“Vocational Education and Training in India“

Term paper

Graduate-Seminar
“Advanced Industrial Countries and Emerging Market Economies: India“

Submitted by: Silvia Wucher
xxx
xxx
xxx

Matriculation number: xxx

Course of studies: Master of Science in Business and Human Resource Education

Instructor: Prof. Dr. Andreas Falke

Semester: Summer term 2012

Date: September 10, 2012
Contents

List of Illustrations and Tables ................................................................. 4
Abbreviations .............................................................................................. 5

I. INTRODUCTION ....................................................................................... 6

II. A SHORT PORTAIT OF THE INDIAN EDUCATION SYSTEM WITH A FOCUS ON VET .................................................................................. 7

1. Overview of the Indian education and VET system ........................................... 7
   1.1 VET in the Indian education system – some general information .............. 7
   1.2 The formal VET sector ............................................................................ 8
   1.3 The non-formal VET sector .................................................................. 11

2. VET in the context of deficits in primary and secondary education .......... 12

III. SIGNIFICANCE OF VET FOR THE INDIAN ECONOMY AND SOCIETY ........................................................................................................ 14

1. Significance of VET for inclusive and sustainable development .............. 14

2. VET demand of the Indian economy and current supply ...................... 16
   2.1 A short portrait of the formal and informal sector of the Indian economy with a focus on employment ......................................................... 16
   2.2 VET demand of the formal/organized sector and current supply ............ 17
   2.3 VET demand of the informal/unorganized sector and current supply .... 19

3. Social recognition of VET ....................................................................... 20

IV. QUANTITATIVE AND QUALITATIVE CHALLENGES TO THE INDIAN VET SYSTEM ...................................................................................... 21

1. Expanding the VET capacity in India .......................................................... 21

2. Improving the poor employability of VET graduates .................................. 23
   2.1 Evidence of the poor employability of VET graduates .......................... 23
   2.2 Reasons for the poor employability of VET graduates and ideas for improvement ................................................................. 24
3. Improving the unfavourable regulatory environment ........................................ 27
   
   3.1 Granting greater operational and managerial autonomy to VET institutions ................................................................. 27
   
   3.2 Implementing an effective quality assurance mechanism in the VET sector ................................................................. 28
   
   3.3 Increasing private sector participation in VET ........................................ 29
   
V. CONCLUSION .................................................................................................................. 29

Appendix ................................................................................................................................. 31
List of References .................................................................................................................. 33
Declaration .............................................................................................................................. 36
List of Illustrations and Tables

**Figure 1:** Structural framework of main agencies in the education and skill development sector in India................................................................. 9

**Figure 2:** Nationwide enrolments by grade and gender in 2008.......................... 13

**Figure 3:** Current and projected employment in selected high-growth sectors (2006 and 2022)................................................................................. 18

**Figure 4:** Manufacturing firms offering in-service training.............................. 22

**Figure 5:** Activity status of persons receiving formal vocational training in 2004-05 .. 23

**Figure 6:** Types of skills possessed by trainers in government, private and NGO training institutions.............................................................................. 26

**Table 1:** GDP, overall employment and informal employment shares of various sectors, 2007-2009...................................................................................... 16
Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AICTE</td>
<td>All India Council for Technical Education</td>
</tr>
<tr>
<td>BFSI</td>
<td>Banking, financial services and insurance</td>
</tr>
<tr>
<td>e. g.</td>
<td>for example</td>
</tr>
<tr>
<td>FICCI</td>
<td>Federation of Indian Chambers of Commerce &amp; Industry</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross domestic product</td>
</tr>
<tr>
<td>ITC</td>
<td>Industrial Training Centre</td>
</tr>
<tr>
<td>ITES</td>
<td>Information technology enabled services</td>
</tr>
<tr>
<td>ITI</td>
<td>Industrial Training Institute</td>
</tr>
<tr>
<td>JSS</td>
<td>Jan Shikshan Sansthan</td>
</tr>
<tr>
<td>NCVT</td>
<td>National Council for Vocational Training</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-government organization</td>
</tr>
<tr>
<td>NSDC</td>
<td>National Skill Development Corporation</td>
</tr>
<tr>
<td>NSS</td>
<td>National Sample Survey</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PPP</td>
<td>public-private partnership</td>
</tr>
<tr>
<td>VE</td>
<td>vocational education</td>
</tr>
<tr>
<td>VET</td>
<td>vocational education and training</td>
</tr>
<tr>
<td>VT</td>
<td>vocational training</td>
</tr>
<tr>
<td>UGC</td>
<td>University Grants Commission</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

India is known for its large and young population. According to the Indian government (2009b, 180) more than half of India’s population, correspondingly about 600 million people, are younger than 25. In order to make use of the development potential India’s human capital endowment provides (often referred to as the “demographic dividend”), it is necessary to adequately educate the youth (Government of India 2009, 1; King 2012, 665). Against this backdrop the Indian vocational education and training (VET) sector in recent years has increasingly attracted the attention of the Indian government, entrepreneurs and scientists.

This paper provides an overview and analysis of the Indian VET system. The main part of the essay is divided into three parts. In the first section the reader is given a general overview about the Indian education and VET system to form a basis for further discussions. The second section draws attention on the significance of VET for the Indian economy and society. A special focus is placed on the relationship between VET and the structure of the Indian economy (III.2). The characteristics of the formal and informal sector frequently receive little attention in literature, although they have considerable influence on the sustainability and success of VET. Quantitative and qualitative challenges to the VET sector are discussed in the third part.

The paper aims to raise awareness for the importance of reform and to build an understanding for the complexity of challenges that the VET sector in particular and – in a broader sense – the Indian government, economy and society is facing. Furthermore, it intends to show interdependences between the demand for VET and the structure of the Indian economy and to analyze the impact of government regulations on the provision of VET.

Methodologically, the paper draws its information from an analysis of available literature1. Due to the complexity of the Indian VET system and the diverse situations in the different states and sectors, the examinations in this paper are inevitably limited to certain principal aspects which are considered to be valuable for providing an overall idea about the system and major challenges.

---

1 Until recently Indian politicians and researchers almost exclusively focused on India’s system of general education and in this primarily on elementary and higher education (Panagaiya 2008a, 432 ff.; Agarwal 2009, xxiv; Dubey 2009, 131 ff.). Consequently literature and data on VET in India is relatively rare. Moreover, the socio-economic National Sample Survey (NSS) – conducted by the National Sample Survey Organization, subordinated to the Indian Ministry of Statistics and Programme Implementation – does not separately show figures for VE and VT which is the reason for the high number of estimations in respect to the subject. Information and data on training in the informal sector is particularly scarce (World Bank 2006, 4; OECD 2011b, 466 ff.).
II. A SHORT PORTRAIT OF THE INDIAN EDUCATION SYSTEM WITH A FOCUS ON VET

1. Overview of the Indian education and VET system

1.1 VET in the Indian education system – some general information

First of all the term VET will be briefly defined to ensure a common understanding. Whereas internationally a combined consideration of vocational training and education is common\(^2\), in India vocational education and vocational training have traditionally been provided separately. Vocational education (VE) in India is part of the upper secondary school system and focuses on developing general competencies associated with particular occupations. Vocational Training (VT), on the other hand, is provided outside the general school system in industry or training institutes, involves little or no theoretical content and aims to impart the skills and knowledge required for a particular job function or a trade (Agrawal 2009, 191; Froumin et al. 2007, 136; NSDC 2009b, 10). Accordingly, the term VET is applied when referring to both parts of the system.

The Indian education and training system can basically be divided into the three career paths “general/academic” (white boxes), “technical” (grey boxes) and “vocational” (blue boxes). In order to illustrate the following explanations on the structure of the Indian education and VET system a schematic depiction is provided in the appendix of this paper\(^3\). It should be noted that the education system – due to the colonial period – is greatly influenced by the Anglo-American model. Similarly, many occupations that demand VET in Germany require academic education in India (Männicke 2011, 17).

Academic careers are very popular and well-respected in the Indian society but with about 11% of an age-group pursuing higher education this is not currently an option for the majority of young people (Agarwal 2009, 192).

When discussing VET in India one should distinguish between the formal and the non-formal VET sector. Both sectors will be discussed in the subsequent sections (II.1.2 and II.1.3) and are depicted in the illustration in the appendix. The formal sector comprises legally defined VET pathways that lead to certificates or diplomas acknowledged by the government. The formal sector frequently attracts more attention in literature, politics and research than the non-formal. Taking into consideration the number of 260 million young people aged 15-29, the present capacities of the Indian VET sector

---

\(^2\) In Germany, for example, the combined dual system of vocational education and training is prevailing.

\(^3\) It might be helpful to consult the overview at various points in the course of the paper.
on a whole are disproportionally small. The Indian government (2009a, 3) estimates that the overall capacity for skill development provided by public and private institutions amounts to around 3.1 million persons annually.

1.2 The formal VET sector

As previously mentioned, formal VE and VT in India are two distinct paths (Froumin et al. 2007, 136). The initial entry point into vocational education is at secondary level (see appendix). To pursue VE, the student needs to opt for the two-year VE-stream at higher secondary level, which is usually offered at the same institution as the general stream. Unlike in the VT-sector there are hardly any private schools that offer the vocational stream, as it is not considered to be lucrative enough (Nilekani 2008, 326). Diversified VE-courses in disciplines such as agriculture, commerce, engineering, home science or health intend to prepare pupils for working life and self-employment (Goel 2009, 176; World Bank 2006, 12). VE, however, is not popular among students with only about 400,000 students, corresponding to 3% of all students at higher secondary level enrolled in the vocational stream in 2006 (Agarwal 2009, 210 f.). This means that less than 1% of students who entered Grade 1 received vocational education (Government of India 2009b, 181). The low level of acceptance of the vocational stream results in a poor capacity utilization of about 40% (World Bank 2006, 12). Only students who perform poorly in Class 10 are said to choose this path. The overwhelming majority, who is still attending school at that level, strives to enter higher education (Agarwal 2009, 210 f.; World Bank 2006, 12).

After completing elementary education Indian teenagers can enter vocational training in order to become a skilled or semi-skilled worker or craftsman. Pursuing VT, however, does not enhance the student’s level of general education (Goel 2009, 173). The Indian VT-market is very diverse and fragmented. The formal VT-sector comprises trainings in Industrial Training Institutes and Centers and apprenticeships (see appendix) (World Bank 2006, 20; Männicke 2011, 17). The distinction drawn in literature between VT and technical education is somewhat contradictory. Indian authors and the Indian government frequently consider three year diploma courses offered at polytechnics (which are an element of the technical career path – see appendix) to be part of the VT-sector (e.g. Government of India 2009b, 180; Agarwal 2009, 207) whereas in international literature the narrower categorization is frequently applied (e.g. World Bank 2006, 20). Education at polytechnics aims to prepare students for middle level or supervisory positions that form a link between engineers and skilled or semi-skilled workers.
(Goel 2009, 177 f.) and therefore can be classified as a higher level than VT. The most typical institutions which provide VT are Industrial Training Institutes (ITI) and Industrial Training Centers (ITC). ITIs are financed and managed by state labour ministries whereas ITCs are owned, financed and managed by private organizations or NGOs. Both types of institutions are accredited at national level by the National Council for Vocational Training (NCVT) (see figure 1) or on state level (World Bank 2006, 20).

The approximately 5,400 public and private institutions have a capacity of roughly 780,000 seats and offer qualifications in 60 engineering and 50 non-engineering trades. Of these, engineering trades are far more popular. Though again, it is said that the existing capacities are largely unutilized (Government of India 2009b 180 f.; Agarwal 2009, 207). There is also the possibility to undergo an on-the-job training in the form of an apprenticeship in one of 254 industries. However, due to very small numbers (about 158,000 apprentices) which are the result of industry reservations, this pillar of the formal VT-sector is negligible (Agarwal 2009, 207 f.).

The separation of VE and VT is also reflected in the distribution of responsibilities at national level. Figure 1 shows the main national agencies involved in education and VET policy formulation. VE is part of the responsibility of the Department for Secondary Educations which is a body of the Ministry of Human Resource Development, whereas the formal VT-sector falls within the competence of the Ministry of Labour and Employment. In 2009 in the course of an extensive reform initiative targeting the VET sector the National Skill Development Corporation (NSDC) was established (see also III.1). It is a non-profit public private partnership (PPP) that aims to initiate and coordinate private sector participation in the provision of VET (Government of India 2009, 5, 10).

Figure 1: Structural framework of main agencies in the education and skill development sector in India

Source: FICCI 2010, 8.
Education in general is the concurrent responsibility of the central and state governments. The implementation of VET, however, is largely the responsibility of the state governments (Goel 2009, 172; Short 2008, 4). For this reason, in addition to the agencies depicted in figure 1, various state authorities are involved in providing VET. The organization and allocation of responsibilities is not consistent across the country (OECD 2001a, 175). According to World Bank data (2006, 9) students in the formal VET sector cover less than 5% of the costs in the form of fees, meaning that the central and state governments are the major financiers of formal VET.

As an interim summary, what can be noted is that the formal Indian VET sector overall is very small and largely focused on engineering trades (Agarwal 2009, 235). The small size of the formal VET sector becomes particularly obvious when comparing it to other emerging countries whilst taking into account the differences of the prevailing systems (World Bank 2006, 15). However, even at national level the capacity bottleneck of the VE and formal VT-sector is evident: Taken together all the formal VET capacities, nearly 1.6 million young people are able to benefit from some kind of vocational training or education. Against the figure of 260 million people in the age group of 15-29 (NSS 2006, 23) this clearly is inadequate. Additionally, the formal Indian VET sector seems not to be highly regarded by students or employers. This becomes apparent in the boom of alternatives on the private training market and the underutilization of VET courses. Further details and reasons for the bad reputation of the system will be examined in more detail in section III and IV.

Societal perceptions (see III.3) and the deficits of the VET system (see IV.2) contribute to the tendency that many Indians favour higher education over VET programmes (Goel 2009, 177 f.). Since the country experienced a remarkable expansion of engineering colleges and degree programmes, engineering diploma holders from polytechnics are increasingly substituted by engineering graduates (Agarwal 2009, 207). The fact that there is little vertical mobility from vocational and technical career paths to academic programmes contributes to the higher attractiveness of academic education (Agarwal 2009, 207). Thus, VET cannot be considered in isolation from other elements of the education system. Primary and secondary education, which form the foundation for VET, are therefore discussed in the section II.2.

---

4 Sum of capacities: VE-streams, Polytechnics, ITIs, ITCs and Apprenticeships.
5 The 61st Round of the National Sample Survey (NSS) on Employment and Unemployment was conducted from July 2004 to June 2005.
1.3 The non-formal VET sector

As a consequence of deficits in the formal VET sector the very diverse non-formal VET-market has been flourishing. Private sector delivery of VT, especially by non-profit organizations, has increased significantly in the past decades, thereby responding to both student and industry demand (Short 2008, 6). Yet, there is hardly any credible data available regarding the quantity and quality of training opportunities offered in this market as privately owned and managed institutions are frequently not accredited (World Bank 2006, 20). According to Agarwal (2009, 208 f.) most of the private VT-providers offer short, non-formal and non-standard courses in IT-related and non-engineering trades like travel, tourism, hospitality, media, fashion or clinical research. Overall, it is said that the private training sector offers more demand-driven market-oriented disciplines. In turn tuition fees are charged (OECD 2011a, 167). Private VET providers commonly charge higher fees than public institutions, especially when operating without financial support from the government (so-called unaided institutions). Accredited private VET providers in India, however, are only allowed to operate as non-profit entities and have to be run as charitable societies, trusts or non-profit companies. The fees charged by private institutions are set by state committees at a cost-covering level. Other regulations concern the admission of a certain number of disadvantaged students whose seats are cross-subsidized by the other trainees (OECD 2011a, 165, 167).

As a further consequence of the deficits in provision of VET by the government, large companies like Infosys, Tata Group or Reliance set up extensive and high-quality in-house training centers to ensure their talent-supply. These in-house training options, however, are mainly targeted at higher level and academic professions (Short 2008, 4, 12; Männicke 2011, 20) and are limited due to the structure of the Indian economy. According to a World Bank report on VET in India (2006, 61, 63) less than 17 % of all manufacturing establishments in India provide apprenticeships or in-house trainings – with companies in sectors that require more sophisticated technologies more inclined to train employees than enterprises in the textiles, garments, leather products, food processing or automobile parts industry. The fact that over 90 % of all Indians are employed in the so called “informal sector” has significant effects on the VET market which will be discussed in more detail in section III.2 (Panagariya 2008b, 22). Still, there are some VET initiatives of state and central ministries and NGOs that explicitly target workers in the informal sector such as Community Polytechnics, Community Colleges or the Jan Shikshan Sansthan Programme – to name the three biggest initia-
Vocational Education and Training in India

tives (Agarwal 2009, 209 f.; World Bank 2006 45 f.). To provide the reader with a rough idea of these programmes two examples, Community Polytechnics and the Jan Shikshan Sansthan Initiative, are briefly explained. In 675 Community Polytechnics with a capacity of about 450,000 places people are trained within their communities. The courses of three to nine months duration are similar to those provided in upper secondary schools in the vocational stream but with a focus on employment opportunities in the informal sector. No formal entry qualifications are demanded but students do not achieve a special qualification or certificate. The 122 Jan Shikshan Sansthas (JSS means Institute of People’s Education) with a capacity of about 1.5 million seats target newly literate workers and unskilled or unemployed young people in rural and urban areas by offering 255 types of vocational courses. In 2001 over 60% of all participants were women. JSSs are managed by NGOs but operate under state supervision (World Bank 2006, 45 f.). Some other agencies also provide a number of smaller development programmes for the informal sector that include VET elements (Froumin et al. 2007, 132). Taken together the offers targeted at the informal sector are small capacity-wise.

On top of that they often lack coordination and do not provide skills that are actually relevant for work or self-employment in the informal sector (World Bank 2006, 45) (see also III.2.3 and IV.2.2.).

2. VET in the context of deficits in primary and secondary education

Since 2001 primary and secondary education in India has increasingly received attention (Dougherty/Herd 2008, 5, 8). With the 93rd Constitutional amendment education became a fundamental right for children between six and 14 in India. The government also increased the allocation of funds for education to 19% in its “eleventh plan” (Nilekani 2008, 186 f., 324; Panagariya 2008a, 433). The Right to Education Act passed in 2009 specifies the right of all Indian children between six and 14 years and entitles them to at least eight years of schooling (Mehrotra 2012, 65).

When looking at India’s basic education, four measures are frequently paid attention to: literacy rates, enrolment and completion figures and quality measures. Overall, India has achieved improvements in recent years in fighting illiteracy and increasing enrolment rates, however the country still faces serious challenges especially with respect to quality of education. Whereas the overall literacy rate stood only at 66.3% in 2005, literacy among 10-14 year old children had risen to about 90% (Dubey 2009,

---

6 It is beyond the scope of this paper to discuss the different programmes in detail.
7 Focuses of governmental action and the respective budget allocation in India is organized through five year plans which are developed by the Planning Commission. The current (eleventh) five year plan covers 2007 to 2012.
144, 7 f.). However, there is considerable variation across the states. The highest illiteracy rates were recorded in economically weak states such as Bihar, Uttar Pradesh, Jharkhand and Rajasthan (Dougherty/Herd 2008, 7; Dubey 2009, 144 f.).

Although, school enrolment has also improved (Panagariya 2008a, 435), India is still among the countries with the largest number of school dropouts in the world (Nilekani 2008, 172; Ganguly/Mukherji 2011 101 f.). The chart below clearly shows that enrolment is sharply decreasing in the course of children’s school education, that enrolment correlates with gender and that just a minority receives secondary education (grade 6 and above). Moreover, researchers (e. g. Dougherty, Herd 2008, 10 f.; Dubey 2009, 145) point out that enrolment data paint a too positive picture due to high student absence rates. It has to be noted that again there is remarkable variation between urban and rural areas (where drop-out rates are usually higher) and states (Dougherty/Herd 2008, 11; Dubey 2009, 146). Furthermore, especially at secondary and higher level education there is a strong correlation between household income of a family and school attendance as in rural areas children are frequently encouraged to work and contribute to the household income (Siddhu 2011, 397 f.; Dougherty/Herd 2008, 11).

Figure 2: Nationwide enrolments by grade and sex in 2008

A reason for the high dropout-rates frequently brought forward is the bad quality of teaching. A survey conducted by the NGO Pratham in 2006 and quoted by Dougherty and Herd (2008, 8 f.) showed that about half of all children aged 7-14 could not accomplish simple reading and mathematics tasks, which indicates low educational achievements. Similar worrying surveys about the quality of basic education are referred to by Panagariya (2008a, 435) and Froumin et al. (2007, 130). According to Dougherty and Herd (2008, 6) the bad performance of elementary education cannot solely be attributed to the level of expenditure on primary and secondary education as in 2002 it was similar
(3.8 % of GDP) to that in other emerging countries. The factors most frequently mentioned for the low educational quality are a high level of teacher absenteeism, a high pupil-teacher ratio, weak performance incentives for teachers, insufficient teacher training, poor teaching conditions, rote learning and poor infrastructure (Männicke 2011, 15; Dubey 2009, 146; Dougherty/Herd 2008, 9 f.; Froumin et al. 2007, 130). Parents try to circumvent quality deficits in government schools by sending their children to private schools. However, cheap private schools hardly perform better (Nilekani 2008, 180). Overall, educational performance on elementary level is weak with growing disparities between good and low-quality schools and achievements across states (Froumin et al. 2007, 130; Ganguly/Mukherji 2011, 101 f.). This contributes to the uneven economic development of the country.

For the VET sector the deficits in primary and secondary education cause a shortage of suitably qualified students who can pursue VET. Froumin et al. (2007, 130) identify secondary education, and especially upper secondary education, as the bottleneck of the education system, which holds back the expansion of the VET and higher education sector and consequently economic growth. Trainers and teachers in the Indian the VET sector repeatedly complain that students have insufficient basic knowledge and that they cannot compensate the deficits. Thus the deficits are passed on to employers who in turn complain about the poor employability of VET graduates and in most cases cannot remedy the shortcomings either (Männicke 2011, 19).

III. SIGNIFICANCE OF VET FOR THE INDIAN ECONOMY AND SOCIETY

1. Significance of VET for inclusive and sustainable development

It is widely acknowledged that human capital – in form of education – is one of the most determining factors for sustaining growth (Goel 2009, 171; Dubey 2009, 140; Nilekani 2008, 173). Additionally, the positive effects of education on various social, environmental and political indicators such as health, ecological awareness or political participation are evident (Dubey 2009, 132, 138). However, there is no consensus among scholars which level of education is sufficient for sustainable development of a society. It is argued, that countries should primarily invest in primary education as it offers higher returns to the society and individuals than secondary, VET or higher education (Mehrotra 2012, 65 f.; Dubey 2009, 140). But according to research carried out by Tilak (2007, 436, 443) attention should also be devoted to post-elementary education as elementary education on its own does not provide sufficient skills to ensure employ-
ability and thus sustainable livelihoods. Dubey (2009, 141) reconciles the different standpoints by stressing that the relative importance of elementary and post-elementary education depends on the stage of development of the economy. The paper agrees with other researchers (e. g. Dougherty/Herd 2008, 15) that India’s economy, which will be described in more detail in section III.2.1, is in a stage that benefits from investment in post-elementary education, including VET.

As Indian businesses face intensified competition both in their home and in global markets, issues like high productivity, the ability to assure high quality standards, the application of modern technologies and innovations – which are highly correlated with the level of education of the workforce (Froumin et al. 2007, 132) – become more important (Männicke 2011, 13). This especially applies to the formal and organized sector of the Indian economy. But also the informal sector can profit from public and private investments in VET. VET can accelerate the transformation of the economy that is currently dominated by an extensive informal sector with low productivity and low wages to more formal employment in manufacturing (Dougherty/Herd 2008, 7; Agarwal 2009, 242; Panagariya 2008b 10). Froumin et al. (2007, 129) argue that skill development (VET) is not only beneficial for high-skill sectors but also for labor-intensive industries. This is because technological developments can only be applied and exploited by the workers who have basic technological literacy and key competencies.

The Indian government has recognized the importance of VET for the development of the economy and launched an ambitious policy initiative in 2009 to promote VET and overcome the deficiencies of the sector. The “National Skills Development Initiative” aims to increase the current VET capacity of about 3.1 million people per year to 15 million annually. By this means the government claims that India can train and educate – the promotionally effective number – of 500 million skilled workers until 2022. Proclaimed goals of the initiative are the improvement of individuals’ employability and their standard of living, the countries’ competitiveness and the attraction of investments in the skill development sector. Two key elements of the extensive policy are the development of a National Vocational Qualification Framework that should improve mobility and transparency in the VET sector and the promotion of public-private partnerships and industry participation in the provision of VET (Government of India 2009a, 3 f., 8). However, According to Männicke (2011, 19) about three years after the project launch hardly any improvements in the formal VET sector are evident. He ar-
gues that the established decision-makers are unwilling to leave behind bureaucratic structures and thereby maintain the status quo and the existing constellations of power.

2. VET demand of the Indian economy and current supply

2.1 A short portrait of the formal and informal sector of the Indian economy with a focus on employment

A country’s VET system must be aligned with the structure of its economy in order to fully exploit the positive effects VET can have on the economic development of the nation. Generally speaking, the Indian economy is characterized by a small formal and a large, low-productive informal sector. According to Panagariya (2008b, 43) the informal sector comprises “unincorporated household units (that are) engaged in the production of goods and services with the primary objective of generating employment and income for the household concerned”. When talking about employment the term “unorganized sector” is also frequently applied. It refers to firms that employ fewer than ten people and therefore are not subject to most of the labour legislations that ensures protection of employees. Conversely, companies with more than ten employees belong to the organized sector (Panagariya 2008b, 29 f.). The table below provides a picture of the Indian industry and the respective employment shares. It becomes apparent that 55 % of the workforce is engaged in low-productivity agricultural work that is almost exclusively in the informal sector. But even in manufacturing and services the share of people in informal employment is still high. All in all, this means that of the total number of 450 million people in employment in 2008 roughly 420 million earned their living in the informal sector (NSDC 2009a, 8). Of these ca. 40 % are employed by small enterprises, while about 60 % are self-employed (NSDC 2009a, 7). In most rural areas unorganized employment is dominating.

Table 1: GDP, overall employment and informal employment shares of various sectors, 2007-2009

<table>
<thead>
<tr>
<th>Industrial Category</th>
<th>Output Share of GDP</th>
<th>Employment Share</th>
<th>Share of Informal Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>17.8</td>
<td>55.0</td>
<td>99.1</td>
</tr>
<tr>
<td>Manufacturing, mining, utilities and construction</td>
<td>27.0</td>
<td>19.0</td>
<td>89.9</td>
</tr>
<tr>
<td>Services</td>
<td>55.3</td>
<td>25.0</td>
<td>86.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>92.0</td>
</tr>
</tbody>
</table>

Source: Self-complied using data from OECD 2011a, 9 and NSDC 2009a, 9f.
Regarding India’s economic development Panagariya (2008b, 19 f.) points out that the transformation of the economy did not follow a typical growth pattern. In contrast to other emerging countries India’s economy is still characterized by a high share of agriculture and a relatively low share of manufacturing. Growth has been achieved in capital-intensive and skilled labour-intensive organized sectors of the economy (such as telecommunications, automobiles, software or pharmaceuticals) but not in the organized low-skilled labour-intensive manufacturing industry. This is mainly due to the prevailing regulatory environment that discourages enterprises in the manufacturing sector to grow and become part of the organized sector (Panagariya 2008b, 27).

Consequences of these economic structures are directly reflected in the job market. Agarwal (2009, 185) argues that Indian job market is characterized by a “missing middle”, meaning that there are jobs at a high productivity level and a lot of jobs at a low productivity level but hardly any in the middle range. The workforce for precisely these “middle-productivity jobs” is generated by the VET system. Thus, the relatively low significance that VET has in India is partly due the structure of the economy, in particular the small manufacturing sector.

2.2 VET demand of the formal/organized sector and current supply

The Indian economy is growing at a high rate and jobs – especially in the organized sector – are becoming more knowledge and skill-intensive (Nilekani 2008, 326). Even though employment over the past two decades has just grown moderately in the organized sector (World Bank 2006, 1) and the expansion of the formal sector was to a large degree based on the usage of more advanced equipment (Agarwal 2009, 186), analysts predict a shortage of skilled workers in the future. The Government of India (2009a, 31) reckons that the country is facing a deficit of employable graduates and vocationally trained workers of about 5.25 million by 2012 that is likely to further increase in the future.

The National Skill Development Corporation (NSDC) compiled an extensive data on employment and skill requirement in key industries. Figure 3 depicts the predicted increase in employment until 2022 in selected high-growth sectors. Unfortunately the available data does not distinguish between formal and informal employment. A high proportion of formal employment is likely to be created in the following industries: “IT and Information technology enabled services (ITES)”, “Electronics and IT-hardware”, “Auto and auto components (core and original equipment manufacturing)” and “Bank-
Vocational Education and Training in India

ing, financial services and insurance (BFSI)”

Further, it is estimated by the Confederation of Indian Industry that about two thirds of the jobs to be created will require low-end skills one third medium or higher skills (NSDC 2009b, 16). To generate workforce for medium and low skilled jobs can be falls within the scope of VET.

Figure 3: Current and projected employment in selected high-growth sectors (2006 and 2022)

Source: NSDC 2009b, 15

Although these predictions are considered to be subject to uncertainty it seems to be evident that the formal sector of the Indian economy is facing a shortage of skilled workers in the coming years if the skill development capacity is not increased significantly. Supply of trained low- and medium-skilled workforce for the organized sector of the economy stems from formal VT and VE-providers, private-/NGO-training providers and in-house training offered by large enterprises (see appendix). Even though one of the political intentions of the formal VET provision was to train people for the informal sector, hardly any ITI or ITC-graduates end up working in this sector. According to World Bank data (2006, 48) only around 12 % of ITI-graduates and 5 % of ITC-graduates enter the unorganized sector. The rest is employed in the formal sector or faces unemployment. As the data above showed the organized sector is said to have considerable demand for skilled labour. However, industry demand for VET graduates in practice is restrained (Goel 2009, 182). Employers complain about the poor employability of the VET graduates and substitute them by university or college-graduates or students who pursued general secondary education. Agarwal (2009, 174, 243) claims that more than 60 % of university or college-graduates perform jobs that do not actually require graduate skills. Companies in the organized sector frequently favour secondary

---

8 Considering the current proportion of formal employment in these sectors (NSDC 2009a, 9 f.) it is likely that a significant share of the new employment opportunities will also be generated there.
students with good general knowledge over VET graduates to train them in-house (World Bank 2006, 5). Thus, it can be concluded that the theoretical demand for VET graduates of the organized sector would be high. De facto however, the low status and poor quality of VET provision results in a poor acceptance of the few VET graduates.

2.3 **VET demand of the informal/unorganized sector and current supply**

India has a large informal sector with about 92% of the workforce employed there. Whereas the share of agriculture is slowly declining other unorganized industries are growing rapidly (see figure 3). Industries with a high proportion of informal employment that are projected to grow significantly are “Textiles”, “Organised retail”, “Building, construction and real estate”, “Auto and auto components (servicing, repair, driving, etc.)”, “Food processing” and “Transportation, logistics and warehousing” (NSDC 2009a, 9 f.). As mentioned in section III.2.2 two thirds of the projected increase in employment will take place in low-skills jobs (NSDC 2009b, 16). Most of these employment opportunities are likely to be created in the unorganized sector. According to a labour market study referred to by Nilekani (2008, 326) 90% of employment opportunities in India require some vocational skills. These assessments point to the fact, that there is great demand in the informal sector for the provision of basic vocational skills.

In spite of the size of the unorganized sector, formal VET hardly reaches the sector (see III.2.2). The only VET supply that is actually targeted at the informal sector are initiatives like Community Colleges, Community Polytechnics, etc. that were discussed in section II.1.2. Against the number of 420 million people in informal employment the capacity of these programmes is far too small.

Thus, basically excluded from formal VET, skill acquisition in the unorganized sector mainly occurs in the form of so-called hereditary training or unregistered, non-formal apprenticeships without any certification (Agarwal 2009, 181). Hereditary training means that young people learn the trade of the family such as farming, fishing or handicrafts by participating in the daily work. In informal apprenticeships (in small enterprises and family-run business) skill acquisition takes place by watching and copying other workers or a master (World Bank 2006, 49). Both forms of skill acquisition are dominated by the principle of “learning by doing” or – as King (2012, 666) calls it – “learning to labour’ on the job”. Although flexible, cheap and self-regulating, such training has considerable weaknesses that hinder progress. In most cases neither any theoretical and conceptual knowledge is taught, nor can modern technologies and meth-

---

9 Unfortunately not specified in more detail.
ods be applied. Additionally, in general, only simple and narrow skills are learnt (World Bank 2006, 49)

When discussing the demand of the unorganized sector for VET, King (2012, 666) insists that “learning to labour on the job” is – not without reason – the dominant form of training in the sector. He claims that the unorganized sector has a distinct preference for unskilled casual workers. Employers would systematically try to avoid workers gaining the status of a permanent employee (e.g. by well-directed layoffs or sifting out workers) so that they do not exceed the limit of ten employees and can remain in the unorganized sector. By operating this way they avoid being subject to the rigid labour legislation that covers the organized sector.\(^\text{10}\)

The bottom line of King’s argument is that there is no massive demand on the part of the enterprises in the unorganized sector for formal VT in form of registered apprenticeships. Rather, there are incentives to maintain the current exploitative “training”-system.

3. **Social recognition of VET**

After devoting attention to the question of VET demand on the part of the Indian industries the reputation VET has amongst students and parents is addressed. VET and blue-collar jobs in India face a serious image problem (Nilekani 2008, 326). Regarding the reasons for the social stigma researchers are not in agreement. Männicke (2011, 14) identifies the caste system that used to determine the economic position of individuals in society as a major reason why manual work and blue collar jobs are considered to be inferior. Singh (2009, 236), on the other hand, argue that the low social standing of vocational training is a typical problem of many developing countries that India simply has not yet overcome. Agrawal (2009, 192 f.) attributes the image problems to the significant influence the British education system had on the Indian one. He argues that in the Anglo-American education model VET was traditionally considered to be the alternative for low achievers or less intellectual people. To opt for an “inferior” option seems incompatible with the culture of aspiration that shapes the contemporary Indian society.

It is likely that a combination of factors led to the negative perception of VET and blue collar jobs that is still noticeable today. The fact that the quality of VET is said

\(^\text{10}\) Operating in the organized sector engenders a number of obligations for the employer that become more excessive with increasing size of the business. Companies in the organized sector have to pay social benefits and higher wages (due to the great influence of unions). Additionally, they are subject to a very high level of worker protection. Massive adversities and de facto bans to reassign workers to different tasks or lay them off (even in critical economic situations) disallow flexible management and adequate responses to changes in market conditions (Panagariya 2008b, 30 ff.).
to be low and that job prospects are bad, certainly does not help to improve the reputation. The social stigma associated with VET, along with other factors (which will be addressed in section IV), have serious negative effects on the Indian skills market. Not only is the economy facing a shortage of skilled workers for blue collar jobs but also an inflation of substandard graduation or engineering courses that do not provide graduates with marketable degrees (Agarwal 2009, 212, 243; Nilekani 2008, 326, Government of India 2007, 2). It is necessary to change public opinion in respect to VET and manual work that pupils with a practical disposition do not shy away from pursuing a vocational career. In the course of the “National Skill Development Initiative” the Indian government (2009b, 61) wants to promote the image of VET. One measure adopted is the renaming of VET to “skill development”. New wording alone, without major quality improvements and reforms of the regulatory environment of VET, though, will not be sufficient to drive real change.

IV. QUANTITATIVE AND QUALITATIVE CHALLENGES TO THE INDIAN VET SYSTEM

1. Expanding the VET capacity in India

According to calculations carried out by the Indian government (2009a, 1) almost thirteen million school-graduates and students who drop out of school early enter the Indian training and labour market annually. In combination with the preceding discussions it is clear that the capacity of the Indian VET sector needs to be expanded. As already mentioned in III.1 the Indian government took action and proclaimed an extensive increase in VET capacity from currently around 3.1 million to 15 million people annually (Government of India 2009a, 3).

However, the Indian central and state governments did not prove to be competent in the delivery of high-quality and marketable VET skills (see also IV.2). Besides, the costs of such a massive and rapid expansion require substantial financial recourses that would put a severe strain on the public budget (King 2012, 671). The provision of VET (especially in technical trades) is three to four times more cost intensive than the delivery of general education, as practical equipment and more extensive facilities are required (Siriwardene/Qureshi 2009, 550; World Bank 2006, 58, 70). For these two reasons, the Indian government tries to motivate businesses to contribute to the capacity expansion by providing more apprenticeships and thereby bearing some of the costs and offering their expertise. Additionally, private VET providers are encouraged to enter the training market. Financial support is granted by the NSDC that is also coordinating the
PPP-initiatives for capacity building. The government set down as a goal that about 30 % of the capacity expansion will be provided by the private sector initiatives (FICCI 2010, 20). So, the reform ideas put trust in the willingness of the private sector to cooperate in respect to the VET capacity increase.

In the past however, Indian employers have not been enthusiastic about providing formal apprenticeships (Agarwal 2009, 208). Figure 4 shows the share of Indian manufacturing firms (in the organized and unorganized sector\textsuperscript{11}) that offered in-service training in 2006 in comparison to the rates in other emerging countries.

**Figure 4: Manufacturing firms offering in-service training**

![Figure 4](chart.png)

Source: Froumin et al. 2007, 135 (using data from World Bank Enterprise Surveys).

According to this 2006 World Bank Enterprise Survey skills, training is not one of the major issues of interest and concern to Indian business. Reasons expressed for the relatively low priority of formal training are too high costs of training, a higher turnover of skilled workers and that informal on-the-job training was considered to be adequate as well as the use of mature technologies not requiring special training. Larger, innovative, technology-intensive or international companies (operating in the formal sector) are more inclined to provide formal in-house training (Froumin et al 2007, 135).

These findings, although limited to the manufacturing sector, confirm King’s argument (2012, 666) about the aversion of the informal sector for formal apprenticeships or trainings. Taking the context explained in III.2.3 into consideration, it is unlikely that small businesses in the unorganized sector enthusiastically go along with the appeal of the government for more industry participation in formal VET. Therefore, one of the challenges in respect to the capacity expansion is to increase the willingness of the informal sector to invest in VET. To achieve this, the paper suggests making the transition from the unorganized sector to the organized sector more attractive by relaxing labour market regulations that cover the organized sector. While Froumin et al. (2007, 137) recommend that government should provide financial incentives to employers who for-

\textsuperscript{11} Small medium and large size companies were interviewed. Almost one quarter of businesses surveyed employed 5-19 workers. For more information: http://www.enterprisesurveys.org/Data/Explore Economies/2006/india
mally train their staff, a reform of labour market regulations affecting the organized sector is considered to be a more sustainable and market-oriented approach. Considering the influence of various stakeholders (e. g. unions) such a reform might be a long and arduous process. Thus, in the short term, financial incentives might be a practical solution. Creating more places for trainees, however, is just part of the challenge. The even bigger one might be the much needed improvement in quality.

2. Improving the poor employability of VET graduates

2.1 Evidence of the poor employability of VET graduates

One of the major problems of the Indian VET system is that graduates are not well-accepted on the labour market. This is true, for VE-certificate holders, apprentices, Polytechnic-, ITI- and ITC-graduates as well as participants of programmes for the informal sector (Agarwal 2009, 207-209; World Bank 2006, 5; Froumin et al. 2007, 132, 137). Private VT-institutions tend to better adapt their programme to market demands and can therefore promise better employment perspectives (Agarwal 2009, 209).

The core of the problem is that students’ “marketable skill endowment” is low (Agarwal 2009, 192). In order to illustrate this claim, labour market perspectives of ITI- and ITC-graduates are expounded hereafter. According to World Bank figures (2006, 25-27) gathered from 1998 to 2001, over 60 % of all ITI- and ITC-graduates remained unemployed even three year after completing their certificate. Of those who did find employment two-thirds did not work in the trade for which they were trained. On the contrary, especially employers who wished to be supplied with candidates in ITI- and ITC-trades complain about a severe shortage of adequately skilled personnel. Even in entrepreneurial states like Maharashtra in 2003 only about 35 % of students took up employment or self-employment after graduating from an ITI or ITC (Government of India 2009b, 183).

Figure 5: Activity status of persons receiving formal vocational training in 2004-05

![Activity status of persons receiving formal vocational training in 2004-05](image)

Source: Government of India 2009b, 181 (using data from the 61st NSS Round).
Figure 5 shows that of all unemployed people in the country almost 11% received formal vocational training whereas only about 2% of all employees went through VT. It becomes apparent that the chances of finding a job after pursuing a VT are not good. A possible explanation for the results could also be that VT-graduates are more discerning than people without special skills training and not willing to perform menial tasks. However, if the graduates’ competencies and skills satisfied the employers’ demands, VT-graduates would be immediately absorbed by the labour market in the organized sector in dire need of skilled workers.

2.2 **Reasons for the poor employability of VET graduates and ideas for improvement**

Major reasons considered to be responsible for the poor employability of VET graduates are that VET is mainly supply- instead of demand-driven and delivered at low quality (Agarwal 2009, 212, 243; Government of India 2007, 2). There is a wide gap between the **VET curricula** followed in VE-schools and training institutes and the skills demanded in the labour market in the organized sector. Curricula continuously need to be revised and developed and new ones need to be set up in order to remain relevant in a dynamic economy. However, Indian government agencies and VET providers have not been proved to be competent in curriculum development. This, to a large extent, is due to insufficient knowledge and information about the job-market demands as there is no reliable mechanism in place for gathering such data (Siriwardene/Qureshi 2009, 557; Agarwal 2009, 240).

In many Asian countries education and industry have traditionally operated in complete isolation which can have – especially in the case of VET – detrimental effects on the quality (Siriwardene/Qureshi 2009, 553). Furthermore, in India industry has not been involved in curriculum development and the management of VET (Froumin et al. 2007, 136). Given the dynamic development of the Indian economy in the past two decades it is not surprising that curricula that have not been updated since then, do not meet industry requirements anymore. Moreover, curricula have not been developed for new occupations in emerging sectors (Nilekani 2008, 326; Goel 2009, 178). In the course of the National Skill Development Reforms proclaimed by the Indian government collaboration between VET institutions and industry should be promoted and industry representatives are requested to bring in their demand analysis in the curriculum development process (Government of Indian 2009a, 12). Up to now, the implementation, however, is done somewhat half-heartedly (see also IV.3.1).
The skill sets required for work in informal and formal sector are markedly different. For this reason the unorganized sector also requires consideration. The lack of information about skill requirements is even more serious in respect to the informal sector. Skill sets required in the unorganized sector are very diverse and cannot be collated easily in the non-transparent market (King 2012, 672; World Bank 2006, 49). An attempt to put together descriptions of job profiles, skill requirements and skill gaps was made by the NSDC for eight industries in the informal sector (NSDC 2009a, 22). All in all, NGOs based within the communities commonly have more reliable information about the relevant competencies and local issues and therefore can better meet the demands of the unorganized sector (World Bank 2006, 6). This favours a decentralized approach to VET.

Researchers agree on that fact that formal VET offered by upper secondary schools, ITIs, ITC, etc. and also most courses by private or NGO training providers do not provide students with the skills needed in the informal sector. It is said that broader skills are needed as the production process is less fragmented and organized and the same person is often engaged in the whole production process and in commercialization. Thus, people in the informal sector need both technical and business skills as well as other entrepreneurial competencies (World Bank 2006, 48 f.). Froumin et al. (2007, 132) even argue that training programmes specifically geared towards the informal sector do not provide abilities and skills that enable people to run a small business. In most cases the training would be limited to a (too) narrow defined occupational skill (King 2012, 672).

Besides the contents that are put down in form of curricula, teaching methods and teachers’ competences can affect the quality of VET. Various authors identify the lack of adequately qualified teaching and training staff as one of the major bottlenecks of the VET sector (e. g. Short 2008, 9; Goel 2009, 182; NSDC 2009b, 5). There are only five public VET teacher training institutes, so-called advanced training institutes, with an annual capacity of 1,200 seats and few private facilities that generate certified trainers. In consequence, a lot of non-certified trainers with obscure qualifications operate in the system. In combination with the relatively poor wages for teachers VET institutions struggle to attract good training staff (Goel 2009, 178; Short 2008, 9). According to a sample study conducted by the NSDC in 2009 that covered the training staff of 71 training institutes across sectors and geographical regions most teachers have technical skills in their subject but lack teaching, soft and entrepreneurial skills (see figure 6).
These findings correspond with Männicke’s claim (2011, 17) that skills in VT-institutions are mainly taught in an isolated way which hampers the application in practice. In context with what has been said above on multiple skill requirements in the informal sector, it becomes apparent that only very few teachers are adequately qualified to perform good, broad-skilled trainings for the unorganized sector. More of an issue for the formal sector might be that trainers – according to Männicke (2011, 18) – often do not have practical experience or sufficient know-how to handle modern technical equipment that might be sponsored by large or foreign companies. On the other hand, many training institutions do not have modern equipment and even lack adequate infrastructure and basic teaching material (Goel 2009, 178, 182).

Another reason that contributes to the poor employability of VET graduates is the poor basic education most of the students received. As already mentioned in II.2 many students have serious deficits resulting from poor primary and secondary education that cannot be cured in the course of their training. Moreover, in connection with the social stigma attached to VET (see III.3) mainly low-achievers in school choose VET courses. On the whole, however the informal sector is more affected by deficits in elementary education as in rural India quality of education is worse than in cities (see II.2) and poor people (who are generally part of the informal sector) cannot afford to send their children to better private schools (Siddhu 2011, 396 ff.). Thus, the lack of basic skills hampers people in the unorganized sector in their ability to properly absorb the knowledge some of the special training initiatives for the informal sector try to provide (Froumin et al. 2007, 132).
3. Improving the unfavourable regulatory environment

3.1 Granting greater operational and managerial autonomy to VET institutions

Panagariya (2008a, 432) detects in his analysis of the Indian education system right at the beginning that “[t]he government is deeply involved at all levels of education in India.” This is also true for the VET sector and in particular for public VET institutions and private institutions that receive financial aid from the government.

Management of public VET institutions is currently shared between central and state government agencies, arranged in an uncoordinated, ineffective way (World Bank 2006, 4) and characterized by the struggle for political power (Nilekani 2008, 183). VET institutions themselves are presently not allowed to change curricula or their training programme, hire or lay off teachers or staff autonomously (Goel 2009, 182; Froumin et al. 2007, 138 f.; World Bank 2006, 5; OECD 2011, 177). Furthermore, public or aided institutions are not authorized to decide on fee levels or to keep the funds they raise (Froumin et al. 2007, 138 f.; World Bank 2006, 5). These severe constraints prevent both, effective budgeting at institutional level and flexible responses to changes in market demands. The independent literature consulted as well as the government advisory group “Task force on skill development” uniformly demand that public VET providers should be given greater autonomy in the aforementioned areas (Government of India 2007, 3; Froumin et al. 2007, 138 f.; World Bank 2006, 5; OECD 2011, 177, Agarwal 2009, 244, 246). This would lead to a more market-oriented and demand-driven provision of VET since market forces would provoke immediate adaptations in respect to problems such as underutilization and obsolete curricula.

As mentioned in section IV.2.2 there is broad demand for more industry participation in the development of curricula. According to the World Bank (2006, 5) participation is most successful at a local or regional level, but it requires freedom in respect to curricula development on the part of the institution management. In the current reform process however, the government has not granted control over curricula to institutions. The reform policy rather intends industry participation organized in a top-down process by national agencies (Government of India 2009a, 11 f.). The OECD (2011, 177) considers this to have negative effects on the effectiveness and pace of the change process. Nilekani (2008, 183) also takes position for a decentralized approach of local VET delivery. But he considers the chances of success in the near future to be rather low due to influential teachers’ unions and their representatives in the state parliaments who try to protect their influence on state level. He argues that these balances of power might
make it difficult to achieve a meaningful increase in autonomy for local institutions (Nilekani 2008, 183 f., 191).

3.2 Implementing an effective quality assurance mechanism in the VET sector

Quality assurance is a challenge that concerns both the public and private VET sector. In respect to public and aided VET providers the government has more opportunities to set incentives for quality improvement. The allocation of funds is frequently mentioned by international researchers as an effective incentive that can lead to a stronger focus on quality (OECD 2011, 180, 184; World Bank 2006, 8, 10; Froumin et al. 2007, 137).

At present there is no kind of binding quality assurance mechanism embedded in the Indian VET system (Short 2008, 12). Although public VET institutions need to be accredited to the responsible agency either on national or state level (see II.1.2), they have no real incentives to focus on quality and performance (OECD 2011, 180). They serve as mere agents of the government and have little room for manoeuvre due to the above mentioned rigid regulations. Once accredited by the respective government agency public training institutes or upper secondary schools receives guaranteed funds regardless of their performance (World Bank 2006, 8). International organizations like the World Bank (2006, 10) and the OECD (2011, 184) recommend the introduction of a performance-based resource allocation process. More precisely, the allocation of funds should be based on clearly defined internal and external performance indicators. It is argued that by competing for funds, institutions would focus quality improvements, which in turn would lead to better labour market outcomes (World Bank 2006, 5, 10).

A quality assurance mechanism should also strive for greater transparency for potential students and for employers. In order to achieve this, all providers – private and public – should be covered in an accreditation and evaluation process. According to a study cited by the World Bank (2006, 54) a significant proportion of private and NGO-providers are currently not accredited, mainly due to extensive inflexible and bureaucratic regulations in the registration process. Consequently, not even the government has a precise picture of the VET activities in the country (Froumin et al. 2007, 137). The National Knowledge Commission (Government of India 2009b, 60), an advisory board of the Indian Prime Minister, recommended the establishment of one independent and efficient body responsible for the accreditation of all new private and public VT-institutions. Consecutive evaluations on the basis of the defined internal and external performance indicators would reduce information deficits and uncertainty among students and employers (Froumin et al. 2007, 137) and could thereby lead to an
improved acceptance of VET programmes. The “Task force on skill development” (Government of India 2007, 2) also suggested that VET providers should be given the chance of a voluntary additional certification of their programmes, comparable to an ISO norm, that is conducted by an independent organization. By achieving certificates VET providers could promote their visibility and reputation.

3.3 Increasing private sector participation in VET

There are two ways to increase the role of the private sector in VET. Firstly, private organizations or NGOs can act as VET providers. Secondly, industry can be involved at the institutional level in the management and delivery of VET in public institutions in order to improve market relevance.

The latter aspect, industry participation at the institutional level, could range from providing places in the institution management for industry representatives to collaborative course elements like practical projects, in-service days or internships (Froumin et al. 2007, 138 f.; World Bank 2006, 4 f.; OECD 2011, 183). However, as already discussed in section IV.3.1, such participation requires a certain degree of institutional autonomy, the Indian government has not yet granted.

In order to facilitate an increase in the number of private VET providers it is essential to pursue a clear and open policy for private investment. Currently, the VET market is highly regulated. Even private institutions are subject to regulations concerning the level of tuition fees and the allocation of seats (see also II.1.3). Another condition is that any surpluses made by private institutions need to be reinvested and that foreign investors are not allowed to absorb generated profits (OECD 2011a, 166 f.). It is said that these regulations, in combination with the relatively high costs for setting up VET institutes, deter potential investors (Männicke 2010 21 f.; World Bank 2006, 58). A tendency noteworthy is that higher degrees of freedom in some states and regulation loopholes have been exploited and have driven the growth of private VET providers in India’s emerging industry sectors (Nilekani 2008, 328; OECD 2011a, 166 f.).

The “National skill development initiative” reform paper promises that the initiative “does not discriminate between private or public delivery (of VET) and places importance on outcomes, users’ choice and competition among training providers and their accountability” (Government of India 2009a, 3). The reform paper, however, does not say anything specific about a liberalization of the above mentioned regulations.
V. CONCLUSION

The objective of this paper was to examine the Indian VET system, to identify issues and challenges, to show interdependencies between the demand for VET and the structure of the Indian economy and to analyse the impact of government regulations on the provision of VET. The Indian VET system has been found to be very small and subject to serious quality issues. By holistically examining the education system it became apparent that deficits in elementary education put pressure on the VET system. Flaws of the VET sector, in turn, increase the pressure on the higher education sector. Therefore the VET sector cannot be considered in isolation. Rather, efforts to promote India’s educational performance need to be coordinated and complement each other.

The findings on the interdependences between demand for VET and the structure of the economy suggest that VET is currently mainly geared to the needs of the organized sector. VET policy does not take into account the characteristics and needs of the informal sector, thereby effectively excluding major parts of the society. The low growth of manufacturing is one reason for the limited relevance of VET in India, compared to other emerging countries, which have experienced a more typical transformation pattern with a rise in manufacturing. The transformation of the Indian economy, which is crucial for a broad improvement in welfare, can be facilitated by the expansion of VET. However, VET reforms alone are not sufficient. Rather the rigid labour market legislations that cover the organized sector need to be liberalized in order to raise the number of people in formal employment. Thereby industry demand for formal VET programmes would also rise.

Achieving a substantial capacity expansion and an improvement in employability of VET graduates have been identified as core challenges to the Indian VET-system. The paper has argued that liberalizing the VET market in a way that facilitates the entry of private VET providers and industry participation would help to meet these challenges. The Indian government should turn away from inefficient and unsuccessful planning and regulation on national and state level and relinquish power to local institutions. Rather the government should focus on accreditation, evaluation and the provision of information and take on the supply of the poor in rural areas that are not attractive to private providers. In the course of the “National skill development policy” the government focused on VET and made some good attempts to overhaul the system. However, overall the reforms undertaken are not adequate in light of the challenges and do not fulfil the demands for liberalizations. Thus, it remains to be seen, whether a market-oriented VET policy is actually adopted.
Appendix
The Indian Education and Training System

<table>
<thead>
<tr>
<th>Age</th>
<th>Grade</th>
<th>GENERAL/ACADEMIC CAREER</th>
<th>TECHNICAL CAREER</th>
<th>VOCATIONAL CAREER</th>
<th>Labour Market Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-14</td>
<td>1-8</td>
<td>Elementary Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-16</td>
<td>9-10</td>
<td>(Lower) Secondary Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>11-12</td>
<td>Higher Secondary Education</td>
<td>Formal Voc. Education</td>
<td>Polytechnics</td>
<td></td>
</tr>
<tr>
<td>19-21</td>
<td>12</td>
<td>Universities/Colleges  (undergraduate)</td>
<td>Engineering Colleges</td>
<td>Public Industrial Training Institutes (ITI)</td>
<td>Scientists</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3-4 year degree</td>
<td></td>
<td>~1,895 institutes</td>
<td>Engineers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~400,000 seats</td>
<td>Technicians</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~1,800 approved programmes (mainly engineering trades)</td>
<td>Non-formal Voc. Training</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~3358 institutes</td>
<td>Private/NGO-training providers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~370,000 seats</td>
<td>In-house training of big companies</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>~60 engineering &amp; 50 non-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>engineering trades</td>
<td></td>
</tr>
</tbody>
</table>

List of References


Declaration

I affirm that I have prepared this term paper without assistance and using only the specified sources. I further affirm that the paper has not been submitted either in the same or in a similar form to any other examination authority. All statements taken from other sources, whether literally or in gist, have been indicated as such.

Nuremberg, September 10, 2012

_________________________________________

Student signature