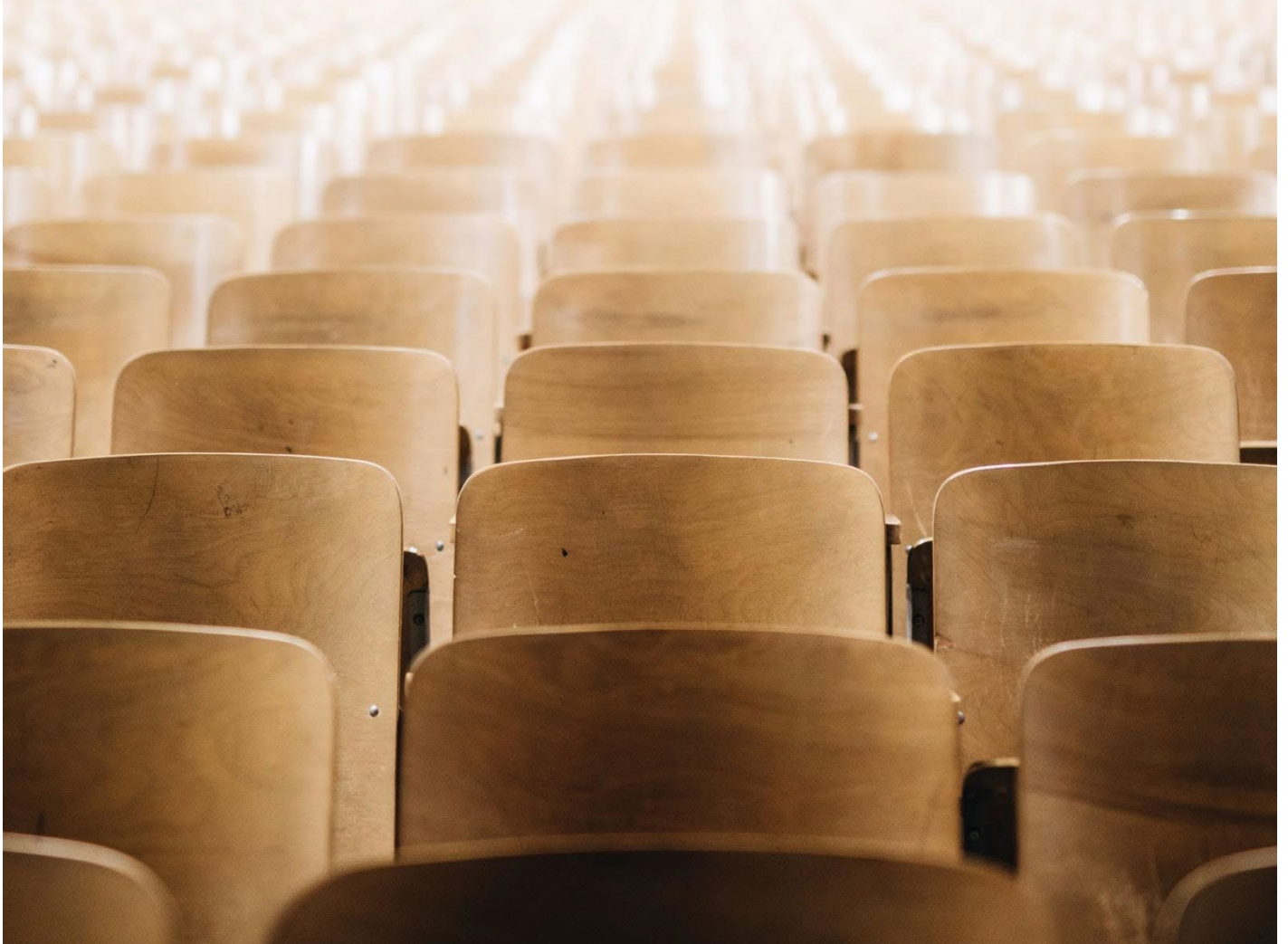


Factbook Education System: Mozambique

CES Chair of Education Systems

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List of Abbreviations

ACQF	African Continental Qualifications Framework
ANEP	National Authority for Professional Education
CNAQ	National Council for Evaluation of Quality of Higher Education
CNES	National Council for Higher Education
CO	Occupational Certificate
CTS	Sector Technical Committee
CV	Vocational Certificate
DHS	Demographic and Health Surveys
EP	Primary Education
ESG	General Secondary Education
ESP	Education Sector Plan
EU	European Union
FNEP	National Fund of Professional Education
FRELIMO	Liberation Front of Mozambique
GCI	Global Competitiveness Index
GII	Global Innovation Index
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
HEI	Higher Education Institution
ILO	International Labour Organization
INDE	National Institute for Educational Development
INE	Instituto Nacional de Estatística
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
ISDB	Instituto Superior Dom Bosco
KOF	Swiss Economic Institute
LFPR	Labour Force Participation Rate

MCTES	Ministry of Science, Technology and Higher Education
MICS	Multiple Indicator Cluster Surveys
MINEDH	Ministry of Education and Human Development
MITRAB	Ministry of Labour, Employment and Social Security
MPI	Multidimensional Poverty Index
MZN	New Mozambican Metical
SINAQES	National System of Evaluation, Accreditation and Quality Assurance
NEET	Not in Education, Employment, or Training
NER	Net Enrolment Rate
NQF	National Qualifications Framework
OECD	Organisation for Economic Co-operation and Development
PET	Professional Education and Training
RENAMO	Mozambique National Resistance
QNQP	Qualifications Framework of Professional Education
QUANQES	Qualifications Framework for Higher Education
SACMEQ	Southern and Eastern Africa Consortium for Monitoring Educational Quality
SEETP	State Secretariat for Technical-Professional Education
SNAQEP	National System of Registration, Assessment, Accreditation and Quality Assurance of Professional Education
SNE	National System of Education
STEM	Science, Technology, Engineering and Math
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VET	Vocational Education and Training
VPET	Vocational Professional Education and Training
WEF	World Economic Forum
WIPO	World Intellectual Property Organization
WGI	Worldwide Governance Indicators
YLILI	Youth Labour Index for Low Income Countries
YLMI	Youth Labour Market Index

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1. Foreword

The increasing competitiveness of the world economy as well as the high youth unemployment rates after the worldwide economic crises in 2008/9 have put pressure on countries to upgrade the skills of their workforces. Consequently, vocational education and training (VET) has received growing attention in recent years, especially amongst policy-makers. For example, the European Commission defined common objectives and an action plan for the development of VET systems in European countries in the Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for 2011-2020 (European Commission, 2010). In addition, a growing number of US states and other industrialized, transition, and developing countries (for example Hong Kong, Singapore, Chile, Costa Rica, Benin and Nepal) are interested in either implementing VET systems or making their VET system more labour-market oriented.

The appealing outcome of the VET system is that it improves the transition of young people into the labour market by simultaneously providing work experience, remuneration and formal education degrees at the secondary education level. If the VET system is optimally designed, VET providers are in constant dialogue with the demand-side of the labour market, i.e. the companies. This close relationship guarantees that the learned skills are in demand on the labour market. Besides practical skills, VET systems also foster soft-skills such as emotional intelligence, reliability, accuracy, precision, and responsibility, which are important attributes for success in the labour market. Depending on the design and permeability of the education system, VET may also provide access to tertiary level education (according to the ISCED classification): either general education at the tertiary A level or professional education and training (PET) at the tertiary B level. PET provides occupation-specific qualifications that prepare students for highly technical and managerial positions. VET and PET systems are often referred to together as “vocational and professional education training (VPET)” systems.

Few countries have elaborate and efficient VPET systems. Among these is the Swiss VPET system, which is an example of an education system that successfully matches market supply and demand. The Swiss VPET system efficiently introduces adolescents to the labour market, as shown by Switzerland’s 2007-2017 average youth unemployment rate of 8.1 percent compared to 14.8 percent for the OECD average (OECD, 2017).

Though not many countries have VPET systems that are comparable to Switzerland’s in terms of quality, efficiency and permeability, many have education pathways that involve some kind of practical or school-based vocational education. The purpose of the CES Education System Factbook Series¹ is to provide information about the education systems of countries across the world, with a special focus on vocational and professional education and training.

In the CES Factbook Education Systems: Mozambique, we describe Mozambique’s vocational system and discuss the characteristics that are crucial to the functioning of the system. Essential components comprise the regulatory framework and the governance of the VPET system, the involved actors, and their competencies and duties. The Factbook also provides information regarding the financing of the system and describes the process of curriculum development and the involved actors.

The Factbook is structured as follows: First, we provide an overview of Mozambique’s economy, labour market, and political system. The second part is dedicated to the description of the formal education system. The third section explains Mozambique’s vocational education system. The last section offers a perspective on Mozambique’s recent education reforms and challenges to be faced in the future.

¹ From 2013 to 2019, the Factbooks were produced within the framework of the Education Systems research division at the KOF Swiss Economic Institute. From 2020 they will be produced by the Chair of Education Systems (CES) group.

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The Education System Factbooks have 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. Mozambique's Economy and Political System

Category	Outcome
Population	31,255,435 (2020)
Area	799,380 km ²
Location	Eastern Africa
Capital City	Maputo
Government	Presidential Republic
Official Language	Portuguese
National Currency	New Mozambican Metical (MZN)

Table 1: Key Statistics and Information on Mozambique

Source: Own table based on Encyclopædia Britannica (2021) and World Bank (2021a)

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, these are briefly described in the first chapter of this Factbook. In addition, this chapter provides an overview of Mozambique's political system with an emphasis on the description of education politics. Table 1 reports key statistics and information about Mozambique, which are further discussed in this chapter.

1.1 Mozambique's Economy

Mozambique is a country in Eastern Africa, located on the coast of the Indian Ocean and bordering Tanzania, Malawi, Zambia, Zimbabwe, South Africa, and Eswatini. The gross domestic product (GDP) per capita² of Mozambique is US\$1229, one of the lowest in the world. Among its neighbours, only Malawi has a similarly low GDP per capita (US\$1487) while all others range between US\$11,466 (South Africa) and US\$2635 (Tanzania). Between 1990 and 2020, the GDP grew at a rate of 6.3% per annum. During the same period, the OECD economies grew at an annual rate of 2.0% and the Sub-Saharan economies at an annual rate of 3.6%. In 2020, the GDP of Mozambique shrunk for the first time after 1992. In between, the country experienced a long period of high growth rates. It is, however, important to note that only a part of this growth translated into higher GDP per capita, as Mozambique's population increased by a factor of 2.4 over this period.

The Multidimensional Poverty Index (MPI) helps in understanding the sources of poverty in Mozambique profoundly. The MPI reflects the intensity of deprivation and the proportion of the people who live under deprivation (headcount ratio) with respect to the three dimensions: education, health and living standards.

² Measured in constant 2017 US\$ at purchasing power parity (PPP)

Table 2: Headcount ratio of MPI in Mozambique and neighbouring countries

Dimension	Indicators	Mozambique	Tanzania	Malawi	Zimbabwe
Health (deprivation in percent)	Nutrient	34.8	28.9	25.6	12.3
	Child mortality	7.6	5.8	4.6	3.2
Education (deprivation in percent)	Years of schooling	50.3	12.2	26.4	3.5
	School attendance	29.8	25.5	7.4	7.9
Living Standards (deprivation in percent)	Cooking fuel	72.1	55.3	52.6	25.2
	Sanitation	64.2	52.1	28.9	21.4
	Water	55.6	42.3	30.5	19.8
	Electricity	67.5	53.6	51.7	19.4
	Flooring and roofing	68.9	46.3	48.3	16.4
	Assets	43.4	25.8	33.9	15.0
MPI		0.411 DHS(2011)	0.273 DHS(2015-2016)	0.243 DHS(2014)	0.110 MICS(2019)

Source: own table based on University of Oxford (2021).

Table 2 shows the different indicators of MPI and the resulting MPI for Mozambique and neighbouring countries. Mozambique has an MPI of 0.411 which indicates a high level of poverty in terms of both intensity and incidence. Mozambique also scores less than its neighbours, especially in the dimensions *Education* and *Living Standards*. MPI identifies a considerably higher deprivation in Mozambique than in its neighbouring countries. Malawi, which has a similar low GDP per capita, has a significantly lower MPI than Mozambique. It is important to note that there are considerable interregional differences in Mozambique: While provinces in the north of the country have an MPI of around 0.5, the Maputo province and Maputo city in the south have a comparatively low MPI with scores of 0.14 and 0.04, respectively.

Table 3 provides an overview of the value-added and share of overall employment by sector for Mozambique and, as a reference, the member states of the European Union (EU-28) in 2019. While 70.2% of the workers are employed in the primary sector, their economic output accounts for only 26% of GDP. 8.6% of workers are employed in the secondary sector and 21.2% in the tertiary sector. Their output accounts for 22.9%, respectively 39.9%, of GDP. In comparison to the EU-28, in Mozambique the primary sector employs a much bigger share and the tertiary sectors a much smaller share of the labour force. The secondary sector employs a similar share of workers and is more productive in Mozambique relative to the other sectors than it is in the EU-28. It is important to note that available statistics account only for around 89% of the total value added while it remains unclear how the remainder is distributed among the different sectors.

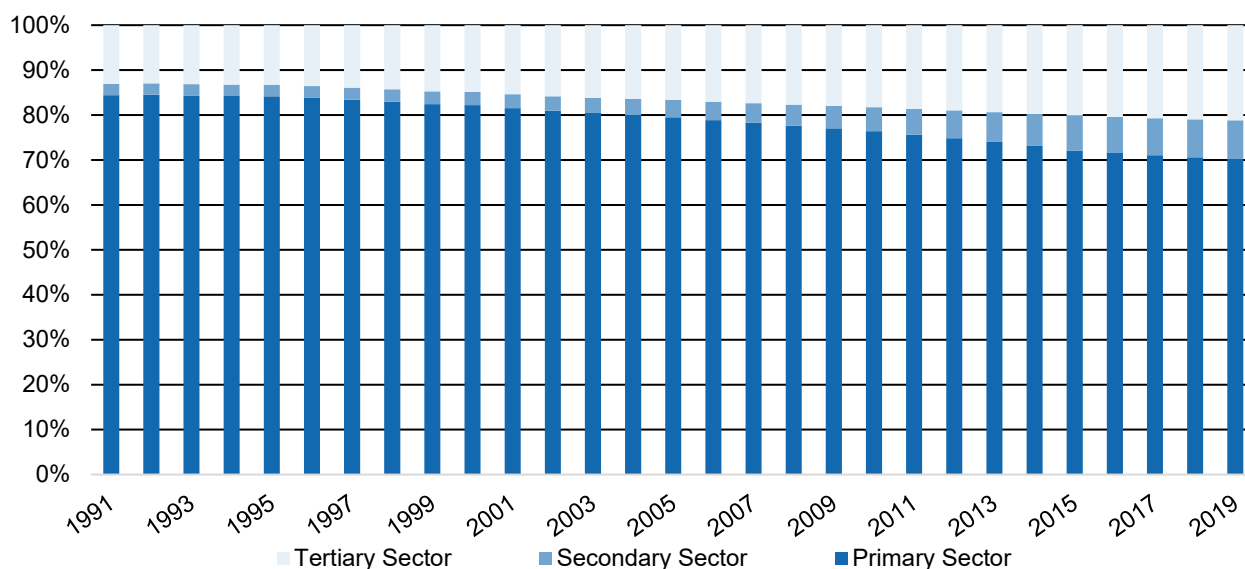
The share of the workforce that is employed in the respective sectors is a key factor of the economic structure. Figure 1 depicts the development of the distribution of the workforce between the three sectors. Since 1991 the share of the workforce employed in the primary sector steadily declined but remains, nevertheless, on a relatively high level. The share of the secondary sector grew more than threefold during the same period while the share of the third sector has grown modestly, but steadily.

Table 3: Value added and employment by sector, 2019

Sector	Mozambique: Value added ³ (%)	EU-28: Value added (%)	Mozambique : Employment (%)	EU-28: Employment (%)
Primary sector	26.0	1.6	70.2	4.1
Agriculture, hunting and forestry, fishing	26.0	1.6	70.2	4.1
Secondary sector	22.9	24.5	8.6	21.6
Manufacturing, mining and quarrying and other industrial activities	N/A	18.9	5.6	15.2
of which: Manufacturing	9.1	15.6	4.9	13.6
Construction	N/A	5.6	3.0	6.5
Tertiary sector	39.9	73.9	21.2	74.3
Wholesale and retail trade, repairs; hotels and restaurants; transport; information and communication	N/A	24.4	11.9	28.0
Financial intermediation; real estate, renting & business activities	N/A	26.5	1.4	16.7
Public administration, defence, education, health, and other service activities	N/A	22.0	7.8	29.6

Source: own table based on Eurostat (2021a), Eurostat (2021b) and World Bank (2021a)

Figure 1: Employment by sector (as % of total employment), 1991-2019



Source: own figure based on World Bank (2021a)

³ Due to incomplete statistics, the sum of all sector falls below 100 percent.

The Global Competitiveness Index (GCI) measures the competitiveness of an economy based on a set of institutions, policies and factors that determine the level of productivity within the economy. In the 2019 Global Competitiveness Report issued by the World Economic Forum (WEF), Mozambique ranked 137th out of 141 countries. The poor rank resulted from scores below Sub Saharan average in all categories except market size. Mozambique lags behind in ICT adoption (135th), macroeconomic stability (136th), health (140th), and skills (139th) (WEF, 2019).

The Global Innovation Index (GII) determines the innovative capability of an economy based on both the input to innovation, such as infrastructure or human capital, as well as the innovative output an economy produces. The GI attests a low level of innovative capability to Mozambique. In 2021, Mozambique ranked 122nd out of 132 countries. Mozambique performs similarly in the input (122th) and the output (118th) dimension. While institutions (127th) and business sophistication (127th) in the country are rated poorly, its infrastructure ranks better in comparison (76th) (WIPO, 2021).

1.2 The Labour Market

In the first part of this section, we describe the general situation of Mozambique's labour market. In the second part, we focus on the youth labour market in particular.

1.2.1 Overview of the Mozambique Labour Market

In Mozambique, as well as in the rest of Sub-Saharan Africa, the informal economy is the major source of employment. While the informal sector employs 70% of the labour force in Sub-Saharan Africa (OECD, 2013), it accounts for 86% of total employment in Mozambique (ILO, 2016). Due to the dominance of the informal economy in Mozambique, it is unclear how reliable official statistics on the Mozambique labour market are.

In Mozambique, there are sector-specific minimum wages, the lowest of which was above the national poverty line. The standard legal work week in Mozambique is 40 hours and may be extended to 48 hours. Occupational health and safety standards are up to date and appropriate for the formal sector. The above regulations, however, are not enforced effectively in the informal economy and in consequence, do not apply to the largest part of the labour force in the country. Workers in Mozambique have - with limited exceptions - the right to form independent trade unions, conduct legal strikes and bargain collectively. The limitations apply to workers in the public sector. There does not exist any unemployment insurance and workers laid off for economic reasons cannot count on a safety-net program. While the government fined companies that violated labour laws, these fines were insufficient to deter violators. The law prohibits forced or compulsory labour, unless it is imposed as a legal penalty. Again, these laws are not enforced effectively; there is evidence of forced labour in the mining, domestic service, and agricultural sectors. Most forms of child labour are prohibited. Children, however, are allowed to engage in domestic work with the permission of their legal guardian from the age of 12 which is not compliant with the ILO Minimum Age Convention of 15 years which Mozambique ratified (ILO, 2021e). Moreover, the laws that protect children from hazardous or forced labour are not enforced effectively; the labour inspectorate and the police are neither well-funded nor educated and low wages make these authorities receptive to bribery (U.S Department of State, 2020).

As illustrated in Table 4, Mozambique exhibits a high labour force participation rate (LFPR), which is above the OECD average for all included age groups. As in the OECD, the LFPR is the highest in Mozambique for the age group from 25 to 64. The unemployment rate is 3.6%, only half as high as in the OECD countries.

Table 4: Labour force participation rate and unemployment rate by age in 2015

Age group	Labour force participation rate		Unemployment rate	
	Mozambique	OECD average	Mozambique	OECD average
Total (15–64 years)	79.1	71.4	3.6	7.1
Youth (15–24 years)	63.4	47.4	7.4	14.1
Adults (25–54 years)	89.2	81.7	2.3	6.3
Adults (55–64 years)	86.1	61.2	0.6	4.9

Source: Own table based on ILO (2021a), ILO (2021b) and OECD (2021a)

It is important to note that low unemployment in a low-income country does not necessarily imply a well-functioning labour market. Many people have no choice but to take low-quality jobs that are badly paid or below their skill level due to the absence of social security systems (Fields, 2011). The unemployment rate is the highest for the age group from 15-24. The population of Mozambique is extremely young; 44% of the population is under 15 years old (World Bank, 2021b). In consequence, the workforce in the country will grow dramatically in the years to come.

Table 5: Labour force participation rate and unemployment rate by educational attainment in 2015 (people aged 25+)

Education level	Labour force participation rate		Unemployment rate	
	Mozambique	OECD average	Mozambique	OECD average
Less than primary education	88.2	64.1 ⁴	0.8	12.4
Less than upper secondary education	87.4		4.3	
Upper secondary education	82.6	80.0	8.8	7.5
Tertiary education	87.9	88.1	4.3	4.9

Source: Own table based on ILO (2021c), ILO (2021d) and OECD (2021b)

Table 5 shows the LPFR and the unemployment rate of Mozambique and the OECD average grouped by educational attainment. The LPFR in Mozambique is, again, above the OECD average for all cohorts. It is notably higher for people with a low level of education: Of the people with less than upper secondary education in the OECD on average only 64.1% participate in the workforce while in Mozambique around 88% of this group participate in the workforce. The unemployment is below the OECD average for all included groups. The unemployment rate is the highest in Mozambique for people with upper secondary education and the lowest for people with less than primary education.

Since 2000, the overall LPFR in Mozambique decreased from around 85% to around 78% in 2019, caused mainly by a drop in the LPFR of women from nearly 89% to 77% (ILO, 2021a). The overall unemployment rate modestly increased from 2.9% in 2000 to 3.2% in 2019 (ILO, 2021b).

⁴ Only *Less than upper secondary education* observed

1.2.2 The Youth Labour Index for Low-Income Countries (YLILI)

Building on KOF Youth Labour Market Index (Renold, Bolli, Egg, & Pusterla, 2014), which primarily relies on high-income country data, Kudrzycki et al. (2020) proposed an index for low-income countries. This index, which is the first to combine indicators specifically tailored to the realities of low-income countries, provides an assessment of individual countries' progress in addressing the needs of young workers. The YLILI helps to make a complex and multidimensional phenomenon more tractable by generating country-specific rankings that allow for comparisons.

Dimensions and indicators of the YLILI

Transition

- Share of youth not in education, employment, or training (NEET rate)
- Relative unemployment ratio
- Youth skills mismatch rate

Working conditions

- Youth working poverty rate
- Youth time-related underemployment rate
- Share of youth in informal employment
- Youth Vulnerable employment rate
- Share of youth in elementary occupations
- Share of youth in agriculture, fishery, or forestry

Education

- Share of youth with no secondary education
- Youth illiteracy rate
- Harmonized test scores

Source: Kudrzycki et al. (2020)

To construct the index, 12 youth-specific labour market indicators were selected from three broad dimensions that best reflect the situation of the youth in the labour market; transition from education to the labour market, working conditions in the labour market, and educational background. The indicators were obtained from three reputable compilers of international data; the ILO, UNESCO and the Demographic and Health Surveys. The index score is calculated as the arithmetic mean of the three dimensions and is varies from 0 (dysfunctional youth labour market) to 100 (functioning youth labour market).

The transition dimension reflects the quantity of employment for youth and encompasses (1) the share of youth not in employment, education or training (NEET), which captures the share of inactive youth, (2) the relative unemployment ratio, which measure the degree to which unemployment affects young people more than adults and (3) the skills mismatch rate, which shows whether unemployment disproportionately affects those with high or low education.

The working condition dimension captures the quality of employment and contains six indicators. The youth working poverty rate measures the proportion of working youth in poverty. The youth underemployment rate measures the share of employed youths who are willing to increase their workload. The informal employment rate captures the share of young people employed without contracts and/or social security. The vulnerable employment rate measures the share of own-account workers and contributing family workers. The share of workers in elementary occupations measures the proportion of young workers in low-skilled basic tasks, which may require great physical effort and can carry a high risk of injury. Finally, the share of workers in agriculture complements the previous indicator, as jobs in agriculture are generally low-paid and labour-intensive.

Finally, the education dimension captures the skill level of youth and comprises (1) the proportion of youth with no secondary education, (2) the proportion of illiterate youth, and (3) a measure of schooling quality in the form of harmonized test scores.

1.2.3 The YLILI for Mozambique

All indicators of the YLILI except for the indicator *share of youth not in education, employment, or training (NEET rate)* are observed for Mozambique. Despite one missing indicator, all three dimensions could be computed. Mozambique receives a score of 53.35 and ranks 44th out of 48 low-income countries. The *transition* dimension receives a score of 63.8, *working conditions* 52.1 and *education* 44.19. In international comparison, Mozambique performs best in the *working conditions* dimension, ranking 34th out of 56 countries for which this dimension was computed. According to the YLILI, the quality and quantity of employment as well as the skill level of the youth is low in Mozambique (Kudrzycki, Günther, & Lefoll, 2020).

1.3 Mozambique's 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. Therefore, in Section 1.3.1 we start by presenting Mozambique's political system in general. Then, in Section 1.3.2, we focus on the politics and goals of the education system.

1.3.1 Overview of the Mozambique Political System

Mozambique gained independence from Portuguese colonial rule in 1975. The Liberation Front of Mozambique (FRELIMO) seized power and established a Marxist-Leninist regime. Struggle for power between FRELIMO and the Mozambique National Resistance (RENAMO) led to a civil war which was ended only by a peace treaty in 1992. The war left at least four million people displaced and resulted in the death of about one million people. In the course of the peace process, several reforms took place. In 1984, the government started a programme to privatize large parts of the economy in order to join the World Bank and the International Monetary Fund (IMF). In 1990, a new constitution that introduced multiparty elections was established. FRELIMO remains the dominating party ever since. Despite the 1992 peace treaty, tensions between FRELIMO and RENAMO remained present. In 2013, sporadic fighting culminated in an abrogation of the peace accord. A new peace agreement was negotiated and signed by both parties in 2014 (Encyclopædia Britannica, 2021). Since 2017, the Cabo Delgado province in the north of the country faces insurgencies by extremists affiliated with ISIS (CIA, 2021).

Mozambique is a presidential republic. The president serves as the head of state and government, is elected by majority vote to a five-year term and can be re-elected only once. The prime minister and the council of ministers assist the president. The legislative branch consists of a unicameral assembly with 250 seats. The members of the legislature are elected by proportional representation vote. The last elections for both the president and the members of the legislature were held in October 2019. Filipe Nyusi (FRELIMO) was elected for his second term as a president with 73% of votes, followed by Ossufo Momade (RENAMO) with 21.9% of votes. In the legislative vote, FRELIMO received 71% of the votes while RENAMO received 20%. FRELIMO filed a legal challenge to the results of the election, which was, however, dismissed by the court (Encyclopædia Britannica, 2021).

Despite the de jure democratic system, Mozambique is classified as authoritarian by The Economist in their Democracy Index 2020. Mozambique is ranked 122nd out of 167 countries. The country faced a steady decline in its rating throughout the last years: While being rated with 5.49 in 2008, the rating dropped to 3.51 until 2020 (Economist, 2020).

Table 6 depicts the country's Worldwide Governance Indicators (WGI) issued by the World Bank. They measure six dimensions of governance and assign a value between -2.5 (bad governance) and 2.5 (good governance) to each of these dimensions. In 2020, Mozambique was ranked in the bottom third of all countries in each of the six dimensions, receiving its best rating for *voice and accountability* and the worst rating for *political stability and absence of violence/terrorism*. As illustrated in Table 6, Mozambique's WGI were subject to a sharp downgrade compared to 2010. Mozambique received a

significantly worse rating in all dimensions. Especially in the dimension *Political Stability and Absence of Violence/Terrorism*, the World Bank identifies a drastic worsening. The poor rating for control of corruption is consistent with Mozambique's performance in the Corruption Perception Index where Mozambique ranks 144th out of 190 examined countries (Transparency International, 2020).

Table 6: Worldwide Governance Indicators (WGI) for Mozambique, 2020

Worldwide Governance Indicators (WGI)	2010		2020	
	Estimate	Percentile Rank	Estimate	Percentile Rank
Voice and Accountability	-0.1	43.6	-0.6	31.4
Political Stability and Absence of Violence/Terrorism	0.4	58.3	-1.2	12.7
Government Effectiveness	-0.6	34.0	-0.7	23.6
Regulatory Quality	-0.4	38.3	-0.7	25.0
Rule of Law	-0.5	39.3	-1.0	15.4
Control of Corruption	-0.4	40.5	-0.7	26.0

Source: Own table based on World Bank (2021c)

1.3.2 Politics and Goals of the Education System

The two-tiered Portuguese educational system which only promoted rudimentary skills among the majority of the native population was replaced in the early 1980s by the National System of Education (SNE). In course of the reform, schools were nationalized in order to facilitate the reorganization and unification of the education system. Primary school enrolment and literacy increased drastically since these reforms opened the education systems for a large part of the population (Encyclopædia Britannica, 2021).

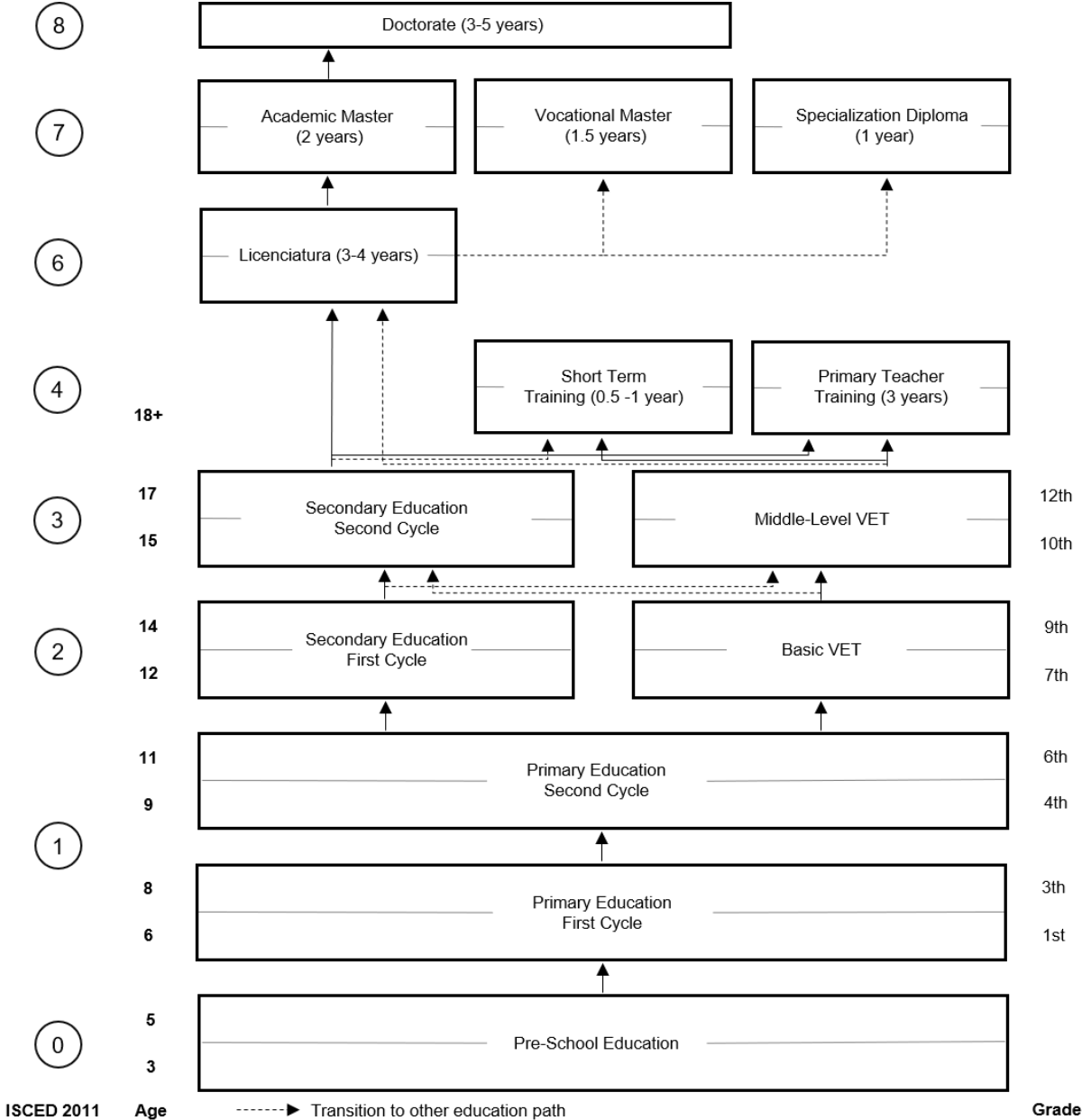
Since the introduction of the SNE, education is mainly a national competence. The Ministry of Education and Human Development (MINEDH) is responsible for general education, the State Secretariat for Technical-Professional Education (SEETP) for professional education, and the Ministry of Science, Technology and Higher Education (MCTES) for higher education. A large part of the curriculum for general education and teacher training is designed by the National Institute for Educational Development (INDE) and is the same for the whole country. In 2000, the government started the decentralization of curriculum development. The system now allows 20% of the curriculum to be designed locally (SACMEQ, 2021).

There remain major challenges for the education system. While the primary school enrolment is relatively high, the quality of education lags behind. Teachers often lack minimal skills and absenteeism is prevalent both among teachers and students. Another challenge is the lack of early childhood learning services (UNICEF, 2021). Furthermore, only a small share of pupils continues to study at the secondary level after primary school (U.S. Agency for International Development, 2021). Another challenge is the safety and inclusion of girls in the education system. These challenges are addressed by the Education Sector Plan (ESP) which specifies the goals for the education system. The current ESP is valid for the period from 2020 to 2029. The main objectives of the plan are to ensure the equity and inclusion of all population groups in the system, the quality of learning, and transparent and efficient governance (MINEDH, 2020).

2. Formal System of Education

The Mozambique constitution states that education is a right and duty of every citizen (UNESCO, 2010). While Mozambique’s government was able to increase school enrolment and literacy, there remain several challenges to the education system, especially regarding enrolment in the levels above primary education, the quality of education, and gender disparities. The education system in Mozambique is mainly a federal undertaking and consists of six subsystems, namely: pre-school, general education, adult education, professional education, teacher training, and higher education. The MINEDH is responsible for managing and monitoring the different subsystems, except higher education, for which the Ministry of Science, Technology and Higher Education (MCTES) is responsible, and professional education, for which the State Secretariat for Technical-Professional Education (SEETP) is responsible (MINEDH, 2020). Figure 2 depicts the formal education system in Mozambique.

Figure 2: ISCED 2011 Mapping for Mozambique



Source: Own figure based on UNESCO (2011), MINEDH (2012), Law No. 18/2018 (2018) and Law No. 6/2016 (2016)

Mozambique's education system is in a constant state of flux due to several reforms. In 2018, new legislation was passed which extended compulsory schooling from six to nine years. By 2023 the extension will apply to all students as the last cohort of students phases out of the old system. In 2019, teacher training was transformed from requiring only lower secondary education to requiring upper secondary education. This reform is still in the transition phase and not fully implemented at the time of writing. Parts of the effects of these reforms will only become apparent in the coming years (MINEDH, 2020).

Table 7: Net enrolment rate (NER) and gross enrolment rate (GER)

Education level	ISCED 2011	Net Enrolment Rate (%)	Gross Enrolment Rate (%)
Pre-primary education	0	NA	NA
Primary education	1	99.13 (2020)	118.42 (2020)
Secondary education	2–3	19.30 (2015)	35.41 (2017)
<i>Lower secondary education</i>	2	NA	37.94(2017)
<i>Upper secondary education</i>	3	NA	31.23(2017)
<i>Percentage enrolled in vocational secondary education</i>	2–3	8.68 (2020)	
Compulsory education age group	1-2	NA	88.74 (2017)
Post-secondary non-tertiary education	4	NA	NA
Tertiary education	5–8	NA	7.31 (2018)
<i>Short-cycle tertiary education</i>	5	NA	NA
<i>Bachelor or equivalent level</i>	6	NA	NA
<i>Master or equivalent level</i>	7	NA	NA
<i>Doctoral or equivalent level</i>	8	NA	NA

Source: Own table based on UNESCO (2021a), UNESCO (2021b), World Bank (2021c) and INE (2021)

The NER quantifies the total number of students in the theoretical age group for a given education level enrolled at that level expressed as a percentage of the total population of that age group. The GER quantifies the number of students enrolled at a given education level—irrespective of their age—as a percentage of the official school-age population corresponding to the same level of education. For example, for the primary education level, the NER indicates how many students of the typical primary school age are actually enrolled in primary school, while the GER sets the actual number of students in primary education—irrespective of their age—in relation to those who are in the official age to attend primary education.⁵

Enrolment in primary education is high in Mozambique. The NER of 99.13% and the GER of 118.42% imply on one hand that almost every child goes to primary school and on the other hand that there are currently many over-aged children in primary school which entered school late. In contrast, the enrolment rates in secondary education are relatively low with a GER of 35.41% and a NER of 19.3%. 9.24% of the students enrolled in secondary education are enrolled in a vocational program.

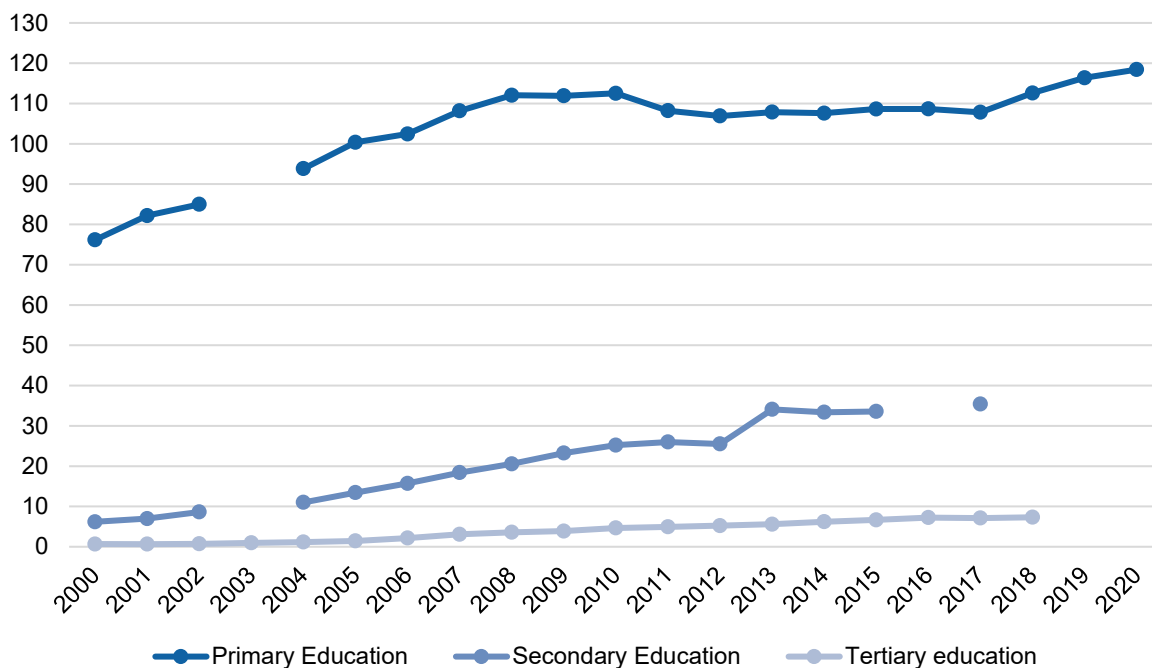
It is important to note that the reported enrolment ratios of secondary education are from 2017. There appears to be no more recent data on the enrolment ratios. The absolute enrolment numbers, however, increased between 2017 to 2020 from 602,057 to 769,564 on the lower secondary level and from 197,397 to 307,388 on the upper secondary level. While these numbers do not account for possible growth of the size of the school-age population during these periods, the magnitude of the increase of the absolute enrolment number suggests that the enrolment ratios increased since 2017.

Tertiary education in 2018 had a GER of 7.31%. Figure 3 illustrates the development of enrolment since 2000 for primary, secondary and tertiary education. On all three levels, the GER increased drastically.

⁵ A gross enrolment rate of 100 corresponds to a situation where each child in a given country is enrolled in the corresponding education level. A value above 100 could occur due to students who are older than the typical enrolment age for primary education (e.g. have to repeat grade, adult learners). A value below 100 implies that not everyone who is in the typical age for primary education is actually enrolled.

In 2000, GER in primary school was 76.16%. After a period of fast growth until 2008, a period of stagnation followed before the GER started growing again in 2017. The GER of secondary and tertiary both witnessed a steady growth, starting in 2000 from 6.19% and 0.66% respectively. The enrolment in the different levels is discussed in more detail and compared to the rest of Sub-Saharan Africa in the corresponding subsections.

Figure 3: GER of Primary, Secondary and Tertiary education (%), 2000-2020



Source: Own figure based on UNESCO (2021b) and World Bank (2021c)

2.1 Pre-Primary Education

Pre-primary education in Mozambique is offered in nurseries and kindergartens and is not compulsory. The targeted age group are children below the age of six. Pre-primary education is a joint responsibility of the Ministries of Education and Human Development, Women and Social Action, and Health. Most programmes are supported by NGOs and religious organizations (UNESCO, 2010). Enrolment rates are, however, very low. While there are no official numbers, it is estimated that only 5% of children between the ages of 3 and 5 years benefit from pre-primary education (UNICEF, 2021). The current ESP identifies and tries to address the challenge of increasing enrolment in pre-primary education (MINEDH, 2020).

2.2 Primary and Lower Secondary Education

Since 2018, both primary and lower secondary education are compulsory for children in Mozambique while before 2018, only primary education was mandatory. Primary education is the first part of general education in Mozambique and is free of charge (MINEDH, 2020). Children must enter primary education in the year of their sixth birthday. Despite this obligation, late entries into the system are prevalent. This is due to, on one hand, a lack of mechanisms to oblige parents to send their children to school and on the other hand to the inability of the school network to accommodate all children. Mozambique saw a sharp increase in primary school enrolment since 2000. GER increased from 76.16% to 118.42% and NER increased from 57.02% to 99.13%. In comparison, during the same time period, primary school enrolment in Sub-Saharan Africa increased from 82.99% to 100.46% (GER), respectively from 61.42% to 80.38 (NER). Boys still have a higher GER (121.9%) than girls (114.93%) in Mozambique. Gender

disparities in enrolment have, however, decreased drastically since 2000, when GER differed by more than 20 percentage points (65.35% vs. 87.02%) (UNESCO, 2021).

Primary education is divided into two cycles: the first cycle (EP1) consists of grades 1-3 and the second cycle (EP2) of grades 4-6. EP1 focuses on reading and writing skills, basic notions of hygiene, relationships, and the surrounding environment of the pupils. EP2 enhances the skills developed in EP1 and introduces natural and social sciences to the pupils. Within EP1, the teacher decides whether a child is promoted to the next grade. This decision is based on the child's attendance and academic performance. At the end of EP1, the children must pass a national exam in order to gain access to EP2. At the end of EP2 pupils must, again, sit national exams in order to finish primary school (UNESCO, 2010).

The dropout and failure rates for primary education are relatively high. In 2017, 8.9% of pupils dropped out of EP1 and 12.5% failed, while 7.4% dropped out of EP2 and 13.7% failed. Related to this, the completion rate of primary education is only 42%. Particularly girls have a high dropout rate: while 94% of girls enter primary education, more than half drop out before completing 5th grade. The main causes of this phenomenon are early pregnancies and forced marriages (MINEDH, 2020).

On the level of lower secondary education, pupils can choose between general education and VET. General secondary education (ESG) consists of two cycles and is offered in secondary schools. The first cycle (ESG1) corresponds to the lower secondary level and includes grades 7-9. The goal of ESG1 is to broaden the pupils' knowledge of mathematics, natural and social sciences as well as culture and physical education. The pupils must sit a national exam at the end of the 9th grade in order to complete ESG1.

Before lower secondary was compulsory, lower secondary schools were, in contrast to primary schools, not free and enrolment, tuition, and boarding fees had to be paid. There could no evidence be found whether this still applies today after the extension of compulsory schooling. VET is offered in professional schools in the areas of agriculture, industry or business. Basic VET, which corresponds to the lower secondary level, aims to train skilled workers and lasts 3-4 years (UNESCO, 2010). Basic VET consists of two levels, for the completion of both of which a certificate is issued. To graduate from basic VET, students must complete exams in all subjects of their study plan and take a professional aptitude test. The diplomas awarded to graduates are equivalent to the ones awarded in ESG1 (ANEP, 2021a). The potential consequences of the extension of compulsory schooling for basic VET are discussed in more detail in Section 3.1.

In 2015, only 64% of the children that graduated from primary school entered the secondary level. In consequence, enrolment rates are relatively low. In 2017, the lower secondary level has a GER of 37.94% which is considerably lower than the Sub-Saharan GER at the time of 50.72% (UNESCO, 2021). It is important to note, however, that absolute enrolment numbers increased heavily between 2017-when the GER was observed- and 2020. On the lower secondary level, absolute enrolment increased from 602,057 to 769,564. While these numbers do not account for possible growth of the size of the school-age population during this period, the magnitude of the increase of the absolute enrolment number suggests that the enrolment ratios are higher nowadays (INE, 2021).

The number of ESG1 schools has almost doubled between 2008 and 2017 (285 to 539). Despite this increase, the catchment areas of ESG1 schools remain large and the number of places limited. In 2017, only 29% of the appropriate age group completed lower secondary education (MINEDH, 2020). In the past, graduates from EP2 were often unable to continue their studies at the lower secondary level because secondary schools did not have enough capacity to face the demand. Making lower secondary education compulsory addresses the challenge of low enrolment. The resulting increasing demand, however, gives rise to further challenges regarding the capacity of lower secondary schools (MINEDH, 2020).

2.3 Upper Secondary Education

On the upper secondary level, Mozambique's education system offers both general education and VET. ESG2 corresponds to the upper secondary level and consists of grades 10-12. Upper secondary education is not compulsory in Mozambique. To enter ESG2, students must either have graduated from ESG1 or from Basic VET. The goal of ESG2 is, like ESG1, to broaden the pupils' knowledge of mathematics, natural and social sciences, culture, and physical education. At the end of the 12th-grade students sit national exams. As an alternative to ESG2, students can enrol in middle-level VET programmes, which aim to train technicians and last 3-4 years. Middle-level VET consists of three levels, for the completion of every of which a certificate is issued. The programmes are offered for a variety of agricultural, industrial, and commercial specializations (ANEP, 2021a). To enter a middle-level VET program, students must either have graduated from ESG1 or basic VET. To successfully complete middle-level VET students must pass exams in all studied subjects and do a professional apprenticeship (UNESCO, 2010). In terms of access to higher education, degrees from ESG1 and middle-level VET are equivalent (Law No. 18/2018, 2018).

While the enrolment rates in lower secondary education were considerably lower than the Sub-Saharan level in 2017, the enrolment rates for the upper secondary level were similar: in 2017, Mozambique had a GER of 31.23% compared to a GER of 33.14% in Sub-Saharan Africa at the time. As for the GER of the lower secondary level, it is important to note that the absolute enrolment numbers increased between 2017 and 2020, on the upper secondary level even more drastically from 197,397 to 307,388. The magnitude of this increase, again, suggests that the GER of higher secondary education is higher nowadays than the last observed GER suggests (INE, 2021).

There, however, remain gender disparities in enrolment on the upper secondary level: the GER of women is 28.03%, considerably lower than the GER of men with 34.47% (UNESCO, 2021). In 2019, the transition rate from lower secondary education to upper secondary education was 66%. The number of schools offering ESG2 more than tripled from 75 in 2008 to 262 in 2017, but, as for the ESG1 schools, the catchment areas of schools remain large. In 2017, only 13% of the appropriate age group completed upper secondary education (MINEDH, 2020).

2.4 Postsecondary and Higher Education

As depicted in Figure 2, the Mozambique education system offers both post-secondary non-tertiary and tertiary education. Both levels are part of the higher education subsystem. The responsibility for higher education lies with the MCTES. The structure of higher education in Mozambique follows the Qualifications Framework for Higher Education (QUANQES), which introduced a credit accumulation and transfer system to Mozambique's higher education. Higher education institutions (HEIs) offer a variety of programmes that may lead to different degrees, certificates or diplomas. In 2018, there were 53 HEIs in Mozambique, including 19 universities. Of these institutions 22 were public and the remaining 31 were private. Tuition fees must be paid for enrolment at higher education institutions. The government, however, grants scholarships to facilitate access to HEIs for low-income students (MCTES, 2021).

HEIs are open to students who have either graduated from ESG2 or middle-level VET (UNESCO, 2011). As a result of the competition for the limited places, students have to sit entry exams in order to enter higher education (SACMEQ, 2021). On the post-secondary non-tertiary level, students can enrol in two types of short-term courses for which a certificate is issued. These courses consist of 30-60 credits which are equivalent to ½ - 1 year of full-time study. Moreover, students can enrol in a primary teacher training programme that lasts 3 years. On the tertiary level, students can enrol in a *Licenciatura* program, which is comparable to a Bachelor's degree according to international standards and consists of 150 to 240 credits which is equivalent to 3-4 years of full-time study. Students with a *Licenciatura* degree can study in a Master's programme which consists of 75 to 120 credits. The Master's programmes are either

of academic or professional nature, depending on the institution and the studied program. Besides the Master's programmes, holders of a *Licenciatura* can enrol in 60 credit courses which lead to a Specialization Diploma. Doctorates are open to students with an academic Master's degree and last 3-5 years. (MINEDH, 2012).

In recent years, the higher education subsystem expanded heavily. While in 2000, the GER of higher education was 0.7%, it grew to 7.3% until 2018. Despite this, Mozambique's GER remains below the Sub-Saharan level of 9.4%. Women still have a lower enrolment in tertiary education (6.5%) than men (8.5%) in Mozambique (UNESCO, 2021a). It is expected that access to higher education will be further expanded in the future (World Bank, 2020). The quality of higher education, however, still faces several challenges as it leaves many graduates with an unsatisfactory skillset (Tambe & Miguel, 2021). Enrolment in higher education is concentrated on humanities and social sciences. In 2017, around 49% of students studied social sciences, around 25% studied to be teachers and only 26% were enrolled in a subject related to science, technology, engineering or math (STEM) which is below the Sub-Saharan average of 30%. Especially women enrol seldom in STEM subjects as they represent only 4% of total enrolments in STEM (World Bank, 2020).

2.5 Continuing Education (Adult Education)

In 2017, only 60.7% of the adults in Mozambique were literate, i.e. could read and write. The literacy rate of women was even lower at 50.3%. The literacy rate was slightly below the Sub-Saharan level of 64.5% at the time (World Bank, 2021a). This highlights the importance of adult education in Mozambique. While in developed economies the goal of adult education is often professional development, the goal in Mozambique is to ensure access to basic education for young people and adults who did not have the opportunity to study at the intended age.

Adult education in Mozambique is divided into two stages. The first stage focuses on literacy and the second stage on other basic education. Adult education is offered formally in schools but may also occur in an informal setting organized by civil society. It is part of the current ESP to strengthen adult education in the country, both in terms of quality and quantity. The goals of the previous ESP were far from being achieved: while the specified target was 700,000 enrolments in literacy schools, only around 400,000 people were enrolled in 2016 (MINEDH, 2020).

2.6 Teacher Education

Currently, there are 38 teacher training institutions in Mozambique that train teachers for primary education. Secondary school teachers are educated at the faculties of education of the universities. There currently exist 37 faculties offering secondary teacher training. Over the past decades, teacher education has undergone many changes. Since 2019, the training course for primary school teachers includes twelve years of schooling and three years of teacher training. The transition phase is, at the time of writing, not yet completed and some institutions still offer courses following two old models with ten years of schooling and one, respectively three years of teacher training (MINEDH, 2020).

There remain various challenges for teacher education in Mozambique. First and foremost, the knowledge of teachers is often unsatisfactory; only an estimated 1% of teachers master 80% of the curriculum of the 4th grade and only 60% know how to subtract with two digits. Improving the competencies of teachers is an urgent need for all subsystems. Moreover, there are still considerably more male than female teachers, especially on the secondary level. While among the primary school teachers 45.5% are female, only 22.8% of the secondary school teachers are female. Furthermore, there does, by now, not exist a training programme for staff which train teachers. This hampers the quality of teacher education (MINEDH, 2020). In addition, due to a constant shortage of teaching staff, many teachers are hired without having completed the required formal training (UNESCO, 2010).

3. The System of Vocational and Professional Education and Training

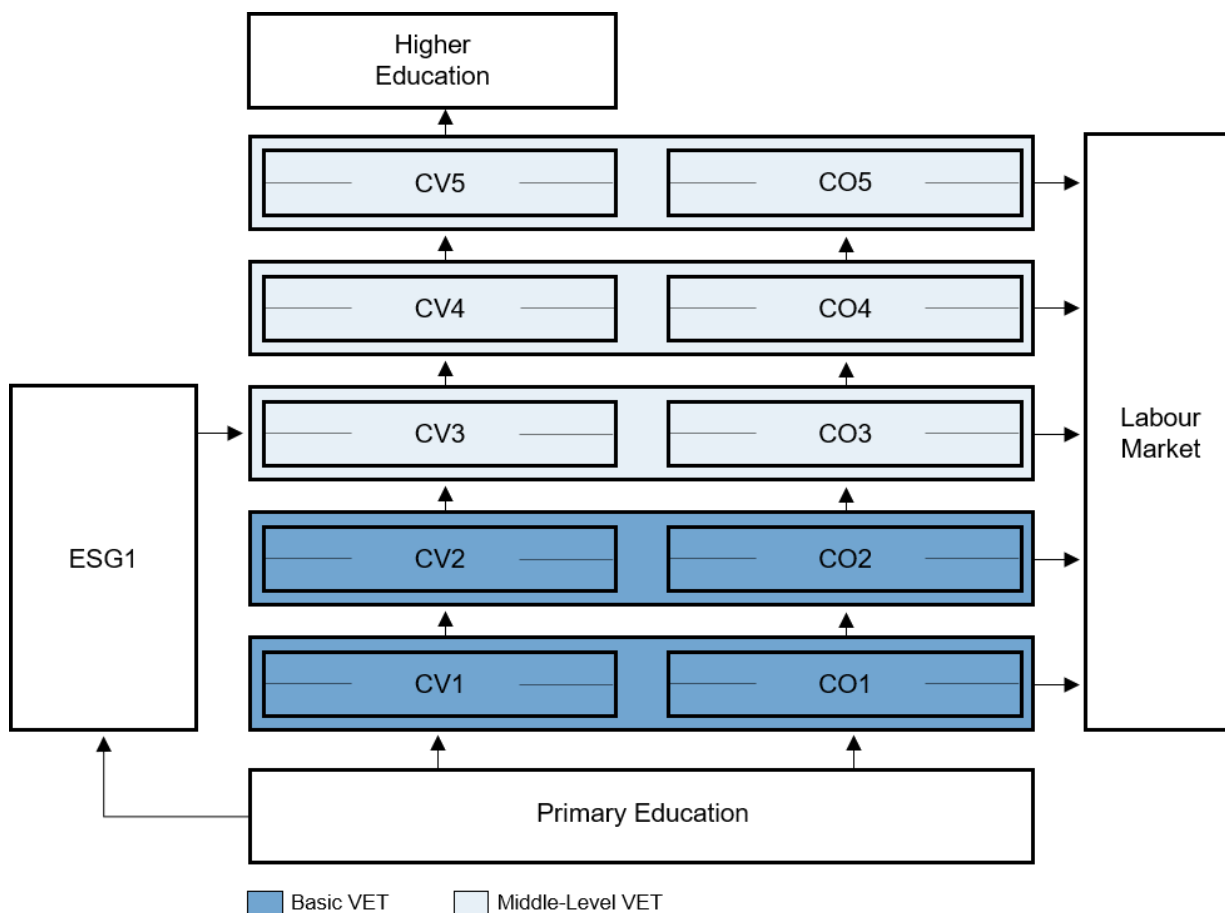
This section of the Factbook describes the VET system at the lower and upper secondary level and the PET at the tertiary level in more detail. Thereby, the term vocational and professional education and training (VPET) refers to both, the VET and the PET system. According to recent enterprise surveys, job-specific technical skills are very sought after in Mozambique. This highlights the importance of the VPET system for the country. Since the early 2000s, Mozambique's VPET system witnessed ongoing reform, discussed in detail in Section 4. This reform process had the goal to improve the quality and relevance of VPET and to increase its responsiveness to the demands of the labour market (World Bank, 2020).

The structure of the VET system is specified by the Qualifications Framework of Professional Education (QNQP) and the structure of PET, which is part of the higher education subsystem, is specified by the Qualifications Framework for Higher Education (QUANQES). In course of the development of the African Continental Qualifications Framework (ACQF), which is an initiative by the African Union aimed to enhance transparency and portability of qualifications across the continent, these two frameworks may be joined into a unified National Qualifications Framework (NQF) in the near future (Castel-Branco, 2020).

3.1 Vocational Education and Training (VET; Secondary Education Level)

The Qualifications Framework of Professional Education (QNQP) specifies the entry and exit pathways of the Mozambique VET system. The QNQP consists of five levels, for the completion of each of which a certificate is issued. There are two types of certificates for each level: Vocational Certificates (CVs) and Occupational Certificates (COs). Both types of certificates are formal VET programmes. The main difference between COs and CVs is that COs are predominantly of practical nature and have a low proportion of theoretical learning while CVs are mainly school-based. The QNQP defines what knowledge, skills, and degree of independence can be expected from a student which finished a given level (ANEP, 2021a). The QNQP was established in course of the new Professional Education Law which was passed in 2014 and amended in 2016. At the time of writing, all institutions should have adapted the QNQP (Jones, Santos, & Schnupp, 2020).

Figure 4: Entry and Exit Pathways of QNQP



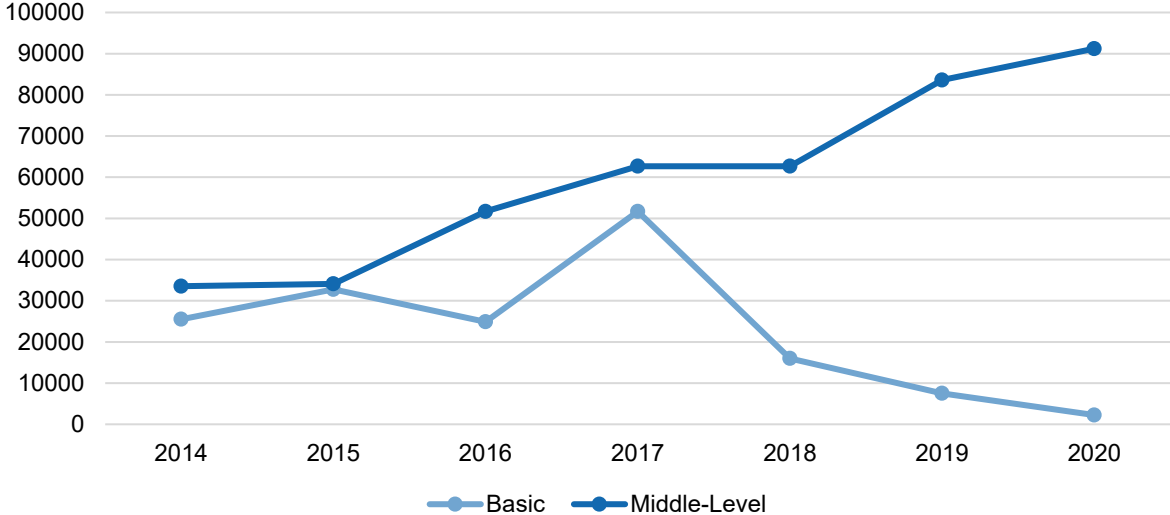
Source: Own figure based on ANEP (2021a)

Figure 4 depicts the QNQP. Basic VET, which corresponds to lower secondary education, consists of the first two levels of the NQF and lasts three years of full-time study. In order to enter basic VET, pupils must have completed EP2. Basic VET is offered in three different specializations, namely, agriculture, industry and business. Middle-level VET corresponds to the upper secondary education and consists of three levels which last additional three years of full-time study. Middle-level VET is open to students who have either graduated from Basic VET or ESG1 (Law No. 6/2016, 2016) The National Authority for Technical and Professional Education (ANEP), which is the regulatory authority of the VET system, lists 32 different certificates on level 3, 48 on level 4, and 47 on level 5. Each certificate on a given level corresponds to a profession. Only four of all listed qualifications are COs, the remainder are CVs. It is specified for each certificate which prior certificates qualify the students to enter the programme (ANEP, 2021a). Students need not necessarily finish basic or middle-level VET to enter the labour market. They can also leave the vocational training institution with the certificate awarded at the end of each intermediate level and enter the labour market directly. Since the financial and family situation of students may change quickly and there does not exist any social security net, this flexibility is important for many Mozambicans (Friedrich Hospitality Foundation, 2019). Holders of a CV5 can also continue their studies on the higher education level (ANEP, 2021a). There also exists non-formal VET in form of short-term training programmes provided by institutions under the responsibility of the Ministry of Labour, Employment and Social Security (MITRAB). These programmes are mainly targeted to dropouts from primary and secondary school (UNESCO, 2015).

The QNQP introduced a credit accumulation and transfer system which should keep learning pathways flexible and allow a greater mobility of students. Each certificate on each level requires the completion of a predefined set of modules for which credits are awarded. One credit should represent approximately 10 hours of work. The number of credits required for a certificate is not uniform for all certificates. Certificates on the levels 1 and 2 require between 60 and 100 credits while most certificates on the

levels 3-5 require 120 credits. There are school-based modules that either provide generic or specific vocational skills. Moreover, there are modules which consist of a professional internship. VET in Mozambique thus both has school-based elements but also elements in which skills are directly acquired on the job. The distribution of credits on the different categories of modules, however, depends on the respective certificate. The proportion of acquired credits in professional internships is around 60% for COs and between 10% and 20% for CVs (Castel-Branco, 2020).

Figure 5: Development of Enrolment in Basic and Middle-Level VET



Source: Own figure based on Instituto Nacional de Estatística (2021)

While in 2010 there were only 82 schools in Mozambique offering VET, this number increased heavily until 2020 when there were 252 VET schools. The enrolment numbers witnessed a similarly sharp increase during this period with a growth from 32,516 in 2010 to 93,463 in 2020. It is important to note that nowadays almost all students are enrolled in middle-level VET. Figure 5 shows the development of the enrolment in basic VET and middle-level VET since 2014. Enrolment in basic VET decreased from 25,514 in 2014 to 2,250 in 2020. A possible explanation is the recent extension of compulsory schooling from six to nine years. While there is no explicit legislative evidence for the abolishment of basic VET in course of this reform, the enrolment numbers may suggest that basic VET is being driven out by ESG1. On the upper secondary level, enrolment in VET is, however, higher than ever. The enrolment of 91,213 students in 2020 accounted for 29.7% of all enrolments on the upper secondary level. There was huge improvement regarding the gender disparities in VET enrolment: while in 2010 women accounted for only 31.9% of total enrolment, they have overtaken men in 2020, with a share of 51.4%. The number of teaching personnel in VET increased from 1,932 in 2010 to 7 716 in 2020. Only 24.2% of these teachers, however, were women (INE, 2021).

Costs of VET are relatively high: attending a private institution costs around US\$80 per month and attending public institutions costs around US\$30 per month. Due to these costs, students often come from comparatively advantaged socio-economic backgrounds (Jones, Santos, & Schnupp, 2020). The shortcomings of basic education in Mozambique also apply to VET. In the past, the VET system was criticized for lacking practical relevance and not being sufficiently geared towards the demand of the labour market (GIZ, 2020). This manifests in the fact that it is hard for VET graduates to find employment. A study found that within the year after graduation, only 9% of graduates found a permanent job that is appropriate for their qualification and 43% of graduates did not find any job at all. There was a considerable mismatch between the graduates' expectations, in terms of type of job and salary, and their actual outcomes. Moreover, there were significant differences between men and women: Women, on average, took longer to find a job and the salary was lower. It is important to note, however, that the study was conducted during the COVID-19 pandemic which had severe consequences for the labour market (United Nations University, 2021). This, nevertheless, highlights the need to improve the quality

of the VET system and facilitate the transition to the labour market for graduates. Other challenges are the lack of teaching personnel, little autonomy, poor management of institutions, a lack of funding, and high repetition and dropout rates (Chicava, 2019).

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

In Mozambique, professional education on the post-secondary level is part of the higher education subsystem. Therefore, professional education on the postsecondary level adheres to QUANQES. QUANQES does not clearly differentiate between general and professional education on the higher education level but there exist practically oriented programmes that we in the following identify as PET. Students which finished either ESG2 or middle-level VET have the possibility to enrol in two types of programmes which lead either to a so-called Certificate A or Certificate B. Certificate A courses consists of 50-60 credits which is equivalent to one year of full-time study. Certificate B courses consists of 25-30 credits which is equivalent to half a year of full-time study. The objective of these courses is to provide advanced technical and professional knowledge to the students. On the postgraduate level, there are additional possibilities for professional training. Holders of a *Licenciatura* can enrol in vocational Master's programmes, which are, in contrast to the academic Master, practically oriented and consist of 75 to 90 credits. The vocational Master, however, does not qualify students for further studies on the doctoral level. Besides the vocational Master, there are also postgraduate non-degree courses consisting of 50-60 credits which lead to a specialization diploma. The objective of these courses is to provide the students with professional and technical skills (MINEDH, 2012).

There are no official enrolment numbers of these programmes available and it therefore remains unclear how popular these courses are. With the potential introduction of a unified NQF there is a restructuring of the system ahead which foresees a clear differentiation between general and professional education on the higher education level (Castel-Branco, 2020). This NQF is at the time of writing in the final stage of consultation for approval (ACQF, 2021).

3.3 Regulatory and Institutional Framework of the VPET System

3.3.1 Central Elements of VPET Legislation

Mozambique's legislation regarding the country's VPET system sets the guidelines within which the institutions offering VPET must operate. This includes:

- Access and accessibility to and within the education system
- Structure of the offered qualifications
- Financing
- General aims and objectives of the VPET system

The legal basis for VET in Mozambique is provided by law 23/2014 which was amended by law 6/2016. The law defines the pillars and competences within the professional education subsystem. This includes the nature and scope of the QNQP, a credit accumulation and transfer system as well as a new regulatory body, ANEP, and a new funding mechanism, the National Fund of Professional Education (FNEP) (Law No. 6/2016, 2016).

Since PET is part of the higher education subsystem, PET is regulated through the higher education legislation. Higher education in Mozambique is governed by law 27/2009. Another important legal act

currently in force is decree 30/2010 as it introduced QUANQES, the regulatory framework for higher education. This framework defines all obtainable degrees, certificates and diplomas in terms of their scope and entry requirements (MINEDH, 2012).

It is important to note that there are currently legal acts in consultation in relation to the introduction of a unified NQF. A reform would have an impact on both the professional education as well as the higher education subsystem (Castel-Branco, 2020).

3.3.2 Key Actors

Government

The responsibility for formal VET lays in the hands of SEETP. SEETP was created by resolution 2/2021. Whereas previously higher and professional education were jointly managed by the Ministry of Science, Technology, Higher, Technical and Professional Education (MCTESTP), the resolution divided the responsibility for the two subsystems and introduced SEETP and MCTES. The competencies of SEETP include the elaboration of strategies for the development of the subsystem and to propose regulations (Resolution No. 2/2021). MITRAB is responsible for non-formal VET programmes (UNESCO, 2021c).

ANEP is the regulatory and quality assurance body for VET in Mozambique. It was created in 2014. ANEP is responsible for the management of QNQP. This includes the registration and approval of professional qualifications and their curricula. Moreover, ANEP is responsible for the accreditation of trainers and training institutions and the management of FNEP (ANEP, 2021b):

The responsibility for the higher education subsystem, which includes PET, lays in the hands of MCTES. The National Council for Evaluation of Quality of Higher Education (CNAQ), which is affiliated under MCTES, is responsible for the supervision of the National System of Evaluation, Accreditation, and Quality Assurance (SINAQES). Moreover, it is responsible for the accreditation of HEIs (Castel-Branco, 2020).

Representation and advisory bodies

There are several representation and advisory bodies involved in the VET system in Mozambique. Within SEETP there is a coordinating council which is an advisory body that advises the secretary leading SEETP on the coordination with the other bodies of the state. Moreover, there is an advisory board which discusses and controls different policies as well as the annual budget and a technical council which coordinates the activities of the different organizational units of SEETP and issues technical opinions on decisions of SEETP (Resolution No. 2/2021, 2021).

Sector Technical Committees (CTs) ensure the connection of other stakeholders in the economy with the VET system. These committees provide advice to ANEP on requirements for different occupations and consist of representatives from the public and private sector, training institutions, employers' organisations, and trade unions. There currently exist twenty different sector specific CTs in Mozambique, ranging from a CT for tourism to a CT for mining. These CTs are key to ensure the relevance of the offered qualifications regarding the needs of the labour market (Castel-Branco, 2020).

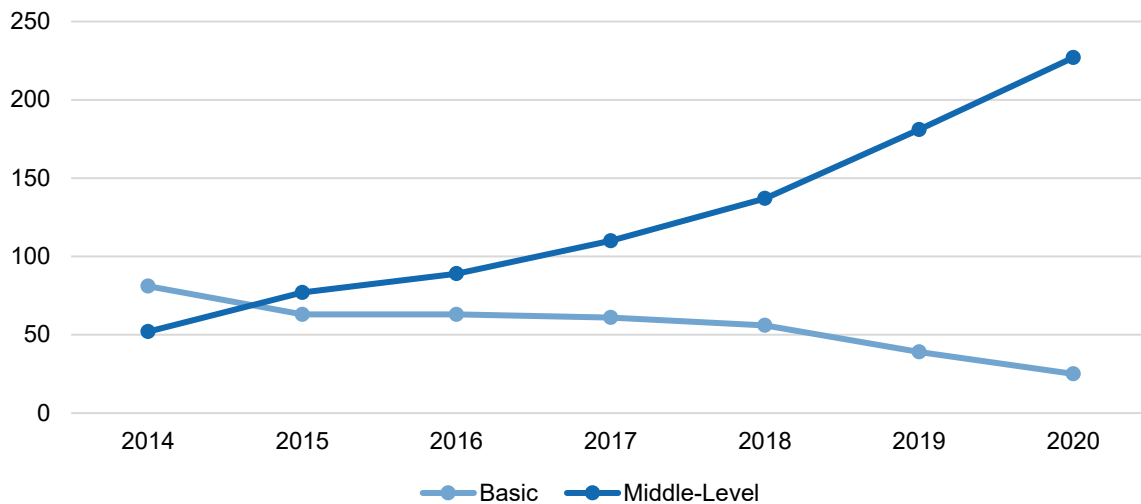
The National Council for Higher Education (CNES) is an advisory body which has different advisory functions with regard to the policies and funding of the higher education subsystem. The CNES is composed of different stakeholders, including government representatives, representatives of the HEIs, and representatives from the public and private sector (MINEDH, 2012).

Education and training providers

VET providers in Mozambique are differentiated through the courses they offer and type of certificates they grant. Professional Schools offer courses on the basic VET courses on the lower secondary level,

Middle-Level Institutes offer middle-level VET courses on the upper secondary level and Vocational Training Centres may offer both types of courses (Law No. 6/2016, 2016). In total, there currently exist 252 institutions offering VET in Mozambique. Figure 6 shows the development of the number of schools offering basic and middle-level VET since 2014. The total number of schools increased from 133 to 252. While in 2014, 81 schools offered basic VET, there were only 25 institutions offering basic VET in 2020. This trend is in line with the decreasing enrolment numbers in basic VET discussed in Section 3.1. During the same time, the number of institutions offering middle-level VET increased more than fourfold from 52 to 227 (INE, 2021).

Figure 6: Number of Institutions offering Basic and Middle-Level VET



Source: Own figure based on Instituto Nacional de Estatística (2021)

There currently exist 54 HEIs. 31 of them are private and the remaining 23 are public (MCTES, 2021). The HEIs are differentiated into universities, superior institutes, higher schools, and academies. It, however, remains unclear which of these institutions offer programmes that were identified as PET in Section 3.2.

3.4 Educational Finance of the VPET System

In 2020, around 18% of Mozambique's government expenditures were spent on education (UNESCO, 2021d). UNESCO estimated in 2015 that 8%-10% of the education budget was spent on VET (UNESCO, 2015). Due to the recent expansion of the VET system in Mozambique it remains unclear whether this estimate is still accurate.

In 2013, the government expenditure on the entire higher education subsystem accounted for roughly 14% of the total expenditure on education (UNESCO, 2021b). However, there is no isolated information on the financial situation of the parts of higher education previously identified as PET. The remainder of this section therefore focuses on VET.

The main source of funding for the VET system is the FNEP. FNEP was introduced by the Law 23/2014 with the goal to increase the financial resources available for the VET system. The fund is managed by ANEP. Institutions offering VET as well as companies involved in VET are eligible. The funding is distributed among the actors that applied for funding based on competitive mechanisms. The fund is financed through annual allocations from the state budget, contributions from companies, and contributions from cooperation partners (Law No. 6/2016, 2016). All registered companies in Mozambique are obliged to contribute 0.65% of their total payroll to the fund on a monthly basis. The

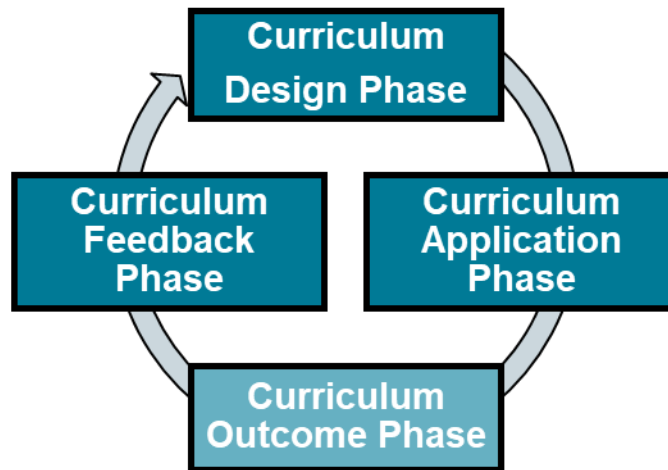
government can provide additional funding for the VET system through other channels than FNEP (ANEP, 2021b).

Students must bear a relatively high cost for VET. According to a study, students pay on average US\$30 per month to attend a public institution and US\$80 to attend a private institution (Jones, Santos, & Schnupp, 2020). There could no information be found whether the professional internships, which are part of the curriculum, are paid or not.

3.5 Curriculum Development

The curriculum is a central element for the functioning of a VPET system because it defines the framework and the (quality) standards for the education system. The development of a curriculum can be decomposed into a three-step process with a curriculum design, a curriculum application and a curriculum feedback phase. This theoretical concept is called the curriculum value chain and is depicted in Figure 7 (for more details, see Renold et al. 2015; Rageth & Renold, 2019).

Figure 7: Curriculum Value Chain



Source: Renold et al. (2015) and Rageth & Renold (2019).

In the curriculum design phase, the relevant actors decide upon VET curriculum content and qualification standards. Therefore, the discussion in Section 3.5.1 focuses on the degree and the amount of stakeholder participation concerning curriculum design in Mozambique. The curriculum application phase revolves around the implementation of the curriculum. Because learning environments differ substantially across countries, especially with respect to the prevalence of workplace learning, Section 3.5.2 focuses on those learning environments. Specifically, it addresses where learning takes place and whether the curriculum dictates both school and workplace learning or only one of the two. Finally, curriculum outcomes can be collected and analysed in the curriculum feedback phase. Section 3.5.3 focuses on the curriculum feedback phase. This evaluation process is important because it may render a more refined curriculum design than was possible in the first place. Since no information on the curriculum development of PET programmes could be found, this section focuses on the curriculum development of VET.

3.5.1 Curriculum Design Phase

The design phase is crucial for the whole curriculum process. To ensure that the skills taught in the VPET programmes correspond to the needs of the labour market, experts from companies should be involved in defining the qualification standards and learning content of the curricula.

The curriculum design of Mozambique's VET programmes is a competence of ANEP. ANEP organizes a catalogue with all existing qualifications within the QNQP. For each of these qualifications it is defined which modules must be included and how the proficiency of the student must be measured for a given module. VET institutions can only offer courses that are included in this catalogue (ANEP, 2021c). If a VET institution wants to introduce a new curriculum, the institution must justify the need for the new qualification. The QNQP provides a high-level specification of the skills that can be expected from a graduate of a certain level. The curriculum design is based on these competency standards. After a curriculum is designed it must be verified by ANEP (UNESCO, 2015).

The interests of the external stakeholders in the curriculum design process are represented through the different CTSs. Through their advisory mandates, they try to ensure that the offered qualifications are relevant and fit the needs of the labour market. Through this channel, employers might be able to influence the curriculum design. They, however, do not have any direct decision-making power (Castel-Branco, 2020).

3.5.2 Curriculum Application Phase

The way in which a curriculum is implemented, especially with respect to learning environments, is important to achieve the intended learning outcome.

As described in Section 3.1, the extent to which the programmes are school-based depends on the type of certificate. CVs are mainly school-based and only 10%-20% of the required credits must be earned in the workplace through internships. COs, in contrast, have a larger share of credits which must be earned in the workplace, namely around 60% (Castel-Branco, 2020). It is important to note that most qualifications are CVs and that, in consequence, most of the offered qualifications are mainly school-based (ANEP, 2021c).

Every module that is part of some curriculum must be examined in some form. The form of the examination depends on the specific module and is specified in the qualifications catalogue that is administered by ANEP. To complete a module, student must either pass a written examination, an oral examination or a demonstration of skills. By specifying the required skills for any given offered module, the QNQP aims to standardize and ensure the quality of the modules and of their examinations (Law No. 6/2016, 2016). For the internships, it is specified which skills students should acquire. Moreover, students must write a report on the internship after completion and hand it in to the VET institution in order to receive credits (ANEP, 2021c).

Employers are involved in the curriculum application through the offering of internships for VET students. Moreover, they contribute to the cost of VET through the FNEP (ANEP, 2021b). No evidence be found to understand whether employers must bear other costs in relation to VET or not.

3.5.3 Curriculum Feedback Phase

The curriculum feedback phase deals with the questions of whether and how educational outcomes are analysed. Based on this, the curriculum could be reworked and improved.

Since one of the main objectives of the recent VET reforms was to improve the responsiveness of the VET system to the demands of the labour market, proper feedback is crucial for the success of these reforms (World Bank, 2020). The National System of Registration, Assessment, Accreditation and Quality Assurance of Professional Education (SNAQEP) aims to ensure the quality of the Mozambique VET system. One of its functions is identify problems with the outcomes of the VET system and formulate mechanisms for their resolution (Law No. 6/2016, 2016). SNAQEP involves both ANEP as the regulatory body, but also all training institutions which should ensure quality through self-evaluation. Another channel through which feedback on the VET system is issued are the CTSs. Through the CTSs, the stakeholders that directly see the labour market outcomes of the VET system, the employers, can

provide feedback on the curricula. As previously mentioned, they have no direct decision-making power (Castel-Branco, 2020).

3.6 Supplying Personnel for the VPET System (Teacher Education)

Until 2008 there was no initial teacher training for VET teachers available. Nowadays the Instituto Superior Dom Bosco (ISDB) offers initial training specifically for VET teachers. ISDB offers different *Licenciatura* and Master programmes which qualify graduates to teach in the area of their obtained degree. There currently are eleven different *Licenciatura* programmes and two different Master programmes at ISDB. A *Licenciatura* degree is sufficient to be able to teach at a VET institution. The programmes are open to students who either graduated from middle-level VET or ESG2 (ISDB, 2021). It is important to note that prospective teachers for the secondary level of general education attend different programmes which are not offered at ISDB but at the faculties of the universities (MINEDH, 2020).

Besides the initial training offered by ISDB, there are other institutions which offer postgraduate teaching studies for people with an engineering degree or catch-up qualification for existing teachers (IPC, 2014). Between 2014 and 2020 the number of VET teachers grew from 4143 to 7716 which now represents around 5% of all teachers in Mozambique (INE, 2021).

The quality of teaching in VET remains an issue. According to a recent study, more than a third of the surveyed students reported the technical knowledge of the teachers to be a severe obstacle in their learning environment. Moreover, around a third criticized their teachers' motivation level and their behaviour (Jones, Santos, & Schnupp, 2020). One reason for this may be the lack of a formal training programmes before 2008 which means that a large share of the current teaching personnel in VET institutions have not enjoyed any pedagogical education (IPC, 2014).

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

4.1 Major Reforms

This section focuses on the major reforms of the professional and higher education subsystems which have undergone significant changes in recent decades.

Shortly after the new constitution came into force in 1990, Law No. 6/92 established Mozambique's education system which included the provision of VET. The law set the objective for the VET system, namely, to provide the youth with skills to improve their lives and contribute to the country's development (UNESCO, 2015). In the beginning of the 2000's, the VET system had been slow to respond to changing labour market demands. Moreover, Mozambique's workforce was poorly educated and lacked technical skills (UNESCO, 2015). VET programmes were not very popular at the time. Only around 30,000 people were enrolled in VET programmes in 2006 (INE, 2010). To address these problems, the government launched the Integrated Vocational Reform Programme (PIREP). PIREP is structured into three phases: The piloting phase (2006-2011), the expansion phase (2012-2016), and the consolidation phase (2017-2021). The reform programme had multiple objectives, including the reorganization of the governance

and finance structures, the development of an integrated framework of qualifications, increasing the capacity and quality of VET institutions as well as improving the access to VET programmes (UNESCO, 2015). PIREP was financially supported by cooperation partners outside the Mozambique government, especially the World Bank (Jones, Santos, & Schnupp, 2020).

Law No. 23/2014 and its amendment, Law No. 6/2016, institutionalized the reform process that had been taking place since 2006. A new regulatory body, ANEP, and a new funding mechanism, FNEP, as well as a new qualification framework, QNQP, were introduced (Law No. 6/2016, 2016). Regarding access to VET, the years since the implementation of the reform represent a massive leap forward with VET programmes nowadays counting more than 90,000 enrolments (INE, 2021). ANEP is responsible for the continued implementation of the reform process as there still are several challenges, which are discussed in Section 4.2 (World Bank, 2020).

The last major reform of the higher education subsystem, which includes PET, dates back to 2010 when a new framework for higher education, QUANQES, was introduced. QUANQES restructured the higher education programs and introduced new qualifications as well as a credit accumulation and transfer system (MINEDH, 2012).

A recent reform of the structure of general educations had implications also on the VET system. Compulsory schooling was extended to nine years and the different cycles of primary and secondary education were restructured by Law 9/2018 (Law No. 18/2018, 2018). As previously mentioned, there appears to be no legislative evidence for the current situation of basic VET. However, the development of enrolment and number of schools offering basic VET suggest that basic VET is being displaced by this reform.

4.2 Major Challenges

Through the reforms discussed in Section 4.1, VET expanded heavily in recent years. VET in Mozambique, however, still faces multiple challenges which will be discussed in this section. As no information could be found on the challenges of the part of the higher education subsystem that we had previously identified as PET, this section focuses mainly on VET.

In their strategic plan for the VET system which covers the years 2018-2024, the authorities identify various challenges for the VET system. Regarding access to the VET system, it remains a problem that the VET institutions are geographically unevenly distributed which hampers the access for students especially from the more rural areas. Moreover, the capacities of the VET institutions remain undersized to face the increasing demand by prospective students. The limited number of teachers and the poor maintenance of the infrastructure as well as the lack of equipment and training resources remain obstacles to the quality of the offered programs. Furthermore, the quality assurance system does not work satisfactorily so far. Governments and VET institutions are not well coordinated and the information management which is crucial for decision making is insufficient (Resolution No. 2/2021, 2021).

A recent study revealed further challenges both regarding the quality of the VET programmes and, related to this, the labour market outcomes of the graduates. Asked for their experiences during their VET education, more than a third reported equipment access and quality, and the teaching quality as a severe obstacle to their learning experience (Jones, Santos, & Schnupp, 2020). Just 9% of the surveyed graduates found a permanent job which was appropriate for their qualifications and 26% of graduates were unemployed one year after graduation. This shows that the transition of graduates to the labour market remains a major challenge for the VET system (United Nations University, 2021).

In order to address these challenges, the Mozambique government specified the following objectives in their strategic plan for VET which covers the years 2018-2024: Increase access and retention to VET, ensure that skills of graduated are relevant for the labour market, and improve the management of the whole subsystem (Resolution No. 9/2018, 2018). Another upcoming challenge will be the possible

transition to a unified NQF for the whole education system which is at the time of writing in the final stage of consultation for approval (ACQF, 2021).

Appendix I: Overview of the VPET system

VET pathway enrolment share out of all upper secondary (%)	29.7 (2020)
Program enrolment share out of all VET pathway (%)	
Number of curricula/qualifications	Level 3: 32 Level 4: 48 Level 5: 47
Ø Share of time spent in workplace (vs. classroom)	Vocational Certificates (CVs): 10% - 20% Occupational Certificates (COs): ~60%
Work contract (Yes/No)	Unknown
Ø Share of vocation-specific content (vs. general) in classroom education	70% - 80%
Classroom/workplace sequencing (Alternating, Sequentially)	Alternating
Frequency of workplace learning (Annually, Semi-annually, quarterly, monthly, weekly)	Annually
Program duration (Years)	~ one year per certificate
Involved Actors	VET: <ul style="list-style-type: none"> - State Secretariat for Technical-Professional Education (SEETP) - National Authority for Professional Education (ANEP) - Sector Technical Committees (CTSs). PET: <ul style="list-style-type: none"> - Ministry of Science, Technology, Higher Education (MCTES) - National Council for Evaluation of Quality of Higher Education (CNAQ)
Reform Years	VET: 2006-2021 Institutionalization of reforms in 2014/2016 PET: 2010
Reforms Summary	VET: Introduction of new Qualifications Framework of Professional Education (QNQP), a system of credit accumulation, a new regulatory body (ANEP) and a new financing mechanism (FNEP) PET: Introduction of new Qualifications Framework for Higher Education (QUANQES)

Own table based on Instituto Nacional de Estatística (2021) and Castel-Branco (2020)

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