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Opportunities and Difficulties for Vocational Education and Training in India from an External Viewpoint

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ABSTRACT

As a result of India's rapid economic growth and apparent skills gap, formal vocational education and training (VET) is becoming more and more modernized. For over ten years, the Indian government has placed a high priority on skill development, leading to the creation of state policies and associated initiatives aimed at improving and developing a system beset by both quantitative and qualitative problems. This article discusses policies and initiatives to restructure and improve formal VET in India, as well as providing an overview of the system's main pillars. Lastly, the primary obstacles and opportunities for the industry's continued growth are emphasized from various systemic angles.

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Introduction

In India, various actors have shown a special interest in vocational education and training (VET) for over ten years. International organizations and nations that provide economic development and foreign aid have been active in this area, attempting to promote skill development through various programs and strategies [1]. Concurrently, the Indian government has demonstrated a strong interest in formal VET-based skill development, aiming to leverage the vast potential of a youthful and continuously expanding populace [2]. While India is frequently cited as one of the most promising nations among the five major emerging economies in terms of economic growth, there are still significant obstacles to be overcome in the areas of poverty, infrastructure, and education. The government is pushing for further development of the economy, which has shown impressive growth rates since liberalization in the 1990s.

To address the issue of "skilling" a significant portion of the population, a significant investment in formal vocational training and education is thought to be necessary. However, the current system is of poor quality, has significant issues with numbers, and neither employers' nor students' needs are met [3,4]. The Government of India (GoI) began modernizing the formal VET sector in 2004 and has since made multiple attempts, focusing on both qualitative and quantitative challenges [5].

Formal Education and Training in India

Numerous institutions and stakeholders are involved in the Indian educational and training system. Over 260 million students attend the 1.5 million schools that exist in India at the moment [6]. The Right of Children to Free and Compulsory Education Act (RTE), passed by the GoI in 2009, ensures that all children between the ages of six and fourteen receive free education. India's average number of years of schooling has increased dramatically since the 1990s, but it is still far less than that of other developing nations like China, at 6.5 years (UNDP, 2019). The RTE covers elementary education, which consists of primary education through grade 8, and secondary education, which can include school-based VET conducted in institutions [2].

It is predicated on the amount of school fees assessed based on parents' financial capabilities. Although India has increased its educational spending in recent years (British Council, 2019), the nation still has significant issues with primary and upper primary education [6]. Ten years ago, the Confederation of Indian Industry (CII) reported that less than 30% of public-school students in grade five had basic numeracy skills, and only half of them could read (CII, 2009). However, improvements have resulted from investments in education; for instance, primary school dropout rates have significantly decreased in recent years, and the literacy rate among children aged 5 to 15 has increased to over 70% [7]. However, even though the government clearly prioritizes education and training, progress is either sluggish or stagnant. Significant differences exist between the federal states and the rural and urban areas [7]. There are significant issues with literacy and basic numeracy skills. Due to the aforementioned shortcomings of public education, parents who are able to pay for tuition send their kids to private schools, which have an overall share of 31% [6].

Governance in Education and Training

Vocational education and training are two distinct categories in the Indian education and training system. The higher education system includes vocational education, which includes courses beginning in secondary or upper secondary school and colleges that grant vocational diplomas. These latter include establishments that are typically associated with postsecondary education and that offer vocational diplomas in lieu of academic degrees, such as polytechnic colleges, nursing colleges, or teacher training

colleges [6]. Because of this, the GoI refers to them as "stand-alone institutions" (MHRD, 2018a), placing these colleges in the middle of academic and vocational education [8]. There is also a distinction between technical and vocational education, the former being provided by polytechnic colleges. A distinct division of duties among governmental authorities is another goal of the division of education and training. The Ministry of Education (MoE) and the All India Council for Technical Education (AICTE), which oversee the various institutions offering vocational education, are in charge of vocational education at the national level [6]. The AICTE's primary duties include planning and development, quality assurance and development, and regulation and upkeep of technical education norms and standards [9]. These include curriculum and syllabus design for colleges, as well as the acknowledgement and accreditation of the institutes. State-level vocational education programs are run by comparable authorities, with state-specific department names varying.

Vocational Education and Training

Depending on the kind and level of courses offered, vocational training may begin in grade nine and continue into post-secondary education (International Centre for Technical and Vocational Education and Training [UNEVOC], 2018). It refers to training at the certificate level in a range of craft skills and has nothing to do with higher education.

The Craftsman Training Scheme

The GoI's 1950 introduction of the CTS, which offers the most seats for industrial trade training, makes it the most significant program [10]. Depending on the course and occupation, courses at governmental or private Industrial Training Institutes (ITI) last anywhere from six to twenty-four months. There are currently 13,912 ITIs with a 2,960,000-seat capacity [10]. 11,751 ITIs are privately financed and managed (MSDE, 2018), with the NCVT accrediting the majority of them [10]. 126 vocations are covered by the courses; 73 are categorized as technical and 48 as non-technical. The CTS program places a strong emphasis on practical instruction, which makes up 70% of the training. Depending on the vocation, entrance requirements can range from a successful completion of grades 8–12. If they pass the exam after finishing the course, the NCVT may award students with a National Trade Certificate [10]. The Crafts Instructor Training Scheme (CITS), which is offered in 12 ATIs as well as other ITIs and training facilities connected to the NCVT, provides teachers at ITIs with a year of training [10].

Apprenticeship Training

The Apprentices Act provides for various programs that offer apprenticeship training. It employs a dual training approach, combining training received in institutions and at the workplace. The government-designated vocations as well as "optional trades" that employers may suggest if certain conditions are met are covered by the Apprenticeship Training Scheme (ATS), which provides a range of training in trades and businesses [10]. The Apprentices Act was used to launch the program in 1961, and it was designed to structure informal training in accordance with industry standards and satisfy industry demands. Since institutional training was thought to be insufficient to produce the entire set of practical skills required, the main objective was to involve employers in VET and use industrial workplace settings for practical training [10]. A few times in order to adjust the program to stakeholder requirements, the legal regulations for apprenticeship training have been modernized; the most recent update was made in 2014 [10, 11]. Depending on the type of training offered, students may enroll in the program at any age as long as they have successfully completed classes 8 through 12. Two distinct groups of apprentices are the focus of schemes: On the one hand, the ATS offers six- to four-year-long training programs under the name "Trade Apprenticeship." Training programs prepare students for careers as welders, tailors, secretarial assistants, and weavers. A broad range of 259 jobs are available in 39 different categories [11]. The Trade Apprenticeship Program offers 360,000 seats.

Policies and Initiatives - Skill Agenda for the Better?

The 1990s economic liberalization led to the rise of new industries such as the IT and service sectors, while manufacturing and engineering declined in importance. This resulted in a shift in the demand for skilled workers from more traditional trades to new occupational qualifications [5]. Such traditional trades were primarily covered by the traditional vocational training system, which also frequently concentrated on specialized skill sets [1]. It became clear that the government needed to act in order to address the qualitative and quantitative issues facing the nation. Beginning in 2006, the GoI began to develop initiatives to modernize formal VET, partially in collaboration with the private sector. The National Skills Qualification Framework (NSQF), the Apprentices Amendment Act, and the establishment of the MSDE, which assumed the duties of the former Ministry of Labour and Employment, were among the various initiatives and programs that followed the first National Policy on Skill Development [12]. The first policy was updated in 2015 as part of the Skill India Initiative and became the National Policy on Skill Development and Entrepreneurship [13]. The objective of Skill India is to train 400 million people by 2022, which is a minor reduction from the previous target of 500 million people [5]. The organization does this by combining various schemes and programmes. The government's skills development policies are examined in more detail in the section that follows, which focuses on a few selected initiatives.

Fostering Private–Public Partnerships

Encouraging the private sector to participate more in formal VET was a key objective of the first skill agenda, which aimed to rapidly raise the proportion of workers with formal skills (King, 2012) [3]. A public-private partnership called the NSDC was established with that objective in mind [5]. Under the direction of the MSDE, it oversees the Sector Skill Councils and training facilities connected to the NCVT. Its primary responsibility is to organize and lead initiatives, including the formation of Sector Skill Councils and private sector participation in VET. In addition to developing curricula and certifying trainers, the corporation serves as the government's information system [10]. At the moment, the NSDC is also involved in own skill training and development schemes, that work parallel to the existing CTS and ATS schemes [10].

National Skill Qualification Framework

The National Vocational Qualification Framework was created in 2009 with assistance from the World Bank, succeeding the National Policy on Skill Development, which served as the initial qualification framework [4]. Its primary goals were to facilitate international comparability of India's educational and vocational credentials and to advance the acknowledgement of knowledge and skills obtained in non-formal contexts. Furthermore, the framework was created to organize and incorporate the wide range of credentials and programs offered by various states and VET providers in India. Under the MHRD, a second National Vocational Education Qualification Framework was established with the goal of integrating pre-vocational content into secondary

and postsecondary education as well as recognizing vocational qualifications within the educational system. The NSQF, which was introduced in 2013, has replaced both frameworks in an effort to establish internationally recognized standards, allow recognition of prior learning, including skills acquired in informal settings, and provide comparability and mobility between vocational and general education [14]. For the CTS scheme and in secondary and higher secondary education (PSS Central Institute of Vocational Education, 2019), updated curricula are currently regularly shaped in accordance with NSQF standards.

Schemes Targeting Informal Settings

Approximately 60% of India's economic output is produced by the informal sector, where over 90% of the working population is employed [3]. The government has introduced a number of programs to support the development of skills in non-formal contexts, primarily in the form of short-term courses designed to impart fundamental skills or improve employability for individuals with inadequate or no basic education. In India, the federal government or state governments may sponsor and arrange informal education, but it is not included in the official systems of general education or vocational training and education. Numerous ministries and state-level organizations oversee an overwhelming and perplexing array of programs (UNEVOC, 2018). Through programmes, these initiatives concentrate on underprivileged groups and rural areas. In 2007, the Skill Development Scheme (SDI) was introduced as part of the New Skills Agenda. It offered short-term courses that, in certain circumstances, resulted in a certificate accepted by NCVT [10]. The Modular Employable Skills (MES-SDI) program, which was created especially for informal settings and launched in 2008 (Unmat, 2013), was a well-liked SDI initiative. Its goal was to offer short-term units and flexible training delivery to both current employees and school dropouts. 1,400,000 people received training through the program up until 2013, when it was deemed successful. The industry gave it positive feedback and it was positively evaluated in terms of acknowledging prior learning for those who were already employed. However, the program encountered the same difficulties as official VET in India, including: no connection between training and employment, missing employability potential, lack of awareness of the programme; and a high barrier in terms of formalities that come with the scheme (Unmat, 2013). The overall SDI scheme is now closed, evidence of a certain discontinuity that can be traced in many areas of educational planning and governance in India [10].

Main Prospects and Challenges

The low status of Vocational Education and Training (VET) in India is a serious systemic issue. In Indian society, general education—especially academic education—is highly valued, reflecting a sentiment that is shared throughout the rest of Asia [15]. In Indian society, manual labor is still stigmatized, and education is seen as a privilege that is only available to the highest castes. During British colonization, the Anglo-Saxon model of academic education was introduced, emphasizing general education while ignoring the native apprenticeship models that were already in place and could have served as a foundation for future models of vocational training. These days, the difference in education and training is evident in terms that are commonly used and clearly define the different types of jobs: "white-collar jobs" and "blue-collar jobs."

For these reasons, it is easy to see why parents and students do not support initiatives like the "vocalization of education," a state-funded program that was established in 1988 and renewed under the Action Plan for Vocational Education. The initial program offered over 150 different upper-secondary courses with the goal of promoting skill development. In contrast to the number of students concentrating on general education, there are currently 9,583 schools offering vocational courses with more than one million students. Moreover, the implementation of the new program would not permit a significant increase in the enrollment in vocational courses. The status of vocational training in Indian society is even worse, which has serious implications for the system itself and the opportunity for improvement [15]. Vocational education, as part of higher and tertiary education, may be perceived as "the poor cousin" of academic education. Adverse selection is severely impacted by the current state of VET in India since students who meet the requirements will almost always choose the academic route. To enable comparability across various qualifications, skills, and educational pathways, the NSQF was put into place [16-23].

Conclusion

Even though the Indian VET system has been the focus of significant modernization efforts for more than ten years, it still faces significant quantitative and qualitative challenges. The aforementioned summary of the system's key components, policies, difficulties, and potential outcomes is not all-inclusive, but it does demonstrate the need for a thorough approach to be adopted in order to develop the system. A purely quantitative approach, coupled with a lack of political will and leadership, is detrimental to the long-term growth of a viable VET system. The intricacy and ineffectiveness of plans and initiatives are exacerbated by the complex governance structure. The states' autonomy over the administration and policies of education aggravates this situation. Plans are frequently time-limited and project-based.

Nonetheless, the system's ongoing shortcomings and difficulties should not be ignored, nor should the concerted efforts to make improvements or the initial achievements in significant areas be disregarded. It is necessary to further establish accessibility to education and, by extension, VET, including the formalization of informal learning. Increasing the system's legitimacy and acceptance is essential to the advancement and development of Indian VET. Even though cultural perceptions of the problem might take time to shift, improving the quality of VET is essential to making it more appealing and in demand. The future shape of the private sector's role is still up in the air, but employers' and industry's increased participation is thought to be advantageous. Finally, sufficient teacher preparation and provision, along with respectable working conditions appropriate for the profession, are critical components for the expansion and caliber of training. Initiatives must be planned on a long-term basis because improving important systemic areas requires a multilevel approach.

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