



United Nations Development Programme

HOW THE PRIVATE SECTOR DEVELOPS SKILLS

LESSONS FROM INDIA

HOW THE PRIVATE SECTOR DEVELOPS SKILLS: LESSONS FROM INDIA

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LESSONS FROM INDIA

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ABBREVIATIONS AND ACRONYMS

AISECT	All India Society for Electronics and Computer Technology
B2Y	Business to Youth
B-ABLE	BASIX Academy for Building Lifelong Employability
BCtA	Business Call to Action
BTL	below the line
CII	Confederation of Indian Industry
CSIG	Centum Skill Instructors Guild
CSR	corporate social responsibility
CWSI	Centum WorkSkills India
DDU-GKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
DRF	Dr. Reddy's Foundation
EFA	Education for All
FICCI	Federal of Indian Chambers of Commerce and Industry
GMRVF	GMR Varalakshmi Foundation
GSM	Global system for mobile communications
IICPSD	Istanbul International Center for Private Sector in Development
IJIT	Indian Institute of Job-Oriented Training
IISCs	India International Skill Centres
ICT	information and communications technology
IL&FS	Infrastructure Leasing & Financial Services Limited
ILO	International Labour Organization
ITDP	Individual Trainee Development Plan
ITI	Industrial Training Institutes
IYDP	Individual Youth Development Plan
KPMG	Klynveld Peat Marwick Goerdeler
LABS	Livelihood Advancement Business School
LIFE	Learning for Improved Functioning and Effectiveness
LMIS	Labour Market Information System
MAYA	Movement for Alternatives in Youth Awareness
MCLA	Model-Centered Learning Architecture
MDGs	Millennium Development Goals
MSDE	Ministry of Skill Development and Entrepreneurship
NGO	non-governmental organization
NIOS	National Institute of Open Schooling
NSDA	National Skill Development Agency
NSDC	National Skill Development Corporation

NSDCB	National Skill Development Coordination Board
NSQF	National Skill Qualification Framework
PMNCSD	Prime Minister's National Council on Skill Development
PMKK	Pradhan Mantri Kaushal Kendras
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PwDs	persons with disabilities
RPL	recognition of prior learning
SCs and STs	Scheduled Castes and Scheduled Tribes
SDGs	Sustainable Development Goals
SDMS	Skill Development Management System
SLT	Synchronous Learning Technology
SME	small and medium sized enterprises
SMS	short message service
SPRING	Skills Programme for Inclusive Growth
SRY	Skilling Rural Youth
SSC	Sector Skills Councils
STAR	Standard Training Assessment Reward
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
VAK	Visual-Auditory-Kinesthetic
VET	vocational education and training
WISE	Work Integrated Soft Skills & English

PREFACE

With the new global development agenda highlighting the importance of skills, employability and decent work, India offers a unique case in the international fora. Our country has been experiencing rapid growth both in terms of demographics and economy, with a large youth population which is expected to transform into world's largest workforce in the next decade. Considering the importance of tapping this demographic dividend and delivering skills towards human development and inclusive growth, the Government of India set a very ambitious goal of skilling 400 million individuals by 2022.



Realizing this goal, as acknowledged by the Government, requires an ecosystem approach and active engagement of the private sector. The ecosystem is essential to bridge education and training with the labour market, mainly through unlocking of partnerships among key stakeholders and revealing the “hidden assets” that build on the interlinkages among the private sector, government, civil society and others. Simultaneously, both design and delivery of skills significantly benefits from private sector engagement. Apart from enjoying the benefits of a skilled workforce, the industry could also enhance the employability of individuals through providing labour market signals, improving technical and practical skills acquisition, integrating industry know-how and expertise to every step of the trainings and help link skills to placement opportunities.

The National Policy for Skill Development and Entrepreneurship (2015) acknowledges the critical role of building a robust and sustainable skilling ecosystem, with a leading role for the private sector. The policy highlights development of new capacity for skills design and their delivery through partnerships. It also envisions the following:

- ◆ increasing the inclusivity of the skills ecosystem and labour market through recognition of prior learning and certification, such as the new Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme;
- ◆ expanding skilling to rural populations;
- ◆ revitalizing the apprenticeship system;
- ◆ working closely with the private sector to form new centres of excellence in training;
- ◆ providing know-how and expertise to vocational institutions through National Skill Universities;
- ◆ making skills more aspirational; and
- ◆ mainstreaming the National Skill Qualification Framework and implementing a comprehensive labour market information system (LMIS).

As acknowledged by the policy and highlighted in this study, the National Skill Development Corporation (NSDC) constitutes the “keystone” of the private sector-led part of the skilling ecosystem. NSDC coordinates the transformation of skills development policies and strategies of the government into viable, inclusive and sustainable business models. Through interventions such as the provision of financing, labour market assessments, skills gap studies and training of trainers, NSDC will continue to ensure that these business models survive and thrive in the skilling ecosystem.

Analysis by the Istanbul International Center for Private Sector in Development (IICPSD) of the skills business ecosystem and inclusive business models on skills is very timely and relevant for the work of NSDC, Government of India and other stakeholders, as it highlights the key lessons and prominent practices so far, which will help achieve the monumental 2022 goal. We would like to thank UNDP for initiating and successfully implementing this guiding and inspirational research.

Manish Kumar

MD & CEO
NSDC

FOREWORD

The 2030 Agenda for Sustainable Development calls on world leaders to “end poverty in all its forms everywhere” as its first universal goal and goes on to assert that economic growth must be inclusive in order to provide sustainable jobs and promote equality. Elimination of poverty and inequalities requires effective skills development as well as inclusive business models in the delivery of skills. The Sustainable Development Goals (SDGs), especially Goal 4 on quality education and Goal 8 on decent work and economic growth, underline the role of skill generation for work, entrepreneurship, employment, livelihoods and development.



Rapid population growth and rapid changes in technology require countries such as India to explore novel, innovative approaches to find solutions to development challenges. India is one of the world’s fastest-growing economies; it will soon surpass China as the world’s most populous country, and it has the world’s highest number of young people. With a young population, it will continue to grow even as much of the world is aging. In a decade, this large youth population could potentially make India home to the largest workforce in the world. Herein lies the workforce challenge: Only a very small percentage, some 5 percent, of India’s working-age population has received any form of skill training, and more than 93 percent of the total workforce is employed in the informal/unorganized sector.¹

This complex challenge necessitates action at a massive scale. The Government of India has built a **comprehensive ecosystem for skills development** to achieve the ambitious target of skilling 400 million individuals by 2022. This report focuses on the business dimension of the ecosystem, inclusive business models within this ecosystem and the innovative value chains.

The ecosystem analysis and findings from 12 case studies presented in this publication show that the **private sector** can accelerate achievement of national, regional and local skills development goals through:

- ◆ helping integrate labour market signals as inputs for more demand-driven trainings;
- ◆ contributing to the identification of required skills and competencies;
- ◆ contributing to the development of occupational standards and qualifications;
- ◆ ensuring practical and industry-relevant skills are acquired by trainees;
- ◆ increasing the relevance and recognition of certificates;
- ◆ helping achieve a faster and smoother transition to work process; and
- ◆ unleashing the economic potential of youth, women and other disadvantaged groups.

The insights from this report speak to the management of skills initiatives in India and beyond. The experiences described and analysed will help support the mainstreaming of best practices in skills development as part of the global commitment to leave no one behind.

Marcos Neto

Director
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¹ Sanghi and Sirja, February 2014, p. 33.

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The cases presented in this book include the National Skill Development Corporation (NSDC) as keystone leader along with AISECT Skill Development Initiative, B-ABLE, Centum WorkSkills, Dr. Reddy's Foundation, Empower Pragati, GMR Varalakshmi Foundation, IL&FS Skills, IndiaCan Education Pvt. Ltd, LabourNet, NIIT Yuva Jyoti and Youth4Jobs. Though all of these organizations are driven by the common goal of professionalizing job seekers and making businesses more competitive, the cases represent 12 different models of skills training in terms of coverage, management structure and funding.

Report writing team

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The academic experts and cases for analysis were selected by a Technical Committee. The Technical Committee was established as a consultative mechanism to assist the research initiative of IICPSD in India and was composed of a representative group of key partners and stakeholders, including the following members: Aimthy Thoumoung (In Dev-Catalyzing Inclusive Development), Clement Chauvet (UNDP India), Shobha Mishra Ghosh (FICCI, the Federation of Indian Chambers of Commerce and Industry), Paul Comyn (ILO, International Labour Organization), Ratnesh Jha (UNDP India), Professor R. Sudarshan (Jindal Global University) and Sougata Roy Choudhury (CII, the Confederation of Indian Industry).

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Part One
Skills Ecosystem



CHAPTER 1

UNEMPLOYMENT CHALLENGE AND SKILLS DEVELOPMENT

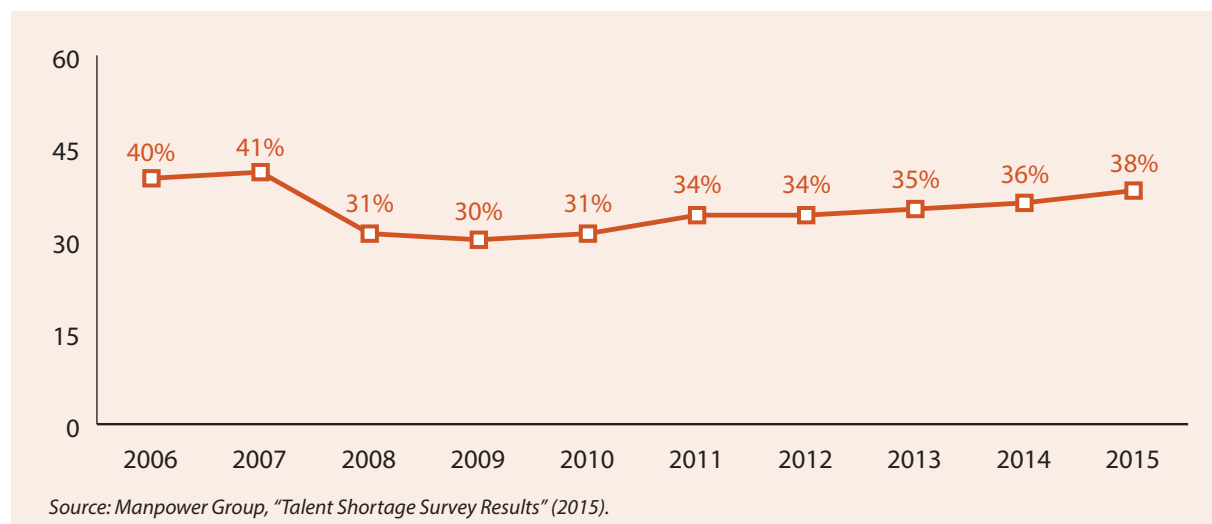
Tackling unemployment through skills

With the current world population of 7.3 billion expected to reach 9.7 billion in 2050, the world is faced with the challenge of promoting productive employment and decent work opportunities for all is key to sustainable development.¹ More than 600 million jobs will have to be created by 2030 to sufficiently absorb the large number of people who are joining the labour force.² Those belonging to different social segments, such as women, youth, the rural poor and persons with disabilities are disproportionately affected by the trend of “jobless” growth. Only 50 percent of women of working age are in the labour force, compared with around 75 percent of men.³ The UNDP Human Development Report 2015 estimates that 830 million people around the globe make an income that is less than \$2 per day despite working and around 1.5 billion are in what is called “vulnerable employment”, with lack of proper working conditions, participation or social security. Youth are of particular concern as of the 204 million people currently unemployed, 74 million are young people.⁴

Governments across the world are grappling with the enormous task of providing jobs to their working-age populations. However, creation of jobs is only one side of the coin; the other is the need to address the problem that most people do not have the required skills to perform these jobs. In 2015, 38 percent of the employers reported that they were having challenges in accessing the skilled human resources they need.⁵ For youth, one of the biggest unemployed populations, among the main reasons behind the rising levels of unemployment are the mismatch between skills and jobs, their low level of skills and lack of access to skills acquisition. According to recent studies, finding the right candidate for the advertised position is getting harder year by year.

Given the importance of having people with the right skills and matching them to the right employment opportunities, **skills development** arises as a viable area of intervention. Skills development is a priority for governments and the private sector alike. The private sector stands to gain by investing in skills development

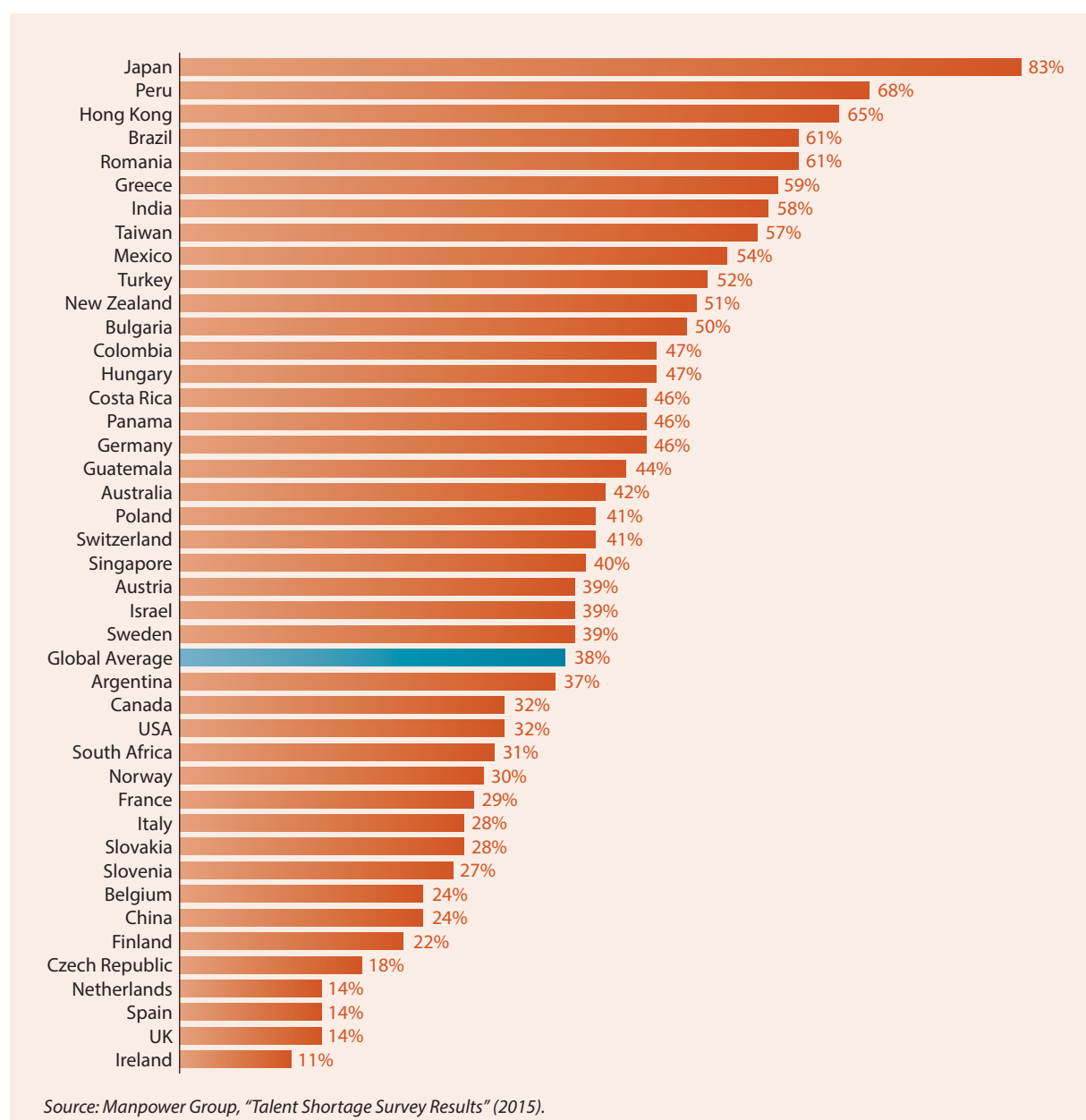
Figure 1: Percentage of employers having difficulty filling jobs – globally



because a skilled workforce boosts productivity and competitiveness. At the same time, the private sector, through contributing to skills development, can offer employment and livelihood opportunities to individuals. Skills development is defined by the United Nations Educational, Scientific and Cultural Organization (UNESCO) as “the relevant knowledge and experience needed to perform a specific task or job and/or the product of education, training and experience that, together with relevant know-how, are the characteristics of technical knowledge”.⁶ The World Bank also focuses on the importance of skills, stating that “skills are at the core of improving individuals’ employment outcomes and increasing countries’ productivity and growth”.⁷

Skills development increasingly refers to a shift away from a supply-led public vocational training system to a system that enables workers to acquire skills which are needed by businesses currently and in the future.⁸ Providing youth, women, disabled and other populations with market-oriented skills increases their employability and earnings and, at the same time, addresses the hard-to-fill vacancies and shortages in skilled labour. Therefore both the private sector as well as the trainees themselves stand to benefit from innovative skills development initiatives.

Figure 2: Percentage of employers having difficulty filling jobs – by country



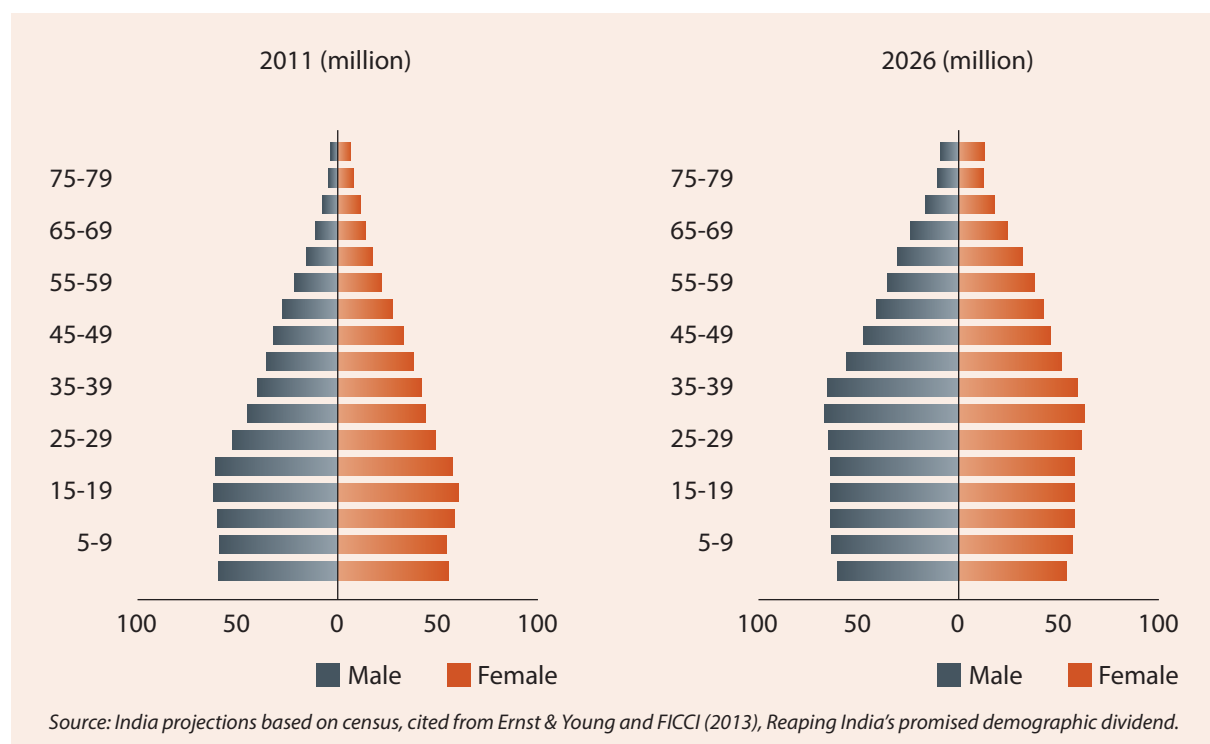
Skilling millions: the case of India

With the world's largest youth population, India has an opportunity to ride a demographic tide to social and economic progress. Some 66 percent of the current population is under the age of 35 and the window, in which India can harness its "demographic dividend" from this youth bulge is expected to remain open until 2040.⁹ Demographic dividend is defined as "a boost in economic productivity that occurs when there are growing numbers of people in the workforce relative to the number of dependents".¹⁰

India is moving towards an economic boom set to make it a more prominent player on the global stage. Therefore, the country presents a unique scenario on the skills development and private sector engagement front. The country has a rapidly growing economy with a GDP growth rate of 7.3 percent in 2014, which was significantly affected by the increase in the country's working age population.¹¹ With the growing economy, job opportunities are also increasing. Total employment in the country was approximately 470 million people in 2013.¹² In addition, the unemployment rate has decreased from 4.3 percent in 1991 to 3.5 percent in 2015 according to ILO estimates.¹³

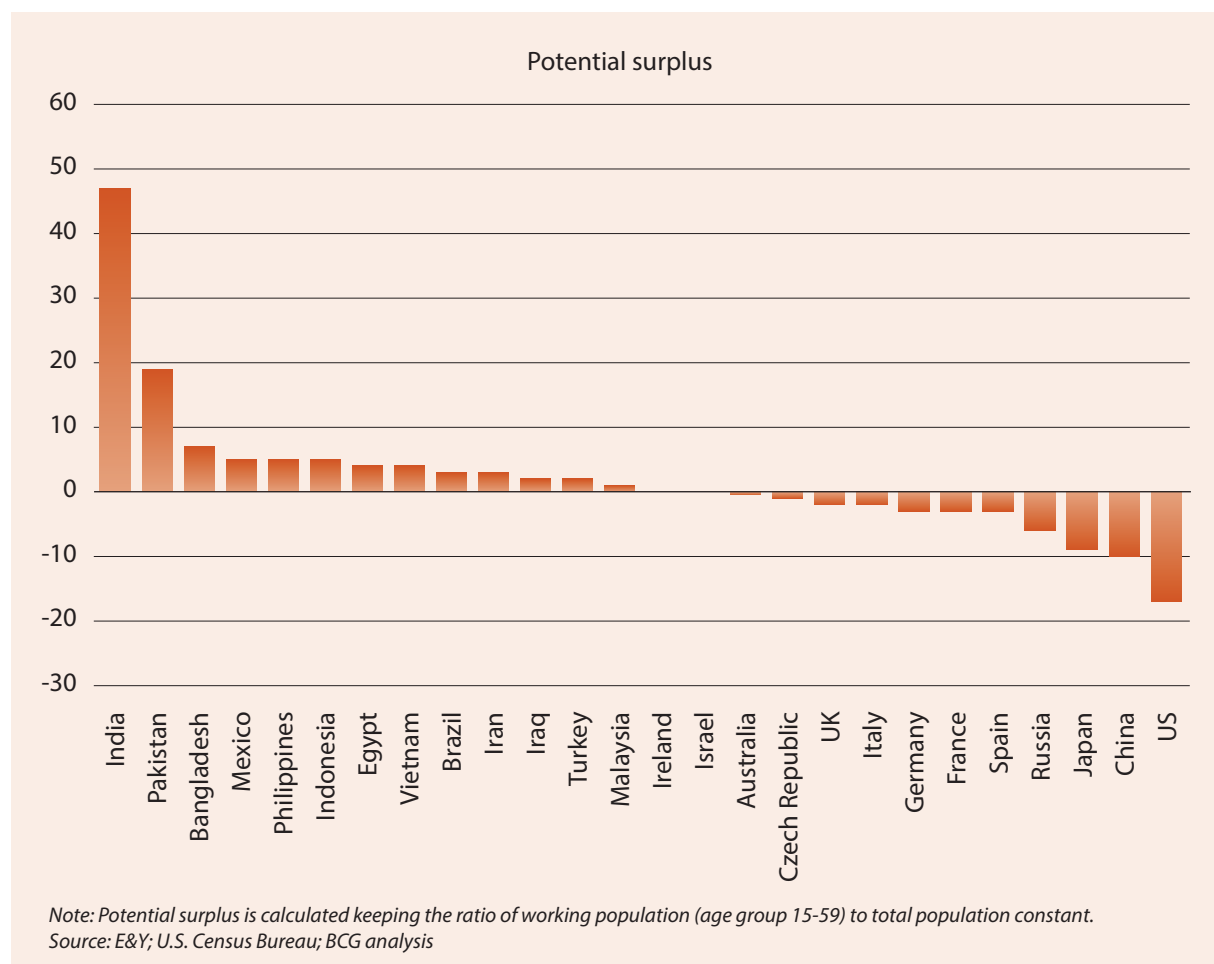
While the rise in working-age population brings benefits, it is associated with risks. First, the country must be able to create jobs and provide employment for the growing population. The quality of jobs also needs to be high to overcome poverty wages, poor or hazardous working conditions, lack of social protection, career development prospects and so forth. Second, failing to provide this burgeoning population with the right education and skills that match existing employment opportunities might reverse the situation from a demographic dividend into a "demographic disaster".¹⁴

Figure 3: India's population pyramid: 2011 vs. 2026



While the population's age is significant, so is its size. The latest United Nations projections estimate that the population of India will overtake China after 2022, reaching 1.5 billion in 2030.¹⁵ It is expected that more than 25 percent of the global workforce will be Indian in 2020.¹⁶ At the same time, many countries will be experiencing labour shortages in 2020 due to decreasing birth ratios and aging societies, as described in the joint 2003 report of the All India Management Association, Boston Consulting Group and Confederation of Indian Industry, cited in various studies.¹⁷ Countries with labour shortages will include those developed

Figure 4: Potential surplus population in working-age group, 2020 (millions)

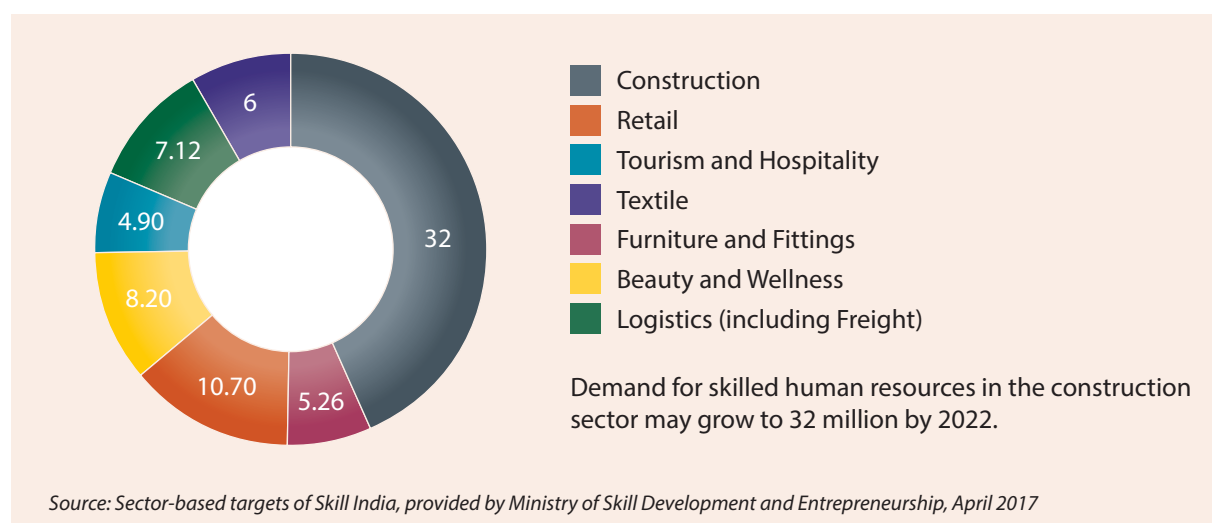


as well as developing countries such as Russia and China. On the other hand, India will have a surplus of workforce thanks to its vast youth population.¹⁸ Approximately one million individuals will join the Indian workforce each month in the upcoming 20 years.¹⁹ Accordingly, India’s leadership is positioning the country to become a global supplier of skills and a human resources capital by 2022 – the year set by the Government of India to achieve its target of skilling 400 million people.²⁰

India requires skills to sustain its rapid economic growth and to integrate its large working-age population into the economy in an inclusive and sustainable manner. Job opportunities will increase from around 461 million in 2013 to approximately 582 million in 2022, and the need for skilled human resources will be apparent especially in sectors such as building, construction and real estate, logistics, transportation and warehousing, and beauty and wellness.²¹ Simultaneously, 300 million young people will join the workforce by 2025²² and will need to access job and income opportunities as productive workers equipped with market-relevant skills. An additional function of skills development would be to foster mobility from less to more productive jobs, between sectors or to upgrade the quality of existing jobs in India.

With so much at stake, Government of India has made skills development a high priority. Over the past decade, it has been building a **comprehensive ecosystem for skills development**. Case descriptions in this report introduce a variety of training partners in this endeavour.

Figure 5: Workforce needs (in millions) by 2022, by sector



Challenges to skills development

While the targets are ambitious, the skills development space in India is also facing certain barriers that require the combined expertise, know-how and resources of all stakeholders to address these issues at scale. India's eventual success in skilling the millions will depend on formulating and disseminating innovative solutions to these challenges:

- ◆ skills mismatch
- ◆ absence of capacity and quality
- ◆ recognition of informal acquisition of skills (prior learning)
- ◆ limited apprenticeship opportunities
- ◆ absence of skilled trainers
- ◆ need for life/soft skills
- ◆ low level of attractiveness of skills (aspirational value)
- ◆ limited access to information
- ◆ shortage of financing for trainings
- ◆ lack of female participation

Skills mismatch

First, skills supply does not always correspond to skills demand. Training in India does not always mean that people acquire the desired employability skills in the form of technical or life/soft skills. As a result, the skills supplied might not link with the needs of the market. Graduates of public or private Industrial Training Institutes (ITIs), for example, face significant challenges in fulfilling the industry demands, lacking relevant skills primarily because courses are not flexible enough to suit the local needs and requirements.²³ Another aspect of the problem is the loss of the importance and relevance of certain "trades" in the market due to shifts in technology. However, these trades continue to be taught at public and private ITIs, which leads to a large mismatch between education and the market requirements.²⁴

In a recent survey, 45 percent of the respondents from different sectors – manufacturing and construction to transport and utilities – reported difficulties in accessing skilled workforce for particular trades.²⁵ A study conducted by the Federation of Indian Chambers of Commerce and Industry (FICCI) estimated that

out of around 0.4 million engineering students graduating every year in India, only 20 percent are readily employable.²⁶ Similarly, around 90 percent of the available jobs demand vocational skills, but 90 percent of the training results from schools and colleges are theoretical outputs.²⁷

The state is working to increase capacity of its systems of higher education and vocational training but the mismatch between skills and job requirements still exists. In fact, the growth of vocational training and skills building has actually turned out to be paradoxical because the unemployment rate is seen to be higher among the educated youth. Also, unemployment is highest among the vocationally qualified youth, i.e. diploma and certificate holders, compared to higher secondary students or graduates.²⁸ Reducing the mismatch between skill supply and skill demand will go a long way to resolving these contradictions.

Absence of capacity and quality

It has been estimated that about 12 million people join the workforce every year in India, including highly skilled (least in number), skilled, semi-skilled and un-skilled workers. Their need for vocational training is vast. Vocational education and training (VET) provides education and training that aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market.²⁹ Currently, however, only 10.4 million people each year receive vocational education or training.³⁰ The number of people in India that are undertaking vocational skills courses in both private and government ITIs is approximately 2.19 million, a negligible number compared with the 460 million individuals in the labour force.³¹

The quality of applied trainings at ITIs is below the required levels, which is also due to the low level of connection between the industry and education and training institutions.³² It then becomes imperative for the country to step up the capacities for VET and provide relevant skill sets to make it a desirable option for its youth.

Recognition of informal acquisition of skills

Another challenge in skills development is how to give formal recognition of prior learning (RPL) – the skills acquired by individuals through working in the informal/unorganized sector, where 93 percent of India's workforce is employed. Most of the new job opportunities in India emerge in the informal sector. Most of the skills acquisition occurs in this segment of the market. RPL is a process designed to assess the knowledge, skills and competencies of individuals and certify the skills that were developed informally.³³ There is a pressing need for mechanisms to analyse skills acquired informally and certify them. It is worth noting that RPL has been initiated under the PMKVY scheme. More than 0.38 million candidates have acquired certification through RPL and the numbers will increase as trainings are still ongoing under PMKVY 2.

Limited apprenticeship opportunities

Apprenticeship could be leveraged to facilitate skills acquisition as it fosters both “learning by doing” and “learning by earning”.³⁴ India has had an apprenticeship framework for approximately 50 years. However, the country only has around 341,000 apprentices,³⁵ which is a very low number considering that its labour force exceeds 450 million.³⁶

Absence of skilled trainers

The low number of skilled teachers and trainers is one of the most pressing problems in the effort to improve the quality of skills delivery. 6 million more trainers and teachers are needed by 2022.³⁷ Yet few teachers or trainers possess the required capacities. In public and private ITIs, for example, less than 10 percent of the teachers have the required academic degrees.³⁸ A World Bank study found that approximately 75 percent of the instructors had not undergone any in-service training in the previous three years.³⁹ The competencies and knowledge of the instructors thus cannot keep up with the novel technologies and requirements of the modern economy.⁴⁰

Need for life/soft skills

Skills training programmes in India often neglect so-called “soft skills” and the lack of such skills can hamper career advancement. Such skills include information and communications technology (ICT) skills, personality and communication skills, entrepreneurship skills, knowledge management and societal skills. Participants in the workforce require these skills to keep up with the shifts in industry demand and technologies.⁴¹ The importance of soft skills is recognized in the National Policy for Skill Development and Entrepreneurship (2015), with “language, basic IT and financial literacy” considered key for employability and job readiness, along with soft skills such as respecting different genders in workplace.⁴² In addition, each course under PMKVY has a component of soft skills for 40 hours including digital literacy.

Low level of attractiveness of vocational skills

Vocational training in India is associated with low-prestige jobs and is frequently not considered as a viable alternative to formal education. Such low regard for vocational education is common among low-income families; they would rather put their children through higher education with the hope of upgrading their social status than opt for vocational education leading to jobs that offer low compensation and low status. Many view this as time that could have been spent earning wages. Vocational education in India has to be made more attractive with better links to competitive jobs with higher salaries.⁴³ In other words, skills development should be seen as a reliable way of obtaining degrees and diplomas that bring about “positions of authority”, open up pathways for sustainable growth and livelihoods, and are directly and positively correlated with income.⁴⁴ It should also be noted that students and trainees are usually from disadvantaged backgrounds, making it challenging for them to start a training and stay outside of the workforce for a long duration.⁴⁵

Limited access to information

India’s population is not aware of most vocational training and vocational job opportunities. The country has an active labour market information system that has been developed by the National Skill Development Agency, but it is still at a nascent stage. A labour market information system is critical for aligning demand and supply for occupations and skills.⁴⁶

The skills development and entrepreneurship policy highlights the need for a comprehensive IT-based information system to collect and analyse information on skilled labour supply and demand, which could help in bridging the skills gap.⁴⁷ Such a full-fledged system could provide the data that can inform decisions about the type of training required by industry. It could also help bridge the skills gap by increasing the public’s access to information about the job market.

Shortage of financing for training

Another key issue is the financing of training programmes; in other words, “who pays for the training”. Challenges are encountered in every direction:

- ◆ The private sector is not willing to pay for trainings due to the risk of drop-out on the side of the trainees, though it does have the intention to provide better compensation for skilled candidates;
- ◆ The trainees want to pay for being placed in a job, but not for trainings;
- ◆ Financing institutions are not willing to provide loans or microfinance instruments if employment is not guaranteed (there is an available option for skill loans as well, but it is not preferred in the context of government financed schemes);
- ◆ The government would like to finance the trainings, but is still working on the best modalities that maximize efficiency, effectiveness and transparency. Such schemes include PMKVY and Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY), where the trainings are provided free of charge; and
- ◆ The skills providers at the same time cannot fill their seats as many potential trainees are unable to pay for the training programmes.⁴⁸

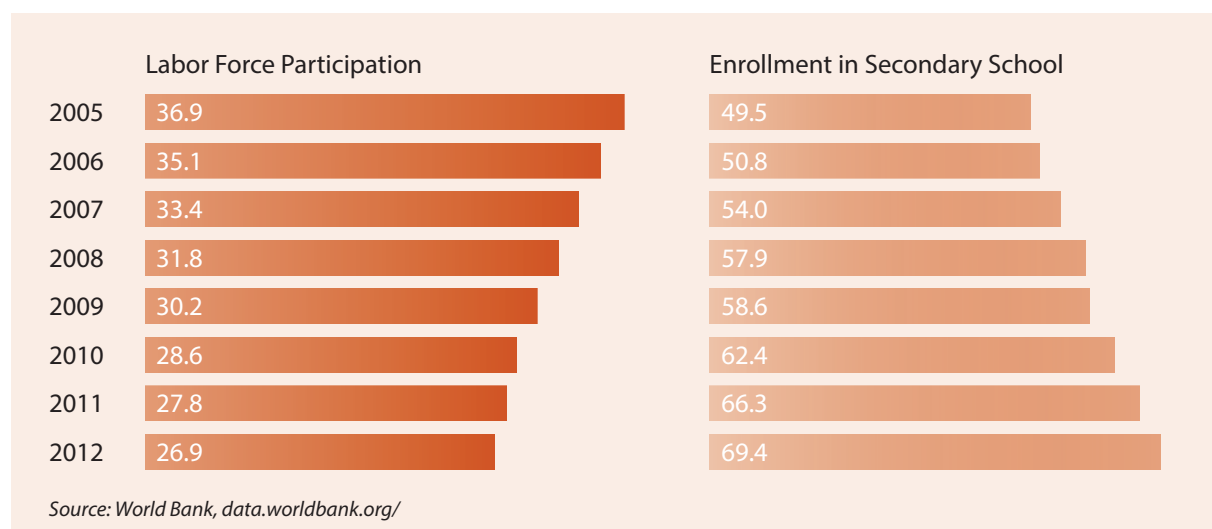
Lack of female participation

In India, while enrolment rates in secondary schools have been increasing for girls and women, their participation in the workforce has shown an opposite trend, as depicted in figure 6. Indian companies cite a number of challenges that hamper the participation of working-age women in skills development opportunities and in the labour force:

- ◆ Gender bias – perceptions that domestic chores are women’s work prevent women from entering and remaining in the labour market;
- ◆ Labour retention – Companies state that female staff leave early for family reasons such as getting married or having children;
- ◆ Flexible working arrangements – Businesses are not always receptive to flexible working conditions, needed by women for family care;
- ◆ Transportation support system – Transportation opportunities are either not available or secure enough for women, which creates a barrier;
- ◆ Support system – Some of the above challenges could be addressed through a support system designed for women after placement.⁴⁹

It is important to acknowledge, however, that the recent government schemes such as PMKVY have almost reached 1:1 gender ratio at the stage of enrollment.⁵⁰

Figure 6: Female labour force participation and education in India



Towards solutions: Indian skills ecosystem and NSDC

The late CK Prahalad, who brought the idea of private sector provision of goods and services to the poor into company boardrooms, was one of the earliest advocates of skilling 500 million people to change the destiny of India. This target resonated in the government circles, especially in tandem with the country’s demographic trends. The Government of India emphasized skills development in its 12th Plan by setting a skilling target.⁵¹ In 2009, taking into account the global demand for skills and the need to reach “the last mile” to deliver skills and increase the employability of the underserved, the Government of India set the world’s most ambitious skilling goal: training 500 million people by 2022. The target was revised in 2015 to 400 million people as a result of demographic changes.⁵² Below is an overview of the recent web of interventions by the government to realize this goal.

The web of interventions by the Government of India to support the skilling ecosystem

The Government of India has been spearheading the skilling ecosystem through innovative schemes and policies. Below is a brief overview of the government initiatives and interventions that constitute the basis for training programmes.

1. Pradhan Mantri Kaushal Vikas Yojana

PMKVY is a key skills certification initiative by the Ministry of Skill Development and Entrepreneurship (MSDE) to provide market-relevant skills training to youth, with a particular focus on short-term trainings, recognition of prior learning, special projects, social and community mobilization, placement and monitoring. The goal is to offer the skills demanded by the industry to 10 million youth between 2016 and 2020. The National Skill Development Corporation is the main implementing body.

The trainings will target 221 job roles and particularly benefit dropouts as well as the unemployed, since it is free of charge. The training duration will range from two to six months. Along with technical skills, the programmes cover soft skills, entrepreneurial skills, digital and financial literacy. Training and assessment costs are met by the government. Trainees also benefit from placement support by training partners. The RPL component will align the skill sets of 4 million people from the informal sector to the National Skill Qualification Framework (NSQF).⁵³ Under PMKVY, more than 2.2 million individuals have been trained so far. Training programmes continue in 2,500 centres in more than 490 districts across India.

2. Pradhan Mantri Kaushal Kendras

Pradhan Mantri Kaushal Kendras (PMKK) are iconic, model training centres, envisioned by MSDE and operationalized by NSDC, that have the necessary infrastructure and state-of-the-art equipment to provide industry-relevant skills and competencies. These centres are expected to act as benchmark for high quality and standardized training and to depict the aspirational value of skilling. The centres will also target sustainable operations and convene all relevant stakeholders for market-driven skills development. Employability of the trainees will be a critical outcome of the courses, which are expected to be delivered in world-class standards.⁵⁴ To date, 451 PMKKs have been allocated in approximately 434 districts of the country.

3. India International Skill Centres

India International Skill Centres (IISCs) have a critical role in positioning India as the skilled human capital provider of the world. IISCs aim to offer training programs and certification in full compliance with international standards and benchmarks. NSDC is establishing these centres to increase the global mobility of the Indian workforce, particularly youth. IISCs, similar to PMKK, will be equipped with the latest technologies and infrastructure to provide skills that are internationally relevant and recognized. These will also offer pre-departure orientation and digital literacy training for youth willing to migrate, towards ensuring a smooth transition in terms of cultural and social adaptation. Joint certification with Indian Sector Skill Councils and international bodies will also be sought, along with cross-country placement linkages. There are currently 13 operational IISCs skilling 400 individuals in nine job roles from eight sectors.⁵⁵

4. Memorandum of understanding between MSDE and NIOS

The Ministry of Skill Development and Entrepreneurship and the National Institute of Open Schooling (NIOS) have signed an MOU to offer an opportunity for ITI learners to acquire certification that is academically equivalent to Class X and XII. This is intended to eliminate gaps

between formal education and skill development and increase the mobility of ITI graduates both in terms of employability and further studies. The ITI graduates will be able to transfer course credits, and when they complete all the course requirements successfully, they will be awarded academic equivalence certification.⁵⁶

5. 2014 Amendment to National Apprentices Act of 1961 and National Apprenticeship Promotion Scheme

The Apprentices Act of 1961 was originally designed to regulate provision of on-the-job training and hands on skills to apprentices in the industry. The Act was revised several times to align apprenticeship practices with the need of the day, and the latest 2014 amendment was a strategic move to increase the responsiveness of apprenticeship to both the supply and demand sides. Some of the changes include broadening the definition of “worker” to cover “contractual and agency workers” in order to enable non-engineering graduate and diploma holders to participate in apprenticeship frameworks, providing flexibility to employers to determine their own policy for apprentice recruitment, utilizing portals to exchange information and facilitating the provision of new courses in line with industry demand.⁵⁷ Apprentices engaged for the 2016-17 period number around 340,000.

Another initiative by MSDE is the National Apprenticeship Promotion Scheme, which aims to train 5 million apprentices by 2019-20. It will facilitate employer engagement in apprenticeship by covering 25 percent of the stipend that otherwise would be paid to the apprentice by the employer from the government budget. In addition to incentivizing the involvement of employers, the initiative will enhance foundational skills training. Fifty percent of the costs for the apprentices to acquire basic skills will be met by the Government of India.⁵⁸ The apprenticeship “lifecycle” will be managed through a single portal, “apprenticeship.gov.in”, including registration, seeking for apprenticeship opportunities, appointment and certification. Seven months after its launch, this scheme has mobilized 194,000 apprentices and 23,231 establishments.

6. Policy framework documents

(a) National Policy for Skill Development and Entrepreneurship

The National Policy for Skill Development and Entrepreneurship (2015) aims to align various endeavours and initiatives in the skilling space of India and to achieve high quality, rapid and sustainable skills delivery at scale. The policy offers an overarching framework setting common standards with which all skills development activities should comply. The policy document highlights the different steps and components of the skilling process, including capacity, aspirations, synergy, quality, mobilization and engagement, outreach and advocacy, inclusivity, partnership and information and communications technology. It underlines the key role of private sector engagement in skills training, delivery of soft skills, enlarging recognition of prior learning, mainstreaming labour market information systems LMIS and achieving higher coverage for NSQF for the achievement of the skilling vision.⁵⁹

(b) National Skill Qualification Framework

The National Skill Qualification Framework (NSQF) is India’s framework for categorizing qualifications based on the required level of skills, knowledge and competencies. It has replaced all other previous qualification frameworks and now is the single source of reference. It acts as a quality assurance scheme since it guides the certification of all skills acquired through formal, non-formal or informal means. NSQF is expected to provide mobility for students and trainees in education and job markets in India or abroad. It will ensure standardized and quality training outputs and introduces national occupational

standards/qualification packs towards this end. NSQF also covers recognition of prior learning to facilitate the transition from the informal market to the formal one.⁶⁰ To date, 1,722 qualification packs have been established and aligned to NSQF.

(c) Common Norms

The Government of India has introduced Common Norms to unify and standardize the implementation of different skilling frameworks and initiatives. The norms offer a clear definition of what constitutes skills development, along with explicit requirements to align the training initiatives in terms of inputs such as training infrastructure, trainers and content; duration; NSQF compliance; outcomes such as wage and self-employment; costs (e.g. funds linked to outcomes and covering expenses such as outreach, training of trainers, placement, etc.); and monitoring and tracking systems. To ensure implementation, the Common Norms Committee was established as an overarching body, chaired by the MSDE with the participation of the representatives of the Prime Minister's National Skill Development Agency (NSDA), NSDC, Ministry of Finance and others. Currently, 18 out of 20 Ministries engaged in skills training have aligned their operations with the Common Norms; exceptions are due only to the unique characteristics of certain schemes.⁶¹

7. Indian Institute of Skills

The Indian Institute of Skills is a state-of-the-art skills training centre, a number of which are being set up across the five regions of India. The institutes will act as centres of excellence in training and replicate best practices from other countries. The first Indian Institute of Skills was launched in Kanpur, Uttar Pradesh on 19 December 2016 by Hon. Prime Minister Narendra Modi, who first formulated the idea based on his visit to the Institute of Technical Education in Singapore.⁶²

Sources:

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The Apprentices (Amendment) Bill 2014.

To carry out its national skills development mission, the Government works with many training partners. A large number of companies are engaged in skill training with full or partial funding by the National Skill Development Corporation (NSDC), which is a public private partnership. Through NSDC, the private sector has been given a crucial role in achieving the national target.

The government, along with tasking various ministries with the training of the population, created the National Skills Development Fund (NSDF) as an initiative towards a holistic skills ecosystem that incorporates the creation of a skills market. Implementation of the National Skills Development Fund was subsequently given to the National Skills Development Corporation.



Source: NSDC

National Skills Development Corporation

The National Skills Development Corporation is the apex body at the centre of coordination between the government and private sector actors. NSDC is a public private partnership to provide support to large-scale vocational institutions, encourage private sector involvement and fund select private sector initiatives. Therefore the government is building both a skills market and developing an ecosystem, with NSDC as its keystone. The ecosystem approach employed by the government taps the capacity and expertise of the private sector and allows it to formulate coordinated action between public and private sector actors.

The skills development policy

The National Policy for Skill Development and Entrepreneurship (2015) moves away from the fragmented skills development policy space in India, as does the initiatives of the Ministry of Skill Development and Entrepreneurship, towards the ecosystem approach. The policy document acknowledges the potential as well as the bottlenecks in the system, with due consideration of its various aspects: aspirations, capacity, quality, synergy, mobilization and engagement, outreach and advocacy, partnerships, inclusivity, and information and communications technology.⁶³ The policy is also complementary to existing green initiatives in India. As per the policy:

- ◆ In the development of capacity for skill delivery, NSDC will continue to play a key role, and through the newly adopted hub-and-spoke model (hubs are large training facilities where curriculum development, certification and other key training activities take place in different occupational fields, whereas spokes provide targeted training in line with the local demand; see details in Chapter 4), NSDC will work to improve the capacity of ITIs as multiskilling centres. The hub-and-spoke model will harness the dynamism of private training institutes as spokes, which will integrate and strengthen the relatively small and scattered private providers.
- ◆ To make skills more aspirational, government will advocate for the use of skilled human resources, which may in turn increase the private sector's demand for skills.
- ◆ The policy will complement the system of International Training Institutions and International Training Centres (ITI/ITC). National Skill Universities will be the know-how and expertise supplier of the ITIs and ITCs. Skills development centres at district block and village levels, the "Kaushal Vardan Kendras", will offer flexible and affordable courses in a scheme to develop skills among youth and other social groups in rural areas. The private sector and partnerships with the large industrial houses will be encouraged to create new centres of excellence. In short, the apprenticeship system will be revised after almost 60 years.
- ◆ To increase the inclusivity of skills training and the labour market, recognition of prior learning will be emphasized in policies and applications. A new voucher-based flagship programme, PMKVY, will replace the Standard Training Assessment Reward (STAR) scheme. PMKVY allocates 40 percent of its capacity to certification of the existing workforce.



Source: NSDC

- ◆ The NSQF will increase its coverage at the state and schools level, and will be further streamlined with the comprehensive LMIS.

The skills movement in India is also aiming to respond to the skills mismatch challenge in accordance with national economic and industrial policies and strategies. The policy highlights the potential synergies and complementarities between large-scale and high-quality skills delivery, and flagship initiatives of the Government of India, such as Make in India, Digital India and Green India. Skilled human resources are essential for achieving the desired outcomes in such programmes.⁶⁴ Insights and lessons learned from previous programmes can inform the implementation of the many measures described above, especially when initiatives have strong monitoring and evaluation. This knowledge can advance positive progress in the policy space.

About the study: skills delivery models led by the private sector

Given India's emphasis on the private sector in achieving its ambitious skills development strategy, the UNDP IICPSD conducted an analysis of private sector-led models of skills delivery in India – with a focus on disadvantaged populations. This documentation collects unique learning to provide a rich source of techniques and modalities that can be emulated by other members in the business ecosystem. Findings will be disseminated among national and international partners to further policy dialogue and shape recommendations.

The study is presented in two parts:

- ◆ **Part One** reports on the analysis of 12 skills development initiatives and their modalities. The study considered India's experience from several perspectives, from business ecosystem level down to internal value chain, and analysed how 12 players operated towards enhancing opportunities for the population to participate in the labour market, including large-scale and niche businesses engaged in skills delivery.
- ◆ **Part Two** presents the 12 case descriptions. The 12 selected cases from India represent a diverse profile in terms of representation and impact on the disadvantaged sections of population. This encourages multi-sectoral learning and integration of vulnerable populations within the private sector agenda. Cases selected for the study are listed in table 1.

Table 1: Twelve cases selected for the UNDP IICPSD study

No.	Case	Summary	Role in the ecosystem
1	National Skill Development Corporation	NSDC was established as a joint venture between the Government of India and private sector organizations. It aims to provide long term (patient) and risk capital to businesses engaged in skills development, to facilitate the development and dissemination of occupational standards, and provide other support measures for the healthy functioning of the ecosystem. It shares the generated value across the ecosystem network and introduces standards of conduct.	Keystone
2	Centum WorkSkills India	Centum WorkSkills India (CWSI) is the largest training partner of NSDC. CWSI offers integrated services from community mobilization and training delivery to assessment, certification and assistance for placement. It takes a participatory approach and focuses on poor and disadvantaged populations.	Large-scale player
3	IL&FS Skills	IL&FS Skills is India's largest vocational training company and a public private partnership between Infrastructure Leasing & Financial Services Limited (IL&FS) and NSDC. It offers skills development in six categories through its Skills Programme for Inclusive Growth (SPRING) initiative. The aim is to engage in large-scale skilling and targeting several groups in different industries.	Large-scale player
4	IndiaCan Education Pvt. Ltd	IndiaCan is a private company and a subsidiary of British Pearson that engages in the design and implementation of vocational training programmes in India's rural and remote areas, using innovative technologies. It specializes in vocational training, higher education and employability test preparation.	Large-scale player
5	NIIT Yuva Jyoti	NIIT Yuva Jyoti is a joint venture between NIIT and NSDC. It provides skills development training to disadvantaged youth, primarily located in tier 2 and 3 towns and rural areas with the aim to enhance skills development in the service sector. Its training is based on the Model-Centered Learning Architecture (MCLA) methodology.	Large-scale player
6	AISECT Skill Development Initiative	The All India Society for Electronics and Computer Technology (AISECT) Skill Development Initiative designs sustained and innovative ICT and skills-based training in previously untapped regions in India's semi-urban and rural areas. The organization operates through a franchise model that imparts training by leveraging content and programme guides developed by the organization. It cooperates with NSDC.	Niche player
7	B-ABLE	The BASIX Academy for Building Lifelong Employability (B-ABLE) is a private organization that targets underprivileged and skill-deficient youth, especially women and the poor. It focuses on providing industry-relevant and area specific training, offering various short-term courses to train for placement and self-employment.	Niche player

No.	Case	Summary	Role in the ecosystem
8	Dr. Reddy's Foundation	Dr. Reddy's Foundation (DRF) offers short-term skill development programmes that prepare youth for careers in the service sectors through its Livelihood Advancement Business School (LABS) model. DRF is a non-profit partner of Dr. Reddy's Laboratories, a pharmaceutical company engaged in corporate social responsibility (CSR).	Niche player
9	Empower Pragati	Empower Pragati is a private sector social enterprise that engages in skills development for youth and women, particularly in the informal sector. It helps female house workers to enhance their competencies, acquire work-related and soft skills, and obtain employment in the service industry and beyond.	Niche player
10	GMR Varalakshmi Foundation	This CSR initiative of the GMR Group provides education and vocational training programmes to rural and low-income families in their business locations. In addition to offering four industry-specific courses, the GMR Varalakshmi Foundation (GMRVF) provides life skills and spoken English.	Niche player
11	LabourNet	LabourNet is a social enterprise that creates sustainable benefits for workers in the informal sector by providing on-site training and livelihood opportunities. Its model towards economic and social integration is built on empowerment through education, employability and employment.	Niche player
12	Youth4Jobs	This social enterprise sets up placement-linked skilling centres for disadvantaged youth and youth with disabilities. It goes beyond the provision of training by adjusting the skills development activities chain in order to be able to incorporate those groups into the workforce.	Niche player



Source: Centum WorkSkills



Source: Youth4Jobs

The National Skill Development Corporation is one of the most prominent public private partnerships in India. One of the key achievements of NSDC has been to incubate the Sector Skills Councils (SSCs) to mobilize the private sector to provide skills in specific sectors.⁶⁵ SSCs are private sector-led organizations that aim to “reduce skills gaps and shortages, improve productivity, increase opportunities for all individuals in the workforce and improve learning supply” in a given sector.⁶⁶

Other companies featured in this study have been partnering with the government for a long period of time to provide skills training and development. IL&FS Skills, for example, is a public private partnership between NSDC and IL&FS that has been offering placement-led skills delivery to a wide range of groups, including school dropouts and graduates of secondary education, higher secondary education or diploma holders (i.e. Class X and XII pass and ITI pass).⁶⁷ Centum Learning has also partnered with NSDC and set up CWSI, which has a mandate of skilling 12 million youth across 11 states and 383 districts in India by 2022. Centum focuses on vocational skills training, designing courses for schools and colleges and partnering with various government and private sector organizations to provide placement to the skilled youth.⁶⁸

The study also considered several initiatives that target skill development among particular disadvantaged groups, as these initiatives are important models to learn from and share. LabourNet provides on-site training and livelihood opportunities for informal/unorganized sector workers.⁶⁹ Youth4Jobs is a placement-linked skilling centre for youth with disabilities that helps companies build an inclusive workforce.⁷⁰

The study includes some novel initiatives in skills development that have been implemented by private firms as part of their corporate social responsibility. GMR Varalakshmi Foundation provides education and vocational training programmes to rural and lower-income families in their business locations.⁷¹ DRF, a non-profit initiative of Dr. Reddy’s Laboratories, pioneered the LABS model, which prepares youth for careers in emerging service sectors. DRF also runs a LABS-Farmers programme that provides small and marginal farmers with knowledge and access to sustainable and cost-effective technologies and methods in order to improve agricultural productivity.⁷²

The study also analysed private companies such as BASIX, which has created a subsidiary, B-ABLE, focused on technological training in construction, tourism, banking, rural farm, hospitality and food processing. B-ABLE reaches school dropouts and socially underprivileged classes.⁷³ Other private initiatives, such as IndiaCan Education Pvt. Limited, are focused on designing and providing advanced skills using innovative technological solutions.⁷⁴

The aim of this study was to learn from these cases about how the private sector enhances results of skills training. It also looked at how to provide skilled human capital needed by the industry to achieve its productivity and competitiveness goals. Five different **levels of analysis** were conducted towards this end:

- 1. Ecosystem-level** – The broader framework for analysis was the skills business ecosystem, in which skills providers, industry, government and other stakeholders co-exist and interact. The interdependencies and complementarities are key to unraveling how businesses operate even beyond their individual capacities.
- 2. Industry value chain** – The second level of analysis is industry value chain, which focuses on skills as a sector and skills development in the sectors. The business models in skilling face particular common challenges, from finding competent trainers to mobilizing the trainees, and a sectoral perspective helps to shed light on the common barriers that the skills providers face.
- 3. Core business players** – This involves a categorization of actors in the ecosystem according to their roles and their target objectives. Private skills providers differ in terms of their target market and objectives. They either provide skills to masses through a more standardized approach suitable for scale, or they pursue market niches where a customized value proposition is offered. Each player thus has his own role in the ecosystem.
- 4. Business model** – The next level of analysis is the business model. As in the case of traditional business models, skilling businesses aim to capture value and earn profits; thus a closer look to their strategies and operations is necessary. Key guiding questions are: What type of a need is addressed through the value offer of the business? How are the sales and revenues realized? How does the business generate profits?
- 5. Internal value chain** – Every business model in the skilling space also includes an internal value chain, consisting of series of activities implemented to generate value for the trainees. This analysis focuses on the processes or stages that an individual trainee could go through in skilling.

The ultimate goal of this study is to generate lessons from India's experience in skilling – to identify and analyse the impactful business models and their practices and innovations, to highlight the challenges and to provide insights on how the private sector could contribute more to skills acquisition and employability in an ecosystem.

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- ⁶⁹ LabourNet website, "Social Value Proposition".
- ⁷⁰ Youth4Jobs website.
- ⁷¹ GMR Group Overview, Naukri.com website.
- ⁷² Dr. Reddy's Foundation website.
- ⁷³ B-ABLE website.
- ⁷⁴ India Can website.



CHAPTER 2

ROLE OF PRIVATE SECTOR IN SKILLS ECOSYSTEM AND INDUSTRY VALUE-CHAIN ANALYSIS

A business ecosystem consists of multiple factors including how business networks operate in terms of structure, interactions between different participants, relationships of dependence and cooperation as well as the divergent roles of members.¹ Every industry consists of core businesses, extended enterprises and at the broadest level, the business ecosystem. This chapter offers a brief overview of the concepts and approaches underlying the ecosystem analysis. It also addresses the private sector's role in providing resources to underserved parts of the population, the importance of fostering inclusive business and the need for an ecosystem around skills development. It concludes with findings from the first two levels of the study: ecosystem analysis and industry value-chain analysis.

Inclusive business: reaching the underserved

Underserved population groups constitute a significant portion of the global market place.² At the base of the economic pyramid in India, for instance, approximately 835 million people with income of under \$4.26 a day represent **\$360 billion** in disposable income.³ Integrating this large segment into the market presents immense opportunities as well as comes with unique challenges, such as creating and sustaining demand among low-income consumers. However, business-as-usual approaches will not reach the underserved. Business models need to be adjusted to the specificities of the underserved if they are to achieve scale.⁴ Thus, in order to deliver market-relevant skills to these groups, new types of business models are required. New and innovative business approaches are needed to transform the underserved into emerging producers,

Business models and the concept of inclusive business

A business model is basically “the rationale of how an organization creates, delivers, and captures value.”⁵ The business model analysis incorporates what type of customers the company is targeting, the kind of need that is met through the offered product or service, the method of sales, the role of the company in the value chain and the way of earning profits.⁶

The goal of inclusive businesses is to deliver a high-level of social impact to large groups of people through commercially viable and sustainable practices. As with other businesses, going into the market with the “right” business model is key to success and scale. Especially for “market creation” for lower-income groups, businesses need to overcome challenges specific to these market segments, such as lack of demand and absence of infrastructure.⁷

Inclusive businesses employ various strategies to operate in the markets of the poor and include them in their operations in various capacities:

- tailoring their products and processes;
- mobilizing investments to open up the lower-income market segments;
- building on the strengths of the disadvantaged groups;
- joining of resources and capacities with others; and
- cooperating with the public authorities through policy dialogue.⁸

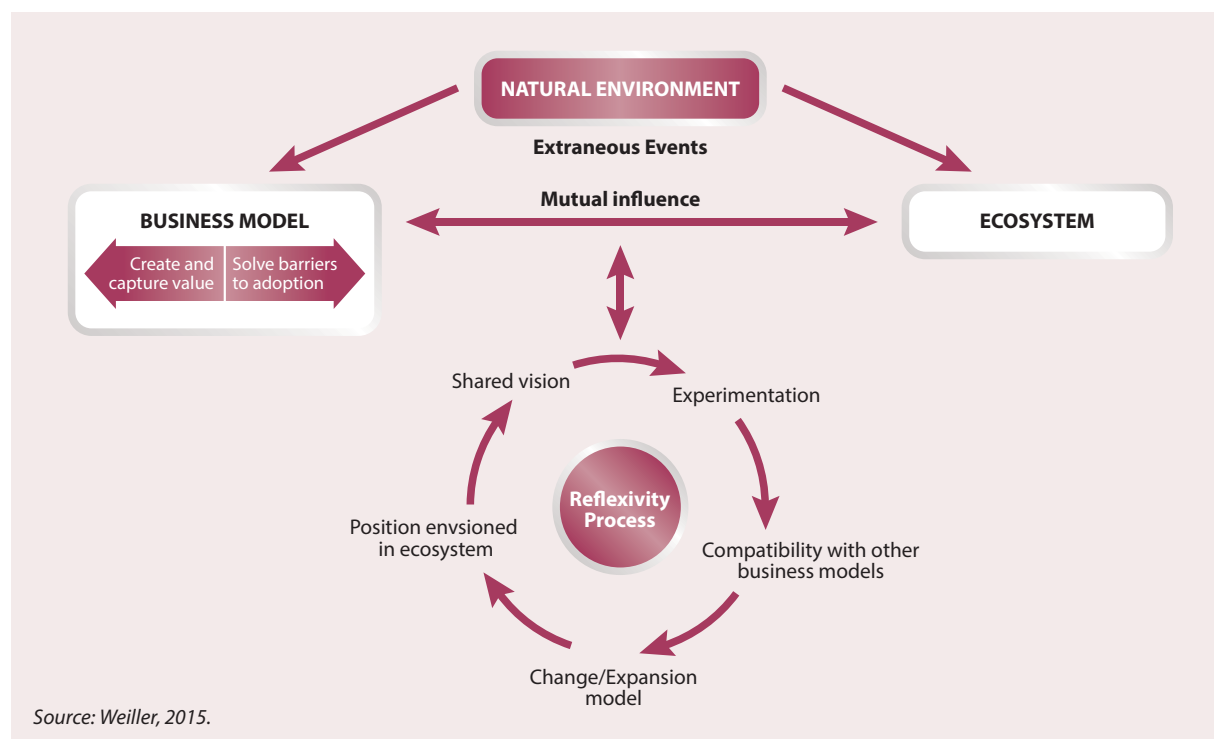
consumers and entrepreneurs, which would open up new business and growth opportunities. These efforts would not only generate business profits but also improve the lives of people who might otherwise be excluded from social and economic progress.

The inclusive business concept articulated by UNDP offers a novel perspective on how businesses could target groups at the base of the economic pyramid, as consumers and producers as well as employees in the value chain.⁹ Inclusive business perspective is essential for India's endeavours to reach the underserved as it highlights product and process customization and market-building for the masses.

Skills development can be approached from the lens of inclusive business. While provision of market-oriented skills training enables workers to acquire skills needed by businesses currently and in the future,¹⁰ businesses also boost their productivity and competitiveness by engaging a skilled workforce. At the same time, the country leverages the resources of the private sector to scale operations, knowledge and experience to align training standards and curriculum to industry requirements. Inclusive businesses are therefore important, and if scaled and supported they contribute positively to economic growth and sustainable livelihoods.

As figure 7 illustrates, there is a continuous interaction occurring between the business model, ecosystem and overall environment. However, the quality of this interaction, and the extent to which it is mutually beneficial, depends on the reflexivity process. This process is comprised of five steps, beginning with the experimentation phase, which provides the groundwork and basis for developing the business model. This leads to the second step, which is a compatibility assessment of the business model with other business models already in the ecosystem. This compatibility assessment is used, in the third step, to make any changes or expand on the current business model, with the ultimate goal of, in the fourth step, establishing a unique position within the current ecosystem. The final step in this reflexivity process is the development of a shared value proposition for all stakeholders.

Figure 7: Interaction between business model, environment and the ecosystem



Recent studies indicate a strong linkage between business model innovation and the ecosystem a company is operating in. The findings show that the value creation due to innovative business models is enhanced by leveraging the ecosystem resources. In turn, a strong business model helps other companies in overcoming barriers through showcasing and adopting good practices and lessons learned. Refining business models enables higher levels of value creation and capture in the sector by better utilizing the ecosystem resources and opportunities.¹¹

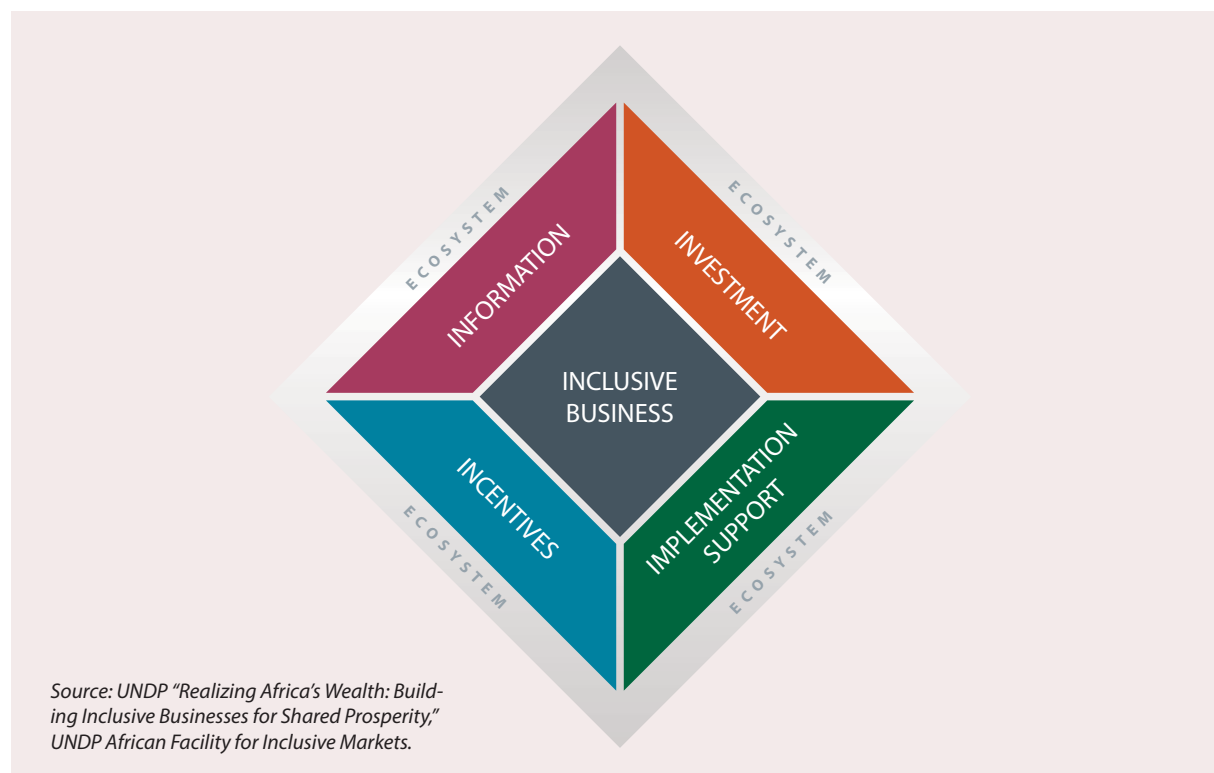
Need for an ecosystem approach

Inclusive business models face far greater challenges in their operations due to the difficult nature of their work. To foster inclusive businesses, a supportive environment is needed to attain the desired business outcomes and to deliver impact to a broader base. Towards this end, an ecosystem approach is paramount.

UNDP uses such an ecosystem-level approach, the inclusive business ecosystem diamond, to highlight the supportive environment needed for inclusive businesses to attain success. While the business model itself is key for success in inclusive business; innovation and entrepreneurship by different stakeholders, from civil society to multilateral organizations, are needed to “enable” and “support” the business in the ecosystem.¹² Only with the joint assets of the ecosystem could the businesses access the underserved.

An ecosystem approach is needed to understand the needs of individual businesses including inclusive businesses. Even in the skills sector, this helps to identify the environment required for success. The following section looks at the skills business ecosystem in India and its various actors and aspects.

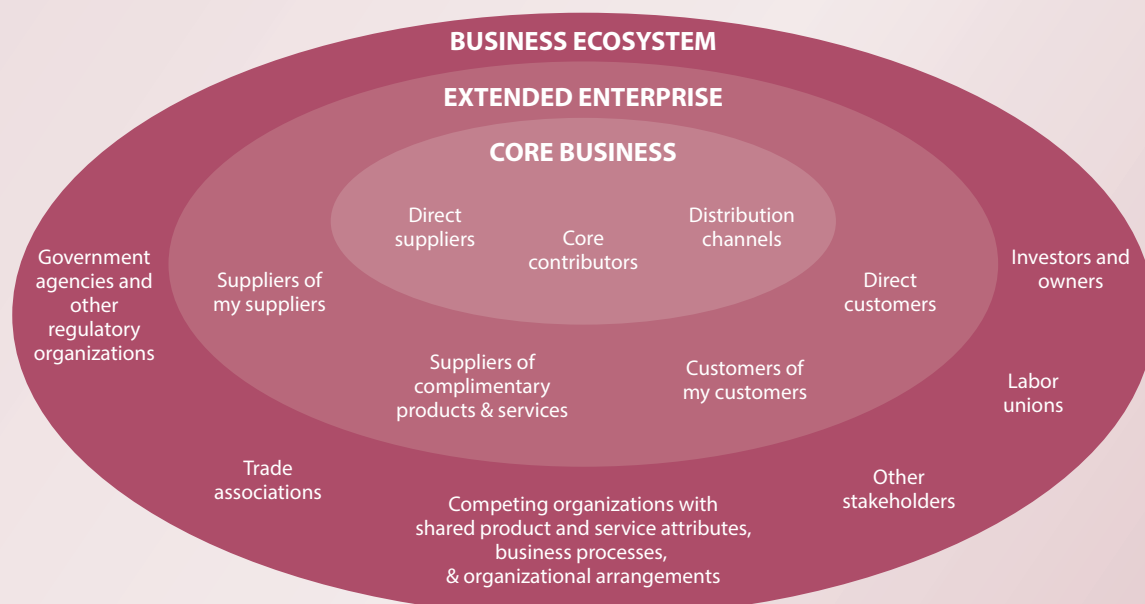
Figure 8: Inclusive business ecosystem diamond



Business ecosystems: how do they work?

The analogy of business compared with biological ecosystems helps to explain how business networks operate in terms of structure, interactions between different participants, relationships of dependence and cooperation as well as divergent roles of the members.¹³ In this complex web of interactions, the skilling models of the private sector should be analysed as part of a wider “business ecosystem”. In this ecosystem, innovation emerges from the cooperative and competitive relations¹⁴ between skills providers and other key actors. The relationship and interdependencies between ecosystem actors are key to unravelling technological innovations and partnerships that open up the “delivery routes” to the lower-income population groups.¹⁵ In other words, the ecosystem perspective enables higher productivity (owing to delivering more with less resources), improved efficiency and innovation. It enables **integration** of previously underserved consumer groups to the market through enhanced cooperation and coordination among ecosystem members, government and industry.

Figure 9: Business model innovation in ecosystems¹⁶



Skills business ecosystem in India

Government and private sector partners in India have intensified their collaboration to create a conducive environment for business, which would lead to inclusive growth to benefit the poor and underserved. The government provides direction to the private sector, which thus operates according to a broader vision in skills development.

To govern the skills business ecosystem in the country, India created many different policy measures, notably the skill development and entrepreneurship policy and NSDC. These policies were **ecosystem-level interventions** as the Government needed to fundamentally change the skilling industry to meet the enormous challenge it had set itself of skilling millions. As described in Chapter 1, these ecosystem-level interventions address many challenges, including the absence of capacity on the side of the private sector to develop viable and profitable businesses in skills delivery, as the existing models are neither profitable nor scalable – a situation compounded by the lack of financing to test and develop new models. Another challenge is the need for better connections between the world of education and work, including for communication to address a persistent perception: vocational skills and jobs are not seen as aspirational,



Source: NSDC

especially by youth.¹⁷ Considering these challenges and the interventions required, a three-tiered structure was initiated in 2009: (a) Prime Minister's National Skill Development Agency, (b) National Skill Development Coordination Board (NSDCB) and (c) NSDC. The aim was to create a unified ecosystem approach to skilling youth in India.¹⁸ It should be noted that NSDCB, along with the Prime Minister's National Council on Skill Development (PMNCSD) and the Office of the Adviser to Prime Minister on Skill Development, was subsumed under NSDA in 2013. Accordingly, NSDA was tasked with coordinating and synergizing the skill development endeavours of the government and the private sector. The goal was to achieve skill development targets and to ensure that skilling initiatives target the skill needs of various disadvantaged groups, such as SCs, STs, women and minorities, as well as taking "affirmative action" as a component of advocacy efforts. NSDA was also responsible for "anchoring" and implementing the NSQF and establishing an LMIS.¹⁹

To improve and expand access to skills training, the Government launched several skills development programmes. For example, the above-mentioned NSQF was devised to link employability education in secondary schools and to ensure that the skills development outcomes match the sector needs. The structure was later strengthened with the formation of the Ministry of Skill Development and Entrepreneurship in 2014 and the National Policy for Skill Development and Entrepreneurship (2015).

These ecosystem-level interventions are guided by a variety of factors. NSDC and the National Skill Development Agency have identified **five key aspects that the business ecosystem must have:**

- ◆ **Cradle to career approach** – Skills development should be seen as a continuous process to overcome the barrier of the knowledge and skills of a person becoming obsolete. This should be accompanied with a lifelong learning perspective, offering various livelihood opportunities to individuals while responding to the human resource needs of the industry.
- ◆ **Digitized marketplace** – Digital technologies enable efforts to achieve the large-scale training targets of India, tailored to also meet the skills needs of hard-to-reach segments of the population. Technology should be leveraged to bring together youth seeking job opportunities, training providers (institutions) and prospective employers.²⁰
- ◆ **Standardization and quality** – Standardization and quality in the market will help align the expectations of the Indian industry with the outputs of training programmes. National occupational standards and the set of standards associated with a job role (qualification packs) should be in sync with global standards, enabling youth to tap job opportunities not only at the local and national levels but also at the global level.
- ◆ **Vocational education by choice** – A frequently mentioned challenge for skills development is the low level of attractiveness of vocational skilling programmes and jobs in India. As keeping demand for skills is crucial for the existence of the ecosystem, vocational education and training should be by choice. It should become an aspirational, desired career path for the youth, while the importance of vocational skills should be acknowledged and industry should accept wages linked to skills and competencies.

Figure 10: Indian skills business ecosystem



- ◆ **Talent capital of the world** – In order for India to achieve its goal of becoming the “talent capital of the world”, it will need to lower the costs of acquiring new talent and reaching scale.²¹ A vibrant skills ecosystem will lower the costs and increase the scale of skills delivery. This is essential if the country is to harness its demographic dividend, utilizing its vast working-age population in a productive manner.

The skills business ecosystem is thus intended to create the conducive environment for private skill provider businesses to scale and flourish through the inclusion of the low-income groups. Effective and impactful skills development will depend on the engagement and success of the key stakeholders. In India, the business ecosystem approach also brings an inclusive and holistic workforce development notion to the training system, along with other improvements.

The National Skill Development Corporation has emphasized private sector participation by bringing together public and private stakeholders under one agency for market coordination. While the main task of NSDC is to catalyse private sector action in skills training, the organization has called for more uniform industry-relevant courses, provision of outcome-based training linked to jobs and employability, and encouragement of public private partnerships.²²

Business models draw on the resources of the ecosystem and can alter their trainings accordingly. This also benefits the ecosystem. Where there is a good level of interaction between the business model and the ecosystem, the company can operate efficiently. Key stakeholders in the ecosystem are responsible to actors in the market and they also learn from business models. Another benefit of functioning in an ecosystem is that there are more resources to draw from. The Government of India has provided much of the funding to drive ecosystem development.

History of the skills business ecosystem in India

Each business ecosystem passes through the stages of birth, expansion, leadership and self-renewal (table 2).²³ Analysing the emergence and growth of India's skills business ecosystem provides insights on how to engage the private sector at different phases.

Table 2: Stages of a business ecosystem

Birth	Entrepreneurs act upon the consumer's needs, developing and implementing their value proposition accordingly. Cooperation especially generates value as companies try to tailor and refine their value offers. This value needs to be centred on a "seed innovation". Also in this stage, a leader needs to come out to launch a fast enhancement process towards a better future.
Expansion	This stage covers extending the value proposition to a broader market through cooperating with suppliers and partners towards scaling and improved access to consumers. The companies try to assure that their approach sets the market standards. Meanwhile, the ecosystem spreads over novel territories, as long as the target market has buy-in for the business concept and the concept has potential for scale.
Leadership	At this stage, the ecosystem mobilizes consumers and suppliers to collaboratively help enhance the value proposition and address the above challenges for scale. Ecosystem participants grow by conducting certain activities in the value chain by themselves, while the role of the ecosystem leader becomes less significant.
Self-renewal	Innovation is key to achieve the desired self-renewal through novel ideas and perspectives. During self-renewal, the ecosystem may have to adapt to changes in regulations, the trends in the target market or broader economic conditions.

Birth

In India, the "birth" took place in 2009 with the National Policy on Skill Development, a policy that re-conceptualized the skilling space to overcome the low-level of readiness of vocational and higher education graduates for the labour market.²⁴ Establishment of the National Skill Development Fund and National Skill Development Corporation acted as the "core policy innovation" for skilling led by the private sector, creating both financial and technical resources for businesses to act. The Fund was established as a type of private equity venture capital managed by NSDC to provide funding for scalable, for-profit vocational institutions.

Formulation of NSDC as a private sector-led body supported the notion of a shared fate among the ecosystems' private sector stakeholders. (The notion of a shared fate remains one of the core concepts of ecosystem thinking because it increases the responsiveness of the actors to each other and vigilance for internal and external shocks.) Support to skills businesses (business that impart skills training)



Source: NSDC

was provided at their early stages, which was crucial because they had access to only a limited amount of risk financing that could be tapped to build capacity for operations and to reach the lower-income market segments.²⁵ In this context, the value proposition was to offer requisite qualifications for people, which would lead them to employment with sustainable, profit-generating models.

In the birth stage, the competitive challenge for private skills providers was to develop and position their skills development frameworks vis-à-vis the country's high growth sectors. Experimentation in the early phases of a business model was critical for business model innovation,²⁶ thus the ease of access to capital provided by NSDC, which allowed for flexibility and some degree of trial and error, and facilitated the consolidation of the skills development business models in India. Out of this birth phase have emerged divergent business model designs such as learner-paid models, initiatives based on corporate social responsibility or government funding, and models with innovative content delivery technologies.

Expansion

The "expansion" stage in India was marked with an increasing number of skills providers, especially in the service sector, which had been largely neglected. For instance, in the first stage of PMKVY in 2015-16 period, there were 13,019 training centres in total.²⁷ Positions and strategies among key stakeholders in the ecosystem gradually became clearer during the expansion stage. Both large scale-players and niche businesses, explained in detail below, emerged in this stage and benefitted from the conducive environment.

For achieving scale in the expansion phase, the skilling business models faced the traditional challenges that companies encounter in trying to create lower-income market segments. The process of attaining financial sustainability was delayed by several factors, including (a) reluctance of households to pay, in this case for skilling programmes; (b) lack of trust that the service offered significant value, meaning that the acquired skills would create significant added-value; and (c) the need for behavioural change on the side of customers, which would then translate into realizing and acting on the need for receiving skills training.²⁸ In addition, generating demand, especially for the disadvantaged segments of the population, had a high fixed cost while the return on investment was low.²⁹ Most private training providers would have faced significant difficulty if the financial channels provided by NSDC had not been available.

Leadership

The "leadership" stage³⁰ for the Indian skills business ecosystem will be achieved when the private training providers achieve the capacity to train the targeted number of people and make profits on a regular basis. Reaching this stage requires active engagement of both private sector and government. Particularly, one essential task for NSDC will be to ensure that the private sector commits to training; this is essential for the health of the ecosystem. Achieving profitability, given the complexity of the skills space and mutual dependencies, requires collaboration among government, skills providers and the private sector. At this stage, the role of NSDC will evolve from capacity development to maintaining the health of the ecosystem through targeting the productivity, robustness and diversity in the ecosystem.

Self-renewal

India's "self-renewal" stage lies ahead.³¹ In the long run, success will depend on the results from the current skills movement. One of the key challenges of having a multitude of private skills training institutions will be the standardization of curriculum and content, which is outlined in the new National Policy for Skill Development and Entrepreneurship (2015): "One Nation One Standard". Success depends on effective mainstreaming, including use of national occupational standards and qualification packs, the set of standards associated with a job role. The private sector-led skills development ecosystem also needs to overcome the misperception that certain occupations can be undertaken without training, and the negative image and status associated with vocational jobs. Another issue is financing, and whether the private training providers will be able to sustain their businesses in the medium-to-long run, which may be influenced by the adoption, or not, of a learner-paid system.

Overall, for successful self-renewal, the ecosystem needs to sustain itself with both the lessons learned it has generated and new innovations. One recommendation of this study is the implementation of a holistic

approach for skills design and delivery for scalability and sustainability in the long term. A cradle-to-career approach should be embraced and effectuated in the strategies and interventions of the ecosystem as well as in the individual business models of the private sector trainers. This will require opening up a sustainable career and decent work path for trainees through skills delivery, which stands in contrast to stand-alone, one-time trainings. With sustainable career and work paths, additional business opportunities for training providers in upskilling will open up through turning trainees to returning customers or regular clients of career development services.

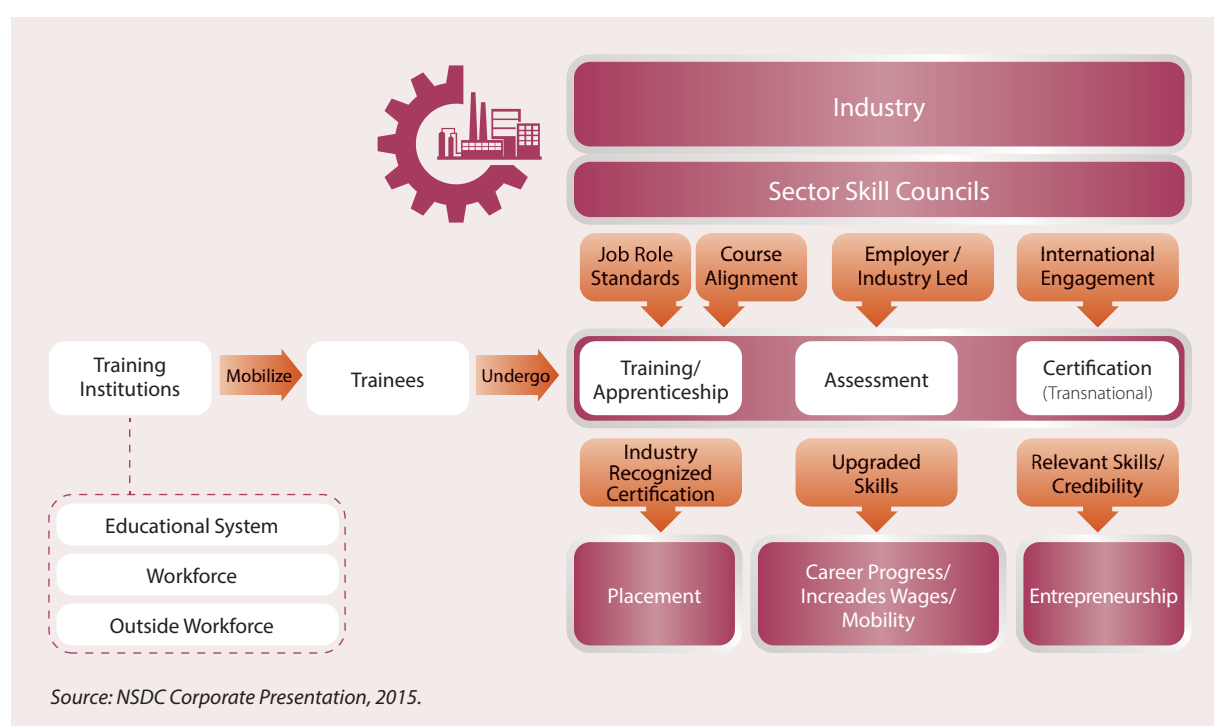
Industry value chain

An industry value chain covers skills development in a particular sector, as well as skills as a business and sector by itself. Industry engagement is ensured through different bodies, and these can also coordinate international engagement so that trainings are recognized internationally. The industry therefore interacts with the skills development process in a variety of ways.

Sector Skill Councils play an important role in the industry value chain in India. SSCs are autonomous and private sector-led institutions that oversee skills design and delivery in their respective sector. Through the Sector Skill Councils, National Occupational Standards and standards associated with job roles (Qualification Packs) are developed as the necessary benchmark for the training providers. SSCs are also involved in the training of trainers, which ensures that the most up-to-date practices and know-how in the industry are internalized by the trainers.

Furthermore, the inputs and know-how of the industry help align the curriculum with workplace practices. SSCs and other sectoral bodies are active in content development, curriculum accreditation and alignment of the courses with industrial needs and operations. In order to standardize the training programmes and maintain quality levels, SSCs engage in assessment and certification. In turn, successful graduates can be placed in jobs more rapidly and efficiently as the certificates they possess is acknowledged by the employers. International engagement, which SSCs or other sectoral organizations may coordinate, can also ensure the validity of the certificates across different nations.

Figure 11: Industry value chain



Skills needs assessment and skills gap analysis can be conducted at the industry-level. The industry is in the best position to determine its current and future human resource needs, and this information can be factored into the design of training programmes in a need-driven way. This kind of engagement is critical for the industry value chain to operate and to ensure that trainees are placed after their training.

When courses are intended for upskilling, the private sector's involvement facilitates career advancement and paves the way for better wages and career mobility. At the same time, the trainees can utilize the skills they acquired for entrepreneurship purposes and start their own ventures.³²

¹ *Iansiti and Levien 2004, pp.8-9.*

² *Prahalad Hammond 2002.*

³ *McKinsey Global Institute n.d.*

⁴ *Kubzansky 2013.*

⁵ *Osterwalder and Pigneur 2009.*

⁶ *Ibid.*

⁷ *Kubzansky 2013.*

⁸ *Ibid.*

⁹ *UNDP 2010. Business Solutions to Poverty.*

¹⁰ *Dunbar 2013, p. 4.*

¹¹ *Weiller, Shang and Shi 2015.*

¹² *UNDP 2013 Realizing Africa's Wealth.*

¹³ *Iansiti and Levien 2004, pp. 8-9.*

¹⁴ *Moore 1993, p. 75-83.*

¹⁵ *Li and Garnsey 2012.*

¹⁶ *Weiller 2015.*

¹⁷ *NSDC Case Writeshop 24 February 2015.*

¹⁸ *Ramadorai. Accessed 13 April 2016.*

¹⁹ *Gazette of India 7 June 2013.*

²⁰ *Ramadorai 2014.*

²¹ *Ibid.*

²² *Chenoy 2013.*

²³ *Moore 1993, pp. 75-83.*

²⁴ *ILO and OECD 2011 Skills Development Impact Evaluation.*

²⁵ *Kubzansky 2013.*

²⁶ *Chesbrough 2010, pp. 354-363.*

²⁷ *Data provided by MSDE, Government of India April 2017*

²⁸ *Kubzansky 2013.*

²⁹ *Ibid.*

³⁰ *Moore 1993, pp. 75-83.*

³¹ *Ibid.*

³² *NSDC Corporate Presentation 2015.*



CHAPTER 3

SKILLS BUSINESS ECOSYSTEM AND CORE BUSINESS PLAYERS

In the skills development ecosystem, there are three types of core business players: keystones, large-scale players and niche players. This section looks at each one and identifies their functions as well as the challenges they face in their assumed roles. The ecosystem level of analysis represents the broadest level and is further complemented by more in-depth levels of analysis.

Role of NSDC as keystone or ecosystem leader

Achieving a healthy ecosystem requires certain “keystones” to play their roles.¹ The keystone players are the centre of all ecosystem activity and serve to coordinate and carry out multiple functions within the multitude of relationships in the system. In India, the keystone is NSDC. NSDC stands at the crucial centre of all skills business activities and also serves as the focal point between the private sector and government functions. Within the complex interactions of the Indian skills ecosystem, NSDC leads the agenda of the private sector.

What is a keystone player in an ecosystem?

A keystone acts as a hub for the complex web of relationships in the ecosystem and supports overall survival by contributing to the ecosystem as a totality, which is particularly important in a changing environment. Individual members of the ecosystem may come and go without dramatic effects but elimination or absence of the keystone damages diversity and productivity, leading to the “collapse” of the ecosystem as a single unit. This is due to the central role of the keystone, which is to manage relationships and interconnectedness between members.² The keystone prioritizes sharing the value across all members.³

Strategies

A keystone aims to enhance the “overall health of the ecosystem” as well as the performance of individual businesses. The keystone (a) manages the ecosystem resources, (b) shapes the “structure” of the ecosystem network and (c) maintains and harnesses the health of the ecosystem.⁴

NSDC coordinates the internalization of the broader policies and strategies of the government on the private sector side, translates them into business modalities and approaches, and mainstreams them in the market. The flow is actually two-way: while NSDC helps operationalize the skills policies in the business context, it also collects and conveys the information and feedback from implementation level to policy level. It works towards elevating the “productivity” and “robustness” of the ecosystem, while supporting “diversity” through the formation of new niche businesses.

First and foremost the organization offers financing to skills providers to manage and scale up their business models. This ensures stability for the businesses as the negative financial impact of start-up costs are alleviated and the survival chances are much higher. Fixed start-up costs are a significant barrier to expansion both for “proven” and “unproven” models,⁵ so NSDC offers ecosystem-level funding to help overcome the initial financial constraints that arise with investments for infrastructure.

Business models often face “noncapital costs” that hamper commercially and financially sustainable operations,⁶ which NSDC helps to reduce or shares the burden. Such efforts help reduce the fixed costs of doing business with the poor. For example, NSDC support may alleviate the need for individual businesses to invest in demand activation, such as overcoming reluctance of target consumers to participate to skills training.⁷ One of the reasons for weak demand for vocational training is the low reputation and lack of attractiveness of vocational jobs and skills, due to historic failures. Private skills providers run advocacy campaigns to overcome this and to increase the demand to their services. However, properly addressing this issue is beyond their limits and capabilities.

Although their businesses may be profitable and efficient in targeting other segments of the market, the systemic problems for skilling the disadvantaged groups create additional costs that weaken the business models and reduce their profitability. In this context, NSDC interventions, such as advocacy campaigns, help reduce the effect of systemic negative externalities on the individual business models, enhance direct business outcomes and improve the health of the ecosystem.

To improve overall profitability of business models, a number of steps could be taken, such as attempting to tackle systemic challenges in skilling and defraying costs of advocacy, training of trainers, and infrastructure and content development through market-based interventions. This would happen without injecting money into the individual enterprises. As NSDC alleviates some of the financial costs associated with skills development, the skills providers benefit from an increased “factor productivity”:⁸ Instead of dealing with ecosystem-level challenges such as limited availability of skilled trainers or lack of interest in skilling programmes, the skills providers can concentrate their resources on developing quality training content and innovative delivery methodologies. In the longer run, benefits from the saved resources accumulate, which providers can tap to innovate further.

NSDC requires a 10-year skilling plan from each of the funded skills provider, which introduces a good degree of predictability and structure to the system. Even small changes in the regulations, such as the change of logos, might incur additional costs for skills providers. NSDC’s engagement, both financially and as a coordinating body, helps the providers to anticipate and embrace changes and shifts in the market.

NSDC also fosters niche creation through supporting skills providers that prioritize impact, including those that target women, youth, rural populations or the disabled. Through the enabling ecosystem, niche providers are able to customize their business models for their intended market.

NSDC’s interventions as a keystone leverage the health of the ecosystem in a number of ways, as summarized in table 3.

Table 3: Interventions and activities by NSDC as keystone

Keystone interventions ⁹	NSDC activities
<p>Build or acquire financial assets for operating leverage</p>	<ul style="list-style-type: none"> • Provide financing to all for-profit and not-for-profit skilling organizations that meet the required criteria – meaning that all business ecosystem members could benefit from this offer. • Provide innovation funds, which help impactful ventures to achieve scale. • Offer grant-funding based on social criteria. This reflects that the skilling initiative generates positive impact on disadvantaged groups such as youth, women and persons with disabilities. • Implementing body of trainee funding schemes such as STAR, PMKVY and Udaan.

Keystone interventions ⁹	NSDC activities
Create high-value, sharable assets	<ul style="list-style-type: none"> • Advocacy on making skills more aspirational for youth and the other disadvantaged groups, aiming to expand the “customer hub” for skills. • Conduct skills needs assessments and forecasts to offer a roadmap on bridging skills supply and demand. • Support the incubation of certain SSCs (This helps NSDC to bring different industries closer to the skills business ecosystem as these bodies engage in activities such as occupational standard development and training of trainers). • Support training of trainers to increase the availability of skilled instructors that the businesses in the ecosystem can employ.
Leverage direct customer connections	<ul style="list-style-type: none"> • Advocacy on making skills more aspirational for youth and the other disadvantaged groups, aiming to expand the “customer hub” for skills.
Create and manage physical and information hubs	<ul style="list-style-type: none"> • Conduct skills gap studies for large-scale businesses and niche providers alike, highlighting the most recent status of labour supply and demand and present a trajectory of where the skill needs and viable business opportunities in skilling are to be found.
Support uniform information standards	<ul style="list-style-type: none"> • Facilitate the development of National Occupational Standards and Qualification Packs equally benefiting the players, since the standards and expectations of the industry are matched with the value offering of skills providers.
Create, package, and share state-of-the-art tools and building blocks for innovation	<ul style="list-style-type: none"> • Keep track of strategies of large businesses (explained below) for identifying areas that require resource allocation, such as training of trainers and utilization of idle times of school/training centre infrastructure for trainings.
Establish and maintain performance standards	<ul style="list-style-type: none"> • Establish criteria and guidelines for funding that require business models in the skilling ecosystem to strive for innovation and efficiency. Skills providers need to achieve certain targets (e.g. 70 percent placement and training 50,000 people, while attaining break-even status and then profitability).
Reduce uncertainty by centralizing and coordinating communication	<ul style="list-style-type: none"> • Facilitate knowledge and information flows between key stakeholders of the ecosystem. For example, Skill Development Management System, an online portal used by NSDC to convene skills providers, trained people, employers, SSCs and other players served this purpose.

Large-scale skilling businesses

After keystone players, an important function played within an ecosystem is that of the large-scale business players. Large-scale players are defined by their strategies, which primarily include scaling up of their businesses. Their objectives lie in dominating the business market and they interact with the ecosystem accordingly. This section therefore looks at the larger business players within the Indian skills ecosystem and their challenges and strategies. According to UNDP, engaging the lower-level segments of the income pyramid offers an increase in returns and prospects for longer-term growth to the private sector while improving livelihood opportunities for different segments of the society.¹⁰ Several large-scale players in India's skills business ecosystem have consolidated their business models to deliver market-relevant skills to the masses and leverage their employability (Table 4).

Cost minimization (or what Porter has called cost leadership¹¹) and growth are cross-cutting features of the strategies of large-scale players. They standardize their training offers, including the training content and training of trainer programmes, across geographies and customer segments for achieving economies of scale. Technology and innovation are frequently tapped for this purpose. They also establish close ties with employers to secure placement for their trainees. As scale has the potential of increasing capital expenditures, they prefer to rely on just-in-time delivery systems in organizing courses.

The large players in India have expanded across the skilling value chain and increased their span of control vertically by undertaking different stages of skills development – from sourcing to placement. At the same time, in order to achieve scale, large private providers have targeted a wide range of social groups for training, from youth and women to rural populations.

Table 4: Challenges and solutions for large players

Challenges	Strategies
<ul style="list-style-type: none"> • Low profit margins • Capacity/absence of training infrastructure • Lack of skilled trainers 	<ul style="list-style-type: none"> • Low operational expenditures through business model optimization, innovation and technology • Tailored modalities for managing training centres (renting facilities, franchise models, standardized centres and hub-and-spoke model) • Training of trainers

Key to success: efficient operations

Large players traditionally aimed to minimize their operational expenditures. Profit margins were low, as trainees had very limited capacity to pay as direct consumers and most of the trainings happened under government or CSR projects. However, improved ecosystem conditions encouraged large providers to come up with innovative practices to lower their costs and increase their customer/trainee base. Centum Work Skills, for example, prioritized operational expenditures (opex) over capital expenditures (capex) by utilizing India's existing training infrastructure through partnerships, delivering just-in-time services and aiming for maximum use of available capacity.

Modalities for managing training centres have addressed challenges in physical infrastructure. NIIT Yuva Jyoti, for example, utilized franchisees to run its operations on a wide-scale without raising the fixed-costs, while IndiaCan pursued standardization of the training centres to achieve economies of scale. Technology and multimedia tools were leveraged by the large-size business in skilling as well. IL&FS Skills, for example, utilized multimedia content to reach a high number of trainees dispersed around the country, without the need for building a full-fledged centre each time to deliver a training.



Source: IL&FS

Niche players aim for impact

Alongside the keystone leader and the large-scale players is a third type: niche players. These business players focus on specialization and differentiating themselves in the market. Their ultimate goal is to tap unexplored market segments and market functions. In the context of India's skills business ecosystem, the niche player business models implement a customized version of the value chain model mainstreamed in the industry. Depending on their target segment, they modify the necessary stages of the chain to tailor their value offer. This approach resonates with Porter's focused differentiation strategy,¹² wherein the needs and wants of a particular market segment such as differently-abled people, women, disadvantaged youth or informal workers are taken as a baseline to customize the product or service offer. Compared to the cost-minimization strategy of large players focusing on scale, niche players prioritize reaching target groups, delivering customized service and making an impact.

Often, niche players target the missing gaps in the market that the large players could not necessarily fill, making the most of their small size and/or specialized know-how and expertise. Some of these models will be mainstreamed and scaled up to the level of large players, while others will prioritize impact and continue to serve to the edges of the ecosystem.

Niches in the ecosystem

A key dimension of ecosystem health is "niche creation", as the ecosystem needs to increase diversity gradually by creating novel and meaningful niches. More specifically, the ecosystem has to grow with the new companies and also introduce novel products and services, new technologies and processes.¹³ Niche players focus on specialization in order to have specific capacities to occupy a certain part of the ecosystem through differentiation. Niche players position themselves at the "fringes" of an ecosystem, where sources of innovation, novel practices and modalities are tested and new markets are opened up.¹⁴ For generating value, niche players specialize in capacities that differentiate them from other players, utilize opportunities offered by the keystones and sustain innovation through their operations.¹⁵

Table 5: Challenges and solutions for niche businesses engaging disadvantaged groups

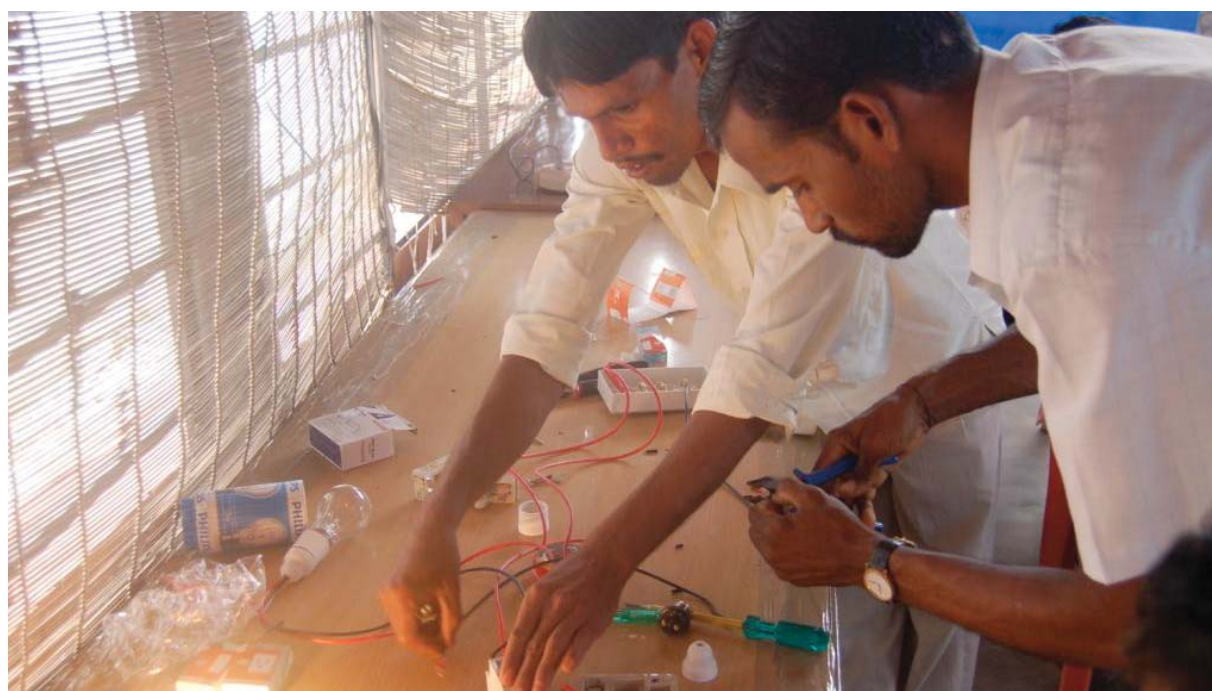
Challenges	Strategies
Lack of customized training inputs for target groups	Specialization in the sector-target segment in the skilling value chain
Low level of employability and soft skills associated with disadvantaged backgrounds	Training modules on industry-driven technical skills and life skills such as communications, English, basic information technology, grooming, etc.
Informal skills acquisition and uncertain skill levels	Recognition of prior learning

Specialization

A differentiating feature of the niches is specialization; that is, focusing all operations on one or few market segments in the skilling space. This takes the form of trainee groups, such as Youth4Jobs training young persons with disabilities, DRF aiming to provide skills to economically disadvantaged youth such as school drop-outs, or LabourNet targeting the informal sector workers. LabourNet also worked on inclusion of workers in publicly-supported social protection frameworks, which helped to empower workers in their career path and to improve their living conditions. It is also possible to specialize on the skills needs of a particular industry or sub-sector, e.g. AISECT provides ICT skills to a wide-range of social groups to meet the need for skilled human resources in computer technologies.

Emphasis on life skills

Niche players need to ensure that trainees have the necessary life skills to succeed in their careers, a challenge shared by large players. GMR Varalakshmi Foundation assesses the life skills of its trainees before, during and after trainings, using parameters such as time management, communication skills and leadership, to ensure



Source: Labournet

their readiness for the job. Life skills and workforce readiness modules are an integral part of DRF's work as well, as each programme started with a nine-day orientation on topics such as financial management, self-awareness, CV or résumé preparation and work ethics.

Recognition of prior learning

Niche players are targeting the underserved populations, whose skills are often acquired through informal means. Recognition of prior learning is then needed to assess and certify the skills and competencies of these groups, in order for niche businesses to deliver targeted services. To facilitate the transition to work, as an example, LabourNet worked on recognition of prior learning through administering assessment tests. This was key as the workers often possessed relevant skills for the market from their experience in the informal sector, which needed to be acknowledged.

¹ *Iansiti and Levien 2004 Strategy as Ecology.*

² *Ibid.* pp. 68-69.

³ *Ibid.* p. 75.

⁴ *Iansiti and Levien 2004 The Keystone Advantage.*

⁵ *Kubzansky 2013.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ *Iansiti and Levien 2004 The Keystone Advantage.*

⁹ *Iansiti and Levien 2004 Strategy as Ecology.*

¹⁰ *UNDP 2008.*

¹¹ *Porter 1980.*

¹² *Ibid.*

¹³ *Iansiti and Levien 2004 Strategy as Ecology*, pp. 54-55.

¹⁴ *Ibid.*, p. 125.

¹⁵ *Ibid.*, pp. 133-135.



CHAPTER 4

BUSINESS MODELS IN THE INDIA SKILLS ECOSYSTEM AND THE VALUE-CHAIN APPROACH

The study analysed in detail the **business models** within the skills development arena, focusing on the strategies and operations they use to capture value and earn profits. Chapter 4 also goes into the last level of the ecosystem approach, the **internal value chain**, which focuses on the processes or stages that an individual trainee could go through in skilling.

Becoming inclusive in the skills business

Inclusive businesses models are an effective instrument by which to deliver skills and to enhance the employability of low-income groups. They are specifically designed to integrate disadvantaged groups to the market and “go the last mile” to reach groups that are hard to reach. This way of doing business offers market-based opportunities to excluded and marginalized groups.¹

Traditional skilling models have been customized to become more inclusive. Though originally aimed at the relatively higher segments of the income pyramid, targeting the lower segments of the pyramid has emerged as a viable business opportunity given India’s ambitious skills development mission and a conducive environment for growth of the skills market. Through altering their business models, skills providers have sought to achieve affordable, scalable skills development for low-income groups. They have mobilized their expertise and know-how from the traditional skills design and delivery models, and combined it with the ecosystem resources.

A number of core features can be identified when business model analysis is applied to skills providers considered inclusive. Such analysis asks what type of customers the company is targeting, the kind of need that is met through the offered product or service, the method of sales, the role of the company in the value chain and the way of earning profits.^{2,3}

In terms of **customer segments**, inclusive business models need to deliver skills to different social groups, such as youth, women and informal sector workers. Training fees may come from the trainees or from government, employers and/or corporate CSR budgets, and such entities could also be seen as the customers of the private skills providers. The skilling space hosts a complex web of **customer relationships** and **revenue streams**. Skills providers can undertake government projects, offer learner-paid trainings, implement skills development projects as part of the CSR initiatives of companies or provide employer-funded trainings. The availability of different revenue streams is essential as low-income groups often cannot finance the trainings on their own.

The **value proposition** is that training provides a set of market-relevant skills that enhance employability. This entails a wide range of skills, such as domain skills, soft skills and entry-level skills. The skills are offered through a variety of **channels**, as skills providers utilize blended learning methodologies. Along with classroom teaching, multimedia and online portals are used to foster the learning experience.⁴ The use of different channels also facilitates the reach to low-income groups.

In order to generate value for the customer, the inclusive business models utilize both their own and skills business ecosystem’s resources. Inputs such as long term (patient) capital, occupational standards, and awareness campaigns are provided by the ecosystem; in addition, skills providers also pursue effectiveness and efficiency in developing curriculum, training the trainers and managing their infrastructure. In terms of expenditures, they reduce their fixed costs and instead incur variable costs, as serving different social segments with low profit margins requires optimal use of resources. In this framework, partnerships are

crucial. The resources and know-how of the private sector, government, civil society and other stakeholders need to be combined to ensure inclusive and sustainable operations.

The key activities of the business models will be explained in detail below, highlighting lessons and prominent practices, through the skilling value-chain approach.

Five approaches used for scaling operations

In India's skills development ecosystem, five prominent approaches are used for scaling business operations: hub and spoke, franchise, leveraging, Establish-Operate-Transfer and just-in-time inventory. Availability of low-cost quality infrastructure and speedy procurement procedures are the main components of training delivery that ensures scale of operations.

Hub and spoke model – IL&FS Skills has established hubs where a multitude of trainings are provided and key activities such as reskilling and certifying the trainers take place. The spokes, in comparison, specialize in a specific set of trainings in line with the local demand. Spokes are often located in clusters and utilize the available infrastructure (e.g. schools and public institutions) to provide basic-level or sector-targeted training. Spokes may be operational or not depending on demand.⁵

Franchising – AISECT has developed an innovative way to scale its operations and to overcome the challenge of operating in difficult locations. The organization's core business is made up of franchised "IT education centres" consisting of local entrepreneurs who deliver skills training to students in semi-urban and rural areas. AISECT provides its training modules and training delivery mechanisms while the franchisees themselves invest in infrastructural costs. It encourages its franchisee network to make their centres "multi-purpose" by providing various B2C and G2C products thereby making the centres self-sustainable in a shorter time span. AISECT also supports entrepreneurs in availing existing government or private infrastructure (e.g. schools, panchayats and common service centres) to serve as "carriers" for their training programmes thereby reducing operational expenditures that the centre operators might incur initially.⁶

Leveraging – Many skills providers leverage existing infrastructure facilities like ITIs, polytechnics and engineering institutions in setting up training centres, thereby reducing operational costs.

Establish-Operate-Transfer – Dr. Reddy's Foundation implements an "Establish-Operate-Transfer" model. The organization establishes and manages a training centre in accordance with local demand and job aspirations. Simultaneously, DRF grooms another organization to take over and administer the centre.⁷

Just-in-time inventory system – Another way to reduce operational expenditures is through the just-in-time inventory system. Centum WorkSkills India uses this system to reduce operational costs and to maximize capacity utilization; it is also called "Speedovation". Implementation includes several steps: (a) identifying the centres and mobilizing trainers as soon as projects are announced; (b) having a list of pre-identified vendors, facilitating procurement of infrastructure and equipment in time for centre establishment; (c) developing a system of uniform courseware and avoiding multiplication of services; (d) maximizing use of trainer capacity and hiring trainers on a variable-pay model. The organization does not allocate a budget for establishing new centres from scratch, and uses the existing infrastructure such as colleges and private ITIs.⁸ Overall, just-in-time inventory allows CWSI to benefit from economies of scale and accommodate the low profit margins that accompany government projects.⁹

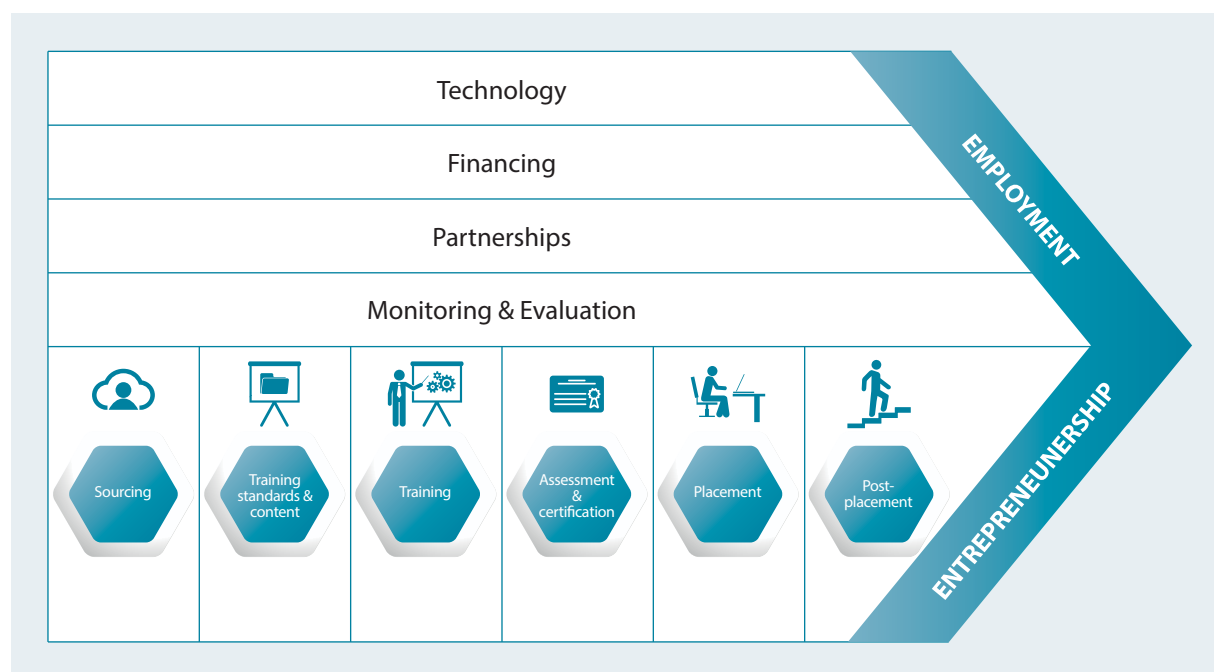
Value-chain approach to skills development

The internal value chain of a private training provider is most simply defined as the activities that a trainee goes through in a skills programme for employment. It reflects how various stakeholders provide input at different stages of skills design and delivery. Following Porter’s value-chain approach,¹⁰ these practices are defined as follows:

- ◆ “Primary activities” for skills businesses include: (1) sourcing, (2) development of training standards and content, (3) demand-oriented training delivery, (4) assessment and certification, (5) placement and (6) post-placement support.
- ◆ “Secondary” or “support activities” include: (7) partnership, (8) financing, (9) technology and (10) monitoring and evaluation.

In this section, the 10 primary activities and secondary/support activities are described in terms of the skills providers featured in the study.

Figure 12: Activities of the skilling value chain: primary and secondary



1. Sourcing is the first stage in the value chain

Sourcing can be defined as “identification, assessment and engagement of skilled worker candidates through proactive recruiting techniques as well as mapping and linking with the available job opportunities.”¹¹ The private sector can help integrate labour market signals as inputs for more demand-driven trainings and its expertise and know-how can enhance skills needs assessment studies and projections. Private skills providers are also tasked with mobilizing trainees for the programmes they offer, which is linked to making skills more aspirational. The process of trainee selection and counselling also benefits from the hands-on experience of businesses. In addition, employment opportunities are taken into account in this stage for delivering relevant trainings. Sourcing consists of sourcing of trainees, sourcing of jobs and pre-training assessments.

Table 6: Elements of sourcing

Sourcing of trainees	Sourcing of jobs	Pre-training assessments
<ul style="list-style-type: none"> • Mapping of socio-economic and livelihood conditions in the target area for trainings¹² • Screening of prospective trainees with respect to their eligibility, willingness and any potential barrier for joining the trainings¹³ • Advanced marketing techniques, such as utilizing mobile phone signals to inform about training courses in a particular region¹⁴ • Mobilizing training participants and building trust through local networks and contacts, dedicated sales agents, alumni • Provisional placement letters¹⁵ 	<ul style="list-style-type: none"> • Mapping of hiring requirements, needs of the private sector, industry growth patterns • Mapping of skill gaps • Value-chain analysis for workforce absorption • Matching with business & establishment of placement linkages according to which people will be trained¹⁶ 	<ul style="list-style-type: none"> • Pre-training assessment and aptitude tests, counselling and guidance • Trainers availability assessment¹⁷ • Recognition of prior learning

Skills providers face multiple challenges in sourcing and mobilizing candidates, as identified in a study by FICCI and KPMG. Factors that make India’s workforce less responsive to skills training programmes include traditional perceptions, lack of recognition of skills-related jobs, low salaries, unwillingness to migrate, inability to pay for training programmes, lack of employers’ endorsement and generally low levels of literacy.¹⁸ As a result, skills providers may have to convince potential trainees to allocate their time and efforts for the trainings and sometimes even move out of their locality. Mobilization activities need to target each of the listed concerns and ensure that the trainings are meaningful – leading to decent work and more sustainable incomes.

Skill gap analysis

An estimated 12 million of India’s population join the workforce every year, which requires careful planning and guidance with respect to matching skills with available jobs.¹⁹ In order to highlight skills needs and develop training in identified rapidly-growing sectors, NSDC has commissioned studies to analyse sector and sub-sector demand for human resources, and forecast these results to its partners. The studies prioritize the

20 high-growth sectors of India that the government has identified for skills development interventions. State and district-wide gap analyses map the skills needs in regional terms. These studies also provide guidance for curriculum development, assessment and certification.²⁰ The NSDC skills gap analysis studies provide a foundation for NSDC partner companies and other skills providers in setting up and scaling operations in different parts of the country both by sector and by region.

Advocacy

Many of the same factors that hinder sourcing are the focus of advocacy and communications efforts. Skills providers contend with low acceptance and lack of awareness of the benefits of vocational training programmes.²¹ In India, vocational education and training is perceived as less prestigious compared to formal education, resulting in low demand for training courses and early dropout from the courses. This trend is even more pronounced among lower income group families, minorities and girls who are often at the bottom of the skilling pyramid. Their populations are characterized by low skills, low productivity and low income levels.²²

NSDC has begun a communications and advocacy campaign (“*Hunar hai to kadam hai*”) that showcases skills training as beneficial for career prospects and essential for India’s growth and prosperity.²³ Different languages are used as part of the campaign strategy in a variety of mediums including television, printed ads and radio. To make skills aspirational, NSDC has initiated programmes like the STAR scheme, which provides monetary incentive rewards to students for successfully completing trainings and getting certified.²⁴ NSDC also coordinates the WorldSkills Competition to inspire Indian youth to participate in a global-level skills tests.²⁵ The *Kaushal Vikas Yatra* developed by AISECT, for instance, stands out as an innovation in mobilization campaigns, recognized by the government as a best practice in skills development programming.²⁶ The *Yatra* is undertaken in schools and colleges using interesting posters with local movie themes to depict the aspirations of youth and attract them to training centres.²⁷

Only through believing that skills are valuable and promising for a career will individuals persist with their training. Advocacy, especially for disadvantaged groups, is thus vital to overcome their hesitation to dedicate time and effort to skilling.



Source: AISECT

Mapping of jobs and trainees

Identification of potential jobs and trainees serves as a catalyst for the design of skilling programmes.²⁸ At the same time, skills training has to respond to the labour demands of the market, taking into account job opportunities, trends and skilling needs.²⁹ Skills providers consider the situation from both angles. For example, IndiaCan conducts a detailed analysis of the local socio-economic context and livelihood trends before initiating a skills programme. The organization maps the existing and future human resource needs of the industry to customize its training offer, taking into account the growth and employment generation patterns, along with the skill requirements of the industry. Its courses are designed to “synchronize” skills supply and demand, with the aim of ensuring that the market has the necessary workforce absorption capacity for the people trained. The organization also assesses the availability of trainers as per the courses needed.³⁰ Another example is CWSI, which maps target communities in terms of factors such as population composition, available jobs and existing training infrastructure; CWSI also assesses job aspirations. The mapping endeavours are an important step towards aligning the skills supply and demand.

Table 7: Sourcing candidates for CSWI training programmes

1	Ground connect	<ul style="list-style-type: none"> • Population and data analysis • Cluster formation³¹ • Visit to District Collector Office, Block Development Office, etc. to determine list of villages/sarpanchs and contact persons • Route plan to go to field • Conduct preliminary meetings
2	Campaign planning	<ul style="list-style-type: none"> • Prescheduled visits and announcements through indigenous mechanisms like mobile loudspeakers, pamphlet distribution, etc. catering to needs of specific areas of work
3	Q & A session, counselling	<ul style="list-style-type: none"> • Mobile van activity • Canopy activity³² • Leaflet distribution • Information exchange
4	Documentation	<ul style="list-style-type: none"> • ID proof collection • Educational qualification proof • BPL and caste certificate • Verification and registration
5	Screening	<ul style="list-style-type: none"> • Determine whether candidates meet required criteria • Are candidates willing to relocate or not? • Are they already employed or not? • Verification and registration • Batch formation for training
6	Placement / settlement	<ul style="list-style-type: none"> • Joining formalities like filling in various forms, providing documents for identity proof, etc. • Travel • Accommodation

Source: Bhatt, S. and Sima Kumari, 2016. *Centum Workskills India: Large Scale Vocational Training for Youth*.



Source: NIIT

Community mobilization

In order to mobilize trainees, it is necessary to create a sufficient level of awareness with respect to the skills training programmes.³³ It is a challenge to source candidates in rural and remote locations of the country, yet this is crucial when skills providers want to grow and scale operations. CWSI follows an innovative below-the-line (BTL) approach to connect with the trainee groups. A positive connection is first made with local governance institutions and opinion makers to reach out to parents and students in the communities. Campaigns are commonly organized using posters, pamphlets and other mediums especially during festival times to mobilize trainees in rural areas.³⁴ Another example is Dr. Reddy's Foundation, which has a "community mobilizers" at each training centre who raises awareness about the courses. The mobilizer utilizes posters and advertisements supplied by DRF to communicate with prominent local figures, teachers, shopkeepers, postmen, self-help groups and social organizations to build trust and to access local youth in their communities. The organization also maintains contact with its alumni, who help recruit new candidates through referral.³⁵

In a similar fashion, NIIT Yuva Jyoti makes contact with local non-governmental organizations (NGOs), opinion leaders and panchayat members to convince the community of the value of skills training. The organization also utilizes geo-data from GSM subscribers to mobilize trainees in a given locality, through which youth are located and contacted via SMS messages encouraging them to participate in training programmes in their region.³⁶ Information on available jobs and income levels could be utilized in marketing the training programmes to further leverage the interest of prospective trainees.³⁷ Engaging with communities is important because it builds trust and ensures that the trainings are accepted and appreciated by the community.

Right training for the right candidate

Candidates for training require counselling to be able to make informed choices regarding which skills programme they would like to pursue.³⁸ This makes skills training more effective. At the same time, it is crucial to match the competencies and capabilities of the trainees with the training requirements. This maximizes the learning outputs and paves the way for a progressive career. Skills providers make an effort to match the

right training with the right candidate. After initial outreach, DRF screens potential candidates in terms of their eligibility to join the courses, interest in the training programmes and whether there are any obstacles to their training. Another example is IL&FS Skills, which conducts pre-training assessments and aptitude tests to assess whether a candidate is suitable for a given occupation, such as colour blindness and finger dexterity tests. Candidates also meet with career advisors to receive counselling and guidance with respect to choosing the right training in line with their goals, ambitions and capabilities.³⁹

Similarly, LabourNet's engagement with the informal sector aims to match the trainees and courses accurately. Acquiring formal skills might not be valuable when such skills are often gathered informally; and giving up hourly wages to pursue skills certification might not be a plausible solution to maintain daily livelihood. To counter both these issues, LabourNet works with the community to recognize and register informal sector workers and provides counselling to help them make informed decision and to register for relevant employment-linked programmes.⁴⁰ Counselling sessions are often held on site so that informal workers do not lose wages while attending.⁴¹ Instruments such as counselling help the trainees to become more aware of their interests and to bridge them with skills development opportunities.⁴²

Placement linkages

Skills providers network with the private sector to ensure that the trainings they offer lead to employment, including consulting prospective employers to factor their needs. This alleviates the risk of trainings being obsolete in terms of human resource requirements in the market. For IL&FS Skills, placement linkages constitute the first step in the training value chain. The company engages a local placement coordinator to understand the market and collect data from industry partners and prospective employers before launching skilling programmes. This enables them to manage capacity and provide skilling in line with industry requirements.⁴³ In addition, IL&FS Skills provides a provisional placement letter to the trainees to show that succeeding in the trainings will lead to employment. This acts as an important source of motivation for the trainees. Also, some skills providers offer standardized programmes that could help trainees to acquire a job anywhere in India, while others localize their training offer and link up with the local businesses.



Source: Labournet

2. Training standards and content

Training standards and content refers to regulations and practices with respect to the design of training programmes in line with the qualification frameworks, covering components such as curriculum development and trainer qualifications.⁴⁴ Sector Skill Councils, companies and chambers of commerce/industry can contribute to the identification of required skills and competencies and development of occupational standards and qualifications. National qualification frameworks help to overcome the skills mismatch challenge and to define the qualifications and assure that the training quality conforms to them. Engagement by the private sector at the design phase can ensure that the skills delivered by trainings conform to expected standards in the industry. At the same time, private sector expertise will create significant added-value for curriculum development and training of trainers. Through the active participation of the industry, curriculum can be further customized to reflect the most up to date industrial practices which is a growing need vis-à-vis today's fast paced technological changes. Likewise, trainers will be equipped with the necessary skills to teach current practices.

Training standards and content refers to the development of the training courses, aligning curriculum with industry needs, offering market-relevant skills and life/soft skills, synchronizing the training offer with the occupational standards.

Table 8: Elements of training standards and content

Demand-driven content development	Market-relevant skills and life/soft skills	Quality trainers	Impact focus
<ul style="list-style-type: none"> Standardization Collaboration with industry experts for curriculum design Course-based partnerships Leveraging multimedia content Content availability in local languages Know-how of parent companies 	<ul style="list-style-type: none"> Applied-practical training embedded in the programme Soft/life skills such as language, IT, personality development, interviewing 	<ul style="list-style-type: none"> Training of trainers Boot camps and train-the-trainer programmes Trainer guild⁴⁵ 	<ul style="list-style-type: none"> Training modules customized for the disadvantaged, e.g. work readiness modules Modules for migration, homesickness, etc.⁴⁶ Training orientation for gender, HIV/AIDS awareness, etc.⁴⁷

Standardization

Standardization of vocational education and training remains a challenge across the current skilling system. Establishment of the National Skills Qualification Framework is a step forward in the effort to centralize and develop an all-encompassing skills curriculum for school education and training. To build more industry perspective into skills training, NSDC supports incubation of the Sector Skill Councils which are primarily responsible for developing occupational standards as per private sector needs, accrediting skills providers, providing training of trainers and undertaking assessment and certification.⁴⁸ The National Occupational Standards and Qualification Packs (a set of standards associated with a job role) are also being industry-aligned. 1,722 qualifications have been developed so far in alignment with the NSQF.⁴⁹



Source: GMRVF

Industry inputs

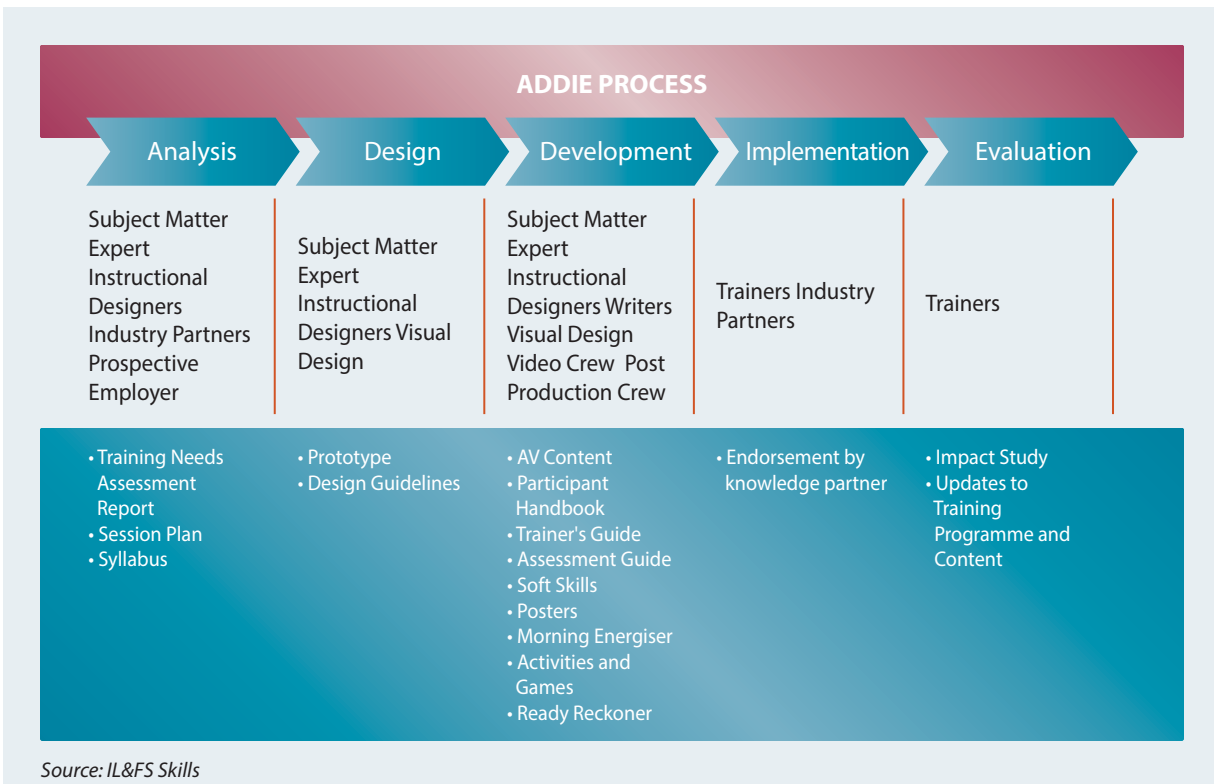
Labour market needs comprise the most essential input for curriculum development.⁵⁰ If the curriculum does not respond to the needs of the market, graduates will face significant challenges in finding employment, succeeding in their occupation or succeeding in entrepreneurial efforts.⁵¹

Organizations such as Dr. Reddy's Foundation have in-house content development teams that leverage their vast industry network to design and upgrade their curriculum based on industry requirements.⁵² The content is validated by the industries and also follows training guidelines and procedures that are required by partner institutions. In another example, most of the courses offered by GMR Varalakshmi Foundation are designed according to the industry requirements at the target location. Private sector partners are involved in curriculum design, training of trainers and provision of guest faculty, providing support for infrastructure and equipment and other activities. The Foundation secures at least one private sector partner for each course to ensure its quality and relevance to the industry.⁵³ Overall, skills providers recognize that close collaboration with the employers secures the most up-to-date information and knowledge.

Multimedia content and accessibility

A pressing problem in the skilling space of India is the difficulty in reaching remote areas of the country, a situation exacerbated by a lack of infrastructure in the rural areas. Multimedia tools offer a partial remedy in cases where training infrastructure is not adequate and skilled trainers are hard to find. Multimedia tools are increasingly employed to standardize training programmes and deliver them even to the remotest locations. For example, IL&FS Skills develops videos that show how experts undertake their work tasks, such as stitching or answering a phone at a call centre, with audio and on-screen explanations.⁵⁴ It uses videos and other multimedia tools to enhance and standardize its trainings and reach a larger number of individuals with enhanced learning opportunities. The organization has translated the content into local and national languages to further increase the scale and overcome the language barriers that hamper learning.

Figure 13: IL&FS Skills ADDIE Process



Source: Centum WorkSkills

Tapping the expertise of a parent company

Certain training providers rely on the accumulated knowledge and expertise of their parent companies in developing training content and curriculum. IndiaCan, for example, draws on the expertise of its parent company, Pearson (an international content design company), in designing and instituting training content and practices.⁵⁵ Similarly, Centum WorkSkills India and NIIT Yuva Jyoti benefit from the vast experience of their parent organizations, Centum Learning and NIIT, in designing content and providing industry-relevant curriculum in skills development initiatives. In the skills market and beyond, this transfer of know-how from parent companies enables the subsidiaries to adopt good practices without incurring the same experimentation costs as their parent companies.

Holistic skills development

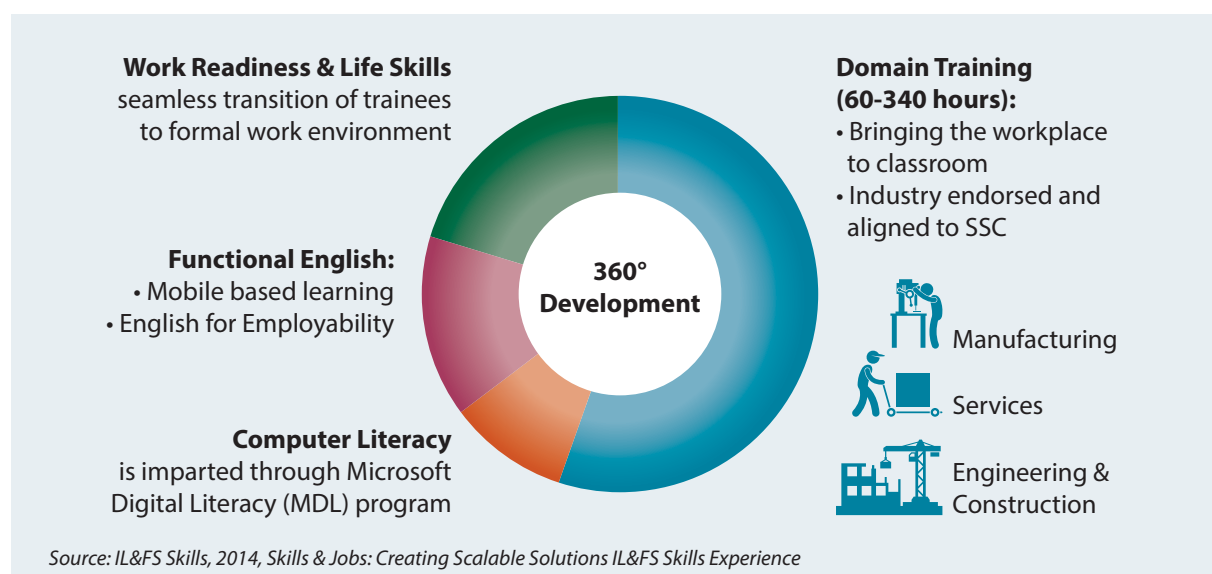
Practical training increasingly accompanies theoretical training. Domain-specific training, which refers to trainings aimed at delivering skills pertaining to a specific occupation or discipline, brings workplace skills into the classroom. The provision of domain-specific knowledge needs to follow topic-related guidelines and standards, and ensure that the trainee is equipped with the skills in demand in the industry. Emphasis on domain-specific training is a priority across the skills providers studied; however, different skills providers place different levels of emphasis on soft skills in their training content. Soft skills relate to interpersonal behaviour and traits⁵⁶ that cut across specific jobs or sectors.

The National Policy for Skill Development and Entrepreneurship (2015) considers soft skills like language, basic IT and financial literacy as an integral part of learning. Other soft skills include grooming and communications. Soft skills increase trainees' chances of success in their jobs. Inclusion of soft skills in training programmes is necessary to increase employability and improve training outcomes.⁵⁷

The life skills programme offered by IL&FS Skills is titled "LIFE – Learning for Improved Functioning and Effectiveness" and includes functional English classes for improved communication and computer literacy to adapt better to the digital workplace.⁵⁸

NIIT Yuva Jyoti integrates basic IT training and spoken English in its skills development programmes. According to NIIT, the infusion of IT and English speaking modules increases the relevance and "acceptability" of skills training programmes, especially in the rural areas who view these as mobility enhancers.⁵⁹ In another example, GMR Varalakshmi Foundation offers a comprehensive personality development programme to provide the needed life skills, including stress management, conflict management, personal efficacy and productivity, customer service delivery, and listening and responding.⁶⁰

Figure 14: How IL&FS Skills visualizes the provision of skills in its training





Source: Centum WorkSkills

Investing in the trainers

Availability of quality trainers is a major concern in the skills development landscape in India. This concern has been documented in national policy: “to achieve the massive target of skilling, it is of utmost importance to have trainers of excellent quality who are capable of training people in several fields”.⁶¹ The government focuses on this challenge directly and through other stakeholders.

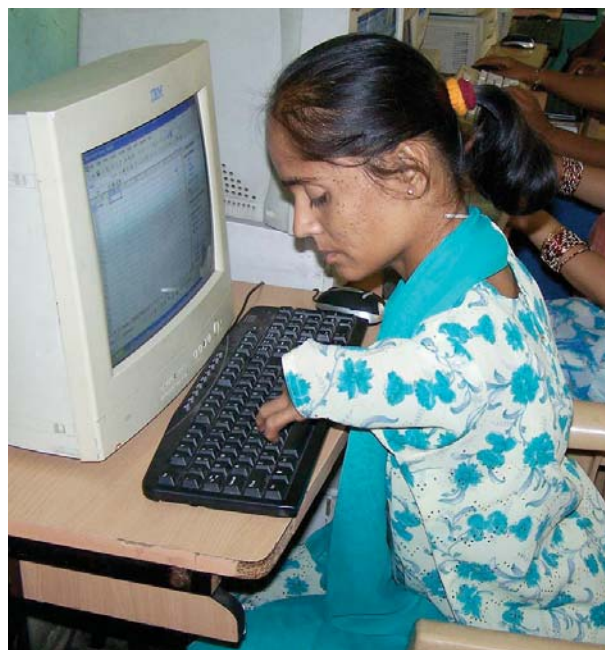
Initiatives to support trainers operate at several levels. NSDC is mandated to support partner organizations in conducting train-the-trainer programmes. Sector Skill Councils also conduct training-the-trainer initiatives. And skills providers such as CWSI and NIIT Yuva conduct train-the-trainer programmes as well as intensive boot camps. The boot camps focus on training locally-sourced trainers, and are conducted by the companies’ master trainers. These master trainers are temporarily contracted employees, but re-hired and re-trained on the basis of performance. This acts as an incentive to perform well, provides facilities to upgrade skill levels, and allows for better livelihood opportunities.

Attrition of trainers is also part of the challenge. While quality trainers are key to the success of skills development programmes, a lack of focus on development of their livelihoods and career often results in attrition of trainers, creating a turnover problem that needs to be addressed. The national policy emphasizes the “need for ensuring availability of quality trainers by enhancing their career progression and development of their capacities in skills training”.⁶²

Private skills providers are investing in building a cadre of skills trainers and making their profession more attractive and lucrative. Centum Learning, for example, has created a forum called the Centum Skill Instructors Guild (CSIG) to recognize and reward trainers and support their role in the skilling value chain. The Guild serves as a platform for Instructors to share, learn and network with one another, develop career paths with an emphasis on lifelong learning as well as acquire competencies for teaching in a multitude of areas.⁶³ Innovations that promote re-skilling of trainers or upgrading their skill sets need to be disseminated across the skills development ecosystem to reach the desired scale.

Prioritizing impact

Customizing the content can boost the social impact of trainings and the social integration of trainees. This happens through identifying the specific skill inadequacies on the side of target groups and adding modules to the skilling programmes to address them. For example, DRF introduced work readiness modules that encompass topics such as understanding oneself, money management, societal perceptions in the communities, etc. These modules are specially designed by DRF to handle the perceptions of the target population (i.e. low income, dropouts, disadvantaged groups) and the skills that they require, which range from overcoming workplace challenges and understanding workplace culture and ethics to achieving a balance between personal and professional life.⁶⁴ In another example, Centum Work Skills includes effective ways of dealing with migration as part of its modules for life skills helping trainees cope with homesickness or difficulty in adapting to local food, which can pose significant barriers to settling the trainee into a new environment. GMR Varalakshmi Foundation offers orientation to its trainees on gender equity issues, avoiding HIV/AIDS and other social problems.⁶⁵ Additional modules in training programmes thus can help address broader social challenges.



Source: DRF

3. Demand-oriented training delivery

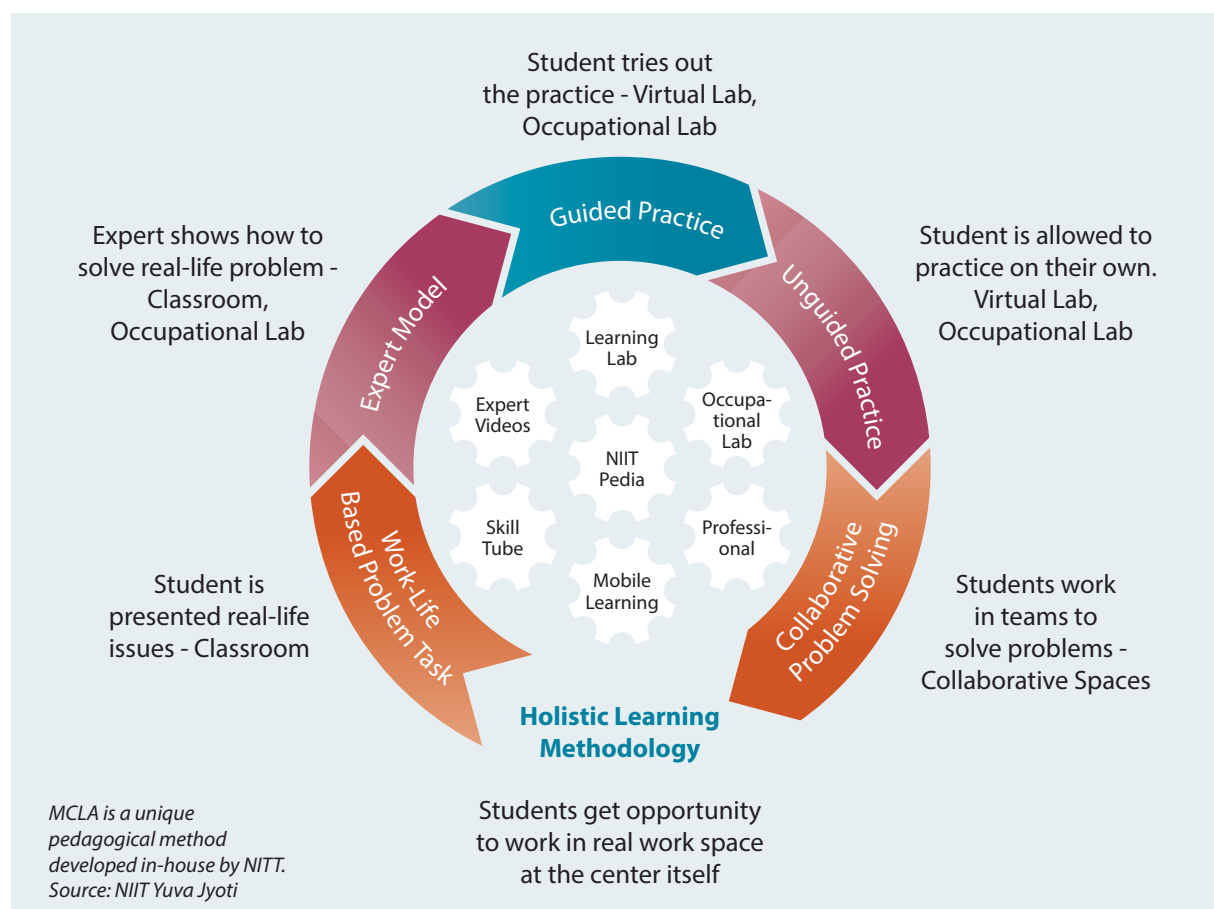
The training stage consists of the methodologies, techniques and tools in the training programmes in addition to the on-the-job trainings and apprenticeships that highlight technical competencies. Training can be defined as the process of delivering skills, knowledge and competencies through “teaching” and/or “practice”.⁶⁶ For the training phase, the private sector can ensure practical and industry-relevant skills are acquired by trainees. This entails development of novel training modalities and methodologies by private skills providers, which include the delivery of practical skills. Training often integrates technology and multimedia. Innovations by the business community can be leveraged to deliver skills to disadvantaged groups.

When skilling large numbers of candidates, skills providers need to constantly to enhance learning experience and impart skills in a more efficient manner to respond to the changing needs and capabilities of their trainees. Skills providers aim to design training delivery mechanisms that are innovative and effective and target various populations. These mechanisms often utilize multiple channels in order to cater to differing learning styles, needs and abilities, who come from a variety of social and educational backgrounds. IL&FS

Table 9: Elements of demand-oriented training delivery

Training delivery	On-the-job training and apprenticeships
<p>Methods, techniques and tools:</p> <ul style="list-style-type: none"> • Visual-Auditory-Kinesthetic Model-Centered Learning Architecture • Usage of multimedia and new technologies 	<ul style="list-style-type: none"> • Hands-on learning • Workplace simulation

Figure 15: Model-Centered Learning Architecture™ by NIIT



Skills, for instance, utilizes Visual-Auditory-Kinesthetic (VAK) methodology, which is a mix of training by trainers, videos and simulations to help trainees learn by seeing and listening, and applied trainings to foster learning by doing. Learning from the trainer is thus not the only opportunity for the trainees. They have an enhanced learning experience as a result of the multimedia content and opportunities to practice on actual work equipment and machinery.⁶⁷

Another example comes from NIIT Yuva Jyoti, which leverages the creative Model-Centered Learning Architecture (MCLA) using real-life scenarios and industry case studies and instructors as role models to make learning more interactive and collaborative. Students can practice what they have learned theoretically at “virtual” and “occupational” labs and benefit from collaborative spaces where they can cooperate with peers for problem-solving. MCLA also includes critical mistake analysis, which underlines the most frequently-encountered mistakes in the industry, used to teach the trainees how to avoid or overcome them.⁶⁸

NIIT Yuva Jyoti also uses Synchronous Learning Technology (SLT), which connects classes to studios where trainers are teaching through a video-based system, allowing interactive learning and live communication between trainees and trainers regardless of the location. This allows the organization to reach rural and semi-urban areas with only limited use of resources.⁶⁹

Hands on learning and on-the-job training

Incorporating hands-on-learning and on-the-job training mechanisms can give trainees the real feel of a job. IL&FS Skills and GMR Varalakshmi Foundation, for instance, have a strong focus on a hands-on-learning training component. They also partner with various industries to set up the infrastructure required to train students on the use of costly machines, modern equipment and tools necessary for the job. IL&FS Skills

ensures that every classroom resembles the workplace, in order to facilitate an easier transition to work and familiarize the trainees with the actual tools and machinery they will use in their jobs. The organization partners with the leading companies in various sectors to replicate the working environment for the trainees. The trainees can test their practical skills in these workplace-like classrooms.⁷⁰ GMR Varalakshmi Foundation uses simulators to train students in the use of expensive machinery and vehicles, to resemble the workplace and build real experiences. The engagement of employers in developing these simulators enhances the connection to industry requirements for training.⁷¹

Training delivery should combine practical and theoretical learning. Innovations emerge when the programmes are complemented with multimedia and online technologies.

4. Assessment and certification

Assessment and certification is both the appraisal of an individual’s knowledge and abilities vis-à-vis a selected set of criteria, and its validation through a standardized evaluation process.⁷² In the assessment and certification stage, it is important to align trainings with national occupational standards and national qualification frameworks. Partnerships with the private sector can increase the relevance and recognition of certificates issued to those who complete training courses.

Table 10: Elements of assessment and certification

(Inter)national-sectoral assessment and certification	Trainee assessment
<ul style="list-style-type: none"> • NSQF-NCVT • Occupational standards - SSC • International certification • NSDC initiatives for incentivization (STAR, PKMYVY) 	<ul style="list-style-type: none"> • Video logs and online assessment⁷³ • Individual development plans⁷⁴ • Co-certification⁷⁵

Sectoral assessment and certification

With the skills system in India evolving at a fast pace, greater attention is being paid to the quality of training delivery as well as to assessment of the trainees. Recognition and certification of skills are being afforded due importance by the government so as to make skills more “attractive” and “valuable” to the youth, as well as standardized and useful for the industry. With the recent Quality Assurance framework under NSQF aimed at guaranteeing consistency in assessment techniques and developing certification standards that are nationally and internationally recognized,⁷⁶ the government is breaking new ground and stepping away from the earlier system of divergent assessment and certification techniques.⁷⁷ Assessment and certification processes are now well-recognized and in line with the occupational standards and NSQF as a result of linkages of private sector skills providers to different industries and prominent SSCs. Larger skills providers such as CWSI and IL&FS Skills use third party assessors and regulatory bodies to provide national certification for their vocational training programmes.

GMR Varalakshmi Foundation and DRF engage with their huge industry networks and linkages with partner companies to seek endorsement of their certificates, which enhances their value in the market. These endorsements differentiate the companies from other players in the market and attract students to join their more reputable brands.

NSDC promotes certification through schemes such as STAR and PKMVY (Pradhan Mantri Kaushal Vikas Yojana). STAR and PKMVY offer monetary returns to trainees who successfully complete their trainings and become certified. They aim to mainstream training and certification in the private sector-led skilling space (see NSDC case study for details).⁷⁸ PMKVY is also dedicating significant capacity for certifying the existing members of the labour force.

In another innovative practice, GMR Varalakshmi Foundation provides co-certification to its trainees together with industry partners. The co-certification process is trade-specific, meaning that the Foundation certifies each training with the relevant private sector actor. This helps trainees' degree to be recognized in the market, particularly in the sector for which they are trained to work.⁷⁹

International linkages

International linkages can strengthen the mobility of trainees and assure employers of quality and relevance of their skills. IndiaCan, for instance, leverages Pearson's longstanding education experience and offers international-level accreditation.⁸⁰ At the broader level, mutual recognition agreements are pursued with Australia and other Gulf countries to ensure that skills acquired in India are recognized abroad.

Trainee assessment

With the decreasing cost of training assessment through technology, assessments are embedded and conducted regularly. Technological and other innovative advancements often become key differentiators for organizations to increase relevance and effectiveness of course structure and training delivery and assessment mechanisms. For example, NIIT Yuva Jyoti uses "video logs" and an "online assessment engine" to gauge students' learning effectiveness throughout the course. Videos of the trainees are shot at four different phases of the training cycle; before the trainee starts the course, after they complete the course and two times as part of the mock interviews. Their communication and grooming skills are assessed in particular and progress is tracked over the courses. The online assessment engine also reveals achievements in terms of the acquisition of both technical and life skills.⁸¹ Video logs are also used to communicate with prospective employers.

DRF and the GMR Varalakshmi Foundation customize the learning experience and personal development of each candidate. The Individual Youth Development Plan (IYDP) used by DRF, for example, focuses on the development of individuals' domain and soft skills. If the trainees fall short of the expected requirements, they receive additional counselling and mentoring support.⁸² The Individual Trainee Development Plan (ITDP) designed by GMR Varalakshmi Foundation, in a similar manner assesses the status of the trainee in terms of soft skills such as time management, relationship management, communication and leadership. The assessment is conducted three times throughout the course and performance of the trainee is quantified and monitored closely.⁸³ More private sector engagement in assessment and certification will ensure that the expectations of the industry are met by the skills providers.

5. Placement

Placement is the provision of wage employment opportunities to trainees after the completion of skills training programmes. For the placement stage, employment linkages with the private sector are required to ensure that training leads to employment. Businesses can help achieve a faster and smoother transition to work process.

Table 11: Elements of placement

Industry partnerships	Localized efforts
<ul style="list-style-type: none"> • Industry tie-ups • Online job portals • Sensitization workshops 	<ul style="list-style-type: none"> • Train locally – place locally • Networking with local industry • Alumni meetings • Job fairs – melas and industry visits



Source: IL&FS

Industry engagement

The absence of strong placement linkages with industry is a major area which requires improvement in India's skills development system. Though the majority of the government-oriented skills development schemes require 75 percent placement rates, the jobs themselves may be fraught with poor working conditions, inadequate wages, lack of jobs near home or even the low status of available jobs.⁸⁴

Since placement of their trainees is the end goal for most private training partners, they closely tie-up with the industry. IL&FS Skills, for instance, cooperates with more than a thousand private sector partners to ensure that its trainings are demand-driven and to secure placement for its trainees.⁸⁵ To foster linkages with the industry, DRF has established a Business to Youth (B2Y) Networking initiative to connect with local employers, placement agencies, industries and companies to place their aspirants where migration would not be necessary.⁸⁶

Placement portals

In order to facilitate an effective industry engagement and placement process for its partner organizations, NSDC has also implemented a Skill Development Management System (SDMS) to act as the main repository bringing together skilling institutions, trained candidates, employers, third party assessment agencies, SSCs and others.⁸⁷ Use of this system will enable both employers and employees to track the job market and reduce the mismatch between skills vs. jobs. As per the National Policy for Skill Development and Entrepreneurship a country-wide LMIS will be developed, incorporating all existing databases such as NSDC's SDMS and others. This system will convene labour supply and demand, market trends including wage status, economic growth for specific sectors and growth for areas where skilled human resources are most needed and shortages are most experienced.⁸⁸

Use of technology to drive better placement processes has also helped the companies to attain high levels of employment rates. For instance, NIIT has a specially designed placement portal that provides a record of students' skills level and an additional facility for uploading video resumes which can be accessed by the



Source: AISECT

potential employers.⁸⁹ Also, one of the unique tools designed by AISECT is *RojgarMantra*, the largest online job portal for rural India. The portal offers real placement services ranging from helping a job seeker assess qualifications, streamline job prospects according to skills sets, and obtain complete communication and resume drafting advice from a panel of experts. Online platforms also offer ease of access by employers for selection of candidates, which shortens the selection procedure and saves time and costs for prospective employers.⁹⁰

Localized efforts

Particularly in remote locations, working with the local stakeholders becomes vital to secure employment opportunities for trainees. NIIT Yuva Jyoti adopted the concept of “local jobs for local youth” to address the issues of placement and migration and uprooting rural youth. Placement units source jobs for youth locally so that they do not have to migrate too far from their homes. It does so by utilizing NIIT’s industry and company network, at national and local levels, which includes more than 300 companies.⁹¹ Cooperating with local industry is key to bridge the skills gap at the local level.

Placements are usually facilitated through job fairs or on-campus and off-campus placement drives (wherein placement calendars are prepared and shared with students). Job fairs or *Rojgar Melas* organized by AISECT at district and block levels facilitate better networking between the student and the employers who are present to interact at the ground level. In another example, GMR Varalakshmi Foundation organizes meetings among its alumni to increase networking with respect to prospective employment and career plans.⁹² Expanding the opportunities for trainees to interact with peers and companies is thus accepted as a prominent way of supporting placement in the skilling space.

6. Post-placement support

Post-placement support is the totality of services offered to employers and employees for the continuation of the employment relationship. This includes the tracking and handholding process that follows the placement of a trainee in a job. It is essential to sustain the results of training, and trainees may require assistance and guidance to adapt to the work life and to succeed in their new jobs. The private sector can support trainees through interventions such as mentoring towards a decent and progressive career path.

The responsibilities of the skills providers usually do not end with job placement. As the graduate trainees start their new jobs, they face a wide range of challenges, from adapting to the workplace to settling into new accommodation. A smooth transition to work thus requires the engagement of training providers and collaboration with the employers.

Table 12: Elements of post-placement support

Adaptation to work life	Improved livelihoods
<ul style="list-style-type: none"> • Mandatory tracking and handholding requirement by government programmes • Counselling support to overcome challenges such as homesickness, culture shock, adaptation to language and food, etc.⁹³ • Advocacy for provision of accommodation solutions⁹⁴ and finding residence for graduate trainees⁹⁵ • Alumni meetings, consultations with parents, information on upskilling opportunities⁹⁶ • Use of social media to maintain contact⁹⁷ 	<ul style="list-style-type: none"> • Support access to key services such as banking and social security⁹⁸ • Provision of identity cards⁹⁹ • Enhance access to formal education¹⁰⁰

Adaptation to work life

Support for candidates for three to six months after they are placed is a mandated activity for most government-sponsored programmes. This aims to ensure that the skills providers offer both the necessary skills to succeed in jobs and the support mechanisms to help trainees adapt to the work life. Government programmes like Ministry of Rural Development training programmes and Aajeevika directs organizations to undertake handholding up to one year following successful placement. This is usually done remotely by dedicated human resources or placement teams. For instance, CWSI offers counselling support to its graduates through call centres that help tackle a wide range of problems from language barriers to homesickness. CWSI also advocates local governments and private sector to cooperate on offering accessible, low-cost accommodation to the trainees. Youth4Jobs takes this to the next level by helping its graduate trainees to secure a decent accommodation.¹⁰¹ For the retention of persons with disabilities in work life, this support is of particular importance as the residences should offer the facilities necessary for their livelihood.

IndiaCan, as another example, acknowledges the key role of social relationships for ensuring that the placement lasts. The organization regularly convenes alumni, parents and other trainee networks to support the graduate trainees in their early career. It also informs the trainees for further skilling opportunities to



Source: Youth4Jobs

ensure that they are aware of the means to climb the career ladder. Another skilling provider that follows a similar strategy is Empower Pragati, which maintains communication with its graduates through effective use of social media.¹⁰²

The duties and responsibilities of private training providers do not end with placement. The success of a training programme depends on not only the employment of trainees, but their adaptation to the workplace, orientation to the new social conditions and retention.

Improved livelihoods

Organizations that target specific disadvantaged groups such as informal sector workers conduct rigorous post-placement activities. LabourNet aims to enhance the livelihood opportunities of its trainees by facilitating their access to basic services such as banking and social security. The organization assists each trainee to obtain an identity card, which they may then use to participate in public-supported social protection schemes. LabourNet further helps them to open bank accounts and highlights the importance of saving features.¹⁰³

GMR Varalakshmi Foundation, along with opening bank accounts like LabourNet, also offers assistance to its graduates to participate to formal education. The organization helps with enrolment processes, such as registering with the National Institute of Open Schooling or Indira Gandhi National Open University.¹⁰⁴

Skills development thus requires a holistic approach; it is not just the delivery of technical skills that fosters sustainable careers and livelihoods. Assisting trainees in terms of adjusting to a new job and lifestyle helps alleviate attrition and enhances their career prospects.

7. Partnership

The complex challenges in the skills development space can only be addressed through the joint know-how, resources and expertise of different stakeholders.

Table 13: Elements of partnership

Private sector	Civil society & academia
<ul style="list-style-type: none"> • Training partnerships (curriculum design, training of trainers, provision of guest faculty, infrastructure and equipment)¹⁰⁵ • Placement partnerships • CSR/financing partnerships 	<ul style="list-style-type: none"> • Grassroots/mobilization partnerships¹⁰⁶ • Content partnerships

For business models to successfully serve the needs of all social groups, partnerships with different stakeholders are instrumental. UNDP highlighted “combining resources and capabilities” as a key strategy to succeed in business models that integrate the poor as producers, entrepreneurs and consumers.¹⁰⁷ The same approach can be applied in the skills development sphere as partnerships help customize and deliver the training offer to traditionally hard-to-reach segments, such as women, persons with disabilities and rural youth.

Private sector as a partner in the skilling value chain

The private sector is a vital partner in the design and delivery of skills. It is not only the final beneficiary of a skilled workforce, but also the possessor of significant technical expertise and know-how about the skills that are required for operations. For instance, GMR Varalakshmi Foundation engages the private sector in curriculum design and training of trainers to integrate the industry’s knowledge on job tasks and responsibilities. It mobilizes guest lecturers from partner organizations to strengthen the industry linkages in

training delivery. The organization also secures up-to-date equipment and infrastructure used in the industry through partnerships, in order for trainees to acquire the skills to use them.¹⁰⁸

Placement partnerships with businesses is another key type of cooperation in the skill sphere. Trainings in the end should lead to decent employment, as per the expectations of the trainees. IL&FS Skills cooperates with more than 1,000 private sector partners from different sectors to secure placement. Since placement linkages are the first step of the skills design and delivery for IL&FS Skills, the organization can align the training offer with the existing jobs in the market.¹⁰⁹ NIIT Yuva Jyoti also mobilizes the support of industry associations and SSCs to enhance placement opportunities.¹¹⁰

Partnerships with the private sector can also be utilized towards financing the trainings or supporting entrepreneurial endeavours. IL&FS Skills offers trainings which are funded through the CSR budgets of major corporations.¹¹¹ This allows for students who can not pay for the training themselves to access skills linked to employment. In another example, AISECT supports entrepreneurship through tying-up with telecommunication and insurance companies which help train entrepreneurs and connect them to the market.¹¹²



Source: Youth4Jobs

Civil society and academia

Civil society's role in reaching out to disadvantaged groups is significant in skills development. Many skills providers cooperate with local NGOs and other stakeholders, such as self-help groups, to overcome the hesitations of potential candidates about participating in skilling programmes, both on the side of trainees, parents and the local community. GMR Varalakshmi Foundation, as an example, actively seeks partner organizations in rural areas in order to facilitate the sourcing of trainees from their locality.¹¹³ Youth4Jobs engages NGOs to jointly mobilize and train persons with disabilities, with the expectation that they can take over the skills development role in five years. The organization initially provides assistance on activities such as monitoring and placement.¹¹⁴ Academia is also a frequent partner in developing high quality training content. Skills providers cooperate with universities and research institutions to formulate and enhance the curriculum.

8. Financing

Another support activity, financing, provides an analysis of the different sources of funding tapped for the trainings, such as public funds, CSR funds and learner-paid financing, as well as key strategies to achieve financial sustainability.

Table 14: Elements of financing

Government funding	Employer funding	Fee-based funding	CSR project-based funding and new modalities
<ul style="list-style-type: none"> • NSDC funding • Skilling projects of ministries such as Ministry of Rural Development 	<ul style="list-style-type: none"> • Placement fees paid by the private sector¹¹⁵ 	<ul style="list-style-type: none"> • Converting trainees into customers for sustainability¹¹⁶ • High-end courses charged to trainees¹¹⁷ 	<ul style="list-style-type: none"> • Grants • Funding from industry partners and parent companies¹¹⁸

While skills development activities have gained momentum and received critical attention from all stakeholders, financing remains a challenge. The National Skill Development Policy (2009) stated the burden should be shared: “all stakeholders, the Government both at Centre and States, the enterprise – public and private, and the direct beneficiary – the individual, would share the burden of mobilizing financial or in-kind resources for skill development”.¹¹⁹ The 2015 policy also underlines this approach. On one hand, Government will support the acquisition of skills training through scholarships, rewards and “Skill Vouchers” for meeting the training expenditures of individuals. On the other hand, companies are expected to allocate a minimum of the quarter of their CSR budget on skilling initiatives either through direct action or through the National Skills Development Fund.¹²⁰

Government funding

One of the major functions assigned to National Skill Development Corporation has been to fund private training providers to achieve scale and impact in skilling initiatives. NSDC awards different forms of funds – loans, equity and grants – at discounted rates with a moratorium on payment up to three years. This allows for flexibility for repayment for NSDC partners especially the niche players with lesser resources and manpower. An “innovation fund” has been set up to finance unique skills development models, some of the recently funded ones are Milaap (crowd funding for skills loans); Aspiring Minds (hybrid assessment platform); Liquid (e-learning content company) and many others.¹²¹ Considering the difficulties in accessing finance for developing new business models, NSDC’s support is valuable in fostering novel ideas and modalities.

Skill providers can also undertake government projects to design and deliver skills for generating revenues. Most of the large players of the ecosystem cater to the government programmes. Both IL&FS Skills and CWSI have conducted training programmes for the ministries, such as the Ministry of Rural Development. Most of the available financing in the skills development sphere is still government funding, thus the training providers customize their business models and service offer accordingly.¹²²

Employer funding

Another modality of financing is to charge the employers for the trained people who are placed in their companies. IL&FS Skills, for instance, utilizes this modality to obtain placement fees from the industry. The key for the organization is to ensure that the placed trainees remain in their jobs for a given period, in order for the employers to realize a return on their investment.¹²³

Sometimes skills providers are able to cover some of the costs incurred in training from their industry partners. DRF, as another example, works with several Panel Employers who recompense DRF with

recruitment fees in return for hiring LABS aspirants.¹²⁴ As private sector is the final beneficiary of skilled human resources, acquiring employer funding can be considered as another sustainable way of financing.

Fee-based funding

Asking the trainees to pay for their own training is a more sustainable financing modality in skilling but it is harder to achieve. DRF, for instance, acknowledged in its business model the aim of transforming trainees into customers for the sustainability of operations in the longer run. Thus, the organization initiated the LABS-Sustainability programme, which is a learner-paid model but with the necessary flexible features (e.g. payment through instalments, discounted fees, waiving fees and instead receiving a symbolic amount from first salary) to not generate additional financial burden.¹²⁵

The candidates are not only usually from disadvantaged backgrounds, but also hesitate to “pay” for skills, which changes in accordance with the “respectability” of the occupation and opportunities for employment abroad.¹²⁶ IL&FS Skills charges the trainees for its more advanced electrician and CNC operator training programmes, as well as advanced welding courses. In contrast, trainees are not very interested in incurring costs to take basic-level courses.¹²⁷

CSR project-based funding and new modalities

In India, corporate social responsibility under the Companies Act of 2013 has furthered the role of the private sector in skill development by allowing companies to spend a part of their CSR budget in “vocational skill building”.¹²⁸ In addition, there are private sector companies that engage in non-profit skilling activities focusing on underprivileged youth as a part of their social objectives.

Skills providers can mobilize CSR resources of the private sector and tap project funding for trainings. GMR Varalakshmi Foundation, to illustrate, receives funds from both its parent company (GMR Group) and industry partners. At the same time, the resources raised are not limited to capital. The organization also acquires tools, equipment and trainer services from the industry through these partnerships.¹²⁹

For a very limited amount in its portfolio, NSDC offers grant-funding to skills providers based on social impact. Reaching the double bottom line is challenging especially in terms of accessing funding, thus NSDC’s support has benefited the niche players in the skills business ecosystem.¹³⁰

New streams of project funding are also utilized in the skills business ecosystem. The skills providers tap impact investing funds for their activities, such as LabourNet acquiring financing from the Bill & Melinda Gates Foundation.¹³¹ Crowdfunding platforms, such as Milaap, are used to secure financing for trainings. Donor financing, particularly from bilateral and multilateral development agencies such as the United Kingdom’s DFID and Australia’s AusAID, is also on the rise. Lastly, the funds can also come in the form of foreign direct investment. For instance, in the case of IndiaCan, Pearson made an investment to establish a joint venture with Educomp Solutions in India, later to acquire all stakes of the company.¹³² The growth of alternative modes of financing is expected as the lifelong learning approaches transforms skilling into a perpetual process.



Source: IndiaCan

9. Technology

As one of the support activities, technology refers to the innovative use of information and communications technology to achieve scale and impact.

Table 15: Elements of technology

Technology for quality learning & scale
<ul style="list-style-type: none">• Multimedia technologies for interactive learning• Online learning portals• Opportunities for self-learning and regular feedback¹³³

Technology is often used by the skills providers to scale up their business models in India and to promote learning and sharing of resources, knowledge and good practices as well as for quality control and achievement of scale. As a result of the vast and dispersed population of the country, implementing the traditional skilling value chain on the ground everywhere at the same quality is challenging. Subsequently, the training institutions adjust their business models to carry out some of the stages in new and innovative ways.

Technology has been used extensively by skills providers. IL&FS Skills, for example, uses K-Yan, a patented multimedia device and community computer that enables delivery of interactive training with minimal infrastructural requirements, especially in spoke centres. K-Yan has the combined aspects of many multimedia devices, along with internet connection. The organization standardizes its training offer through the use of K-Yan, which helps overcome constraints such as lack of skilled trainers and absence of classroom infrastructure.¹³⁴ NIIT centres, as another example, are equipped with advanced and innovative Synchronous Learning Technology using broadband satellite (VSAT) to facilitate interactive learning from a distance through interconnected studios hosting the trainers and classrooms. NIIT's online assessments and video logs also help overcome the challenges of physical distance and time limitations in assessment, certification and placement (see assessment & certification section for details).

AISECT uses an interactive learning management system in the form of an online portal that facilitates students to log in from anywhere to register, access course materials, take exams and even communicate with the management team. Through the use of such technology the skills providers have ensured that youth in rural areas are not deprived of quality education. At the same time, the online portal gives the opportunity for trainees to further practice and learn on their own.¹³⁵

Figure 16: K-Yan multimedia and community computer

- ◆ Single cable device with computer, portable interactivity, projector and internet connectivity
- ◆ Converts any wall into an interactive smart board
- ◆ Comes loaded with multimedia content for 360 degree learning



The image shows the K-Yan device, which is a black, rectangular, all-in-one unit. It features a large lens on the top right, likely for projection. The text 'K-YAN' is prominently displayed in a stylized font, with 'AN ALL-IN-ONE DEVICE' written below it. The device is shown from a three-quarter perspective, highlighting its compact and portable design.

Source: IL&FS Skills Presentation at UNDP Skills for Inclusive Markets Workshop, July 2015.

10. Monitoring and evaluation

Monitoring and evaluation tracks results along the skills value chain, including challenges and business success.

Table 16: Elements of monitoring and evaluation

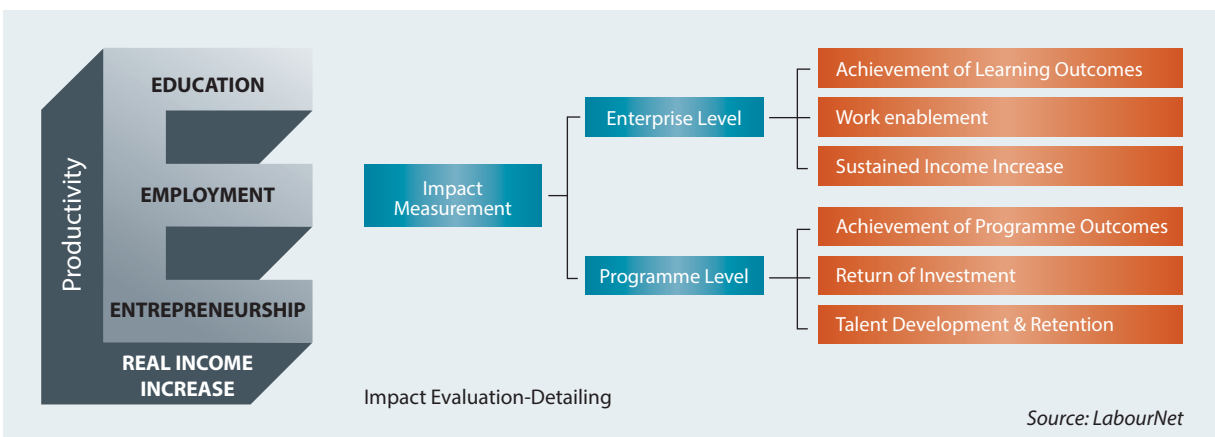
Government requirements	Organizational requirements
<ul style="list-style-type: none"> • NSDC requirements • Ministerial project requirements 	<ul style="list-style-type: none"> • Tracking indicators for breadth & depth of impact¹³⁶ • Assessment of productivity raise and improvement in livelihoods¹³⁷

Monitoring and evaluation practices are critical to assess which skills training modalities produce the desired results, which in turn indicates which should be considered for replication and scale. As a result of NSDC requirements and government project standards, most training providers have centralized monitoring systems to keep track of their training outputs, yet comprehensive impact assessment mechanisms are infrequently found. NSDC runs an outcome-based monitoring framework evaluating which initiatives receive funding at different stages. The tracked indicators include training numbers, social impact created, financial viability of the modalities in place, as well as geographies where the model succeeded or not.¹³⁸

LabourNet has developed a comprehensive impact assessment framework that takes into account training outcomes (the “breadth of impact”), such as number of people trained and number of trainees certified, as well as broader socioeconomic results (the depth of impact), such as wage/income increase, enhanced quality of employment (e.g. reduced degree of attrition and absenteeism) and productivity increase.

Such approaches are necessary to differentiate between skilling practices in terms of both efficiency and effectiveness. For the assessment of productivity raises, the organization further evaluates pre-training and post-training data on productivity to observe the level of improvement. Also, LabourNet tracks the improvement in the livelihoods of the trainees, taking the pre-training income as baseline and then comparing it with the post-training wage levels.¹³⁹ Private trainers have embraced and also internalized these metrics as key performance indicators for units and employees. DRF, for instance, has used mobilization, placement and attrition results respectively as success indicators for communication, networking and training delivery skills of the relevant employees and units. Proving and demonstrating the impact is the most reliable way of scaling and replicating prominent skilling practices.

Figure 17: Impact evaluation, LabourNet



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- ¹ UNDP 2010. *Business Solutions to Poverty*.
- ² Sinfield et al. 2012.
- ³ Osterwalder and Pigneur 2009.
- ⁴ SDC and *Employment and Income Network* 2013.
- ⁵ Dikmener and Dinc 2016.
- ⁶ Singh and Choudhuri 2016.
- ⁷ Pratap Singh and Choudhuri 2016.
- ⁸ Bhatt and Kumari 2016.
- ⁹ Ibid.
- ¹⁰ Porter 1985, pp 11-15.
- ¹¹ Wadera and Tiwari 2016.
- ¹² Ibid.
- ¹³ Pratap Singh and Choudhuri 2016.
- ¹⁴ Chandrasekhar 2016.
- ¹⁵ Dikmener and Dinc 2016.
- ¹⁶ Ibid.
- ¹⁷ Wadera and Tiwari 2016.
- ¹⁸ KPMG and FICCI 2014.
- ¹⁹ Ernst & Young and FICCI 2012.
- ²⁰ KPMG, Vol. 5.
- ²¹ Tata Strategic Management Group, n.d.
- ²² Ernst & Young and FICCI 2013.
- ²³ Chenoy 2013.
- ²⁴ Ernst & Young and FICCI 2013.
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- ²⁶ Ministry of Skill Development and Entrepreneurship. Accessed 10 October 2015.
- ²⁷ Singh and Choudhuri 2016.
- ²⁸ Honorati and McArdle 2013.
- ²⁹ SDC and *Employment and Income Network* 2013.
- ³⁰ Wadera and Tiwari 2016.
- ³¹ A gram panchayat (village level approach) is utilized whereby the local officers are contacted for information on population, number of youth etc. CWSI also collects the Socio-Economic Caste Census (SECC) of the village to map out the whole area. Once mapped CWSI makes data clusters according to age, socio-economic status etc to reach out to these people through various approaches/contact persons etc.
- ³² CWSI representatives set up a 'canopy' (tent) to counsel prospective candidates about various courses.
- ³³ Honorati and McArdle 2013.
- ³⁴ Bhatt and Kumari 2016.
- ³⁵ Pratap Singh and Choudhuri 2016.
- ³⁶ Chandrasekhar 2016.
- ³⁷ Honorati and McArdle 2013.
- ³⁸ SDC and *Employment and Income Network* 2013.
- ³⁹ Dikmener and Dinc 2016.
- ⁴⁰ LabourNet Case Writeshop.
- ⁴¹ Ibid.
- ⁴² Honorati and McArdle 2013.
- ⁴³ IL&FS Case Writeshop.
- ⁴⁴ UNESCO-UNEVOC. Accessed 13 April 2016.
- ⁴⁵ Bhatt and Kumari 2016.
- ⁴⁶ Ibid.
- ⁴⁷ John and Singh 2016.
- ⁴⁸ NSDC Case Writeshop.
- ⁴⁹ Data provided by MSDE, Government of India, April 2017.
- ⁵⁰ SDC and *Employment and Income Network* 2013.
- ⁵¹ Ibid.
- ⁵² DRF Case Writeshop.
- ⁵³ John and Singh 2016.
- ⁵⁴ Dikmener and Dinc 2016.
- ⁵⁵ IndiaCan Case Writeshop.
- ⁵⁶ ETF 2015, *Soft Skills and Employment*. Accessed 26 July 2016, http://www.etf.europa.eu/web.nsf/pages/Soft_Skills_and_Employment_in_Arab_Mediterranean_Countries_
- ⁵⁷ National Policy for Skill Development and Entrepreneurship (2015).
- ⁵⁸ IL&FS Case Writeshop.
- ⁵⁹ NIIT Yuva Joyti Case Writeshop.
- ⁶⁰ John and Singh 2016.
- ⁶¹ National Policy for Skill Development and Entrepreneurship (2015).
- ⁶² Ibid.
- ⁶³ Bhatt and Kumari 2016.
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- ⁶⁵ John and Singh 2016.
- ⁶⁶ UNESCO-UNEVOC. Accessed 13 April 2016.
- ⁶⁷ Dikmener and Dinc 2016.
- ⁶⁸ Chandrasekhar 2016.
- ⁶⁹ *Ibid.*
- ⁷⁰ Dikmener and Dinc 2016.
- ⁷¹ John and Singh 2016.
- ⁷² Cedefop 2014.
- ⁷³ Chandrasekhar 2016.
- ⁷⁴ John and Singh 2016.
- ⁷⁵ *Ibid.*
- ⁷⁶ National Policy for Skill Development and Entrepreneurship (2015).
- ⁷⁷ A number of assessment agencies sit under the two key schemes: the Modular Employability Scheme - Skill Development Initiative (MES-SDI) and the Standard Training Assessment and Rewards (STAR). Ministries are also implementing training programmes that are now introducing the requirement for third party assessment requirements, such as the Aajeevika Skill Development Programme (ASDP) and the Employment Skills Training & Placement Programme (ESTP) under the National Urban Livelihoods Mission, which draw on certification from either the National Council for Vocational Training (NCVT) or Sector Skills Councils (SSC).-Source: British Council and International Labour Organization. October 2014. *Skill Assessment in India: A discussion paper on policy, practice and capacity.*
- ⁷⁸ Bhaskaran 2016.
- ⁷⁹ John and Singh 2016.
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- ⁸⁴ Ernst & Young and FICCI 2013.
- ⁸⁵ Dikmener and Dinc 2016.
- ⁸⁶ Dr. Reddy's Foundation Case Writeshop.
- ⁸⁷ NSDC Case Writeshop.
- ⁸⁸ National Policy for Skill Development and Entrepreneurship (2015), p.24.
- ⁸⁹ Chandrasekhar 2016.
- ⁹⁰ Singh and Choudhuri 2016.
- ⁹¹ NIIT Yuva Jyoti Case Writeshop.
- ⁹² John and Singh 2016.
- ⁹³ Bhatt and Kumari 2016.
- ⁹⁴ *Ibid.*
- ⁹⁵ Saha and Satpathy 2016.
- ⁹⁶ Wadera and Tiwari 2016.
- ⁹⁷ Agnimitra and Iyer 2016.
- ⁹⁸ Vergheze 2016.
- ⁹⁹ *Ibid.*
- ¹⁰⁰ John and Singh 2016.
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- ¹⁰⁵ *Ibid.*
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- ¹⁰⁷ UNDP 2010.
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- ¹¹⁶ Pratap Singh and Choudhuri 2016.
- ¹¹⁷ Dikmener and Dinc 2016.
- ¹¹⁸ John and Singh 2016.
- ¹¹⁹ Tripathi n.d.
- ¹²⁰ National Policy for Skill Development and Entrepreneurship (2015).
- ¹²¹ Bhaskaran 2016.
- ¹²² IndiaCan Case Writeshop
- ¹²³ Dikmener and Dinc 2016.
- ¹²⁴ Pratap Singh and Choudhuri 2016.
- ¹²⁵ *Ibid.*
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- ¹²⁷ *Ibid.*
- ¹²⁸ *India, Ministry of Corporate Affairs, accessed 5 November 2015.*
- ¹²⁹ *John and Singh 2016.*
- ¹³⁰ *Bhaskaran 2016.*
- ¹³¹ *LabourNet Case Writeshop.*
- ¹³² *Wadera and Tiwari 2016.*
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CHAPTER 5

SKILLS FOR IMPACT: ACCELERATING INCLUSIVE GROWTH

A key goal of the skills development ecosystem is the development of underserved populations to create impact. This section looks at the impact created by the involvement of the private sector in the skills development ecosystem in India.

A strong private sector can deliver economic growth and create wealth, fundamental for the achievement of the Sustainable Development Goals.¹ The private sector generates about 90 percent of all jobs in developing countries.² Main agents from the private sector include large enterprises (foreign and domestic-owned), small and medium sized enterprises (SMEs), informal enterprises and new and potential entrepreneurs.³

Actors in the field of development assistance frequently emphasize the substantial evidence of private sector contributions. Such contributions come in various forms,⁴ including:

- ◆ reduction of negative impacts by incorporating international standards;⁵
- ◆ creation of investments, jobs or tax revenues;⁶
- ◆ provision of services, privately financed and delivered (this makes up a significant part of all services addressing development goals in low- and middle-income countries);⁷ and
- ◆ contributions made through core business, philanthropic or advocacy efforts.⁸

In addition, engaging in skills design and delivery is another way the private sector could accelerate sustainable growth and the progress towards the SDGs.

Background – towards the 2030 Agenda

Skills development can be considered as a cross-cutting and transformational activity, as its outcomes go beyond the boundaries of employment and productivity. Skills are the key ingredients for jobs, and jobs are means of attaining income as well as boosting human dignity, empowerment and security in terms of economic wellbeing.⁹ Thus, delivering skills is a way to enlarge available choices for individuals¹⁰ and to lift them out of poverty and inequality. It helps create the markets that integrate women, youth, persons with disabilities, rural populations and other groups as producers, consumers and entrepreneurs.¹¹ In broader terms, skills development is an instrument to transform economies into more sustainable structures.

In recent decades, efforts to improve basic education have, in most international policies and frameworks, placed emphasis on improving access and quality as the best way to address mass illiteracy, which is persistent in developing countries. In the 1990s, the Education for All (EFA) agenda of UNESCO aimed to meet the learning needs of all children, youth and adults by universalizing primary education.¹² In 2000, the United Nations Millennium Declaration galvanized global action for education with Millennium Development Goals 2 and 3: achieve universal primary education, and promote gender equality and empower women. The global efforts on education did pay off: global literacy for youth increased by 8 percent between 1990 and 2015, including the narrowing down of the gender gap in literacy.¹³ However, this emphasis on literacy is not the same as an emphasis on skills development. While basic education, especially in the initial years of learning provides an individual with foundation skills¹⁴; skills development helps build market-relevant skills that are industry based and professional competencies that facilitate the transfer to the world of work. Lifelong learning then ensures that individual skills and competencies are maintained and enhanced as work, technology or skill requirements change. Learning is a continuous process needed to guarantee sustainable

employment and livelihoods.¹⁵ At the same time as countries were being urged to improve basic education, they also were facing the challenge to “sustain growth, reduce poverty and ensure inclusiveness in the distribution of gains.”¹⁶

In the mid-2000s, international agencies began to express a greater interest in secondary and tertiary education, as a critical part of building a skilled productive workforce that can contribute to economic growth.¹⁷ In the UNDP Strategic Plan 2014-17, skills development was a recommended area of intervention for the generation of new jobs and livelihoods, particularly towards “...incorporating productive capacities that create employment and livelihoods for the poor and excluded.” It was recognized as a “resource endowment” and the definition of livelihood included “education and skills” as “capabilities” of people to be able to support the wellbeing of themselves and their families. The strategy also highlighted the effective and efficient use of technology regarding the availability of skilled human resources and skill-building.¹⁸ In 2015, skills, knowledge and competencies were further underlined as a crucial linkage between human development and prosperity in the context of the Sustainable Development Goals. Goal 4, Goal 8 and associated goals place a strong emphasis on skills, while other goals also spell out specific targets that will require skill development and engagement of the private sector:¹⁹

- ◆ Goal 4 seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”. Many targets associated with Goal 4 are tied to providing skills by 2030. Target 4.3 is to “ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university”. This target supports female participation in skills training and subsequently to the workforce. Target 4.4 highlights acquisition of “technical and vocational skills for employment, decent jobs and entrepreneurship” for more youth and adults. Target 4.5 is to “eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable”.
- ◆ Goal 8 aims to “promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. Target 8.5 underlines “productive employment” and “decent work” for different social groups including youth, women and persons with disabilities, for whom market-driven skills will be a key asset. Another example is target 8.6 to decrease the number of youth “not in employment, education or training”.
- ◆ Goal 1 is to “end poverty in all its forms everywhere” and Goal 10 highlights the need to address inequalities in and across different countries. This would require the economic integration of the bottom 40 percent of the population pyramid globally, who would need skills demanded in the market. Inclusive business models to deliver these skill sets should be tested, replicated and scaled.
- ◆ Realizing gender equality and women empowerment also necessitates effective skills acquisition. For instance, target 5.4 emphasizes the acknowledgement and valuing of “unpaid care” and “domestic work”. The skills that precede this kind of work should also be recognized and certified to empower women. Furthermore, as women need to participate in decision-making as leaders in the economic field (target 5.5), they need to develop the necessary skills and competencies.

Displaced and migrant workers also are groups to be considered. Skills training could be directed at improving or readapting the skills of displaced workers to offer them livelihood opportunities. It is also noted that migrant workers might contribute with novel skills and knowledge, creativity, experience and capacity for innovation.²⁰

Generating impact for the disadvantaged

This section will examine some of the innovative ways in which the social impacts of businesses are heightened by targeting disadvantaged groups. While targeting poor and marginalized groups in skills development is a mandate in most skilling programmes, some organizations go to the last mile in accommodating the needs and requirements of the most disadvantaged ones, namely youth from disadvantaged socio-economic backgrounds, persons with disabilities, workers in the informal sector and women.

Table 17: Elements of skills development support for the disadvantaged

Women	Informal sector & rural areas	Persons with disabilities
<ul style="list-style-type: none"> • Female-centric learning content²¹ • Women-only accommodation, female trainers, female safety precautions²² • Support to female entrepreneurship²³ • Formation and strengthening of women self-help groups, supporting entrepreneurship and market linkages²⁴ • Transforming domestic workers to home managers²⁵ 	<ul style="list-style-type: none"> • Recognition of prior learning²⁶ • Customized training programmes for rural youth and farmers²⁷ • Facilitating access to financial services at unbanked areas²⁸ 	<ul style="list-style-type: none"> • Customized modules on communication, soft skills and mobility • Training and sensitization of trainings, such as teaching of sign language • Sensitization workshops²⁹ • Workplace adaptations for persons with disabilities³⁰

Women

Women are particularly disadvantaged when it comes to work: women are less present in the labour force than men, earn less, are subject to more vulnerable terms of work and are underrepresented in high-level decision making and management, according to the UNDP Human Development Report 2015. Across the world, women's earnings are 24 percent less than those of men, while 75 percent of managerial and administrative positions are occupied by men. In addition, 32 percent of all businesses have no female managers in high-level decision-making positions.³¹

Women are reportedly the most disadvantaged when it comes to education, skills development and employment in India. Women and girls account for 48 percent of the country's population, yet 65 percent of rural women and 30 percent of urban women lack basic primary education.³² Only about 17 percent of women and girls report having participated in some form of skills training.³³ The percentage of women participating in the labour force has been decreasing both in urban and rural India. Between 2004 and 2011, it declined from 33.3 percent to 26.5 percent in rural India, and declined from 17.8 percent to 15.5 percent in urban India. International Labour Organization (ILO) estimates also reflect a decline for the overall labour force participation of women in the country, from 35 percent in 1990 to 27 percent in 2016. Moreover, women are mostly engaged in the informal sector or are self-employed – working in poor conditions, for meagre salaries and with no social security systems.³⁴

Often the participation of women in education and subsequent employment is limited due to traditional gender roles and unequal gender relations. Domestic chores and responsibilities, social norms, and safety and security concerns are not only a barrier in terms of women and girls' access to training but also a constraint against their ability to access suitable employment opportunities.³⁵ Identifying specific needs, building gender-sensitive training content and mobilizing women for training programmes will increase their capabilities and at the same time benefit businesses.

NIIT Yuva Jyoti extends monetary incentives for more female enrolment in its training programmes, targets job roles with high demand for female employees, establishes female only training centres and sensitizes employers to provide flexibility of time and preference of location to women candidates after they are placed in any job. Most mobilization of women is done through counselling and door-to-door campaigns with parents and communities, taken up by the skills providers.³⁶ Along the same lines, CWSI operates separate female-only hostel facilities, employs female instructors and wardens for safety and comfort of female candidates, and ensures safety through CCTV cameras and bio-metric attendance.³⁷ These interventions instil trust and security among the female trainees, increasing their participation and engagement.

Women's participation to the economy can be facilitated through entrepreneurship. AISECT has supported female entrepreneurship through supporting women's engagement in franchisee networks through financial incentivization, bargaining for favourable rates in retail as well as assisting women to access government funding for entrepreneurship purposes.³⁸ GMVRF has facilitated establishment of self-help groups among women, guided them on how to market their products and link with the market through joint action.³⁹

Empower Pragati takes into account the disadvantages of domestic work – which does not generate sustainable employment, skills upgradation or career advancement – and supports women to become home managers instead. In this way, they can have enhanced skills and competencies with respect to household management, cooking and other relevant tasks, along with life skills such as basic financial management and communication. Women can thus be employed in the hospitality sector or domestic households with better conditions and improved social and job security.⁴⁰

Women's participation in skilling could be leveraged through interventions such as mobile training units, flexible afternoon batches and training based on the local needs of the area, national policy suggests. It could also be improved through training and apprenticeship slots dedicated to women, increasing the availability of female trainers, development of gender sensitive training and employment contexts and ensuring decent and sustainable compensation for females.⁴¹

Informal sector workers

Ninety-three percent of the Indian workforce is employed in the informal sector⁴² and many individuals lack any formal or informal skills.⁴³ Barely 2.5 percent of this unorganized labour has undergone any formal skills development.⁴⁴ The informal sector has no structured skills development and training system and there has been no certification framework for the skills acquired through informal channels, e.g. family occupations, on-the-job training and apprenticeships under master craftsmen.⁴⁵ It is important that workers in the informal sector receive formal vocational training along with certification of their already-acquired skills,⁴⁶ which will make them more employable and give them higher earnings.

Recognition of prior learning is a key instrument to evaluate the knowledge and capabilities of people, and to certify the skills that they acquired through informal means.⁴⁷ It is an area addressed by some niche players in skills development, as noted at the end of Chapter 3. LabourNet, for example, assesses the tacit knowledge and competencies of its trainees through tests before the courses commence. Occupational experts evaluate these tests and the assessment results are factored into the training requirements and content. The candidates also receive "report cards" highlighting their skill level, which can be shared with potential employers.⁴⁸



Source: Labournet



Source: DRF

Rural areas

Generating impact for disadvantaged groups requires efforts to reach rural areas. DRF's LABS-Farmers and Skilling Rural Youth (SRY) programmes cater to the needs of rural youth with a view towards extending knowledge and transfer of low-cost and environmentally-friendly technologies and farming practices without displacing them from their original livelihood settings. LABS-Farmers enhances productive use of land, optimizes input costs for agricultural products, and fosters market linkages and income opportunities. The initiative also benefits from the support of skilled "village replicators" or "development extension workers" as well as existing government schemes at the rural level. SRY, on the other hand, targets unemployed rural youth at their locality. The programme offers both life skills and skills such as poultry and seedling-raising to facilitate their employment.⁴⁹

Towards rural inclusion, in addition to skills delivery, AISECT extends financial services to the disadvantaged, such as acquiring credit or opening a savings account. AISECT supports entrepreneurs at the rural level to open and manage "banking kiosks" from which customers such as workers, farmers, small shop owners and women can engage in financial transactions.⁵⁰ Thus, previously unbanked areas and segments acquire access to financial services through AISECT's work.

Persons with disabilities

Over 1 billion people have a certain kind of disability in the world. Disabilities may require rehabilitation education and training to provide work opportunities for these persons, who otherwise have faced lower employment rates both in developed and less developed countries.⁵¹

Persons with disabilities (PwD) form a large part of the Indian workforce and only a miniscule portion of this group has received any formal training; the World Bank estimates only 0.1 million out of 70 million disabled youth in India.⁵² They face multiple barriers while entering the labour market ranging from low levels of literacy, lack of financial resources, low access to markets to normative barriers such as negative perception of the capabilities of disabled, over-protective parents, lack of confidence and self-esteem, and in general ignorance and misconceptions regarding disabled in the world of work. Thus, they suffer from a double jeopardy where they not only suffer from low self-esteem, they are also often viewed with negative perceptions both by communities and in the job market.

The Government of India has acknowledged the importance of inclusion of disabled persons in national policies and frameworks by ratifying the United Nations Convention on the Rights of Persons with Disabilities in 2007 and stipulating a 3 percent reservation in government jobs.⁵³ However, employment of disabled has been mostly facilitated in government jobs; the rate of employment in the private sector was a miniscule 0.28 percent and 0.05 percent in multinational companies.⁵⁴ The government asserts that skills development for this group is a priority, stating: “Improving vocational training and employment opportunities for people with disability is a critical element for enhancing the quality of life for individual with disability, their families, but there are also substantial gains for the broader economy”.⁵⁵ Recognizing this as an urgent need, the government initiated a National Action Plan for Skilling the Persons with Disabilities in 2015.

One of the key objectives of the Ministry of Skill Development and Entrepreneurship is to guarantee and safeguard the skilling needs of persons with disabilities. To further this aim, the Ministry is developing a cross-cutting Sector Skills Council for PwDs to build their competencies by developing more focused and well-designed skilling modules, identifying specific trades for generating employment, and providing certification mechanisms to safeguard and sustain their livelihoods.⁵⁶

Customizing the skilling value chain activities is needed to ensure that the training programmes for PwDs reach and deliver the necessary skills to this segment. Youth4Jobs does an in-depth role mapping to design modules that are compatible and cater to the requirements of PwDs. Training modules are made in consultation with specific industries to incorporate the finer skills demanded. For example, when the Gem and Jewellery Company needed people to work patiently, a module was developed that focused on the ability of the person to work with perseverance on monotonous details. Youth4Jobs has also developed a Work Integrated Soft Skills & English (WISE) course to incorporate the fine skills required by persons with disabilities to adjust to their work environments.⁵⁷ Similarly, the LABS-PwD initiated by DRF also enhances market-driven skills for persons with disabilities. Training content is customized as per the needs of the aspirants, whether they have orthopaedic or hearing difficulties. Modules such as mobility and communication are validated by the industry.⁵⁸ Both Youth4Jobs and DRF organize sensitization trainings for employers to foster accessibility for PwDs in the work environment, negotiate for proper working conditions and facilitate their transition to work.

Scheduled Castes and Scheduled Tribes

With a large pool of youth in need of training (“potential learners”) being added to the labour market every day, millions are from tribal communities and from the disadvantaged group in the past termed “untouchables”. A study done by FICCI revealed that the total number of potential learners in the country during 2009-10 was about 363 million: of this number, 28 percent were from Scheduled Castes (SCs) and Scheduled Tribes (STs).⁵⁹ Specific policies are required for enhancing the employability of SCs and STs towards alleviating their vulnerable status.⁶⁰

Green skills for a sustainable future

The focus on green skills is at its nascent stages even in the National Policy for Skill Development and Entrepreneurship (2015). The policy only refers to green skills by way of providing support to non-governmental organizations to scale and create with the support of NSDC sustainable skill development models for green jobs (e.g. agriculture, horticulture, renewable energy, recycling, eco-tourism, etc.).⁶¹ It is only recently that a Sector Skill Council for Green Jobs has been created to draw up job roles, create a cadre of trainers and provide skills for green jobs.⁶²

Skills training needs to take into account the future needs of the society, such as the transitioning to green and more effective technologies.⁶³ Climate change, environmental degradation and related natural (e.g. scarcity of water and other resources, disasters) and social impacts (e.g. risks to human health, displacement) are necessitating that countries adopt better policies and practices that envisage greener economies and green growth. At the international level, economic and market restructuring around green growth is high on the agenda. While, it has been estimated that one hundred million green jobs would be available worldwide by 2030, filling those jobs would require a labour force with pre-requisite skills and an understanding of the larger need for greening the economy.⁶⁴ Green jobs reduce the environmental impact of enterprises and

economic sectors like agriculture, industry, services and administration to levels that ensure a sustainable future. At the same time, the shift towards sustainability in the industries and infrastructure, increased efforts towards efficient use of natural resources, more emphasis on greener technologies and production processes will require skills upgradation, also towards the newly emerging spheres of work.⁶⁵

Sixty percent of India's population is engaged in agriculture, which is the largest consumer of natural resources and hence has to increasingly adapt to and mitigate climate change. A study done by ILO mention that out of the 4,650 vocational training institutes hardly any of them provide training in green technologies or related areas.⁶⁶ Some non-governmental organizations have actively engaged in crafting new skills and measures outside the existing formal training system to build renewable energy. The Barefoot College, for example, works with illiterate or semi-literate women from villages to organize trainings on solar technology. However, the country needs to adopt skill development policies that are made more responsive to emerging needs of the country to make them more sustainable and yield long-term returns.⁶⁷

India is one of the forerunners in putting together a climate change policy (2012) addressing issues of energy efficiency, renewable energy and greenhouse gas emissions. Though the plan identifies "strategic knowledge" as one of its eight missions, action for building a skill development framework has not yet been taken.⁶⁸ Climate change policies and regulations give rise to a demand for new skills and professionals who can handle new jobs but a study done by ADB revealed that in India far too little emphasis has been put on developing green job policies or skills development frameworks.⁶⁹

Assessing the impact of skills

Assessing the impact of skills is a matter of seeing the forest through the trees. Impact is a multifaceted and multi-level concept, and so is its measurement. For instance, the ILO suggests that impact could be evaluated at three levels: people, enterprises and society.⁷⁰ Taking a similar approach, NSDC analysed the impact of skills training programmes in India through observing the changes at the "individual/family, industry and societal" levels through survey studies.⁷¹ The three-layered approach suggested by these two organizations and others sheds light on how the results of skills training could be effectively monitored and interpreted.

At the individual level, in terms of the impact generated on individuals, it is vital to take into account how a skills training programme affects the employability, working conditions and remuneration of a person, along with any potential increases in the welfare level and career prospects for the future.⁷² For individuals, NSDC studied the increase in employability as an indicator for the training programmes. It found that out of the 11 percent of the alumni who were unemployed prior to the trainings, 64 percent have now obtained regularly-paid positions or are self-employed. Career advancement was also evaluated for the trainees and 77 percent of the alumni, employed before taking a skills training programme, actually had a wider range of responsibilities in the job or got a promotion after successfully completing the training. The organization has also included, as an indicator, the increase in the capabilities of the students to learn and adjust to the changes in the work environment. In the study, more than 70 percent of employers and 80 percent of alumni agreed that skills training programmes enhance the capacity of learning and coping with change at work.⁷³

At the enterprise level, skills training needs to contribute to the availability of a competitive workforce. The companies would then utilize this human resource pool to increase their productivity and capacity for innovation. Organizational learning will be enhanced with more skilled members, and the company can better preserve and nurture its competitive advantages.⁷⁴

At the industrial level, NSDC has taken two components into consideration for impact: (a) the increase in the productivity and performance of trained individuals and (b) improved availability of skilled workforce that matches the occupational needs of the industry.⁷⁵ To illustrate, more than 75 percent of the employers surveyed from Northern, Southern and Eastern regions stated that the individuals from NSDC's skilling initiatives perform better than others. They also stated that the candidates from NSDC programmes are more likely to have the skills needed by the industry.⁷⁶

At the broader community level, skills programmes should be assessed with respect to their contribution to economic growth and social cohesiveness. Furthermore, skilling practices might influence the dynamics of the labour market and enhance the opportunities for decent work.⁷⁷ NSDC, for the community-level impact,

Figure 18: Areas of focus in an impact assessment study



included a wide range of indicators, such as awareness level of immediate stakeholders in skills development, workforce's awareness about occupational requirements, macroeconomic outcomes (wage changes for the trainees who have a job, costs of training providers and spending and innovations of SSCs taken into account), level of empowerment for female trainees, women's participation to decision-making in the family and broader society as well as quality of living. For instance, 67 to 84 percent of the trainees included in the survey agreed that NSDC's activities has led to a higher level of awareness in skilling.⁷⁸

At the level of the broader skilling ecosystem, significant challenges remain. In assessing the impact of skills, both the trainings provided through skills providers in collaboration with NSDC and those provided through the Ministries fall short. The number of people trained by these organizations in fiscal year 2015-16 added up to only 23.64 percent of the original target.⁷⁹ The numbers are likely to increase through sharing of good practices and know-how across the training providers as well as the industry. Impact assessment towards this end could help improve the health and profitability of the skills business ecosystem. Robust assessment is linked to transforming the system into a more inclusive, accessible and efficient structure.⁸⁰

¹ UN Sustainable Development Knowledge Platform 2016.

² World Bank 2012.

³ World Bank 2009.

⁴ Ibid.

⁵ Nelson 2003.

⁶ Kharas 2013.

⁷ World Bank 2009.

⁸ Nelson 2003.

⁹ UNDP Human Development Report 2015.

¹⁰ Ibid.

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- ¹¹ UNDP 2010.
- ¹² UNESCO, *Education for All*. Accessed 20 April 2016.
- ¹³ Millennium Development Goals and Beyond 2015. Accessed 20 April 2016.
- ¹⁴ This includes literacy and numeracy skills, which are key for continuing in education and training as well as for work.
- ¹⁵ ILO 2010. *A Skilled Workforce*.
- ¹⁶ Maclean, Jagannathan and Sarvi 2013.
- ¹⁷ World Bank 2011.
- ¹⁸ UNDP 2013 *Changing the World*.
- ¹⁹ UN Sustainable Development Knowledge Platform 2016.
- ²⁰ UNDP Human Development Report 2015.
- ²¹ Chandrasekhar 2016.
- ²² Bhatt and Kumari 2016.
- ²³ Singh and Choudhuri 2016.
- ²⁴ John and Singh 2016.
- ²⁵ Agnimitra and Iyer 2016.
- ²⁶ Vergheze 2016.
- ²⁷ Pratap Singh and Choudhuri 2016.
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- ³⁰ *Ibid.*
- ³¹ UNDP Human Development Report 2015, p.4.
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- ³⁴ *Ibid.*
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- ⁴³ Ernst & Young and FICCI 2013, p. 31.
- ⁴⁴ *Ibid.*, p. 8.
- ⁴⁵ Ernst & Young and FICCI 2012, p. 4.
- ⁴⁶ Mehrotra 2014, p. 269.
- ⁴⁷ Mehrotra and Saxena 2014.
- ⁴⁸ Vergheze 2016.
- ⁴⁹ Pratap Singh and Choudhuri 2016.
- ⁵⁰ Singh and Choudhuri 2016.
- ⁵¹ UNDP Human Development Report 2015.
- ⁵² Shenoy 2011.
- ⁵³ *Ibid.*
- ⁵⁴ *Business India* 1998.
- ⁵⁵ India, Ministry of Social Justice and Empowerment. Accessed 6 November 2015.
- ⁵⁶ National Policy for Skill Development and Entrepreneurship (2015).
- ⁵⁷ Youth4Jobs Case Writeshop.
- ⁵⁸ Pratap Singh and Choudhuri 2016.
- ⁵⁹ Scheduled Castes are the previously 'untouchable' groups that constitute the most marginalized (Ministry of Social Justice and Empowerment, Government of India). Scheduled Tribes are the tribal communities that are deemed disadvantaged by the Constitution of India in accordance with having "primitive traits, distinctive culture, shyness of contact with the community at large, geographical isolation and backwardness" (Ministry of Tribal Affairs, Government of India).
- ⁶⁰ Mehrotra and Saxena 2014.
- ⁶¹ National Policy for Skill Development and Entrepreneurship (2015).
- ⁶² CII website on Skills Development, accessed 7 November 2015.
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- ⁶⁶ ILO 2011 *Skills for Green Jobs*.
- ⁶⁷ *Ibid.*
- ⁶⁸ *Ibid.*
- ⁶⁹ Maclean, Jagannathan and Sarvi 2013.
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⁷⁹ India National Skill Development Agency 2015.

⁸⁰ NSDC Impact Assessment Study 2014.

CONCLUSION

Rising unemployment levels is a global challenge, and it hits disadvantaged groups (women, youth, rural poor and persons with disabilities) the hardest. While generating more jobs is part of the solution, it alone will not be enough to meet the needs of the population in the coming decades. To reduce unemployment levels, governments must address the skills gaps and the current skills mismatches in the labour market. It is also crucial to ensure that individuals can access high quality jobs offering decent working conditions, social protection and career development opportunities.

India's population will be reaching 1.35 billion by 2020, with 906 million individuals aged between 15 and 64.¹ The country, with its ambitious goal of skilling 400 million individuals by 2022, provides a strong case for how skills development initiatives can incorporate strong private-sector engagement and partnerships towards large-scale and inclusive human capital development. In shifting the focus from supply-led vocational trainings to demand-driven skills development programmes, both the private sector and the unemployed win in the end.

This report evaluates the work of the India government in reaching its skilling goal, with an emphasis on the role of the private sector. While this study highlights the different business models in India's ecosystem and possible ways to generate and capture value,² decisions about which models work best will depend on how each business model responds to the needs of consumers, partners and other key stakeholders, the level and extent of partnerships and the degree of government support and involvement in the industry.³

The report analysed in detail the multitude of ways in which the private sector can contribute to skills development. The findings reflect that the private sector's involvement is a key requirement towards developing **holistic, inclusive, market-oriented, employer-led and results-oriented** skills initiatives:

- ◆ Towards a more integrated and **holistic** system, the private sector is involved in the skilling value chain at each step, beginning from sourcing and all the way to the post-placement support to trainees.
- ◆ The second feature that private sector's involvement brings is **inclusivity**, i.e. skilling different segments of the society towards market integration. This includes disadvantaged and marginalized groups within communities as well.
- ◆ The private sector also promotes a **market-oriented approach** to skills development. Private sector's engagement ensures that the trainings are aligned to human resource needs in the market.
- ◆ Another benefit of private sector engagement is **securing employers' commitment** to the cause of skills development.
- ◆ The last advantage of private sector involvement is the fact that it helps trainings to become **result-oriented**, i.e. resulting in employment or self-employment. Since the private sector employers are also beneficiaries of the process, their engagement ensures that the trainings drive concrete results.

The success of India's ecosystem will depend on how the private training providers adopt these lessons, and if they will customize and refine their business models to deliver and capture highest value. At this stage, one recommendation for India is to mainstream best practices for the effective management of skills initiatives. This will preserve the work that has already been done to improve and standardize the performance of training initiatives, now and in the future. IICPSD will also take this research as a baseline to formulate a management approach for designing and implementing effective skills development interventions.

The study also poses further research questions and opens up additional areas for discussion. One important area of continued research will be the use of technology and innovation to overcome the challenges faced in the various stages of the training cycle. Some of these challenges are acknowledged in this study, for example, the unwillingness of some individuals to relocate for trainings and placement, the low level of attractiveness associated with vocational jobs, trainees' lack of life skills, etc. India's strong information technology sector has facilitated the development of value-adding solutions. A detailed study to establish the causal linkages would be a fruitful contribution to the literature.

Another area of research is the participation of women in skills training and subsequently in the workforce. Designing all phases of skills development in a gender-sensitive manner would help overcome traditional gender roles and perceptions. Good practices and lessons learned on how to foster skills acquisition for women and ways to change the view that occupations are gender-specific could be identified to the benefit of both researchers and practitioners.

Comprehensive monitoring and evaluation systems can also help differentiate between the skilling models in terms of the quality and success of trainings. At the individual business model level, UNDP's Business Call to Action (BCtA) has initiated the BCtA Impact Measurement Services (BIMS) to support its members to assess their social impact along with their business outcomes. Implementation with Empower Pragati, a BCtA member, will provide insights on the impact of skills development in niche areas such as the informal sector. IICPSD will seek opportunities to mainstream the replicable good practices in monitoring and evaluation of skills initiatives. Furthermore, randomized controlled trials could be used to compare the trainees of a particular business model with control groups consisting of either randomly selected trainees from other programmes or those without training.

Lastly, it should be noted that in order to improve the health of the ecosystem, disseminating innovations is essential. NSDC is indeed focusing on developing the capacity of the business skills ecosystem towards the 400 million goal by 2022. At the same time, in order to facilitate learning and replication of prominent practices in the ecosystem, further case studies should be collected and analysed. Cases from different sectors and targeting specific segments would help identify novel ways and ideas that could contribute to the growth of the ecosystem.

¹ *Ernst & Young and FICCI 2015.*

² *Weiller and Neely 2013.*

³ *Ibid.*

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Youth4Jobs Case Writeshop.



Part Two Case Descriptions

Part Two of this report is available separately on the IICPSD website.

Keystone

NSDC

Large-scale players

Centum WorkSkills India

IL&FS Skills

IndiaCan

NIIT Yuva Jyoti

Niche players

AISECT

B-ABLE

Dr. Reddy's Foundation

Empower Pragati

GMR Varalakshmi Foundation

LabourNet

Youth4Jobs



*Empowered lives.
Resilient nations.*

United Nations Development Programme

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