Demand for Skill Training: Aspirations, Challenges and Recommendations

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ABSTRACT

The economy of India has been growing briskly since the past two decades. This growth has been accompanied by structural changes in the economy. India is no longer an agrarian economy and its rapid growth is increasingly being led by the industrial and service sectors. This has resulted in a surge in demand for skilled labour and the country is already staring at its huge shortage. Keeping in mind the need to not only continue with expansion of the industrial and service sectors but to further accelerate their growth and also make them more competitive in the global markets, the government of India has taken up a number of initiatives to impart skills to young individuals entering the workforce. Among its recent efforts, the government established the National Skills Development Corporation (NSDC) in 2008. The NSDC is the first of its kind public private partnership through which the government aims to develop and upgrade skills of the working population through skill training programs. But despite such efforts, the situation of shortage of skilled workforce has not eased; it is in fact getting worse. Recent studies have indicated that nearly 50% of the employers find it difficult to fill up jobs. This prompts one to ask - Why is there a shortage of skilled labour even after the establishment of numerous training facilities across the country? Is it because the training programs are not able to attract students in sufficient numbers? If so, why? Is it because student expectations and aspirations are not being met by these programs? This paper explores these questions based on semi-structured interviews with students and prospective students of skill training programs. Ultimately, it argues that a significant number of NSDC courses are not 'attractive' to students as they do not create long-term employment and career growth opportunities for them. Finally, this paper makes recommendations to the NSDC in the areas of program awareness, content and execution which would help meet students' demands better and make them more attractive to the prospective trainees.

INTRODUCTION

A large working population, low labor cost and a diverse talent pool are huge advantages that India possesses in establishing a distinctive position in global markets. However, there is a need to capitalize on these advantages by skilling and empowering the workforce so as to facilitate the nation's economic progress and global competiveness. The government of India has recognized this as crucial and hence been actively promoting and supporting various educational, vocational and skill training programs.

In line with governmental efforts in promoting skills development, the Finance Minister announced the formation of the National Skill Development Corporation (NSDC) in 2008-09. NSDC is a public private partnership that provides funding to private skill training companies and organizations so to facilitate the development and upgrading of skills among the working population of India. (NSDC, 2009)

However, the NSDC's efforts have so long not been quite successful in overcoming the shortage of skilled labor in manufacturing and service sectors. In an Ernst and Young study (2012) on the shortage of skilled labor, it was found that nearly 50% of the surveyed companies indicated that they were unable to find adequate number of appropriately skilled workers. This shortage suggests that government efforts need to be relooked at and suitably modified in order to reduce the gap between demand and supply of trained individuals. Upon study it can be seen that the government has solely looked at the needs of the industries and not much has been done so as to understand the needs of trainees and prospective trainees who lie at the heart of the project. (Ernst and Young, 2012)

This paper attempts to address this issue by raising the following questions: Who are the trainees and the prospective trainees? What are their aspirations? What do they expect to receive from skill training? Do the training programs meet their expectations? If not, how could skill training be delivered such that it better meets student demands?

After identifying the needs of the students and studying the provisions of the current skill training programs, this paper argues that a significant number of skill training courses offered by the NSDC are not attractive to students. Further, the paper provides policy recommendations to the NSDC on how it can better meet student expectations, thereby increase enrolment into the training programs and in turn facilitate an increase in the supply of skilled workforce.

LITERATURE REVIEW

Given the shortage of skilled labour in Indian industries, many scholars have analysed why skill-training initiatives of the government have not been very successful. Various arguments have been put forth to explain the failure of training programs, but none have considered the mismatch of interests of the students and the offerings of the programs. In this section of the paper, some of these arguments will be looked into. It will be seen that most of the arguments are not robust enough to tackle the issue at hand. Ultimately, this paper hypothesises that much more demand for skill training among the potential students needs to be created so as to bring success in government initiatives. And this can be achieved only by taking into consideration the needs and expectations of potential students.

Among the many authors, Panagriya (2007) argues that skill-training programs in India are unsuccessful due to an absence of active involvement of the employers. Further, he explains that private sector employers fail to participate in skill training due to stringent labor laws in the country. He argued that laws such as the Minimum Wages Act and the Industrial Disputes Act, which guarantee minimum wages and impose restrictions on downsizing workforces, create a disincentive for private firms in investing in training and the research required for it. This is because they do not have the autonomy to retrench workers or reduce their wages during lean periods. However, this argument does not hold good when one looks at recent studies such as that of the FICCI(2012) which informs that 94% of surveyed firms had experienced upward pressure on wages (over and above minimum wage) and that 82% of employees in these firms had enjoyed a 10% rise in their wages. This indicates that firms would rather raise wages than face a shortage of skilled workers. Further, NSDC courses today are designed with the help of employers in the target sectors. For instance, a course on auto and auto components would be designed with the involvement of large companies in the sector such Mahindra. (interview with the NSDC Management)

One of the other common arguments focuses on the problems in the implementation of the skill development policies of the government. In this, Hajela's (2012) argues that better coordination between the state governments and the central government is required for skill training programs to be successful. However, this argument does not take into fact that the NSDC in fact conducted pilots in every state so as to collect data on the skill requirements of industries in the state. Further, the target of skill training has not been assigned solely to NSDC. It has been allocated to 17 different ministries both at the central and the state levels. Therefore, even if lack of coordination between the central and state governments help explain the poor supply of skilled labor in some specific industry sectors, it would fail to explain why the situation is similar in almost all of them.

A final argument on skill development issues points to the Indian socio-cultural values/preferences wherein manual labour or blue-collar jobs is accorded a low status and as most vocational training programs cater to these requirements, students are often discouraged from enrolling into them. The World Bank (2006) has also highlighted that vocational training is considered a stigma in India. This argument though does look at the issue from the students' point of view and how students do not regard skill training as consistent with their aspirations, it does not look at how skill development programs can be made more attractive to students. Further research is required along these lines so as to provide policy recommendations to the government, which this research paper seeks to accomplish.

In this light, one must note Anita Sharma's work (2011) that has looked into the needs of prospective trainees to a greater extent. In her article, *The development of the informal skills sector in India*, she informs that 90% of NSDC funded skill-training providers have found it profitable to target sectors that require minimum investment. These sectors include tourism, hospitality, and retail, amongst others. However, she informs that while these sectors have easy placement, the possibilities of upward mobility are limited, unless the trainees have opportunities to upgrade their professional skills [1]

This paper seeks to build on Sharma's findings. The hypothesis of the paper is as follows: A significant number of courses offered by the NSDC in the state of Delhi are not 'attractive' to students as they do not bring them long-term employment and career growth opportunities. The paper will use this finding to explain the shortage in the supply of skilled labor, based on which it will provide policy recommendations to the NSDC.

RESEARCH DESIGN

Testing of this hypothesis was done primarily based on qualitative data collected. To start with, a list of all stakeholders was built: NSDC Management, enrolled trainees, prospective trainees, trainers, training institute alumni and industry employers; and semi-structured interviews were conducted. The area of focus of the study was the state of Delhi.

The researcher started with semi-structured interviews with the NSDC Management Team so as to learn about the current offerings of the skill training programs in Delhi. Here it must be shared that, unlike visits to most government offices, visiting the NSDC office at The Qutab Hotel, Delhi was a delightful experience. The staffs were prompt and ready to provide information. They were also self-analytical and not hesitant to share deficiencies in their programs.

Having learnt about the current scenario of skill training provisions of the government, data was collected to test the hypothesis. For this, semi-structured interviews were held with trainees at NSDC affiliated training institutes and mostly with those who were in the last week of their training program. Such a selection was done so as to interview those with the ability to reflect on their course and inform whether their expectations had been met. The training centres to conduct the interviews were selected through random sampling. A list of all the NSDC affiliated centres in Delhi was built and three out of them were selected at random. Students from these selected institutes were then interviewed.

The second part of my research entailed interviewing prospective trainees. The researcher met with them through snowballing. The students interviewed at the training centres directed me to their school peers and their out-of-school friends who were not enrolled in any skill training programs.

The researcher also got in touch with some of the trainers at the institutes, the alumni of the centres so as to corroborate the information collected from other interviews.

WHERE DO WE STAND TODAY? : THE CURRENT SCENARIO IN SKILL TRAINING

I. India's standing

The rapid growth in India's economy has resulted in a surging need for increased and better quality of products and services. Unfortunately, it can be seen from the chart below that only 10% of the Indian workforce have received skill training which is far below compared to some of the developed countries. (Planning Commission Report, 2007)

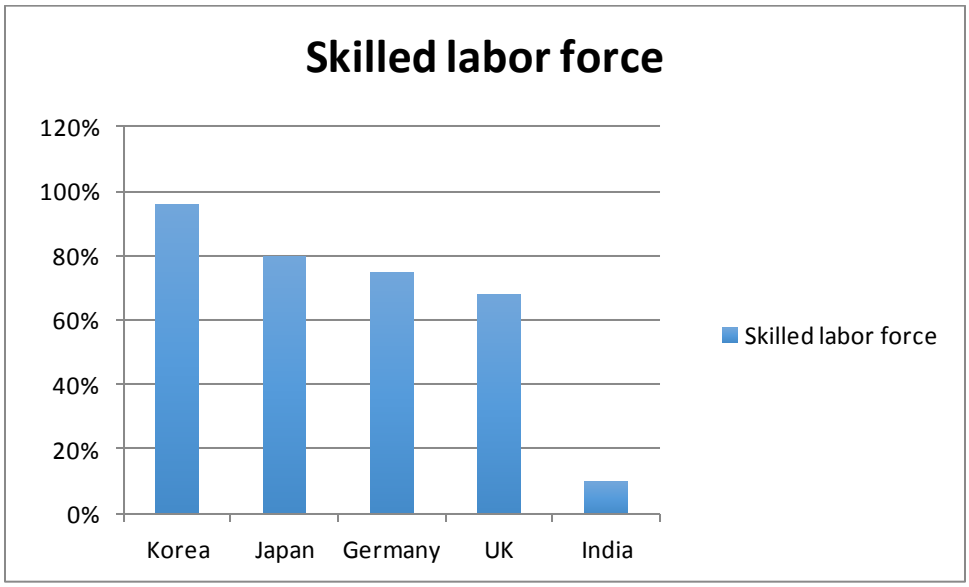

Figure 1: Skilled Labor Force

Such low percentage of skilled labour becomes even more alarming when one notes that India is also one of those countries where employers find it most difficult to fill up jobs. In India the difficulty to fill up jobs is indexed at around 48%, which is above the global standard of 34% as per data collected in 2012.[2] (Ernst and Young, 2012) Such a huge gap in supply and demand of skilled labour will stagnate the fast growing economy of India. Overcoming this shortfall in supply is crucial if India is to maintain its rapid growth and development in the coming years.

On the brighter side, India does not have a shortage of working population. In the map below it may be seen that India is one of the few countries with a median age between 25-30 years In fact, India has the world's youngest workforce with its median age way below China's and other OECD countries. This gives India the unique advantage of not having any shortage of availability of manpower, but skilling them suitably has become a pressing need. (Erst and Young, 2012)

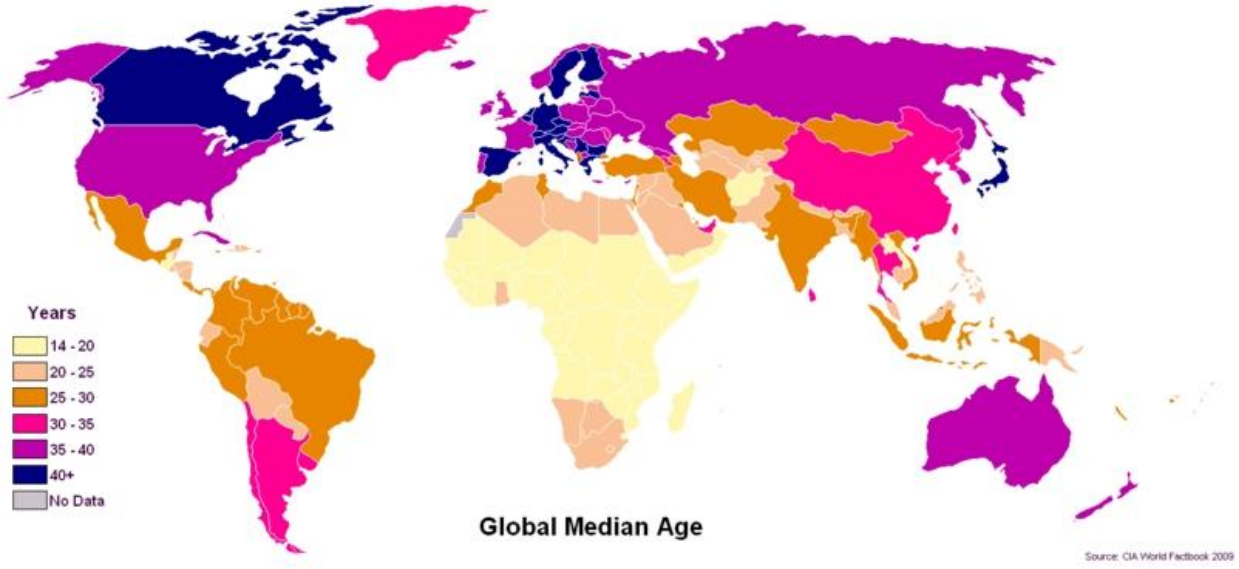

Figure 2: Global Median Age

II. Poor performance of private initiatives

Given that only few (10%) have received skill training in India, one might have expected the private sector to have filled the gap in providing skill training on a massive scale. However, there are structural deterrents in the Indian landscape that act as market barriers against new private initiatives from entering the market. Further, these deterrents make it difficult for the current enterprises to function without the financial support of the government (mostly in the form of grants or loans). Such deterrents have prevented the private sector from self-sustaining. Hence, the government has instead taken up the planning and implementation of skill training in India.

The main constraint that private institutions have reported is the lack of access to resources. (World Bank, 2006) Many private institutes identified a lack of access to credit and other financing options for initial investments. In fact, this was identified as the key reason underlying the reluctance of the private sector in providing training in the 'hard' sectors (industrial and engineering-related skill sectors). (World Bank, 2006). The lack of access to credit becomes a bigger deterrent given that skill-training courses often need expensive technological inputs. Additionally, skill-training institutes need to keep themselves up-to-date with technological advancements in the market and modify their courses accordingly. Therefore, one-time investments are often not enough.

Overall, the private sector has been unable to provide skill training at the required scale. This is unfortunate since private institutes might have given heed to student's demands in order to attract them and collect fees. However, private institutes in India have mostly collaborated with the government for financial support and follow government guidelines in providing skill training. Many private institutes now collect little or no fees as they run under government schemes. Moreover, given that there is a shortage of skilled workers in the Indian economy and that the private sector has not been able to increase its supply by itself, the government of India has shouldered the responsibility of skilling the population and has taken up a number of initiatives in this regard. These have been discussed in the following section of the paper.

III. Recent government initiatives

In its recent efforts, the government has set itself a target of skilling 500 million individuals by 2022.[3](interview) The government aims to achieve this target by dividing this set task between different ministries and private initiatives. The list of most Ministries and the size of the labour force allocated for skilling has been provided below.

Ministry	Projected number of trained individuals in 2022 (in million)
NSDC	150
Labour and Employment	100
HRD Higher Education	50
Transport	30
Agriculture	20
Rural Development	20
Urban Development	15

Micro, small and medium enterprises	15
Textiles	10
Women and Child Welfare	10
Health and family welfare	10

Table 1: Allocation of Skill Training

In this list the task allocated to the NSDC has also been included due to sheer size of the task that has been assigned to it. It can be seen that the NSDC has been allocated the largest target (30%) of skilling 150 million students.

The NSDC is the first of its kind public-private enterprise that has been set up to facilitate the development and the upgrading of skills of the growing workforce through skill training programs. It is under Section-25 of the Companies Act. It has an equity base of Rs. 10 crore, of which the Government of India accounts for 49%, while the private sector has the balance 51%.[4](interview)

It also engages in advocacy and training programmes, in-depth research to discover skill gaps in the Indian workforce, and developing accreditation norms.[5] It is highly interesting to study the initiatives taken by NSDC since they attempt to increase the number of skilled labourers in India in a variety of innovative ways. NSDC has partnered with 59 institutes and financially supports them in skilling the youth of the country. NSDC has also conducted a skill gaps study and identified the industry and service sectors facing serious shortages of skilled labour. The following is the list of these sectors and upon which NSDC focuses most of its efforts (NSDC, 2009)[6]:

1. Automobile / auto components
2. Electronics hardware
3. Textiles and garments
4. Leather and leather goods
5. Chemicals and pharmaceuticals
6. Gems and jewellery
7. Building and construction
8. Food processing
9. Handlooms and handicrafts
10. Building hardware and home furnishing

11. IT or software
12. ITES-BPO
13. Tourism, hospitality and travel
14. Transportation/ logistics/ warehousing and packaging
15. Organised retail
16. Real estate
17. Media, entertainment, broadcasting, content creation, animation
18. Healthcare
19. Banking/ insurance and finance
20. Education/ skill development
21. Unorganised sector

Further, in the past year (2013-14), the NSDC introduced the STAR scheme that has aroused much interest. This scheme provides funding to individual students for taking up a skill-training program of a minimum duration of one month at any of the NSDC affiliated institutes. This funding covers the fee of the training program for those students who enrol and pass the assessment at the end of program. (interview) This conditional scholarship was designed to facilitate the mobilization of students and encourage their enrolment in training institutes. Though the STAR scheme was quite successful compared to other initiatives, which did not offer fee-waivers, and achieved its target of skilling 10 lakh students within one year, concern lies in the need to provide such monetary incentives to students. A much more cost-effective approach would be to make these programs more attractive to students by making them better suited to meet their expectations and demands.

ANALYSIS OF CURRENT PROGRAMS

While the opportunities offered by the NSDC appear plenty and diverse, the study aimed at taking a deeper look into the NSDC courses and ascertain whether they truly met the expectations of trainees and prospective trainees. For this, the trainees were asked to spell out what they expect to get out of skill training programs. A unanimous answer this researcher found was 'prospect of better employment' or 'career advancement.' Taking this further, students and potential students were asked whether these expectations were being met in the current programs; and if not, why did they think so. The responses to these questions have been reported below and it will be seen that they corroborate our hypothesis, that a significant number of skill training courses do not meet student demands as they do not bring prospects of career growth or long-term employment.

I.Is the NSDC meeting the expectations of enrolled students?

This section of the paper is based on the feedback received from students in their last week of training in NSDC affiliated programs. Most surveyed students initially provided positive responses when asked whether their expectations had been met in the skilled training programs. However, on further questioning, it was found that most students were satisfied with their teachers at the training institutes, but were not completely satisfied with the contents and design of the courses. Below are some of the common grievances of the enrolled trainees.

A. Courses were too short and specific:
The students were not satisfied with the content and design of the programs. Firstly, they were of the opinion that since most NSDC courses were for a duration lesser than one year, little knowledge could be imparted. This was especially true in the case of students under the STAR Scheme. The STAR scheme was designed to skill 10 lakh students within one year. Therefore, the courses were even shorter than other NSDC courses and consequently, the trainees were not satisfied with their learning outcomes. Secondly, since the courses were of short duration they were too focused on teaching a particular skill. Complimentary skills such as spoken English or elementary business skills were not included.

This finding is an important critique of the NSDC programs, in the context of the paper, since it reinforces the argument that skill trainng programs need to reorient their focus and meet the needs of students while serving the interests of industries. Recently, the NCVT (National Council for Vocational Training) recommended the shorterning of skill training programs so as to churn out more students within a short period of time. (interview) However, students loose confidence in programs that are of such short durations and hence do not opt to skill themselves through the programs.

B. Limited placements:
Even though the students had been promised placement at the end of their training period, majority of students were yet to be placed. This was despite the fact that this was in the last week of their training program. In a class of telecom under the STAR Scheme, it was seen that only 3 out of 25 students had been placed. On questioning, the respondents said that the type of employment they were being offered was entry level and not as per their expectations after taking a training program.

This finding suggests that despite conducting sector skill gap studies, the NSDC has not very accurately allocated targets for courses based on industry demand.

Therefore, NSDC should review its skills gap study and provide more courses in those sectors that are employing more students and retaining them.

C. Work experience required:
The students were of the opinion that their courses might have brought better employment opportunities if they were followed by a period of internship. This opinion was highly supported by the trainers as well. They expressed that skilling programs could not be referred to as 'training' if they did not include any application of knowledge acquired or practical experience.

D. Admission into desirable courses was difficult:
In our survey, students were asked which training programs were the most popular as per their understanding. The top three courses that were indicated by most were: data entry, accounting, computer courses (those that included some programming). The students were of the opinion that these courses were most popular because of easy placement at the time of completion of these courses. Secondly, it was easy to switch jobs to other firms if one did not find prospects of career advancement in the one firm they were initially placed in.

Having identified the most popular courses, students enrolled in other courses were questioned why they had not opted for the courses that were most popular. Most respondents said that enrolment opportunities were limited in those courses and hence, admission was not possible. Further, many students (85%) under the STAR scheme informed that the main factor influencing their decision to take up a skill training course was the monetary incentive that had been provided to them under the scheme. They informed that the scholarships (ranging between Rs. 7,500-10,000) provided for their courses were more than the fees commanded by the institutes. The difference was in turn collected by students and it was this difference of (Rs. 1000-4000) that mobilized students in enrolling themselves for skilling programs. Unfortunately, this findings suggests that even after receiving skill training most students do not take up a career in the targeted industry and hence the shortage of skilled labor in certain industries continues to prevail.

II.Who are the prospective students and what are their contextual needs?

Even though the NSDC aims to skill the entire working population of India (as per its vision statement)[7](NSDC, 2009), it is designed in a way that it only caters to those individuals intending to enter the workforce rather than targeting all potential students. Most surveyed students enrolled in NSDC affiliated programs are in the age group between 18-22 years.

Based on the findings from primary data (interviews with schoolmates of trainees and employees at firms), the following categories of potential trainees have been identified. The researchers interviewed potential students at firms and showroom at Kalkaji and a coaching center for IITJEE in the vicinity of the Kalkaji area. Students enrolled in the skill training institutes directed the researcher to these locations, where most of their peers from school were placed. It is important to identify these categories so as to understand their specific needs and demands and make policy recommendations. It will be seen that NSDC programs have little to offer to these categories of students and hence are not attractive to them.

A. School dropouts below class VIII:
   Many NGOs and other training institutes with humanitarian interests have identified this group of individuals as potential learners. This is because this group, with little educational qualifications, would highly benefit from learning practical skills which would bring employment. However, NSDC affiliated institutes mostly work with students of a higher age group.
   In most cases, school drop outs usually engage themselves in informal and casual jobs with no other alternative. Further, with little awareness regarding skilling options, few end up enrolling in any skill development program even after entering a higher age group.
B. School graduates:
   A large percentage of students enrolled in the surveyed NSDC institutes were school graduates. From this it might appear that the NSDC has targeted this category well. However, the enrolled students informed that they were among the few students in their schools who had opted for skill training. Most students had opted to attend college or take up informal jobs. This can be explained by the finding that even the enrolled students had not learnt about the training programs through formal channels (for example NSDC advertising in schools or on the internet). Instead, they had learnt of NSDC programs from their friends and neighbours who had been previously enrolled in training institutes. However still, it was most alarming to learn that the informants had advised the current students to take up the program as a 'back-up' option in case if

[7] **NSDC is a first-of-its-kind Public Private Partnership (PPP) in India set up to facilitate the development and upgrading of the skills of the growing Indian workforce through skill training programs.**

preferred career options did not work out for them. This indicates that NSDC training programs are not considered to be promising for career building.

C. Laid off workers/ workers looking for better employment:
This category has been identified through a study of secondary sources. Though this category is primarily under the scope of the Ministry of Labor and Employment (interview with NSDC Management), one must note that this category constitutes 65% of all potential learners identified by an Ernst and Young report of 2012. Therefore, NSDC should also contribute to upskilling this large pool of workers. Some of the other reasons that make it important to look at the needs of this category have been investigated below.

With constant technological advancements, industrial production systems and the services demanded by consumers are both constantly changing. Hence, very often individuals find their acquired skills obsolete and hence, require re-skilling so as to keep up with technological changes. Currently, there are no provisions under the NSDC to re-skill such individuals. This is alarming; especially in a scenario, like the STAR scheme where very short term, specific skills are imparted. While these skills may be able to bring instant employment they run the risk of facing early obsolescence.

D. Women:
This finding was arrived at through personal observation and secondary data rather than through semi-structured interviews.
A very strong gender bias exists in the enrolment of some types of vocational courses even in urban areas such as Delhi. Ernst and Young reports (2012) that of the 90% Indians who have not taken up any kind of skill training, nearly 70% is constituted by women. Our survey findings corroborate such reports. Firstly, in the surveyed institutes very few women were enrolled in courses teaching industrial skills. Secondly, courses in the services sector (such as telecom promotion) too had fewer enrolled women than men. This suggests that skill training courses offered by the NSDC are not designed so as to meet the demands/ contextual needs of women. The NSDC should design incentives to attract women into their training institutes.

Overall, it might be seen that the aspirations and the needs of learners are not being satisfactorily met in these skill training programs. Among the findings, the most important one is that most students enrol primarily for the fee-waiver and stipend and some to have a fallback option, if unsuccessful in getting the desired job. This suggests that skill training does not promise preferred employment opportunities. Further, the possibility of many skilled individuals ending up serving an industry different from the

ones initially targeted, (as they take up alternative careers) explains the shortage in the supply of skilled labor in those industries.

HOW DOES THE WORLD DELIVER SKILL TRAINING

In this section, skill-training provisions in China and South Korea will be studied and used for a comparative analysis with what is planned and offered in India. The paper will discuss what India could learn and adopt from these two countries to improve its own the supply of skilled labour. These two case studies have been chosen because they have both been successful in meeting surging demands for skilled labor to sustain rapid industrialization. The key takeaway from these two case studies is that consideration of needs and aspirations of the young generation is vital while planning and designing such national-level mass skill development programs. While Korea's technical and vocational training policies are largely designed around learner's interests, China too had taken a series of effective measures to make skill training attractive to students.
in its own economy.

Case Study 1: China

China's economy has been growing at over 10% per annum for the past two decades. Structural transformation of the economy has gone hand-in-hand with such expansion. As the economy shifted away from being largely agrarian to increasingly industry-based there was a surging need for skilled labour. Keeping in mind the growing needs of the economy, the Vocational Education Law was passed in 1996, which provided the legal framework for the implementation and functioning of Technical and Vocational Education and Training (TVET).

The TVET system in China, as per the Master Plan 2010-2020, has been designed in a very systematic and thorough manner and it derives its comprehensiveness from careful planning. The flowchart below shows the skill training system in China. There are skill-training programs for both school going students and adults who may want to skill/re-skill. Among the different features of the TVET system, one may note that public-private partnership is strong in China. All private enterprises need to spend 1.5% of their resources on in-service training. A second feature is that vocational training and education for students from economically weaker backgrounds are highly subsidized by the government. Third, the Chinese government recently introduced a dual-certificate system under which students earn both a diploma and a

professional qualification after completion of technical education and skill training program. (Planning Commission, Year Unknown) Lastly, China strongly emphasizes upon retraining of teachers at TVET institutes so as to keep them up-to-date with latest technologies. Their TVET program is depicted below :

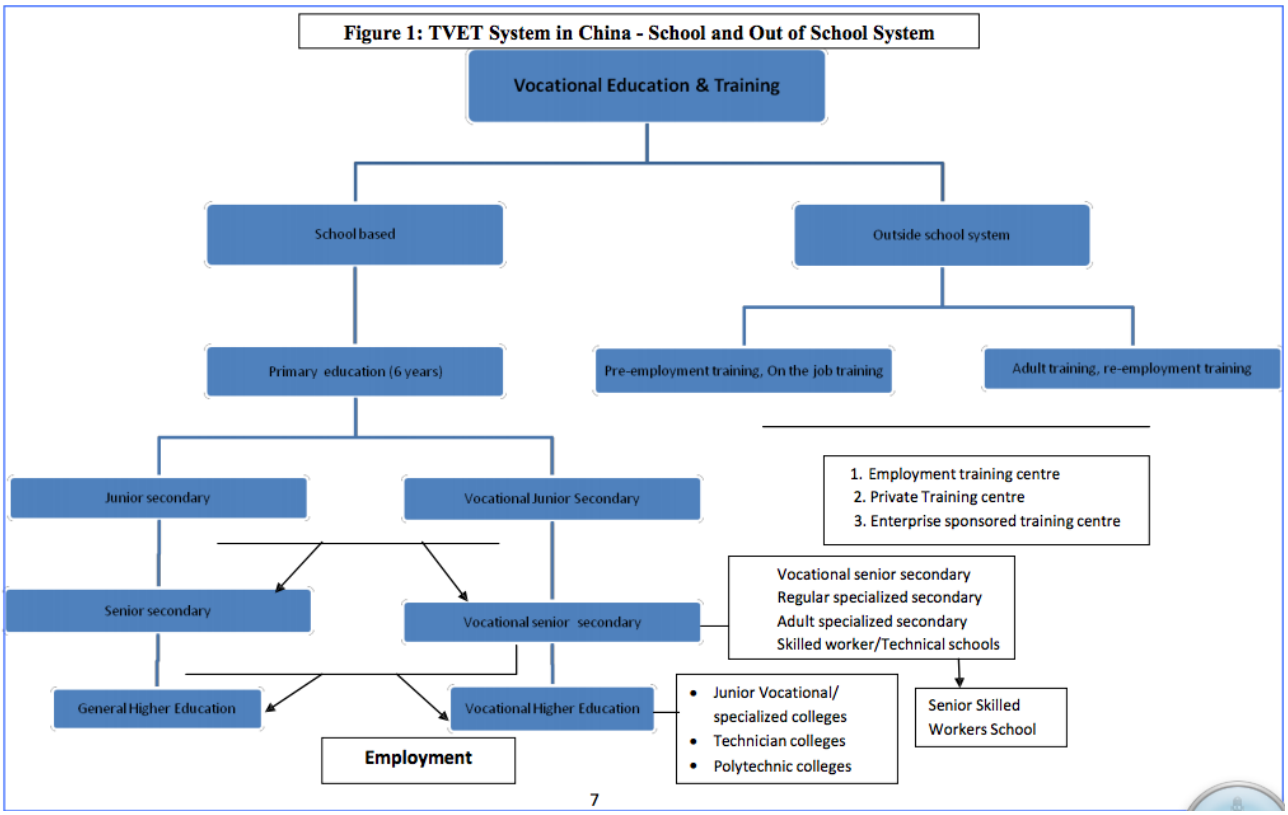

Figure 2: TVET system in China

Some of the provisions under China's Master Plan, which Indian policymakers might find relevant to consider, have been discussed below:

1. Unlike in India, where vocational training is only for out-of-school individuals, the option of learning technical and vocational skills is introduced in China as early as secondary school. India should introduce similar courses within its own schooling system which might help generate interests among the students about technical skills and make post-school technical trainings more attractive. Additionally, introducing skill training at the school level would allow the programs to be longer and more comprehensive than the short duration programs that the NSDC currently offers.. The sheer scale and size of Chinese TVET program dwarf India's. For India, introduction of technical and vocational courses at the secondary school level in India, now offered

only at senior secondary school upwards, appears to be the only way to increase the supply of skilled labour to match its surging need. Two years ago the Ministry of Human Resource Development of the Government of India had approved a National Vocational Education Qualifications Framework which mandated the inclusion of vocational education from class 9. However, that has been introduced in only about 1000 or so secondary schools in 22 States so far **(at** the time of writing in late 2013). (Planning Commission, Year Unkown) Skill training has to be made more accessible to students and more awareness needs to be created regarding the benefits of such training, which is possible through introduction of such classes in secondary schools.

2. Like in India, vocational education enjoys a low social status in China too. Taking this into account, the Chinese government, in their Master Plan 2010-2020, introduced the dual- certificate system. (Planning Commission, Year Unknown) Given the success of the system in China, the Indian government could really look into how the dual certificate system can be implemented in India. The professional qualification component of the system would offer long-term career prospects to students and may better meet their aspirations and uplift the social status of related career options.
3. 'Adult Trainees' is a segment that India's skill training programs should cater to. China's dual system can be used as a model where re-training for those who have been laid-off is a large component of the TVET system (as can be seen from the flowchart above). It is described as a 'dual system' as training is carried out in two places of learning: at the workplace and in a vocational school. (Planning Commission, Year Unknown)
4. The presence of state-owned enterprises has facilitated the provision of in-firm training in China. This has allowed both industries and workers to keep up with latest technologies, which in turn has reduced worker attrition rates. India should venture into public private partnerships and provide financial incentives to private enterprises to skill their own workers.
5. The infrastructure facilities in Chinese government senior secondary schools are excellent in comparison to Indian I T I and other training institutes. Impressive facilities have been important in making TVET programs attractive to Chinese students. The Chongqing Tourism School is one such government school in China. Though it is a senior secondary school it has collaborations with Singapore, South Korea, UK, Australia. (Planning Commission, Year Unknown)

Case Study 2: South Korea

Skills development has played a critical role in the history of economic development in South Korea, where a sufficient number of workers were skilled in time for industrialization. Korea's experience shows that it is crucial that the governments take a leading role in vocational training in the early stages of industrialization in developing countries.[8] As heavy and chemical industrialization exerted itself in the 1970s, and the demand for skilled work forces in industry

rose, vocational training was largely developed through the establishment of vocational high schools. (UNESCO, 2012)

Through the government's strong will and active support, various policies were executed to foster vocational high schools such as the expansion of vocational high schools, specialization of industrial high schools, increase of experimental and practical training, establishment of industry-training cooperation system, provision of testing standards for practical technique measurement of vocational training students, cultivation of practical teaching abilities among teachers, preference for vocational school graduates advancing to college within the same field, and the expansion of scholarship for vocational training students. These have been similar to other models followed across the developing world, but the key difference in Korea was the right approach. In providing TVET courses, the Korean government ensured that the approach was strongly labor-demand driven and not focused only on industrial requirements. (UNSECO, 2012) The success of Korea is strong evidence for the argument presented in the paper, that is, for skill training programs to be successful they need to be student demand oriented. Below are some aspects of Korea's student demand oriented model and the lessons for India.

1. Career counselling: The main actors of skills development in Korea are KOICA and EDCF who work in coordination with the Korean HRD (Human Resource Department). These two organizations ensure that skill training programs are aimed at increasing individual productivity and thus, increasing employability. Therefore, they provide career guidance and employment services at training centres in order to help the trainees in selecting a job that matches trainee's career aptitude and maintaining stable employment.[9] Adopting such practices in India would increase awareness regarding the benefits of skill training and how to utilize it in order to ensure long term employment.
2. In Korea, similar to the case of China, expansion of skill training centres played a large role in making them accessible to students. Korean vocational schools expanded in the late 1970s, with the ratio of vocational high school students to all high school students reaching 45.0% in 1980 from 42.3% in 1975 (Lee, 2009). In comparison, India still lags behind in opening up an adequate number of institutes and reaching sufficiently high enrolment levels given the size of its working population.
3. Korea's training centres often come with housing options for students. Apart from providing necessary equipment at the training centres, the government invests in dormitories at most centres.[10] Such an initiative may be important in India so as to attract capture and skill the large rural-urban migrant population in most of its cities.

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POLICY RECOMMENDATIONS

Having identified that India faces a shortage of skilled labour because skill-training programs in the country are not student demand oriented, this paper provides the following recommendations to the NSDC:

1. Skill vouchers that subsidize fees:
   The student demand for popular courses (such as data entry and accounting) are not met through the current provisions at NSDC affiliated institutes. Hence, this paper recommends to the NSDC that it provides skill vouchers to the students directly rather than allocating scholarships for specific courses at the NSDC institutes, as was done under the STAR Scheme. Students can themselves gauge which industries have the highest demand for skilled employees and accordingly choose the course they would like to enrol themselves in. If students can enrol themselves in the course of their choice they might no longer look at skill training programs as a "back-up" option (as discussed above).

   However, these vouchers should not cover the entire fees that institutes command from students. Instead, they should only subsidize the course to the extent that they are affordable to the target population. This is because one of our key findings was that many students enrol themselves in skill training programs only so as to collect the difference between the scholarship received and the fee commanded by the institute they are enrolled in. This defeats the objective of skill training. Only if the students have to cover a part of the fee on their own accord will the NSDC be able to ensure that skill training courses are meeting student expectations.

   Further, the skill vouchers provided to women should subsidize fees to a greater degree than the skill vouchers provided to others. This is because one of the findings of this paper is that NSDC courses are not attractive to women in particular and special incentives needs to be given to enrol more women. This is important so as to target this potential pool of students who might help reduce the shortage of skilled labor in the economy today.

2. Awareness/ Advertisement among students:
   Given that most student respondents in our survey informed that they had learnt of skill training through informal channels, the government should advertise its skill training programs better. Further, government advertisements should appropriately inform prospective students regarding the benefits of the program. For instance, advertisements should emphasize on the government-affiliated certificates that students would receive on completion of a program.

3. Longer and more comprehensive courses (in secondary schools):

   Most courses offered are of too short a duration for a student to acquire skills that would ensure long-term employment. While short duration courses may be able to provide instant employment for many at the job market, more comprehensive courses of a duration of at least one year are recommended. Comprehensive courses would entail training in not only one specific skill but also provide classes in other necessary skills such as basic English speaking and business accounting, etc so as to increase the probability of long term employment.

   Such longer and more comprehensive courses can be introduced within secondary school education (as in the case of China). This would make skill training a viable alternative for many students, especially those that would otherwise drop-out of school below class XII. Moreover, introducing skill training programs in school would increase the number of skill training centers with less investment. This in turn would allow more students to take up popular courses such as computer programing and data entry, as there would be more centers offering these courses.

4. Recognition of older age groups (30-55 years) as a pool of students: India needs to reduce its unemployment rate of 14% and for this skilling of laid-off workers might be essential. In a scenario, where training centres provide specific skill based, short duration training programs, it is highly likely that one would be unemployed within a few years (given technological progress in the market)(Talwar, 2011). Hence, re-skilling should be a viable option for the labour force. For this the government needs to set up separate training centres, possibly at the workplace itself through public private partnerships with industrial and service sector firms.

5. Career counselling: Students at training centres should be guided how to make the most of their acquired skills and make them more aware of possible career options. This would also spread awareness regarding the benefits of the programs and draw in more students to the training centres.

6. Attractive infrastructure: In India, like in most developing countries, skill training is associated with low status. This can be countered by constructing aesthetically appealing institutes equipped with the latest technology and teaching methods, apart from introducing the dual-certificate system mentioned earlier. This has shown success in the cases of both China and Korea.

7. Lastly, the government should support economically weaker students through subsidies and not stipends (as is the case with the STAR Scheme of the NSDC program). Both China and Korea provide subsidies to students rather than stipends. Provision of a stipend does not ensure that courses are student demand oriented. Many of our student respondents seemed to be taking up the course simply as a

back-up which suggests that they were possibly taking the short courses only to collect the stipend. Therefore, while the government should continue to provide monetary incentives to students, it should mainly be in the form of subsidizing the fees of individual students.

CONCLUSIONS

It can be seen that India's situation is indeed paradoxical. In spite of massive efforts by the government in skilling the population, little has been achieved in reducing the shortage of skilled labor. In fact, both shortage of labour and unemployment co-exist at high levels. Among the many roadblocks in skilling the population, this paper has shown that the primary challenge that the government faces is to make skill-training programs more 'attractive' and beneficial to students. Mere monetary incentives are not enough. The entire skill training system needs a thorough overhaul and upgrade to make ~~the~~ training programs deliver better and long-term career prospects to the young generation. Only then India would be able to meet the surging needs of skilled labour and sustain high economic growth.

For this the paper has provided policy recommendations regarding the program awareness, content, design, and implementation. These policy recommendations were compiled after taking into the account the opinions of different stakeholders in the state of Delhi. Further, the practices in China and Korea were studied to make policy recommendations to the NSDC based on policies that have proved to be fruitful elsewhere. However still, before making any policy reforms, they must be reviewed with students and prospective students to ensure that the new policies are student demand oriented.

REFERENCES

Chun, Hong-Min and Eo, Kyu Cheol, 2012, *Aids for Skill Development: South Korea Case Study,* UNESCO. Accessed on 14 July 2014 at Mhttp://unesdoc.unesco.org/images/0021/002178/217875e.pdf

Erst and Young, 2012, *Knowledge Paper on Skill Development in India: Learner First,* FICCI. Accessed on 14 July 2014 at http://canada-indiabusiness.ca/wp-content/uploads/2013/01/Knowledge_paper_Sept2013.pdf

FICCI Survey on Labor/ Skill shortage for industry. Accessed on 14 July 2014 at http://ficci.com/Sedocument/20165/FICCI_Labour_Survey.pdf

Hajela, Ruchi, November 2012, *Shortage of skilled workers: A paradox of the Indian economy*. Accessed on 14 July 2014 at http://www.skope.ox.ac.uk/sites/default/files/WP111.pdf

ICRA Management Consultancy Limited, 2010, *The Skill Development Landscape in India and Implementing Quality Skill Training*, FICCI. Accessed at 14 July 2012 at http://www.bibb.de/dokumente/pdf/IMaCS.pdf

Lee, Young-Hyun, 2007, Workforce Development in the Republic of Korea. Asian Development Bank. Accessed on 14 July 2012 at http://www.adbi.org/files/2007.10.29.book.korea.workforce.development.report.pdf

Mehrotra, Santosh, Devi, Kamala, and Gandhi, Aniket, Understanding Skill Development and Training in China, Planning Commission. Accessed on 14 July 2012 at http://planningcommission.gov.in/reports/genrep/rep_devch1104.pdf

National Skills Development Corporation, 2009. Accessed on 14 July 2014 at http://nsdcindia.org/

Panagriya, Arvind, 2007, *Transforming India*. Accessed on 14 July 2014 at http://www.columbia.edu/~ap2231/Policy%20Papers/Transforming%20India%20Panagariya.pdf

Planning Commission, 2007, Skill Development. Accessed on 14 July 2014 at http://planningcommission.nic.in/aboutus/taskforce/tf_skilldev.pdf

Sharma, Anita, 2011, Development of the informal skill sector in India, Center for Skills Development. Accessed on 14 July 2014 at http://www.skillsdevelopment.org/knowledge_portal/e-zine/csd_e-zine_summer_2011_editio/the_development_of_the_informa.aspx

Talwar, Sharad, 2011, A skilled India, IndiatodayIn. Accessed on 14 July 2014 at http://indiatoday.intoday.in/story/a-skilled-india/1/146363.html

World Bank, 2006, *Skill Development in India: The Vocational Education and Training system*. Accessed on 14 July 2014 at http://www.bable.in/Knowledge%20Bank/World%20bank%20Report_Skill%20Developement%20in%20India.pdf