

A Study of Challenges and Feasibility of Vocational Training in Germany Replicated in India.

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Abstract:

The recent pandemic has drastically affected World economies and society. Empathy, adaptability, long-term, and perseverance take precedence over rapid growth. The digital economy and small businesses reflect these values. MSMEs (Micro, Small, and Medium-sized Enterprises) are transforming. The world has realized the importance of MSMEs in job creation for the masses, reducing regional imbalances, enhancing exports, increasing the share of manufacturing in GDP, and so on. Skill development is a major enabler in making our MSMEs successful. Systematic Vocational Education and Training (VET) has no long history in India. Under the “Skill India” Mission, the Government is trying to consolidate efforts in this field. The Research Paper looks into the possibilities of learning from other successful examples – especially that of Germany. Germany has an outstanding VET ecosystem which has been benchmarked upon by various countries. This paper explores the reasons for the success of the German system and shortfalls in the Indian system and explores the possibilities to benchmark upon the former. The present study revealed that the Skills India program could replicate certain best practices relating to increasing awareness of VET, inclusiveness of the dominant informal sector, and making certain structural changes.

Keywords: Vocational Education and Training, Skills Development, Dual VET, youth unemployment, informal economy

1. Introduction

The Micro, Small, and Medium Enterprise (MSME) sector, also known as the Small and Medium

Enterprise (SME) sector has a significant role to play in promoting inclusive and regionally balanced growth.

For comparison, SMEs in Germany (popularly known as the *Mittelstand*)⁷ are defined as follows:

German Mittelstand definition as per IfM Bonn effective 1st January 2016

Enterprise size	Number of Employees	<u>and</u>	Sales Turnover per annum (EUR)
Micro	up to 9		up to 2 million
Small	up to 49		up to 10 million
Medium	up to 499		up to 50 million

At the current EUR-INR rate, the SME limit in Germany is equivalent to INR 425 Crore. In India, SMEs¹⁰ are defined as follows:

Ministry of MSME's Revised Classification applicable w.e.f 1st July 2020

Enterprise size	Investment in Plant & Machinery and Equipment (INR)	and Sales Turnover per annum (INR)
Micro	up to 1 Crore	up to 5 Crore
Small	up to 10 Crore	up to 50 Crore
Medium	up to 50 Crore	up to 250 Crore

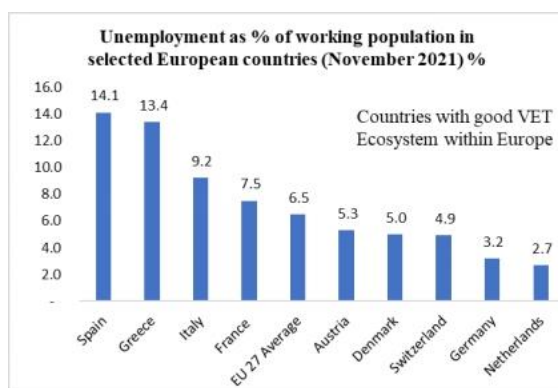
SMEs form the backbone of both German and Indian economies. However, in India, the MSME sector struggles for a variety of reasons. As against that, SMEs in Germany continue to be strong and set a benchmark to follow - for developing as well as developed nations alike.

One of the major reasons for the success of German SMEs is the quality of their workforce. And this is primarily due to the high quality of vocational training imparted to its young people. The vocational education and training (VET) structure and ecosystem in Germany are driven by socioeconomic factors like the motivations and responsibilities of different stakeholders, and funding and resources invested by different stakeholders.

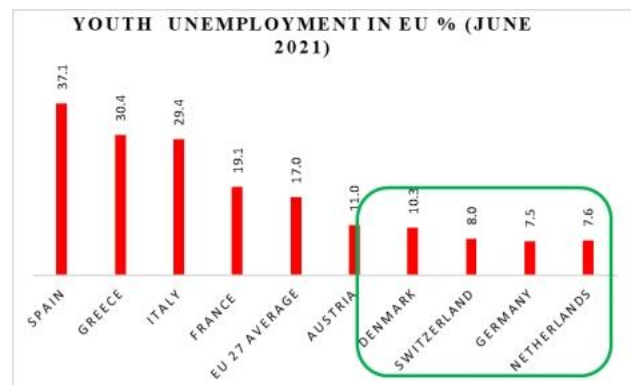
Germany has a very long history of guilds or trade leagues tracing back to the 12th century when craftsmen's training and qualification were standardized in a country-wide format. Though the predominant trades were different then - metalworking, tannery, shoemaking, tailoring, etc. the training practices, qualifications, and practicing privileges were shaping up in the western part of the world.

VET and Employment generation in Germany

Denmark, the Netherlands, and German-speaking countries – Germany, Austria, and Switzerland are amongst the top countries with traditions of vocational training and education. The results are obvious from the following charts we created based on very recent statistics from Statista ^{20,21}.



[Chart 1: Correlation between Good Vocational Education system and Employment]



According to the Cedefop²⁶ document **Vocational Education and Training in Germany (2020)**, the labour market situation improved for all age groups and for all qualification levels in Germany. 2019 unemployment rate was 3.2% (EU-27: 6.7%). This was an all-time low rate for the reunified country. The unemployment rate for young people in Germany was 5.8% compared to the EU-27 rate of 15.1%. In 2019, 71.9% of people were employed in the Service sector, 26.9% in the production industry, and 1.2% in agriculture.

The same report also discloses the vast difference between people who are vocationally educated and those who are not. In 2018, 17.4% of people without a vocational qualification were unemployed – almost five times more than those with a vocational qualification (3.4%).

The importance of VET in Germany compared to other EU countries is again highlighted in the same document.

Cedefop Public opinion survey on vocational education and training in Europe: Country-specific report (Germany)

VET Indicators for Germany

for the last available year (2017) were as follows:
[Scale: EU average =100, Above 100 means, higher than the EU-27 average]

Employees participating in on-the-job training	140
Enterprises providing training	111
Employees of SMEs participating in VET courses	112
VET Expenditure as %age of GDP	102
Public Expenditure per student	127
The employment rate for VET graduates	113

VET and Innovation

Germany has not been known for radical discoveries lately but is very well known for its **incremental innovation**. These incremental innovations are important in **building a competitive advantage for a country**. *"It is generally agreed that basic innovations are generated by researchers and scientists at universities. In addition, there are so-called "incremental innovations" – the small, everyday process improvements that are not produced by great inventors but are rather the result of thoughtful problem-solving by the people who implement and test new processes and products daily. Such incremental innovations are achieved when well-trained, skilled workers not only perform their assigned tasks but also identify, describe and solve problems in innovative ways, in a process that leads to steady improvement."* (Bertelsmann Report 2013)⁴.

India has been a late starter in Industrialization. The British model of trade and commerce in India was based more on the exploitation of natural resources from the country and the dumping of finished goods. However, as we aspire to become an industrialized economy, enhancing the efficiency and effectiveness of all factors of production is indispensable. To increase the wealth of the nation, and distribute it fairly, the most important resources, viz. human resources - have a big role to play. The much-talked-about "demographic dividend" of India can be used only when we can provide work to our youth. And for that skills development based on vocational education and training is going to play a dominant role. The present Government has recognized the gap, and the need to focus on skill development and has launched the Skill India program.

2. Objectives of the Study

- To gain a detailed understanding of the German Vocational Education system including dual VET
- To gain a brief understanding of India's evolving skills development ecosystem
- To identify the challenges of India's skills gap

- To benchmark success factors from the German VET ecosystem for replication in India depending upon relevance and impact.

3. Review of Literature

Some efforts to learn from German VET with an Indian perspective have been done by the **Bertelsmann Think Tank** in its 2014 report titled **Vocational Education and Training Reform in India**. (Bertelsmann report 2014)⁹

Before that for the same Bertelsmann Think Tank, **Prof. Dr. Dieter Euler** also carried out a study in 2013 focusing on whether **Germany's dual vocational training system: a model for other countries?**⁴

Nayana **Tara** (Indian Institute of Management Bangalore), Sanath **Kumar** (Indian Institute of Management Bangalore), and Matthias **Pilz** (University of Cologne) published a research paper in 2016 in the Online Journal of Technical and Vocational Education & Training in Asia - **Quality of VET in India: The case of Industrial Training Institutes**⁷. They studied in depth the quality of ITI's being the major technical VET institutes in India. They mention that – *"...it is important to remember that in India, more than 90 percent of workers are allocated in the unorganized sector."* They further elaborate on the dilemma faced by the employers – *"A corollary is that only about two percent of the workforce has undergone any formal vocational qualification. As a consequence, it is clear that the employers seeking workers must either focus on a relatively small group of more theoretically qualified ITI graduates or on unskilled assistants who cannot accept challenging tasks."* A lot has happened since the study was conducted. The focus on skills development has increased since 2014, but the gap between the actual situation and aspirations remains large.

While commenting on VET in Indian subsidiaries of German companies in his 2016 research paper titled **Training Patterns of German Companies in India, China, Japan, and the USA**¹⁶ (ISSN: 2197-8646) Michael **Pilz** observes *"This apprenticeship training involves a year's practical training within a company. This training is not governed by a fixed curriculum but takes the form of on-the-job training (OJT) provided by the heads of specialized departments who have, however, received no special instruction in providing it. The state subsidizes the trainee's wages and the cost to the companies of providing training. There is no final examination or assessment on completion of the practical training."* It was also observed that the focus on training was on job-specific skills. No systematic training material was used but mostly product presentations served as technical training material. The content was more task-specific rather

than giving the interns a universal view of the topic. Trainers were generally senior colleagues/supervisors having experience but with no specific training background.

At the level of research into VET systems, there has been fruitful cooperation between individual Indian universities and the German Research Center for Comparative Vocational Education and Training (G.R.E.A.T.), based at the University of Cologne (<http://www.great.uni-koeln.de/en/great/>).²²

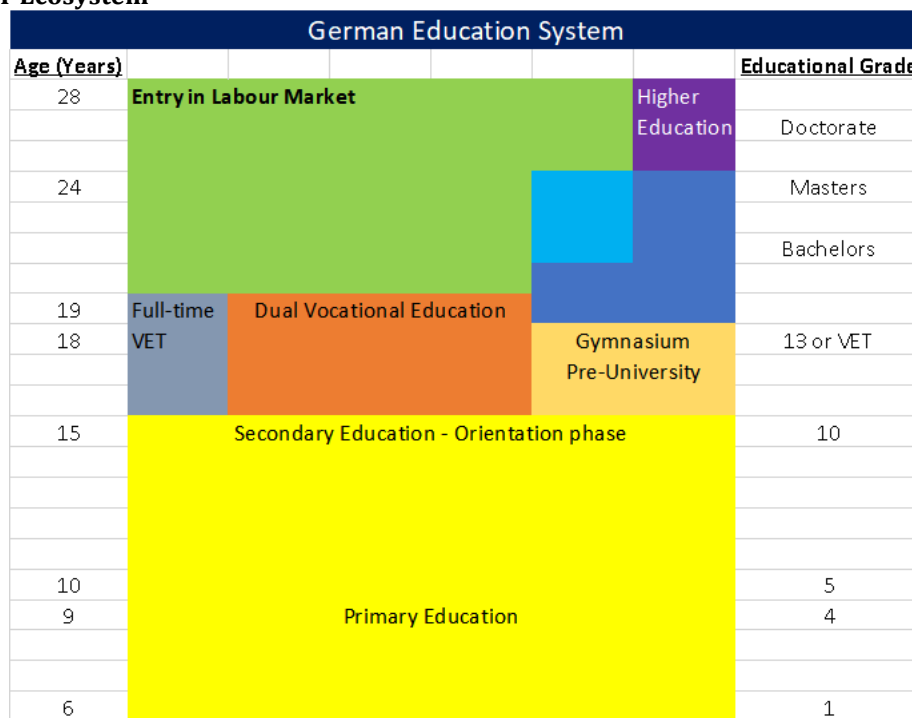
However, the skills of today and tomorrow have further evolved during these transformational times. The world of work is changing radically. The geopolitical situation has changed, demanding more cooperation between Germany and India to reduce dependence on single-source manufacturing. We

need to continuously keep on exploring the possibilities of learning from the best practices.

4. Research Methodology

A semi-structured exploratory interview methodology was used to achieve the objectives of the study. Extensive research was conducted by way of the review of existing literature. This review included the study of research papers but also reports published by the German Government, the Indian Government, as well as think tanks like Bertelsmann Stiftung and Konrad Adenauer Stiftung. This review was further consolidated with detailed interviews with experts in vocational education and training. The interviewees included experts from industry, associations imparting VET, practitioners from industry, chambers of commerce, etc.

5. German VET Ecosystem



[Chart 2: A simplified view of the German education system]

German Vocational Education and Training is a highly successful system with a long historical and social background. The model has survived the turbulent 20th century and continues to help the industry to maintain its competitiveness, and the society maintains high living standards and peace and harmony.

At any given point in time, around 1.32 million trainees are getting trained in 325 recognized professions. That means 5% of the whole workforce makes up of trainees. Around 500 000 new trainees join the VET every year to undergo an apprenticeship consisting of 2 to 3 ½ years. 74% of them are directly taken over upon completion of the training program. Though full-time school-based training exists, the

major part of it is conducted as "Dual VET". 70% of the training in dual VET takes place at the workplace under real work conditions. Trainees participate in the day-to-day business activities and are paid a reasonable salary. 30% of lessons happen in vocational schools. 2/3rd of the content is occupation-related and 1/3rd are general subjects and skills.

5 a) Representation of stakeholders' interests

GOVET is the German Office for International Cooperation in Vocational Education and Training based in Bonn, Germany. GOVET is funded by Federal German Government and tries to export the

successful German VET model abroad. (<https://www.govet.international/en/>).²⁴

The primary stakeholders in any VET ecosystem are businesses or employers, trade unions or workers, and the Government. To make the ecosystem successful, their interests must be taken into consideration. These interests can be at odds at times. Nonetheless, a detailed and ongoing dialogue amongst the stakeholders is essential for establishing a lively and sustainable ecosystem that will benefit the industry as well as workers, and the nation as a whole.

Businesses want qualified workers to be productive and stay competitive. Employers want competent and loyal employees. German employers are also keen on providing in-house VET which makes the future workers already a part of the production processes and teams.

Workers' / apprentices' interests on the other hand are represented by national and sectoral trade unions and workers' councils at the plant level. Employees want decent employment and stable income which can help them maintain good living standards. Apprentices also want high-quality VET as well as training in soft skills. The rights of trainees need to be protected – they should not be used as cheap labour. Continuous supply of trained employees is in the interest of society and the nation. It provides gainful employment to the youth and maintains social peace and coherence.

GOVET summarizes the pooling of interests collectively and collaboratively as follows: "Employer organizations, unions, and government articulate different collective interests in VET in a highly organized and competent way. Strong stakeholders jointly commit to VET. This commitment is based on shared principles: We want to jointly steer VET. We share the responsibility for VET. VET should be practice-oriented, coherent, and of high quality. VET standards need to be demand-driven and up-to-date. VET is the precondition for competitiveness on the global market." (<https://www.govet.international/en/>)²⁴

5 b) Stakeholders' role and responsibilities in dual VET

Stakeholders jointly shape the system. There is a strong commitment from all the stakeholders. Cooperation, conciliation, and communication are promoted in this co-decision process.

The federal government develops legal and policy frameworks following regulative interests. **Federal Institute of VET (BIBB)** is the lead institute. The

National Committee (or "the Board") is equally represented by the members of employers' organizations, workers' unions, the national Government, and the Local Governments. This Board forms consensus-driven VET policy at the national level and advice the Government.

Chambers of Commerce play a vital role in VET. Chambers keep track of training companies, monitor and check "in-company" training, train "in-company" training personnel (company employees), and organize examinations.

Unions and employers' associations negotiate training regulations. They decide the training content, and trainees' remuneration, and monitor "in-company" training.

As the third major stakeholder, **Government** shapes the legal framework and provides the resources for "school-based" training. Another very important feature of the German VET system is the comprehensive VET research carried out through the Federal Institute of VET (**BIBB**). This research helps keep education content qualitative, relevant, and up-to-date.

5 c) Development of Standards for VET

Employers identify new tasks and qualifications in the companies. Unions, employers' associations, and the Government negotiate and pass new training standards, moderated by the BIBB. Then Government adjusts framework curricula to the newly-defined training standards. The adopted standards are fixed in training regulations ("in-company" training) and framework curricula ("school-based" training). The standards thus developed are valid and compulsory - nationwide.

5 d) Execution of training

Training, of on an average three years, commences once the **Training Contract** is signed between the employer and the trainee. The Contract contains clauses like duration, probation period, remuneration, leave, working hours, rights, and duties of both the parties.

Typically, four days a week the apprentice is trained at the company. In-company training is very hands-on, in actual business operations. The trainees are considered long-term members of the organization, are assigned duties, and are relied upon. This in-company training is guided and imparted by certified corporate trainers. Typically, school-based training takes place at the vocational school 1-2 times a week where trainees learn about the theory related to their domain and general educational topics. Vocational schools are run by the **state governments**.

At the end of the training, the final examination takes place through a multi-stakeholder examination board. Board consists of representatives of employers, employees, and vocational school teachers. The exams are organized by the **Chamber**. The trainee is awarded a **Dual VET Certificate** by the chamber upon successful completion of the examination.

5 e) Funding of VET in Germany

German VET system is well-financed thru' a regulated public-private system. **Companies** bear the costs of **in-company training** and pay the **trainee remuneration** as regulated by collective agreement. This often gets compensated by the productivity gains coming from the apprentices. Businesses are among the main contributors to the German VET. The others are – Federal Government, State Governments, and local authorities.

5 f) Factors making the VET effective and successful

Full-time “dual” training - approximately 70% of in-company training is in **actual business operations**. 30% of training is in vocational schools with domain theory, plus education on general topics and skills. **Chambers** act as competent bodies and monitor in-company training. Also responsible for examinations.

The VET system has historically grown over centuries with guilds and league traditions of the Middle Ages. The system is **modernized continuously** to suit the new requirements of the industry as well as to respond to major disruptions through digitization. With the prevailing of the dignity of labour, the system is **accepted in society**. Almost half of the German school-leavers prefer vocational training over academic qualifications. It must be mentioned, however, that there is an increasing trend toward academization.

VET system **benefits all stakeholders – the trainees, companies, and Government**. The trainees get quality education which is recognized throughout the country. The system also provides a provision to reskill and upskill the employees. Training within work processes makes them employable directly upon completion. In-company training familiarizes them with the equipment, procedures, work environment, organization, etc. 93% pass the training successfully. 74% are absorbed directly at their apprenticeship company upon completion. 96.4% of Dual VET graduates are employed (GOVET/BIBB Data Report 2019 from **Federal Statistical Office**)⁵. The trainees also get a reasonable remuneration during their training period. Employers, get a continuous supply of

qualified employees who have learned in the real work environment and within their organizations.

The pragmatic VET system maintains the training hands-on, flexible, relevant, and up-to-date. The **institutionalized research** carried on by BIBB shapes the training according to the demands of skilled labour, makes it adaptable, and also brings in **newer concepts of pedagogics** in the training.

Clarity about the **roles and responsibilities** of the stakeholders makes it easier to reconcile conflicts of interest if any. Strong institutions and active participation by the stakeholders are the key factors in the success of VET.

Famous German **Mittelstand** – Small and Medium-sized Enterprises play a vital role in the success of VET. But also, skills development influences the success of the Mittelstand. About 83% of the vocational training takes place with the Mittelstand companies. This adds to the significance and competitiveness of the Mittelstand in international markets.

Qualified **VET staff** – within the companies and at the vocational schools- is also the basis of the system's success. The VET system is a major cause of the industrial strength of Germany. It involves all relevant social partners as well as regulators in discussions, deliberations, negotiations, conflict resolution, and consensus-building. This makes the system solid, sustainable, and resilient.

India's challenges with vocational education and training

India's challenges start with the **very low acceptance of vocational training** in the country - by businesses, the population, and the Government. This phenomenon is not limited to India. But in many Asian countries, it is often assumed that vocational training is exclusively undertaken by people who have been rejected by more prestigious non-vocational institutions or who cannot afford academics. **De-academization** of the education system is necessary. The lack of **dignity of labour** is based on our ancient caste system - still deep-rooted in certain pockets. During our research, we found many authors observing the very low reputation of VET in India – especially relating to trades involving manual activities. Social opinion about manual work and VET needs to change.

Extremely low levels of **formally trained skilled resources** - as per the survey by the Labour Bureau for 2013-14, only 6.8 percent of persons aged 15 years and above have received or were receiving vocational training, of which only 2.8 percent were through formal channels while four percent was through the informal system. In contrast, the skilled

workforce in other countries is much higher – Korea (96%), Germany (75%), Japan (80%), and the United Kingdom (68%). (FICCI-KAS Report 2015).¹⁸

Skilling **infrastructure is grossly inadequate** despite the implementation of the “Skill India” initiative. India needs to create physical and human infrastructure even in rural and semi-urban areas.

ITIs or **Industrial Training Institutes** are the major instruments of imparting technical VET in India. These ITIs are, however, suffering from a chronic lack of funds, facilities, infrastructure, equipment, lack of suitably qualified staff, technical instructors, and lack of vision. An overhaul of the ITI’s essential. This has already started happening by way of public-private partnerships. Corporates are adopting ITIs and making them more effective. But it needs to be accelerated.

90% of Indian business activities take place in the **informal sector**. Hence slightly above 2% of Indian workers are formally skilled. The formalization of MSMEs has started with various Government schemes lately – Udyam/Udyog Aadhar. MSMEs are offered preferential treatment if they are registered with the Government. But it is happening at a slow pace.

Even on-the-job training takes place in India in an informal way – through seniors on the job. Such training is not certified formally and may lose value while changing jobs as there is no structure for the **recognition of prior learning (RPL)**. **Reaching out to the informal sector** for VET remains a big challenge. Accessibility to it or other institutes of vocational education in **rural areas** remains a challenge.

The National Skill Development Policy 2009 of Government focuses on short-term, industry-relevant courses. However, different trades necessitate different **tenures of training**. While concentrating on the shortening of the training period, the **quality of the training** often gets sacrificed.

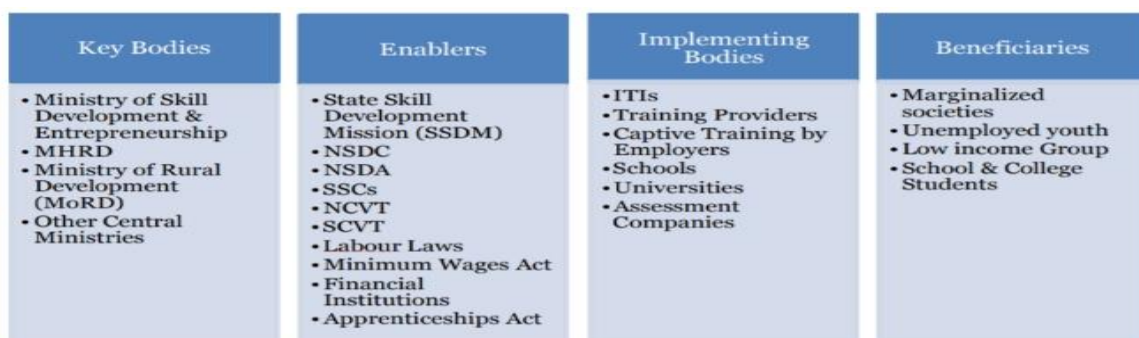
German dual VET blends practical and theoretical education perfectly and provenly. Theoretical instructions still dominate Indian VET.

The lack of sufficient collaboration between industry and VET institutes is another major challenge. This collaboration is essential for the content's quality, relevance, and modernness. Since VET is not part of major education, India does not have dual VET like in Germany. On-the-job training is often an add-on provided through internships to academic students. Students, as well as universities, fail to take the practical component of internships seriously. Industries also do not invest enough in interns as the internships tend to be of very short duration (often just two summer months). Companies are also **unwilling to invest in skills development**. Often the candidates leave the company which trained them and join another company – or even a competitor.

German VET is in **pull mode**. Though there is an infrastructure to support it, it does not require any major adjustments as the stakeholders – industry, workers, Government, and society - are convinced about the necessity as well as benefits. As against that, Skills Development in India is induced externally – it is in **push mode**, with separate ministries and organizations to support it. This makes the efforts a bit complex to implement and slows them down.

India’s VET Ecosystem

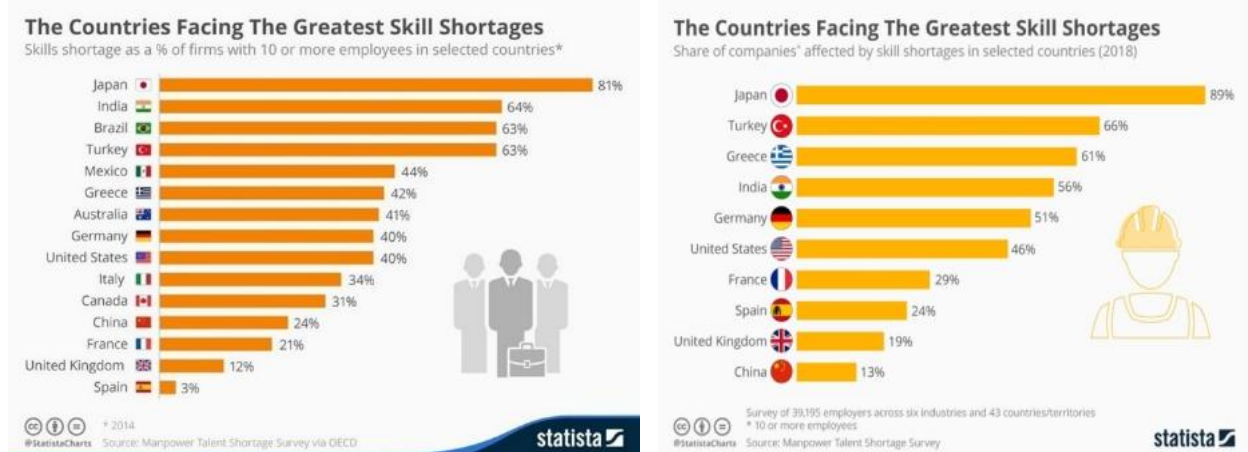
India did not have a proper concept of systematic and formal skills development in the past. Since the launching of the Skill India programme by the Government in 2015, a lot of activities have been initiated. Due to India’s federal structure, several strategy-making, policy-administration, and implementation agencies are getting formed at the Central-State-Local levels. The complexity of the structure is obvious from the below chart.¹⁹



Source: FICCI-KPMG report “Skilling India”

[Chart 3: An overview of the Indian Skill Development ecosystem]

Results of Skill Development efforts in India from 2014 to 2018



[Chart 4: Positives effects of the “Skill India” initiative are clearly visible]

Skills shortage is felt for two major reasons. One is – demographic development, and two is – the lack of an efficient VET ecosystem. Demographic development in India has been more favourable than in any other major economy. And yet, in this list by Statista²³, in 2014 India was ranked 2nd amongst the countries facing the greatest skills shortages with 64% of firms with more than 10 employees. With the Skill India initiative, awareness and efforts started showing results. Four years down the line, India ranked 4th on the list with 56% of firms claiming severe skills shortage. And yet 56% remains a high number.

Discussion and Conclusions

- (a) *Awareness-enhancing measures*
- (b) *Inclusiveness of informal sectors*
- (c) *Structural improvements*

The previous decade has undergone drastic changes so far as the world of work is concerned. These changes were driven by financial upheavals, new and evolving geo-political world order, increasing women’s participation in gainful employment, rising middle class, demographic changes, urbanization, rapid digitization, and globalization. Lately, the pandemic has again disrupted the world of work. For India, many changes have been aspirational – industrialization, digitization, the young population, e-commerce, and the use of digital modes of payment, etc. In order to sustain these changes and the improvements they brought; skills development is a must.

The study conducted by FICCI and Konrad Adenauer Stiftung of Germany¹⁸, suggested India focus on creating capacities and infrastructure, integration, mobility, transition, and work on a greater industry linkage. Skilling India Report of KPMG and FICCI¹⁹ mentioned that “While we have seen growing awareness and sensitization among employers about

training and upskilling, these are still early days and a wider consensus needs to be built.” They also expressed concern over Employer participation – without which the initiatives will not have sufficient impact.

The successful German VET model is something to emulate. It cannot be replicated as it is due to differences in social, cultural, and economic structure, and a different history of industrial development. But good parts of it can be considered in our skills development model. During the implementation of NEP 2020 (New Education Policy)¹², the focus should be on skills development and vocational education, and German VET provides a good framework to benchmark upon.

Suggestions for improvement in the Indian VET environment based on German experience - in three categories.

(a) Enhancing awareness about VET and creating a favourable atmosphere

As has been observed over and over again, vocational training is not the preferred option for Indian school-going children. Vocationally trained people are more suitable for entrepreneurship than academics. It should be highlighted that employment is not just limited to jobs in Information Technology, but there are enormous opportunities in skill-based professions in the manufacturing industry, trade & logistics, and agriculture as well.

A campaign should be undertaken by the Government to highlight the dignity of labour. All type of work – including manual – is equally essential, and has a place in society. The Government is already doing efforts under Skill India with its “Kaushal Bharat-Kushal Bharat” campaign. However, those efforts further need to be intensified. The campaign should be carried out on national television in prime time by way of short edutaining

clips. In Germany, the VET is deep-rooted in society. And yet the Government reaches out to school children, especially during their orientation phase, informing them about vocational education possibilities and post-VET job opportunities. We can benchmark some of their practices.

(b) Improving *inclusiveness* by focusing on areas neglected erstwhile

Indian economy is yet massively dominated by the **informal sector**. Be it the MSME sector with over 63 million MSMEs in the country providing 110 million employment or agriculture on which the livelihood of 58% of Indians is dependent.⁶ In India, there hasn't been a practice of systematic VET even in the organized sector. Hence our formal VET education remains at a dismal below 3% level.

Efforts need to be increased drastically in the industrial sector – especially **MSMEs** by way of public-private partnerships.

Considering the huge population that is dependent upon **agriculture**, efforts are needed in enhancing the reach of Skill Development in the agricultural sector – farming, fishing, logistics, food-processing, and other agro-based and allied sectors. Digitization of education – which snow-balled massively during the Covid-19 pandemic – can play a big role here.

Structural changes in the VET ecosystem

List of Abbreviations

(In alphabetical order)

BIBB	Bundesinstitut fuer Berufsbildung (Federal Institute of VET)
CEDEFOP	European Centre for the Development of Vocational Training (Centre Européen pour le Développement de la Formation Professionnelle)
EU-27	European Union – 27 Countries
FICCI	Federation of Indian Chambers of Commerce & Industries
GIZ	Deutsche Gesellschaft fuer Internationale Zusammenarbeit (German Development Agency)
GOVET	German Office for International Cooperation in Vocational Education and Training
GREAT	German Research Center for Comparative Vocational Education and Training
IfM	Institut fuer Mittelstandsforschung (German SME Agency)
ITI	Industrial Training Institute
KAS	Konrad Adenauer Stiftung
MSME	Micro, Small, and Medium-sized Enterprises
NEP	National Education Policy
OJT	On-the-Job Training
SME	Small and Medium-sized Enterprises
VET	Vocational Education and Training

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Continuing the discussion on the informal sector, **Recognition of Prior Learning (RPL)** becomes very important in an economy like India. This will increase the flexibility and mobility of the employee and allow him/her to demand fair remuneration.

Need to start **moving toward a Dual VET System** in a phased manner. Introduce it to certain vocational trades and observe the results before widening the scope. A major difference between Germany and India was observed to be related to **ensuring employee loyalty**.

Vocational education needs to be **integrated with general education** in schools and colleges at the secondary level. There should be seamless facilitation between VET and higher education. If students chose to get trained vocationally first and then pursue academic education, they need not fear losing out.

Training of trainers is another area where India needs a lot of improvement. There is a need to collaborate with German development agencies/chambers like GIZ (German Agency for International Cooperation) and IGCC (Indo-German Chamber of Commerce) to set the structure for the training of the VET staff – in vocational schools and in factories – which is the fundament of any good VET system. Let industry play a major role in deciding about the **content creation** and **design of curricula**. This will make the training syllabuses qualitative, relevant, dynamic, and modern.

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