Case Study

# The economic benefits of vocational education and training in India



# Introduction

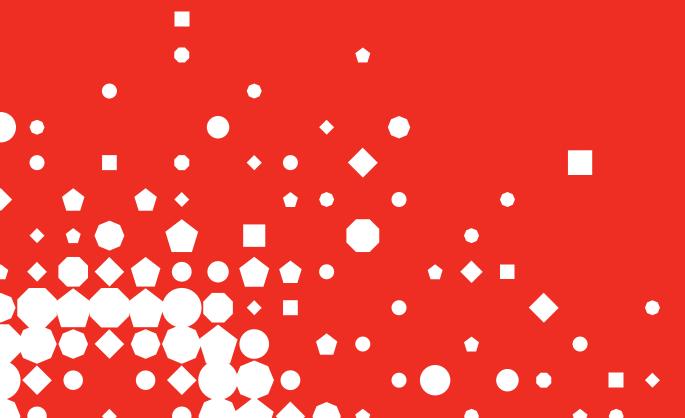
While much of the developed world expects to see its labour force shrink by 4% over the next two decades, India's workforce will increase by 32%. In fact, the government estimates that 365 million people will become eligible for the workforce by 2024. Up to 13 million people will be seeking employment each year. ii

The country is also experiencing a booming youth population. The average age of the population in 2020 will be 29 years old, as opposed to 40 years of age in the US and 46 years of age in Europe. The Indian government recognises these trends as both 'a challenge and an opportunity".iii

It is therefore no surprise that Prime Minister Narenda Modi is placing so much effort on his Make In India programme, which he hopes will turn India into a global manufacturing hub to boost jobs. He also has visions of the young population supplying 'the requisite manpower to all,' helping to fill international skills gaps.iv

If there's one thing standing in the way of Make In India's success, it's that vocational education and training (VET) makes up a very small part of the India's education system. Currently only 2.3% of the workforce have undertaken formal skills training, so it isn't surprising that the government aims to upskill 500 million workers by 2022. In July, it launched the new National Policy on Skill Development – the first large-scale integrated national policy for developing skills and promoting entrepreneurship. Vii

This case study explores the current VET system in India, and the steps that have been taken to expand and enhance it over the past few years. Due to the lack of available, reliable data, there are gaps regarding the potential economic and business benefits of investing in skills, which should be explored at a later stage. But the case study paints a picture of a country that recognises the need to boost the skills of its workforce to secure future economic growth.



# Key findings

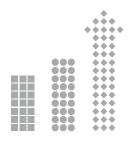
VET is a small part of the education system, with only 2.3% of the workforce having undertaken formal skills training.

India has the largest youth population in the world. Its demographic position means it can provide a surplus of skilled labour, whereas the rest of the world continues to experience skills shortages; as such, there is an active target to skill 500 million workers by 2022.

Key challenges to implementing VET include a traditional bias against vocational occupations and trades, a lack of coherent delivery mechanisms and obsolete curricula.

Current initiatives include the restructure of the skills governance system and improved quality assurance mechanisms; there are also a number of schemes to promote individuals' skills development and incentivise vocational education.

Key findings



## VET: The context

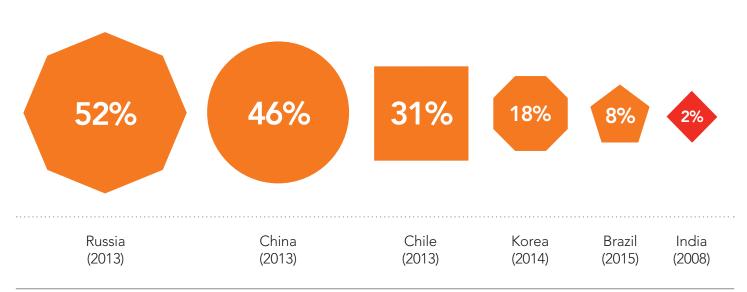
Currently vocational education is a small part of the Indian education system. Although accurate figures are difficult to acquire, one estimate is that only 6.8% of India's labour force has received or is receiving vocational training of any kind. ix This includes formal and informal apprenticeships, as well as classroom-based education. Formal vocational education accounts for only 2.8% of education that is currently being pursued by youth aged 15-29. It is estimated that of the current workforce, only 2.3% has undergone skills training; this is significantly lower than in the UK (68%), Germany

(75%) and Japan (80%).<sup>xi</sup> A further complication is in the informal sector, which constitutes 93% of the workforce; due to its unorganised nature, it is almost impossible to determine the number of skilled workers it includes.<sup>xii</sup>

The relatively small size of vocational education persists despite a continual increase both in Industrial Training Institutes (ITIs)<sup>1</sup> and the number of vocational education places available. Between 2010 and 2012, government investment into classroom-based vocational training remained largely static, but

in 2014 it began to offer grants and scholarships to vocational schools and students who met standards of quality to try to drive higher participation. \*\* Current estimates place the number of ITIs at 12,000 and the number of polytechnics at 3,200.\*\*

## Percentage of students in upper secondary education enrolled in vocational programmes



Most recent available data used for all countries (date stated in brackets) Source: UNESCO, Cebr and The Research Base analysis

## Challenges to implementing VET in India

The draft National Skills
Development Policy (2015),
which supercedes the 2009
policy, highlights a number of
key challenges that exist within
the current skills system in India,
including: xvi

- The 'traditional and cultural bias against non-white collar occupations'
- Divergences between different skills development activities, organisations and policies
- Lack of delivery mechanisms at State level
- Limited mobility between vocational and higher education programmes
- 'Narrow and often obsolete skill curricula'
- Low levels of take up and poor design of formal apprenticeship programmes.

The complexity of the Indian skills system is a significant challenge to successful implementation; there are currently more than 20 ministries and departments with some responsibility for skills development initiatives at the national level, with the same structure replicated at state level. According to the government, this creates a 'multiplicity of norms, procedures, curricula, certifications' and further, the issue that many of these initiatives do not reflect the skills demand from industry. \*vii

Part of the traditional problem in vocational education has been the high-level of government control. Private firms that have provided training have not had their qualifications recognised, resulting in a rigid system lacking the flexibility that can respond to developing needs as seen in the US system. xviii

Until recent years (and particularly until the introduction of Sector Skills Councils), there was little input from employers and industry into the skills system, resulting in little information around supply and demand, and competencies needed by employers. The government is conscious, however, that it is also necessary for employers to provide incentives for skills development; the remuneration offered by employers must be commensurate with the skills individuals possess.xix

Only
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of India's labour force have received or are receiving vocational training of any kind.

Until recently, the system has been **disconnected** from industry, with little business involvement.



## **Current initiatives**

Since the National Skills Development Policy in 2009, there have been a number of initiatives by the Indian government to promote vocational education and training. Over the past five years, it has created the National Skills Coordination Board (reporting into the Prime Minister); the National Skill Development Corporation (NSDC) through the Department of Economic Affairs; a commitment from the Minister of Finance to inject Rs1000 crore into the system's structure; and the creation of Sector Skills Councils.

The introduction of Sector Skills Councils, as overseen by the NSDC, aimed to involve industry in training and labour force growth, to set occupational standards and to accredit qualifications.\*\*

There has also been a drive to improve the quality of training in recent years, and the governance of the skills sector, through the introduction of the National Skills Development Agency (NSDA) as the key coordinating body for skills, and the development of the National Skills Qualifications Framework (NSQF). The NSQF combines academic, vocational and technical qualifications and aims to facilitate the recognition of prior learning, and also progression between levels and types of education.xxi

A number of schemes have been established to encourage skills development, particularly for young people. In 2014, the National

Skill Certification and Monetary Reward (STAR) scheme (operated by the NSDC) provided monetary incentives for the completion of certain training programmes, to an average level of Rs10,000 per individual; the overall target was to upskill one million young people. To date, the scheme reports that 1.4 million candidates have enrolled, with more than 850,000 receiving certification.\*\*\*ii In 2015, the Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme was launched to provide skills to 2.4m people, of which 1m will be under the Recognition of Prior Learning (RPL) framework, where prior and informal learning can be assessed and certified. This will enable workers to move towards employment in the formal sector xxiii

The Modular Employable Skills (MES) scheme (operated by MoLE) focuses on providing short-term training courses in sectors and industries experiencing extreme demand; the training fees incurred by candidates are refunded by the government upon completion of the qualification. \*\*xiv\* Female candidates, and those from scheduled castes, are given a discount in training fees to encourage their participation. \*\*xiv\*









## Overall economy

In response to the 'challenge and an opportunity 'xxvii that the Indian government sees in its booming youth population, the Indian government is attempting to ramp up VET. The National Skills Development Policy in 2009 set the target of upskilling 500 million workers by 2022 to meet the impending skills gap; it is worth noting, however, that the government currently estimates training capacity to be 7 million per year.xxviii A more recent estimate from the Institute of Applied Manpower Research argues that 291 million additional workers are needed for the same period. \*\*\* This is particularly pertinent to the building, construction and real estate industry, the auto and auto components industry, and the textiles and clothing industry.

The lack of skills supply is characterised by the government as a key issue for the economy: 'The country presently faces a dual challenge of severe paucity of highly-trained, quality labor, as well as non-employability of large sections of the educated workforce that possess little or no job skills.'\*\*\* Youth unemployment rates are also concerning. Youth unemployment is significantly higher than the adult population, and the rates of youth unemployment have risen from 6.8% in 2004-05 to 10.3% in 2009-10.xxxi

There is mixed evidence, however, concerning vocational education and training's effect on youth unemployment in India. Several studies have failed to demonstrate the positive impact of vocational training on job prospects, and indicate no discernible difference in wage expectations.\*\*\*\*i A recent study found that 11% of 15-29 year olds who had received vocational education and training were unemployed: lower than the unemployment rate for graduates of general secondary education but higher than the overall employment rate for the age group.\*\*\*\*iii

Academic qualifications are not without problems, largely concerning underemployment after graduation. But being underemployed is often preferable to being unemployed. In 2007, 60% of graduates from Industrial Training Institutes were still unemployed three years after graduation. xxxiv However, this trend is reversing; with studies in 2015 by the World Bank showed that unemployment amongst ITI graduates at 40%. xxxv

Apprenticeships have shown potential to contribute to the economy: an International Labour Organization (ILO) cost-benefit analysis, based on several case studies of small businesses, found that the increased earnings associated with apprenticeships typically outweighed the associated costs.xxxvi

The National Policy for Skill Development and Entrepreneurship (2015) also recognises the potential of the informal sector – which makes up 93% of the workforce – to contribute to the economy. The Policy has the objective of developing and launching a framework for the Recognition of Prior Learning (RPL). As mentioned above, this framework will assess and certify prior and informal learning, supporting workers into employment in the formal sector. \*\*\*\*\* This is the first serious attempt to target the informal workforce through a structured approach, and will be done through the Sector Skills Councils, funded by the PMKVY project.

India needs to skill or upskill 500 million workers by 2022 to meet the impending skills gap.



### **Construction sector**

As in so many other countries, India's construction sector is one that is particularly affected by vocational training. The number of skilled workers needed in the construction industry is expected to top 80 million by 2022.\*\*xviii The Ministry of Labour and Employment (MoLE) has mandated that 20% of the funds collected under the Building and Other Construction Workers Cess Act (BOCW) must be used for skills development activities for the construction workers themselves and their dependants.xxxix

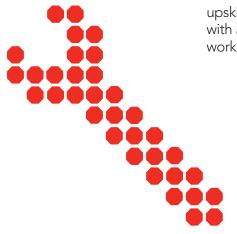
# The impact on skilled labour migration

The development of international partnerships is a key tenet of the government's skills policy, principally due to the potential economic benefits of India's demographics and the prospective supply of skilled labour it could offer to the rest of the world. By 2022, it is estimated that the US will experience a shortfall of skilled workers totalling 17 million; India, on the other hand, will have a surplus of 47 million.<sup>xl</sup>

The government is also conscious of its responsibilities to Indian workers currently residing overseas, currently numbering approximately 14 million and of whom 70% are unskilled or semi-skilled. The proposed government policy towards these workers is to provide access to upskilling schemes and courses with a view to preparing outbound workers for skilled employment.\*

It's not surprising that there has been widespread commitment to support potential Indian migrants from the embassies or high commissions from countries such as Germany, Switzerland, Australia, Canada and the UK. As stated by the MSDE, 'active collaboration is being sought in the area of creation of international mobility through mapping of job roles and development of transnational standards.' xliii

One of the biggest immediate impacts of skilled labour migration is that of 'brain drain' as underemployed graduates of academic programmes emigrate to find challenging jobs with higher wages.\*



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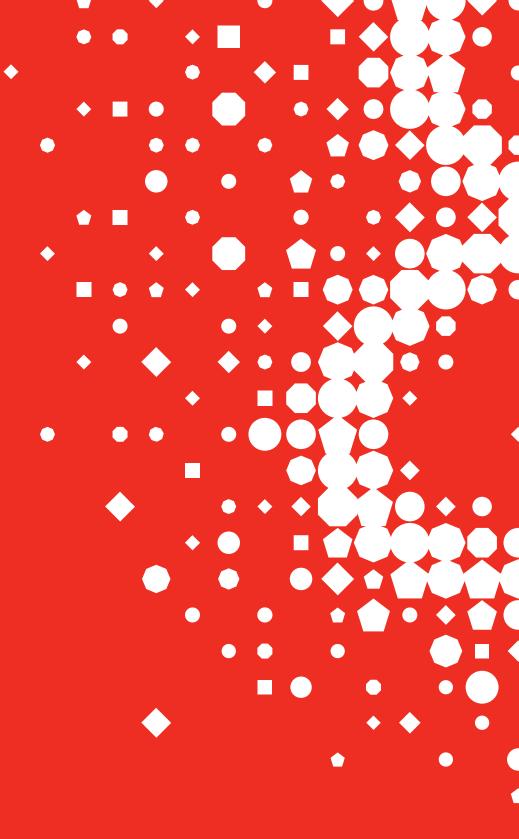
by 2022.

# Conclusion

India is one of the fastest growing economies in the world, but its growth can only be sustainable if it has the skills to drive it forward. As this case study highlights, there is encouraging progress being made – namely the different government-led initiatives to increase investment and incentivise learning.

The challenge for India will be maintaining this momentum. The introduction of employer engagement in the system is a positive step forward, but more needs to be done to incentivise vocational training to adequately reward workers who have undertaken skills development programmes. Additionally, if Prime Minister Modi wants India to provide 'the requisite manpower to all, 'xliv development of international partnerships is key to Indian skills policy to ensure skills supply meets international demand and quality standards.

Finally, there is a lack of available primary data to inform future skills development initiatives, or indeed to highlight the benefits of VET. There is an opportunity for the government, employers and education providers in India to invest in primary research in this area to create a more compelling argument for ongoing investment. New insight could challenge the inherent stigma around vocational education, encourage employer engagement, inspire young people to consider the opportunities VET provides, and ensure India makes the most of the opportunities that lie ahead.





# References

- i https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- ii https://www.bertelsmann-stiftung.de/fileadmin/files/BSt/Presse/imported/downloads/xcms\_bst\_dms\_39337\_39338\_2.pdf p12
- iii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- iv http://articles.economictimes.indiatimes.com/2014-09-28/news/54400422\_1\_prime-minister-narendra-modi-pm-modi-clean-india
- http://www.skilldevelopment.gov.in/assets/images/NationalSkillDevelopmentPolicyMar09.pdf
- vi http://www.skilldevelopment.gov.in/National-Policy-2015.html
- vii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- viii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- ix http://www.axisbankfoundation.org/images/TISS-ABF-Skill-Development-Report.pdf
- x Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M. J., Muravyev, A., Pieters, J., ... Zimmermann, K. F. (2013). Youth Unemployment and Vocational Training
- xi https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xiii Directorate General of Employment & Training (DGE&T), Indian Ministry of Labour & Employment
- xiv April, 2013. The major changes in the scheme are as follows:- i) Introduction of Vocational Education from Class IX. (2014), 1–38
- xv https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xvi NSDA website www.nsda.gov.in
- xvii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xviii Kaushik, K. (2014). Vocational Education in India, 4(1), 55–58
- xix https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xx NSDA website www.nsda.gov.in
- xxi NSDA website www.nsda.gov.in
- xxii http://www.nscsindia.org/ (accessed 13 Nov)
- xxiii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xxiv NSDA website www.nsda.gov.in
- http://www.dvet.gov.in/Schemes/MES.aspx
- xxvi Skills ministry plans to raise \$460 mn from World Bank. (2015), 2015
- xxvii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- $\textbf{xxviii} \quad \text{https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf (biblio style)$
- xxix Institute of Applied Manpower Research. (2013). Estimating the Skill Gap on a Realistic Basis for 2022
- xxx https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf (biblio style)
- xxxi Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M. J., Muravyev, A., Pieters, J., ... Zimmermann, K. F. (2013). Youth Unemployment and Vocational Training
- xxxii Ahmed, T. (n.d.). Labor Market outcome for Vocational Training in India- Does Safety net Theory holds true Tutan Ahmed Indian Institute of Management Calcutta
- xxxiii Agrawal, T (2012) Vocational education and training programs (VET): An Asian perspective
- xxxiv Biavaschi, C., Eichhorst, W., Giulietti, C., Kendzia, M. J., Muravyev, A., Pieters, J., ... Zimmermann, K. F. (2013). Youth Unemployment and Vocational Training
- xxxv Skills ministry plans to raise \$460 mn from World Bank. (2015), 2015
- xxxvi International Labour Organisation (2014), Using Benefit Cost Calculations to Assess Returns from Apprenticeship Investment in India: Selected SME Case studies
- xxxvii https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xxxviii India Vision 2020 Federation of Indian Chambers of Commerce & Industry (FICCI)
- xxxix NSDA website www.nsda.gov.in
- xl https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xli https://mygov.in/sites/default/files/master\_image/Draft\_National\_Policy\_for\_Skill\_Development\_and\_Entrepreneurship\_2015.pdf
- xlii MSDE website http://www.skilldevelopment.gov.in/global.html
- xliii Clemens, M. a. (2013). Skilled Migration and Development (Policy Brief), 1–12
- $\textbf{xliv} \qquad \text{http://articles.economic times.india times.com/2014-09-28/news/54400422\_1\_prime-minister-narendra-modi-pm-modi-clean-india}$
- 1 Industrial Training Institutes are centres of training that provide specialist technical and professional training. They are overseen by the Ministry of Skill Development and Entrepreneurship.

The report was commissioned by the City & Guilds Group. It forms part of a series exploring the economic benefits of investment in vocational education and training in four countries – the United Kingdom, the United States of America, India and South Africa.

It was compiled by the Cebr, using their economic forecasting models, and supported by a literature review developed by research organisations, Reputation Leaders and The Research Base.

**Methodology:** The research was developed by the Centre for Economic and Business Research (Cebr) and research organisations Reputation Leaders and The Research Base.











