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Book

KOF factbook education system Nepal

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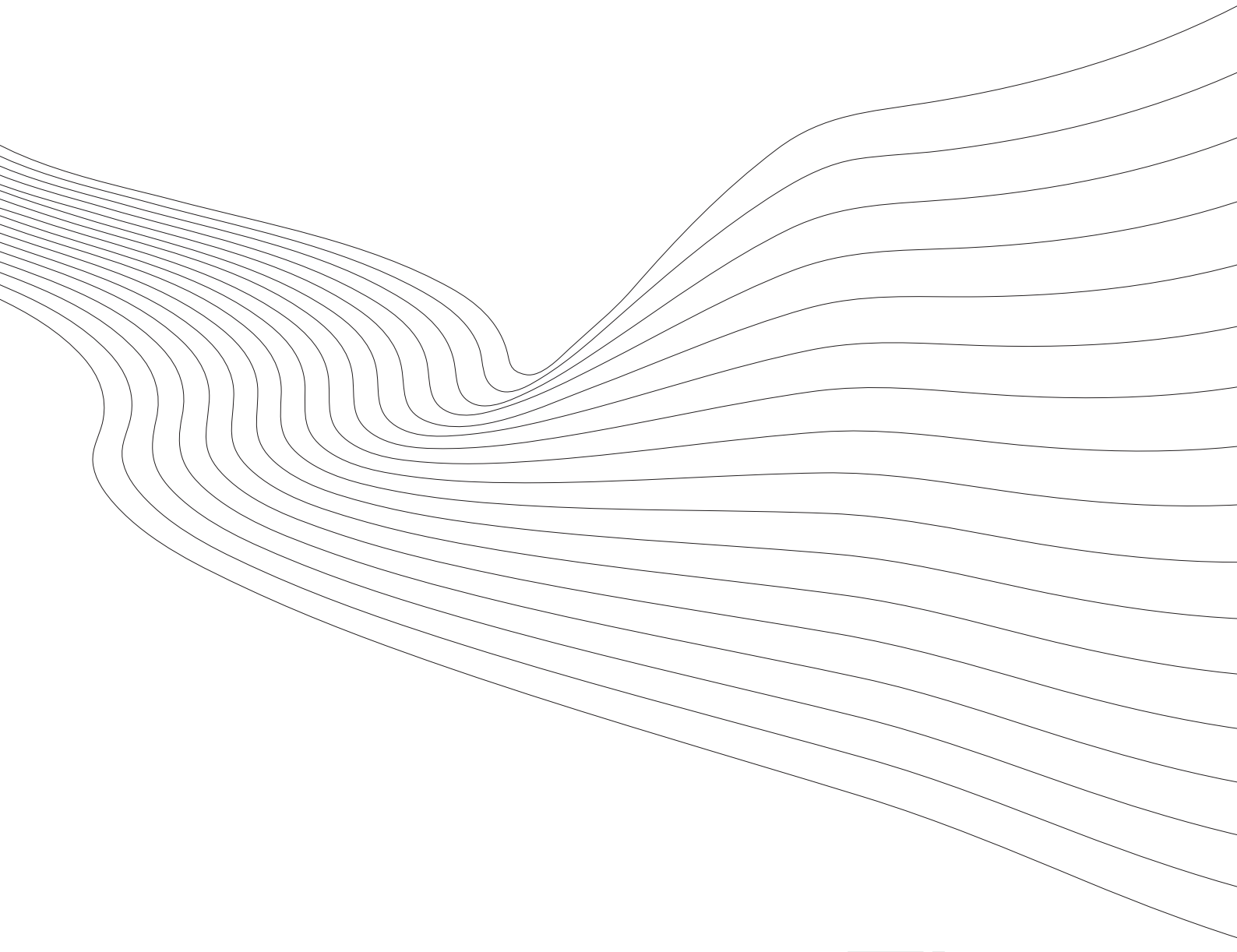

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Contents

List of Figures

List of Tables

List of Abbreviations

ADB	Asian Development Bank
ANM	Auxiliary Nursing Midwifery (TSLC programme)
CA	Constituent Assembly
CBS	Central Bureau of Statistics of Nepal
CTVET	Council for Technical Education and Vocational Training (Nepal)
DoE	Department of Education from Nepal's MoE
ECD	Early Childhood Development
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GIR	Gross Intake Rate
GNI	Gross National Income
GoN	Government of Nepal
GPI	Gender Parity Index
GVA	Gross Value Added
HE	Higher Education
ILO	International Labour Organization
ISCED	International Standard Classification of Education from the UNESCO
MICS	Ministry of Industry, Commerce and Supply
MoE	Ministry of Education (Nepal)
NIR	Net Intake Rate
OJT	On-the-Job Training
PCL	Proficiency Certificate Level
PPCs	Pre-Primary Classes
REDs	Regional Education Directorates
SAD	Swiss Academy for Development
SLC	School Leaving Certificate
SSRP	School Sector Reform Programme
TITI	Training Institute for Technical Instruction
TSCL	Technical School Leaving Certificate
TU	Tribhuvan University
TVET	Technical and Vocational Education and Training
UGC	University Grants Commission
UIS	UNESCO Institute for Statistics
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNEVOC	International Centre for Technical and Vocational Education and Training of the UNESCO
US$	United States Dollar
VET	Vocational Education and Training
VPET	Vocational Professional Education and Training
WDI	World Development Indicators of the World Bank

FOREWORD

In the last years, vocational education and training has received more and more attention. The increased pressure to upgrade the skills of the workforce through an increasingly competitive world economy, or the high youth unemployment rates in the aftermath of the world economic crises putting pressure on politicians to provide solutions could be part of the reason why. In fact, vocational education has been suggested as one major solution to these problems since it provides an education pathway for those who do not continue with tertiary level education and helps upgrading the skills of those who would have started working immediately and would have received some form of on-the-job training.

The increased attention for vocational education and training was in particular perceptible among policy makers. In Europe, the European Commission defined common objectives for the further development of the vocational education and training systems of the European countries for 2020 and an action plan for the upcoming years in the *Bruges Communiqué on enhanced European cooperation in vocational education and training for 2011-2020* (European Commission, 2010). In the United States, Obama mentioned in a speech that he wanted to increase the investment in vocational education and training system of the United States of America (The White House, 2015). But also many other countries worldwide, such as South Korea or Hong Kong, show increased interest in extending their vocational education system.

Worldwide, only a few countries have a well-elaborated and efficient vocational and professional education and training (VPET) system, among these the Swiss VPET system. It is a good example of how an education system can contribute to the successful matching between market demand and supply. It is highly efficient in getting the adolescents into the labour market (7.7% from 2005-2012, compared to the OECD average of 14.6%, OECD, 2015).

Though not many countries have VPET system that is comparable to Switzerland, many have a vocational component in their education system. To provide information about the education systems of other countries, with a special focus on the part of the education system teaching vocational skills, is the major purpose of the KOF Factbooks Education System.

SUMMARY

In the KOF Factbook Education System Nepal, we will describe the vocational system of Nepal in general and in particular refer to factors which are crucial for the functioning of the system. Among others, these comprise the regulatory framework and the governance of the VPET system, specifying the actors that are involved and which competencies and duties they have. Further, the curriculum development and the actors involved in this process, as well as the financing of the system, etc.

The Factbook is structured as follows. We will refer to Nepal's economy, labour market, and political system in the first part of this Factbook. The second part is dedicated to the description of the entire formal education system. The vocational part of Nepal's education system will be explained in the third part. And finally, the last section gives a perspective about the set of reforms Nepal's education system went through in the past and will face in the future.

EDITING AND ACKNOWLEDGEMENTS

This Factbook is edited by Johanna Kemper. For the elaboration of the contents, we want to thank Lars Brönnimann and Reto Odermatt. Without you, the realisation of this Factbook would have been impossible!

The KOF Factbook Education System series has to be regarded as work in progress. The authors do not claim completeness of the information which has been collected carefully and in all conscience. Any suggestions for improvement are highly welcome!

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1. The Nepalese Economy and its Political System

One of the main purposes of an education system is to provide the future workforce with the skills needed in the labour market. The particularities of a country's economy and labour market are important factors determining the current and future demand for skills. Therefore, they will briefly be described in the first part of this Factbook. In addition, this part provides an overview of Nepal's political system with emphasis on the description of the education politics.

1.1 The Nepalese Economy

According to the World Bank definition of economic development, Nepal is a low-income country[1] (World Bank, 2015). The multi-ethnic and multilingual population of Nepal is divided into 126 castes and ethnic groups, which manifests in 123 languages spoken within the country. In 2014, about 27.8 million people lived in Nepal (World Bank, 2015). Nepal's average annual population growth rate from 1991 to 2013 was moderate (1.86% p.a.), compared to its neighbouring country India (6.40% p.a.).

In 2013, Nepal had a gross domestic product (GDP) per capita of about US$ 409 in 2013 (in constant 2005 US$), which is low compared to its neighbouring countries Bangladesh (US$ 621), India (US$ 1,165) and Bhutan (US$ 1,977) and very low if contrasted with the GDP of OECD countries as for example the United States (US$ 45,710) and Switzerland (US$ 59,055) (World Bank, 2015).

In the time period from 1989 to 2013, the Nepalese economy grew on average with 4.4% p.a. Compared to the average of all OECD countries, Nepal almost always had a higher level of GDP growth in the time period from 1989 to 2013- except of the year 2002 where GDP growth turned negative. This was one year before the escalation of the political insurgency, which started in 1996 (IMF, 2005:1).

According to the KOF Index of Economic Globalisation[2], Nepal is a relatively closed economy (value 26.9 for 2011) (KOF, 2015a). Thus, it is not as dependent on the world economy as other countries. Consequently, the Nepalese economy was not hit as hard by the global

[1] According to the definition of the World Bank, a low-income economy attains a gross national income (GNI) per capita (Atlas method in current US$) below $1,045. Nepal falls into this category because its GNI per capita (formerly gross national product (GNP) per capita) was about US$ 730 in 2013 (World Bank 2015a).

[2] The KOF Index of Globalisation measures the economic, social and political dimensions of globalisation. Here, we focus on the economic dimension of globalisation, the KOF Index of Economic Globalisation. It is constructed by using indicators for long distance flows of goods, capital and services (that is, data on trade, FDI and portfolio investment), as well as information and perceptions that accompany market exchanges (restrictions to trade and capital, using hidden import barriers, mean tariff rates, taxes on international trade and an index of capital controls).

economic crisis in 2008/2009. In contrast, countries with a higher degree of openness to economic globalization (e.g., India, Switzerland, or the US with KOF Index values of 41.6, 74.5, and 58.8, respectively), had a sizeable drop in GDP growth during the crisis. Looking at the income distribution reveals that income inequality in Nepal is not that high. With a Gini coefficient[3] of 32.82, inequality is higher lower than in India and in the USA, and slightly higher than the OECD-average (Gini coefficient: 33.9, 41.12, and 32 in 2010, respectively). However, one of Nepal's biggest problems is poverty- even if the poverty has declined over the past years. Defining poverty as the percentage of people living below the poverty line of an US$ 1.25 per day (in purchasing power parities, PPPs), poverty came down by 44.3%-points in the same time period (from 68% in 1996 to 24.82% in 2011) (ADB, 2014a:43). Poverty is much more of a problem in the rural areas, where 27% of the people lived below the poverty line in 2010/11, while this was only 15% in urban areas.

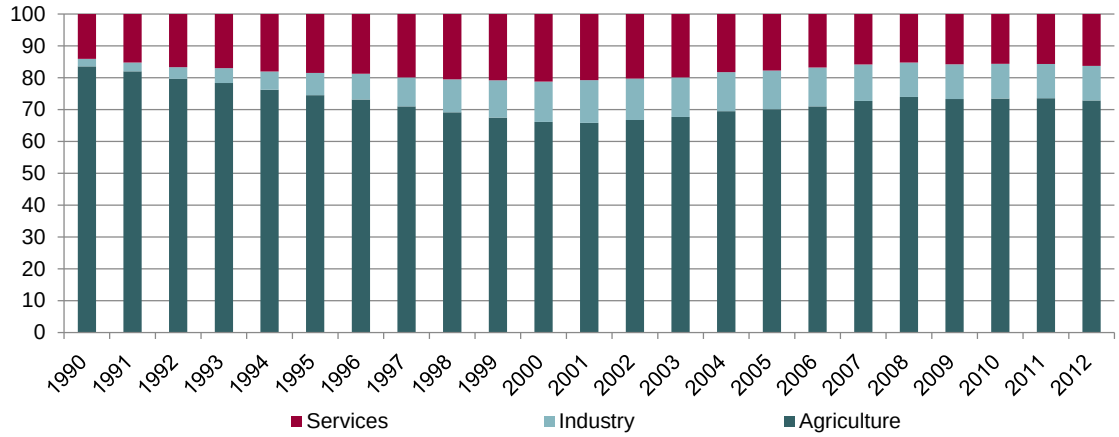
Besides poverty, there are several other factors impeding the growth of Nepal's economy. Among these are political factors such as the corruption and instability of its political system as well as steady political unrests. Another source of uncertainty for the Nepalese economy is its inflation rate. A high inflation rate can have a negative impact on investment decisions of firms and individuals and thereby on innovations, which are important to spur economic growth (Dorman, 2014). Until the beginning of the 2000s, Nepal had a very volatile inflation rate. Though its level is still high, it is stable and controlled since then (average inflation rate of 8.6% p.a. from 2004-2013, World Bank, 2015).

Remittances are very important for Nepal's economy. In 2012, remittances from abroad amounted to 26% of GDP. In the same year, 6% of the population were abroad in order to work (Ministry of Labour and Employment, 2014). In 2012 about 57% of them were in India and 18% in Qatar. However, most of the remittances, namely 40% came from Qatar, and only 33% from India. In 2011, of those households which received remittances (around 50%), these made up 31% of the household's income (CBS, 2011a).

Looking at the distribution of employment by sector (Figure 1), it can be observed that the majority (more than two thirds) of people in the labour force have been employed in the agricultural sector since the beginning of the 1990s. This is in stark contrast to developed countries such as in the EU-28, where the agricultural sector accounted for only five percent of the employment share, as can be seen in Table 1.

[3] The Gini coefficient measures the differences in the income distribution (in some cases the consumption expenditure) of individuals or households. A coefficient of '0' means equal distribution of income. '100' corresponds to complete inequality where one individual or household possesses the total income (The World Bank, 2015a, World Development Indicators, slightly adapted).

Figure 1: Employment by sector (in % of total employment), 1990-2013



Source: APO (2014); own calculations.

In 2012, most people in the EU-28 countries were employed in the services sector (72.9%), which also accounted for more than two thirds (73.6%) of the gross value added (GVA). In Nepal, the service sector only employs roughly one sixth of the working population.

Table 1: Breakdown of total value added and employment by sectors for Nepal and the USA, 2012

Sector	Nepal: Value added (%)	EU-28: Value added (%)	Nepal: Employment (%)	EU-28: Employment (%)
Primary sector	35.0	1.7	72.9	5.0
Agriculture, hunting and forestry, fishing	35.0	1.7	72.9	5.0
Secondary sector	15.3	24.8	10.8	22.0
Manufacturing, mining and quarrying and other industrial activities	9.5	19.3	7.7	15.6
of which: Manufacturing	6.8	15.4	6.6	14.0
Construction	5.8	5.5	3.1	6.4
Tertiary sector	49.7	73.6	16.3	72.9
Wholesale and retail trade, repairs; hotels and restaurants; transport; information and communication	23.7	23.9	9.9	27.4
Financial intermediation; real estate, renting and business activities	12.1	26.9	0.8	15.8
Public administration, defense, education, health, and other service activities	13.9	22.8	5.6	29.7

Source: CBS (2014); APO (2015); Eurostat (2015a,b)

However, the services sector was the most important sector of the Nepalese economy with respect to productivity. In 2012, it had a share of 49.7% in GVA, followed by the agriculture sector with 35%, the industry (including manufacturing) with 9.5%, and the construction sector with 5.8% in GVA. As only 16.3% of the people of Nepal's workforce work in the services sector, it is not surprising, that the sector with the highest share in GVA also depicted the

highest per employee value added, while the agricultural sector with the second highest share in GVA but largest share in employment had the lowest per employee value added in 2012.

According to the Global Competitiveness Index (GCI) of the World Economic Forum (WEF), Nepal's competitiveness is very low. In the 2014-2015 ranking, Nepal reached 102th rank 102 out of 144 countries in the 2014/2015 GCI. The position got slightly better compared to the years before (2013-2014: 117th rank; 2012-2013 and 2011-2012: rank 125) (WEF, 2014:286).

To quantify the innovativeness of the Nepalese economy, we use the Global Innovation Index (GII). The GII shows the weakness of the innovation capacity of Nepal. In 2014, the country only achieved a GII (average) score of 23.8, ranking 136th out of 143 countries. It has to be mentioned that the data for a lot of sub-indicators has not been collected for Nepal (Dutta et al., 2014:230).

1.2 The Labour Market

In the first part of this section, we will describe the general situation on Nepal's labour market. In the second part, we will refer to the youth labour market in particular.

1.2.1 Overview of Nepal's Labour Market

At a first sight, the Nepalese labour market is doing quite well. According to the WDI, the labour force participation rate (LFPR) was at 85.7% for people aged between 15 and 64 in 2013 (see Table 2). This number was very high, when compared with the 70.6% of the OECD average. A reason for this result could be, that for production, the input factor labour is more important than capital (72.9% of those in employed worked in agricultural sector in 2008, see Table 1).

Table 2: Labour force participation, unemployment by characteristics 2013

	Labour force participation	Labour force participation OECD average	Unemployment rate	Unemployment rate OECD average
Total (15-64 years)	85.7	70.6	2.7	8.0
Youth (15-24 years)	75.3	46.0	4,6	17.3
Children* (7-14 years)	40.6	-	-	-
Women (15-64 years)	83.0	62.0	2.4	8.0

Source: World Bank (2015), World Development Indicators (modelled ILO estimates); '*' children involved in economic activities.

As the LFPR, also the unemployment rate of those aged between 15 to 64 years was very low, at 2.7% in 2013 if compared to the OECD average of 8% (see Table 2). One possible reason for Nepal's low unemployment rate is that 81.9% (male 71.4%, female 91.2%) of the employed persons were engaged in 'vulnerable employment', which means that they were self-employed and doing unpaid family work (CBS, 2009:178).

The unemployed workers are forced to take every work they can get, because there is no social protection for unemployment. This keeps unemployment low. In general, wage employment is not the usual employment form in Nepal, especially not for women. The International Labour Organization (ILO) estimated that approximately 30% of the labour force in Nepal was underutilised or unemployed in 2008. Thereby, those between 20 to 24 years were most affected. The term underutilisation refers to a situation where a person is formally employed but works less hours than in a normal job. Evidence for the high rate of underutilisation can also be found in the distribution of working hours of the employed population. According to the Nepal Living Standards Survey (NLSS) 2010/11, only 46% of the employed persons worked 40 hours and more a week, 22% between 20 and 39 hours and 32% less than 20 hours a week. Men were more likely than women to work less than 20 hours a week (54% of the men, 40% of the women) (CBS, 2011a:51).In 2013, the LFPR of men (88.8%) was higher than that of women (83%; see Table 2). Compared to other countries, this is a high rate. In 2013, the LFPR of women in the OECD countries was on average 62%. In 2013, the unemployment rate of men was with 3% a little higher, than the rate of 2.4% of women. A possible reason for this result might be, that if women get unemployed, they are less likely than men to register their status.

According to the ILO, poor quality employment is a common issue for the Asian workforce. The problem lies in insufficient earnings and access to social protection, as well as informal working arrangements (ILO, 2015:3). The affected people have no security by law and therefore no legal recognition and thus work under dismal conditions. Moreover, they often have no voice or representation in the workplace and no social protection. According to the Nepalese Labour Force Survey (LFS) 2008, about 86.4% of the total population working in the non-agriculture sector worked informally (ILO, 2013:7).

Another part of the working people decided to work abroad and looked for employment in India or in the further Middle East in countries as Saudi Arabia, Qatar, United Arab Emirates and Malaysia (ILO, 2014:9). According to the WDI (World Bank, 2015), this led to a net migration of about 400,000 people in 2012.

1.2.2 The Youth Labour Market

In the national census of 2011, around 20% of the 26.5 million people in Nepal were aged 15-24 and 34.9% were below the age of 15 (CBS, 2012:56). Therefore, over half of the population was younger than 25 years.

The family is very important in Nepal. It influences young people’s decisions and with high expectations for the future. In Nepal, already 71% of young people aged between 25-29 years

are heads of households. They have to earn enough and have to have a stable income for their families (ILO, 2014:14).

According to the labour force participation rate (LFPR) and unemployment rate of 2013, the youth is well integrated in Nepal's labour market. About 75.3% of the 15 to 24 years old persons were in the labour force and only 4.6% unemployed (see Table 2). Compared to the LFPR (46%) and unemployment rate (17.3%) of the OECD average, this seems to be very good. But this is might a misleading assumption. In Nepal, everyone has to start working from early age onwards in order to get enough income to feed themselves and their family members. This is one reason why child labour is a problem in Nepal. According to the World Bank (2015), about 40.6% of the children aged between 7 to 14 years were economically active in 2013 (Table 2). The situation is different for most of the young people in the OECD countries, where the LFPR of the youngsters is in general low, because more than half of those aged between 15 and 24 years are still in education (and training).

It is very difficult for the youngsters to find employment in Nepal. Therefore, the mobility of the youngsters to search work within the country or across national borders is very high. In 2013 about 18.1% of the persons aged 15-29 moved away from their home (more women (27.4%), than men (10.3%)). Thereof 94.6% left rural areas. The remaining young persons are often in long-term studies (higher education as certificates, diploma, master's, MPhil. And PhD), which don't train them the skills the labour market needs. Besides, they built the most educated generation in the country ever (ILO, 2014).

In 2013, 58% of all youngsters were self-employed. The share was considerable higher for woman (68.2%) than for men (51.3%) and higher in rural (60.2%) than in urban areas (46.0%) (ILO, 2014:27). One reason for that might be that they can earn 1.5 times more when they are self-employed compared to working in employment.

The most vulnerable age group with respect to working conditions is that of teenagers (15-19 years), of which 60.8% worked in family business, while only 32.3% were in wage employment in 2013. The older groups tend to be less affected by bad working conditions (of those aged 20-24 and those 25-29, 40.3% and 29.7% respectively work in family business). Therefore, it is not surprising, that 60.5% of the youngsters worked in the informal sector in 2013. Looking at the sector distribution of youth employment, 45.3% worked in the agricultural, 40.7%, the services and 14.1% in the industry sector (ILO, 2014:27).

In 2013, the youth unemployment rate was much lower than that of the OECD countries on average (4.6% versus 17.3%; Table 2). Accounting for the educational attainment of the youth, their risk of becoming unemployed was increasing with education level according to the 2013

unemployment numbers. In 2013 the unemployment rate for those with no schooling was at 8.2%, for those with primary education at 10.8%, zero for those with secondary vocational education, 10.7%, 4.6% and 26.6% for those with secondary, higher vocational, or with university education respectively and finally 9.1% for postgraduates (ILO, 2014:24).This is a result of the fact that the Nepalese economy offers more jobs for low-skilled workers than for medium or highly skilled workers. A fact which is not surprising when having in mind that most people are employed in the agricultural sector.

When asking the young people for the reasons for unemployment, they mentioned the lack of education or training as the major reason (32.9%; in 2013), while also 32.1% think that the lack of jobs and/or the absent work experience (19.7%) led to insufficient work opportunities for youth (ILO, 2014:24).

As the Nepalese life is affected by political conflict lasting for 10 years, there are other difficulties to handle. Many young persons are manipulated, co-opted or forced to participate political rallies, strikes or yet military violence. So they lost the opportunity to go to school or vocational training (ILO, 2014:1). The proportion of the population that is not in the labour force is summarised under the term inactivity rate (OECD, 2002). In Nepal, the inactivity rate of persons who never completed school or did not even attend school, was with 23% respectively 19.1% about 11.4%-points respectively 7.5%-points higher, than for persons who completed their schooling (11.6%).

The KOF Youth Labour Market Index (KOF YLMI)

To compare the labour market situation of adolescent across countries, the KOF Swiss Economic Institute developed the KOF Youth Labour Market Index (KOF YLMI) (Renold et al., 2014). The basic idea behind this index is that a single indicator, such as the unemployment rate, does not suffice to describe the youth labour market adequately and to provide enough information for a comprehensive cross-country analysis. To improve the information content of such an analysis and to foster a multi-dimensional approach, the index consists of twelve labour market indicators[4], which are summarized in four categories.

[4] The data for these indicators are collected from different international institutions and cover up to 178 countries for the time period between 1991 and 2012.

Dimensions of the KOF YLMI
Activity state - Unemployment rate - Relaxed unemployment rate[5] - Neither in employment nor in education or training rate (NEET rate)
Working conditions Rate of adolescents: - with a temporary contract - in involuntary part-time work - in jobs with atypical working hours - in work at risk of poverty[6] Vulnerable unemployment rate[7]
Education - Rate of adolescents in formal education and training - Skills mismatch rate
Transition smoothness - Relative unemployment ratio[8] - Long-term unemployment rate[9]
Source: Renold et al. (2014).

The first category describes the *activity state* of the young, specifically of those between 15-24 years old, on the labour market. Therein, the adolescents are classified according to whether they are employed, in education or neither of both (unemployed, discouraged and neither in employment nor in education or training, see info box to the right). The category *working conditions* and the corresponding indicators reflect the kind and the quality of jobs of the working youth. The *education* category accounts for the share of adolescents in education and training and for the relevance of and need for their skills on the labour market. The fourth category, *transition smoothness*, shall connect the other three categories by capturing the school-to-work transition phase of the youth. Each indicator of the KOF YLMI ranges from 1 to 7. Thereby, a higher score reflects a more favourable situation on the youth labour market and a more efficient integration of the youth in the labour market. One of the major drawbacks of the KOF YLMI is the data availability. Often, a category is based on a single indicator or no indicator for that category exists at all. This could make comparisons across countries or groups of countries problematic or even impossible.

The KOF YLM-Index for Nepal

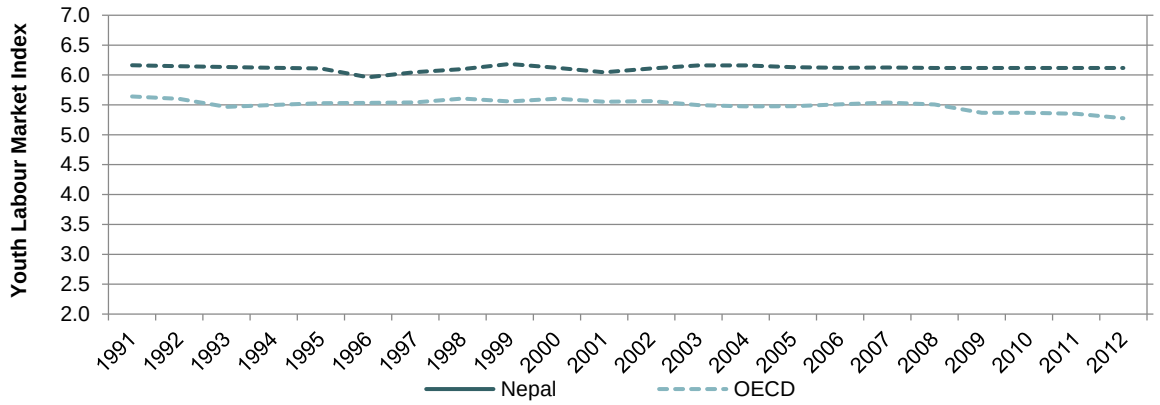
Data availability is also a problem in the case of Nepal. Consequently, we had to restrict the KOF YLMI to the unemployment rate and the relative unemployment ratio.

Figure 2 shows the evolution of the (limited) KOF YLMI for Nepal from 1991 to 2012 and compares it to the OECD-average. In the entire time period from 1991 to 2012, Nepal had a higher score of the (limited) KOF YLMI than the average of OECD countries. In 2012, the Nepalese youth unemployment rate was with 4.5% ways below the OECD average of 20.3%, also the Nepalese relative unemployment ratio was with 2.3 lower than the OECD average of

[5] It is calculated as the number of unemployed and discouraged workers as a share of the entire labour force. Discouraged workers have given up the search for work (not actively seeking), although they have nor job and are currently available for work (also: "involuntary inactive").
[6] Those who cannot make a decent living out their earnings, being at risk of poverty as a percentage of the working population.
[7] Share of the employed population working on their own account or those working in their family business and thus contributing to the entire family income. Both are less likely to have formal work arrangements and are therefore less protected by labour laws and more exposed to economic risk.
[8] Is defined as the youth unemployment rate (15-24 years) as a share of the adult unemployment rate (25+). If the youth cohort is affected in the same way than the adult group with respect to unemployment, then the relative unemployment ratio will be equal to one. If the youth are relatively more affected, then the ratio will be bigger than one.
[9] Those unemployed for more than one year (52 weeks) in the total number of unemployed (according to the ILO definition).

2.8, i.e., the youth unemployment rate was higher than the adult unemployment rate in both countries. This relation was more pronounced for the OECD average than for Nepal, meaning that the youth was in a relatively poor position in the average of OECD countries compared to Nepal. This results in an overall KOF YLMI of 6.12, which is a very good result (KOF, 2015b). However, given the relatively small size of the formal labour market in Nepal, these numbers must be interpret with a grain of salt.

Figure 2: KOF YLMI for Nepal versus the OECD average, 1991-2012



Source: KOF (2015b), Youth Labour Market Index.

1.3 The Political System

Understanding the basics of a country's political system and getting to know the political goals with respect to its education system, are crucial points for the understanding of the education system in a broader sense. In the first part, we explain Nepal's political system in general. The politics and goals and regarding the education system will be referred to in the second part.

1.3.1 Overview of Nepal's Political System

Since 1768, Nepal has been a kingdom of the Shah dynasty (ILO, 2014:5). It has been relatively isolated until the beginning of the 1950s. Except of China, Tibet, India and UK, Nepal established formal diplomatic relations with other countries only after 1950. However, Nepal had relations with many countries at the government level in pre-1950 days also. Nepal also had trade relations with many countries. Many Nepalese had traveled to many other countries and many foreigners have visited to Nepal.

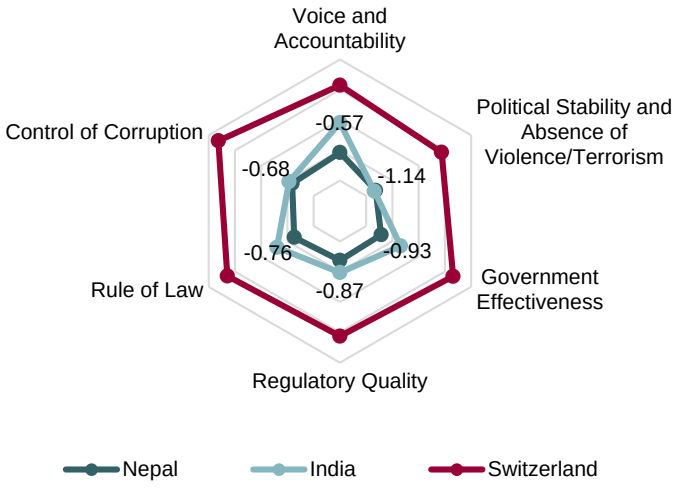
In 1959 the strict rules of the king changed into a constitutional monarchy, when then-King Mahendra introduced elections and a new constitution. But already in 1960, the king refused the parliamentary system and established a political system without parties after monarchical

rules again. Political parties stood existent, although they were officially prohibited (Vaughn, 2011).

In the early 1990s, the major political parties launched, together with student groups, the Movement for the Restoration of Democracy. It came to peaceful demonstrations in urban areas of Nepal. After 50 demonstrates had been killed by the police in these movements, King Birendra changed Nepal's political system into a parliamentary democracy with the monarch being the head of state. However, the government did not succeed to improve living conditions. And there exists evidence that it was corruptive (Vaughn, 2011:4).

In 1996, the Communist Party of Nepal (Maoists) wanted to take over power and set up a communist regime. It launched the "People's War" (insurgency) (ibid.). However, they did not manage to overthrow the incumbent government. But at the same time, the Nepalese government was not able to defeat the Maoists.

Figure 3: Worldwide Governance Indicators, Nepal alongside other countries 2013



Legend: Displyed scores are for Nepal. Source: World Bank (2014); own display.

The security situation deteriorated from 2002 onwards. Nepal fell into a constitutional crisis, because the national elections could not find place in the politically unstable environment. Finally, the cabinet was disbanded and the prime minister dismissed (Vaughn, 2011). In 2005, King Gyanendra took over control. But he could not stop the Maoists. In 2006, the Seven Party Alliance (SPA), which wanted a more democratic Nepal, opposed the king and some months after, they made a peace agreement with the Maoist. At this point, the ten-year conflict was over. However, the Constituent Assembly (CA) of the new federal republic wanted to draft a new constitution, but failed to do so. The result was a widespread political instability with social

and economic disruption (ESCR, 2013). Sushil Koirala, the sixth head of government (prime minister) since 2008, was elected in 2014. He swore to draft a new constitution within a year (Panda, 2014).

According to the Worldwide Governance Indicators of the World Bank (2014), it can be observed, that Nepal has a relative bad position. The Indicators, which measure different aspects of governments performance range between -2.5 (weak) and 2.5 (strong). As Figure 3 shows, all the governance performance indicators for Nepal are negative. For India it can be highlighted a similar, slightly better, situation. Most of the indicators were still negative except voice and accountability, which reached a positive score. Compared to Switzerland, the results are, as expected, very unsatisfying and have huge potential for improvements.

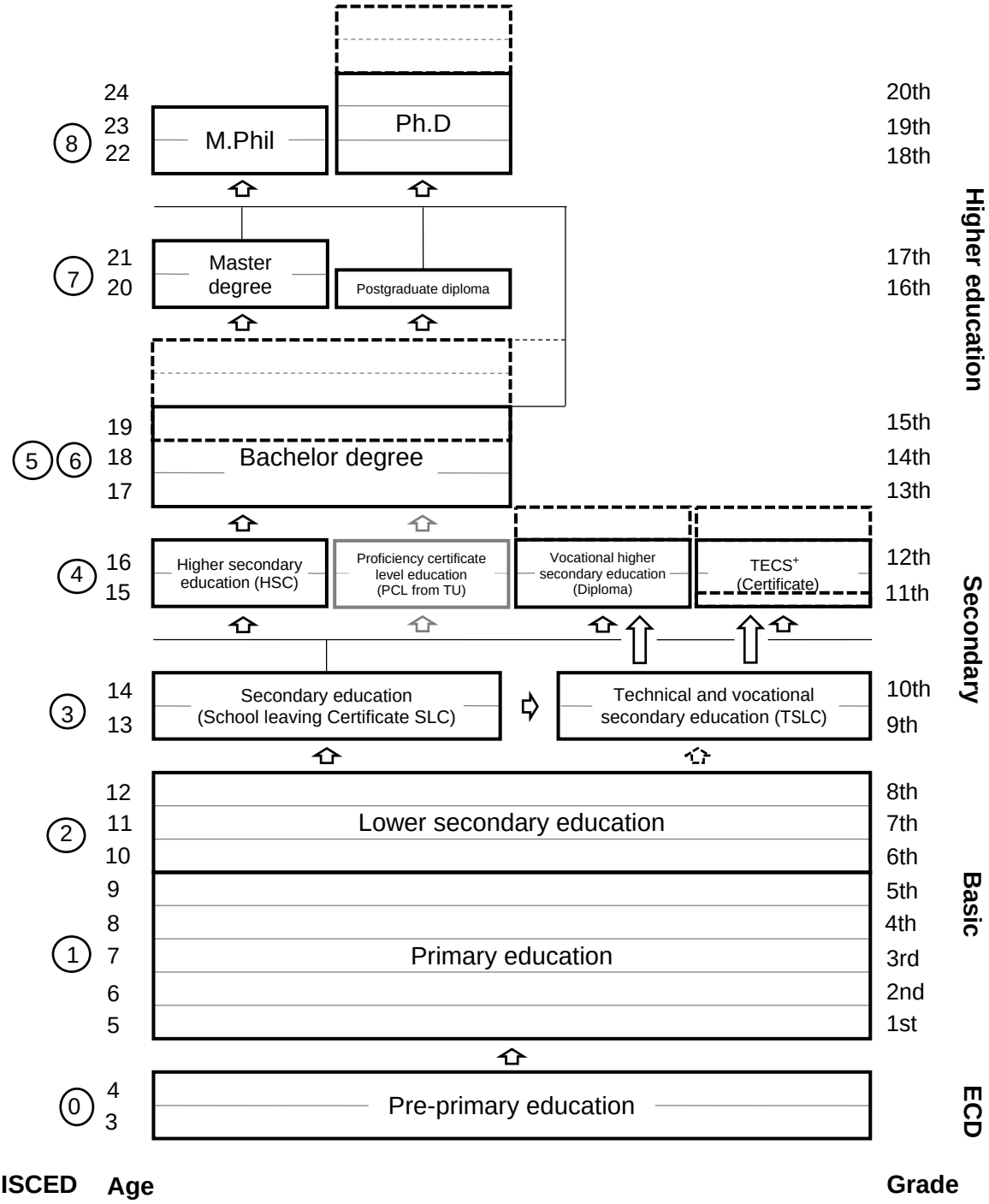
1.3.2 Politics and Goals of the Education System

Until the middle of the 1950s, Nepal did not have a modern school system. The aim of the School Sector Reform Plan (SSRP) is to restructure the education in school by raising quality and institutionalisation of performance accountability. The major focus lies in quality, efficiency and effectiveness of the services in the education sector. Key goals to reach are rights to education for everyone, gender parity, equity and inclusion (MoE, 2009). These goals are congruent with the Education for All (EFA) initiatives from the United Nations Educational, Scientific and Cultural Organization (UNESCO). In primary education, the latter contain access and good quality education for all students in primary age by 2015 (Clark, 2013). Finally, for a successful implementation of the SSRP, the capacity in the service delivery of the ministry of education has to be improved (MoE, 2009).

2. Formal System of Education

The aim of this chapter is to give an overview of the education system of Nepal. The design of an education system is important for a country's future and a way to improve welfare of its society. In particular, this chapter also refers to the vocational training and education system of Nepal, which will be described in more detail in Chapter 3. Figure 4 depicts the Nepalese education system, which is planned and managed at all levels by the Ministry of Education (MoE) (UNESCO, 2011).

Figure 4: Structure of Nepal's Education System



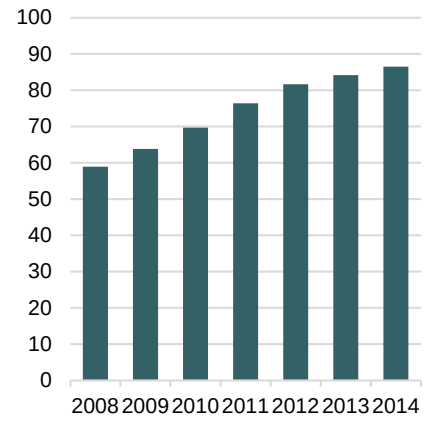
+Technical Education in Community Schools.
Source: MoE (2010); UIS (2012); EP-Nuffic (2015); own display.

It is subdivided into five stages, namely primary education, lower secondary, secondary, higher secondary and higher education (university). According to the new School Sector Reform Programme (SSRP) the number of sublevels should be reduced from five to three: to early childhood development (ECD), basic, secondary and higher education (MoE 2010).

2.1 Pre-Primary Education

Early childhood development (ECD) education in Nepal, starts at the age of 3 to 4 years and lasts for 1-2 years. It comprises pre-primary classes (PPCs), ECD community and school based centres. In the *International Standard Classification of Education* (ISCED) of the UNESCO 1997 ECD corresponds to level 0. In 2011, about 86.5% of all ECD programmes had been run as community-based ECDs and community schools based ECD/PPCs, while the rest (about 13.9%) has been managed by private institutions (DoE, 2011). Besides, there are private nursery classes for children below the age of 3 (UNESCO, 2011).

Figure 5: Gross enrolment ratio in pre-primary education 2008-2014



Source: UIS (2015).

As shown in Figure 7, the pre-primary enrolment rate in Nepal has increased drastically by 27.6%-points over a six-year period from 58.9% in 2008 to 86.5% in 2014 (UIS 2015). The enrolment rates were highest in the valley region of Kathmandu (and two other close districts) and lowest in the hill and mountain regions. Still, almost one third of the children aged 3-4 years did not have access to the ECD/PPCs in 2011 (DoE, 2011:9). According to the Flash I Report 2068 (2011-2012) of the Department of Education (DoE) (2011:4), about 54.3% of the students (girls 55.2%, boys 53.5%) in primary grade 1 participated in some kind of ECD/PPCs in 2011.

2.2 Primary and Secondary Education

As shown in Figure 4, theoretically, pupils spend five years in primary education when they are between 5 to 9 years old (grade 1-5) and another three years if they proceed to lower secondary education, typically when they are between 10 to 12 years old (ISCED 2011 level 2; grade 6-8) (UIS, 2012). In the future, children will be obligated to attend primary school (at least 180 days a year) until they complete five years of school, corresponding to the age range of 5 to 10 years[10] (ISCED 2011 level 1) (UNESCO, 2011).

At the primary and lower secondary level (ISCED 2011 level 1+2; grade 1-8), education has to be provided by the state, i.e. basic education has to be tuition free. Also textbooks are for free,

[10] Goal of the Ninth Plan (1997-2002). According to the definition of ISCED 1997, still in 2012, none of the grades in Nepal was compulsory (UIS, 2012). It is expected, that the new constitution (not made yet) will make grades 1-8 compulsory and grades 1-12 should be free for every one (UNESCO, 2008a:6).

but donations for schools from the community and the families of the children to cover expenses for development and maintenance are allowed (UNESCO, 2011).The transition from the primary to the lower secondary level is determined on grounds of the results of the school-based final examination at the end of the 5th grade (UNESCO, 2011). Lower secondary education ends with the District Level examination at the end of the 8th grade (UIS, 2012). Different to the more common division of secondary education into a lower and upper secondary level, classes are split into three levels in Nepal: lower, secondary and higher secondary education.

Hence, secondary education (ISCED 2011 level 3) is split up into two cycles: two years of secondary education (grades 9-10, pupils aged 13-14 years) and two years of higher secondary education (grades 11-12, pupils aged 15-16 years) (see Figure 4).

Secondary education ends with the nation-wide School Leaving Certificate (SLC) examination at the end of the 10th grade. However, passing the 10th grade is not sufficient for making oneself eligible for siting in the SLC examinations. Before being allowed to take the SLC, schools conduct examinations that are commonly called *"Test examinations"*. One becomes eligible for sitting in the SLC only after passing these *Test examinations*.

After the 10th grade (secondary education), graduates can either enter into the general path of two-year higher secondary education, which ends with the Higher Secondary Certificate (HSC) examination at the end of grade 12, or enrol into Proficiency Certificate Level (PCL) programmes from universities, which end up with the Proficiency certificate at the same grade (UNESCO, 2011). Though university offered PCL programs are still there, they are being phased out.

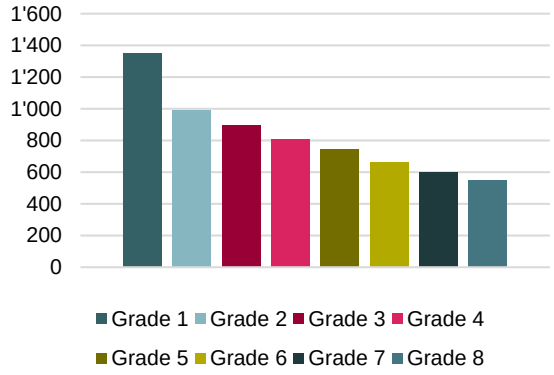
We need to be clear the difference between grades ten or SLC. Grade ten pass is just something like eligibility for siting in the SLC examinations, a state conducted national level examination. Schools conduct examinations that is commonly called as 'Test examinations'. One becomes eligible for sitting in the SLC only after passing the Test.

Besides it is possible, to start a two-year technical and vocational secondary in grade 9. Afterwards, technical schools and private technical training institutes offer two-year (sometimes 2.5 years) vocational higher secondary education. There are also shorter one-year programmes as well as short-term training courses (skills oriented) of about 2-8 weeks. These are classified as short term training programs and thus are not academic programs (UNESCO, 2011).

In 2011, the enrolment in grade 1 was with almost 1.35 million highest and significantly decreasing with the number of school years (Figure 13). In the 8th grade there were only scarce 550 thousand children. Girls made little more than 50% of the pupils in grades 1-8 (DoE 2011:19). Figure 13 indicates that only approximately half of the children complete primary education, not to speak of secondary education. Community schools are the default in Nepal. On average of basic level education, approximately 86% of all pupils were enrolled in public schools in 2011, while the rest was enrolled in private schools. (DoE, 2011:5).

The gross intake rate (GIR) in grade 1 is an indicator, that shows, with which capacity an education system absorbs children[11]. In 2011, the score of the GIR in 1st grade in Nepal was 140.7 (144.2 girls, 137.3 boys) and therefore high (DoE, 2011).

Figure 6: Enrolment by grade of basic education, Nepal 2011 (in thousands)



Source: DoE (2011).

However, the net intake rate (NIR), which is similar to the GIR, allows a more sophisticated prospect. The NIR shows, the access of the children to the 1st grade of primary school and therewith to education[12]. The NIR was 90.7 in 2011 (girls 90.2, boys 91.2) (DoE, 2011). Thus, access to education is not optimal.

In 2011, only 8% of the children enrolled in grade 1 were below the age of five years. Together with the NIR of 90.7 and the GIR of 140.7 this indicates, that a lot of children enter later than usual into grade 1 (DoE, 2011). The over-age enrolment ratio in primary education from the UIS (2015), witnesses this result. In 2011, about 44% of the pupils enrolling in 1st grade, were over-aged. Two years later, in 2013, it was still 34.3%, whereas the share of female pupils was considerably higher than for male ones (38% vs. 30.7%).

Another problem of the school in Nepal is the comparatively high repetition rate and the dropout of pupils. More than one of five pupils in the 1st grade (21.3%) has to repeat the school year and almost every tenth pupil (7.9%) drops out of school in the first year (school year: 2011).

[11] More precisely: The total number of enrolment into the 1st grade, divided by the total population of the official primary school-entrance age (Nepal: 5 years) (DoE, 2011:25)

[12] More precisely: The numerator of the NIR is the total enrolment of the official primary entrance age (here: 5 years), divided by the total population in the same age (DoE, 2011:25).

The relatively high amount of children with an age different from five in grade 1, builds a heterogeneous group, what might has a negative impact on these factors.

The number of pupils having to repeat a grade or dropping out of school were smaller in later grades, but the survival rate to grade 8 is only 67.5% (girls 69.5%, boy 66.2%). This means, that more than 3 of 10 pupils did not finish basic education. And only 58.8% of the children (girls 60.2%, boys 57.7%) graduate basic education in the theoretical duration of 8 years (DoE, 2011:32).

2.3 School Providers

Schools in Nepal can broadly be divided into four types, according to their provider:

- **Community-aided** are completely financed by the government (teachers' salary and other expenses);
- **Community-managed** get teachers' salary and other funds from the government, but the community is responsible for the management;
- **Community-unaided** either get partial support from the government or not;
- **Institutional schools** are mostly owned and managed by an individual or by a group of people as profit making commercial venture.

There were also 835 religious schools (Madarasa, Gumba/Vihar and Ashram/Gurukul) (DoE, 2011:4). The government supports them, if they have been mainstreamed into the regular education system by following the Education Act and Regulation and registering to the DoE (DoE, 2011:13).

The public funded schools in Nepal often do not reach and preserve the expected quality standards and the needs of the society. The results in the School Leaving Certificate (SLC) examination show, that the situation got worse over time. The lack of resources and funds in combination of a politicisation led into a difficult situation. Meanwhile, the institutional (private) schools in comparison have better facilities and performance in the SLC examinations due to better management. But there are huge differences between schools concerning the performance level of education. There are two groups of private schools, the 'A' class schools, which are managed and run by companies, charity organisation and trusts, and the so called English boarding schools from business minded people, which are something as "teaching-shops" (EducateNepal, 2010).

2.4 Postsecondary / Higher Education

Nepal's first and most important university (measured in number of student enrolment and campuses in the year 2012/13) the Tribhuvan University (TU), was founded in 1959. The second university was founded in 1986, followed by seven further universities thereafter, the most recent three were founded in 2012. Besides the nine official universities, there are so-called *deemed universities*, which are autonomous medical academies (UGC, 2014).

The campuses of these institutions can be distinguished into two types: constituent and affiliated. The affiliated campuses can be community- or private-based. Community-based campuses are supported by local communities and get regular grants from the government, while private-based campuses do not receive funds from the GoN and are managed by profit oriented organisers and shareholders. Constituent campuses get substantial public funding and mostly belong to universities. In addition, some few campuses in Nepal offer degrees in HE affiliated to foreign universities (UGC, 2012).

In 2012/13, from 1'276 campuses in Nepal's HE system, about 96 were constituent, 429 community and the rest 751 were private institutions. The TU thereof had on its own 60 constituent, 422 community and 559 private campuses, which amounted to a share of 81.6% of all campuses in Nepal (UGC, 2014:4). In 2012/13, medical academies only had one constituent campus each (UGC, 2014:4). Private institutions had about 32.9% of the students. The share of students in community universities was about 30.2%, the one of students in constituent campuses 36.8% (UGC, 2014:22).

Public financing in HE depends on which type of institution is observed, as explained in the previous paragraph. In 2012/13, overall grants for HE measured as a share of GDP were about 0.31% and as a share of the national budget only 1.4% (UGC, 2014:34). Compared with the shares of the OECD average in 2011, which were about 1.4% resp. 3.2% (OECD, 2015), this percentages were tiny. Public spending as a share of the education budget was about 9.31% in 2012/13 (UGC, 2014:34).

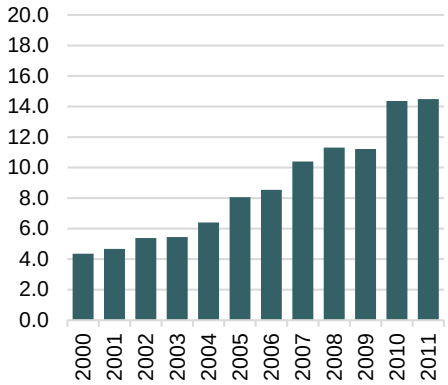
The HE institutions offer programmes from Bachelor level (ISCED 2011 level 6A; UIS, 2012) to Ph.D (ISCED 2011 level 8), as depicted in Figure 4 (UGC, 2012:12). The normal duration for a bachelor's degree is about three to four years; four years for agriculture, engineering, nursing and pharmacy; five years for veterinary; five and a half years for medicine. Besides the bachelor degree, universities offer postgraduate diploma (one-year), master's (two years) and doctoral degree programmes (three years) in various fields (UNESCO, 2011). Next to that, some universities and medical academies also offer a proficiency certificate level programmes for grades 11 and 12 (UGC, 2012:12). The TU offers 50 technical PCL courses in 2015 (TU,

2015). However, these courses will be phased out and/or integrated into normal secondary level schools (UGC, 2012:12).

Nepal's HE sector can be divided in campuses offering general and those offering technical education. Most campuses have general faculties as management (2012/13: 40.6% of Nepal's campuses), education (28.8%) and humanities (17.8%), next to other general faculties of lower significance as Sanskrit (0.7%), Buddhism (0.3%) and law (0.3%). Technical faculties are composed of those offering courses in science and technology (S&T) (5.3%), medicine (3.3%), engineering (2.3%) as well as forestry (0.2%), Ayurveda (0.2%) and agriculture (0.1%) (UGC, 2014:9). Hence, almost nine of ten campuses in Nepal (88.6%) offered general programmes in 2012/13, whereas only 11.4% offered technical programmes (UGC, 2014:7)[13]. This corresponded, to the total enrolment in the two fields (89.8% general, 10.2% technical in 2012/13) (UGC, 2014:21).

In 2012/13, nearly 560'000 students were enrolled in tertiary education. Participation in HE as a share of the population in this age group, the so-called gross enrolment ratio (GER), grew from 3% in 1980 to 17.11%, in 2012 by an annual growth rate of 5.6% within the 32 years. The GER increased considerably between 2008 and 2009, when it grew about 3%-points (10.1% to 13.1%) (UGC 2012:9 / 2014:32). The lower female GER, increased even faster between 1980 and 2010[14] (1% to 11.9%, 8.6% p.a. over the 30 years period). Most of the growth took place in the decade between 2000 and 2010, when the female GER tripled (UGC, 2012:9).

Figure 7: Enrolment rate in tertiary education 2000-2011, Nepal



Source: UIS (2015).

Figure 10 shows enrolment rates in tertiary education for the period 2000-2010. It confirms the trend exhibited by the GER: enrolment rates in tertiary education increased over time. The GER according to education levels was higher at the Bachelor level (21.8%) compared to the Master level (8.54%) in 2012/13 (UGC 2014:32). The other programmes made up only very small shares between 0.0 and 0.1% of enrolment in tertiary sector (UGC, 2012:35).

The gender parity index (GPI), defined as the enrolment of female students as a share of that of male students, increased from 0.2, to 0.7 between 1980 and 2010. In 2012/13, it rose even

[13] Due to the fact, that some campuses have more than one faculty, the share is probably not exactly correct.
[14] Because of missing data in 2012, this period is 2 years shorter.

to 0.91. The GPI among faculties shows, that in 2012/13 women, compared to men, inclined to enrol more often in fields as education (1.3) and medicine (1.3). In all other fields, male students outnumbered the female students. The lowest GPI was found in engineering with about 0.16 (UGC, 2014).

3. The System of Vocational Initial and Professional Education and Training

First attempts to integrate vocational training in were in the 1950's by Nepal's government (GoN) (e.g. by setting up schools that taught vocational as well as general subjects in the mid-1950s and multi-purpose schools in 1960). In 1971, the GoN implemented the National Education System Plan (NESP) which promoted vocational and technical education vocational education. According to this plan, every secondary school should have offered some vocational subjects (Adhikary, 2009). This lead to the establishment of trade schools in 1979 (Karki, 2012:131). In the same year, the National Education Committee (NEC) initiated the Technical School Work Plan (TSWP). The principal aim of the plan was the preparation of educational dropouts, school-leavers, students with no future in college and poor people without access to higher education, for the labour market in- and outside of Nepal (TVETipedia, 2013). As a consequence, vocational education and training (VET) is not regarded as a good-quality education, as it is the case with respect to the dual education system of Switzerland.

Officially, Nepal had about 218 occupational skill standards/profiles in 20 different sectors[15] in 2014 (CTEVT, 2014). The Council for Technical Education and Vocational Training (CTEVT) is responsible for the vocational track[16]. The CTEVT is the top body of VET and was established in 1989. It comprises schools which are directly managed by the CTEVT but also affiliated technical schools and training centres. Furthermore, it offers the formal Technical School Leaving Certificate (TSLC) and diploma courses, but also short programmes (39-1500 hours), which can be attended by anybody (CTEVT, 2015a) (for further information see chapter 3.1 below).

[15] The 20 sectors are: Agriculture, automobile, business, computer, construction, construction equipment, electrical, electronics, forestry, handicraft, health, hospitality industry, leather goods and products, mechanical, others, printing, renewable energy tailoring/garment and textile.

[16] For further information about reforms and the implementation of a vocational stream at secondary level, see Chapter 4.

3.1 Vocational Education and Training

In Nepal, all the VET programmes are called technical and vocational education and training (TVET) programmes. The technical and vocational secondary education track, which leads to the Technical School Leaving Certificate (TSLC), usually starts in grade 9 and lasts for two years. Besides the TSLC level, certificate/diploma level courses are offered- at the secondary level grades 9 to 10, as well as at grades 11 to 12. In addition, also short programmes (39-1500 hours), which can be attended by anybody are available (CTEVT, 2015a).

However, the entry qualifications, durations and structures vary greatly by programme. The duration of the programmes varies from one month to four years.

i) TSLC level programmes: Programmes leading to a TSLC last for about 15 months (1 year + 3 months OJT) (exception: TSLC in Auxiliary Nursing Midwifery (ANM): 15 months + 3 months OJT). For the latter programmes having passed the SLC (grades 9-10) is an entry requirement. Remember that passing the 10th grade is not sufficient for making oneself eligible for siting in the SLC examinations. Before being allowed to take the SLC, schools conduct examinations that are commonly called *"Test examinations"*. One becomes eligible for sitting in the SLC only after passing these *Test examinations*. So, the test examinations are implicit admission requirements.

   Other TSLCs last for 29 months and having passed grade 10 or the aforementioned *Test examinations* is and entry requirement.

   There are about 45 different programmes leading to TSLC level programmes with corresponding curricula[17]. These are offered in six different fields: agriculture (animal or plant), engineering (civil, computer, electronics/electrical or mechanical), health (medicine), tourism (cookery), humanities and management (CTEVT, 2014:47 et seq.). In 2010, 10'332 students were enrolled in TSLC level in schools of the CTEVT, which is the only provider in Nepal (MoE, 2010:91).
ii) Certificate/Diploma level programs: The entry requirement for the certificate/ diploma level programs is having successfully passed the SLC. These are offered in the following fields: agriculture, engineering, health/medical science.
iii) Short-term vocational trainings

After passing the SLC or TSLC, students can pursue one of about 33 different three-year diploma courses[18] (grades 11-13). These are provided by the CTEVT in the following six fields:

[17] For further information about curricula of programmes see the website of the CTEVT: ctevt.org.np (CTEVT n.d. b).
[18] See footnote 17.

agriculture (plant/animal); engineering; health/nursing; forestry; tourism; and humanities. After the programmes, graduates get a diploma at the certificate level (see Figure 8)[19] (CTEVT, 2014:52 et seq.). In 2010, about 8'403 students were enrolled in diploma courses (MoE, 2010:91).

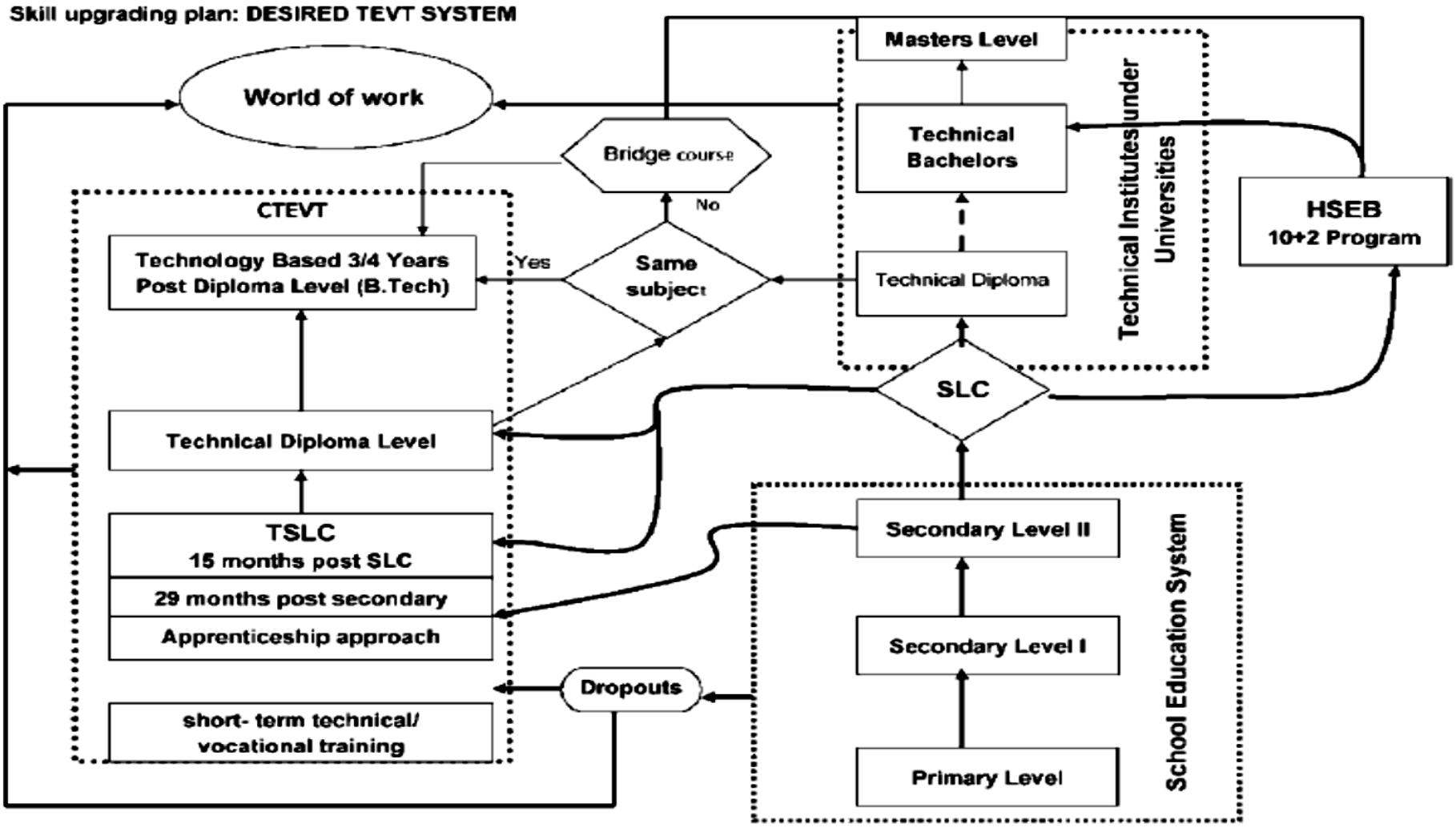
Besides, alternative education pathways are TVET programmes which do not lead to a TSLC and Technical Education in Community Schools (TECS) (sometimes called "annex programmes"). According to the UNESCO (2008b:13) they are both located at the secondary education level, in grades 9 and 10. The students studying in TECS get the TSLC. As the name suggests, TECS are general school based programs. However, some of the TECS can only be accessed after having passed the SLC and therefore refer to grades 11 and 12 (CTEVT, 2015b). In 2008, there were 17 technical schools in Nepal, with courses in agriculture, construction, health, mechanics, electrical installation, tourism, sanitation and other occupations. TECS programmes can either be of short or long duration. Their target group are school drop-outs and unemployed (UNESCO, 2008b:13). A maximum of 75 community-based schools are allowed by the Tenth Five-Year Plan and have to be approved by the CTEVT. According to the plan, about 40, respectively 100, students per school should participate in short, respectively long-term, programmes (ibid). This means, that the planned number of students in the long-term programmes is about 7'500, what is just a small fraction of the huge peer group.

Besides, there is a possibility for young Nepalese to do one of three different apprenticeships or one of three skill upgrading curricula after grade 10. The apprenticeships are junior welding technician, junior mechanical technician and junior electrical technician. These apprenticeships last for two years. Students must have passed the 10th grade in order to be admitted. Graduates are prepared for the Butwal Technical Institute (BTI) (the only official apprenticeship training institute in Nepal).

Another possibility for young Nepalese is one-year skill upgrading modular courses in the following fields of mechanics, plumbing and electrics are offered. However, these do not require any entry qualifications and are thought as preparatory training for Balaju Technical Training Centre (BTTC) only (since 1962, today: Balaju School of Engineering and Technology (BSET), a TSLC and diploma school in Kathmandu (BSET, 2015). Therefore students do not get a certificate if they pass (CTEVT, 2014:51)

[19] Some programmes are different and have more focus on experience (CTEVT 2014).

Figure 8: Desired TVET System according to skill upgrading plan



Source: CTEVT, 2011.

The enrolment rates of VET programmes were very low in 2007. From all students at the secondary level (according to the ISCEC 97 definition grades 6-12), only 0.9% were enrolled in VET programmes. This share was a little higher (2.6%) for those enrolled in programmes at the upper secondary level (grades 11-12). The shares of female students were lower in both groups (0.4% secondary resp. 1.3% upper secondary). In 2008, the shares of all persons decreased to only 0.7% (secondary) resp. 1.7% (upper secondary) (UIS 2015, ADB, 2014b).

VET Providers

Formal VET (State Side)

The formal TVET system is depicted on the right side of Figure 8 and contains the Technical and vocational secondary education (TSLC) (grades 9-10), the vocational higher secondary education (diploma courses) as well as the annex programmes (grades 11-12) (UNESCO-UNEVOC, 2014:7).

The TSLC programmes at the secondary, but also diploma courses at the higher secondary education level are provided by the CTEVT (CTEVT, 2014:52). Private institutions are allowed to organise these programmes, but only in affiliation with the CTEVT (Karki, 2012:134). Annex as well as technical and vocational education programmes are offered by technical schools and general community schools in secondary grades 9 and 10 (UNESCO, 2008b:13). Recently, the CTEVT also developed curricula for community schools at these grades (CTEVT, 2015b).

Non-formal VET

The non-formal sector of TVET does not provide generally accepted certificates and has the following providers / provider groups: The CTEVT, private institutions, other governmental agencies, technical institutions of the universities, community-based secondary school (annex schools), and NGOs/INGOs ((international) non-governmental organisations) (UNESCO-UNEVOC, 2014:9).

Some 10 ministries provide training programmes in their specific economic sector (ADB, 2014b). Training could be practically-based, entrepreneurship enhancing (for interested and potential citizen) or based on in-service OJT. There is no centralised ministry, which has the responsibility for these non-formal TVET programmes (Ghimire, 2011:165).

Different to the MoE (where the CTEVT belongs to), the Ministry of Industry, Commerce and Supply (MICS) runs only short-term technical and vocational education programmes

(UNESCO, 2008b:13). The MICS expanded the training with a duration between two weeks and half a year in various fields into rural cottage industries (Ghimire, 2011:165).

The Ministry of Labour and Transport Management (MLTM), more precisely the Department of Labour, offers training programmes in 33 different occupations in 11 skills development training centres. The duration of the programmes varies between one month and one year (Ghimire, 2011:165).

The Department of Tourism provides training in tourism and hotel management. The pupils are trained in cooking, restaurant and bar, front desk management, tour and travel guide, trekking guide and house guide (Ghimire, 2011:165 et seq.).

The Ministry of Women, Children and Social Welfare offers special courses for women. These comprise training in textiles, carpet weaving, tailoring, knitting, ceramics, sewing or housekeeping (Ghimire, 2011:166).

Foreign VET Projects

Alongside these nationally organised programmes, there are foreign projects aiming to improve Nepal's VET sector. For example the Swiss Academy for Development (SAD). Its Move 4 New Horizons (M4NH) project is an inclusive education programme comparable to the dual system of Switzerland. Thereby, the relationship between schools and enterprises is an important factor in the development of vocational education. Jobs are created according to the demand of the regional labour market, which is comparable to the functioning of the Swiss system. The students get practical training in vocational schools and intensive courses from specialists in combination with basic business skill teaching. In order to find and receive the right profession, students get support and coaching. About 197 young people have completed the pilot phase of one year, from which 71% had a job or are self-employed six month after the practical training (SAD, 2015).

3.2 Professional Education and Training (PET; at Post-Secondary Level)

Professional education and training (PET) refers to vocational and professional education and training at the post-secondary, tertiary level. In the case of Nepal, instead of using the term PET we will refer to vocational and professional education and training (at the post-secondary level) by using the term TVET.

Universities with technical institutes offer TVET programmes comparable to bachelor, master and doctoral degrees often in agriculture, engineering, information and communication technology (ICT), medicine and technician level programmes in different trades (Ghimire,

2011:164). Even if these courses are more general than PET courses offered in Switzerland, we will explain them briefly in the following paragraph since they are still classified as having a “vocational” component and thus have to be separated from normal university programmes.

Tribhuvan University (TU) has five institutes with higher education programmes (Institute of Medicine, Institute of Engineering, Institute of Agriculture and Animal Science, Institute of Forestry, Institute of Science and Technology) (Ghimire, 2011:164). In the past, 40 campuses were responsible for teaching higher level professional master programmes (but also secondary level education). After the armed insurgency carried out by the Maoists (1996-2006), the CTEVT had to phase out some programmes (such as JTA, ANM and others) from the TU (as well as Kathmandu University, Purbanchal University, Pokhara University and B.P. Koirala Health Science Academy) through the decision of Nepal’s government. In addition, the Education Commission advocated to withdraw certificate as well as diploma programmes for committing them to the CTEVT. Instead, the universities put up technical institutions to raise the supply for the required technical manpower (Ghimire, 2011:164 et seq.).

Besides, private institutions offer programmes in higher technical education in collaboration (also called affiliation) with the CTEVT. Often, NGOs or INGOs are involved in organising the cooperation. An increasing number of colleges provide higher technical programmes in affiliation with universities (Ghimire, 2011:165).

3.3 Administrative and Supervisory Structure and Operation of the VET System

The Ministry of Education (MoE) is responsible for Nepal’s education system and its TVET sector. At the political level, the MoE is managed by a cabinet minister. At a bureaucratic level, one secretary hold the responsibility. The functional level of the MoE is divided into the following four divisions with a joint secretary each: administration; higher education and educational management; planning; and monitoring, evaluation and inspection (UNESCO, 2011).

Since 1999, the Department of Education (DoE) has the responsibility to manage the overall implementation, supervision and monitoring of all education programmes (formal and informal) (UNESCO, 2011). There are also five regional education directorates (REDs), which coordinate, monitor and supervise school level teaching, learning and development activities at all education levels from their region. Due to the division into further districts, the REDs are also responsible for district level programmes (UNESCO, 2011).

As apex body of TVET and autonomous institution on the national level, the CTEVT is responsible for the regulation and quality control of the VET system. In addition, it controls the

formulation of the curricula, the development of skill standards for different occupations as well as the examinations, the commissioning of research studies and formulation of the training needs of the labour market (Parajuli, 2013:60). It takes over the governance and management of TVET institutions in Nepal. Every provider of TVET, for example, has to pass the review process of the CTEVT (ADB, 2014b:28).

According to the CTEVT Act[20], the executive power over the VET system is exercised by the Vice-Chairman, the policy chief and the Member-Secretary, which are elected by the ministerial cabinet of the GoN (Karki, 2012:132 et seq.). The CTEVT's decisions in its beginnings in most cases had been made without concurrence with the government or the ministry. The institution even was able to implement by-laws and regulations concerning administrative and financial issues. After the 3rd amendment of the CTEVT Act, parts of this autonomy was abolished. Frequent changes of the CTEVT's chief executive officer (CEO) and poor support by the government due to the instability of the latter additionally reduce autonomy of the CTEVT (Karki, 2012:133). Moreover, the government has the right to determine the direction of technical education and vocational training, the skills testing certification and standardisation.

3.4 Educational Finance of the VET System

Financial resources of VET systems either could come from the state, the pupils through tuition fees or the industry. Access is a minus when training centres charge tuition fees, because disadvantaged students are not able to pay them. On the other hand, incentives of tuition fees help to make good investments only for those who really want to learn something. If either the state or the pupils their selves finance the education and training system, it is more likely that the direct connection to the labour market is lacking and, therewith, the knowledge which skills demanded by the industry. Funding is more likely less input-based but more output-based if the industry is involved. This means, financing is bound on targets (as knowledge, competencies and skills of students), instead of input factors (for example to pay teacher's salaries, material costs and utilities), which can lead to unwished linkages between budget allocations of TVET and expected outcomes (Karki, 2012:133).

Unfortunately, the CTEVT's funding is input-oriented and also most public institutions are funded this way (Karki, 2012:133). Technical schools, under the CTEVT, submit their proposed annual budget to the GoN. The MoE gives the annual budget, which adds up to less than 1% of total government budget and short of 3% of the education budget (Joshi, 2014:62), to the

[20] Which is the legal foundation of the CTEVT.

CTEVT. New investments in, for example buildings or equipment, are upon approval by the CTEVT and are covered by the GoN (Karki, 2012:136).

There exist only few projects with output-funded TVET programmes and they are mostly from external development partners. Examples therefore are, the Employment Fund (EF) from Helvetas or the Enhanced Vocational Education and Training (EVENT) from the MoE which both are supported by various other institutes (Karki, 2012:133).

Private institutions, in most cases, charge tuition fees for technical and vocational education in 2012. Because this excluded poor families from TVET programmes, the CTEVT enacted, that 10% of the whole enrolled capacity of students, has to get scholarships (Karki, 2012:135). Recently, they joined bilateral and multilateral funded programmes and projects based on programmes of the government and are therefore able to spare tuition fees (ibid).

3.5 Supplying Personnel for the VET System (Teacher Education)

The Training Institute for Technical Instruction (TITI) is the centre of excellence for development and training of teachers in vocational education (established in 1991 (MoE, 2010:90)) (UNESCO-UNEVOC, 2014:10). It provides basic as well as additional training in modular courses and training programmes (Bachelor degree programme in technical education, advanced training in instructional media development and various short-term training programmes (MoE, 2010:90)) (UNESCO-UNEVOC, 2014:10) and is the only institute with regard to the future demand of teachers and innovation in their education and training (Subedi, 2012:21). The teaching diploma, which most TVET teachers hold, can be obtained in part- or full-time training. If teachers have limited practical experience, there is a possibility to take professional practical training in companies and organisations of the industry, the commerce, the agriculture and the health care sector (UNESCO-UNEVOC, 2014:10). Financial support from the Swiss government between 1991 and 2007 helped TITI to build up an international reputation (ADB, 2014b:9).

The current situation of the TVET teacher education and training system is far from satisfying. Everyone can become TVET teacher after passing technical school education (SEAMEO VOCTECH and UNEVOC, 2012:60). There are no regulations for compulsory professional experience of the teachers, pre-job training or OJT. Only a small number of TVET teachers has had pre-job training (ibid).

In general, professional TVET teachers have to hold either a diploma, a bachelor degree, a master degree or a Ph.D., while teaching assistants only need a TSLC (SEAMEO VOCTECH and UNEVOC, 2012:60 et seq.).

Fixed standards for the competencies of TVET teachers and for the training staff is missing (SEAMEO VOCTECH and UNEVOC, 2012:61). Hence, in most cases, junior teachers who do not yet hold a diploma, teach at TSLC as well as at the diploma level. Their educational background, but also their instructional and occupational skills often are weak (ibid.).

Part of the problematic situation stems from the low level of funding and trained subject teachers as well as poor physical facilities (ibid.).

3.6 Curriculum Development

Short time training programmes are developed according the DACUM (Developing a Curriculum) process (Jha, 2013:126). It helps to quickly create a job profile of an occupation by writing down duties and their tasks. Therewith, on one hand a curriculum for a skill profile can be developed and on the other hand a parallel evaluation of earlier training programmes is possible (Collum, 1999:1). The CTEVT or private TVET institutions can set up short-term curricula, but the CTEVT has to approve them. However, most of the short-term programmes get approval respectively were developed and provided by the CTEVT itself. But also private TVET institutions are allowed to teach and train programmes, which the CTEVT has developed (Karki, 2012:136).

However, TSLC and diploma courses run through a different development process. Experts of related programmes meet according to private sector demand, organised by the curriculum division (CD). They discuss with members of universities that have run those programmes in the past or are running them today, to transfer them to the CTEVT and subsequently select subjects. The experts decide about the duration of programmes and determine the hours spent for theoretical and practical education and training. After this, the CD commits responsibility create subject contents to the experts, whose drafts were sent back to the CD. Meetings of the technical subcommittee for at least three days, take place and go on with five or six meetings with discussions about every point of each course. Only if the experts from the technical subcommittee find a consensus about all the points of each programme, they are handed on to the curriculum committee (CC). This instance finally has to approve them (Jha, 2013:126).

Concerning the TSLC and diploma course curricula, the vice chairperson of the CTEVT is above the CC. The members of the CC is made up of senior (first class) officers of the line ministry, experts of universities and representatives of professional organisations. If CC gives its approval, the curriculum will be implemented in technical institutes (Jha, 2013:126 et seq.).

The employability of the pupils depends heavily on the adequateness of the curriculum. This can only be reached by matching the curriculum content with the needs and changes of the

industry (Basnet, 2012:34). Since there is no maintenance of the labour market information system (which traces the needs of the labour market), the system is not up to date and not agile to respond on labour market demand. Different industries and their needs in training and manpower issues are not collected in data bases (Jha, 2013.127). Involvement of the industry in TVET is also minimal. Training providers, which are often public, do not have an appropriate understanding for the labour market and its needs. Even worse, the industry neither has councils at national level, nor a lot of direct committees for advisory (SDP, 2013:2).

The Nepalese TVET system is mainly teacher-centred and traditionally classroom-based. A real workplace-orientation is missing, what demotivates students and leads to less effective teaching-learning outcomes. The efficiency of the system is therefore low (Jha 2013:127). Also, transition of trainees to labour market is not supported adequately (SDP, 2013:2).

4. Major Reforms in the Past and Problems for the Future

The school sector reform programme (SSRP) 2009 – 2015 has the goal to restructure the education system from grade 1 to 12. Grades 1 to 8 will be called basic education and grades 9 to 12 secondary education. Basic education should be compulsory for every child in Nepal. Therefore the access is the essential factor (MoE, 2009:17). According to the WDI, the net enrolment rate (NER) of primary and basic education has recently increased (World Bank, 2015).

Access is also an issue for the TVET system. Poverty and the illiteracy hamper the development of TVET for unreached youth. Also, the present TVET has failed to attract people. In addition, the quality of the TVET system was still low in 2012, which relates might to the insufficient und inadequate funding of the programmes (which are often input-oriented) and to systematic problems (Sinha, 2012:18, Karki, 2012:133).

Although the interest for TVET by stakeholders and beneficiaries is raising, it is not yet well-established as a separate stream in the education system (Subedi, 2012:27). This stream in the education system needs to be strengthened and expanded and integrated (with ladders and bridges) with the general education stream allowing flexibility and movement across the stream. Therefore, the SSRP aims to implement a vocational stream, which allows that pupils are able to choose vocational education and training at the secondary level (grade 9). They will be allowed to change between the two streams, to go further into tertiary education. The change between the VET to the general track of general education will be possible with a one-year bridge (UNESCO, 2008b:15). Besides, the movement should be not only from TVET to general but also from general to TVET.

Clearer definitions and differentiations between types and levels in vocational training and technical education and more relevant content according to the needs of the labour market are necessary to improve TVET in Nepal (Subedi, 2012:27, UNESCO-UNEVOC, 2014:7).

The rather weak reputation of the CTEVT among its recognised qualifications is a problem, which can be shown in three factors: training and assessment institutions have different quality levels, what undermines value and integrity of the TVET programmes; there is too few comparable and reliable information for learners, employers and communities about training institutions and their performance; and considerable diversification, growth and change in labour market issues led to various TVET providers with different forms of programmes, which are not regarded individually and adequately by the regulation framework (Basnet and Basnet 2014:30 et seq.). The last factor is mostly shown in different regulatory policies and guidelines, what result in different treatment of providers (e.g. the current public funding majorly goes to the CTEVT) (ibid).
As a consequence of the recent direction of reforms, the reputation of the TVET programmes can increase simultaneously with enrolment rates.

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