By Invitation

Skill Mismatches in Indian Labor Market: Policy Priorities & Challenges Ahead

Sahana Roy Chowdhury

This article highlights some major concerns on India's ability to create a balanced mix of 'employment' and 'quality employment' to embark on a sustainable, balanced and inclusive growth path, where quality signifies productivity contribution. It points out that co-existence of 'unemployability' and 'skill shortages' in certain sectors depicts prevalence of 'skill mismatches' or allocative inefficiency in Indian labor market. Problems and prospects of the steps taken so far to bridge the skill gaps are discussed with a focus on the major challenges ahead such as increasing informalization. A few international best practices are then mentioned but with a note of caution that there is no 'one-size' that 'fits-all'.

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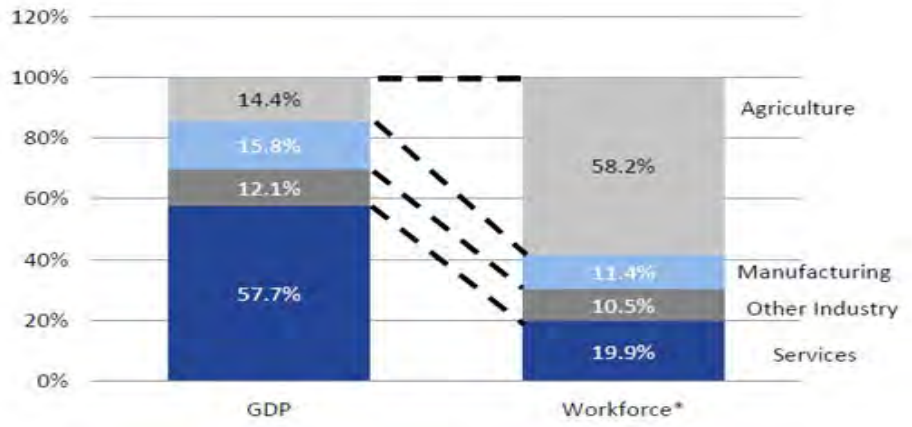
Introduction

Indian economy witnessed quite a varied phase of growth and a mixed sectoral performance prior to the structural reforms. Growth scenario changed remarkably just before the 2007-08 recessions placing India amongst the fastest growing emerging economies in the world. However, a closer look on its sectoral distribution suggests that the main driving force has been the 'service sector' which constitutes a major share (54.1%) of GDP although a lower share (24%) in terms of work force participation. While agriculture (primary sector) has been incapable of creating any 'productive employment'[1] manufacturing (secondary sector) showed a staggering growth; its contribution of 16% in real GDP as in FY2012 was well below the targeted level and abysmal in comparison with other emerging economies (Fig. 1a). Closer investigation reveals that within manufacturing stark differences exist in terms of performance efficiency: labor intensive industries are found to be less efficient (Fig. 1b & Fig. 1c). Such

[1] Contributing only 23% in GDP with the highest absorption rate (56% in 2004-05).

sectoral composition of growth and employment points towards India's inability to create a balanced mix of 'employment' and 'quality employment', quality measured – broadly – in terms of productivity contribution.

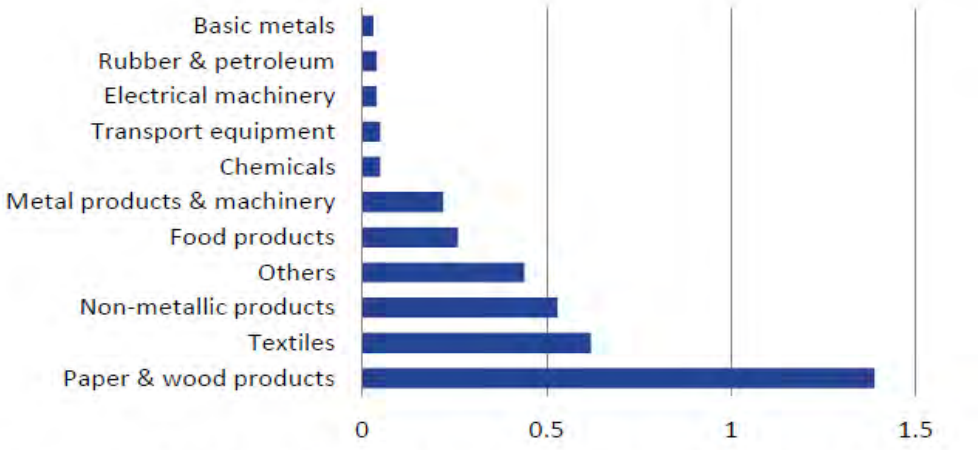
Fig.1a GDP Contribution & Labor Distribution across Sectors (FY11)



Source: RBI (GDP data); Econimic Survey (Workforco data)
Note: *workfotce data is for FY10 (recent articles show manfacturing sector employs as much as 12% of the total workforcel); Economc Survey FY12 uses Census 2011 data to arrive at agriculture labour force; industrial sector also includes construction

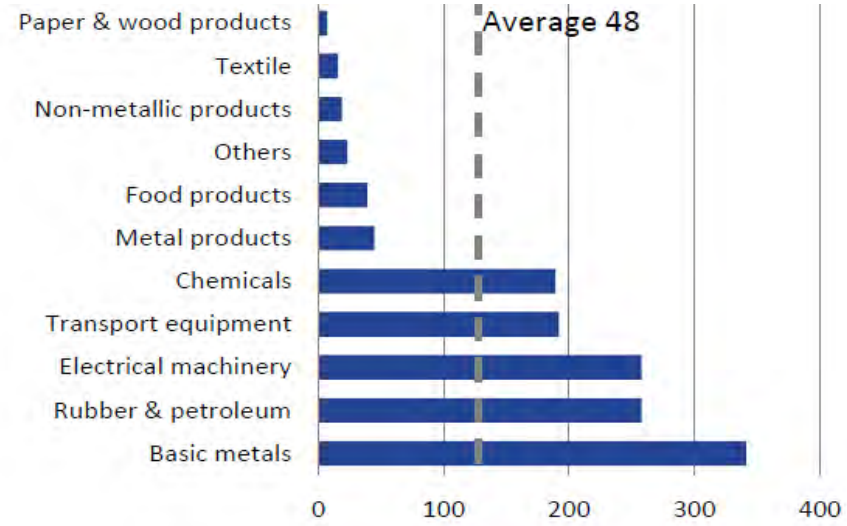
Fig. 1b Labor Intensity across Manufacturing in India*

(number of workers per INR 100 thousand of output generated)



Soure: CII-BCG Report on manufacturing-2010; ASI; CSO; Aranca Research:
Note: *indicates labour intensity data is for 2008

Fig.1c Labor Efficiency by Segment (Revenue in INR10 Million/1000 Workers)



Soure: CII-BCG Report on manufacturing-2010; RBI; MoSPI Aranca Research:

Employment in typical labor intensive sectors has tilted significantly in recent times. Employment elasticity in the first half of the decade 2000-2010 has changed from positive (0.76) to negative (–0.31) with a more pronounced decline in labor intensive manufacturing, which *inter alia*, points towards 'absence of skilled manpower' prompting substitution of labor. This was also mentioned in the Manufacturing Plan of 12th Five Year Plan prepared by the Planning Commission. Thus the concern is that, even for the sector that has been labor absorbing so far, if the workforce lacks quality quite persistently, it is bound to impact the employment generating potential of that sector in the medium run. Concerns were also raised on the 'sustainability of competitiveness' of India's highly remunerative IT sector owing to the abysmally low-skilled manpower in comparison with its ever growing need. Besides, within the service sub-sectors, lack of any direct relation between share of services income (implying productivity gaps) and that of employment has a direct policy implication of prioritizing employment quality improvement in low-end services[2].

To make growth 'inclusive' expanding employment base in the sectors that have less absorptive capacity but higher productivity, is essential.

In order to make growth 'sustainable' proper identification of skilling techniques

[2] Reported in Second Annual Report to the People on Employment 2011, Ministry of Labour and Employment, GOI.

for the laggard sectors that have high absorptive capacity is crucial. On the other hand, to make growth 'inclusive' expanding employment base in the sectors that have less absorptive capacity but higher productivity, is essential. Thus, to embark on a sustainable, balanced and inclusive growth path policies need to target improving allocative (labor) efficiency. This encompasses creating incentives for a balanced mix of 'quantity and quality' in the employment base, in sync with the characteristics of our expanding labor force and simultaneously designing sector-specific skilling mechanisms to mitigate 'skill mismatches'.

Skill Mismatches

Persistent skill gaps and mismatches in the labor market lead to longer term joblessness, persistent productivity gaps between high and low-skilled jobs and polarization of incomes of high and low-skilled workers which is, undoubtedly, a major equity concern. Hence it is crucial to understand what we mean by existence of skill mismatch in the labor market and its measure. However, there is no simplistic way to define it. Skills are primarily thought to improve worker's productivity (Becker's view on human capital) but Schultz/Nelson-Phelps define skills from a much broader and dynamic perspective as the 'capacity to adapt with changing environment and needs'. Thus the absolute level of workers' skill might be high enough in a country/region in spite of that it falls short of the growing needs of the job market on retaining competitive advantages. On the other hand, the *average* level of workers' skill might be high enough but that *in aggregate* falls short of the job market demand, implying some sectors fall short of the skills demanded while some sectors have excess of skills than what is required[3]; obviously, skills are either underpaid or underemployed in this case. Fundamentally, two interactive forces are responsible for these labor market distortions:

1. Job-market is not incentivized to generate human resources required: laborers do not meet the skill demanded by the employers and there is lack of economic incentive to train the less skilled and make them adaptive in the job market.
2. Education system is not in sync with job-market requirements: Existence of underemployed or unemployable skills produced in the education process; wastage/misallocation of scarce resources.

Causal empiricism and anecdotal evidences show that skill shortage is a typical phenomenon of less skill intensive, labor absorbing sectors where workers have very poor literacy level and are mostly low-paid unskilled migrants; highly skilled intensive sectors also face similar

[3] This is something referred to as 'over-education' in the labor market literature, which says that education level of workers is higher than what is demanded by the employer. The reason being, primarily, lack of coordination between education and job market and the lack of complementarity between general education and job based learning. Chevalier (2003)shows that it is as high as 40% among UK graduates who have too much education for their job.

challenges but for a variety of reasons: high education cost, persistent migration of highly skilled professionals on account of existing wide wage gaps between the destination (mostly developed world) and source region. Industries with medium skill intensity in contrast, face very different challenges. Diagrammatically skill mismatches in industries with varying skill intensity can be depicted as in Fig.2a

Fig.2a Mismatches with Varying Skill Intensity

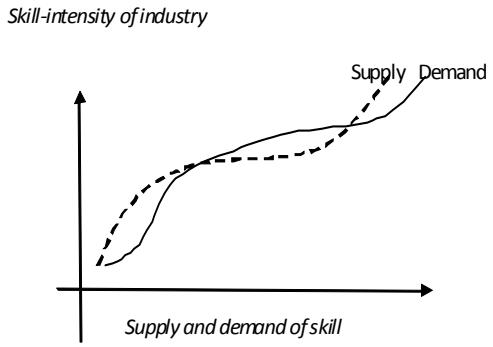
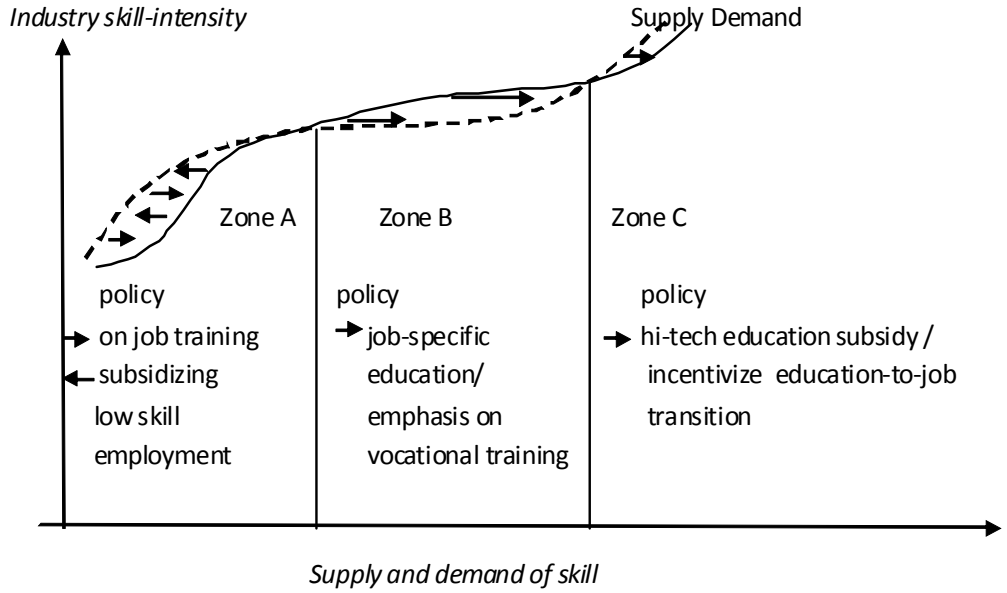


Fig.2b provides a brief sketch of the possible policy means to smoothen education-job transition and mitigate sector specific skill mismatches.

Skills are often 'unemployable' in job market when the skill set demanded by employers is very different from what our education process supplies. Co-existence of the problem of 'unemployability' and at the same time 'skill shortages' is a typical phenomenon of 'skill mismatch' or 'allocative inefficiency' in the labor market. This can be mitigated by a combination of policies: enhanced labor market information system that facilitates reduced job-search friction and better skill-job matching,

Fig.2b Policy Means to Smoothen Education-Job Transition to Mitigate Sector Specific Skill Mismatches



suitable incentive designing that facilitates inter-sectoral factor movement towards efficient allocation, 'skilling' the workforce in sectors that fall short of skills via 'on the job training' (incentivizing employers via subsidy). A longer term policy imperative is to complement the education process with 'job based learning' for a better fit of the skills generated in the system. Nonetheless, a minimum level of basic literacy in the labor force is indispensable even for improving their skills to match the jobs.

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Identifying Skill Gaps

The 12th Plan document points out: "There is a need to ensure basic skill that is at least functional literacy and numeracy among the labor force". Though there is hardly any work on estimating skill gaps across sectors in India, a general perception on worker education profile sketches a dismal picture, and the current status of education in our labor intensive sectors is worrisome.

The 66th round of NSS (Table 1) shows that general education of over 50% of India's labor force in the age group 15–59 remains extremely low. Of the total labor force on UPSS basis about 29% are not even literate, proportion of illiterate workers is the highest in agriculture and allied activities (about 40%), followed by the non-manufacturing sector (construction, 33%). Looking from the employer's perspective, even in the government's employment generation schemes lack of skill in the labor force has been a major problem; an evaluation of the Prime Minister's Rozgar Yojana conducted by the Institute of Applied Manpower Research (IAMR) in 2000 revealed that more than 50% of the applications from the potential beneficiaries were rejected on grounds of inadequate skills. The World Bank (2006) also points out that high unemployment among the educated points towards possible mismatch of skills in the labor market with that demanded in job market. More recently, TeamLease Services in their India Labor Report 2012 mentions that nearly 58% of our graduates suffer from some degree of unemployability and absence of formal on-the-job exposure.

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Specific to certain sectors skill shortage and loss of India's competitive advantages have reached the critical level of concern. Hajela (2012) in a recent study mentions: "In 2008, DLF, one of India's leading real estate developers, reportedly brought in skilled carpenters, steel fixers and electricians from China, Indonesia and Philippines as they were cheaper and more productive than their

Table 1: Estimated Number of Workers (PS+SS (Principal status + subsidiary status?) in the age group of 15–59) by Level of Education by Sector (millions), 2009–10

	Agriculture and Allied	Manufacture	Non-Manufacture	Service	Total
Not Literate	87.36	9.56	14.42	13.65	124.99
Literate without formal schooling	1.23	0.25	0.21	0.42	2.11
Below primary + Primary	57.62	12.69	12.47	18.32	101.10
Middle	36.20	10.27	8.67	18.98	74.12
Secondary	21.30	7.02	4.27	18.21	50.79
Higher secondary	10.36	3.21	1.45	12.43	27.45
Diploma/certificate course	0.58	1.16	0.53	3.12	5.39
Graduate	3.84	3.01	1.25	17.82	25.93
Graduate and above	0.74	0.73	0.24	7.00	8.70
Total	**219.23**	**47.90**	**43.50**	**109.96**	**420.59**

Source: Computed from NSS (66th Round), 2009–10.

Indian counterparts (Dhall, 2008). Reliance Industries, a major Indian business conglomerate, reportedly brought in 4,000 Chinese construction workers for the construction of India's largest oil refinery at Jamnagar district in the state of Gujarat (Choudhary, 2007). Large firms in the construction business have been vocal about the negative impact of the lack of skilled carpenters and masons on quality and delivery of projects (Pearson & Sharma, 2011)". Increase of mechanization and use of technology are expected to reduce use of unskilled migrant workers which is now costly on account of the time required accomplishing the job while maintaining good quality.

Skill Development Initiatives

The sectoral shifts with increasing economic contribution of secondary and tertiary sectors have major implication for skill development. Sectors that have higher potential of creating a desired (targeted) mix of high growth and employment should be prioritized while designing skilling strategies, but at the same time, minimizing the trade-offs with the growth and capacities of the laggard sector to facilitate an inclusive growth. The 12th Plan mentions: "If we focus on more productive and quality (organized and self-employed) employment in the manufacturing and services sector, additional 50 million job opportunities can be created in the non-farm sector. But this will need a huge effort in the form of skill development aligned to the market needs. In particular, manufacturing, construction, trade, transport, hospitality and financial services are the promising sectors where skill development can lead to a faster growth in employment opportunities". Also the National Manufacturing Policy envisages increasing the share of manufacturing contribution to 25% by 2022 emphasizing the role of skill development in manufacturing.

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Technical & Vocational Training Initiatives

The Vocational Training (VT) scheme was started in 1985 and meant to raise employability of youth in a broad range of occupations and industries or to create opportunities for self-employment. The Craftsman Training Scheme and Apprenticeship Training Scheme are the two main pre-employment training schemes. The courses in polytechnic are designed to address skill demand in services sector. The Modular Employable Skills is also another remarkable initiative that helps in creating 'minimum skill set' sufficient to get employment, in consultation with industry, state governments and experts.

Both the quantitative and qualitative dimensions of achievements of VT schemes reveal that they are much below the expected level. At the beginning of Eleventh Plan only 3% was enrolled in vocational courses at the secondary

level. As per the 66th Round of NSS (2009–10), the vocationally trained in the age group 15–59 in the labor force are around 10% of the labor force in that age group, highest in services sector (33%), followed by manufacturing (31%), agriculture (27%), and non-manufacturing and allied activities (9%). But only 2% of them have had formal training and the rest received informal training (86% in agriculture, 91.7% in manufacturing and 56% in services). This is abysmal as compared with the figures for other emerging economies ranging between 60-96% in the age group 20-24. However, Department of Secondary Education has revamped the existing scheme in 2011 which envisages strengthening of 10,000 existing secondary schools with vocational stream and establishment of 100 new vocational schools through State Governments. This is expected to enhance the scope of vocational training.

Course Structure Not in Sync

As per the 66th round of NSS, the proportion of people who received vocational training by activity status is the highest among unemployed (12.4% compared with 2.3% for the employed and 1.6% for not in the labor force category). Interestingly, data was also collected on helpfulness of formal vocational training which shows that 28.6% (36% in rural, 24% in urban areas) of those received training reported it to be 'not helpful' in getting a job (self-employed or salaried). This has important implications regarding the quality of training and that it doesn't fit well with the job market demand. The reason as pointed out by the Planning Commission is: near exclusive reliance on a few training courses with long duration of 2-3 years covering 100 skills; also the curriculum is not revised regularly which must be mandatorily done in every 3 years to meet the industry demand. Besides, there is lack of uniformity of course structures in centre and states, entry and exit from general and vocational training courses are inflexible. Lack of 'effective training capacity' in terms of maintaining a minimum standard of accreditation is another basic problem. Regarding funding structure of the VT schemes, World Bank (2006) indicates: "public funding for training in India is ad hoc and not based on any funding formula". It is identifiable that no transparent formula of funding is followed by any of the state governments for financing vocational training, and that too after meeting the needs of their priority sectors.

Inadequate & Skewed Infrastructure

Where as 12.8 million people enter in the labor market every year the training capacity is only 3.7 million per year

The training infrastructure in terms of industrial training institutes saw a significant increase to reach a level of 9,447 in the Eleventh Plan from about 5,114 in the beginning of the Plan. The seating capacity also increased to 13.35 lakhs from 7.42 lakhs in 2007. However, where as 12.8 million people enter in the labor market every year the training capacity is only

3.7 million per year (TeamLease Services, 2008). A study by Confederation of Indian Industry (CII) has projected that the demand for skilled workers in the construction to be 15 million by 2015, while the present training capacity is merely 4.4 lakh per annum. As per an estimate, the education sector faces an incremental requirement of 86,64,000 teachers and trainers between 2008 and 2022[4].

The geographic distribution of ITIs/ ITCs remained skewed with South and West Zones accounting for 67% of private and government ITIs catering to 51% of the population with 60% of seating capacity and North and East Zones accounted for 33% of ITIs catering to 49% of population with 40% of seating capacity. Even within each zone, there are significant state-wise variations (12th Five Year Plan, vols-1, 3). Regarding access to technical and vocational education it is mentioned in a document prepared by the Ministry of Labor: "Although the level of technical education is relatively high among youth (15-29 years), the bulk of the degree level technical education is accessed by the rich". So equity is a general concern in our existing skilling mechanisms.

National Skill Development Corporation (NSDC)

The National Skill Development Policy was formulated in 2009 at the juncture when it was identified that skill development is indispensable to mitigate skill mismatches and arrive at a balanced, sustainable and inclusive growth path while the existing schemes are insufficient to reach the target. It envisioned "revamping the existing schemes by empowering the labour force with improved skills to gain access to decent jobs that in turn ensures retaining India's global competitiveness". Following this NSDC was officially launched in October 2009 for catalyzing private sector involvement in skill development with a mandate to skill 150 million people by 2022 (towards reaching a skilled labor force of 500 million in 2022) in 20 high growth sectors and unorganized sectors identified by the government. Structured as a PPP with government ownership restricted to 49% of the equity capital, funds will be made available to the NSDC through a trust called National Skill Development Fund (NSDF). NSDC acts as an investment manager for the NSDF, whose corpus of $330 million has gone up to $550 million following the Finance Minister's announcement of a further infusion in 2012–2013. The NSDF is envisaged to attract bilateral, multilateral and private funding (Chenoy, 2013). Under the aegis of NSDC there are several initiatives on public-private basis to impart skill development and training at the subsector level. For example, The Confederation of Real Estate Developers Association of India (CREDAI), an apex body for private real estate developers has implemented an onsite training model to upgrade skills of construction workers and train in plastering, masonry, plumbing, electrical works, tile laying, and other allied activities. NSDC has sanctioned Rs 18 crore for CREDAI.

As per the 12th Five Year Plan NSDC works in around 365 districts in 28 states and 2 Union Territories in both organized

[4] National Skill Development Corporation's report.

as well as unorganized sectors. NSDC along with its partners have trained over 1.8 lakh people in the year 2011–12 with an aggregate placement of around 79%. It is also responsible for catalyzing setting up of Sectoral Skill Councils (SSCs) for identified priority sectors. Eleven such SSCs have been approved till March 2012. These SSCs are expected to lay down the National Occupational Standards for different levels of jobs in their respective sectors, formulate certification and accreditation norms, create knowledge repository on current requirement of skill development in the industry, assess the supply of skilled workers, identify the demand and supply gap in each sector, and identify trends and future requirements. The government did a skills mapping study realizing the severity of skill shortages in target sectors such as construction and identified key occupations where shortages are likely to arise in near future. Hajela (2012) provides an estimate of the total shortage of skills in construction using NSDC data.

Challenges Ahead

There have been evidences of increasing casualization and informalization of the workforce in 2009-10 compared with that in 2004-05.

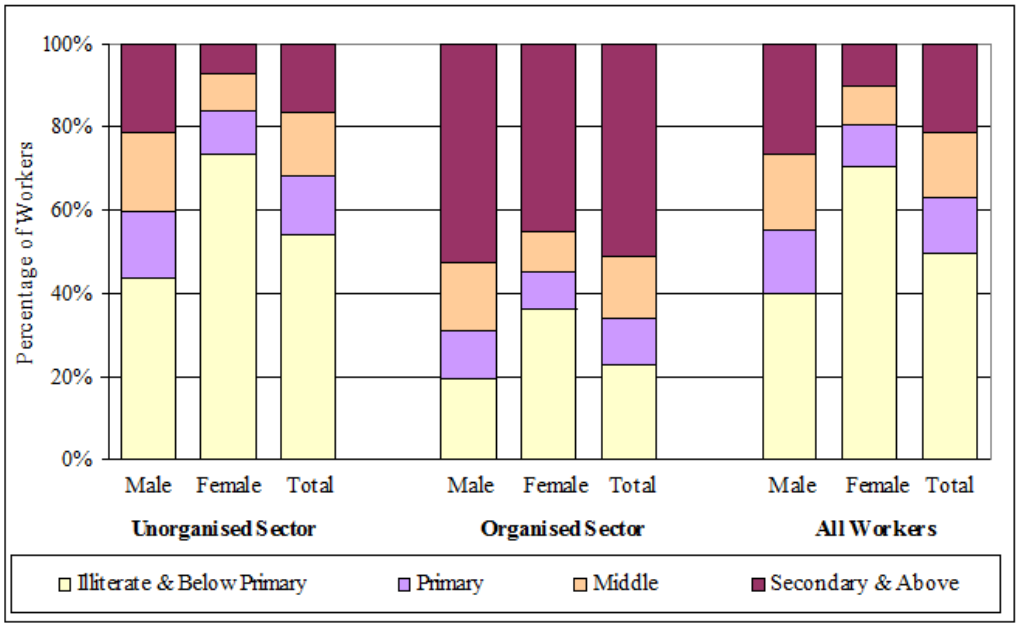
There have been evidences of increasing casualization and informalization of the workforce in 2009-10 compared with that in 2004-05. Nearly 93% of the total workforce in 2009–10 was in the informal employment, a rise from 91% in1999–2000; 80% of secondary sector and 69% of tertiary sector was informal. This is too high in comparison with other emerging economies like Brazil (51%), Mexico (50%), Indonesia (78%), Philippines (72%), and Thailand (49%). Also notable is the fact that organized sector employment is not increasing largely due to stringent labor laws but there have been shifts in employment in this sector to the informal (contractual) category from regular employment. Small and medium enterprises are mostly informal. World Bank (2006) estimates that India had no less than 42% of its employment within the smallest category of 5-9 compared to East Asian economies such as South Korea, Hong Kong and Malaysia (3%, 11% and 4% respectively).

Skill Development Needs

Informal firms are characterized by lesser number of employees with poor division of labor, which is why skill specialization and on the job learning are lacking in most of these firms, and this has a strong bearing on their productivity. Informal firms face various hindrances towards improving productivity in terms of accessing capital, technology, and they form a bottom of skill pyramid with poor productivity and low income. Education of the workers in the unorganized sector is much lower than that of the workers employed in the organized sector (Fig. 3). Also it is noted that the formal training of workers in the age group 15 & above in the unorganized sector is much lower compared to that in the organized sector. However, certain sectors absorb more formal training in

both unorganized as well as organized sector; for example, real estate, finance, education, health. One major concern is that the 'quality' dimension is largely missing in this category of employment, and there is lack of any skilling mechanism in this vast pool of employment. The role of training and education is crucial and absolutely essential as this would help reducing productivity differential between largest and smallest size group which is estimated to be as high as 8:1 compared to many other advanced nations, Japan for example (3:1). Also, high opportunity cost of worker involvement in training in the informal sector on account of wage losses is a serious practical concern. As most of these jobs are characterized by long working hour training or skilling workers on job is a real challenge. Thus state intervention in one or other form such as employer subsidy schemes is absolutely essential. Another characteristic of this sector is heterogeneity of industries within, which requires multiple model schemes on skilling.

Fig. 3 Education of Workers (age 15 & above) in the Unorganized Sector vis-à-vis Organized Sector (2004-05)



Source: Srivastava, R. (2010)

Problems & Prospects of Existing Schemes

Formal training schemes like Apprenticeship Training Scheme focus completely on organized sector skill demand and study the demand pattern for skill in these sectors leaving the unorganized sector completely in the hand of informal training. On the other hand, the ongoing skill development programs meant for certain specific areas of the informal sector are too disjointed and routine oriented to have a significant impact, as it

is pointed out by some studies by the Planning Commission. Empirical studies showed that the courses offered by Khadi and Village Industries Corporation (KVIC) were not employment-oriented at all (IAMR, 1997).

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International Scenario &Best Practices

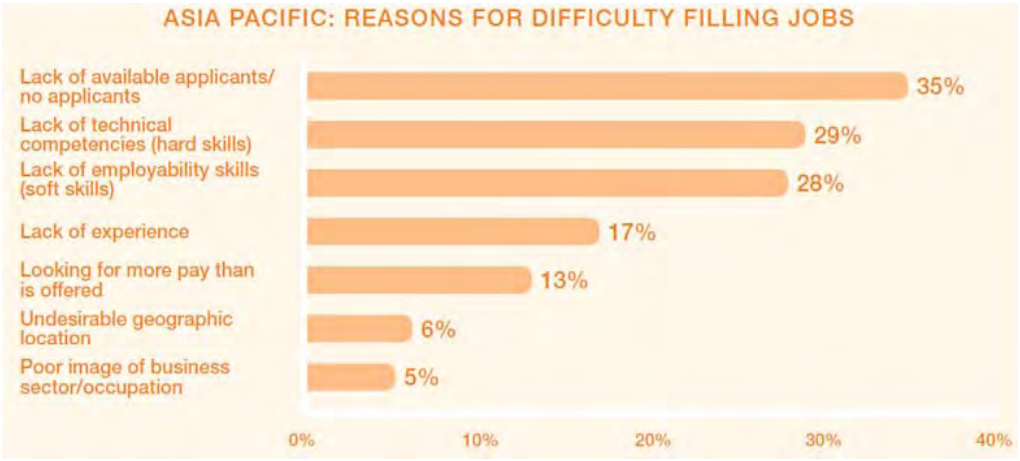
The problem of skill gap and skill mismatch is not specific to the developing world; it is a global phenomenon. The McKinsey Global Institute June 2012 report 'World at Work: Jobs, Pay, and Skills for 3.5 Billion People' predicts a potential global shortage of 38 to 40 million high-skills workers in 2020, 45 million middle-skills workers and a shortage of 90 to 95 million low-skills workers. In an estimate in the US it was noted that medium and high-skill jobs have the highest skill gap. Also as per Deloitte's report 'Boiling Point? The Skills Gap in U.S. Manufacturing' "67% of surveyed U.S. manufacturing executives report a moderate to severe shortage of available qualified workers; and 56% anticipate the shortage to grow worse in the next three to five years". Also notable is the finding of Bureau of Labor Statistics, US that 8 of the 10 top growing occupations through 2014 do not require a bachelor's degree. Instead, skills certificates, on-the-job training, and apprenticeship programs are relevant and practical methods for developing middle skills.[5] The Talent Shortage Survey 2012 of Manpower Group notes that one of the key reasons why jobs are hard to fill by the Asia Pacific employers is related to shortages of hard skills, or technical competencies (Fig. 4). The India profile is also prepared which shows that hard skills and lack of professional skills are the main hindrances (Fig. 5).

Only 16% of Indian manufacturing employers provide in-service training compared with 90% in China

In the developing world shortage of skill is a typical phenomenon of the labor intensive manufacturing (and construction) where mostly unskilled migrant workers are absorbed. However, training of the workers data shows that only 16% of Indian manufacturing employers provide in-service training compared with 90% in China (World Bank, 2010a). In respect of formal in-service training, India is in a poor position in South Asia (apart from Pakistan which is even lower). Enrolment in vocational education and training courses in India as per net enrolment is a mere 3.5 million per year, as compared to 90 million in China and 11 million in US. Also, China has an ongoing project for enhancing migrant worker skills and improving their employability in urban areas (World Bank 2010b), such training focus on mi-

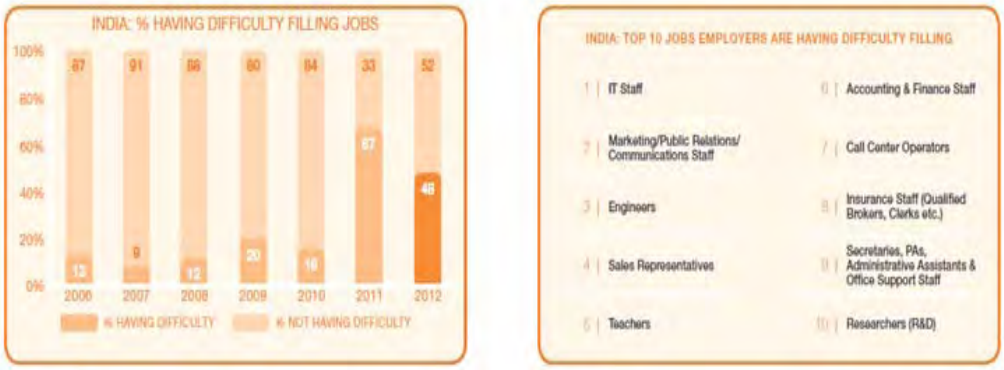
[5] Bridging the Skill Gapreport prepared by the American Society for Training & Development (ASTD).

Fig. 4 Asia-Pacific Reasons for (Hard to?) Filling Jobs



Source: Manpower Group, Talent Shortage Survey 2012.

Fig. 5 Difficulty in filling jobs - India country profile



Source: Manpower Group**,** Talent Shortage Survey 2012.

grant workers who constitute a major share in large and emerging cities is absolutely missing in India.

The emphasis on the necessity of vocational education vis-à-vis general education and innovative incentive schemes to smoothen their entry and exit were designed in China. A law on Vocational Education (VE) was adopted in 1996 with a goal to have equal number of students in vocational and academic secondary schools. In 2007, there were 14,832 upper middle vocational schools with an enrollment of 19.87 million students in China; also, tertiary VE is offered in vocational colleges for students enrolling from general and vocational middle schools enabling vertical mobility. Whereas, in India, only 3,80,000 students in classes XI and XII were enrolled in schools under vocational education in 2005-06 (IAMR, 2010a).

Vocational education in India is largely a supply side intervention.

Vocational education in India is largely a supply side intervention where interactions with industries to assess their demand are missing; this is in contrast to the other developing countries like Korea, Malaysia, and Singapore. Financing of vocational and technical education schemes is a real constraint in India. Germany's dual system is worth the mention here where companies directly provide training to staff or apprentices, and also make a compulsory contribution to the national training system by way of paying a training levy or a specified amount to training institutions. Malaysia and Singapore's emphasis on using training funds to promote small enterprises is something India should also learn from to incentivize training in this highly labor absorbing but rapidly expanding sector. India under the aegis of NSDC has taken good initiatives towards PPP in skilling, but understanding the pros and cons from its best practices is always crucial: such as public-private partnership mechanism in Singapore where it has been a real success. On the accreditation of training India should share experience from Mexico's PROBECAT scheme of pre-employment training for its excellent use of monitoring and learning evaluation.

Conclusion

It is evident that while designing skill upgradation policies, sectors with high employment potential but facing socio-economic hindrances should be targeted with utmost priority; construction and manufacturing for example, which absorb high percentages of migrant workers with very poor skill set. The skilling initiatives by the government along with private participation are quite ambitious but lack certain practicalities that should be taken care of. Rigid entry, for example, in the technical and vocational education scheme with regard to level of schooling requirement, often doesn't match with the general workers' profile and thus loses policy priority at the local or state government level. Aligning existing vocational and general curricula to make them compatible with each other to facilitate horizontal and vertical mobility, involving industry in skill assessment and certification of competencies, and increasing coordination among the trainers, NGOs and government organizations are other policy imperatives at this juncture.

The NSS 2009-2010 data shows that access to job and 'quality job' is lower among poor, implied by lower work participation in lower quantile of consumer expenditure. Added to this, a skewed access in vocational and technical education and training networks make the spread even more polarized and unequal, which is certainly not desirable in an egalitarian society aiming towards an inclusive growth. Spread of vocational education and training networks in backward areas and private participation initiatives taken by the Government through Kaushal Vikas Yojona need emphasis.

Spread of vocational education and training networks in backward areas and private participation initiatives taken by the Government through Kaushal Vikas Yojona need emphasis.

Currently there is no forum on Labor Market Information system where both employers and job seekers can exchange information on skill demand and supply. This is an absolute necessity to bridge the skill gap, reduce frictions in job search and lessen skill mismatches in labor market. This has been mentioned as a priority in the G20 agenda for the developing country partners under the pillar Human Resource Development. The employment exchanges were created to serve this specific purpose of easing job search frictions but they are inefficient, if not dysfunctional, as only 300,000 jobs were given to the 40 million people registered in 2011, reported in India Labor Report 2012 by TeamLease Services.

Regarding financing the vocational training courses a suitable mechanism for incentivizing the stakeholders is required. Innovative schemes are necessary to be planned. For example, it is mentioned in the 12th Five Year Plan that the thousand crores that has been collected by the Construction Workers Cess Fund remained unutilized for years that could be used to skill construction workers. Also PSUs with Rs. 100 crores profit are bound by law to invest 5% in training that should be monitored for its effective utilization.

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