy. Formal training, which is accessed by a very percentage of the population currently is directly related to the socio-economic status of the individual. To some extent, the other skill needs of the economy are met through non-formal training, which is relatively more

accessible to persons from lower socio-economic backgrounds but which suffers from a number of limitations. Moreover, even after taking into account the non-formally trained, the prevalence of skilled workers in the Indian economy is still quite small and there are many sectors in which a case for expanded formal training can be made out, but where there is a severe dearth of skills.

3.52 In this report, we have focused on the training needs of workers in the unorganised sector who have low levels of education and low level of formal skills. We are of the view that all entrants in the labour force must be equipped with a minimum level of education which must be gradually extended to secondary level. However, simultaneously efforts have to be made to provide these workers with skill training through modular courses so that a significant part of the labour force can be imbued with formal marketable skills within a reasonable period of time. Unless this is done, this workforce will not be able to move on a trajectory of higher productivity and higher incomes, with deleterious consequences for the development of the economy as a whole.

**Appendix Table A1: Skills across All Population, 1993-94**

Skill	Number of Persons	Per cent to total	Per cent to total with skills
	(in lakhs)	(in per cent)	
<b>Stenographer</b>	<b>43.45</b>	<b>0.49</b>	<b>4.76</b>
Fisherman	21.01	0.23	2.30
Miner, Quarryman	8.36	0.09	0.92
Spinner	16.78	0.19	1.84
<b>Weaver</b>	<b>74.89</b>	<b>0.84</b>	<b>8.21</b>
<b>Tailor</b>	<b>156.04</b>	<b>1.75</b>	<b>17.10</b>
Shoemaker	7.69	0.09	0.84
Carpenter	29.25	0.33	3.21
Mason, Bricklayer	27.89	0.31	3.06
Moulder	2.70	0.03	0.30
Machineman	16.45	0.18	1.80
Fitter, Diemaker	11.43	0.13	1.25
Welder	8.27	0.09	0.91
Blacksmith	9.63	0.11	1.05
Goldsmith	7.81	0.09	0.86
Silversmith	2.36	0.03	0.26
Electrician	16.16	0.18	1.77
Repair Electronic Goods	9.72	0.11	1.06
<b>Motor Vehicle Driver</b>	<b>73.37</b>	<b>0.82</b>	<b>8.04</b>
Boatman	2.16	0.02	0.24
Potter	8.99	0.10	0.99
<i>Nurse, Midwife</i>	4.57	0.05	0.50
Basket, Wick maker	24.38	0.27	2.67
Toy Maker	0.34	0.00	0.04
Brick Maker, Tile maker	11.32	0.13	1.24
<b>Bidi Maker</b>	<b>41.72</b>	<b>0.47</b>	<b>4.57</b>
Book binder	1.25	0.01	0.14
Barber	13.49	0.15	1.48
Mud House builder & thatcher	36.15	0.40	3.96
Others	224.79	2.51	24.64
<b>Total With Skills</b>	<b>912.44</b>	<b>10.20</b>	<b>100.00</b>
<b>No Skills</b>	<b>8029.45</b>	<b>89.80</b>	
<b>Total</b>	<b>8941.89</b>	<b>100.00</b>	

Computed using unit level data of NSS on Employment and Unemployment, 50th Round, Schedule 10, 1993-94

**Appendix Table A2: Skills of Workers (15 – 29 years) across Industry and Sector, 2004-2005**

	Unorganised Sector		Organised Sector		All Workers	
	Formal	Any Skill	Formal	Any Skill	Formal	Any Skill
Agriculture	0.8	11.0	<b>3.5</b>	13.1	0.8	10.9
Mining	<b>0.3</b>	<b>2.1</b>	<b>4.4</b>	<b>19.0</b>	<b>2.3</b>	<b>10.4</b>
Manufacturing	3.7	31.4	8.7	26.2	5.1	29.8
Electricity, Gas, Water Supply	<b>0.0</b>	<b>3.8</b>	<b>20.5</b>	<b>20.8</b>	<b>15.8</b>	<b>16.9</b>
Construction	2.6	14.0	1.8	8.5	2.4	12.7
Trade	4.2	13.1	14.8	26.1	4.7	13.7
Hotels & Restaurants	<b>1.7</b>	12.1	<b>8.6</b>	<b>14.8</b>	2.9	12.6
Transport	7.5	22.5	14.1	22.1	8.4	22.5
Finance	<b>18.9</b>	<b>20.6</b>	23.8	26.4	22.3	24.6
Real estate	19.0	30.6	32.1	34.2	24.2	32.1
Public Administration	<b>15.1</b>	<b>15.1</b>	12.1	14.9	12.1	14.8
Education	23.2	28.1	19.0	22.1	20.9	24.8
Health, Social Work	24.4	42.0	36.6	40.2	29.9	41.2
Community, Personal, Social Service	2.8	28.2	<b>11.5</b>	<b>22.3</b>	3.5	27.7
Private Households with Employed Persons	<b>5.5</b>	<b>8.9</b>	<b>0.0</b>	<b>7.0</b>	<b>5.5</b>	<b>9.0</b>
Total	2.5	15.1	11.1	21.6	3.5	15.8

Bold figures indicate sample size below 30

Computed from unit level data of NSS 61st Round 2004 - 2005, Employment-Unemployment Survey.

**Appendix Table A3: Logit Model: Dependent Variable Vocational Training (Have training Formal and Informal/No training)**

<b>Variable</b>	<b>Coefficient</b>	<b>Odds Ratio</b>
Constant	-7.298	
Sector		
Rural(R)	-	-
Urban	0.648*	1.913
Sex		
Female(R)	-	-
Male	0.133*	1.142
Education		
Illiterate & Below Primary(R)	-	-
Primary & Middle	1.177*	3.244
Secondary & Above	3.229*	25.243
Poverty Status		
Below Poverty Line(R)	-	-
BPL to 2*Poverty Line	0.457*	1.579
More then 2* Poverty Line	1.250*	3.492
Socio-religious		
ST(R)	-	-
SC	0.851*	2.342
OBC	0.684*	1.983
Others	0.529*	1.698

\*- Significant at .01

**Appendix Table A4: Percentage of Workers Receiving/ Received Formal Vocational Training in Age-group 15 – 29 Years by Institute of Training and Sector, 2004-2005**

<b>Institute of Training</b>	<b>Unorganised</b>	<b>Organised</b>	<b>Total</b>
ITI/ ITC	24.8	22.4	23.9
Schools with Vocational Course	4.1	3.8	4.0
UGC	<b>1.9</b>	3.5	2.5
Polytechniques	2.3	5.5	3.5
Janshikshan	<b>0.6</b>	<b>0.5</b>	<b>0.6</b>
National Open	<b>0.1</b>	<b>0.5</b>	<b>0.3</b>
Hotel Management	<b>0.1</b>	<b>0.5</b>	<b>0.3</b>
Food Craft, Catering	<b>0.5</b>	<b>0.3</b>	<b>0.4</b>
CSISI/ DIC	<b>0.6</b>	<b>0.8</b>	<b>0.6</b>
Fashion Technology Institutes	<b>0.1</b>	<b>0.0</b>	<b>0.1</b>
Tailoring, Embroidery, Stitch Craft	9.3	<b>2.6</b>	6.8
Nursing Institutes	<b>1.5</b>	3.7	2.3
Physiotherapy, Ophthalmic, Dental Institutes	<b>0.1</b>	<b>0.4</b>	<b>0.2</b>
Institute Diploma Pharmacy	<b>0.8</b>	<b>0.9</b>	0.8
Hospital & Medical Training Institutes	2.3	3.0	2.6
Nursery Teachers' Training Institutes	<b>1.3</b>	<b>1.9</b>	1.5
Training for Agricultural Extension	<b>1.0</b>	<b>0.3</b>	<b>0.7</b>
Carpet Weaving Centres	<b>0.2</b>	<b>0.0</b>	<b>0.2</b>
Handloom, Handicraft, KVIC	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>
Recognised Motor Driving Schools	10.2	3.4	7.6
Institute for Secretariat Practices	<b>0.5</b>	<b>1.7</b>	0.9
Recognised Beautician Schools	<b>1.0</b>	<b>0.2</b>	<b>0.7</b>
Institutes run by Companies, Corporations	2.8	5.0	3.6
Institutes for Journalism, Mass Communication	<b>0.2</b>	<b>0.5</b>	<b>0.3</b>
Other Institutes	33.7	38.4	35.5
Total	100.0	100.0	100.0

Bold figures indicate sample size below 30

Source: Computed from unit level data of NSS 61<sup>st</sup> Round, 2004 - 2005, Employment-Unemployment Survey and adjusted for population

**Appendix Table A5: Occupation of Workers and Education, Technical Education, Any Skill, Growth Rate and Shares, 2004-2005: Sector Status**

Occupation	Mean Years of Education			Any Technical Education			Any Skill (15-29 years)			Growth Rate 1999-2000 to 2004-2005			Percentage Share		
	US	OS	All	US	OS	All	US	OS	Workers	US	OS	All	US	OS	Total
Economists, Auditors, Social Scientists, Jurists	14.4	14.5	14.5	25.3	21.0	23.1	<b>18.3</b>	<b>32.6</b>	24.5	-0.4	6.3	2.7	0.2	1.3	0.4
Computing Machine Operators	14.2	14.4	14.3	39.6	51.9	48.2	80.5	66.3	71.4	9	12.4	11.3	0.0	0.6	0.1
Mathematicians, Statisticians, Related	<b>14.1</b>	15.4	15.1	<b>47.0</b>	65.8	61.8	<b>51.9</b>	<b>36.0</b>	38.7		13.1	15.5	0.0	0.4	0.1
Stenographers, Typists, Card, Tape Punching Operators	13.4	13.8	13.8	<b>29.0</b>	30.2	30.0	<b>78.9</b>	<b>57.0</b>	<b>61.3</b>	-19.7	-1.5	-5.2	0.0	0.4	0.1
Physicians, Surgeons, Scientific Medical, Para Medical	13.3	14.9	13.8	60.2	76.2	64.8	33.2	<b>46.4</b>	36.8	5.5	-0.5	3.5	0.2	0.6	0.3
Teachers	13.0	14.2	13.9	12.8	22.1	19.3	28.7	22.2	25.3	7.6	5	5.7	0.7	10.8	2.1
Scientists, Architects, Engineers	11.9	14.0	13.7	61.1	75.6	73.6	67.0	32.3	40.5	-9.6	0.4	-1.4	0.1	2.4	0.4
Book Keepers, Cashiers, Related	11.4	13.5	12.8	<b>13.2</b>	10.4	11.2	<b>27.5</b>	<b>45.2</b>	35.9	3.3	4.8	4.4	0.1	1.4	0.3
Insurance, Real Estate, Securities, Business Service Salesmen, Auctioneers	10.6	12.9	11.1	6.1	<b>11.6</b>	7.2	25.1	<b>19.8</b>	23.4	13.6	14.1	13.7	0.3	0.5	0.3
Clerical Related, Village Officials	10.1	11.3	11.1	5.4	5.9	5.9	<b>9.4</b>	18.1	15.7	-5.2	0.2	-0.6	0.3	12.1	1.9
Money Lender Pawn Broker	10.0	<b>8.0</b>	9.9	<b>4.5</b>	<b>0.0</b>	<b>4.5</b>	<b>13.0</b>	<b>0.0</b>	<b>12.5</b>	7.5		5.5	0.0	0.0	0.0
Telephone, Telegraph Operators, Mail Distributors, Related	9.2	10.3	9.9	<b>7.5</b>	<b>5.1</b>	6.0	<b>19.4</b>	<b>6.1</b>	<b>15.0</b>	-0.2	0.2	0.1	0.1	0.8	0.2
Nurses, Other medical, Health Technicians	9.1	11.8	10.9	17.2	38.2	31.0	52.8	55.0	53.9	3.5	3.4	3.4	0.1	1.5	0.3
Elected Legislative Officials	<b>8.5</b>	11.2	10.6	<b>7.4</b>	<b>3.9</b>	<b>4.7</b>	<b>0.0</b>	<b>9.4</b>	<b>8.2</b>		2.8	2.8	0.0	0.1	0.0
Electrical Fitters, Related Electrical, Electronic	8.4	9.7	8.9	13.8	26.5	18.9	42.8	55.3	45.0	6	-0.7	3	0.5	2.1	0.7
Administrative, Managerial, Proprietor	7.8	13.5	8.9	5.7	22.0	8.9	23.8	27.8	24.2	5.8	6.1	5.9	3.2	5.0	3.5
Arts and Journalists	7.5	12.0	8.5	<b>8.0</b>	<b>19.7</b>	10.5	40.5	<b>44.5</b>	41.2	5.6	7.8	6	0.2	0.3	0.2
Transport Communication Supervisors, Transport Conductors, Guards	7.5	11.8	10.1	<b>1.1</b>	<b>7.7</b>	<b>5.1</b>	<b>19.9</b>	<b>4.0</b>	<b>15.8</b>	0.8	-0.5	0	0.1	1.0	0.2
Wholesale/ Retail Trade, Manufacturers Agents, Technical Salesmen, Commercial, Travelers, Sales Worker (Other)	7.1	10.8	7.3	2.4	17.3	2.8	9.7	24.9	10.3	3.3	9.6	3.5	5.6	1.1	5.0
Professional Workers, Others	7.0	9.1	7.5	<b>3.9</b>	<b>15.3</b>	6.4	<b>21.9</b>	<b>34.4</b>	24.3	8.8	8.2	8.7	0.2	0.4	0.3
Jewelry, Precious Metal, Metal Engravers	6.4	6.8	6.5	<b>1.5</b>	<b>0.5</b>	<b>1.2</b>	37.0	72.1	49.3	1.6	8.2	3.4	0.3	0.9	0.4
Machine Fitters, Machine Assemblies, Precision Instrument Makers	6.2	10.0	7.3	5.7	34.4	13.8	36.0	52.9	38.7	2.3	-2.6	0.8	0.7	1.8	0.9
Plumber, Welder, Sheet Metal, Structural, Metal Preparers, Erectors	6.0	7.3	6.4	<b>4.4</b>	13.6	7.1	36.8	52.9	39.3	8.7	-3.2	4.3	0.3	0.8	0.4
Broadcasting Station, Sound Equipment Operator, Cinema Projectionists	5.5	<b>9.5</b>	6.5	<b>0.2</b>	<b>11.7</b>	<b>2.9</b>	<b>14.9</b>	<b>50.8</b>	<b>17.6</b>	-3.4		-2.7	0.0	0.0	0.0
Salesmen, Shop Assistants, Related	5.5	9.8	5.8	1.4	<b>7.0</b>	1.7	6.5	<b>16.9</b>	7.2	11.6	2.8	10.9	2.9	1.2	2.6
Tailors, Dress makers, Sewers, Upholsterers, Related	5.5	7.0	5.7	2.6	<b>1.8</b>	2.5	44.1	45.1	44.3	8.4	24.4	10	2.0	2.2	2.0
Painting	5.3	5.6	5.3	<b>1.5</b>	<b>3.0</b>	<b>1.7</b>	21.6	<b>13.8</b>	20.0	6.5	4	6.1	0.3	0.3	0.3



*Draft for Feedback Only. Please do not Quote. 29<sup>th</sup> August 2008*

Occupation	Mean Years of Education			Any Technical Education			Any Skill (15-29 years)			Growth Rate 1999-2000 to 2004-2005			Percentage Share		
	US	OS	All	US	OS	All	US	OS	Workers	US	OS	All	US	OS	Total
Protective Service Worker, Service Worker	5.3	8.8	7.9	<b>0.5</b>	2.7	2.2	<b>6.4</b>	13.3	10.8	-1.4	1.8	0.9	0.2	4.4	0.8
Hair Dresser, Barber, Beautician, Related	4.9	<b>4.6</b>	4.9	<b>1.9</b>	<b>0.0</b>	<b>1.8</b>	43.5	<b>0.0</b>	43.1	5.3		5.3	0.6	0.0	0.5
Transport Equipment Operators	4.9	7.5	5.3	1.6	7.6	2.4	27.4	31.0	27.7	6.5	0.7	5.6	2.6	2.6	2.6
Carpenters, Cabinet, Related Wood	4.9	5.3	4.9	<b>0.9</b>	<b>3.4</b>	<b>1.0</b>	40.5	<b>44.7</b>	40.7	5.8	-2.7	5.3	0.9	0.3	0.8
Hotel, Restaurant Keepers	4.6	9.3	4.7	<b>0.4</b>	<b>0.0</b>	<b>0.4</b>	11.6	<b>49.0</b>	12.4	4.4	-1.4	4.2	0.5	0.1	0.4
Blacksmith, Tool Makers Machine Tool Operators	4.4	9.1	5.8	<b>2.0</b>	16.4	6.2	29.3	<b>32.1</b>	30.0	3.9	-4.3	1.1	0.3	0.8	0.4
Food Beverage Processors	4.1	4.9	4.3	<b>1.0</b>	<b>1.3</b>	<b>1.1</b>	18.3	<b>4.8</b>	15.4	-0.9	0.1	-0.7	0.6	0.9	0.6
Metal, Wood, Chemical Preparers, Processors, Paper Makers	4.0	7.6	5.8	<b>1.7</b>	14.0	7.8	<b>15.3</b>	<b>18.6</b>	17.0	-3.4	-3.3	-3.3	0.2	1.0	0.3
Production, Related (Others)	4.0	6.5	4.8	<b>1.3</b>	6.6	3.1	15.8	20.7	17.6	5	10.1	6.5	1.0	3.2	1.3
Tanners, Fell Mongers, Pelt Dressers, Shoemakers, Leather Goods Makers	4.0	6.5	4.9	<b>1.4</b>	<b>0.2</b>	<b>1.0</b>	25.3	<b>9.6</b>	18.2	0.2	18	4.5	0.2	0.7	0.3
House Keeper, Matron, Steward, Cooks, Waiters, Bartenders	4.0	5.1	4.3	<b>0.9</b>	<b>3.2</b>	<b>1.6</b>	13.6	<b>10.3</b>	12.6	7.4	3.7	6.1	0.5	1.4	0.6
Stationary Engines, Equipment Operators, Material Handling, Loaders	3.7	4.9	4.2	<b>0.5</b>	3.1	1.6	7.8	13.0	9.8	9.5	8.6	9.1	0.5	2.7	0.8
Spinners, Weavers, Knitting, Related	3.6	5.5	4.1	<b>0.4</b>	<b>1.4</b>	0.7	36.3	9.6	28.4	2.4	1.8	2.3	1.2	2.7	1.4
Construction Workers, Stone Cutter	3.4	3.4	3.4	0.4	<b>0.6</b>	0.4	11.7	9.8	11.3	9.6	8.6	9.4	3.1	6.9	3.6
Agriculture & Allied	2.9	4.2	2.9	0.4	2.5	0.5	10.9	13.3	11.0	2	1.5	2	63.6	10.0	56.3
Labourers (Others)	2.7	3.0	2.8	<b>0.5</b>	<b>0.2</b>	0.4	6.1	<b>3.5</b>	5.3	0.2	-1.1	-0.3	2.0	6.0	2.5
Building Caretaker, Sweeper, Cleaner, Related	<b>2.6</b>	<b>3.5</b>	<b>3.2</b>	<b>0.0</b>	<b>0.3</b>	<b>0.2</b>	<b>1.2</b>	<b>5.0</b>	<b>3.3</b>	<b>5.2</b>	<b>1.8</b>	<b>3</b>	<b>0.2</b>	<b>2.4</b>	<b>0.5</b>
Glass Formers, Potters, Related	2.6	3.5	2.8	<b>0.1</b>	<b>2.0</b>	<b>0.6</b>	18.8	<b>11.3</b>	16.4	2.4	8.3	3.7	0.3	0.6	0.3
Launderers, Dry Cleaners, Pressers	2.5	<b>6.0</b>	2.6	<b>0.9</b>	<b>2.9</b>	<b>0.9</b>	25.2	<b>0.0</b>	24.7	-1.1		-1	0.5	0.1	0.5
Tobacco Preparers, Tobacco Product Makers	2.1	2.1	2.1	<b>0.4</b>	<b>0.0</b>	<b>0.3</b>	27.2	37.7	29.2	0.2	6.4	1.2	0.9	1.3	1.0
Maids, Related House keeping Service (Others)	<b>1.9</b>	<b>5.6</b>	<b>2.3</b>	<b>0.2</b>	<b>6.1</b>	<b>0.8</b>	<b>4.5</b>	<b>34.7</b>	<b>6.1</b>	<b>9.1</b>	<b>-4</b>	<b>7.2</b>	<b>0.9</b>	<b>0.6</b>	<b>0.9</b>
Miners, Quarrymen, Drillers, Related	1.7	3.9	3.0	<b>0.1</b>	<b>4.3</b>	<b>2.5</b>	<b>2.9</b>	<b>21.5</b>	<b>11.2</b>	3.9	2.6	3.2	0.1	1.2	0.3
All	3.8	8.5	4.5	1.4	11.5	2.8	15.1	21.6	15.8	2.9	2.9	2.9	100.0	100.0	100.0

**Bold** denotes inadequate sample size (below 30). Unorganised Sector (US); Organised Sector (OS)

**Grey** denotes occupations which have low mean years of education (less than middle - 8 years); low technical education (less than 3 per cent); presence of some skills; High Growth rate (above 5 per cent) in Unorganised Sector

**Peach** denotes occupations which have low mean years of education (less than middle - 8 years); low/absence of technical education (less than 3 per cent); absence of skills; High Growth rate (above 5 per cent) in Unorganised Sector.

## **Chapter 4**

### **International Experiences of Skill Development and Training**

4.1 This chapter attempts to review international experiences of Skill Development and Training Delivery, keeping in view the issues that are important from a developing country context and more specifically from that of enterprises and workers in the unorganised sector.

4.2 In Chapter 3, aggregate information on the number of people who had vocational training as a percentage of the population in the age group 20-24 showed (Table 9) that India, with a percentage of 5.06 per cent fares poorly even in comparison to some other developing countries such as Botswana, Colombia, Mauritius and Mexico, where the percentages were significantly above 20 per cent. In advanced countries, of course, the figures are mostly above 60 per cent, with the Russian Federation and the Republic of Korea having a staggering 87 per cent and 96 per cent of its population in the 20-24 age groups having undergone vocational training.

4.3 The question that becomes important is whether it is possible for India to drastically change this situation with regard to skill development and training and whether international experiences can provide guidelines on directions to be taken and pathways to be planned. This chapter tries to analytically review international experiences of skill development, in general and in the informal sector in different countries.

4.4 As pointed out in Chapter 1, the key considerations are the principles that dictate systems of training and skill development i.e., whether made available through the educational system or TVET systems, whether supply-driven or market demand led, whether training for employment is confined to pre-employment training or also includes a process of continuous learning and re-skilling; who delivers the training and where; and modes of financing the programmes as well as incentive systems.

4.5 While the review below will examine different systems on the basis of the criteria mentioned, here we first briefly review the trajectory of skill development in the case of countries that have made the transition to high levels of development, both developed as well as developing.

4.6 In a typology developed by the ADB (Asian Development Bank: Improving Technical Education and Vocational Training Strategies for Asia, 2004) to discuss the relationship between skill development and training and levels of economic development, it has been suggested that levels of economic development roughly corresponded to certain levels of development of education and training. In the first stages, when the primary sector is predominant, manufacturing is characterized by labour-intensive activities and low value added production and competitiveness derives from low costs, basic education and adult education are priorities, and higher education is limited with the gradual development of a basic skills formation system for blue-collar workers. At the next stage, when the secondary sector becomes predominant, manufactured good and service exports are high and production concentrates on high value goods and services, with competitiveness based on high-technology, high value added goods , universal secondary education, worker upgrading, and technician training became priorities. More specifically, apart from the universalisation of secondary education, there is a deepening of vocational and technical education at the post secondary levels, a widening of the idea of skills to include teamwork and communication and there is an increase in the incidence of enterprise level or on-the-job training. In the final stage, characterized by innovation-driven growth, leading towards the knowledge economy, there is a need to increase the rate of innovation, adaptation and the commercial development of new technologies. At this stage, higher education with science based learning, becomes the priority, along with research and development.

4.7 Typologies such as the one presented above (ADB 2004) help to separate the different elements of skill upgradation corresponding to different structures of production and to suggest that as countries move from a low skill base to a high skill one, the skill-mix also tends to change and that different levels of education and different types of training (with location being important) have to both be elements of skill development strategies for all levels of skills. However, the pathways that have been followed by countries that have managed the transition to high levels of skills and which have in turn translated into high levels of development have been very different and this has been on the basis of the institutional structure that has been put in place to impart these different levels of education and types of skills in the economies.

4.8 The pathways followed by most of the OECD countries, consisting of broadening and universalizing access to education and developing skill development systems that were variedly market led and state directed and also differently emphasized training in institutions and enterprise based training, resulted in outcomes that were spread across long periods of time. The distinctly different paths followed by the East Asian countries and Japan, which achieved very high levels of education and skill development in a very short period of time, brought out the importance of

conscious targeting, directed investments and strong regulation in skill development programmes. The experiences reviewed below have attempted to bring out the salient aspects of these different paths adopted.

4.9 Broadly, it is useful to distinguish between public and private institutions for skill development and also on the basis of where the skilling process is located, i.e., within the enterprise/firm, in educational institutions and in institutions outside the firm. The Study group set for the Second National Commission on Labour has examined various systems of skill training in other countries. The training systems of various countries are found to be broadly of three types - “cooperative,” “enterprise based” and “state-driven.” The State Driven System can be further demand driven and supply driven. These have been summarised in the table 4.1 below.

**Table 4.1: Training Systems**

<b>System</b>	<b>Countries</b>	<b>Main Feature/s</b>
“Co-operative”	Austria, Germany , Switzerland, and many countries in Latin America counties	Pressures to undertake training resulting from strong co-operation amongst employers’ organisations, the state and trade unions
“Enterprise-based” - Low labour turnover	Japan	Low labour mobility, lifetime employment for many staff, ‘longtermism’ arising from absence of stock market pressure, wage system based on seniority and enterprise-based trade unions
- Voluntarist	The United Kingdom, United States	Few institutional pressures on firms to provide training
“State- driven” a) Demand-led	Hong Kong , Malaysia, Republic of Korea Singapore, Taiwan, China	State plays a leading role in coordinating the demand for and supply of skills, Operates in an open and competitive economic environment
b) Supply-led	Economies in transition, many developing countries especially in Asia and Africa	Government takes on a prime responsibility for formal sector training in training institutes, Little or no pressure on employers to train

Source: Second National Commission on Labour: World Development Report, 1998-99

4.10 In the **cooperative system**, there is no single institution responsible for the planning and delivery of the training system. Instead, the employers’ organisation and trade unions cooperate strongly for producing the desired result. Germany is one of the successful examples of this system.

4.11 In the **enterprise based system** as prevalent in Japan, the educational system provides a foundation of basic skills, which is then built upon by employers through intensive off and on-the-job training. While vocational and technical schools provide some initial training, the bulk of skills

development is provided and financed by employers. Employees with few industry-specific skills on entry are moulded by the system into a highly skilled workforce that is very adaptable to change. As the table shows, this kind of system has come into existence in the context of very low turnover of the workforce, labour having long-term commitment to the enterprise and enterprises wanting to invest in the labour force in turn.

4.12 **State-driven systems** can be divided into two types. Education and training systems of the demand-led type, prevalent in the East and South East Asian economies, have to respond to rapid changes in the demand for skills. In this, the governments have played a key role, especially in meeting the demand for higher level skills. In the State-driven system of the supply-led type, which was operational in many of the centrally planned economies of Eastern Europe and the erstwhile USSR, the training system was sustained through government financing. It puts little or no pressure on employers to train with the government taking on the prime responsibility of running training institutes.

4.13 The **Asian Development Bank** in its Report<sup>6</sup> classifies systems of skill formation according to training location. According to the report, training can be in schools as part of the formal education; in non-formal training centres outside the school system and within enterprises as discussed below:

### **School-based Vocational Education and Training**

4.14 Comprehensive High Schools or Diversified Secondary Education: Vocational skills are developed within secondary schools, typically called comprehensive or diversified secondary schools, as in the United States and Sweden. Students take practical courses according to their interest and aptitude in one single school attended by all students from a given geographical area, regardless of their career interests.

4.15 Vocational and Technical Schools: In the French model, vocational education takes place mainly in vocational or technical schools at the secondary level. These institutions run parallel to academic schools that prepare students for higher education. In France, after the age of 13 students are tracked into different types of schools. They may attend vocational schools for 2 or 3 years and earn a Vocational Proficiency Certificate or Vocational Education Certificate; a Vocational Baccalaureate may be earned after another 2 more years. These schools serve two purposes: (a) to

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<sup>6</sup> ADB, 2004. Improving Technical Education and Vocational Training , Strategies for Asia, Asian Development Bank,

prepare youth to work in skilled jobs, and (b) to cater to students that do not want to pursue long academic studies. A variant is the technical school (lycee technique), which combines academic study with technology. The main difference of these from vocational schools is the greater attention to academic subjects, and the less attention to specialised subjects. Graduates are usually trained for supervisory roles in factories or for highly skilled occupations, e.g. electronics and drafting. There are several cases of success with this approach in Asian countries where industrialisation has been rapid, such as in the Republic of Korea and in Taipei, China.<sup>7</sup>

### **Non-Formal Training Centres**

4.16 *Vocational Training Institutes (or Technical Training Institutes)*: these are typically operated by ministries of labour (or community development), and are outside the school system. Training is thus provided for youth who have completed their formal education, and certificates, if conferred, are not recognised as from of the formal school system. The training can be variable in length - from modular courses / to short duration courses / to courses lasting even 2-to-3 years. These training centres have the advantage of being focused on one purpose – ‘training for work’, and in theory can modify the content of training programs more quickly than schools in response to changes in the labour market. The clientele may also be more serious about training, having completed their formal education and with reduced aspirations for moving up the educational ladder.<sup>8</sup>

4.17 *The Latin American Model*: Training in most Latin American countries (main exceptions are Argentina and Mexico, which use vocational schools within the education system) is based at training centres, and are designed for both working adults and young school leavers. The various training centres are run (independently of the education system) by autonomous training agencies that maintain close links with industry through strong representation of employers on their governing bodies. Also significant is their financing, which is based on a payroll tax (about 1 per cent) paid by employers. These organisational features have enabled them to provide high quality training and respond dynamically and flexibly to changing demands of the labour market. The systems are separate from academic schools, thereby sheltering ‘training-for-trades’ from the prejudices against manual occupations and the attractions of higher education. The training levy provides financial stability and a long-range planning horizon. These financial and institutional arrangements have allowed the institutions to survive economic crises and fend off political interference.

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<sup>7</sup> *ibid.*,p.56

<sup>8</sup> *ibid.*,p.57

## **Apprenticeship Training - (by formal sector enterprises)**

4.18 *The German Model:* This model draws heavily from apprenticeship systems that developed in Europe from the middle Ages through occupational guilds. The apprentice offers labour to a master craftsman in exchange for a small wage and on-the-job training. Because of its direct links with the labour market, the apprenticeship approach has proved to be quite efficient at transferring skills, especially when technology is stable or changing slowly. It is also largely self-financing and does not rely on public financing. At its most sophisticated, it has become complex and structured (as in Germany). The German system of skills training, the famous “**dual apprenticeship system**”, combines two basic models: centre-based training and enterprise-based training. The system is based on a longstanding tradition of apprenticeship that is firmly rooted in German corporate culture. Theoretical training for about one day per week is provided by public vocational training centres and practical training is provided within enterprises about four days per week. Apprentices sign an employment contract with an enterprise, which gives them on average 3½ years of formal training under the supervision of a certified master. Apprentices receive an allowance fixed by collective agreement for each branch of training. The graduates receive a nationally recognized diploma.

4.19 As mentioned earlier, while a large part of this training is enterprise based, it has evolved in response to co-operative behaviour and close co ordination among employers’ associations, labour unions and public administration.<sup>9</sup>

4.20 While these are the overall categories that can be seen in different countries, these systems cater mostly to formal sector enterprises. Below, we review the systems that have been tried out in the case of the informal sector.

## **Training Systems for the Informal Sector**

4.21 *Traditional (unregulated) Apprenticeship Training:* Unregulated apprenticeship training has evolved in the informal sector in many countries over decades. In fact, in many countries it may be the predominant form of training (e.g. in Sub-Saharan Africa and the Indian sub-continent). Typically, a written or oral agreement is concluded between a master craftsman working in the informal economy and parents or guardians, with the objective of the apprentice acquiring a set of relevant, practical skills. Sometimes, the master receives a training fee, or the apprentice must earn the training in exchange for work or reduced wages. Training consists primarily of ‘**observing and**

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<sup>9</sup> *ibid.*,p.59

imitating the master'. The apprenticeship may last for several years and is product specific. Traditional apprenticeship has several advantages over conventional training methods, but also has disadvantages, as seen in Table 4.2.<sup>10</sup>

**Table 4.2: Advantages / Disadvantages of unregulated Apprenticeship**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>- practical in orientation,</li> <li>- self-regulating and self-financing,</li> <li>- caters to individuals who lack the educational requirements for formal training,</li> <li>- serves important target groups (rural populations and urban poor), and</li> <li>- is generally cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>- gender bias (females rarely participate),</li> <li>- exclusion of applicants from very poor households,</li> <li>- perpetuation of traditional technologies, and</li> <li>- a lack of standards and quality assurance</li> </ul>

4.22 Nigeria, through its National Open Apprenticeship Scheme (NOAS), has given major recognition to the role of the traditional apprenticeship system. The scheme involves the state encouraging employers, including those in the informal sector, to take on apprentices beyond their essential needs. Allowances are paid both to the trainee and to the master, and there is a system for monitoring the quality of the training. What makes this system particularly interesting is that it has the effect in the informal sector of producing state apprentices and "traditional" apprentices within the same workshop. For one group the master is being paid by the state, while the others pay for themselves and make their own traditional arrangements. The duration of training for the new apprentices is less than the customary group, and the state apprentices are encouraged to attend some off-the-job training on Saturdays. This system has not been dependent upon full-time institutional training, but on expanding access to training within industry -- whether formal or informal.

4.23 Bangladesh's *Underprivileged Children's Education Program (UCEP)*<sup>11</sup>, established in the early 1970s, is an innovative programme designed for the informal sector that seeks to raise the living standards of poor urban children and their families. It focuses on the target group of working street children and aims to provide them with skills to enhance their employability in the local labour market, often in the informal sector. UCEP is conducted in 30 general schools for non-formal basic education working on three shifts per day in four major cities of Bangladesh. Total enrolments are about 20,000. Skill training is given in three training institutions working on two shifts each, training a total of 1,400 trainees. UCEP has extraordinarily high completion and employment rates for its graduates, both averaging about 95 per cent.

<sup>10</sup> *ibid.*p.61

<sup>11</sup> World Bank Report 2001



4.24 UCEP's program can be divided into three stages - (a) first stage is accelerated non-formal basic education starting at age 10 or 11. About half of the graduates from the non-formal basic education program are admitted into vocational training, (b) second stage consists of fundamental skills training which may vary in length from six months to two years, and (c) third stage is placement in employment and follow-up on the job.

4.25 Factors that have contributed to making UCEP successful include:

- providing students with a solid base of general education;
- focusing on the proper target group, those who intend to enter the labour force after training as semi-skilled workers;
- continuous linkages with industry, which ensure that trainees are trained in the knowledge, skills and attitudes sought by employers, and also that employers are aware of the competencies of UCEP graduates;
- focus on acquisition of skills and competencies through highly structured, supervised individual "hands-on" instruction (rather than being driven by credentials and certificates);and
- rigorous follow-up of each graduate in terms of employment, earnings and performance on the job.

4.26 An aspect of informal employment that needs to be addressed in developing economies that have undergone restructuring is that of retrenched employees, who fall back on the informal sector after being retrenched from the formal sector. An initiative that needs to be mentioned here is from China, where the Ministry of Labour and Social Security has introduced a re-employment training programme for unemployed and laid-off employees, referred to as the Three Years Ten Million Re-employment Training Programme. During the years of 1998 to 2000, this programme aimed at giving training to 10 million people, employees laid off from SOEs and the unemployed, in order to raise their vocational skills, build market awareness and assist them towards re-employment. During the execution of this re-employment training programme, the Ministry set the 1-3-1 goal, i.e. each laid-off employee in an enterprise re-employment centre is entitled to one occupational guidance interview free of charge, three briefings of employment information, and one training opportunity free or partially free of charge. Vocational training centres, technical training schools under labour and social security departments, other training institutions, including those run by NGOs, the trade unions, the women's federations, and youth leagues, were the major institutions undertaking re-employment training workshops.

4.27 An important feature of this programme is also that this training is extended explicitly to those whose economic position is below certain socially acceptable levels. For example, in a certain province, those eligible for this training were those whose family average income is lower than the standard which qualifies for social assistance, or who are under a certain age (40 for males, 35 for females), and they can attend one vocational training course that is longer than a month, free of charge, if they can pass a particular test. In another province, re-employment training and service are linked with the provision of basic living allowance in an effort to change the practice of the provision of basic living allowance to the provision of training opportunities and jobs. It is reported that about 75 to 80 per cent of the trainees can find satisfactory jobs or start up their own businesses. By the end of 2000, a total of 13.6 million laid-off employees, 11 per cent more than the set target, had been exposed to re-employment training.

4.28 Another major informal sector training initiative from China consists of the China Rural Employment Promotion Project. The participants are mainly local household farmers in selected counties where micro-loans are provided as a means of supporting low-income households to be self-employed or to form partnerships in starting small businesses. The project provides vocational training to applicant households, helps them to make a business plan, and provides micro-lending and assistance in their business operation.

4.29 A flexible skills training is an essential part of the project which focuses on resident communities and households, so training courses are organised near where they live. This enables training courses to be closely linked to local requirements. It combines theoretical teaching with practice, classroom presentation with follow-up and collective teaching with individual tutoring and combines training with employment support. The project also combines training with local industrialization. There are examples of counties that offer up to 3,000 Yuan to rural households that are willing to have jobs locally. This financial support helps them to be self-employed. It also serves as a launching fund to help them start up their own businesses. They are also entitled to preferential policies as they can be exempted from some fees and get free access to some facilities.

4.30 Kenya's *Jua Kali* (informal sector) project<sup>12</sup>, funded by IDA, is a well-quoted informal sector training initiative that is oriented entirely towards markets. It was aimed at (a) providing skills and technology upgrading for about 25,000 informal sector manufacturing workers; (b) to increase the access of informal sector entrepreneurs to services; and (c) to improve the policy and institutional environment by removing restrictive laws and policies. A key feature of the project is a voucher

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<sup>12</sup> Johanson and Van Adams (2004)

program intended to introduce consumer choice, enabling informal sector operators to purchase the training they want wherever they want. Intermediaries / allocation agencies were selected by competitive tender to market, allocate, and redeem vouchers in a decentralized way throughout Kenya. Allocation agencies received a fee equal to 3 per cent of the value of vouchers issued. Vouchers could be used for any kind of training from any registered training provider. Over the course of the project, about 700 training providers became pre-qualified for providing training. By early 2001, some 18,000 training vouchers had been issued.

4.31 The impact of the project, evaluated through two studies, has been highly positive for the beneficiaries. Employment among the graduates had increased by 50 per cent compared with employment before training, and the income of surviving enterprises had also increased by 50 per cent. According to anecdotal evidence, some participants who received a voucher for basic training have paid the full cost of more advanced training. One unexpected outcome of the voucher training program was the emergence of a new kind of training provider - the skilled master craftsman. The strong preference of *Jua Kali* workers for appropriate, accessible training by master crafts persons was revealed in the first phase of the project: 85 per cent of all vouchers went to pay for the services of master crafts persons, and only 15 per cent went to private and public training institutions.

4.32 Some important lessons include - (a) the use of a voucher mechanism enabled the project to stimulate demand for training, technology, management and marketing consultation among micro and small enterprises. A supply response has been generated and a training market established to address the needs of micro enterprises; (b) an unexpected impact of the voucher training program was the emergence of skilled craftsmen as the leading providers of training. Entrepreneurs preferred the training services of master crafts persons in the informal sector to training in formal institutions. The training by master crafts persons was usually well adapted to the entrepreneurs' need for short, practical training. These training providers were previously invisible to agencies that wished to pay for these trainings directly; and (c) the implementation experience underscores the importance / viability of appropriate management arrangements - a project for the private sector is best managed by the private sector, with government best playing a facilitative role.

### **Drawing Lessons from international Experiences**

4.33 This chapter has outlined the major characteristics of international skill development and training experiences and systems. The review has brought out the lessons that can be drawn for a

country like India with a very large informal sector and massive numbers of poorly educated people with a low level of formal skills.

4.34 It has been seen that comprehensive systems of skill development that exist internationally are primarily for the formal sector, as it is economies that are dominated by the formal sector that have evolved such systems. In countries of East Asia, which have been characterized as State-led, demand driven systems, it is universalisation of basic education, enlarging the coverage of secondary education and developing a vibrant system of vocational education that laid the foundation towards specifically targeting skills designed towards the workplace. Strengthening the educational system and universalizing access is thus an essential prerequisite for widespread skill development, particularly when the skill mix needs to change to accommodate the needs of greater integration with the knowledge economy.

4.35 While training systems might be supported by the Government, especially in a situation where externalities limit the extent to which private initiative is forthcoming, it is essential to tailor training to employment as much as possible. Evolving systems of apprenticeship and enterprise based training that allow trainees to use their skills, with suitable incentives provided to employers and those trained, is essential. Further, training needs assessment needs to be a joint exercise between those who need trained manpower (employers), those who need to be trained (workers) and those that evolve systems and frameworks (the state), as successful experiences demonstrate.

4.36 Further, in rapidly changing economies which also undergo restructuring and retrenchment, large numbers of workers who hitherto belonged to the formal sector would become informal sector workers. Programmes of retraining such as those in China demonstrate that support from the government becomes essential to equip workers to make themselves available for the market by anticipating demand, which might not automatically take place.

4.37 Interesting experiences of programmes designed explicitly for the informal sector in different countries have been witnessed that might offer guidelines by which a system for a country like India can be designed. For example, making the local area or district the focus of training programmes for employment as in China will enable a matching of needs of people and that of markets. Targeting training towards the poorest households and linking it up with employment in local areas is also a useful initiative for poor informal sector workers.

4.38 All the above lessons from international experiences notwithstanding, it also needs to be kept in mind that the need for India to achieve a major turnaround in its skill profile as well the numbers

that are being talked about means that it is possibly not any single development experience that might be directly relevant or replicable. This is because the ‘initial conditions’ that India is faced with are very different from those that confronted either the OECD countries or the East Asian economies as they went about developing their skill and training systems. These consist, first and foremost, of the large preponderance of the unorganised sector and informal employment in the economy, an abysmally low level of formal skill availability by even developing country standards, but at the same time a fairly elaborate structure of institutions and systems of education and training, although catering only to a small segment of the population. So while international experiences can provide ideas and guidelines on how to go about the formidable task of expanding the skill base of the economy substantially, the structure that needs to be evolved has to be specific and keeping in mind the structure and dynamics of the economy.

## Chapter 5

### System of Skill Development in India

5.1 This report has until now examined the rationale and requirements of a suitable skill development system for the vast majority of the Indian workforce that is located in the informal sector. It has also traced the contours of the availability of skills in the economy and the high level of congruence between poverty, low levels of education and the skill deficit. These trends are seen in a situation where over the entire post-Independence period, a vast array of institutions and initiatives have attempted to address the issue of generating a requisite skill base. It is essential to review these systems that exist as a result of direct State participation in the skilling process as well as through various non-State initiatives. This chapter evaluates, separately for Government and non-government, the skill development system that presently exist in India by looking at the range of institutions that cater to skill development and training needs in the Indian economy. Various programmes, their objectives, coverage, sectoral focus and modes of imparting are evaluated.

5.2 In India, skill formation is broadly made through general education as a provider of generic skills. Vocational education and training provide marketable industry specific skills for better employability. Other than basic primary education, skill formation efforts consist of

- Vocational education,
- Vocational training, and
- Sector specific programmes to address issues of skill formation and enhancement

5.3 Within vocational training, we can distinguish between the **formal vocational training system and the informal vocational training system**, both of which take place under the aegis of the Government as well as private and non-government agencies. Broadly, there are four systems that cater to training needs: the Governmental formal training system, the Governmental system that focuses exclusively on the informal sector, the non-Government (private as well as NGO) network of formal training institutions and the non-Government (mostly NGO-led) principally non-formal training programmes for the informal sector.

5.4 While we have made the above categorization these systems can be distinguished, the Commission recognizes that these are not watertight compartments. As seen in the previous chapter, systems of formal vocational training, however limited they are in terms of numbers in comparison to the size of the workforce, have resulted in only a small proportion of those trained being absorbed in the formal sector of the economy. Others, who have been formally trained, in fact, find jobs in the informal sector, possibly in the upper rungs, constituting in fact a part of the informal workforce, apart from the informally trained and untrained part of the workforce.

## **Part A: Governmental Initiatives**

5.5 In the present section we focus on Governmental initiatives, both formal and informal, whereas the following one looks at the initiatives by the private sector and NGOs. At present, the total training capacity of the public sector is estimated to be around 3.8 million. The details are given in appendix 5.1 to the Chapter.

### **Vocational Education**

5.6 Vocational education remains within the broader school curriculum and involves provision of specific skills to increase the employability of the students on completion of formal education. Vocational training is especially for a particular trade or economic activity and is conducted outside the schooling system. The box below illustrates the progress in vocational education in India.

#### **Box 5.1: Vocational Education in Indian Planning**

In 1947, there were only 46 engineering colleges and 53 polytechnics with an annual intake of 6,240 students. Due to the initiatives taken during successive Plan periods, and particularly because of large-scale private sector participation, the number of All India Council of Technical Education (AICTE) approved technical and management institutions has risen to 4,791 in 2001-02 with an annual intake of 6.7 million students.

Almost every Five Year Plan contributed to the strengthening of the vocational education system in the country. The Second Five Year Plan, for example, provided for the establishment of 38 junior technical schools for students in the age-group 14-17 and these numbers kept on increasing in the subsequent years. Vocationalisation of education at the higher secondary stage was one of the important reforms included in the Sixth Plan. Measures were initiated to establish the necessary links combining vocationalisation, skill training,

in-plant apprenticeship and placement in gainful employment as composite parts of an integrated effort to raise the level of utility of the programme, and its wider acceptance and success. In the following Plans, facilities for vocational education were diversified into commerce and services. During the 9th Five Year Plan, the scheme for Vocationalisation of Education at 10+2 stage was introduced to regulate admissions at College level. The purpose was to divert at least 25 per cent students of 10+2 stage to self-employment or wage-employment, while providing them with vocational competence in a field of their choice.

The Tenth Plan has emphasized that vocational system should be a separate stream within the secondary education system, rather than being imparted through separate educational institutions. It should also establish greater linkage with vocational training and academic education to provide for vertical mobility for students aspiring for higher professional programmes in polytechnics, universities and engineering colleges.

The Eleventh Five Year Plan has recognised the importance of expansion and strengthening of the system of Vocational Education and Training in the country. It, inter-alia, provides for expansion of vocational training, modernizing ITIs, adding relevant skills, and public-private partnership model for training.

5.7 There are three categories of vocational education prevalent in India today - at the lower school stage, at the class 10+2 stage and at the specialised level. The system of vocational education is administered by the Ministry of Human Resource Development. At the lower school stage, a scheme of pre-vocational education at lower secondary level was started in 1993-94 to impart simple marketable skills and to develop vocational interests. The centrally sponsored scheme of Vocationalisation of Secondary Education at +2 level is being implemented since 1988. The main objective of the scheme is to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative for those pursuing higher education without particular interest or purpose. The scheme is implemented in both formal and non-formal sectors. In the formal sector, the scheme is implemented by the State Governments at +2 stage of 10+2 scheme, through 9500 schools spread all over the country. The total training capacity is estimated at about 10 lakh per annum. More than 150 courses are offered in 6 major disciplines covering the broad areas of agriculture, business and commerce, engineering, technology, health and paramedical services, home sciences and services. These courses are selected on the basis of the assessment of manpower requirements through district vocational surveys. After the completion of a two-year course, the students can undergo a year's apprenticeship under the Apprenticeship Act.

5.8 There have been a number of critiques of the vocational education system in India. The Commission is of the view that the vocational education system suffers from deficiencies such as a



low component of general education, poor linkages between the vocational education and general education streams and between the vocational education and vocational training streams. Further, the system of basic education itself needs to be strengthened in the interests of skill acquisition. Education being a foundational skill, the focus on skills needs to start at the level of basic education through enlarging access and improving quality.

5.9 It also needs to be noted that the link between vocational education, vocational training and actual employment is not really known, both due to a lack of actual link and due to a paucity of information from the labour market. This has to be addressed adequately through evolving effective systems of feedback.

## **Vocational Training**

### **Some features of Governmental Initiatives**

5.10 Skill development programmes are undertaken by various Ministries / Departments, Commissions, Councils, Autonomous bodies and Institutions as well as such bodies where there is a public-private partnership. The Ministry of Human Resource Development and the Ministry of Labour and Employment are the two major Ministries responsible for skill development. Most of the initiatives by other Ministries/Departments are sectoral in nature and target-group oriented.

5.11 In this context, the Commission wishes to emphasised that the multiplicity of ministries, institutions and agencies that cater to skill development result in a plethora of initiatives that all run independently with little coordination. The initiatives by different ministries vary depending on their mandate, but the effect often remains piecemeal, although in the aggregate, the system is very large. *There needs to be a coordinating system that attempts to dovetail and consolidate these seemingly disparate programmes with common objectives.*

5.12 Most of these schemes and programmes are administered at the field level by the departments and agencies of the respective State Governments or other Non-Government organisations identified for the same. The funds flow downwards and the State governments are usually assigned the task of implementing as well monitoring of the skill formation programmes on a routine basis. Alternatively, there are a number of programmes for which the voluntary organisations are also entrusted the task directly by the Central Government Departments. This presently results in overlapping of efforts in implementing the programmes.

### **Formal Training Programmes**

5.13 The formal training programmes in the Governmental system are conducted mainly by the Ministry of Labour and Employment and Ministry of Human Resource Development. Formal vocational training system demands minimum educational prerequisites, leading automatically to the exclusion of those with low levels of education.

#### ***Ministry of Human Resource Development***

5.14 Polytechnics offer Diploma-level courses to meet training needs of manpower for industry at the supervisory level. The All India Council of Technical Education (AICTE) approves Diploma programs in engineering and architecture, hotel management and catering technology and pharmacy. There are 1244 polytechnics run by HRD Ministry with a capacity of over 2.95 lakhs offering three-year diploma courses in various branches of engineering with an entry qualification of 10<sup>th</sup> pass. Besides, there are 415 institutions for Diploma in Pharmacy, 63 for Hotel Management and 25 for Architecture.

#### ***Ministry of Labour and Employment***

5.15 The two flagship schemes of Directorate General for Employment & Training under Ministry of Labour and Employment are i.e. Craftsmen Training Scheme (CTS) and Apprenticeship Training Scheme (ATS). The CTS provides institutional training whereas ATS is a combination of institutional as well as on the job training in which trainees are exposed to real life industrial environment.

5.16 *Craftsmen Training Scheme (CTS)*: The CTS is implemented through 1913 ITIs run by the State Governments. In addition, 3552 ITCs in the private domain implement the CTS on the same pattern as ITIs. Training courses are available in 110 trades. The courses aim to impart the basic skills and knowledge so as to prepare the trainees both for wage employment as semi-skilled worker or Junior Executives or for self-employment. The entry level qualifications for the trainees is: Age 14 to 40 years no upper age limit for women in women exclusive ITIs/women wings in general ITIs) and education of 8<sup>th</sup>-12<sup>th</sup> class. The duration of the training varies from six months to 3 years depending on the trade chosen. A total of 7.49 lakh training seats are available at the ITIs throughout the country (Govt ITIs – 3.71 lakh and private ITCs – 3.78 lakh). Over 47,000 seats are exclusively for women trainees. Reservations for SC / STs, Disabled, OBCs, Ex-servicemen etc. are made as per

Govt directives. About 70 per cent of the training period is allotted to practical training and the rest to subjects relating to Trade theory, workshop calculation & science, engineering drawing & social studies. There is also a provision for grant of stipend and workshop uniform to all the trainees of Govt. ITIs.

5.17 All India Trade Test of Craftsmen is conducted under the aegis of the National Council for Vocational Training (NCVT) and successful candidates are awarded National Trade Certificate (NTC) which is recognized for the purpose of recruitment to subordinate posts and services under the Central Government.

5.18 Apart from ITIs/ITCs, Craftsmen Training in 22 trades is also imparted through 6 Model Training Institutes (MTIs) attached to 5 Advanced Training Institutes (ATIs) and one Central Training Institute (CTI) under the DGE&T. Besides, National Vocational Training Institute (NVTI) and 10 Regional Vocational Training Institutes (RVTIs), with about 3000 training seats, have been imparting training exclusively to women. In order to reorient the training modules as per the changing skill requirements of the industries, Craftsmen Training on modular pattern is offered in 4 Model Industrial Training Institutes (MITIs) under DGE&T.

5.19 Apprenticeship Training Scheme: Formal apprenticeship, introduced through the Apprenticeships Act of 1961 which requires employers in notified industries to engage apprentices in specified ratios in relation to the workforce, are a mode of training where apprentices obtain training for periods ranging from six months to four years at the end of which they are tested by the NCVT. The successful candidates are awarded National Apprenticeship Certificates. Apprenticeship Training for the School leavers and ITI passed out persons is offered through a network of 23,800 establishments in 187 designated trades. As on 30<sup>th</sup> June, 2007 1,85,224 training seats for the trade apprentices have been utilised against 2,58,163 seats identified. The training is designed to utilize fully the facilities available in industry for imparting practical / on the job training in the industrial environment to the apprentices to enable them meet the requirements of the industry for employment. All India Trade Tests (AITT) for trade apprentices are conducted twice a year, and Apprenticeship Certificates (NACs) are awarded. Stipend is paid as per the Government notification. Six Regional Directorates of Apprenticeship Training (RDAT) at Mumbai, Kanpur, Faridabad, Kolkata, Hyderabad and Chennai, have been set up for implementing the Apprenticeship Training in the Central Government PSUs/Establishments.

5.20 It has often been argued, in assessments of formal training systems that are in place in India, that the quality of vocational training institutions is not very good. Evaluations of the ITIs have shown that there is a great variability in the quality of different ITIs reflecting differences across states and also partly the characteristics of individual ITIs. Many states have encouraged the creation of new ITIs to cover new areas but without adequate preparatory work or resource input or effective follow up action. The following deficiencies have been noted, with different points being emphasized in different reports, by the Special Group on Targeting Ten Million Employment Opportunities per year over the Tenth Plan period set up by Planning Commission under the Chairmanship of Dr S P Gupta, the Task force on Employment Opportunities set up by Planning Commission under the chairmanship of Shri Montek Singh Ahluwalia, the National Knowledge Commission, the Eleventh five year plan and the Task Force on Skill Development.

- Much of the training provided in the ITIs is for skills for which there is little demand. The curriculum has not been revised for many years and was therefore not attuned to current market requirements. Some revision has taken place recently but a lot remains to be done. One reason for the lack of attention to market requirements is the lack of involvement by the industry in the management of the ITIs.
- The transfer of skills too needs improvement and the testing process at the end needs to be made more reliable. All Government ITIs and private ITIs affiliated with the NCVT as well as the private training institutes running DOEACC accredited courses rely on formal certification by an independent authority. However, there is widespread perception amongst employers that students obtain certificates even though the actual skills acquired are very poor.
- The facilities and infrastructure in most ITIs are inadequate, with obsolete equipment in laboratories and workshops. Maintenance is also poor. These deficiencies reflect the scarcity of resources with State Governments in India. They have been exacerbated by the tendency to create new institutions in places where they do not exist, even though existing institutions are under-funded and under- utilised.
- There is a shortage of suitably trained faculty in most ITIs.
- There is hardly any follow- up of the trainees, and the courses remain rather obsolete and piecemeal. Placement of graduates is not a certainty.
- Most of the ITIs in the state sector and the institutes for advanced training and training of instructors under the Ministry of Labour, are organised as subordinate offices of Government. These training and training related establishments should be restructured as “autonomous bodies”.
- The apprenticeship scheme too has its own share of problems. The major problem relates to the quality of training, which varies according to the nature of the firm. The bulk of the apprenticeship places are in public sector firms. As to private sector firms, they generally do not comply with the requirements. One of the problems that have arisen is that apprentices view apprenticeship primarily as an avenue for subsequent employment rather than a mode of

training. Although the law clearly does not entitle them to employment, the courts have interpreted the law to mean that apprentices must get preference in employment opportunities within the company where they were trained. This tends to discourage employers from fulfilling their obligations under the Act. The World Employment Report (ILO, 1998-99, p.70) notes that training systems in India are a typical example of central government driven, supply-led ones, with the Government taking on the prime responsibility for formal sector training in training institutions. There is little or no pressure on employers to train. The Government of India too accepts this position (GOI, 2001, p.6.23). It has been noted by the Second National Commission on Labour that the apprenticeship system has inadequate coverage of skill requirements, mismatch between demand and supply and lack of flexibility in the engagement of trade apprentices within the same trade group. It has also been argued that a predominant proportion of the educational and training resources of the formal institutional structure is somehow directed to the formal sector and the 'upper end' of medium and small-scale enterprises, many of them in the informal sector. There is a strong orientation towards the use of machines, a very marked gender division of training and curricula (an assumption that girls will go for beautician courses whereas boys will be fitters and motor mechanics). Further, the numbers trained are very low, as chapter 3 showed.

5.21 Several initiatives have been taken to strengthen the ITI system. These include: (i) Establishment and upgradation of ITIs in North-Eastern States, Sikkim and State of Jammu and Kashmir, (ii) Upgradation of 500 ITIs (100 from domestic funding and 400 from World Bank assistance) into Centres of Excellence and (iii) Upgradation of the remaining 1396 Government ITIs through Public Private partnership by providing an interest free loan of upto Rs. 2.5 crore per ITI.

5.22 The Government training/skill-building efforts, such as the ones outlined above, have not been directed explicitly towards the informal sector, or at least not towards the most vulnerable informal workers. A review of the governmental system of formal training above demonstrates this. This has also been emphasized by the Second National Commission on Labour, which notes that the structural characteristics of the informal sector require specific interventions that take on board these characteristics. However, the district level studies conducted by the Commission show that very large numbers of people who pass out of ITIs, i.e., those who receive formal training either start their own enterprise or go for wage employment in informal sector. However, what is required are training schemes that take on board structural characteristics of the informal sector and target those at the lower ends.

5.23 Initiatives that target the informal sector are discussed in the following paragraphs.

### **Government Schemes Focusing on the Informal Sector**

5.24 The focus on skill development based explicitly on the needs of the informal sector exists through a range of programmes under the aegis of different ministries under the governmental system. Some of these are summarized below.

#### ***Ministry of Human Resource Development***

5.25 Community Polytechnics as a scheme started in 1978-79 under Direct Central Assistance programme by Government of India to harness the scientific / technical knowledge available with polytechnics to secure community / rural development. Community Polytechnic activities are a part of an existing AICTE approved Polytechnic. The Polytechnic is entrusted to undertake rural / community development activities in its proximity through the application of science and technology, making use of infrastructure available in polytechnics. Presently, 669 diploma level Institutions are implementing the Scheme of Community Polytechnics training about 3,31,000 trainees a year. The main activities of Community Polytechnics are:

- a) To provide training in need based, non formal skills/trades to unemployed youth, women, SCs/STs, minorities, school dropouts and other disadvantaged sections of the community to enable them to obtain gainful self/wage employment ;
- b) To develop and implement innovative and economical ideas for rapid adoption of the latest technology by the community in and around the community polytechnic (Technology Transfer);
- c) To provide technical/support services to the rural community;
- d) To disseminate information and create awareness regarding latest technology and its applications among the community; and
- e) To undertake survey for ascertaining the felt needs of the community with regard to manpower training and adoption of affordable technology by the community.

5.26 There is no age and qualification bar for the trainees under the scheme. The skill development under manpower training is imparted through short term training courses of 3- 6 months duration. However, no course fee is charged from the trainees.

5.27 Jan Shikshan Sansthan (JSS) is an institutional framework for offering vocational training programme to disadvantaged groups of adults such as neo-literates, less-educated slum dwellers, SC and ST and women etc. to raise their efficiency and increase their productive ability. It also provides academic and technical resource support to District Literacy Societies (Zila Saksharata Samitis).

NGOs having a three year old track record are identified for the implementation of such programmes as may be the need. Based on their location and past performance, JSSs are categorised in three categories and provided financial assistance accordingly.

5.28 National Institute of Open Schooling (NIOS) [Continuing Education and Distance Learning]: was set up in 1989 as an autonomous organization with a view to provide a flexible educational opportunity for persons who wish to study and qualify for a better tomorrow. NIOS designs its own curriculum, prepares instructional materials in print and electronic modes, conducts examination and certifies students up to pre-degree level.

5.29 Keeping in view the needs of target groups, the thrust is on providing more vocational and community-oriented courses in addition to general and academic courses. NIOS offers several vocational courses up to pre-degree in the broad areas of Agriculture, Engineering and Technology, Health and Paramedical, Home Science, Computer Science and Information Technology, Library and Information Science, Business and Commerce, Secretarial Practice and other general, vocational and life enrichment areas. The NIOS operates its Vocational Education Programme through Accredited Vocational Institutes (AVIs) and Special Accredited Institution for Education of the Disadvantaged (SAIED) catering to the disadvantaged sections of the learners.

5.30 There are two types of Vocational Education courses offered by NIOS: (a) Package courses: consist of two or more modules / papers/subjects, a certificate for which can only be given after passing all the modules /papers of a package course. The course is of a certificate or Diploma level having duration of 6 months and more; (b) Stand-alone vocational subjects / courses: These are primarily offered through Accredited Vocational Institutes (AVIs) and can be combined with Academic subjects along with a facility of credit transfer in lieu of one academic subject. However, a stand-alone subject can also be offered independently as a vocational course. As on February, 2007, the country had 999 vocational NIOS.

### ***Ministry of Labour and Employment***

5.31 Skill Development Initiative (SDI): This is a recent scheme , initiated in 2007, as a five year project. During this period one million persons would be trained or their existing skills tested and certified under Modular Employable Skills (MES) framework. The objectives of the scheme are (i) to provide vocational training to school leavers, existing workers, ITI graduates, etc. to improve their employability by optimally utilizing the infrastructure available in Govt., private institutions and the

Industry. Existing skills of the persons can also be tested and certified under this scheme and (ii) to build capacity in the area of development of competency standards, course curricula, learning material and assessment standards in the country.

5.32 MES would benefit different target groups like: (i) Workers seeking certification of their skills acquired informally, (ii) workers and ITI graduates seeking skill upgradation, (iii) early school drop-outs and unemployed, and (iv) Previously child labour and their families. The minimum age limit for persons to take part in the scheme is 14 years but there is no upper age limit.

5.33 The key features of the scheme are:

- Demand driven short term training courses based on Modular Employable Skills (MES) decided in consultation with Industry. MES is the 'minimum skills set' which is sufficient for gainful employment.
- Central government will facilitate and promote training while industry, private sector and State Governments will train the persons.
- Optimum utilisation of existing infrastructure to make training cost effective.
- Flexible delivery mechanism (part time, weekends, full time, onsite/ offsite) to suit needs of various target groups.
- Different levels of programmes (Foundation level as well as skill upgradation) to meet demands of various target groups.
- The services of existing or retired faculty or guest faculty to be utilized.
- Courses would also be available for persons having completed 5th standard.
- Testing & certification of skills acquired informally.
- Testing of skills of trainees by independent assessing bodies, which would not be involved in training delivery, to ensure that it is done impartially.
- The essence of the scheme is in the certification that will be nationally and internationally recognized.

5.34 The training under SDI scheme will be provided by various VTPs under Central Government, State Governments, Public and Private Sector and Industrial establishments. VTPs will provide counselling & vocational guidance, training facilities as per norms, impart good quality training, post training support to trainees in getting employment, maintain data base on trainees trained and the outcome of the training. They will track the trainees for three years or till they get gainfully employed. VTP will also be required to have close networking with the industry for immediate



placement of the trainees. Following categories of Educational and Training Institutes having requisite facilities for conducting training courses would be eligible for becoming VTP for conducting MES courses: (i) Institutes (including autonomous institutes) set up by Central Government / State Governments / UT Administrations, (ii) Private Institutes of repute affiliated/ accredited to a Board / University / Council (NCVT, AICTE etc.) set up by Central Government / State Governments / UT Administrations, and (iii) Any other type of institutions/ bodies approved by Apex committee

5.35 A rate of training fee has been proposed which would be as follows: i. Rs. 500 per module for modules having duration upto 90 hrs; ii. Rs. 1000 per module for modules having duration from 91 to 180 hrs; iii. Rs. 1500 per module for modules having duration from 181 hrs to 270 hrs; v. Rs. 2000 per module for modules having duration more than 270 hrs. Candidates belonging to SC/ST category and women will be given relaxation of 25 per cent in training fee. In order to motivate trainees to take the training programme seriously, training fees of all those trainees who successfully complete the training would be refunded to them. Training cost @ Rs 15/- per person per hour will be reimbursed to registered VTPs in respect of those successful persons who got training from it. VTPs will reimburse training fee to the successful candidates. A one time advance of Rs. 3.00 lakhs will be paid to each Govt. ITI so that they can start courses under the SDI scheme. Testing fee will be Rs 500/800. The testing fee will be reimbursed to all the successful persons who have received training from approved VTPs.

#### ***Ministry of Micro, Small and Medium Enterprises***

5.36 The Ministry of Micro, Small and Medium Enterprises (MSME) and its field institutions have been imparting training to the new entrants to the workforce over the last several decades aimed at developing skills, entrepreneurship and managerial capabilities. Some of these programmes are discussed below.

5.37 Entrepreneurship Development Programmes (EDP) - Entrepreneurship Development Programmes are being organised by MSME-DIs as a regular training activity to educate the youth on various aspects that need to be taken into consideration while setting up small scale enterprises. The duration of these training programmes varies from 2-4 weeks are necessary with training fee at Rs 100/-. Trainees from weaker sections are given a stipend of Rs 500/- per trainee per month. No fee is charged from SC and ST candidates.

5.38 Entrepreneurship Skill Development Programmes (ESDP) - These programmes are targeted at training unskilled and semi-skilled workers employed in small-scale industrial units in new skills and/or upgrading their technical skill and knowledge. However, some fresh educated unemployed youth also participate for learning the traits/skills of various trades in order to find some employment opportunities or for starting their own ventures. Efforts are made to organise tailor made programmes for the skill development of the socially disadvantaged groups, particularly in less developed areas. The target group for these programmes are SC, ST, OBC, women, minorities and other weaker sections, These programmes are also called 'Out-reach Programmes' as they are conducted in the rural/less developed areas. Training programmes are of 6 weeks duration with training fee at Rs 200/- . Trainees from weaker sections are given a stipend of Rs 500/- per trainee per month. No fee is charged from SC and ST candidates. 46,418 persons were trained under EDP/ESDP in 2007-08. Training programmes are being conducted in 60 disciplines under EDP/ESDP. An amount of Rs 20 crore has been kept for skill development programmes for 2008-09 for training 90,000 persons.

5.39 The Ministry of MSME has decided to implement the scheme of Entrepreneurship Development Centres (EDCs) through Partner Institutes (PIs) in the PPP mode through the National Institute for Entrepreneurship and Small Business Development (NIESBUD). The scheme aims to develop such EDCs in each block of the country to cover about 15 lakh youths in the country every year in addition to the 5 lakh that the Ministry intends to train through the existing programmes. The idea is to identify institutes that can impart training by becoming the Partner Institutes to provide Skill Development Training in at least one identified product for each block.

5.40 The Ministry of MSME has proposed to promote skill development by setting up District Skill Development Centres (DSDC) in 6000 blocks of the country. The DSDCs may be run by the Government while 6000 block level SDCs may be run by PIs.

5.41 The various training programmes run by the Ministry and the MSME-DIs are significant. However, the linkage of these programmes with markets and the private sector is yet to be fully achieved. Further, in many of the industries that are targeted under these schemes, industrial organisation is characterised by clustering, which are administered by cluster development programmes whose linkages with these schemes are often not clear. Existing cluster development programmes focus more on helping enterprises realise the importance of establishing linkages with each other, on evolving common marketing facilities and have relatively weak focus on skilling of the most unskilled workforce.

5.42 Apart from the institutional training programmes that are outlined above, there are several schemes that incorporate elements of skill development. These are discussed below.

5.43 Prime Minister's Rojgar Yojana (PMRY): Prime Minister's Rojgar Yojana was launched on 2nd October 1993 to assist educated unemployed youth to set up self-employment ventures. Initially, the scheme was implemented only in the urban areas of the country. Since 1994-95, it is in operation in both urban as well as rural areas. The Scheme also seeks to associate reputed non-governmental organisations in implementation of PMRY Scheme especially in the selection, training of entrepreneurs and preparation of project profiles.

5.44 Rural Employment Generation Programme (REGP): KVIC launched the Rural Employment Generation Programme (REGP) with effect from 1st April, 1995 for generation of two million jobs under the KVI sector in the rural areas of the country. The scheme is applicable to all village industries projects set up in rural areas. The eligible agencies under the scheme are (i) individuals (rural artisans/entrepreneurs) ii) institutions cooperative societies, Trusts & SHGS for projects upto Rs. 25.00 lakhs.

5.45 PMRY and REGP have been merged forming Prime Minister's Employment Generation Programme (PMEGP). The merged scheme is expected to increase the participation by and coverage of rural beneficiaries by KVIC and State Governments in a more focussed manner through rationalized implementation, training, monitoring and verification procedures to be piloted and coordinated by KVIC.

#### ***Ministry of Housing and Urban Poverty Alleviation***

5.46 Swarna Jayanti Shahari Rozgar Yojana (SJSRY): For providing gainful employment to the urban unemployed/ underemployed by encouragement to self-employment ventures or provision of wage employment, a new urban poverty alleviation programme, namely Swarna Jayanti Shahari Rojgar Yojana was launched in 1997 with a fund support on 75 per cent: 25 per cent basis between the Centre and the States. The programme is applicable to all urban towns in India and is implemented on a whole town basis with special emphasis on urban poor clusters. The scheme consists of two major components, namely - (i) The Urban Self Employment Programme (USEP), (ii) The Urban Wage Employment Programme (UWEP). Salient features of the Urban Self Employment Programme are:

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- Assistance to individual urban poor beneficiaries for setting up gainful self-employment ventures
- Assistance to groups of urban poor women for setting up gainful self-employment ventures. This sub-scheme has been titled as "The Scheme for Development of Women and Children in the Urban Areas (DWCUA)"
- Training of beneficiaries, potential beneficiaries and other persons associated with the urban employment programme for upgradation and acquisition of vocational and entrepreneurial skills. Training is imparted in the ITIs, Polytechnics, Jan Shikshan Sansthan, Engineering Colleges or other training institutes.
- There is no minimum educational qualification for beneficiaries under this programme. However, this scheme is not applicable to the persons educated beyond the 9th standard. The training and infrastructure support is as stated below:
  - Training Cost per Person - Rs. 2,000/-
  - Training Period - 2 to 6 months subject to a minimum 300 hours
  - Tool Kit worth - Rs. 600/-

The annual targets under self employment under USEP/DWCUA and under skill development training under training component have been fixed as 1,20,000 and 1,50,000 respectively in recent years.

***Ministry of Rural Development***

5.47 The Swarnajayanti Gram Swarozgar Yojana (SGSRY) aims to bring the assisted poor families (Swarozgaris) above the poverty line by providing them income-generating assets through a mix of bank credit and government subsidy. The programme aims at establishing a large number of micro enterprises in rural areas based on the ability of the poor and potential of each area. The SGSY is financed on 75:25 cost sharing basis between the centre and the states.

5.48 Training and capacity building of Swarozgaris is an important component of SGSY. Under SGSY, 10 per cent of the financial allocation is earmarked for training and skill development of the Swarozgaris. During 2007-2008 on an average 8.59 per cent of SGSY funds have been utilized for training of Swarozgaris.

5.49 Fifteen per cent of the funds under the programme are set apart at the national level for special projects having a far reaching significance and which can act as indicators of possible alternative strategies.

5.50 As special projects, an innovative intervention for demand-based skill development training projects for increasing employability of rural BPL youth leading to their placement or self employment has been taken up at the national level. The emphasis of these projects is on identifying demand driven skill sets in consultation with the industry/potential employers in and near the project areas and imparting training to rural BPL youth leading to their placement on completion of training courses. The processes involved in the model are partner / client identification followed by market scan and curriculum development, mobilisation, selection and training of rural poor and their placement and tracking.

5.51 Realizing the great potential in this strategy, twelve Placement Linked Skill Development Projects have been sanctioned with total project cost of Rs. 147.70 crore and beneficiary coverage of 2.79 lakh rural youth. The average skill development training cost to be borne by the Government in these projects is about Rs. 5,000/- per head. Out of about 36,610 youth trained so far in these projects, more than 27,465 have found employment through successful placement at salaries ranging from Rs. 3000 to 4000 per month bringing them above poverty line.

5.52 By March 2012, a total of about 2.5 million rural poor are planned to be covered by the Ministry of Rural development through similar skill upgradation programme/projects with guaranteed placement.

5.53 The Ministry has successfully initiated a Skill Development Programme for uneducated/low educated unemployed BPL rural youth through partnership programme with industry associations. A pilot has been initiated for garment industry in association with IL&FS. To implement this programme, an SPV has been formed called APTEX, which is managed by industry representatives and professionals. The Govt. plays only a supportive role. After pilot phase the programme would be expanded to cover at least 5 lakh BPL youths with 100 per cent placement guarantee. Similar initiatives are being worked out for other sectors like textiles, leather, footwear, retail, etc. The Ministry also partners with banks for the RUDESETI model as discussed in the next para.

5.54 The Department of Rural Development had proposed setting up Rural Development and Self-Employed Training (RUDSETI) type institutes in all the districts in the country to provide skill training to rural poor. The first RUDSETI was established at Ujire, Karnataka, in 1982 jointly by Sri Dharmasthala Manjunatheshwara Educational Trust, Syndicate Bank and Canara Bank. It chalked out an innovative approach to help the rural youth stand on their own feet by identifying opportunity avenues, train participants in developing the desired skills and assist them in their entrepreneurial

activity. RUDSETI has developed a highly successful training module benefiting over 150,000 trainees. Over 66 per cent of the trainees have all successfully established entrepreneurial ventures. In the pre-training phase of the programme, candidates are selected on a scientific assessment of their abilities. The selected candidates are then given inputs on motivation, conviction, entrepreneurial competence and technical skill and know-how in the selected fields. Later, the training familiarizes them with the steps needed to set up their own business. The final phase covers several aspects of management. Apart from their educative and qualitative programme, the organisation is in constant touch with its students and is willing to support them for 2-3 years even after their training. RUDSETI also provides a helping hand to the candidates to come through their initial struggles in their ventures. The trainees maintain a good rapport with the RUDSETI even after their training and constantly seek guidance. Keeping in view the fact that most of the unemployed youth are from poor/middle class rural families, entire training is provided free of cost including free boarding and lodging.

5.55 Some of the typical EDPs for first generation entrepreneurs are:

- Agricultural EDPs - Agricultural and allied activity, Dairy management, Bee-keeping, Horticulture, Mushroom cultivation etc.
- Product EDPs - Dress designing for men and women, Rixin based utility articles, Agarbatti manufacturing, Woollen knitting, Bag making, Fabricating cane furniture, Bakery products etc.
- Process EDPs - Repairs of two-wheelers, Pump sets, Radio and TV etc., Motor rewinding, Multi-purpose mechanic, Beautician course, Photography and Videography techniques, Screen printing and photo lamination, Watch and mobile repair, Repair of domestic electrical appliances, Computer and Desk Top Publishing (DTP) etc.

5.56 The above are only a synoptic view of existing schemes for skill development and training that have been initiated under the Government of India. As mentioned earlier, a number of other Ministries/Departments are also associated with skill development programmes which are catering to the requirements of specific sectors and target groups. For instance, the Development Commissioner, Handlooms under Ministry of Textiles is providing training to handloom weavers and it has a number of Weavers Service Centres in various parts of the country which provide their services to the handloom weavers. Similarly, Development Commissioner, Handicrafts is conducting/supporting various promotional programmes for the handicrafts sector which include skill development /upgradation of artisans. Nehru Yuvak Kendra Sangathan (NYKS) under Ministry of Youth Affairs and Sports has 500 district level offices which, among others, conduct programme to improve the vocational skills of rural youth.

5.57 The Ministry of Women and Child Development is implementing a number of programmes aimed at training women in marketable trades and enable them to access remunerative employment opportunities or help them in setting up their own businesses. The Department of Science and Technology had initiated Vocational Training for Employment Generation (VoTEG) in January 2000 with support from UNDP to target the informal sector for training. The project evolved into SKILLS Project which takes a lead in adapting and implementing the 'franchise model' to skills required by the target segment of resource poor communities and less educated persons. The Ministry of Agriculture is involved in training activities in fields of agriculture/extension services, horticulture, animal husbandry, dairying and fisheries. The National Rural Health Mission and other programmes of Ministry of Health and Family Welfare have skill formation components built in the overall schemes. The Ministry of Tourism is associated with training activities in areas of hotel management and catering. The Ministry of Food Processing Industries is involved in training programmes relating to food preservation and food packaging to impart vocational abilities to the youth. Institutions like APEDA, NID, Coffee Board under Ministry of Commerce and Industry have skill development components embedded in their programmes. Ministry of Social Justice and Empowerment and Ministry of Minority Affairs have training programmes to train people from their target groups. In addition to these, a large number of training programmes are supported by NABARD for the agricultural sector and institutions such as NDDDB which work with informal sector workers.

### **State Government Initiatives**

5.58 As mentioned earlier on in the chapter, a significant part of the implementation of national level schemes takes place at the state level. In addition, several State Governments have also initiated specific programmes for skill development in the informal sector. In Andhra Pradesh, for example, an Employment Generation Mission has been set up in the last few years by the State Government that works in a public-private partnership mode with the Collectors and Project Directors of DRDAs in the districts. Companies such as G-4 Securitas collaborate with the Mission in various ways ranging from mentoring, providing human and financial resources. In a specific initiative that trained rural youth in market linked opportunities for entry level jobs in the service sector, it resulted in placement with companies such as Mc Donald's, Café Coffee Day, Food World and so on. Training programmes for self-employment that focuses on the informal sector are undertaken by schemes run by the governments of several states such as Rajasthan, Tripura and Maharashtra. States such as Orissa and Jammu and Kashmir have specific training programmes in the handicraft and artisanal sectors.

## **Conclusion**

5.59 The above review demonstrates that *the governmental system for skill development and training, while vast, is dispersed and characterised by overlaps and multiplicity of schemes. Further, the system that is in existence for the informal sector, while recognising some obvious needs of the sector such as certification of trainees, accreditation of trainers, broad basing and making flexible the actual training imparted and linking training to jobs, is again not conceptualised in a comprehensive manner.* The Second National Commission on Labour focuses its critique of existing systems on these characteristics, which this Commission also seeks to emphasise. Specifically, it is stressed that *the formal and informal systems of skill development need to be integrated with training being competency based, flexible, allowing easy entry and exit to trainees at different points in their lives and being subject to formal systems of accreditation and certification.*

5.60 At the level of implementation, the district level studies conducted by the Commission in Sehore, Allahabad, Shillong and Imphal show that in spite of all the above mentioned schemes, both formal and informal, being in operation to different degrees in different places, the present facilities to impart skill development to workers are grossly inadequate. For example, in Allahabad, it was seen that at present only 12 to 15 thousand workers get trained every year with the contribution of the government system being about 55 per cent and private sector about 30 per cent while NGOs provide training to about 15 per cent workers. In Sehore, of an estimated 2.18 lakh workers, who require training, the existing capacity can cater only to about a few thousand.

## **Part B: Private and NGO Initiatives**

5.61 The review of Governmental initiatives towards skill building, both in the formal and informal sector, in the previous section, revealed the contours of the largest system of skill development in India. As was pointed out in chapter 2 a significant proportion of the workforce gets trained in the private sector. The present section reviews some of the initiatives that originate in the private and NGO sector. The focus is on culling out the salient features of such initiatives.

### **Private Sector Initiatives for Skill Building**

5.62 Broadly, private sector initiatives can be categorised into four types: the first, where private entrepreneurs or corporates establish training centres/institutes on a for-profit basis; Second, where



private corporations impart training to people who get absorbed as skilled workforce in their own production units; Third, where they enter into partnerships with public agencies and become the vehicles for training delivery and sometimes finance; Fourth, where corporate houses set up public trusts or foundations with a development agenda to build the capacities of local communities to be self reliant systems that utilize human and physical capital in a sustainable manner as an integral part of their 'corporate social responsibility' (CSR) mandate. Below, we briefly summarise some of the major initiatives taken by the private sector.

5.63 Examples of the second kind of initiative, where skilled manpower trained by a private company is absorbed within the company itself, are by companies such as Group 4 Securitas, Reliance and Kingfisher. Kingfisher runs a training academy (Kingfisher Training Academy) that caters to the hospitality industry, including aviation, tourism and hotels. It runs training modules of roughly a year's duration that train young people as airhostesses, flight stewards, and workers in the hospitality sector. Reliance Industries has started an initiative called **Reliance Global Services** to provide job oriented call center training. Group 4 Securitas conducts a two-week training programme for security guards before they are inducted into the workforce.

5.64 Examples of the third kind of initiative, involving public-private partnerships, are of the Construction Industry Development Council (CIDC), which has been set up jointly by the Planning Commission, Government of India and the Indian construction industry. CIDC, a group of industry and government representatives, has undertaken a programme to assess, build and certify skills of individuals in the construction trades, not for the benefit of one or two companies, but so that the overall industry can have access to skilled labour of certified quality. Further, following this example, TATA Motors has developed a training model in partnership with the Construction Industries Development Council (CIDC). This partnership has effectively become a source of training for an entire automotive supply chain linked to its branded vehicles. Though it was originally developed as a closed programme that simply trained students to build quality vehicles, TATA soon realized the need to also train those who supplied the parts, sold and repaired their cars. The unique feature of these programmes is that they are private sector led, but not designed exclusively for the benefit of the designers or the funding organizations of the program.

5.65 In the previous chapter, we referred to an initiative by the Andhra Pradesh government involving a public-private partnership initiative for training rural youth for service sector jobs. This initiative, coordinated by the state government, has the private sector undertaking training of youth

for employment in the private service sector in companies such as McDonalds, Café Coffee Day, Food World, Futures group, Pizza Hut, Microsoft, Dell, Wipro and so on.

5.66 There are also several initiatives where private foundations undertake training programmes as part of corporate social responsibility of corporations. The Ambuja Cement Foundation (ACF) is the development initiative of the Gujarat Ambuja Cement Company and works at 11 locations covering nearly 700 villages of eight states. While some youth groups have been imparted training on bamboo crafts and furniture making, others were trained for repairs of TVs & mobile phones, driving, masonry, electrician, motor mechanic, welding and fabrication, carpentry and plumbing. Some others were provided training on small-scale enterprises, so as to enable them to establish their own small business. The efforts of ACF are to go beyond just imparting training in skills that the work market requires; training them in entrepreneurship is also provided. The youth are also supported to learn the procedures of approaching banks for loans and setting up their own enterprises.

5.67 The training initiative by the Confederation of Indian Industry (CII) is another example of the above. With a focus on shifting training from an employment to a employability perspective, the Confederation of Indian Industry (CII) is presently piloting the 'Skills Development Initiative' as a solution to deliver a structured and scalable framework to impart skills to the unemployed / underemployed / uncertified workers, so that they develop as a quality human resource to meet the dynamic needs of the growing economy. This has been piloted initially in 6-7 urban as well as rural locations. The trades in which skills are imparted are chosen in response to the local demand requirements and the growth potential. There is no condition in regard to the social, economic or educational background of the trainees, who are selected on the basis of their aptitude and potential. Under this initiative, the skill-demand assessment is carried out, then the programme module formulated, along with identification of training centres and trainers, and finally, delivery of capsule modules targeted to help the candidates gain employable skills. The skill trades are classified into blue skills (agriculture, health care, security services) / rust collar skills (construction, minor engineering, transportation) / and grey collar skills (ICT) etc. The existing training infrastructure, such as that available at ITIs, Engineering Colleges and Vocational Training Institutes after regular hours, is sought to be utilized optimally. The services of faculty members of these institutions are utilized on an honorarium basis. The duration of the training course is 3-6 months. The contents of the training can be customized to meet the requirements of an employer, who gives a firm commitment of employment.

5.68 A universal certification process is an important component of this initiative. There is an independent verification and a joint certification of the proficiency acquired by the trainees for which the CII has partnered with City & Guilds. The certificate given by City & Guilds is expected to have wide acceptability nationally and internationally and the CII is negotiating an arrangement with banks for underwriting a smart card to be given to the successful candidates to help them get financial linkages.

5.69 Another example of a CSR initiative by a corporate foundation is that of the Byrraju Foundation, set up by the Satyam group of companies, which seeks to providing training services in the areas of healthcare, environment, sanitation, and adult literacy. The Foundation currently works to transform 156 villages in 5 districts of Andhra Pradesh and impacts 800,000 people.

5.70 Dr. Reddy's Foundation, which is the Corporate Social Responsibility wing of Dr. Reddy's Laboratories, a leading pharmaceutical company of India, has started a programme called Livelihood Advancement Business School (LABS) which is a vocational and life skills training model that provides job based skill development training to the poor youth in the age of 17-25 yrs over a period of 3-4 months. It is custom-designed for school dropouts, unemployed secondary school graduates, street youth, retrenched workers, migrant youth and resettlement community members from the poorest sections of the Indian community. This demand-driven program has trained over 36,000 youth (between the ages of 17 and 25) from economically weak backgrounds and placed them in the salaried formal employment sector. Over 100 major national and international corporations and business organizations and over 4,000 local small businesses and medium enterprises have provided entry level positions to the LABS alumni till date.

5.71 Private sector initiatives in skill building, as the above demonstrate, tend to be more linked to industry demand and hence avoid the wastages associated with supply led initiatives. However, as has been analysed in chapter 2, these are likely to be forthcoming only in response to existing demand and where skilling is likely to have a direct link with profitability. For a large segment of workers in the informal sector, these considerations are not enough and their skilling needs go far beyond those that are likely to be addressed directly by the private sector. Some of these concerns are taken up through NGO interventions which are described below.

## **NGO Initiatives in Skill Building**

5.72 NGO interventions range from offering NCVT approved formal ITI courses to a wide range of non-formal courses. Typically, NGOs devise their own curricula, provide their own trainees and have their own certification procedures. Very often, they have contact with employers in neighbouring areas which provide placements for the trainees. It is often also reported that placement in jobs for those trained are high and that trained workers earn higher wages. A review of the working of the activities of the major initiatives of NGOs reveals that there are two types of approaches being followed –(a) training only on basic or upgraded skills and then leave the trainees to seek wage employment or start their own enterprise, and (b) a ‘holistic’ package of skill development, basic entrepreneurship training and assistance in availing credit facilities etc. Some NGOs even ‘handhold’ the trainees for a certain period. Some of the major initiatives are summarised below.

5.73 ***Goodwill International Association:*** Goodwill International Association, based in Bangalore, was established in 1971 and imparts ‘earning skills’ to unemployed youth and school dropouts in various disciplines (at least 10<sup>th</sup> pass). Formal courses offered for training are the ITI courses affiliated to the NCVT, which comprise the fitter trade for boys and cutting and tailoring for girls. The non-formal vocational courses include fitting, welding, turning (boys), electrical and plumbing. The non engineering courses include literacy, health education, craft (girls), medical attendant, machine mechanism, electrical. Around 60 per cent of the trainees under non formal courses have been successful in obtaining jobs in various industries either on their own or through Goodwill’s association. With regard to formal training for boys, the success rate in placement is 100 per cent. Goodwill has contacts with a number of engineering and garment industries and hospitals which help trainees to secure a job after completion of training. Attempts are made by the Association to find placements for trainees in the industry as apprentices. Multi skilling of the trainees provides them with ample opportunities to learn and move upward in employment hierarchy.

5.74 The training manual for formal courses is provided by the Directorate General of Employment & Training where as for non-formal courses the manual is prepared by Goodwill. Goodwill has its own trainers and does not depend upon outside trainers. For formal courses, certificate is provided by the Government and for non-formal courses it is provided by the Association.

5.75 ***Gram Vikas:*** Gram Vikas is a secular, non-profit voluntary organization working in Orissa with the needy and weaker sections of society to facilitate their development. It engages in activities

aimed at improving the living conditions and the economic standards of the poorest of the poor. Gram Vikas provides training to landless unskilled labourers in masonry, stone dressing, wire binding, painting and plumbing. The target group is the landless village youth working as unskilled labour. Trained barefoot engineers and skilled masons contribute towards projects implemented by Gram Vikas itself on shelter related constructions work and also manage to get gainful employment in and around the villages once the project gets over. Skill training helps the people to bargain and secure better wages for themselves. It has been observed that most of the skilled masons managed to double their daily wage earning capacity over a period of two years.

5.76 Gram Vikas has its own trainers to provide training to the target group. Gram Vikas provides the technical back up support and the necessary credibility to trainees to establish their own micro enterprise. Follow-up surveys are conducted by Gram Vikas after at least two years of the completion of the training programme. Gram Vikas awards Certificate to each trainee on the completion of training.

5.77 An interesting NGO intervention that targets the informal sector is that of *Movement for Alternatives and Youth Awareness (MAYA Organic)*: Maya Organic is a not-for-profit company based in Bangalore working with informal workers in about 52 slums. It provides access to the working poor to skills up-gradation and learning. It recognizes that the unorganised sector, the organised industry and the markets - each has specific needs as well as opportunities to offer and share with each other for growth and development. The model takes advantage of the large number of individuals operating in the informal economy by bringing them together- as collective enterprises of 30-50 members / owners each - to access the work opportunities available and by making continuous learning, social security and decent work conditions as inherent part of the organizational structure. It distinguishes itself from existing member-based organizations in that all these collectives are profit centres of a particular sub-sector enterprise, which in turn ensures a certain visibility and organizational structure, thus far missing in the unorganised sector.

5.78 Maya Organic has been working in 4 sub-sectors and has registered four enterprises: lacquer ware, construction (painting, masonry, and carpentry), hospitality and services (domestic work, food industry and public place maintenance as well as gardening and waste management) and garments (home based garment workers and embroidery workers). Maya Organic encourages different kinds of vital networking between the collectives and markets. One central activity is the interaction with clients in the areas of information about changing market demands and quality feedback related to the products and services offered by the collectives. Equally important is the continuous interaction with

resource pool (persons/ institutions/ material) which support the collectives in the areas of training, marketing, product and brand building and social protection; this ensures continuous product and service upgradation for better marketability. This form of networking and making the resource pool accessible to the collectives not only facilitates the process of continuous reflection on market trends and changes but again, enhances empowerment.

5.79 As an active marketing agency, Maya Organic represents the various collectives under a brand in the market, ORGANIC, that represent not just products/ services but rather a development brand. It implies that every product/ service bearing the ORGANIC label has a developmental objective and connotes good work practices, high quality and professionally run collectives. It is responsible for developing and promoting the brand identity across different markets and clientele through building networks with clients. Maya Organic also has a process of monitoring the collectives to ensure compliance with what the brand stands for.

5.80 In addition, *LabourNet*, an institutional network of markets and informal sector workers - a facilitating structure that routes jobs to workers, encourages skill development, influences policy and facilitates access to social security schemes for the construction workforce etc, has evolved from the experiences of Maya Organic.

5.81 *Self Employed Women's Association (SEWA)*: Self Employed Women's Association (SEWA) is an organisation of poor and self-employed women workers from the unorganised sector of the economy. SEWA's main goal is to organize women workers for full employment and self reliance and it believes in capacity building as a strategy for making the poor women self-dependent. SEWA has experience of skill formation in a variety of livelihood creation and supportive activities by imparting training on technical, managerial and behavioural skills. For more than 32 years now, SEWA has been working for poor, self-employed women in the unorganised sector of rural and urban areas. Today more than 9.6 lakh poor women from five states of India are organised in the forms of Self-Help Groups (SHGs), co-operatives, associations, federations and even corporate entities. It has formed producer federations in each of the districts it works in.

5.82 The various sectors where SEWA works is construction (masonry, brick work, plumbing etc), production of traditional craft work, management of water supply by women, repairing & maintenance of hand pumps and pipelines, provision of health related services, basic skills in electrification, food processing and assembling of solar energy equipments.

5.83 SEWA's approach to organizing women for a particular trade has been demand driven and need based. Even before designing the training modules, surveys are conducted to study the member's needs and skill assessment exercises are carried out to identify the areas where training is required. As a policy, SEWA uses training modules and curriculum for training through the SEWA Academy - the focal point for workers' education and capacity-building. Similar inputs are also available from relevant sister institutions of SEWA. Moreover, SEWA has district level teams of trainers and co-ordinators who interact regularly and keep upgrading the training modules.

5.84 So far as technical skills training is concerned SEWA makes arrangements with external resource organizations and individuals. E.g. NIFT, Gujarat Agriculture University, CIDC etc. SEWA has followed the strategy of utilizing external expertise of individuals as well as institutions. SEWA has established institutional linkages for various aspects of managing women's micro enterprises. Some of the institutions include Mahila SEWA Sahakari Bank, ICICI Prudential, Gujarat Alkalies and Chemicals Ltd., Central Marine and Salt Research Laboratory.

5.85 The above review shows that the non-Government initiatives, whether by the private sector or by NGOs, address some of the deficiencies that exist in existing Government-led systems. They provide training that is demand led with signals being provided by the market. However, as was noted earlier, going purely through market signals will not address a lot of problems of the informal sector. NGOs adopt a more integrated approach, with different emphasis across different kinds of organisations, but their interventions are too small and dispersed to make a significant difference in terms of numbers trained. Further, they suffer from the problems of inconsistent curriculum, lack of certification and standardisation that were noted earlier.

5.86 The focus of the Commission's work and recommendations in this report is to critically evaluate to what extent the skilled workforce needs of the economy can be met through existing schemes and approaches. It must be mentioned here that in recent years, there have been several agencies and institutions that have undertaken similar reviews, underlined several inadequacies in existing systems and come up with recommendations for reforming the system. Our review therefore evaluates the existing system keeping in mind other evaluations, critiques and recommendations. The salient features of these evaluations are described below.

### **Critical Evaluations of Skill and Training System in India: The Salient Features**

5.87 The main critiques and proposals which need to be evaluated have been made by the Planning Commission's Task Force on Skill Development (subsequently also in the Eleventh Plan) and the Draft National Skill Development Policy of the Ministry of Labour & Employment (MOLE). In addition, the National Knowledge Commission, the Second National Commission on Labour, the Planning Commission's Task Force on Employment Opportunities, the World Bank and the 2008-09 Union Budget also spell out some proposals.

5.88 Many of the reports published by the above mentioned commissions and committees characterize the system of skill development and training in India as being Government led on the one hand and being supply driven and not linked to emerging demand (by the organised sector) for skilled manpower on the other. In this context, most of the proposals argue for reducing the government's role and gradually allowing the private sector to take over in training delivery or reorienting systems of training in the PPP mode. The government's role is envisaged as facilitator and for creating a larger framework for certification and accreditation. Within this broad approach, proposals vary between laying greater stress on general education in comparison to vocational education (World Bank), the government withdrawing completely from training delivery (Task Force on Employment Opportunities) and training necessarily having to be paid for in the form of user fees by trainees.

5.89 Further, while many of the proposals recognize the importance of skill development of workers in the unorganised sector, *they focus on the skill requirements for the organised sector*. In this context, issues of accreditation of trainers, certification of training, the need for a separate autonomous structure for skill development and such issues that affect quality of training for the organised sector are addressed in various reports. The characteristics of the informal sector which are highlighted in Chapter 2 are considered only very briefly by the Second National Commission for Labour and the MOLE's report. The fact that workers and entrepreneurs in the informal sector require formal training in order to improve productivity not only in the formal sector, but also for the large informal sector, is hardly analysed or recognised. In this sense, that skill development for the informal sector has to be *structurally different*, on which this Commission lays great emphasis, is not emphasised by most critiques and proposals.

5.90 The Task Force on Employment Opportunities under the chairmanship of Shri Montek Singh Ahluwalia submitted that the Central Government should completely withdraw from delivery of vocational training services. It felt that its role should be one of monitoring the institutions that set up



standards of training, and evaluating and assigning rating to the private training establishments. It called for the ITI system to be restructured and additional resources provided to improve its output. Selected ITIs chosen for joint management with industry should be converted into autonomous bodies receiving government funds. Moreover, it felt that restrictions in the existing policy on charging of fees should be removed. It also called for a centrally sponsored scheme or an aid institution like the UGC to be set up for the ITI's. It was in favour of imposing a small levy on companies to be contributed to a skill development fund which could be used to fund it is with industry associations also having a voice in deciding allocations. It wanted graduates of ITIs and other vocational training institutions to be eligible for entry into polytechnics and +2 level medical and engineering courses. The Task Force recommended that all enterprises, irrespective of size and status, should be brought under the purview of Apprentices Act. It opined that the private sector involvement in training has been discouraged because of highly subsidized training services provided by the public sector which should change.

5.91 The Second National Commission on Labour recommended a new modular approach to vocational training, which would aid multi-skilling, impart skills attuned to the needs of the labour market, and in consonance with the latest technology. It called for the setting up of an independent regulatory authority to set standards for skills required for a particular competency, standards for programme implementation and standards for accreditation of institutions imparting training programmes for skill development and retraining. It also favoured establishment of Block Level vocational educational institutions in a phased manner in each block. It emphasized that trade unions at the national, regional, industry and plant level should all have a say in the running of workers' education programmes. The Commission recommended that for better matching of demand and supply of marketable skills, a labour market intelligence system needs to be set up for forecasting of marketable skills in both the organised and unorganised sectors. In order to provide for retraining of workers rendered surplus/obsolete by lay-offs, retrenchment and Voluntary Retirement Schemes/Early Separation Schemes, and training of labour in the unorganised sector, the Commission recommended the establishment of a Skill Development Fund (SDF).

5.92 The World Bank in its recent report on VET in India has taken a different approach. It has argued that going by the international experience India would do well to not expand its vocational education system but focus on strengthening its general education system. As far as Vocational Training in the Public Sector is concerned, major reforms at the policymaking and institutional levels would be required. The report emphasized that at the institutional level, involving private sector in management is going to be critical if institutions are to be responsive to labor market needs.

Regarding training for the Informal Sector, the World Bank was of the view that the diverse training needs of informal sector operators cannot be met by simply reorienting public training institutions. Instead of delivering training themselves, governments could focus on creating an environment to support non-public providers. While emphasizing the importance of informal apprenticeships for training in the unorganised sector, it suggests that the quality of such apprenticeship should be improved through a strategy revolving around traditional form of training, by upgrading the technical and management skills of the masters as well as their skills in pedagogy. Further, traditional apprenticeships should be linked with specialized training providers or master craftsmen, with the governments acting as facilitators. To assist the growth of private training provision, the report emphasized that the government should remove constraints on setting-up training institutions.

5.93 The National Knowledge Commission, in its recommendations on the vocational education and training system, favoured placing Vocational Education entirely under the Ministry of Human Resource Development (MHRD). It called for increasing the flexibility of VET within the mainstream education system and establishing links between the vocational education stream and school education as well as higher education, and making vocational training available in various literacy and adult education schemes. The Commission recommended that the Government should aim to spend at least 10 – 15 per cent of its total public expenditure on education, on vocational education. The Commission called for expanding VET capacity through innovative delivery models such as public private partnerships, decentralized delivery, distance learning and computerized vocational training. It also called for enhancing the training options available for the unorganised and informal sector. In this context, it suggested that the skills required by the unorganised sector should be formally introduced in the curriculae and practical training courses. The government should act as a facilitator and provide financial support. In respect of the existing Industrial Training Institutes (ITIs) and Industrial Training Centres (ITCs), these should be improved through increasing their functional autonomy. An independent regulatory agency for VET should be established.

5.94 The Task Force on Skill Development set up by the Planning Commission has asked for a paradigm shift in the national policy on skill development with the private sector playing a lead role instead of the government, as they are the job providers. The government's role would have to change from being a vocational training provider to a partner and facilitator. Moreover, the Task Force's emphasis is on a shift from a *supply* to a *demand* driven policy. For vocational education, the Task Force has suggested that the nodal agency would be the Ministry of Human Resource Development but an interface between VE and VT would be provided at different levels. Recognizing the importance of skill development in *agriculture* and its vast potential, it has recommended that

agriculture training institutes can be set up all over the country, in the PPP mode wherever possible, to empower persons dependent on agriculture. It called for a National Mission on Skill Development to be set up. As part of the Mission, the National Council of Vocational Training (NCVT) should be reconstituted and become the *sole* regulatory authority for VT. New institutions or *Skill Development Centres* (SDCs) could be opened on demand by the State Governments in collaboration with industry on a **PPP** basis. However, the Task Force left the issue of training in the *unorganised* sector, (where it was suggested that training centres be set up in clusters of villages, linked with rural business hubs and the development programmes of the local bodies, PPPs and industry) to be looked at by the Mission.

5.95 The Eleventh Five Year Plan has called for a “**Skills Development Mission**”, with an outlay of Rs. 22,800 crores. The Mission will, among others, realign and reposition existing public sector infrastructure ITIs, Polytechnics and VET in school to get into PPP mode and to smoothen their transition into institutions managed and run by private enterprise or industry associations. It will encourage a move from a system of funding training institutes, to funding the candidates. As a result institutional funding could be limited to an upfront capital grant while recurring funding requirements could be met by appropriate disbursement to the institute at the end of successful certification. Public – Private Partnership Mode will be the major vehicle for absorption of public expenditure in skill development in the Eleventh Five Year Plan. Apart from the financial contribution from the Government, the Plan calls for creating an Enabling Environment for Private Investment in Skill Training.

5.96 The Draft National Policy on Skill Development, prepared by the Ministry of Labour & Employment, has targeted to expand significantly the capacity of the national skills development system. The Policy envisages setting up of State Skill Development Councils, State Skill Development Boards and State Skill Development Corporations on the lines of their national counterparts. The Policy places the Ministry of Labour and Employment as the nodal Ministry for coordinating various efforts of skill development. The Ministry will also guide the formulation of a Programme of Action for implementing the Policy.

5.97 As part of institutional restructuring, the Policy calls for the National Council of Vocational Training (NCVT) to be strengthened and reengineered with a broader mandate and expanded activities to play a pivotal role in skill development. A State Council for Vocational Training is to be remodelled in each State, which has similar functions as NCVT at the national level. The Policy envisages establishment of Sector Skills Councils (SSCs), in coordination with NCVT, as an

institutional mechanism to facilitate greater and active participation of the social partners. Sector specific Labour Market Information Systems are to be established at national and state levels, and area specific LMISs at local levels.

5.98 The Policy aims to introduce ‘competency focus’ in the national skills development system. The Policy will focus on equalization of skills development opportunity for the socially disadvantaged communities with those of the rest of the population. Special efforts will be mounted to promote establishment of training facilities in deficient regions. The scheme of Modular Employment Skills would be expanded greatly to cater to the large size of the target group of drop-outs and out-of-school youth, including child labour group. All efforts will be made to improve and strengthen informal apprenticeship arrangements in the unorganised sector and to upgrade and diversify their activities into modern skill areas. A special funding support scheme will be set up, which, among others, will help meet direct and opportunity cost of skills training and lifelong learning for the unorganised sector.

### **District-level studies of Skill Development System**

5.99 While recognising the existing critiques and proposals by the above mentioned agencies and committees, this Commission made an attempt to independently evaluate the existing system of skill development at the district level by commissioning four district level studies in Sehore district of Madhya Pradesh, Allahabad district of Uttar Pradesh, East Khasi Hills district of Meghalaya and Imphal West District of Manipur. The aim of these district level assessments was to estimate existing training capacity for unorganised sector workers in the districts, including those run by the Government, private sector and NGOs. They also each tried to evaluate the quality and suitability of the training already available for informal sector workers, estimate the training needs of the district, suggest suitable ways for expanding training capacity in the district in order to cover about half the workforce by 2025 and develop a blueprint for new institutions that may need to be supported, including the role of the public and private sectors, management and governance structures etc. They also tried to indicate the nature of public finances that may be required for different purpose including subsidies to private trainers or training facilities, direct provisioning of training services, and subsidies to trainees.

5.100 The Studies have emphasised the total inadequacy of training facilities for unorganised workers at the district level. Moreover, the quality of training also leaves much to be desired. The unorganised workers are acquiring training mainly through informal apprenticeships.

5.101 The Studies have called for setting up training facilities at a decentralized level, at least at the block level, to enable such workers to access them. Moreover, they feel that the NGOs, PRIs and private sector should be actively associated if the desired expansion in training facilities is to be achieved. In respect of quality of training, it is felt that skills being imparted through the existing informal system should be certified and linkages between formal and informal institutions should be established.

5.102 The various studies have stressed identification of master trainers at village, block and district level, incentivising their training and linking them with formal training institutions. There is a felt need for a well designed training of trainers programme at formal institutions where these master craftsmen could be trained. Provision could be made for a one time grant to master trainers to upgrade their workshops.

5.103 The Studies have also called for a nodal agency at district level to be set up to coordinate, implement, evaluate and follow up the skill development programmes. It has been suggested in the Allahabad Report that all those functions that has been stated in the SDI scheme of Ministry of Labour & Employment for state committee to be executed at state level may be assigned to the suggested District Skill Development Agency at the district level. Thus it would substitute the role of nodal ITIs as proposed in the SDI scheme. The report on Sehore district has suggested that at State level the nodal agencies for rural and urban sectors may be the Rural Development and Commerce and Industries Department respectively with authority of coordination resting with State Planning Commission assisted by the Directorate of Economics and Statistics [DES]. At Divisional level a Committee headed by the Revenue Commissioner may be constituted with collectors and other divisional level officers as members to determine the strategy for implementing training programmes. A few NGOs of repute may also be incorporated as members. At district level, the District Planning Committee may be entrusted with the function of implementing the training programmes. A few sarpanchas from strategic Gram Panchayats may be coopted for suggesting skills keeping in view the grass –root realities. Similarly a few urban ward members may be involved for identifying specific skills for urban.

5.104 Another important recommendation emerging from the studies is that financial support may be provided to subsidise wage losses of unorganised sector workers during their training. Moreover as part of the training strategy soft skills like marketing, communication, attitudinal and behavioural changes should also be imparted. A strategy may be formulated for marketing of the produce of the unorganised sector entrepreneurs, especially rural entrepreneurs

5.105 The two studies on the North Eastern region have also suggested setting up of training institutions in specific areas of interest to the two states. The study on East Khasi Hills district has recommended setting a new training institution for the construction trades in the district as there is a large demand for construction workers in the North Eastern Region in general and in the State of Meghalaya in particular. The study on Imphal district has suggested setting up of an institution like the National Institute of Fashion Technology for the development of the handloom and handicraft sector in Manipur. It has also called for establishment of an institution for providing training in the food processing sector. The study also feels that the State Institute of Rural Development (SIRD) in Manipur could be promoted as a full fledged training centre in the form of an autonomous body.

## **Conclusion**

5.106 The emphasis of the Governmental training system is mainly on formal training. Moreover, the training facilities show a regional concentration, with the southern and western region being better served. The training capacity is also very limited in comparison to the requirement which has been brought out in detail in chapter 3. There are a variety of NGO and private sector initiatives in the area of skill development. However, these again have a very limited outreach and their spread is weaker in precisely those areas which are likely to witness faster labour force growth in future. The findings of the district-level studies emphasise the importance of a decentralised training system going down to the district and the block level. This approach is in consonance with the recommendation of the Second National Commission for Labour calling for block level vocational educational institutions.

## Appendix 5.1

### Skill development programmes being organised or funded by Ministries /Departments of Central Govt.

<b>Total</b>	<b>3833300</b>
<b>Formal Training</b>	<b>2213100 (57.73 per cent)</b>
<b>1. Ministry of Human Resource Development</b>	<b>1295000</b>
-Vocationalisation of Secondary Education	1000000
-Polytechnics	295000
<b>2. Ministry of Labour &amp; Employment (DGET)</b>	<b>860000</b>
-Craftsmen Training Scheme (CTS)	371000*
-Apprenticeship Training Scheme (ATS)	258000
-Short Term Courses based on Modular Employable Skills (MES) (Target)	200000
-Crafts Instructor Training Scheme (CITS)	1000
-Advanced Vocational Training Scheme	30000
-Hi-tech Training Scheme	
- Women Training Programme	
<b>3. Ministry of Rural Development</b>	<b>3000</b>
-National Institute of Rural Development (NIRD)	3000
<b>4. HUDCO &amp; others in Construction sector</b>	<b>2500</b>
-Training by Construction Industry Development Council (CIDC)	2500
<b>5. Ministry of Heavy Industries &amp; Public Enterprises</b>	<b>10000</b>
-Counseling, Retraining and Redeployment of Rationalized Workers of CPSEs (Formerly NRF)	10000
<b>6. Department of Information Technology</b>	<b>41500</b>
-DOEACC - 'O' level	41500
<b>7. Department of Tourism</b>	<b>1100</b>
-Food Craft Institutes under State Governments	1100
<b>Informal Training</b>	<b>1620200 (42.27 per cent)</b>
<b>1. Ministry of Human Resource Development</b>	<b>517700</b>
-Community Polytechnic Scheme	331000
-Jan Shikshan Sansthan	180000
-National Institute of Open Schooling – Distance Vocational Education Programmes	6700
<b>2. Ministry of Textiles</b>	<b>40000</b>
-Decentralized Training Programme	
-Weavers' Service Centres	
-Cooperative Training	
-Powerloom Centres	
-Indian Jute Industries Research Association	
-Central Wool Development Board	

-Central Silk Board	
-Training Centres for Handicrafts	
-North –eastern Handicrafts and Handlooms Development Corporation	
Apparel Export Promotion Council (AEPC)	
<b>3. Ministry of Women &amp; Child Development</b>	<b>247000</b>
-Support to Training and Employment Programme for Women (STEP)	87000
-Swalamban (previously NORAD)	53000
-Training in Home scale preservation of fruits and vegetables (by Community Food and Nutrition Extension Units)	23000
-Central Social Welfare Board	24000
-Kishori Shakti Yojana, etc.	
-Other Programmes	60000
<b>4. Ministry of Agriculture</b>	<b>200000</b>
-Training in Agricultural Extension	
-Training in use of Agricultural Implements & machinery	
-Soil Conservation Training Centre	
-LFQC&TI	
-NPPTI	
-Cooperative Education and Training	
<b>5. Ministry of Food Processing Industries</b>	<b>2500</b>
Food Processing & Training Centres (FPTCs)	
Institutions like Central Food Technology Research Institute	
Paddy Processing Research Centre	
Council of Entrepreneurial Development Programme (EDP)	
<b>6. Ministry of Social Justice &amp; Empowerment</b>	<b>15000</b>
-National Institute of Mentally Handicapped	
-National Institute for the Orthopadically Handicapped	
-Institute for Physically Handicapped	
-National Institute for the Hearing Handicapped	
-National Handicapped Finance and Development Corporation	
-National Scheme of Liberation and Rehabilitation of Scavengers and their Dependents	
-National Scheduled Castes and Scheduled Tribes Finance and Development Corporation	
-Rehabilitation Council of India	
<b>7. Ministry of Rural Development</b>	<b>200000</b>
-Swarnjayanti Gram Swarozgar Yojana (SGSY)	200000
<b>8. Ministry of Housing &amp; Urban Poverty Alleviation</b>	<b>150000</b>
-Urban Self Employment Programme under Swarna Jayanti Shahari Rozgar Yojana (SJSRY)	150000
<b>9. Ministry of Micro, Small and Medium Enterprises</b>	<b>180000</b>
<b>10. HUDCO &amp; others in Construction sector</b>	<b>13000</b>
Building Centres of HUDCO	13000
<b>11. Ministry of Health &amp; Family Welfare</b>	<b>36000</b>
Basic Training of multipurpose health workers	20000
Promotional training of Female Health Assistants	16000
<b>12. Ministry of Tribal Affairs</b>	<b>19000</b>
Vocational Training Centres (VTC) in Tribal Areas	19000

\*Excludes 3.78 lakh seats in ITCs



## **Chapter 6**

### **Summary and Recommendations**

#### **Introduction**

6.1 This Commission has reviewed the role of knowledge based inputs acquired (i.e. education, skills and technical education). These inputs clearly play a very significant role in promoting growth, especially in the emerging knowledge economy. As shown by this Commission in its earlier report (NCEUS 2007) these inputs are also important from the individual's point of view as they provide a basis for income and productivity growth.

6.2 The deficiency with regard to education and skill development in India has been considered by us in chapters 2 and 3 of this Report. A large part of the Indian workforce has low educational attainment and even lacks basic foundational skills in the form of literacy and numeracy, although this may gradually change with improved access to elementary education. In the area of skills, the skill base in India is mostly informal and thus difficult to adapt to changing market and technological environment. As far as formal skill training is concerned, the present system suffers from a number of deficiencies and the proportion of trained people is way below that achieved by a host of developing and developed countries. This no doubt has profound developmental implications both for the workers themselves, as well as the economy as a whole. From the demand side, with the economy experiencing rapid growth, skill shortages are being experienced across the board, drawing attention to the problem of skill development and engaging the attention of industry federations, international organizations and national bodies.

6.3 The issue of skills has to be contextualized in India in terms of the specific characteristics of its workforce which is predominantly informal and engaged in the unorganised sector. More than three-fifth of this workforce is self-employed while of the remaining who are regular or casual wage workers, only half are employed in the organised sector. In the years to come as well, the bulk of employment is likely to be in the unorganised sector of the economy. The skill requirement of the unorganised sector has to be visualized quite differently from the organised sector. This report is an attempt in that direction.

## **Recent Government Initiatives for Expansion of Skill Training**

6.4 Recently, the role and performance of the existing training system has been extensively reviewed and a number of proposals have been made to strengthen and expand the skill development system in the country. These proposals readily recognize the importance of skill development of workers in the unorganised sector. However, they focus on the skill requirements for the organised sector. It is recognized that the present training system is supply oriented and is not linked to emerging demand (by the organised sector) for skilled manpower. The proposals, therefore, make various suggestions for strengthening and expanding the present vocational educational and training system in the country.

6.5 The main proposals which we have examined in this Report have been made by the Planning Commission Task Force (subsequently also in the Eleventh Plan) and the MOLE Draft Skill Development Policy. In addition, the National Knowledge Commission and 2008-09 union budget also spells out some proposals. The targets proposed in the various documents perused by the Commission are quite general and range from about 15 m to 50 m annually. But in some cases only public sector training capacity or only organised sector worker coverage have been specified and there is general lack of clarity on extent of coverage of unorganised sector workers. In order to achieve these targets, these reports have mentioned various financing mechanisms and have different emphases on the respective roles of the public and private sectors. Besides, these reports have suggested different apex level organizational structures to address the VET requirements. From the Commission's point of view, a major lacuna of these reports is that they focus mainly on the needs of training for the organised sector workers (whether formal or informal) and also do not assess the existing training systems for the unorganised sector workers. As far as this Commission is concerned, we find that our broad approach as well as some of our key recommendations are similar to that of the Second National Labour Commission. But we have gone beyond the recommendations of this Commission in several important respects.

6.6 We note that following on the recommendations of these different reports, the Government of India has recently initiated a major restructuring of the skill development system in the country. Prime Minister's National Council on Skill Development has been set up for giving policy directions and periodic review of skill development efforts. The Council will be supported by a National Skill Development Coordination Board (NSDCB) which will be charged with the coordination and harmonisation of the Govt's initiatives for skill development spread across the seventeen central ministries and State Governments with the initiatives of the National Skill Development Corporation

(NSDC). The Board will be under the Planning Commission. The NSDC is being set up as a non-profit Company under the Companies Act, in a public private partnership mode, to stimulate/coordinate private sector skill development initiatives.

6.7 The main Ministries/Departments engaged in skill development have also embarked on consolidation and expansion of their programmes. These include Ministry of Human Resource Development, Ministry of Labour and Employment and Ministry of Micro, Small and Medium enterprises. The two main programmes which have considerable potential for the unorganised sector are the Skill Development Initiative (SDI) of Ministry of Labour and Employment and the Entrepreneurship and Skill Development Programmes of the Ministry of MSME.

### **Approach of this Report**

6.8 The differentiating feature of this report, compared to the others discussed above is that the present report has focused upon, and discussed the skill-related issues of the unorganised workers in some detail. As we have shown earlier in this report, formal training (i.e. training in a structured manner) has mainly been accessed by students / workers with secondary and post-secondary education. The chances of acquiring formal training are currently much lower for women, those with less than secondary education, the poor, and those from socially deprived backgrounds. Training capacity is currently located in a few states in the South and the West whereas the increase in labour force will be concentrated in the states in the east and the north. As this report indicates, the empirical, analytical and practical issues that pertain to skill development and training for the informal sector are indeed quite different. Some of these are briefly summarised below, followed by a set of concrete recommendations for addressing them.

6.9 This Commission has underscored the need to understand the heterogeneity of the informal sector in India, which leads to a wide range of training needs, requiring analysis and policy that is different from that of the formal sector. At the same time, we recognize that addressing and attending to the training needs of those who operate in the informal sector will eventually lead to the generation of a pool of manpower that can cater to the priorities and structures of the formal sector as well. It is from this standpoint that we address the issues that come up when we discuss training in the informal sector and the suggested rubric of a structure for skill development in the economy.

6.10 The informal sector is highly heterogeneous, encompassing production units of different features and in a wide range of economic activities, as well as people (i.e. workers, producers,

employers) working in service activities or producing under many different types of employment relations and production arrangements.

6.11 Some basic questions that come up regarding training and skill-building or upgrading as applied to the informal sector are those of training for whom, for what, what kind of training and how it can be provided. Beginning with motivations of the various people in the informal sector for training, those working in the informal sector may not immediately see the need for further skills acquisition and may have little knowledge about where to go even if the skills are seen to be required. The principal problems of poor literacy and numeracy often prevent informal sector workers from participating successfully in conventional training programmes, even if they perceive the need for training. Training can also be prohibitive in terms of costs – both direct and indirect. Even token fees for the training can form a real barrier for participating in training. Working hours are often long and any time off from the productive work means less income, which would affect the willingness of workers to join a training programme, even if it is relevant and easily available. Another issue is that the training needs of different segments of informal workers also have to be factored in. For example, the expansion of training needs to be gender equitable and gender sensitive, which can not be only in the nature of stereotyped expansion or left entirely to the market. These issues, therefore, has to be kept in mind when designing training programmes for the informal sector.

6.12 Coming to the content of training, the competencies that are required in the informal sector in a range of trading activities or also in microenterprise based production are a combination of ‘social competencies’, including basic literacy and numeracy and the ability to seek out markets and negotiate as well as technical skills that might be industry or trade based.

6.13 A further set of issues relates to identification of relevant demand for training for unorganised sector workers. It is often suggested that they should be responding to market demand with a greater role for the private sector and for enterprises. This is a very pertinent issue as state run vocational education and training systems tend to be too supply driven and far-removed from market demand. There is an assumption that by virtue of their closer contact with the market, an employer-operated training could be more efficient with private firms and small enterprises at their centre, coordinated through business associations and other such intermediary institutions. However, it is seen clearly that the impulses that generate from the market to the products and services of the informal sector are often very indirect. To use existing patterns of market demand alone to signal what the training needs of the economy are and also determine the outcomes of training initiatives will by-pass most members in the informal sector. Nor can it be expected that private enterprise would be forthcoming for skill

upgradation for a large part of this sector. In fact, market development in a number of sectors is likely to follow the skill development initiatives for workers in this sector. Thus, expansion of skill upgradation of unorganised sector workers needs to follow an assessment of social demand rather than existing market demand. This being the case, skill expansion in this sector will require the active participation of public agencies, while giving ample scope and opportunity to the private and non-governmental actors, who wish to provide expanded opportunities for training to such workers.

6.14 Further, this requires co-ordination between public agencies and private actors at all levels, including the decentralized ones, particularly at the district-level, in order to be able to arrive at realistic assessments of the training needs of those in the unorganised sector on the one hand and that of different areas and sectors, on the other.

6.15 Finally, even as we recognize the diversity of training needs, the differential perceptions and abilities to undertake training in the informal sector, it is necessary to assert that the skills that are perceived or found necessary in the informal sector have to be 'formally' provided as this involves processes of accreditation, certification and standardization that are essential for enhanced productivity, both in the informal and formal sectors.

6.16 Keeping the above issues in mind, the Commission has put forward recommendations below for building a skill development and training system that explicitly focuses on the expansion of VET for the informal sector workers who generally also have low levels of education. It may be noted that in doing so, we have deliberately not focused upon systems of formal training which are primarily intended for organised sector workers with a reasonable level of education. These systems of training are a subject of reform and have been discussed extensively in other reports.

## **Recommendations**

### **I. Proposed Target**

6.17 The share of persons having formal training is just 2.6 per cent of the labour force as per the NSS 2004-05 Survey. Based on the studies sponsored by the Commission which have assessed the demand for skill upgradation and the existing training systems, the Commission's review of VET experience and the link between VET and development, the Commission would like this rate of formal training to reach a level of 50 per cent of the labour force by 2021-22. The persons who would

be targeted would include potential entrants into the labour force as well as the existing pool of workers whose skills require to be upgraded.

6.18 The 11<sup>th</sup> Plan has assumed vocational education to increase from 1 million to 2.5 million per year and vocational training capacity to increase from about 2.5 million to 10 million, to a modal mix of 12.5 million per year. This will raise the annual VET capacity to 15 m per year. The Commission estimates that if by scaling up the skill development programmes, the training capacity can be increased to 16 million by the beginning of the XII plan, the target of 50 per cent of formally trained labour force can be achieved by 2021-22 or within three plan periods. Although this is a long time frame, given the vast size of the untrained labour force as well as its other characteristics, this time frame is realistic.

6.19 The total labour force at that point is projected to be 623 million by 2021-22. Our assumptions imply an increase of formal trained labour force from 11 million in 2004-05 to around 310 million in 2021-22.

6.20 It may be noted that in the long run (by 2021-22), the annual increase in labour force would be about 7 m. Since the training programmes would have succeeded in covering the backlog, the long run VET capacity in the country may not exceed 12 m.

## **II. Organisational Structure**

6.21 Given the urgency of development of adequate skills in the economy at a wide scale, the Commission welcomes the setting up of the Prime Minister's National Council on Skill Development (NCSA) to address the issue of skill development by expansion of training capacity in a mission mode. The Council includes six Union Ministers, Chairman of the NMCC and six non-official experts, including two from the unorganised sector. The Council will be responsible for vision setting and laying down broad strategies for skill development.

6.22 As mentioned in para 6.6 above a National Skill Development Coordination Board (NSDCB) has also been set up in the Planning Commission under the Deputy Chairperson, Planning Commission to coordinate actions of skill development in the public and private sectors. The NSDCB has thus emerged as the main body in the three tier structure put into place by the Government of India which will oversee the skill development policies of the government of India and bring about an accelerated growth of formal skill acquisition in the Indian economy through the public and private

sectors. At present the NSDCB has been allocated a sum of Rs. 300 crores to support innovative ideas by the Ministries to expand skill training in the PPP mode.

6.23 Given the enormity of the task and the deficiencies in the present institutional infrastructure for skill development in the unorganised sector, this Commission is of the view that the NSDCB should launch a *National Mission for Development of Skills in the Unorganised Sector*, to support skill development in the unorganised sector. Apart from coordinating the expansion of skill development in the unorganised sector in a mission mode, a certain quantum of funds should be at the disposal of the Mission to support skill development in a responsive mode, focusing upon strengthening of institutional infrastructure, creation of labour market information systems etc. in the manner that is detailed below.

6.24 The National Skill Development Corporation has been created by the Ministry of Finance as a non-profit corporation to support the expansion of private sector initiatives in skill development. The Corporation will have an initial corpus of Rs. 15,000 crores, to which the Central government has already contributed Rs. 1000 crores. The corporate sector, international development agencies and others are expected to contribute the remaining amount. At a meeting on the NSDC held in August 2008 and chaired by the Finance Minister, the private corporate sector has already announced its decision to provide 51 per cent of the corpus amount.

6.25 The principal function of the corporation will be to provide financial support to private sector initiatives in skill development. The operational details and objectives of the Corporation have not yet been detailed. The main purpose of the Corporation, in the Commission's view, should be to provide financial support to NGOs and non-profit organizations engaged in training of informal sector workers, while the financial needs of for-profit training organizations should be catered to by banks and other existing financial institutions. The Corporation has also been given some other functions which we discuss later in this chapter.

### ***Vocational Training***

6.26 The key requirements in a national skill development system are the identification, development and accreditation of training providers and training institutions; development of suitable courses based on a careful assessment of needs and demands; ensuring that such a system meets the needs of potential trainees, and the certification of trainees. The expansion of formal training as envisaged in the targets mentioned above will require a manifold expansion in each of these tasks

along with the development of fresh approaches which will increase the relevance of training both for the trainees and the potential employers or users of services and products of the trained workers.

6.27 At present, the National Council for Vocational Training (NCVT) has been set up as an advisory body to advise the government on matters relating to vocational training, for accreditation of institutes and prescribing of standards and curricula under the Craftsmen Training Scheme (for the ITIs/ITCs). Courses under the CTS, as discussed elsewhere in this report, cater mainly to organised sector requirements. There is presently a void as far as training in short term courses for the unorganised sector is concerned. The MOLE has sought to fill this void through its modular employable skills (MES) programme and skill development initiative (SDI). More than 300 modular courses have currently been developed. While the programme initially relies on expanded capacity utilization of ITIs/ITCs, a large number of public and private sector institutions are eligible to register as training providers. Ten agencies have been identified for carrying out certification.

6.28 The Commission views the SDI as a commendable initiative under which there is a positive effort to expand relevant skill training for school drop-outs and by backing this through the development of modular courses, registration of vocational training providers and certification by third party agencies. However, these developments are still limited and are within the framework of a national scheme. There is therefore the need for a national level structure that can provide the backbone to national skill development in lacking areas and address the needs of course development, recognition and accreditation of training providers, and certification. These functions may be performed by the NCVT with enlarged scope and functions which will continue to play a pivotal role in providing a framework for formal skill development in the country. In other words, the NCVT may be identified as the primary agency charged with setting of standards, certification of skills and accreditation of providers for all certificate based training for which the minimum eligibility is less than higher secondary education. Alternatively, a new body with well defined statutory responsibilities may be charged with these functions.

6.29 In performing these functions, the NCVT will have to work closely in coordination with the private sector, with employer bodies as well as those who have experience in assessing training requirements of the unorganised sector. The DGET is developing a framework in which these stakeholders are closely involved with the expansion of training. Given the complexities of the task, the DGET has proposed the setting up of Sector Skills Councils. These Councils should have adequate representation of stakeholders who understand sector-specific training needs for the informal sector as well.



6.30 The NSDC created by government discussed above has also been given some of the above functions viz. formulation of courses and certification; accreditation of training institutions, and creation of Sector Skill Councils. The first meeting on the NSDC presided over by the Finance Minister has taken a decision to create fifty Sector Skill Councils in high growth sectors. It appears that the NSDC is being envisaged as a large body with several functions apart from financing private sector initiatives. There is an overlap in the functions of the NCVT and some of the proposed functions of the NSDC. The views of the Commission on the organizational structure to oversee functions such as development of courses, accreditation, and certification have already been elaborated. The Commission does not favour transfer of these functions to the NSDC which, in its view, should focus on financial initiatives.

6.31 The Commission also recommends that a State level structure should be established in the states which will perform the same coordinating functions at the state level which the NSDCB will perform at the national level, within the overall framework provided by the Prime Minister's Council and guidelines set by the latter. This body should be fully responsible for making and implementing a training plan at the state level and coordinating and monitoring skill and training initiatives in the State. The Commission is of the view that given the vast nature of the task and the heterogeneous nature of the unorganised sector, training initiatives need to be decentralized to the State and sub-state levels. The SCVTs should have full responsibility for evolving a framework for curricula development which meets local needs, developing a certification framework. Thus, in the Commission's view, while the NSDCB/NCVT will be responsible for overall co-ordination, development of guidelines and curricula at the national level, the state level bodies and the SCVTs will undertake the relevant activities at the state level.

6.32 In the Commission's view, the expansion of skill development involving millions of people will require coordinated action between public and private agencies at the local level. The Commission is of the view that the skill development programmes for the unorganised sector should be operationalised by a District Skill Development Council (DSDC) which would be the most crucial link in the entire skill development framework. The DSDC will function under the District Planning Committee or Zilla Parishad and will be managed by an executive committee consisting of the major stakeholders in the skills arena at the district level. These would, typically, be employer's associations, prominent NGOs working in the district, representatives of artisans and members of the district administration. The main executive of the district skill development agency should be a professional who is devoted full-time to the activities of the agency. In order to give greater operational flexibility to the DSDAs, they could be registered as societies or non-profit companies.

6.33 The DSDC will perform the following functions: It will create a database of existing skills by undertaking skill mapping, assess training needs on the basis of existing as well as potential industrial and employment trends, formulate a district training plan involving all stake holders, ensure convergence of various training programmes, coordinate training activities of government departments as well as other training providers, monitor and evaluate training programmes, provide handholding to the trainees, and keep track of the trainees after completion of their training. The agency will assess the infrastructural needs for training and help in its proper maintenance. The agency will help develop a labour market information system which will consist of a data bank of training and training providers, along with requisite details, details of trainees, compilation of information of skill requirements in each sector and sub-sector and also put into place a computerised MIS.

#### ***Vocational Education***

6.34 At the apex level, the Ministry of Human Resource Development will continue to coordinate the development of vocational education in the country. However at the district level, the DSDC may be given the task of dovetailing VE with training requirements. As already discussed, the capacity for vocational education needs to be increased significantly. This will have to be accompanied by making the course content more responsive to market demand. The industrial associations may be associated with formulation and revision of course curricula. Links should be established between the vocational education stream and school education as well as higher education. Students should be able to move between vocational and general education streams by providing them with multiple entry and exit options. Public expenditure on vocational education needs to be increased significantly. The NSDB can perform the task of coordination between vocational education and vocational training components.

### **III. Expansion of Skill Development**

6.35 As discussed earlier in this Report, the existing training systems for the unorganised workers are of the following kinds: The government system financing and providing (on its own or with the assistance of private providers) either formal or informal training; or different types of private providers providing formal or informal training. The expansion of skill development for unorganised workers have to be formulated to reflect the needs of the economy and the strengths and weaknesses of the different types of on the one hand and the realities of the unorganised sector on the other. This

needs to be done through a combination of public and private sector initiatives, the latter term being defined broadly to include all types of non-governmental providers, trainers, and others involved in certification, accreditation etc.. In the public sector, expansion of training can be done through consolidation, strengthening and expansion of existing schemes that are already in existence and have been functional at the district level for some time now, by undertaking new initiatives, and also by integrating initiatives such as the cluster development programme of the MSME under it.

**i. Consolidation and Strengthening of Training in the Existing Livelihood and Social Sector Programmes.**

6.36 A basic need of the training system would be to link skill development with livelihood promotion. Skill development for the unorganised sector workers has to be seen as an integral part of livelihood support which includes a number of elements including identification of activities, credit and technological support, capacity building and backward/forward linkages.

6.37 As shown earlier in this report, the governmental system is a very large source of skill training for unorganised sector workers. Almost all large government livelihood promotion and developmental programmes have a training component; e.g. the rural development programmes involve training for SGSY beneficiaries. Some training is also built into the NREGP. The MSME trains under the PMRY and REGP and also through the MSMI. The Ministry of Health has training programmes for ANMs, Anganwadi workers and ASHAs and so on. The stress is on providing short duration functional training. The advantage of this training is that it is linked to a specific livelihood based activity being undertaken or likely to be undertaken by the individual and often with different types of assistance/handholding. Government programmes rely on formal as well as informal trainers. Moreover, these programmes also reflect PPP mode as training in a number of instances is imparted by NGOs / private providers.

6.38 Further, there are many other livelihood promotion activities which are being carried out with the support of banks and NGOs. Prominent among these are the micro-finance based activities supported through the NABARD-SHG linkage programme. These programmes also support training initiatives.

6.39 The main problems associated with these training programmes are that this training is not linked to any standards, its quality is highly variable, there is no standard curriculum and usually there is no certification. In addition, the government also extends informal sector training through the

SSKs and Nehru Yuvak Kendras. However, the training under these programmes is also neither standardised nor certified. *It is recommended that the quality of training imparted under them should be improved and standardized and these schemes be integrated under the training plan of the DSDC. These schemes should also involve formal certification procedures to ensure standardization and minimum standards of quality. Over time, training under these programmes should be linked to the MES framework.*

**ii. The Skill Development Initiative (SDI) and the Entrepreneurship Skill Development Programmes (ESDP)**

6.40 The Skill Development Initiative (SDI) scheme of the Ministry of Labour & Employment has been considered by us in chapter 5 of this Report. This is a five year project during which one million persons would be trained or their existing skills tested and certified under Modular Employable Skills (MES) framework. A rate of training fee has been proposed. Candidates belonging to SC/ST category and women will be given relaxation of 25 per cent in training fee. In order to motivate trainees to take the training programme seriously, training fees of all those trainees who successfully complete the training would be refunded to them. Training cost at per person per hour will be reimbursed to registered VTPs in respect of those successful persons who got training from it. VTPs will reimburse training fee to the successful candidates. Testing fees have been specified for skill certification. This will be reimbursed to all the successful persons who have received training from approved VTPs.

6.41 The Modular Employable Skills (MES) framework under SDI of the MoLE offers many elements which are appropriate to the development of training initiatives for the informal sector. Under the SDI, workers can be trained in formal institutions, or informally trained workers could take up a certification examination and be certified. Such workers, as discussed above, could be offered facilities to go through a “finishing school” before taking such an examination. Since the SDI and the MES framework can be adapted for training of all informal sector workers, with appropriate care been given to context, the Commission is of the view that the SDI should be gradually strengthened and target under the scheme significantly increased along with budgetary allocations. Larger number of training providers and assessing bodies should be brought under its ambit.

6.42 The Ministry of Micro, Small and Medium Enterprises is focusing on Entrepreneurship Skill Development programmes (ESDP) in the unorganised sector conducted through MSME-DIs. Emphasis is on conducting out-reach training programmes in backward areas, particularly for weaker

sections of the society. Training programmes are of six weeks duration with training fee at Rs 200/-. Trainees from weaker sections are given a stipend. No fee is charged from SC and ST candidates. Training programmes are being conducted in 60 disciplines under ESDP. The Commission is of the view that this programme should be steadily expanded as it has the potential to provide relevant skills to a large number of target group beneficiaries in the unorganised sector.

### **iii. Focused approach towards improvement in training in clusters**

6.43 The UNIDO and the MSME have identified about 6400 clusters in the country, of which more than 6000 are classified as low-tech and are certainly likely to be requiring skill upgradation. The following specific recommendations are being made with regard to dovetailing of existing cluster development programmes in India and the proposed district level skill agency. First, it has to be recognized that an important component of development in the unorganised sector is that of clusters and a process of skill development focused at the district level has to explicitly take into account the needs of clusters in the district. Effective partnership needs to be established between the DSDC and all clusters in the district. The DSDC should consist of representatives from different stakeholders in clusters that exist in specific districts and district cluster skill development plans should be evolved and dovetailed with cluster programmes run by different agencies such as UNIDO, NABARD, MSME, KVIC and so on. Alternatively, if cluster development programmes in districts are managed by a cluster officer, he has to be part of the DSDC, along with representatives from different agencies that run cluster development programmes.

6.44 Second, in order to motivate cluster actors regarding the desirability of expanded skill development programmes, the methodology evolved by the UNIDO and the MSME's cluster initiatives in generating the conditions for concerted joint action among enterprises, recognizing interdependencies between them and the advantages out of joint initiatives, need to be expanded into the skills and training arena. Such initiatives are already in place for marketing and financing and can be easily extended to skills. This involves convincing entrepreneurs, artisans, industry associations and other cluster stakeholders about the desirability of investing in and undergoing training for sectoral upgradation and also evolving a system of incentives for participating in training programmes.

6.45 Third, there are several sectoral skill development programmes that are conducted by different agencies that function as part of industries that are organised in the form of clusters. For example, in the leather industry, institutes such as the Footwear Design and Development Institute

and the Central Leather Research Institute conduct training programmes aimed at providing skilled manpower for the export segment of the leather industry. Many of these initiatives cater to limited number of trainees and are often targeted at higher ends of the training spectrum, whereas the upgradation requirements of the industry require training at low value added levels in the value added chain, as in raw hide and skin collection or the production of semi-finished leather in the leather industry, where very large numbers of unorganised sector workers are employed. Such integration of training requirements of workers in the lowest level in the value chain with the more overtly perceived need for skilled workers at higher levels can take place only with more active intervention by state agencies working together with cluster level organizations. District level subsidized institutions to train such lower level workers, set up under the DSDC in collaboration with cluster actors, can do this role.

6.46 Fourth, the incentive structures and costs to be incurred by potential trainees have to take into consideration differences between clusters, i.e., artisanal, microenterprise based or mixed firm ones. For example, purely artisanal clusters will require co-ordination among artisans and recognition or education about the benefits of training, but costs will have to be borne by state agencies under one of the programmes discussed in this chapter. Expenses and infrastructure for training of trainers can come under cluster based artisanal improvement programmes that are located in clusters, again jointly under the cluster development programme and the DSDC. In the case of clusters where some larger firms dominate through value chain or subcontracting relationships, a method to divide costs of training by size of firm might need to be evolved along with positive incentives for firms that undertake training.

#### **iv. Provision of Formal Training to Informally Trained Workers**

6.47 The largest system of skill development for unorganised workers that is in vogue today is the informal training system in which workers learn some skills on the job from skilled workers/master craftsmen. Our analysis in this report shows that such training is spread across all major activity categories, includes workers with low levels of education and across the poorer segments. In other words, should the productivity and earning potential of such workers be raised through appropriate formal training, it would also have a major pro-poor impact.

6.48 The main advantage of the system is that workers combine learning with earning. The passage of skills from skilled worker to unskilled worker varied depending upon worker background (family or hired worker, male or female), type of industry or trade etc. A major potential constraint in

this system is the static skill level of the worker with limited adaptations in a world of changing technologies/demand. No 'schooling' of the skilled worker is possible and he/she only learns while doing.

6.49 In order to address the existing problems with informal apprenticeship systems, at the district level, crucial attention has to be paid to the issue of awareness and incentives to those that impart training (master craftsmen) as well as those that receive training (apprentices) in informal apprenticeship systems. First, it is essential that the formal certification systems being developed under the SDI are able to reach out to the informal training system through the district level structure suggested earlier, or through specific schemes such as the SDI, the ESDP etc. The formal apprenticeship can be supplemented by including a component of specific training for instance on technical and theoretical skills that could be provided at the workplace or in a supporting centre, again using a system of incentives and possibly coordinated by boards such as KVIC, HHDC and so on. Formal training inputs can also be offered at the workplace through mobile units or trucks equipped with complete workshops that regularly visit workplaces and provide instructions on problems at hand. There can be incentives for the apprenticeships in the form of reimbursement of fees charged on completion of the course, low or no fees charged for those from SC/ST backgrounds, and so on.

6.50 Second, it is necessary to continuously upgrade skills of master craftsmen/trainers themselves in order to be able to cope with changing technology, fashion and shifting markets. This will need to involve sectoral initiatives that combine skill upgradation at a higher level with other sector-specific interventions such as technological upgradation and initiatives for expansion of scale under cluster development programmes. Some of these issues are dealt with by the SDI. But the Commission has recommended a full-fledged programme for taking informal training to the next level, while providing some form of employment assurance for a period during training to the trainee.

#### **v. Proposal for Programme for Employment Assurance and Skill Formation**

6.51 The Commission recommends that in order to operationalise the suggestions given in the earlier paras to strengthen and upgrade (formalize) the systems informal training, a massive *Programme for Employment Assurance and Skill Formation with the aim to develop human capital through on-job-training* be launched. The scheme will provide employment to poor individuals for about six months and provide them formal marketable skills. This will help the trainees realize the importance of training. The proposed scheme is discussed in detail in the following paras.

Goals and Objectives

6.52 Given the need to expand formal training in a demand oriented fashion and to provide some incentive for formal skill training to unorganised sector workers, the Commission proposes a scheme for Employment Assurance and Skill Formation to meet the twin purpose of skill development in a practical fashion, and for meeting employment needs of these workers.

6.53 The purpose of the scheme is to develop human capital through on-job training, while providing employment to poor individuals for about six months; to train them and to provide them with formal marketable skills, so that at the end of this period, having been employed at least at the minimum wage, they qualify for regular employment or self-employment at higher wages utilizing the skills acquired. In that sense, the proposed scheme may also be considered as a programme for skill formation through apprenticeship and the six months' job at minimum wages may be regarded as "on job training".

Eligibility

6.54 All young persons will be eligible under the scheme who: a) are in the age group 18-29, (b) are with at least primary, but not more than secondary level of education; and (c) have an economic eligibility depending upon location, as discussed below under the heads "Coverage" and phasing. Subject to this, and subject to training slots being available, the scheme may be seen as providing an entitlement to all registered youth to receive training through placements.

Programme of Training

6.55 The scheme envisages dovetailing training / wage employment with existing schemes of the Ministry of Labour and Employment (Skill Development Initiative) and other schemes of Self-Employment and Entrepreneurship Development.

6.56 All employers willing to provide on-job training would be registered by the proposed SDS in its MIS. These employers could include all micro and small enterprises, master craftsmen and other skilled self-employed workmen, self-help groups, cooperatives, municipalities, government departments, public sector undertakings and any other urban agency, whose bonafides in providing on-job training in designated skills could be easily accepted.



6.57 All workers seeking training in specific areas of their choice would also be registered under the scheme.

6.58 The allotment of workers to employers/trainers could be by mutual agreement or through employment exchange/placement centres in the district.

6.59 All employers/trainers would provide on-job training to the worker and a daily stipend not less than the declared minimum wage for unskilled workers. The daily working hours shall not be more than 8 hours and workers will be allowed weekly off.

6.60 Every worker under the scheme would be expected to undergo certification in the designated skill. For this purpose, this programme would be dovetailed with the Skill Development Initiative which is developing course curricula under the Modular Employable Skills Programme and certification norms for a wide variety of skills.

6.61 It will be the responsibility of the employer to provide employment for at least six months to the eligible worker. A mechanism will have to be set up to quickly arbitrate any possible infringement of the terms of this scheme by any of the parties involved.

#### Coverage

6.62 The scheme is intended for youth with at least primary but less than higher secondary levels of education. Further, it is largely intended to cover poor youth. In urban areas, eligibility may be limited to those whose household income is less than Rs 7000 per month as on March 1, 2008. In rural areas, the scheme may cover youth from landless poor, marginal and small farmer households who are about 80 per cent of the total with the requisite educational eligibility. During 2004-05, an estimated 104 m youth in India had educational qualifications as per this scheme. Of them, about 30 per cent (33 m) were in urban areas and the rest (71 m) were in rural areas. About three-quarter of the urban youth were in smaller towns (less than million population). About two-third of the youth in this entire category are in the labour force.

#### Phasing of the Scheme

6.63 At present, employment and income opportunities are distinctly higher in large towns. On the other hand, the training capacity is the weakest in rural areas, particularly in poorer states. Since the scheme requires building up of administrative capacity in the districts, in the first phase we may start

with urban areas with poorer employment opportunities and cover some 50 non-metropolitan smaller towns with population between 50,000 and 5 lakhs, as pilots. This may be followed by the other segments of the eligible population, such as the eligible youth in the rural areas and larger towns.

Financing requirement

6.64 The total financial provision per worker would be Rs 10,000/- which would cover (a) about six months of pre- or post-certification on job-training/employment for which the employer be provided Rs. 50 per day as subsidy towards stipend being paid to the worker (b) Rs 500 as the cost of certification, as provided under the SDI; (c) Rs. 1000, as cost of training/incentive to the provider/employer. The worker would have the flexibility of receiving training either pre or post-certification, or both. However, the subsidy towards the stipend would be back-ended in the case of the former; i.e. the employer would receive the stipend subsidy only if the worker is certified.

6.65 As indicated above, the programme requires a one time financial outlay of Rs. 10,000 per worker, which is the same as that provided under the NREGA. A provision of Rs 10,000 crore over five years for this project would thus ensure additional training-cum-employment to one crore persons through this mechanism, expanding the present training capacity by 2 m per year under the programme. A larger budgetary allocation would provide larger job creation. However, it will require galvanizing the existing and newly created administrative mechanisms to effectively implement this proposal.

Benefit and Impacts

6.66 The proposed programme will provide formal skills to those youth who are from the poorer sections and who have dropped out of school without achieving higher secondary education. The scheme would provide the following principal benefits.

- Allow the hitherto unskilled and poorest individuals to acquire skills for employment and increase their employment potential and the wage earning capacity.
- Enhance the sourcing of certified skilled manpower in line with workplace requirements and customize skills, education and training to the requirements of the industry.
- Integrate unemployed poor into the mainstream of an expanding economy who can be fully employable on a sustainable basis without any further sop or subsidy.

- Further, the programme, as designed above, is quite flexible and can be applied differently in different contexts, within the same overall financial parameters.

6.67 The scheme envisages a demand driven training wherein the employers/industry would determine the skills required for their manpower.

#### **IV. Training Providers**

6.68 Availability of quality trainers is generally perceived to be one of the main bottlenecks to expansion of skill development programmes. Hence a major effort is required to enhance their availability. A register of training providers should be prepared and updated as a part of the labour market information system. To provide training at block-level, the trainers will have to be from the local areas so that they would be willing to reside and provide training in those areas. Industry associations can help in training the trainers in their respective fields. MOUs could be signed by the NSDCB/NCVT with existing training institutions and industry associations for this purpose. Master crafts persons would also be a part of the mission to create a larger universe of trainers.

#### **V. Training Infrastructure**

6.69 It has been observed that with devolvement of large number of functions and funds to the panchayati raj institutions, physical infrastructure is available at the block level which could be used for skill development programmes. However, the availability of infrastructure varies between blocks and may not be adequate for the potential target trainees in particular blocks. Funds could be given by the DSDC for meeting deficiency of available infrastructure at block level. Such financial help could be linked to the number of potential trainees in that block.

#### **VI. Course Development and Assessment**

6.70 Under the MES/SDI framework, modular courses are being developed in association with industry associations. These courses are available for adoption by any training provider. This process should be strengthened and the list of courses available for training be significantly enhanced. Such course material will have to be provided in local languages if skill development programmes' outreach has to expand.

6.71 Under draft NSDS of Ministry of Labour, while Sector Skills Councils are to assess the training needs of the organised sector Partnership Development Councils are to perform a similar

function for the unorganised sector, at least initially. However, such an arrangement may create unnecessary confusion. Skill Sector Councils may look after the training needs of the unorganised sector also from the beginning.

## **VII. Labour Market Information System**

6.72 It is necessary to set up a Labour Market Information System (LMIS) at the national, state and district levels linking various trainers and the trainees. Such a system will help in linking the trainers and the trainees and also help in monitoring the training programmes. The DSDC will be performing the task at the district level. For this purpose, the states may consider remodeling the existing employment exchanges so that these can also take up the functions of tracking trainees, listing formal and informal training providers, and providing relevant placement information to both trainees and potential employers. Over a period of time, the LMIS systems could sell their services and be made financially viable. The systems at the state and national level will have to aggregate the inputs from the districts to arrive at the national scenario.

## **VIII. Support to and Synergy with Private Initiatives**

6.73 There are, as we have seen, a vast number of private initiatives to support skill training. These include in-house training by corporates, private for-profit training initiatives and private non-profit initiatives by Foundations, Trusts, NGOs etc. The government's approach towards these initiatives should be to provide them the maximum opportunity and flexibility for growth. While the public sector will no doubt like to rely on NGO/private agencies to front-end its training initiatives, special effort should be made to preserve the autonomy of those institutions which are trying to develop innovative models of training for unorganised sector workers. Support may be provided for such initiatives as well as other non-profit initiatives, in the form of subsidies for capital costs or coverage of financial, with proper incentives to expand their outreach among the weaker sections of the unorganised sector workers. The Commission had already envisaged such a role for its proposed National Fund for the Unorganised Sector. This function must also be extended to the NSDC.

## **IX. Addressing Gender Issues in Skill Development**

6.74 The prevalent education and training system reinforce the cumulative disadvantage faced by women in the labour market. As shown in this report, women in the unorganised workforce have

much lower levels of education and training than men. Further, in the unorganised segment, existing training is concentrated in certain gender stereotyped vocations, such as tailoring. There often a structural bias against women in existing training systems. This is because gender stereotyping and discrimination results in their facing several obstacles such as lack of time and heavy domestic workload, distance to classes, male teachers/trainers, opposition from family members, and poor linkages with other development inputs, such as income generating programmes. Further, in situations where training provision is subject to minimum educational requirements as in the formal training system in India, this discriminates against women even more than men. In addition, since gender discrimination in the labour market restricts access to employment and results in lower remuneration in most types of employment, women themselves might not be motivated to enter training programmes. All the issues that affect workers in the informal sector, therefore, affect women within it even more intensively.

6.75 The Commission believes that the proposed expansion in training systems should pro-actively foster gender sensitivity and gender equity in training through proper design, advocacy, and incentives. Four broad sets of issues may be addressed here. First, the content of training programmes for women may need to integrate components of literacy, numeracy, business skills, confidence skills in a bigger way. Second, training for women is likely to more effective when done in a formal, participatory way through groups. In a range of activities such as street vending, city cleaning services and domestic services, such interventions have resulted in better remuneration to those who organise in groups and this should include training. In fact, in urban areas, these groups can function as employment exchanges where women can be encouraged to register to undergo training and in turn be placed in employment at given terms. The Kudumbashree initiative in Kerala shows that this can be coordinated fairly effectively at the district or block level, without running into difficulties with fraudulent agencies. Third, programmes should address the special constraints faced by women in participating in training. This includes absence of mobility, need for child care and gender segregation. The training itself should mainly comprise modular, short-term courses with flexible entry and exit options and mobile training provision. Fourth, training women only in gender stereotypes activities has both specific and general ramifications, since such training not only would perpetuate gender segmentation, but also often leads to over saturation of trained women in low paid work. This does not mean that skills training should no longer be provided in areas around women's reproductive or conventional care role, but that the main consideration is for women to gain access to work which is better paid and with better conditions. Hence, women must also be encouraged to train

for “hard” technical skills as well in areas such as agriculture, where their role as producers is far more significant today. Admittedly, NGOs may have a better niche in doing this.

## **X. Financing**

6.76 The significant expansion in VET will require a considerable upscaling of financial resource commitment by the government and by the private sector and both these entities have signaled their commitment to increase their spending on skill training. The present commitment of the Central government is to increase expenditure on VET to Rs. 22,800 crores during the 11<sup>th</sup> Plan. In addition, a sum of Rs. 300 crores has been committed to the NSDB and Rs. 1000 crores has been allocated to the NSDC. A large part of this allocation will go to support strengthening of VET infrastructure for training of workers for the organised sector through ITIs and Polytechnics.

6.77 This Commission has advocated that (i) a sum of Rs. 5000 crores be allocated to the NSDB for a National Mission for Skill Development in the Unorganised Sector for supporting the cost of setting up and operating the proposed institutional infrastructure for expansion of training initiatives at the district level and, (b) at least a doubling the existing training schemes under the SDI and MSME (Rs. 1000 crores; and (iii) Rs. 10,000 for the proposed Employment Assurance Scheme. In effect, the Commission’s proposal imply a significant increase (to about Rs 40,000 crores) in the financial allocation for VET over the next five years. Given the strong positive externalities emerging from expansion of training, especially of the unorganised sector workers, this increase can be considered necessary. Moreover, if necessary, the resources can be raised through a levy on the turnover of companies to help partially meet the cost of skill development programmes. Tax concessions may also be extended for making contributions for skill development

## **XI. Conclusion**

6.78 The Report of this Commission has focused on the formal training of workers who are either employed in the unorganised sector, or are likely to join the unorganised sector as waged or self-employed workers. These are typically workers with low levels of education and economic wherewithal, a proportion of whom have acquired skills through informal training. We have shown in this report, that formal training has focused so far on those with better educational attainments (at least higher secondary education), coming from better-off segments of society. Although, interestingly a majority of these trained persons are not absorbed in the organised sector, they would still tend to constitute an upper stratum of workers in the unorganised sector. Due to perceived skill

shortages in the organised sector (for formal as well as informal workers), most recent proposals have focused on higher end formal training, while recognising the need for training of unorganised sector workers. This Report, on the other hand, has based itself on the premise that there is also a very significant developmental need to improve the skill level of unorganised sector workers (both self-employed and waged) who are at the lower segment. We further show that the characteristics and training needs of this segment of the workforce are quite different from the upper segment requiring significant differences in approach – in terms of content, institutional delivery etc.

6.79 Expanding the training for such workers would require active participation of different types of stakeholders – government departments, trainers, private training providers, NGOs and employers. The financing and cost recovery models for such training would also be quite different. The Commission is, however, of the view that the recently constituted National Mission, and the proposed structures in the Draft Skills Policy with suitable modifications to assimilate the needs of training of unorganised sector workers could meet the requirements of training expansion at the national level. The Commission expects that it would be possible to expand training to cover 50 per cent of the labour force within a reasonable time frame. This, in turn, would not only provide a firm anchor to the growth process, it would also help in spreading the benefits of growth to a much wider cross-section of the workforce.