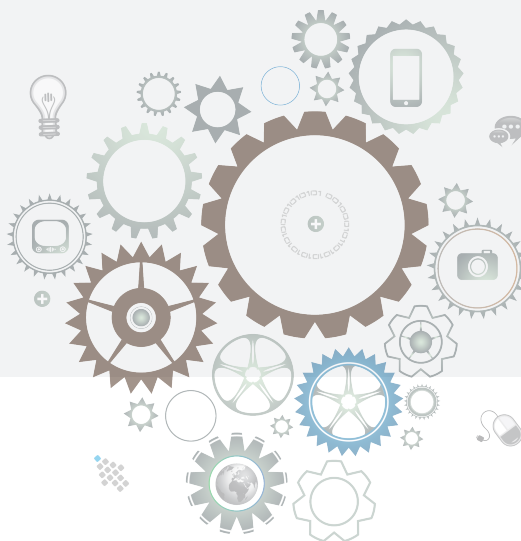


*Effective* VOCATIONAL EDUCATION  
AND TRAINING *Strategies*  
to **Reduce**  
**Youth**  
**Unemployment**  
in the  
**OIC Member**  
**Countries**



September 2023





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September 2023

This report has been commissioned by the Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC) Coordination Office to a research team. The team members are Bekir S. Gür, PhD; Zafer Çelik, PhD; Asma Nairi Özen, PhD; and Gamze Bozgöz. Views and opinions expressed in the report are solely those of the authors and do not represent the official views of the COMCEC Coordination Office (CCO) or the Member Countries of the Organization of Islamic Cooperation (OIC). The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the COMCEC/CCO concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its political regime or frontiers or boundaries. Designations such as “developed,” “developing,” “emerging,” “low-income”, etc. are intended for statistical convenience and do not necessarily express a judgement about the state reached by a particular country or area in the development process. The mention of firm names or commercial products does not imply endorsement by COMCEC and/or CCO. The final version of the report is available at the COMCEC website. Excerpts from the report can be made as long as references are provided. All intellectual and industrial property rights for the report belong to the CCO. This report is for individual use and it shall not be used for commercial purposes. Except for purposes of individual use, this report shall not be reproduced in any form or by any means, electronic or mechanical, including printing, photocopying, CD recording, or by any physical or electronic reproduction system, or translated and provided to the access of any subscriber through electronic means for commercial purposes without the permission of the CCO.



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# EXECUTIVE SUMMARY

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## EXECUTIVE SUMMARY

This report takes a comprehensive approach to tackle the pressing issue of youth unemployment across the Member Countries of the Organization of Islamic Cooperation (OIC), commissioned by the Committee for Economic and Commercial Cooperation of the Organization of Islamic Cooperation (COMCEC).

Through the implementation of effective Vocational Education and Training (VET) strategies, the study encompasses three key sections, culminating in a comprehensive guide for developing bespoke VET systems tailored to address varying developmental levels across the OIC.

The report initiates by establishing the foundational concepts of vocational education and active labor market policies. It emphasizes the intricate links between youth unemployment, the not in education, employment, or training (NEET) category, and informal employment. The report highlights the pivotal roles of governance, institutions, non-governmental organizations (NGOs), international bodies, and donors in tackling youth unemployment.

Subsequently, the report conducts in-depth case studies of Germany, Türkiye, Tunisia, and Uganda. Each case study scrutinizes vocational education systems, challenges faced, youth unemployment scenarios, policies for reducing youth unemployment, and the relationship between vocational education and employment outcomes. Lessons gleaned from successful and unsuccessful policies are analyzed, along with collaborative efforts between international organizations, non-governmental organizations, and governments to address these issues.

Notably, Germany stands out with consistently low youth unemployment rates due to its successful apprenticeship system. The dual education system, blending practical training with theoretical education, effectively prepares students for the job market. This achievement results from equalizing academic and vocational education, maintaining high vocational standards, and aligning with industry needs. The applicability of Germany's VET system as a model hinges on vocational training's breadth.

However, Türkiye, Tunisia, and Uganda struggle with significant youth unemployment challenges. Despite declining fertility rates and net migration, youth unemployment remains high in Uganda. While Germany's VET system excels, addressing skill-job mismatches, fostering job opportunities, and nurturing industry-university collaboration is critical for Türkiye and

Tunisia. Uganda also confronts issues like underutilized youth labor and bridging the education-to-employment transition.

Tailored policies emerge as vital tools to combat youth unemployment, with recommendations encompassing proactive macroeconomic strategies, curriculum reforms, second-chance education, seamless school-to-work transitions, and targeted programs for specific demographics. Partnerships with civil society organizations specializing in youth and women's skill enhancement are crucial. Introducing varying minimum wages based on regions or sectors could boost Türkiye's industrial sector. Collaborating with international organizations and addressing vocational education financing barriers are also pivotal.

Throughout the report, the global impact of youth unemployment emerges, affecting countries regardless of their development stage. Factors such as education, macroeconomic conditions, labor market policies, demographic shifts, and informal employment contribute. The COVID-19 pandemic exacerbates challenges, disrupting education, training, and job prospects.

Empirical studies underscore education's pivotal role in alleviating youth unemployment. Bridging education-labor market gaps, addressing skill-job mismatches, and implementing effective VET strategies are emphasized. These strategies, extensively discussed, can significantly reduce youth unemployment across the OIC Member Countries.

Furthermore, the report highlights the profound social and economic ramifications of youth unemployment within OIC countries. Prolonged unemployment leads to informal work, poverty, social exclusion, and even criminal engagement. Addressing the risks related to youth unemployment necessitates a multifaceted approach considering the complexity of the challenges.

The final section of the report provides a comprehensive guide for OIC member countries to establish or enhance their VET systems. Tailored recommendations are presented, accounting for the varying development stages of different nations. The guide covers a range of critical elements to address youth unemployment effectively in OIC member countries:

It begins by **Recognizing Challenges** and identifying issues in youth unemployment, informal employment, and NEET. Strategies like investing in education, vocational training, and active labor market policies are recommended, with a focus on fostering youth entrepreneurship and aiding post-COVID-19 recovery.

**Learning from Experience** involves gleaning insights from both successes and failures. Lessons from failed projects, efficient fund allocation, and the impact of COVID-19 are highlighted. The guideline showcases Germany's vocational model and encourages customized policies for OIC countries.

**Creating Effective Policies** entails establishing strong legal frameworks and advocating for inclusive policies, aligned legislative revisions, and collaborations for sustainable programs. The emphasis is on fostering favorable business environments and robust institutions.

In the context of the evolving landscape, the guideline underscores the importance of **Digital Transformation of VET** systems. This involves adapting to changing labor markets, aligning skills with demands, and addressing challenges such as automation. A model for digitalization is outlined, emphasizing leadership and teacher training.

**Clear Stakeholder Roles** stress collaboration among governments, NGOs, donors, and the International Labor Organization to improve working conditions. The guideline promotes enduring partnerships, policy coherence, and tailored strategies for countries with limited resources.

Addressing the critical need for funding, the guideline highlights the significance of **Financial Support** through policy shifts and international cooperation. It also suggests exploring investments in green transition and climate adaptation to foster growth opportunities.

Lastly, **Progress Monitoring** is emphasized, focusing on tracking key indicators like unemployment rates, apprenticeships, and employer-institution collaborations to ensure the efficacy of implemented strategies. This comprehensive approach guides member countries in reducing youth unemployment and advancing social inclusion within the OIC.

In conclusion, the guideline underscores the significance of implementing targeted VET strategies, supported by case studies and tailored solutions for OIC countries, to effectively address youth unemployment.

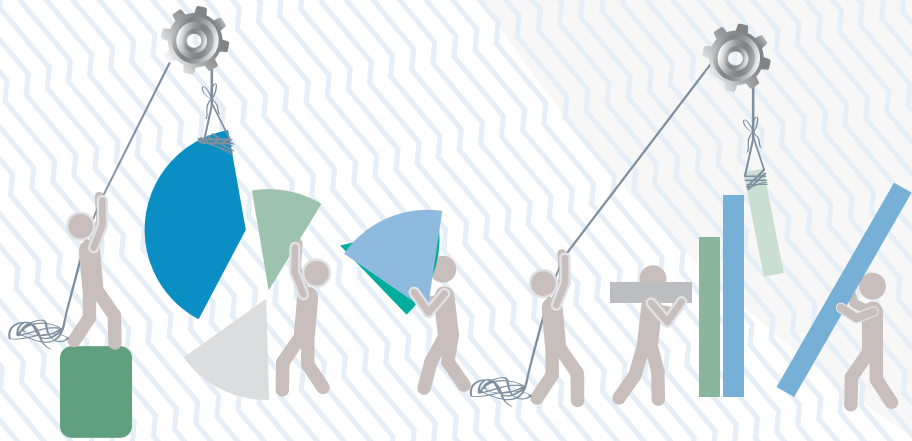
By drawing insights from case studies, comparative analyses, and successful implementations, the report provides guidance to member countries in devising customized approaches for mitigating youth unemployment and fostering social inclusion. Recognizing the transformative potential of digitalization, the report advocates for a comprehensive approach that surpasses the mere translation of training to digital platforms. It proposes an ecosystem encompassing visionary leadership, collaborative curriculum development, skills assessment, and digital career platforms to facilitate a robust digital transformation in VET. The report accentuates the pivotal role of digitalization in VET evolution and underscores the importance of multi-stakeholder collaborations in achieving these objectives. Ultimately, this report serves as a vital resource for shaping effective VET systems and alleviating youth unemployment within the OIC member countries.



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# INTRODUCTION

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## **1. INTRODUCTION**

Youth unemployment is considered as an important problem not only in developing countries but also in developed countries (O'Higgins, 2001). In addition to youth unemployment, neither in employment nor in education (NEET) also emerges as an important global problem. According to the International Labor Organization (ILO) data, nearly 300 million young people are not engaged in employment or education (ILO, 2022a). High youth unemployment rates have been a much more important issue for Organisation for Islamic Cooperation (OIC) Member Countries. Reducing youth unemployment has been on the agenda of OIC for many years (SESRIC, 2018b). This research report aims to provide effective vocational education and training strategies to reduce youth unemployment in the OIC member countries to show the member countries how to establish an effective vocational education system or improve the existing systems. In addition, this report is intended not only to identify problems and challenges, but also to provide guidance for OIC member countries. This report will also include other active labor market policies (ALMPs) that are proven to be effective in combat against youth unemployment. The guide will explain the components of these labor market tools step by step and will reveal how these active labor market policies can be integrated into labor market policies in the OIC member countries, with examples from successful countries, according to the level of development in this matter. The difficulties encountered in countries with high youth unemployment will also be explained with examples and the measures that can be taken to overcome them will be indicated.

### **1.1. Aim of the Study**

The aim of the study is to identify the deficiencies and weaknesses of the existing vocational education systems in the OIC member countries and to present suggestions on how to develop better systems by eliminating the problems encountered. In light of the research findings, this report presents a comprehensive guide to show the OIC Member Countries, according to the level of development on the matter, the means and ways to establish/improve the vocational education system.

This study firstly discusses what are the most basic concepts and theoretical approaches related to youth unemployment, what is the current situation of youth unemployment in OIC Member Countries and in the world, what are the strategies used to reduce youth unemployment. Secondly, Germany, Uganda, Tunisia, and Türkiye have been identified as case studies, and the vocational education structures of these countries are discussed, along with the strengths and weaknesses of their vocational education systems, the policies followed to reduce youth unemployment, the difficulties encountered in implementing these policies, and their successful and unsuccessful experiences. Thirdly, a guide for OIC Member Countries has been provided, according to the level of development, to establish/improve vocational education systems in their respective countries.

## 1.2. Methodology

Literature review (desk study) and case studies with field studies (site visits) were utilized. All the information gathered via literature review and site visits was cross-checked by team members and corroborated with the inputs from national representatives prior to dissemination with final users of OIC Member Countries.

**Desk Study:** Within the framework of the desk study, data were collected and analyzed from the following sources:

- the existing written and visual literature.
- the reports, policy documents and data by OIC institutions.
- the reports, policy documents and data of the international institutions (i.e., ILO, World Bank, European Commission, Organization for Economic Co-operation and Development [OECD], United Nations Educational, Scientific and Cultural Organization [UNESCO] or European Training Foundation [ETF]).
- the reports and policy documents provided by international aid organizations which carry out activities to reduce youth unemployment, especially in African countries.
- the official document and legislation of each case country.
- the reports, data and research published by the national governments.

**Site visits:** In this study, field visits were made to Uganda, Tunisia, and Türkiye. During the field visits, key informants such as experts from ministries, policy makers, academics, and researchers were interviewed. Semi-structured interview form was used in the field interviews. This form includes the following themes: the situation of youth unemployment; the main efforts/policies/regulations/instruments utilized to reduce youth unemployment; the challenges and difficulties encountered, the lessons to be learnt from unsuccessful practices; the best practice examples to reduce youth unemployment; the lessons learnt for eradicating youth unemployment; the role of non-governmental organizations (NGO's), international organizations, and donors in complementing national policies; the role of vocational education in reducing youth

unemployment; the difficulties experienced in improving vocational education and the steps taken for improvement. On average, 15-17 key actors were interviewed in each country and sufficient data was collected. Some interviewees even provided additional resources on their activities. The following organizations and individuals were interviewed during the site visits:

- Representatives of the ministries of education and/or vocational training
- Representatives of other education/training institutions
- Representatives of institutions related to employment
- Representatives of the Ministry of Trade and Industry
- Representatives of the business world
- Academics and researchers studying youth unemployment and vocational training.

### **1.2.1. Outline of the Study**

In the first part of this study, an explanation of the background and key concepts related to the vocational education system and other ALMPs is provided. Moreover, the current status of and trends in youth unemployment are analyzed, and labor market tools used against youth unemployment in the world and within the OIC Member Countries are examined.

In the second part, information on the current vocational education system in Germany, Uganda, Tunisia, and Türkiye, selected as case studies, is provided, along with the difficulties they face, the state of youth unemployment, and the efforts made to reduce it. The education systems of the countries in general, the structure of vocational education systems, how vocational education is financed, and the strengths and weaknesses of these systems are first examined. Subsequently, the situation of youth unemployment in each country, the causes of youth unemployment, policies, and practices aimed at reducing it, and the challenges encountered in this process are discussed. The challenges faced in vocational education and youth unemployment reduction, the lessons learned from policy and project successes and failures, cooperation with international organizations and NGOs on this issue, and the most significant risks identified in failing to reduce youth unemployment with the collected field data are then analyzed. Finally, policies and practices related to the vocational education system and youth unemployment reduction in these four countries are comparatively analyzed, and policy lessons are drawn from both successful and unsuccessful practices.

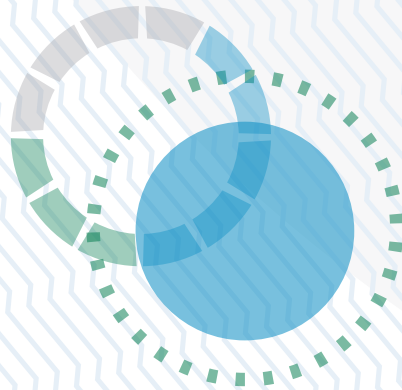
In the last part, a detailed guide with a step-by-step approach is provided to assist member countries in establishing or enhancing their vocational education and training (VET) systems. The guide considers the varying development levels of OIC Member Countries on this matter and offers specific recommendations accordingly.



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## BACKGROUND AND KEY CONCEPTS

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## 2. BACKGROUND AND KEY CONCEPTS

This section of the report undertakes an examination of the efficacy of the VET system and other ALMPs. Additionally, it will highlight underlying deficiencies and propose potential areas for enhancement. The analysis revolves around a comprehensive exploration of vital questions, each shedding light on critical aspects related to youth unemployment, VET systems, and ALMPs.

At its core, the theoretical framework behind youth unemployment is explored within the broader context of labor market dynamics. This examination highlights the intricate interplay between youth unemployment, the NEET category, and youth informal employment. By delving into the theoretical underpinnings and empirical insights, this chapter establishes the backdrop for formulating targeted interventions.

Governance and institutional frameworks emerge as critical elements in mitigating youth unemployment and enhancing well-being. The role of NGOs, international organizations, and donors in complementing national policies is dissected, with a focus on the sustainability of these collaborative endeavors and their alignment with overarching national strategies. The sustainability of these collaborative efforts and their alignment with national strategies are evaluated to gauge their long-term impact.

ALMPs take center stage as potent tools for achieving favorable youth labor market outcomes. Drawing from empirical evidence, this part dissects the effectiveness of diverse policy tools in reducing youth unemployment, countering informal employment among youth, and addressing the NEET status.

Cost-effectiveness analysis occupies a pivotal role, in comparing the economic efficiency of different policy alternatives. This evaluation provides insights into optimal resource allocation and informs decision-making processes, ensuring impactful utilization of available resources. By understanding the economic impact of these alternatives, decision-makers can also prioritize interventions that deliver the highest value in reducing youth unemployment.

Measuring youth unemployment presents a complex challenge, particularly in contexts with limited resources. This analysis sheds light on the hurdles and limitations associated with accurately quantifying youth unemployment rates.

Risks and limiting factors that could impede progress are identified, encompassing the influence of external factors like the COVID-19 pandemic, climate change, migration trends, conflicts,

inflation, and economic slowdown. By understanding these potential barriers and recognizing these risks, strategies can be devised to mitigate their adverse effects on youth employment prospects.

The social and economic consequences of not effectively addressing youth unemployment are examined comprehensively, encompassing both immediate and long-term implications. This assessment underscores the urgency of implementing successful interventions to prevent detrimental outcomes for individuals and societies.

Demographic trends, including rural-urban migration, international migration, and fertility rates, are analyzed for their potential impact on youth unemployment. These trends can influence labor force dynamics and contribute to skill imbalances within the job market.

The current state of international cooperation in addressing youth unemployment is also assessed, recognizing the significance of collaborative efforts among nations, organizations, and stakeholders to develop coherent strategies and pool resources for achieving collective success.

Collectively, the exploration of these key questions provides a comprehensive foundation for understanding the complexities of youth unemployment within the OIC countries. By analyzing theoretical frameworks, governance roles, policy effectiveness, challenges, and global collaboration, this section establishes the context necessary for the subsequent analyses and recommendations outlined in the report.

## **2.1. Youth Unemployment and NEET As a Global Concern**

Finding employment is becoming increasingly difficult for young people, and youth unemployment is a serious issue in many countries (O'Higgins, 2001). Although the definition of "youth" varies depending on cultural and institutional factors, the United Nations (UN) defines it as individuals between the ages of 15 and 24 (UN, 2023). The ILO definition of unemployment is now widely used, and it includes "all those of working age who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity" (ILO, 2013, p. 3). Accordingly, the unemployment rate is calculated as the ratio of the total number of unemployed individuals (for a country or a specific group of workers) divided by the corresponding labor force (the sum of the total persons employed and unemployed in the group). Note that individuals who are jobless, available but not looking for a job are not considered part of the labor force.

The proportion of NEET in the youth population is a relatively new indicator. Unlike employment or unemployment, there is no international standard for the definition of NEET (Elder, 2015). The ILO has adopted the following definition of the NEET rate: the percentage of young persons (aged 15-24 years) not in education, employment, or training, out of the total youth population (United Nations Statistics Division, 2023a). It is also referred to as the "youth NEET rate." Young people who are neither employed nor educated or trained are at risk of being excluded from

society, with incomes below the poverty line and lacking the skills to improve their economic situation (OECD, 2023a). The issue of youth unemployment is a serious concern, as it has long-lasting and severe consequences (O’Higgins, 2001). Youth unemployment rates are generally much higher than those for adults, with recent estimates from the ILO indicating that at least 282 million young people are not engaged in employment or education (ILO, 2022a). As of March 2023, the unemployment rate for young people aged 15-24 in OECD countries is 10.8% (OECD, 2023b), more than twice that of adults who had a rate of 4.9% (OECD, 2023c). However, the global youth NEET rate is much higher at 23.5% as of 2022 (ILOStat, 2023). Additionally, there is significant variation among countries in terms of the youth NEET rate (ILOStat, 2023). The youth NEET rate is particularly high in the Middle East and North Africa (MENA) region where most Organization for Islamic Cooperation (OIC) member countries are located.

The international community has demonstrated its commitment to reducing the proportion of youth who are not in education, employment, or training by adopting the 2030 Agenda for Sustainable Development Goals (SDGs) (**Box 1**). The youth NEET rate presents a more comprehensive assessment of young individuals who are not actively involved in productive activities compared to relying solely on youth unemployment data. This rate takes into account young people who are discouraged job seekers, no longer actively seeking employment, as well as those who are not part of the labor force due to other reasons, such as their engagement in household responsibilities or having a disability (United Nations Statistics Division, 2023a).

**BOX 1*****Youth employment in the Sustainable Development Goals (SDGs)***

**Goal 4.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship

**Goal 8.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training

8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labor Organization



### 2.3. Youth Unemployment and Labor Market Dynamics

Youth unemployment is a multifaceted issue that requires an understanding of the broader labor market dynamics. Theoretical frameworks, such as human capital theory, and screening theory, underlie the study of youth unemployment. The human capital theory proposes that young workers who invest in their education and skills are more likely to find employment and earn higher wages. In essence, proponents of human capital theory contend that individuals who invest in their education and skills are more likely to secure better employment opportunities and higher earnings (Yamamoto, 2012). On the other hand, screening theory posits that a direct correlation between education and employability is not always the case, as hiring processes can be more complex (Yamamoto, 2012). While human capital theory attributes unemployment to an individual's lack of skills, screening theory attributes it to deficiencies in background characteristics such as education, innate ability, and test scores (Yamamoto, 2012). Meanwhile, labor market segmentation theory views the labor market as segmented by various institutional, societal, and structural factors, resulting in uneven distribution of youth unemployment and low-paying precarious jobs across society (Li, 2019).

Numerous empirical studies have investigated the determinants of youth unemployment. According to Görlich et al. (2013), weak macroeconomic performance is the primary cause of youth unemployment, as young people are particularly vulnerable to the absence of economic growth. Aggregate demand, education, demographic change, wages, labor market policies, and individual characteristics are among the key factors that have been identified as influencing youth unemployment (Ebaidalla, 2016). In addition, technological changes and globalization are often considered in the context of youth unemployment. The digital economy, which is characterized by a concentration of highly skilled workers with advanced education, presents significant opportunities for educated youth (ILO, 2022a). However, there is ongoing concern regarding the instability of jobs and the insufficient measures in place to protect young digital gig workers.

According to Ebaidalla (2016), a decrease in aggregate demand caused by economic hardship or crisis is a major contributor to the rise of youth unemployment. The COVID-19 pandemic, similar to the 2008 financial crisis, has led to a significant decline in employment for young people, with a decrease of 8.7 percent, which is much higher than the decrease in employment for adults, which was 3.7 percent. (ILO, 2021). The impact of the COVID-19 pandemic on the youth has been particularly severe, affecting them in three main ways: (1) causing disruptions in education, training, and work-based learning; (2) presenting increased challenges for young job seekers and those entering the job market; and (3) resulting in job losses, income reduction, and a decline in employment quality (ILO, 2021a).

According to various empirical studies, education plays a crucial role in mitigating youth employment (Ebaidalla, 2016). The human capital theory suggests that education and training can enhance the productivity and earning capacity of individuals (Yamamoto, 2012). This theory further asserts that young people who are not in employment, education, or training

(NEET) are at a higher risk of unemployment or informal employment due to a lack of skills and credentials required for formal employment. The long-term consequences of being NEET are also severe, such as reduced employment rates and earnings in later life (OECD, 2022a). In a study conducted by Ralston et al. (2021) in Scotland, it was discovered that being classified as NEET (Not in Education, Employment, or Training) leads to prolonged periods of economic inactivity and unemployment. The research findings indicated a greater likelihood of economic inactivity among individuals who were NEET during their prime working years (aged 36-39), even two decades after being identified as NEETs.

In many countries, individuals with higher levels of education have higher earning potential and better employment prospects. In 2020, full-time full-year workers with a bachelor's equivalent degree earned 44% more on average than those with upper secondary degree, according to data from OECD (2022a). Similarly, in 2021, individuals with tertiary attainment had an average unemployment rate of 4%, while those with upper secondary attainment had a rate of 6% and those with below upper secondary attainment had a rate of 11% across OECD countries (OECD, 2022a). The COVID-19 pandemic has also highlighted the importance of educational attainment for economic stability, as individuals who did not complete upper secondary education experienced significantly higher unemployment rates compared to those who completed tertiary education (OECD, 2022a).

Despite the increasing number of college graduates, labor demand may not be able to keep up due to the mismatch between education supply and labor demand. Many graduates pursue fields with little demand or an oversupply of workers, resulting in a significant portion of graduates struggling to find suitable employment (Biagi, et. al, 2020). While higher education does not guarantee employment, some experts suggest that the notion of higher unemployment rates among educated individuals has been exaggerated (O'Higgins, 2001). However, an empirical study conducted in Türkiye and Spain found that increasing the higher education schooling rate does not decrease youth unemployment, which might be due to a mismatch in the labor market supply and demand for labor in these countries (Alçın, Şahin, and Hamzaoğlu, 2021). The mismatch between education and labor market demand is a growing concern that contributes to higher youth unemployment rates especially in the developing world and the MENA region (Görlich et al., 2013).

The age structure of the population, fertility, and child mortality are demographic changes that can have an impact on the youth labor market (Ebaidalla, 2016). In a study focused on Euro-area countries, Gomez-Salvador and Leiner-Killinger (2008) discovered a positive association between the proportion of young people in the population and the rate of youth unemployment. High fertility rates are considered the primary cause of the high rate of youth unemployment in many developing countries (Ebaidalla, 2016). In contrast, developed nations with projected declines in their youth populations may see demographic changes that support policies aimed at reducing youth unemployment (O'Higgins, 2001).

Empirical studies examining the impact of minimum wage on youth unemployment have yielded mixed results. Some studies suggest that increasing minimum wages can negatively affect youth employment, while others found no significant relationship between the two (Ebaidalla, 2016). Furthermore, labor market policies (i.e., employment protection and regulation) are considered the primary factors contributing to youth unemployment rates (Ebaidalla, 2016). Youth unemployment is not distributed evenly among young people. Certain individual characteristics such as gender, race, and geographic location can increase or decrease the likelihood of a young person becoming unemployed. In both developing and developed countries, young women and girls have historically faced higher unemployment rates (O'Higgins, 1997).

Ebaidalla (2016) conducted a study on youth unemployment in OIC member countries spanning from 1993 to 2012. To investigate the effect of economic, demographic, and institutional factors, the author utilized a dynamic panel data approach. According to the study's findings, GDP growth, inflation, and domestic investment were influential in determining youth unemployment rates in these countries. Additionally, the high fertility rate was identified as a contributing factor to the elevated level of youth unemployment. Furthermore, the quality of bureaucracy was found to negatively impact youth unemployment in member countries of OIC.

Empirical studies indicate a strong positive correlation between youth unemployment and informal employment. Informal employment or non-standard employment is more prevalent among young men and women around the world. (ILO, 2022a). As a matter of fact, informal employment is the main source of employment for three out of four young workers, with the youth informality rate standing at 78%, while the adult informality rate is at 58%. However, young individuals who fail to secure a job or lose their employment are vulnerable to "scarring". The term "scarring" refers to a scenario in which an individual's future labor market prospects become more unfavorable compared to their peers, even as macroeconomic conditions show signs of improvement (ILO, 2022a, p. 54). Taking a job for which they are overqualified poses a risk as they may get trapped in informal employment and low pay.

## **2.4. Youth Unemployment, Governance, and Institutions**

The role of governance and institutions in reducing youth unemployment and increasing their welfare is crucial. Strong institutions and good governance can create a favorable environment for economic growth, job creation, and human development. The quality of regulations and institutions can have an impact on the dynamism of the private sector, which in turn generates jobs and economic opportunities (World Bank, 2019b). Therefore, countries with better business regulations tend to have higher levels of job creation and lower unemployment rates.

Investing in education and skills development is crucial in preparing young people for the labor market. Public investment in education is, therefore, a critical means to reduce unemployment and promote future economic growth by equipping young people with the necessary skills

(OECD, 2022a). Studies have shown that a long-term causality exists between public expenditure on education and the youth unemployment rate. For instance, a study conducted in Albania demonstrated that a 1% increase in total public expenditures on education would lead to a 10.81% reduction in the youth unemployment rate (Mehmetaj and Xhindi, 2022). Moreover, governments can support entrepreneurship by providing funding, business development services, and mentorship programs. Some European Union (EU) governments offer financial support in the form of investment and working capital to assist young entrepreneurs in establishing their businesses. Research indicates that well-crafted government initiatives can substantially enhance the rate at which young individuals transition from unemployment to entrepreneurship, thus offering a favorable return on public investment (European Commission and OECD, 2012).

Ensuring inclusive policies is essential to provide equal access to opportunities for all young people. Governments, international organizations, NGOs, and donors can play a significant role in promoting inclusive policies by reducing discrimination, promoting social inclusion, and addressing the needs of vulnerable groups (USAID, 2018). International organizations, NGOs, and donors can offer technical support to assist governments in developing and implementing effective policies and programs aimed at tackling youth unemployment. Moreover, they can provide funding to support national efforts to address youth unemployment. The International Labor Organization (ILO) has been actively involved in enhancing the working conditions of young people since its establishment in 1919 (O'Higgins, 2001) by creating regulations.

NGOs and international organizations can advocate for policies to promote youth employment. For example, the Global Initiative on Decent Jobs for Youth is a worldwide partnership of multiple organizations, including the ILO, UNDP, UNICEF, the World Bank, academia, foundations, and regional institutions that advocate the creation of quality jobs for young people (Global Initiative on Decent Jobs for Youth, 2023). In terms of coherence with national policies, it is important for these efforts to align with the overall goals and strategies of national policies on youth employment. NGOs, international organizations, and donors should work closely with national governments to ensure that their efforts are complementary and supportive of national policies. This can help ensure that efforts are sustainable over time and have a lasting impact.

Furthermore, sustainability can be ensured through the development of long-term partnerships between national governments and NGOs, international organizations, and donors. These partnerships can help ensure that resources are effectively coordinated and that efforts are focused on achieving long-term impact. Additionally, NGOs and international organizations can work to build the capacity of local organizations and government agencies to implement effective youth employment programs, which can help ensure sustainability. Another important factor in ensuring sustainability is the availability of resources. Donors and international organizations should work to ensure that funding is available for sustained and long-term investment in youth employment programs.

## 2.5. Active Labor Market Policies and Youth Unemployment

Active labor market policies (ALMPs) are interventions in labor market policies that aim to increase employment opportunities and reduce overall youth unemployment rates (Kluve, 2014). ALMPs work together with passive labor market policies, i.e., early retirement programs or unemployment assistance. In the literature, ALMPs are commonly divided into four categories: (i) job search assistance; (ii) labor market training; (iii) incentives for private sector employment, and (iv) public sector employment (Kluve, 2014).

**Job search assistance:** Job search assistance programs aim to enhance job seekers' job search efforts, improve the efficiency of the search process, and increase the quality of job matches (Kluve, 2014).

**Labor market training:** Training and education programs are common active labor market policies to improve the employability of young people. These programs are designed to increase human capital and reduce skills mismatches through various training components, including vocational education and training, on-the-job training, and job insertion (Kluve, 2014). Private sector involvement in developing the curriculum, and training methods, or providing on-the-job training can increase the success of these programs (World Bank, 2019a).

**Incentives for Private Sector Employment:** Private sector incentive programs aim to alter employer or worker behavior through various interventions, including wage subsidies and self-employment assistance. Entrepreneurship programs offer skills and resources needed for the youth to start and run their own businesses, such as business incubators, mentoring, and access to finance. The World Bank found that entrepreneurship programs can be effective in improving business knowledge, but not necessarily creating jobs (World Bank, 2019a). For example, training for female entrepreneurs in Peru improved business but did not generate a significant increase in employment (World Bank, 2019a).

**Public Sector Employment:** Public sector employment programs typically target the most disadvantaged individuals and aim to create public works for them (Kluve, 2014). Frequently, it appears that public job creation serves a dual purpose of functioning as a social policy that offers a source of income and keeps the most marginalized people connected to the labor market, as well as a means of avoiding high unemployment rates by creating public jobs (Kluve, 2014).

Based on empirical evidence, various policy tools are effective in reducing youth unemployment, informal employment, and NEET rates. When designing policies and programs to address these issues, it is important to ensure that they complement each other instead of competing with one another. Education and training programs and active labor market policies are interdependent and should not be viewed in isolation from each other (O'Higgins, 2001).

Recent micro econometric evaluations analyzing active labor market policies indicate that job search assistance programs are more effective than public sector employment programs in reducing youth unemployment (Card, Kluve, and Weber, 2010). Kluve et al. (2019) conducted a comprehensive meta-analysis of 113 impact evaluations of youth active labor market programs, concluding that integrated interventions are more likely to succeed in reducing youth unemployment in middle and low-income countries. Ebaidalla (2016) suggests that to enhance the employability of young workers in OIC member countries, it is crucial to improve the economic environment through effective fiscal, monetary, and trade policies and to foster increased public and private investment to create more job opportunities. The choice of active labor market policies tailored for young individuals should be influenced by the existing education and training system. For example, in Germany, the focus of ALMP is on assisting the relatively small number of young people who disengage from the country's apprenticeship system, given that almost all young people up to the age of 18 are involved in education or training (O'Higgins, 2001).

In the medium term, classroom, and on-the-job training programs tend to yield relatively positive impacts, but not in the short term (Card, Kluve, and Weber, 2010). However, it should be noted that vocational training programs for the unemployed often improve short-term earnings, but not always long-term employment outcomes (World Bank, 2019a). To address this issue, there is a need for serious efforts in vocational education to develop the skills of young people (Ebaidalla, 2016). According to the World Bank (2019a), the Youth and Employment program in the Dominican Republic, while successful in enhancing noncognitive skills and job formality, failed to increase employment rates. Eichhorst et al. (2013) propose that the dual system, which involves both school-based education and company-based training, is generally more successful than school-based VET.

In summary, the research suggests that a combination of policy approaches that are tailored to the specific labor market conditions is the most effective in reducing youth unemployment, informal employment, and the NEET rate. Although some studies have investigated the cost-effectiveness of different policy alternatives, Card, Kluve, and Weber (2010) caution that only a few studies provide sufficient data for cost-effectiveness analysis. Jespersen, Munch, and Skipper (2007) present a cost-benefit analysis for various Danish active labor market programs, which suggests that subsidized job training programs in the public and private sectors have a positive net earning effect. In contrast, classroom training programs do not significantly improve employment or earnings prospects in the long run. According to the same study, job training programs in both private and public sectors are more cost-effective than classroom training. A study carried out by a coalition of multiple stakeholders revealed that youth employment interventions, particularly those focusing on skill development, entrepreneurship training, or employment subsidies, yielded positive and statistically significant results for young participants in terms of their labor market outcomes (Solutions for Youth Employment, 2015). The largest employment outcomes and earnings effects come from entrepreneurship promotion interventions.

## 2.6. Main Challenges in Measuring Youth Unemployment

There are several challenges in measuring youth unemployment, particularly in poorer countries. Some of these problems are related to methodology or data collection, while others are associated with the country's economy and employment structure. Here, without addressing the methodological challenges, the challenges related to the economy and employment structure of the countries will be discussed.

**Informal employment:** The first challenge is that the vast majority of employed young people in poorer countries work in the informal sector. Youth are pushed into the informal economy by a dearth of wage jobs, which is estimated to account for nearly 80% of jobs in some countries. Youth generally work in informal sectors, where jobs are less stable and have lower earning potential. (African Development Bank Group, 2016). There may be shortcomings in the data collection. Therefore, it is difficult to measure youth unemployment accurately. Especially in poorer countries, new migrants either work in the informal sector or work as self-employed. Young individuals who are self-employed frequently manage their own small enterprises, which encompass a diverse range of businesses. These ventures may include operating food stalls, retail shops, restaurants, mobile money outlets, salons, bars, boutiques, and motorcycle taxis. Additionally, some of these young entrepreneurs may be engaged in informal activities, such as selling illegal drugs, running market stalls, petty trade, bricklaying, construction work, mechanical repair and maintenance, food processing, and operating taxi vehicles (Mirembe et al., 2019). However, gathering reliable data on employment in the informal sector is challenging, making it difficult to accurately measure unemployment rates, particularly in cases where rural-urban migration data are not available.

**Underemployment:** In poorer countries, many young individuals may have jobs, but they may not receive a fair salary or have enough working hours, which is referred to as underemployment. Measuring underemployment accurately can be a challenging task. For example, in Africa, there are around 420 million young people between the ages of 15-35. Among those who are not students, one-third are discouraged and unemployed, another third are employed in insecure jobs, and only one-sixth are in wage employment. Young people encounter more than double the unemployment rate of adults, with significant differences by nation. The issue is not solely unemployment but also underemployment, which is highest among low-income countries where over half of the youth, excluding students, face it. In the past two decades, Africa is the only region where the number of young working individuals living on \$1 a day has increased (African Development Bank Group, 2016).

**Fragility:** In the absence of political and economic stability, it becomes difficult to collect data in fragile environments after conflict or disaster. A significant disruption of almost all daily and business life, especially in times of conflict and disaster (ILO, 2016, 2021b; OECD, 2022b) makes it difficult to measure youth unemployment in poorer countries.

**Skill mismatch:** There may be a mismatch between the skills that young people have and the skills that available jobs require. This can lead to high levels of youth unemployment even when there are job vacancies available. In poorer countries in Africa, MENA, and South Asia education levels are constantly increasing. This causes brand new problems. Because in some countries the unemployment rate of the people with higher levels of education is higher than that of the people with lower levels of education. Because the skills that young people have and the skills that are desired in the labor market differ from each other. This causes skill mismatch. In some poorer countries, the education system is insufficient to produce the skills that the market wants (Ahmed, 2012).

## 2.7. Social and Economic Consequences of Youth Unemployment in OIC Countries

The young population is a significant asset for OIC member countries. However, managing this population and providing them with appropriate education, employment, and job opportunities are crucial factors (African Development Bank Group, 2016). Long-term unemployment can lead young people to engage in subsistence work or criminal activities in the informal sector for income. These factors, coupled with crises that disrupt education and social support systems, can push young people into poverty and social exclusion, making them vulnerable to joining gangs or criminal organizations (ILO, 2016). Violence, terrorism, and unrest can worsen economic conditions, leading to fewer opportunities, lower incomes, and poor education, particularly affecting the young population who are more vulnerable to such circumstances. Youth unemployment contributes to the fragility of countries, which, in turn, increases youth unemployment (Adelaja & George, 2020).

According to research, long-term youth unemployment can lead to an increase in violence, conflict, and recruitment by terrorist organizations and rebel movements. A study conducted in Middle Eastern and North African (MENAP) countries revealed a correlation between youth unemployment and terrorism, with high rates of youth unemployment leading to an increase in domestic terrorism (Bagchi & Paul, 2018). The link between youth unemployment and violence is a cause-and-effect relationship. Impoverished areas with a lack of decent job opportunities are hotspots for violent extremism (Izzi, 2020).

The migration of young people from rural to urban areas due to unemployment has negative effects on agricultural production in rural areas (Kummitha et al., 2020; Lyu et al., 2019). As rapid urbanization occurs, cities face significant health and social problems due to the lack of infrastructure and hygiene. The informal sector grows due to the lack of job opportunities, leading to youth unemployment becoming a major issue. Moreover, unemployment and lack of economic opportunities lead to irregular migration and tragic events during the migration process. This unemployment and poverty also trigger international migration (African Development Bank Group, 2016; Rakauskienė & Ranceva, 2014). While international migration can contribute to the economic development of a country, increase welfare for migrants, and reduce unemployment (Boubtane et al., 2013; Dumont & Garson, 2010), it can also cause a brain drain and increase the need for

qualified manpower in the country of origin. These migrations often lead to the disappearance of young people, who are valuable assets for the development and growth of developing economies (African Development Bank Group, 2016).

## 2.8. The Risks That might Limit Progress in the Coming Periods

Policies aimed at reducing youth unemployment may encounter hindrances from various factors that could even result in an increase in youth unemployment. Civil wars, terrorism, and natural disasters pose a significant risk to reducing youth unemployment. Fragile states denote potential risks and challenges. The state of being delicate or extremely vulnerable indicates fragility (ILO, 2021b). The OECD defines fragility as “the combination of exposure to risk and insufficient coping capacities of the state, system, and/or communities to manage, absorb, or mitigate those risks” (OECD, 2022b, p. 24). The OECD defines fragility across six dimensions: economic, environmental, political, security, societal, and human (OECD, 2022b).

The concept of fragility can be influenced by both endogenous and exogenous factors. Exogenous factors include “catastrophic events, health pandemics, global trade and financial crises, external military threats, and flows of refugees or migrant workers”, while endogenous factors consist of “weak democratic governance and dysfunctional public institutions, socio-political crises, and high levels of non-conflict violence”, among others. In addition, “climate change and environmental degradation, migration and forced displacement, and terrorist group activity” can also contribute to increasing the fragility of a nation (ILO, 2021b, p. 2). These problems or disasters, such as the Covid-19 pandemic, floods, and earthquakes, can catch countries off guard and cause crises that last for extended periods. Currently, critical issues such as the COVID-19 pandemic, the Russian invasion of Ukraine, and climate change pose direct threats and increase vulnerability (OECD, 2022b).

Considering the OIC member countries, conflict and natural disasters stand out as the two most important issues. These problems deepen the problems of youth unemployment. In this context, conflict is the most important indicator of fragility. Conflict and post-conflict environments cause many negative political, social, and economic situations. These can be defined as follows:

- Weakened institutions, disrupted social services, weakened or dysfunctional economies, and severely depleted capacities at all levels. The need for political support, institutional development, and response capacity is greater than in post-disaster situations.
- Instability at macroeconomic and microeconomic levels, such as political instability and high inflation.
- Destruction of productive and non-productive assets drives people out of the region, fostering instability and further vulnerability.
- The shortage of workforce, inadequate expertise, extended lack of access to essential services, and limited availability of services (ILO, 2016, p. 17).

Another aspect that gives rise to fragility is disasters. Disasters can arise from natural causes such as geological events like earthquakes, biological outbreaks like Covid-19, or hydro-meteorological incidents such as floods. Or disasters could be human-induced climate change, i.e., environmental degradation and technological hazards. These disasters lead to the destruction of physical, social and human capital. All public services, social relations and human resources can be damaged by disasters. For example, the destructive effects of earthquakes or floods destroy cities, villages, houses, schools etc. (ILO, 2016, pp.17-18).

There are individual/societal, institutional, and national level barriers to young people's entry into the labor market **Table 1**.

**TABLE 1** Barriers to young people's entry into the labor market according to ILO

At the personal/social level	<ul style="list-style-type: none"> <li>• low education</li> <li>• illiteracy</li> <li>• physical and psychological scars from conflict experiences and violence</li> <li>• early family responsibilities</li> <li>• social norms that exclude women from engaging in productive employment</li> </ul>
At the institutional level	<ul style="list-style-type: none"> <li>• scarcity of educational and vocational training institutions, especially in rural areas</li> <li>• high costs of enrolling in secondary education</li> <li>• available skills training fails to target young people</li> <li>• skills training confined to a limited number of trades</li> <li>• mismatch between skills trainings provided and market demands</li> </ul>
At the national level	<ul style="list-style-type: none"> <li>• national policies fail to target and benefit young people directly through e.g. quota systems</li> <li>• young people are mainly represented and treated as security concerns</li> <li>• limited participation of young people in decision-making and policy formulation</li> <li>• limited employment opportunities in the private sector</li> </ul>

Source: ILO (2016, p. 29)

Not only in developing countries but also in developed countries, youth are the most severely affected by economic crises. Many studies have shown that economic crises deepen youth unemployment. While poorly educated and low-skilled youth had difficulty finding work before the crisis, they had even more difficulty during the crisis (Scarpetta et al., 2010). Because young people have lower human capital, qualifications, skills, and job-specific experiences, they have fewer opportunities. At the institutional level, the labor market shrinks and does not offer many opportunities to young people. Similarly, comparative studies examining economic crises and youth unemployment in OECD and EU member countries show that economic crises increase youth unemployment (Bruno et al., 2017; Scarpetta et al., 2010). Youth unemployment also increases in high inflation environments, which are indicators of economic crises (Bayrak & Tatl, 2018). Migrant youth, on the other hand, experience even deeper unemployment during times of crisis because they are less qualified than their native-born counterparts. A study analyzing EU-15 countries after the 2008 crisis showed that low-quality migrants had higher unemployment rates than native-born individuals (Dumont & Garson, 2010).

## **2.9. The Effect of Migration and Fertility Trajectories on Youth Unemployment**

### **2.9.1. International migration**

Several studies suggest that international migration leads to employment issues for both migrants and the host community, with negative consequences for the sending and receiving countries. However, other comparative studies indicate that migration can have positive impacts on employment and the economy of both sending and receiving countries. Various theoretical models have been proposed to explain the reasons behind migration, but they all share the view that individuals move in search of improved living conditions and employment prospects. The factors contributing to migration include poverty, unemployment, rapid population growth, economic turbulence resulting from conflicts, forced displacement, authoritarian rule, and the appeal of robust welfare programs, stability, and social security in the destination country. When it comes to young individuals, they tend to evaluate migration as a cost-benefit calculation, with lower migration costs and higher lifetime returns being the main determinants. The anticipated advantages for youth are demonstrably more significant due to their increased ability to obtain an education abroad, seamless integration into the job market, and a prolonged career span. The potential for achieving a high lifetime income within one's native country appears to be less promising for youth, particularly within nations characterized by high levels of unemployment. Issues such as the youth bulge, low employment opportunities, and high unemployment rates encourage the youth to migrate (Redlin, 2022).

Some studies state that international migration adversely affects youth employment and draw attention to the following issues. The rise in the number of less educated immigrants has had a notably adverse impact on the employment prospects of native youth compared to native adults because the youth in the receiving country and less educated adult immigrants traditionally do similar work, and the skills of the youth in the receiving country and less educated adult immigrants overlap significantly. Secondly, the supply of young labor seems to react more strongly to wage fluctuations brought about by immigration (Smith, 2012).

Studies on the impact of youth international migration on receiving and sending countries have mixed findings. On one hand, youth unemployment is widely regarded as a significant threat in today's world and a leading cause of migration (Dao et al., 2021; Rakauskienė & Ranceva, 2014). However, comparative studies have demonstrated that immigrants can have a positive impact on the economic development of receiving countries. For instance, a study covering 22 OECD countries from 1987 to 2009 found that migration contributed positively to the economic prosperity of the host country, leading to increased GDP per capita and lower aggregate unemployment rates for both native- and foreign-born workers (Boubtane et al., 2013). Similarly, a study of EU-15 countries concluded that immigrant workers have played a significant role in employment growth (Dumont & Garson, 2010). Moreover, migration and remittances have been shown to have a positive impact on the economy of sending countries, as demonstrated in a study of 71 developing countries (Adams & Page, 2005). Overall, while some studies have identified the negative effects of youth international migration, others suggest that it can have positive economic impacts for both receiving and sending countries.

### 2.9.2 Rural-urban migration

In many developing countries, internal migration as a result of rapid urbanization brings considerable challenges. Driving factors such as unemployment, poverty and low quality of life in rural areas, employment opportunities, the possibility of obtaining a better life and income in urban areas are the main reasons for rural-urban migration. In addition, climate change, famine, environmental changes, floods, and droughts are the other factors that increase rural-to-urban migration (Imuetinyan & Charles, 2018; Lyu et al., 2019; Mirembe et al., 2019). With rapid urbanization, especially unskilled youth migrants have problems finding work. Those who are more qualified have no problem finding a job (Lyu et al., 2019). In addition to the high rate of youth unemployment, rapid urbanization leads to congestion, pollution, underemployment, and increased crime rates in urban areas. On the other hand, it causes a decrease in the labor force in rural areas and adversely affects agricultural production (Imuetinyan & Charles, 2018; Kummitha et al., 2020; Mirembe et al., 2019). Compared to refugees, the situation of internal migrants is more vulnerable. Because international migration statistics do not encompass data regarding internal migration and displacement. Although the internal migrants and refugees are displaced for the same reasons, the refugees are under international protection. However, internally displaced persons are a group of individuals who, unlike refugees, do not possess internationally recognized rights and must rely upon their country of origin for safeguarding. These unhappy internal migrants would be part of international migration within a short time (Wedekind et al., 2019).

### 2.9.3 High fertility rate and youth bulge

Declining infant mortality rates and the continued high fertility rates have led to the emergence of a large youth population in the total population. The concept of youth bulge has been used to define this high rate of youth in the general population. The fact that youth bulge is defined as a factor that causes problems for the employment of this young population and increases youth unemployment. Youth bulge is identified as a very important problem especially in many developing countries (Lin, 2012; Redlin, 2022). In poor nations with limited employment opportunities, youth unemployment is becoming a significant concern. For instance, the utilization of panel data from 41 African countries spanning the years 2000 to 2010 has demonstrated that a youth bulge, coupled with insufficient economic growth on both the supply and demand fronts of the market, serves as a critical determinant of youth unemployment within Africa (Baah-Boateng, 2016). The demographic phenomenon of a large youth bulge presents a dual prospect of serving as a critical opportunity for societies while also bearing the potential of posing a formidable threat. As young members of the population commence their entry into the labor market, the level of receptiveness of the market to their involvement, coupled with sufficient flexibility, will dictate the decrease in the proportion of non-working age individuals compared to the working age group, ultimately leading to a decline in the dependent population. If these youthful individuals encounter a dearth of employment opportunities coupled with low remuneration, an unfavorable circumstance may emerge, thereby precipitating collective dismay and serving as a promising origin of social and political turbulence. High levels of youth unemployment can lead to a range of associated difficulties. (Lin, 2012).

### 2.10 The Status of International Cooperation Toward Reducing Youth Unemployment

At the global level, youth unemployment is considered a crucial issue by several international organizations. Among them, the International Labor Organization (ILO) and the World Bank (WB) play significant roles in setting standards and providing resources related to youth employment policies. As norm-entrepreneurs, they define youth unemployment as a social and economic problem and generate information in leading roles. These prominent actors in soft governance have normative and ideational foundations in the field of unemployment. The ILO intervenes through conventions, recommendations, projects, and has a presence in multiple regions. The organization works in collaboration with the UN, NGOs, governments, and partnerships. ILO's focus has been on addressing international unemployment and has established norms for young people's work and education through conventions and recommendations. The transnational policy field for children and work has been shaped by 48 instruments from 1919 to 2002, including financial support to the unemployed and disputed wage reductions as a solution to unemployment (Fergusson, 2021).

ILO is the most active organization globally in reducing youth unemployment and increasing youth employment. ILO keeps youth unemployment on the agenda by organizing many regional and global events every year. In this context, on May 2-3, 2018 in Geneva, Switzerland, the

Global Initiative on Decent Jobs for Youth: Innovations for Decent Jobs for Youth conference was organized. Governments, social partners, youth and civil society, private sector, foundations, UN entities participated in this conference and discussed what to do for decent jobs for youth. Similarly, the Global Youth Employment Forum 2019 was organized on August 1-3, 2019 in Abuja, Nigeria. In addition to these, ILO organizes many webinars and regional meetings (ILO, 2023).

In addition to these events, ILO has been implementing joint projects with national governments to reduce youth unemployment. ILO has been carrying out projects to reduce youth unemployment in many OIC Member Countries in the recent years. ILO has been implementing such projects with the national governments, including but not limited to the Green Works Based on Labour-Intensive Local Technologies in Burkina Faso project between 2020-2022, the Urban Infrastructure Development And Creation of Decent Jobs for Young People in The Cities of Maroua and Bamenda for the Strengthening of Peace and Socio-Economic Resilience (HIMO MINH DU Project) with the Government of Cameroon between 2020-2022, Young Futuremakers Malaysia project in Malaysia from 2021-2023 and Employment and Reintegration in Nigeria project with the Nigerian government from 2021-2023 (ILO, 2023).

In addition to these events and projects, ILO produces reports, guidelines and documents aimed at reducing youth unemployment and improving vocational training. In recent years, ILO has published guidance documents on the digitalization of national vocational training systems, which is also a focus of this study such as: *The Digitization of TVET and Skills Systems in 2020*, *Digitalization of National TVET and Skills Systems: Harnessing Technology to Support LLL: An Enquiry and Action Framework* in 2021, *Strengthening Work-Based Learning In VET Institutions* in 2022. In addition to these studies, ILO carries out studies that consider global developments in the processes of reducing youth unemployment and improving vocational training. More specifically, ILO focuses on how to improve vocational training in a sustainable and green way, considering climate change and developing policies to reduce youth unemployment. For example, ILO organized an event in 2022 titled “Transforming Technical and Vocational Education and Training for Refugees: Greening the Southern Africa Technical Vocational Education and Training (TVET) Ecosystem.” In addition, in 2022, ILO published a report titled *Greening Enterprises: Transforming Processes and Workplaces* (ILO, 2023).

Since the inception of the UN, UNESCO has played a vital role in linking education to youth unemployed discourse. To address child labor, UNESCO and ILO pushed for more schooling and raising the school-leaving age. The OECD actively addresses YU policy through annual Employment Outlook Reports, providing survey data and policy analysis. OECD and WB shared the same views on human capital theory, emphasizing labor supply weaknesses and inadequate skills of graduates, as well as discouraging welfare schemes. In addition to these organizations, UNICEF and the IMF are the new actors to develop policies to reduce youth unemployment (Fergusson, 2021). The ILO, UNDP, UNFPA, and UNICEF have collaborated in organizing a meeting aimed at enhancing the learning, skill development, and transition to decent work for young individuals in Middle Eastern and African nations (UNICEF, 2022).

In addition to international organizations, aid organizations in many countries also support efforts to reduce youth unemployment. Between 2014 and 2021, the European Economic Area and the Norwegian Government allocated about 3 billion euros to reduce youth unemployment among the European Union countries, especially in Eastern Europe and Mediterranean countries (The EEA and Norway Grants, 2023). Furthermore, from 2016 to 2021, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) to carry out the YouMatch initiative, which aimed to enhance employment services for young people using a collaborative approach involving labor market professionals and key players across regions. The YouMatch community is made up of approximately one hundred professionals hailing from public and private employment services, civil society groups, educational institutions, and other influential parties representing twenty-five nations in sub-Saharan Africa and the Middle East and North Africa (MENA) regions. In Communities of Practice (CoPs) focused on addressing needs and spanning regions, participants shared insights, effective techniques, valuable experiences, leading strategies, and novel methods to advance youth employment opportunities (GIZ, 2021a). For example, in this sense, GIZ supports projects to reduce youth unemployment not only in some countries in Africa, but also in Balkan countries. In this sense, GIZ supports projects to improve vocational training and non-formal training in Serbia (GIZ, 2022).

In summary, it is essential to have a global collaboration in reducing youth unemployment, and additional actions are necessary to ensure that young individuals can obtain access to high-quality employment opportunities, education, and training.



# EXPERIENCES AND RECOMMENDED PRACTICES: CASE COUNTRY STUDIES





### 3 EXPERIENCES AND RECOMMENDED PRACTICES: CASE COUNTRY STUDIES

In this section, the current vocational education systems in Germany, Uganda, Tunisia, and Türkiye, selected as case studies, are discussed, along with the challenges they face, the state of youth unemployment, and the efforts made to reduce it. The education systems of the countries in general, the structure of vocational education systems, how vocational education is financed, and the strengths and weaknesses of vocational education systems are examined first. Subsequently, the situation of youth unemployment in each country, the reasons for youth unemployment, policies, and practices aimed at reducing it, and the difficulties encountered in this process are discussed. The challenges faced in vocational education and youth unemployment reduction, the lessons learned from policy and project successes and failures, the cooperation of international organizations and NGOs on this issue, and the most significant risks identified in failing to reduce youth unemployment with the collected field data are then analyzed. In the last part, a comparative analysis of the policies and practices related to the vocational education system and youth unemployment reduction in these four countries is conducted, and policy lessons are drawn from both successful and unsuccessful practices.

One of the case studies via desk study was conducted in Germany, a leading OECD country in vocational education and training. Germany was chosen due to its reputation for having one of the exemplary VET systems in the world. VET, integrating work-based and school-based learning, is widely respected in German society (OECD, 2010). The German VET system as a whole is well-resourced, combining public and private funding. Moreover, a rich literature on German vocational education and training is available.

Fieldwork was carried out in Türkiye, Uganda, and Tunisia, involving interviews with key stakeholders in vocational training and youth unemployment in these countries. Türkiye, Uganda, and Tunisia were chosen for field studies because of their relatively large populations, high levels of youth unemployment, and data availability. Thus, a total of four countries were selected, representing different income levels according to the World Bank and world regions according to OIC classification (**Table 2**).

**TABLE 2** Case countries by region and income level

	Europe	Asia	Arab States	Africa
High-income countries	Germany			
Upper-middle-income countries		Türkiye		
Lower-middle-income countries			Tunisia	
Low-income countries				Uganda

Türkiye has shown noticeable progress in VET in recent years (Özer, 2020). Also, the prestige of VET schools and centers increased in recent years; accordingly, more students started to enroll in VET schools and centers. Moreover, some of the top achieving students also chose to study at some selective VET high schools (Milli Eğitim Bakanlığı, 2022).

Tunisia has one of the most successful education systems among Arab and African countries. It allocates about 20% of its national resources to education. Tunisia also gives special importance to VET. The Ministry of Vocational Training and Employment is responsible for VET. Moreover, Tunisia is currently implementing a new project: Youth Inclusion in the Economy Project (Le Ministère de la Formation Professionnelle et de l'Emploi, 2023). The aim of the project is to improve the economic opportunities available to young, disadvantaged Tunisians. Tunisia has also signed bilateral agreements with different European countries to improve vocational training.

Uganda is a large African country with almost a 50-million population. English is one of the official languages of Uganda and accordingly most policy documents are available in English. Uganda followed a new strategic plan in VET for 2011-2020 (Caggiano, 2018). The Business, Technical and Vocational Education and Training (BTNET) Strategic Plan 2011-2020 denotes a paradigm shift for skills development in Uganda to develop skills as well as to enhance productivity and growth (UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training, 2014). Moreover, the OPEC Fund for International Development (OFID) has signed a US\$14.3m public sector loan agreement with Uganda to develop VET (OPEC Fund for International Development, 2017). Uganda also has several ongoing national projects in vocational education such as Uganda Skills Development Project and Capacity Building for Industry Demand-Based Technical and Vocational Education and Training in Uganda, supported by Korea Chamber of Commerce & Industry (Ministry of Education and Sports, 2023; Ministry of Education And Sports, 2023).



### 3.1. Germany

In this part of the report, German Vocational Education and Training (VET) is presented, with a focus on its role in reducing youth unemployment. The German educational system is discussed first, followed by the German VET system and its funding scheme. Finally, the strengths and challenges of the German VET system are presented.

### 3.1.1. The German Educational System

Germany is a federal country composed of states known as *Länder*. Consequently, in keeping with other areas of responsibility, education tasks are split between the central government and the states. The central government is mainly accountable for providing resources for education while the states are responsible for tasks such as determining the purpose of education, organizing, and managing it, and training teachers. In the German education system, local governments primarily manage education. Overall, the German school system administration can be aptly described as a “multi-central” system.

Compulsory education for all children in Germany begins with primary school (*Grundschule*) and spans from ages 6 to 10, depending on the state. There are also several specialized schools for children with specific needs, and five different tracks after primary school. The secondary education system (years 5-12/13) is currently perceived as quite complex. Secondary education level I (basic education schools) is for grades 5-10, while secondary education level II (upper secondary school) is for grades 11-13. Secondary education level II prepares students for both higher education and vocational training. In all types of schools, the 5th and 6th grades are considered trial classes (*Erprobungsstufe*). Based on their performance in these classes, the class teacher and teachers’ council can recommend different types of schools to the student. The decision on which type of school a child attends is usually made after the fourth grade, when students take an assessment test called the “*Empfehlung*” or recommendation. This test is designed to assess the student’s academic abilities and potential. Based on the results of this test and other factors such as the child’s interests and future career aspirations, parents can choose the appropriate school type for their child. In some cases, the child’s teacher may also provide guidance on which school type would be best suited for the child.

The *Hauptschule* is the first level of secondary education for students who are considered to have limited academic achievement or interests. It provides a general basic education that is less advanced than other types of schools. Students are awarded a graduation diploma after completing the 9th or 10th grade. After this, they have the option to attend vocational schools (*Fachoberschule*) or undergo vocational training (*Ausbildung*). The *Realschule* program is less academically demanding, and students who graduate from a *Realschule* are eligible to attend a vocational high school (*Fachoberschulreife*). Graduates of both *Hauptschule* and *Realschule* typically pursue vocational pathways at the age of 15 or 16, including the transition system.

The *Gesamtschule* offers vocational training and prepares students for higher education using a unique teaching system. The education program combines the characteristics of the *Hauptschule*, *Realschule* and *Gymnasium*. The school comprises two levels; the first level (grades 5-10) and the second level (grades 11-13). It differs from the *Hauptschule* and *Realschule* in that it allows students to attend the upper level of high school at the same institution. The *Gymnasium*, on the other hand, provides a challenging academic program that leads to university entrance and offers advanced general education. Students here study for higher education or to gain the necessary knowledge and skills for higher vocational training.

### 3.1.2. The German VET System

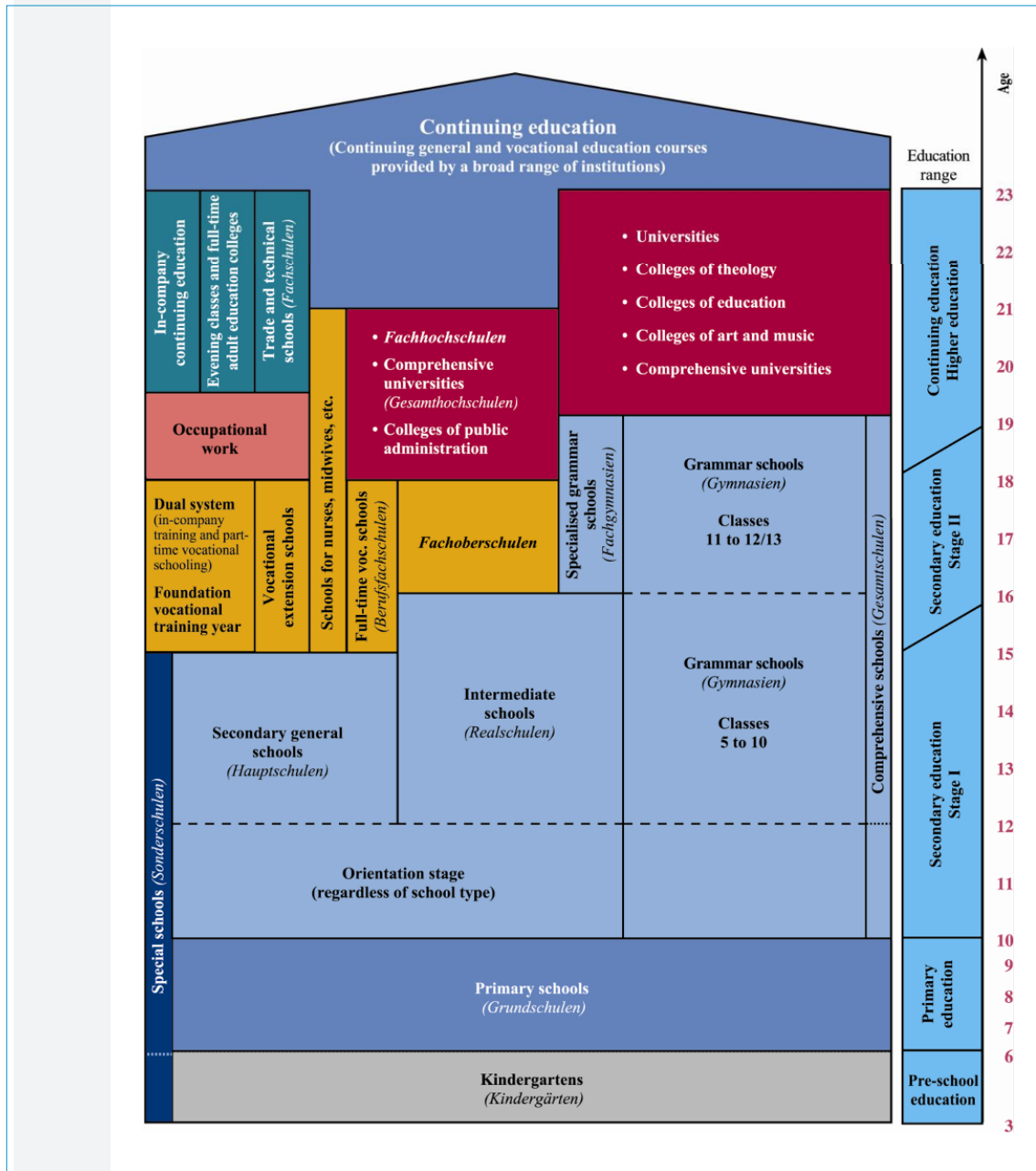
A notable aspect of the German school system is its approach to vocational education and thus providing employment opportunities for its youth. The German vocational training system is highly regarded for its ability to achieve three objectives that have been established through consensus among policymakers within the education sector at both state and federal levels. These objectives have been documented in reports such as the National Report on Education. The education system aims to promote the individual's capacity for self-regulation, encourage equal opportunities and societal participation, and develop human resources (Autorengruppe Bildungsberichterstattung 2010: 2), as outlined in this report.

The three objectives of German vocational education represent the convergence of the interests of society, businesses, and individuals. The individual aspect focuses on how vocational training can improve an individual's ability to overcome work-related challenges and enhance other aspects of their life, enabling them to reach their full potential. The social aspect concerns how vocational training can facilitate the integration of the younger generation into society and the workforce, preventing social exclusion and ensuring a smooth transition into training and employment. In turn, this promotes their integration into society. The economic aspect pertains to how vocational training can enhance economic, business, and individual productivity. This involves developing human resources by ensuring an adequate number of skilled workers and improving their qualifications (Euler, 2013).

In the Federal Republic of Germany, compulsory education comes to an end when an individual turns 18 years old. Students who complete the first stage of secondary education but choose not to pursue the upper secondary level of high school must continue their compulsory education at a vocational education school in the second stage of secondary education (**Figure 2**). Vocational education schools are designed to provide training for specific professions, including practical training in real-world work environments, and operate within a dual system (**Box 2**). Germany's dual system of VET is highly regarded for blending school-based learning and practical on-the-job training. This vocational education system is especially important in the private sector. Responsibility for vocational education in schools falls to the states, while federal government regulations govern on-the-job training outside of school.

The Federal Government of Germany holds the authority for practical training in businesses, and the principles are established by the Vocational Education Act (BBiG). However, the states are responsible for carrying out the practical training. The educational objectives, establishment systems, registration and admission conditions, and diplomas of vocational education schools vary among states. The German dual system, which involves apprenticeships that combine on-the-job training with regular lessons at a vocational school, is the predominant pathway to employment for most of the young people. With about 53% of an age cohort pursuing a recognized vocational training, the dual system is the most extensive area of education at the upper secondary level (Hoeckel and Schwartz, 2010). According to the Federal Statistical Office of

**FIGURE 2** The German vocational education system



Source: [https://www.researchgate.net/publication/301568774\\_Educational\\_demands\\_to\\_reduce\\_avoidance\\_of\\_vocational\\_education\\_in\\_Jordan/figures?lo=1](https://www.researchgate.net/publication/301568774_Educational_demands_to_reduce_avoidance_of_vocational_education_in_Jordan/figures?lo=1)

Germany, approximately 2.4 million students were enrolled in vocational education and training in Germany for the school year 2020/2021, representing approximately 49% of all students at the upper secondary level (Destatis, 2023).

**BOX 2** *Dual vocational education in Germany*

*Berufsschule* is a school where students receive practical training in businesses and theoretical education in the school itself. It is a type of school that operates under the “dual system” and typically lasts for three years, offered as part-time vocational schools. Dual vocational education and training (*Duale Berufsausbildung*) is a system of vocational education and training (VET) in Germany that combines practical on-the-job training with theoretical education. The dual system is designed to provide students with hands-on experience and skills in their chosen field, while also giving them a solid foundation in the theoretical knowledge needed to succeed in their career (Federal Ministry of Education and Research, 2021). According to the Federal Ministry of Education and Research in Germany, the dual vocational education and training system has a long tradition in Germany, with the first vocational schools established in the mid-19th century. Today, the dual system is a central feature of the German education system and is widely regarded as one of the most successful vocational training systems in the world. In the dual system, students typically spend three to four days per week in a company or organization, where they receive practical training and work experience under the guidance of a skilled worker or trainer. The remaining one to two days per week is spent in a vocational school, where they learn the theoretical aspects of their chosen profession. The dual system is available for a wide range of occupations, including trades such as carpentry, plumbing, and electrical work, as well as more specialized fields such as information technology, healthcare, and hospitality. In brief, the dual vocational training system exemplifies the close collaboration between the government and the business sector, which is reflected in the amalgamation of corporatism and federalism principles. The regulatory and supportive duties are undertaken by the federal and state governments, whereas significant responsibilities are delegated to companies or collaborative entities, such as responsible agencies.

**Box 2** highlights the German dual VET system. Nearly half of the upper secondary students in Germany (48.8%) participated in vocational education and training (VET) programs in 2020, similar to the EU average. Moreover, VET graduates enjoy high employment rates, with 91.6% of them being employed in 2021, compared to the EU average of 76.4%. About half of each age group, around 52.9% in 2017, undertake vocational training in one of the 325 training occupations listed under the Vocational Training Act (BBiG) or the Crafts and Trades Regulation Code (HwO), according to BIBB’s (2019) estimates.

According to Hoeckel and Schwartz (2010), 75% of upper secondary students pursuing vocational pathways opt for the dual system, while the remaining 25% choose full-time VET schools such as *Berufsfachschulen*, *Fachschulen*, and *Schulen des Gesundheitswesens*. These schools typically span 2-3 years and may involve an internship, providing VET qualifications and the opportunity to acquire school leaving certificates such as *Hauptschulabschluss*, *Realschulabschluss*, and *Fachhochschulreife*.

Germany has established various programs to facilitate the transition into vocational education and training (*Übergangssystem*) for individuals who may face challenges such as coping with the demands of an apprenticeship. As explained in detail by the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung*) (2022), *Berufsgrundbildungsjahr* or *Berufsvorbereitungsjahr* (one-year vocational education) is an education program that lasts for one year and is considered the first stage of vocational education that can be continued later on. In these vocational education schools, students receive practical and theoretical training in specific vocational areas.

On the other hand, *Berufsfachschule* is a full-time vocational school that requires basic education (*Hauptschule*) as an admission requirement, and some schools also require completion of the 10th grade in the first stage of secondary education (*mittlere Reife*). The program may last for one, two, or three years, depending on the field. Upon graduating from a two-year *Berufsfachschule*, students can continue their education at *Fachoberschule* (Technical High School), which provides advanced theoretical and practical knowledge and skills in a specific vocational field.

*Fachhochschule* is a type of technical high school that provides students with advanced theoretical and practical knowledge and skills in a specific vocational field. Graduating successfully from these schools gives students the right to continue their education at vocational colleges. The education program can be full-time or part-time and typically lasts for two years, covering the 11th and 12th grades. *Fachhochschule* (Technical School of Applied Sciences) is a type of technical school that provides in-depth vocational education in a particular field for individuals with professional experience. They are considered a continuation of vocational education, with full-time programs lasting at least one year, and part-time programs lasting at least two to three years. *Berufliches Gymnasium/Fachgymnasium* (Advanced Vocational High School) is at the top level of vocational education in Germany. These schools cover grades 11 to 13 and provide general or subject-specific higher education maturity, opening the way for university education. *Fachgymnasiums* place more emphasis on vocational courses in addition to general courses, distinguishing them from regular upper secondary schools (Edelsten, 2013).

### 3.1.3. Funding of VET in Germany

In Germany, there is a tradition of not directly transferring public funds to companies for apprenticeships. However, in recent years, the Federal Government has been financing apprenticeship opportunities for unemployed youths in troubled areas more frequently (Berger and Eberhart, 2019). The responsibility for VET strategy is held by the Federal Ministry of Education and Research (*Bundesministerium für Bildung und Forschung, BMBF*). The Vocational Education and Training Act (*Berufsbildungsgesetz, BBiG*), which was last reformed in 2005, is under its jurisdiction. The BMBF also publishes an annual VET report, provides funding and guidance to the German Federal Institute for VET (*Bundesinstitut für Berufsbildung, BIBB*), and oversees programs aimed at enhancing VET (Hoeckel and Schwartz, 2010). On the other hand, the responsibility for VET schools of the dual system lies solely with the *Länder*. They are responsible for creating school curricula, training, and compensating teachers, and overseeing

the Chambers (Rechtsaufsicht) in a legal capacity. The Länder holds primary responsibility for cultural and educational affairs (Kulturhoheit), which results in significant variation across states in terms of the structure and substance of teaching within the school aspect of the dual system (Goeser et al., 2013).

The financing of vocational schools is divided among the Länder (primarily for teacher salaries), local authorities (for equipment and infrastructure), and companies (for workplace training). In some sectors, companies have established a general fund to cover the costs of the training institution through contributions paid by all participating companies. However, in other sectors, each company is responsible for bearing its own costs. Companies bear the largest share of the costs associated with the dual system VET. In 2007, employers spent EUR 14.7 billion on VET (after productive gains but including apprentice salaries as net costs) while the Länder spent EUR 2.9 billion on VET schools. The Federal Government and the Employment Service (Bundesagentur für Arbeit) provide additional funding for VET (Hoeckel and Schwartz, 2010).

Today, in Western societies, the costs associated with apprentice training are typically shared among businesses, apprentices, and the government. Businesses are responsible for providing the necessary financial resources for practical training and are obligated to pay a certain fee to the apprentice. In the final year of training, the apprentice produces more value than they earn, allowing them to pay back a portion of the training expenses. In the evaluation made by German employers in the 1950s, they estimated that the balance between training costs and income would be achieved, and small businesses even made small profits by employing apprentices (Euler, 2013).

The social partners are involved in several aspects of training, including developing and updating training guidelines. Although businesses are not required to offer training positions, the social partners ensure enough training opportunities are available. The federal government allocates responsibility for vocational training across various ministries. The Federal Institute for Vocational Education and Training (BIBB) is essential in coordinating guidelines and conducting research, while the role of the Federal Employment Agency (BA) has grown in importance due to the expansion of the “transitional sector.” The government and businesses collaborate to finance vocational training, with each entity contributing in different ways. Businesses cover the expenses associated with vocational training and offset these costs through the productive input of their trainees and other factors that generate benefits for the company. According to the 2012 education expenditure report, public sector contributions to vocational training amounted to 57.2 percent (federal: 18.5 percent; states: 27.6 percent; local communities: 11.2 percent), while private entities contributed the remaining 42.8 percent of the total (German Federal Statistical Office 2012: 29).

In Germany, the management and general expenses of apprenticeships are covered by the dues paid to Chambers of Commerce and Industry (IHK) by businesses, and federal and state governments also provide financial assistance. Municipal and state budgets cover the theoretical training expenses of apprentices (Hoeckel, 2008). The chambers (i.e., chambers of commerce, chambers of crafts, and chambers of industry and commerce) play a critical role in the German

VET system. They act as intermediaries between employers and vocational schools, ensuring that the training provided meets the needs of the labor market. In addition to overseeing the certification process, they provide guidance and support to both apprentices and employers. They are entrusted with several responsibilities that include:

**Providing information and advice:** The chambers offer valuable guidance and counsel to companies, vocational schools, trainers, and apprentices on various aspects of VET, such as training regulations, funding opportunities, and qualification requirements.

**Developing and updating training regulations:** The chambers work in collaboration with employer associations, vocational schools, and other stakeholders to create and revise training regulations. These regulations define the skills and competencies that apprentices must acquire during their training.

**Overseeing and assessing training:** The chambers are responsible for supervising and evaluating apprenticeship training. They ensure that training is conducted in compliance with established regulations and standards and that apprentices receive adequate support and guidance.

**Issuing certificates:** The chambers issue certificates to apprentices who successfully complete their training. These certificates are recognized throughout Germany and attest to the skills and competencies that the apprentice has acquired.

**Promoting VET:** The chambers promote the value of VET and advocate for its importance to companies, policymakers, and the public.

In conclusion, the chambers play an essential role in ensuring the quality and relevance of VET in Germany, and they act as a bridge between the world of work and the education system (BiBB, 2019).

### 3.1.4. The Strengths of the German VET System in the Reduction of Youth Unemployment

According to the German Office for International Cooperation in Vocational Education and Training (*Bundesinstitut für Berufsbildung*) (2019), there are currently 1.32 million trainees across 325 recognized professions in Germany, which accounts for 5% of all employees. Approximately 20% of companies with staff subject to social insurance contributions engage in training annually, which amounts to around 430,000 out of 2.2 million. Furthermore, approximately 500,000 new trainees are taken on each year, with 74% being hired directly after completing their training. In terms of sectors, the manufacturing, engineering, and construction sectors—in which there is a high demand for skilled labor—are where the German VET system is most effective. The system is closely aligned with the needs of the German economy and places great emphasis on hands-on training and job-based learning. In addition to this, vocational training for plumbers, carpenters, electricians, etc. is firmly established in the German vocational training system.

The German healthcare system is also well-developed for various professions such as nursing, medical assistants and dental assistants. There exist less developed areas namely retail and hospitality which have fewer apprentice opportunities (Berger and Eberhart, 2019). This is because these sectors tend to have high turnover and less predictable staffing needs, making it more difficult to set up structured apprenticeship programs. Another sector where VET system is less developed is the creative industries sector. This includes areas such as media, advertising, and design. Although there are some vocational training programs in these fields, they tend to be less structured and less standardized in training and qualifications than in other fields. Regarding gender, the German VET system has traditionally been male-dominated, especially in technology. However, efforts have been made to encourage more young women to pursue education in traditionally male-dominated fields such as engineering and IT. In addition, more gender-equal vocational training is also taking place in other fields such as health care (BIBB, 2020).

Dual learning is conducted in two different locations, with 70% of the training taking place within the company under structured conditions and actual work environments, enabling trainees to participate in real business activities. Trainees are compensated for their participation through remuneration. The remaining 30% of the training is provided through vocational schools.

The German vocational education and training (VET) system is widely regarded as an example for other nations to emulate. This system also contributes significantly to the reduction of youth unemployment by equipping students with practical skills that are in high demand by employers. The Federal Ministry of Education and Research's report on "Vocational training as a route to the labor market" highlights the positive impact of VET on lowering youth unemployment in Germany and aims to reduce youth unemployment by increasing the number of apprenticeship sites and improving the quality of VET program. It claims it can further reduce and improve job prospects for young people. The before and after comparisons for labor market outcomes in terms of reducing youth unemployment reveals that prospects for young people, particularly in male-dominated fields increase. According to the Federal Employment Agency, youth unemployment rates in 2021 were lowest in Bavaria, Baden-Württemberg and Hesse, and highest in Berlin, Bremen and Mecklenburg-West Pomerania (Bundesagentur für Arbeit, 2022). One of the reasons for these regional disparities is that some regions have stronger economies and more job opportunities for young people than others. Bavaria and Baden-Württemberg, for example, have strong manufacturing and mechanical engineering sectors and offer many apprenticeships and employment opportunities for young people. In contrast, parts of East Germany have suffered from high youth unemployment since reunification in 1990. Another factor contributing to regional disparities in the decline in youth unemployment is the quality and availability of vocational training programs. Some regions have well-developed VET systems with strong partnerships between employers, schools, and training providers, while others have fewer training opportunities and less effective VET programs. In recent years, the federal government has launched initiatives to reduce regional disparities in youth unemployment, such as the Regional Employment Agreement and the National Agreement for Training and Youth. These programs aim to improve the quality and availability of vocational training programs in areas with high youth unemployment and to better tailor vocational education and training to the needs of local employers and industries.

One of the strengths of the German VET system is the strong cooperation between employers and vocational schools (**Box 3**). Employers play a central role in the German VET system by collaborating closely with vocational schools to design training that is tailored to the labor market's needs (European Commission, 2019).

**BOX 3*****Strong cooperation between government, business community, and social partners***

The task of providing vocational training is carried out in partnership between the government, business community and social partners constituting the stakeholders. Close cooperation between government and companies (e.g., development of specialized regulations) range from codified co-determination, to the “consensus principle,” to informal agreements. In the realm of training and education, various stakeholders play crucial roles. Chambers and social partners collaborate to define and oversee the training programs offered by companies, whereas the government assumes responsibility for shaping the legal framework and allocating resources for school-based training.

Chambers, acting as competent bodies, are tasked with verifying and approving training companies, as well as supervising in-company training activities and training personnel. Additionally, they play a role in organizing examinations, events, and offering consultancy services.

On the other hand, social partners, which include unions and employers' associations, engage in negotiations to establish standards (training regulations) for in-company training. They work together with each other and the government to determine training content, trainees' remuneration, monitor in-company training, and participate in examination boards. Lastly, the government's responsibilities encompass providing the necessary framework for both in-company training and vocational schools. This involves negotiating training regulations in collaboration with the social partners for in-company training and defining the training curriculum for vocational schools.

Vocational schools with a designed curriculum provide trainees the theoretical knowledge and technical skills they need to supplement their on-the-job training. They work closely with employers to ensure the curriculum is relevant and up to date with industry standards and practices. Vocational schools also provide orientation and advice to trainees and support them throughout their training. The government also finances and organizes the public vocational school system, conducts VET research via BIBB), and supports people searching for an apprenticeship (Euler, 2013).

Overall, the close cooperation of these various actors is essential for the success of dual vocational training in Germany. Together they ensure that trainees receive quality training relevant to the labor market and are optimally prepared for their future professional life.

The German VET system is renowned for providing high-quality training that equips graduates with the skills and knowledge needed to succeed in the workplace. Employers highly value the German VET system and are actively involved in designing and delivering training programs to ensure that students are trained in the skills currently in demand in the job market. The system provides students with a clear career path, which can help to reduce unemployment among young people. Apprentices who complete vocational training have a high employment rate after graduation, as they are equipped with the skills needed in the workforce (BIBB, 2018). Close cooperation with industry is another strength of the German VET system as it is closely aligned with industry needs. Employers are involved in the design of training programs, ensuring that young people are equipped with the skills required by employers. This approach also helps to reduce skills mismatches, which can lead to higher levels of youth unemployment. Training providers are subject to strict quality controls, and the system is regulated by law. This ensures that young people receive training of a consistently high standard, which is valued by employers. A study by the Bertelsmann Foundation found that companies are more likely to hire young people who have completed vocational training in Germany (Euler, 2013). According to a study by the European Commission, the close cooperation between the VET system and industry has contributed to the success of the German labor market. The VET system provides equal access to training opportunities for all students, regardless of their socioeconomic background. This can help to reduce social inequality and provide opportunities for social mobility (European Commission, 2019). The German VET system recognizes vocational qualifications, which are valued by employers. Young people who have completed vocational training are often able to find employment quickly, as their qualifications are recognized by employers. This helps to reduce youth unemployment.

It is possible for other countries to replicate Germany's success in promoting vocational education by implementing policies that place equal emphasis on academic and vocational education. In order to ensure that vocational education meets high standards, the government should invest in it and work with businesses to ensure that it meets the needs of today's and tomorrow's labor market. Additionally, they can work to foster a culture of respect for vocational education and promote VET as a viable career option. Furthermore, they can outline precise certification and career advancement pathways to aid students in understanding the potential career options that may be open to them.

### **3.1.5. The Challenges of the German VET System**

In Germany, the three objectives of vocational training set a high benchmark for productivity and achieving these objectives may vary significantly over time. However, in the past decade, many young people have faced difficulties finding a training position in a company. This has resulted in them having to work in unskilled or semi-skilled jobs, limiting their upward mobility. Other countries considering adopting the German system need not take an all-or-nothing approach but can gradually adopt some of its objectives (Euler, 2013). Nonetheless, certain issues may still arise. The German VET system is widely recognized as successful, but it is not without its challenges. Here are some of the current challenges that the system faces:

**The challenge of demographic change:** The aging population in Germany with many skilled workers retiring and a shortage of young people entering vocational training programs to replace them has led to a declining workforce, which poses a challenge for the VET system. There are concerns that there may not be enough apprenticeships to meet the demand for skilled workers (BMBF, 2020).

**The challenge of digitalization:** The rapid pace of technological change is affecting the skills that are required in the workforce. The VET system needs to adapt to these changes and provide training that is relevant to the current job market (BIBB, 2020).

**The challenge of lack of flexibility:** The German VET system is often criticized for its lack of flexibility, with training programs being seen as too rigid and not adapting quickly enough to changing labor market needs. This can lead to a mismatch between the skills that young people have and the skills that are required by employers (European Commission, 2019).

**The challenge of internationalization:** Although the German VET system is highly regarded, it is not very internationalized. It is necessary to strengthen international partnerships and provide opportunities for German students to gain international experience (BIBB, 2018).

**Maintaining cooperation between companies and schools:** The German VET system relies heavily on the cooperation between companies and schools, but there are concerns that this cooperation is not always strong enough. For example, some companies may not be willing or able to offer apprenticeships or provide adequate training for their apprentices.

**Gender segregation:** The German VET system is highly gender-segregated, with male and female students often trained in different fields. This can reinforce gender stereotypes and limit opportunities for students who do not conform to traditional gender roles.

**Inadequate recognition of prior learning:** The German VET system does not always recognize prior learning, such as work experience or training completed in other countries. This can be a disadvantage for immigrants and other groups who have acquired skills outside of the formal education system.

Overall, the German VET system faces some challenges related to social inequality, flexibility, recognition of non-formal learning, and an aging workforce. Addressing these challenges will be important for the continued success of the system. In order to overcome these challenges in Germany several policy recommendations are widely being discussed. Specifically, to deal with mismatches between the skills that young people acquire through vocational education and training and the skills that are in demand in the labor market the policy recommendations include improving coordination and communication between schools, employers and training providers, promoting lifelong learning opportunities, and upskilling of workers, and encouraging employers to invest in training and skills development. Another recommendation is promoting social inclusion by providing financial support and incentives for disadvantaged youth to participate in vocational education and training. Providing guidance and counseling services to help young people make informed choices about education and careers is another recommendation.



## 3.2. Uganda

Uganda is a landlocked country in east-central Africa and has a population over 45 million people of which only a quarter are urban dwellers (Kokole et. al, 2023). Urban areas including Kampala, the capital city, houses many young people, most of them men, who come to the cities to look for jobs. There are at least 32 languages spoken in Uganda. While English is the language of education, only a small portion of the population speaks English well (Kokole et. al, 2023).

Since its independence in 1962, Uganda has become a stable country and one of the fastest-growing economies in Africa (Kokole et. al, 2023). Some participants have pointed out that some level of deindustrialization in Uganda due to structural adjustments. Some industries became uncompetitive because of the cuts in governmental subsidies. The Ugandan economy is basically agricultural with limited industrialization and manufacturing—most of which is based on processing agricultural products (Kokole et. al, 2023). As services are becoming automated, this creates a new challenge for Uganda, and they require fewer human resources.

### 3.2.1. Education and VET in Uganda

Uganda introduced Universal Primary Education in 1997, under which the government would pay tuition fees for up to four children per family (Kokole et. al, 2023). This initiative resulted in an increase in school attendance and literacy rates. Some schools continue to charge different rates of tuition fees and families must pay them according to which schools their children attend. Gender disparities between boys and girls have largely been eliminated at primary school level, but they persist in secondary and post-secondary education. Accordingly, the Universal Secondary Education Policy was introduced in 2007 and the Gender in Education Policy was introduced in 2009 to reduce disadvantages experienced by females (Ahaibwe, Ssewanyana, and Kasirye, 2018). Moreover, since there is a limited number of public secondary schools, private schools continue to be an important part of Uganda's education system (Kokole et. al, 2023). Vocational training education programmes also exist in Uganda.

### 3.2.2. Funding of VET in Uganda

The Business, Technical and Vocational Education and Training (BTVET) sector in Uganda has witnessed significant improvements in domestic financing. Sector allocations to skills development have quadrupled during this period (BTVET, 2019). This growth has corresponded to a 30.41% increase in the share of the total education budget, aligning with the national development plans aimed at enhancing infrastructure development and fostering sectoral relevance (BTVET, 2019). Despite the notable progress in funding, the BTVET sector still faces a substantial funding gap of Ugandan Shillings 635.95 billion. This deficit exists between the estimated costs required to fund the plans outlined in the Education Strategic Plan and the current as well as projected Medium Term Expenditure Framework (MTEF) allocations. To bridge this gap, the sector has been benefiting from external financing sources, including budget

support from countries such as Korea, Japan, and institutions like The World Bank, as well as off-budget support from Belgium, Germany, and Ireland (BTVET, 2019).

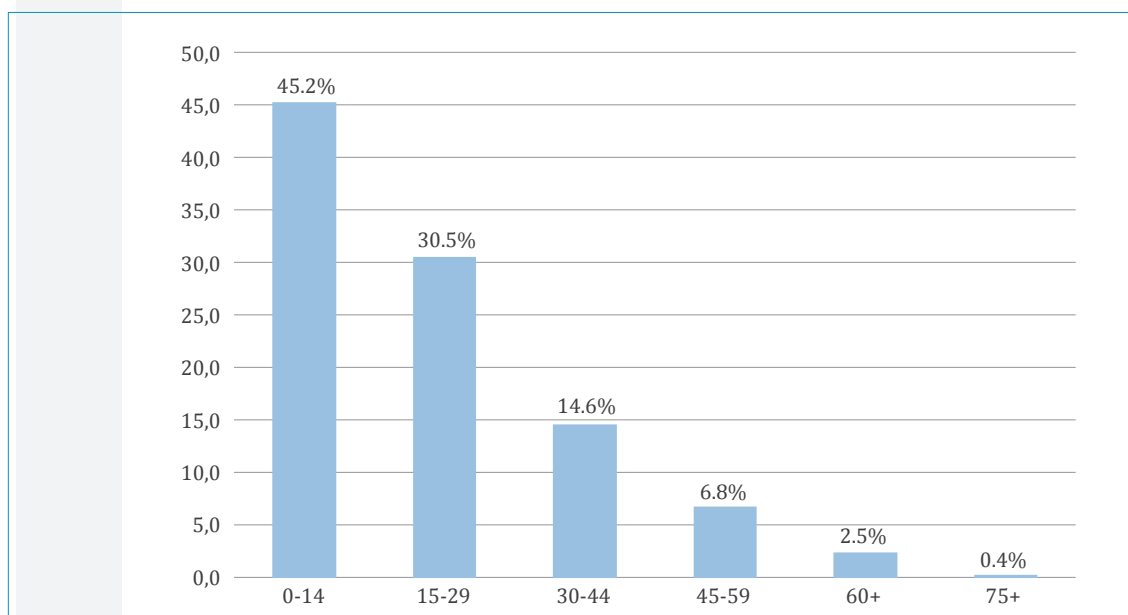
According to the BMAU Briefing Paper, there are various infrastructure development projects within the BTVET sector over the last five years, which have contributed to the expansion, construction, and rehabilitation of technical institutes. The paper also highlights that projects funded by organizations like OPEC and the Islamic Development Bank have been instrumental in constructing new technical institutes and expanding existing ones.

However, despite these efforts, a significant number of institutions still face challenges due to inadequate infrastructure (BTVET, 2019). The report also indicates that there are ongoing projects aimed at addressing these infrastructure deficiencies, such as the Albertine Region Sustainability Project, the Skills Development Project, and the Support to the Implementation of Skilling Uganda Project. Nonetheless, it notes that certain projects are behind schedule, further underscoring the need for continued efforts in funding and addressing infrastructure needs within the BTVET sector in Uganda (BTVET, 2019).

The 2019 Technical Vocational Education and Training (TVET) Policy in Uganda focuses on developing a sustainable funding strategy that targets priority skills development needs. The policy will be financed by both the Government and the private sector. Diversification of funding will involve Public-Private Partnerships, engaging enterprises, local authorities, and individuals while ensuring equity and inclusion. Cost-sharing and securing loans will enhance efficiency and accountability, while performance-based financing models will incentivize investment in TVET programs (MoES, 2019).

### **3.2.3 Youth Unemployment and active labor market policies (ALMPs) in Uganda**

Youth unemployment is especially high in East Africa where Uganda is located. Like many other OIC member countries in the MENA region, the Ugandan population is very young due to the fact that Uganda's birth rate is about twice of the world average (Kokole et. al, 2023). About half of the population is under 15 years of age and a quarter is between 15 and 29 years of age (**Figure 3**). In other words, only a quarter of the population is 30 years or above. Only 30% of youth work in formal sector in Uganda (Alfonsi et al., 2020), there is a noticeable size of unemployed youth as well as people who engage in low-paying informal or insecure work, such as riding motorcycle taxis (boda-bodas) in the streets of Kampala. Informal sector is a source of employment especially for the youth, the middle-aged, the less educated persons, and women in Uganda (Ministry of Finance, Planning and Economic Development & Economic Policy Research Centre, 2022).

**FIGURE 3** Uganda age breakdown (2021)

Source: United Nations, 2022.

More than 45% of young Ugandans drop out of school and the majority of dropouts enter the labor market at an early age which limits their capacity to accumulate human capital necessary to secure good jobs (Ahaibwe, Ssewanyana, and Kasirye, 2018). However, it should also be noted that the peculiar case of overeducation and unemployment exists in Uganda. While education equips young people with the skills and capabilities, unemployment rate is higher for those who have some level of education such as high school and post-secondary education than those with no education in Uganda. Urban youth and youth with post-secondary education are especially associated with the highest unemployment (Egessa, Nnyanzi, and Muwanga, 2021). This might be due to the poor quality of education, skills mismatches, lack of job opportunities in public and private sector, and the increasing number of graduates.

Ugandan women face more challenges than Ugandan men in terms of accessing education, personal security, and economic opportunities. Poor educational attainment, early (child) marriages, low age at first birth, and poor labor market outcomes continue to be of concern for young women in Uganda (Ahaibwe, Ssewanyana, and Kasirye, 2018). Uganda has one of the highest rates of child marriages in the world; girls who are married early tend to have more children, thus directly influence fertility patterns in the country, and discontinue their education (Sahadevan et al., 2023). Gender inequalities persist despite the existence of policies and programs to address them (Ahaibwe, Ssewanyana, and Kasirye, 2018).

### 3.2.4. Highlights from the Field Study: Strength, Current Challenges, and Future Prospects

Uganda has one of the youngest populations in the world and the fertility rate is very high. This creates a big challenge for Uganda because the current labor market is not big enough for young people and there are not enough new job opportunities. Moreover, most of the youth in Uganda do not own land and their mindset towards agriculture is negative (Guloba et al., 2022). Many participants suggested that the biggest challenge in reducing the NEET rate in Uganda is that there are not enough jobs for the increasing number of youth coming from villages to towns. There is insufficient agricultural land for the new generations; and the negative impacts of climate change increase rural-urban migration. Rural-urban migration continues to create new challenges in Uganda. Compared to central regions, the eastern, northern, and western regions need further development since studies showed that region is a very critical factor in youth unemployment in Uganda (Egessa, Nnyanzi, and Muwanga, 2021).

The current state of the education system may not fully align with the evolving needs of the country, and there is room for improvement in both the quality and duration of schooling. Therefore, young people with low skills have difficulty in accessing jobs in the manufacturing and service sectors of the economy (Alfonsi et al., 2020). Moreover, as many participants expressed, it is mostly theoretical education, it does not address challenges of the country. Many participants pointed out the colonialist roots of the Ugandan education system for the youth mindset, i.e., the youth want high-status white-collar jobs; they also want quick returns and agriculture does not provide any quick returns. The problem is that the economy and labor market do not absorb such graduates. One participant elaborated that “After 17 years, you become a community psychologist and you are unemployed. In other words, rather than saying that ‘I have a certificate in plumbing,’ saying that ‘I have a degree in community psychology’ has more status.” The Ugandan government is trying to change that mindset by emphasizing the importance of job creation and providing vocational training that has more employment prospects. In other words, education is very white-collar but white-collar jobs are not there or there are very limited opportunities for young people who are college graduates (Alfonsi et al., 2020). Considering the size of the youth population, vocationalization of the education system is needed.

VET is seen as very important in preventing youth unemployment, but within the formal education system, young people graduate without adequate vocational skills and Uganda needs to strengthen its VET system. With the support of the Ugandan government as well as many international organizations, including German Agency for International Cooperation (GIZ), United States Agency for International Development (USAID), and Turkish Cooperation and Development Agency (TIKA), vocational training centers offer vocational training to young people of all ages, genders and educational levels and support them to enter employment.

Uganda has some challenges related to providing vocational skills to the youth. One of the primary challenges is that vocational training centers require payment for the training they

provide. At this point, poor youth have difficulty in accessing vocational training centers due to the high costs. Several participants pointed out the initial high cost of technical and vocational education as the biggest bottleneck in reducing youth NEET rate in Uganda. The lack of new technologies in vocational training centers is also seen as a problem. Certification is also very expensive and creates a barrier for some.

There are big challenges in transition from school to the labor market due to inadequate youth entrepreneurship. As the number of college graduates is increasing and the graduates are looking into finding jobs, rather than creating jobs, the labor market cannot absorb them. The rate of creating jobs is much slower than the increase in the population due to high fertility. According to an expert, there is about 1 job for every five job seekers in Uganda.

Entrepreneurship is considered as very important for economic growth and job creation. To increase youth entrepreneurship, the Ugandan government provided financial assistance to the youth in their endeavor to create jobs. The research showed that it is more effective to provide funds to youth at the early stages of their age to operate their own businesses (Egessa, Nyanzi, and Muwanga, 2021). As the youth's age increases, so do their chances of falling into the trap of unemployment. Through the microfinance support from the Ugandan Ministry of Gender and Social Development, some graduates start their own small businesses.

Skills mismatches are also seen as big problems. Many participants stressed the fact that both college graduates and lower-level graduates do not have skills demanded by employers. The Ugandan government and international organizations have started to offer some short-term training programs to fill the gap in terms of skills mismatches. However, the magnitude of the problem exceeds the current capacity of the existing programs. Skill mismatches are a big concern affecting both the educated and others. Some participants pointed out that demand for free vocational and technical courses is very high. They added that some local leaders come to the officials and ask to open new courses. More differentiated programs in different parts of the country are needed to train in appropriate skills and put a mechanism for youth in engaging them in vocations and agriculture. While the stigma related to vocational education and manual jobs is over there, opening skilled training for all is a right step to combat youth unemployment (**Box 4**).

**BOX 4** *Special Presidential Initiative on Skilling Youth*

The Special Presidential Initiative on Skilling the Youth program, implemented nationwide, represents a positive direction and should be broadened to encompass all categories of young individuals, both in educational institutions and beyond, aiming to enhance their employability opportunities (Egessa, Nyanzi, and Muwanga, 2021). One participant emphasized that the program is an ongoing project and successful but small enterprise in terms of targeting unemployed youth. Therefore, it needs to be extended to reach more youth.

Modernization of agriculture is needed so that an increasing number of the youth can work in that sector. Commercial farms are very few and should be supported. The Ugandan government also encourages tourism which also creates new jobs and has more potential.

Externalization of labor (i.e., migration to Arab states) seems to be a viable option for some youth in Uganda who do not have skills and can work in well-paid manual jobs. Due to high unemployment or underemployment especially for youth and women in Uganda, labor externalization has also become an alternative to extended durations of unemployment (Guloba et al., 2022). In other words, when skilled, semi-skilled or unskilled youth people cannot find jobs locally, they seek alternative employment options in other countries.

There are some serious risks to limit progress in the coming periods in Uganda. Security challenges have seen a notable escalation across various regions of Africa. Unemployed youth are increasingly drawn toward criminal organizations, and there is a growing appeal of extremism among this demographic. Mass human migration, drug abuse, food scarcity, and human trafficking are also of concern to many parts of Africa.

Uganda needs technical assistance from other countries and international organizations. There is very limited capacity in terms of financial, technical, and human resources. Technical assistance from OIC member countries such as Türkiye and Qatar will be welcome. As one participant has expressed, “it is not only money, but we need expertise, we need technical knowledge.” International organizations such as African Development Bank, World Bank, USAID and GIZ have invested in social sectors, financed health research, family planning, stopping mass human migration, and vocational training in Uganda. TIKA supported Ugandan women by providing sewing machines and providing six-month training for free. Sisters of Hope International started some projects to enhance women’s entrepreneurs. Vision for Africa has opened primary and secondary schools.

Many participants have expressed that many policies are good however implementations of policies are weak. Thus, implementation and monitoring capacity needs to be expanded.



### 3.3. Tunisia

Tunisia is a country located in North Africa, bordering the Mediterranean Sea, with a population exceeding 11 million (INS, 2023). It is characterized by a diverse cultural heritage influenced by several civilizations including the Phoenicians, Romans, Byzantines, and Ottomans. The urban population accounts for almost 70% of the total, with the capital, Tunis, being the largest urban center (INS, 2023).

Despite its size, Tunisia is linguistically homogeneous, with Arabic being the official language. French is also widely spoken and used in various aspects of life, including business and education. However, the Tunisian dialect of Arabic, known as Derja, remains the mother tongue of the majority. Following its independence from France in 1956, Tunisia embarked on a series of socio-economic reforms. These efforts led to significant improvements in education, healthcare, and women's rights, setting the country apart from many of its regional counterparts (Jeguirim, 2021).

Tunisia's economy has been traditionally reliant on sectors like agriculture, and tourism, though recent years have seen a focus on developing knowledge-based industries. Nonetheless, economic challenges persist, including high unemployment rates, especially among the youth and women. The country also faces issues stemming from regional disparities and the imbalance between urban and rural development (Raifu et. al, 2023).

The government has made significant investments in the education sector since the early period of independence as Habib Bourghiba, the first president of the independent Tunisia, considered education as the major tool to reach his goal of getting Tunisia out of underdevelopment (Pontanier, 2021). Despite these efforts, disparities in access to quality education between urban and rural areas, and between different regions, remain. Furthermore, the Tunisian education system is grappling with challenges related to skills mismatch, which is a significant contributor to the high youth unemployment rate (Haouas et. al, 2012).

Despite economic struggles and concerns regarding security (Haouas et. al, 2023), Tunisia continues to build a democratic, inclusive, and prosperous society. Key to this goal is addressing socio-economic disparities and dealing with the challenge of youth unemployment.

#### 3.3.1. Education and VET in Tunisia

In Tunisia, the orientation law which governs education and school education (Orientation Law no 2002-80 of July 23, 2002) makes education an absolute national priority and education a fundamental right accessible to all, free of charge. The Tunisian education system is structured across three stages (primary, secondary, and higher education) and two streams (general and vocational). Basic education serves as the cornerstone, encompassing the years of compulsory education, legally required for all children from 6 to 16 years old. Basic education concludes with the award of the Diploma of End of Basic Education (DFEB) at the end of its 9th year, or the Diploma of End of Basic Technical Education (DFEBT) for those who opt for technical preparatory schools at the end of the 7th year.

The DFEB permits entry into the general secondary cycle, culminating in the Baccalaureate diploma, while the DFEBT leads to Vocational Training. Higher education, accessible with the Baccalaureate, offers LMD (Licence-Master-Doctorat) training or other specific diploma courses. Although legislation allows and creates pathways between these streams at multiple stages, in reality, there is limited permeability between the general and vocational streams.

Tunisia has increasingly recognized the importance of VET programs as an effective strategy to address unemployment, particularly among youth. VET programs in the country are designed and executed by a mix of public and private entities. This report, however, focuses specifically on those VET programs that are publicly administered, particularly those delivered by various ministries or ministerial agencies.

One of the most significant aspects of the Tunisian VET system is the wide range of programs it offers and the diversity of the educational outcomes. The public institutions currently deliver 286 VET programs, exemplifying the commitment to providing a broad spectrum of skill development opportunities to cater to various interests, aptitudes, and job market demands (Table 3).

**TABLE 3 Breakdown of functional specialties by operator**

Public Operators	286
Tunisian Agency for Vocational Training	250
Training Agency in Tourism Professions	11
Agricultural Extension and Training Agency	27
Ministry of National Defense	53
Private Operators	60

*Source: Tunisian Ministry of Vocational Training and Employment, 2020.*

The VET system in Tunisia is not managed by a single institution, but instead is the result of a cooperative multi-institutional framework. This collaborative structure ensures a wider coverage and a more efficient utilization of resources. Various ministries and agencies take responsibility for delivering different VET programs, corresponding to their respective fields of expertise and jurisdiction (Table 3).

A key player in this multi-institutional framework is The Tunisian Vocational Training Agency (ATFP). ATFP is an organization under the supervision of the Ministry of Vocational Training and Employment and provides most of the activity. Around 95% of learners evolve within its system, which has 136 centers under direct management offering 308 training specialties. Additionally, the Ministry of Defense is also an active player in the VET system. Aside from its primary role, the ministry also runs and coordinates 10 different vocational training centers delivering 53 different vocational programs, demonstrating the government's integrated approach in harnessing all potential avenues to enhance the skills and employability of Tunisian youth. One of the other

specificities of the Tunisian VET system, is focusing on the key sectors in the Tunisian economy, to prepare a professional young workforce responding to these specific sectors mainly, tourism, industry and agriculture.

Tunisia has set its sights on bolstering specific sectors by introducing specialized VET programs. These programs are carefully curated to cater to the fluctuating demands of various industries, with a particular focus on the agricultural sector. Targeting farmers, their children, agricultural promoters, and recent graduates from higher education institutions, these programs offer a broad spectrum of technical themes in agricultural production. The training is delivered through modular sessions that average around 340 hours each. Participants are afforded the flexibility to tailor their learning paths to suit their individual needs and career goals. They can either opt to complete all modules within a selected program or choose to follow only a select few modules from a program. Tunisia, recognizing the agricultural sector as a vital pillar of its economy and a key driver for rural development and food security, has shown a strong commitment to strengthening this sector through continuous vocational training and education. The aim is to modernize the sector, increase productivity, ensure sustainable practices, and foster the social and professional advancement of its agricultural community (CHEBBI, 2018).

Central to these efforts is the Agricultural Extension and Training Agency (AVFA), a public administrative institution founded in 1990. Operating under the joint supervision of the Ministry of Agriculture, Water Resources, and Fisheries, and the Ministry of Vocational Training and Employment, AVFA is tasked with implementing agricultural training and extension programs as part of Tunisia's economic and social development plans (AVFA, 2023). AVFA manages a network of 39 agricultural and fishing vocational training establishments, striving to develop human resources and meet growth objectives. It offers comprehensive training, spanning virtually all areas of agriculture, fisheries, and aquaculture. The agency also produces and distributes written and audio-visual technical materials to enhance knowledge dissemination, and tailors vocational training programs for a diverse array of stakeholders within the agricultural sector.

A notable component of AVFA's operations is the National Pedagogical and Continuous Agricultural Training Institute of Sidi Thabet. This institute's role in developing training programs and training trainers, extension workers, and private advisers reflects the importance Tunisia places on the quality and relevance of vocational training in the sector (Chebbi et. al, 2019). Moreover, AVFA ensures coordination between vocational training establishments and provides pedagogical and logistical support to regional commissions for agricultural development (CRDA).

Complementing AVFA's work are 22 comprehensive continuous training programs delivered across 40 specialized training establishments. These programs, some of which are delivered through 12 establishments focusing solely on continuous training, cater to varying levels of experience and specialization. They offer a broad spectrum of technical themes in agricultural production and allow learners the flexibility to tailor their learning paths according to their individual needs and career goals.

These robust educational measures demonstrate Tunisia's dedication to building a resilient agricultural workforce equipped to adapt to the dynamic challenges of the sector. By prioritizing vocational training, Tunisia is empowering its agricultural community, enhancing productivity, and driving socio-economic progress, thereby testifying to its dedication to the continued growth and modernization of its agricultural sector.

### 3.3.2. Funding of VET in Tunisia

In Tunisia, the vocational training financing system comprises a multifaceted approach, effectively balancing the roles of the public sector, private businesses, and households. Initial vocational training is regarded as a public service, and the main providers are public institutions. These public establishments are entirely subsidized by the state, both for investments and operational costs, ensuring accessible and affordable training for all citizens. In the case of private training centers, the cost of vocational training is borne by households. This arrangement promotes a diversified and competitive training environment that caters to a wide variety of needs and preferences. Continuing vocational training (occurring during employment) is seen as a shared responsibility between the state and businesses. Its funding is derived from three main sources:

- **Professional Training Tax:** The Tunisian Labor Code (Articles 364 and 365) mandates every company to pay a Professional Training Tax on its payroll (at a rate of 1% for manufacturing companies and 2% for the rest of the economic activities). This is essentially a tax on businesses that do not provide training. Manufacturing companies are charged 1% of their wage bill, while all other companies are charged 2%. Fully exporting companies, agricultural enterprises, and very small businesses are exempt from this tax. The Professional Training Tax is not mutualized and is collected monthly by the finance department. Until 1999, any unused tax was allocated to the state's general budget. However, since 2000, any surplus has been directed towards a dedicated fund for the development of vocational training
- **Direct state funding:** This includes the National Continuing Training Program and provisions under Article 39 of the Investment Code.
- **Direct business funding:** Companies also contribute to the funding of continuing vocational training.

Regarding the use of Professional Training Tax, it mainly serves the purpose of continuous personnel training within the company, initial training in collaboration with the company, and operational costs related to integrated training structures and company human resources services. The process involves diagnosing training needs, formulating training plans, implementing training, and evaluating the conducted training. Companies contributing to in-company training are compensated.

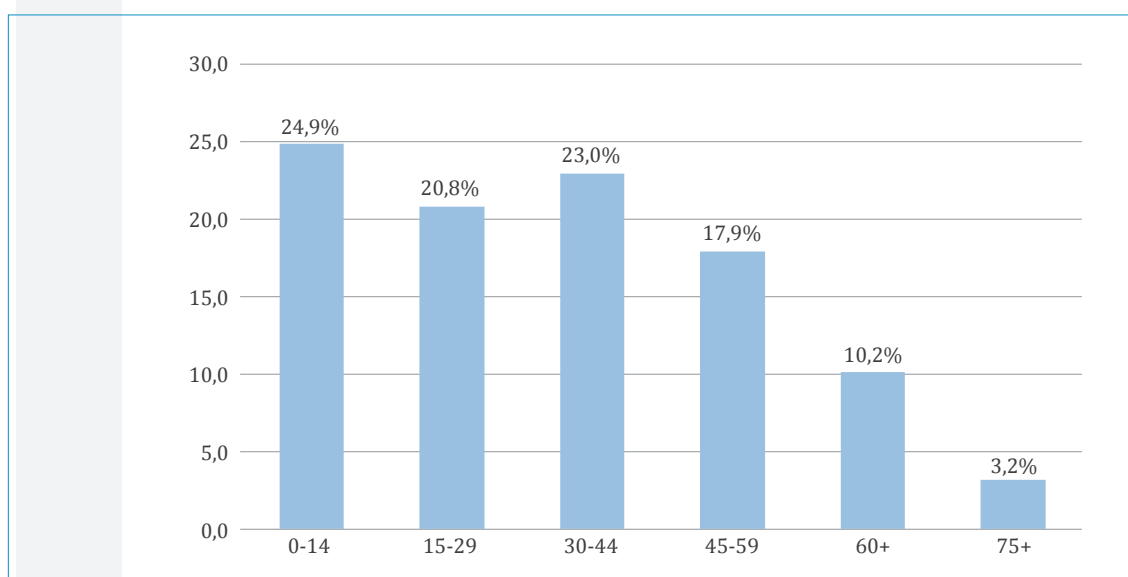
The Professional Training Tax operates under specific usage principles. Each company can only utilize its own tax, and any unused tax cannot be carried over to the following year. If a company's expenditures exceed the due tax, these costs can be carried over to the next year. A

decree-issued scale determines the amounts for each spending category. Since 2000, any tax not used by companies feeds into the Development Fund for Apprenticeship and Vocational Training.

### 3.3.3 Youth unemployment and active labor market policies (ALMPs) in Tunisia

Tunisia has been grappling with high youth unemployment rates, mirroring many of its regional peers in the MENA region. The Tunisian population is predominantly youthful, with about 25% of the population being under the age of 15 and another 22% being between the ages of 15 and 29 (Figure 5) (INS, 2023). The percentage of employment for the youth under the age of 30, is 16% according to the most recent national statistics published on the first trimester of 2023. (Figure 4).

**FIGURE 4** Tunisia age breakdown (2021)



Source: United Nations, 2022.

The formal employment sector encompasses only 28% of Tunisian youth (INS, 2021). There exists a substantial fraction of unemployed youth and those participating in low-remunerating informal or precarious work. The informal sector primarily employs youth, less educated individuals, and women (Ministry of Finance & Economic Observatory of Tunisia, 2022).

There's a peculiar occurrence of overeducation and unemployment in Tunisia, with a higher unemployment rate among those with a high school or post-secondary education than those with no education or those with VET credentials. The most severe unemployment rates are associated with youth with post-secondary education and high education levels (Dhif Allah,

2021). This situation is linked to the quality of education, skills mismatches, insufficient job opportunities in the public and private sectors, and a growing number of graduates.

Among the Tunisian youth, the most vulnerable groups who will be more likely to be unemployed for longer periods, are the rural youth, and women. Studies indicate that urban youth are more likely to be unemployed than their rural counterparts, and it's relatively easier for youth to find employment, either formal or informal, in rural agricultural sectors (Dhif Allah, 2021).

Additionally, and contrary to prevalent perceptions, Tunisia's female labor force participation rate is noticeably lower in comparison with global averages. Men constitute a substantial majority of the workforce, at 75.3%, leaving women with a minor share of 24.7%. Discriminatory practices affecting women's entry and job retention become evident when considering the strikingly high unemployment rate among female graduates of higher education, at 49.4%. This is more than double the unemployment rate of their male peers with equivalent qualifications, which stands at just 21%. This stark contrast underlines the gender-based challenges within Tunisia's job market. Tunisian women experience more obstacles than Tunisian men in terms of education access, safety, and economic opportunities. Issues such as subpar educational attainment, early marriages, early age of first childbirth, and poor labor market outcomes continue to plague young women in Tunisia (Ayed, 2021). Despite the existence of policies and programs to address these concerns, gender inequalities persist and even appear to have heightened over time (Ayed, 2021).

Facing these high rates of youth unemployment, Tunisia has opted for the encouragement of self-employment through encouraging entrepreneurship programs and small and medium-sized enterprises (SMEs): a significant shift in Tunisia's employment policy that occurred around 2003. This shift is symbolized by the renaming of the National Employment Agency to the National Agency for Employment and Independent Work (ANeTI). The new orientation prioritized the promotion of micro-enterprises and self-employment, encouraging job seekers to become self-employed and mobilizing financial resources to support the creation of micro-enterprises.

### **3.3.4. Highlights from the Field Study: Strength, Current Challenges, and Future Prospects**

**The inclusivity of the VET System:** In Tunisia, special emphasis has been placed on the empowerment of individuals with disabilities in their job access and in creating their own business, hence fostering entrepreneurial spirit among them. In an effort to empower persons with specific needs, a series of measures have been introduced in Tunisia. These include the implementation of specific quotas in the VET program, as well as in employment and recruitment within the public sector. The aim of these measures is to facilitate the inclusion of persons with disabilities. As part of these initiatives, no less than 2% of the annual assignments in the public office, and in public and private institutions and establishments, are allocated for the benefit of persons with disabilities. This mandatory quota ensures consistent opportunities for these individuals to actively participate in various sectors. In addition to this, since 2013, the Ministry of

Social Affairs has been given the responsibility of overseeing the competitions for the recruitment of persons with disabilities. This has resulted in the successful employment of several individuals with disabilities over the years. For instance, in 2013, 217 persons with disabilities were recruited. The number rose to 276 in 2014 but fell to 126 in 2019 which is an indicator of the economic hardship faced in Tunisia and the limited ability of public employment. As a result, Tunisia has begun to place emphasis on fostering self-employment trends, both generally and specifically for people with special needs. In addition to its efforts to secure employment for persons with disabilities, Tunisia has devised strategies with a focus on entrepreneurship. These strategies serve as an alternative solution designed to empower individuals with special needs following their graduation from specialized VET programs. The objective is to equip these individuals with the essential skills needed for self-sufficiency, thus contributing to their personal development and the welfare of society as a whole. This approach is embodied in the implementation of a livelihood program that provides financial support to individuals with disabilities capable of work after graduating from specialized VET programs in more than 104 different specialities. These funds are particularly targeted at those who aspire to establish their own businesses in diverse sectors such as agriculture, traditional industries, minor professions, and various services (**Box 5**).

**BOX 5** *Specialized VET programs for persons with special needs*

Tunisia's Vocational Education and Training (VET) programs show a remarkable commitment to inclusivity, focusing on the needs of individuals with disabilities. The ultimate goal is to enhance employment opportunities for individuals with disabilities, enabling them to contribute positively to the economy and society. One significant initiative in this direction is the Economic Empowerment Program. Established by decree n° 715 of September 20, 2022, this program focuses on economically disadvantaged groups and persons with disabilities.

Prioritizing persons with disabilities, the program allocates 30% of the total funds to them, aiming to boost their financial stability and encourage their active participation in economic activities. Reflecting the government's commitment to this cause, the budget appropriations for the year 2023 amount to 2.9 million dinars. These funds are being transferred to the relevant authorities to ensure that the program's objectives are effectively met, thereby fostering an inclusive and diverse entrepreneurial ecosystem in Tunisia.

The system provides three key pathways: specialized education centers run by disability-focused associations, public institutions under the Ministry of Social Affairs, and those affiliated with the Tunisian Agency for Vocational Training and Independent Work (ANETI). These avenues have collectively harnessed the potential of thousands of individuals, fostering their independence and enhancing employment prospects. They provide a range of services, from preparatory education to vocational rehabilitation, across various fields. Tunisia's dedication to empowering all citizens is truly a success story of inclusive VET.

**The challenge of social perception to the VET:** One of the main barriers of the empowerment of the professional and Vocational Training in Tunisia is the social perspective that considers VET a second choice compared to university level high education. Families and students - even if aware of the potential of VET in securing employment and financial access- would still prefer to pursue an academic degree rather than a professional/vocational one. This challenge limits the effectiveness of the Tunisian VET system and requires systematic work on the social perception of the VET in the short term.

**The economic challenge:** In Tunisia, the economic challenge lies in its struggling job market and stagnant private sector, unable to provide enough employment opportunities for the growing population of young people. With a high unemployment rate, especially among the youth, it's clear that Tunisia's economy lacks the necessary vigor to absorb the increasing number of vocational training graduates and university degree holders alike. This inability to provide employment opportunities can be attributed to several factors, including a lack of industrial diversification, low foreign investment, and regional disparities in economic development.

**Aligning VET programs with the evolving job market:** VET programs in Tunisia are multifaceted and well-structured, providing an array of specializations and pathways for young people seeking to integrate into the job market. However, despite their extensive design, a notable disparity persists between the skills fostered in these programs and the actual needs of the Tunisian job market. This discrepancy can be traced to various factors including rapid technological advancements, evolving industry requirements, and a lack of dynamic alignment between education and employment sectors. Consequently, while VET programs are designed to mitigate youth unemployment by imparting practical skills, their efficacy is compromised when the imparted skills do not precisely correspond with the market needs. Therefore, a significant challenge for these programs is to continually adapt and realign their curricula in response to the dynamic nature of the job market, to effectively reduce youth unemployment in Tunisia.

**The challenge of VET funding:** While the Tunisian system has initiated the establishment of an alternative legal taxation system to finance the implementation of VET programs, as outlined above, the collected amount remains insufficient. This has led to severe funding challenges confronting the vocational education system in Tunisia. This financial strain impacts the capacity to modernize facilities, hire qualified trainers, develop relevant curriculum, and reach out to a larger population. The shortfall of funds significantly hampers the development and the overall effectiveness of vocational training programs.

**The challenge of intra-institutional and ministerial coordination:** Institutional and ministerial coordination remains a significant challenge in the Tunisian vocational education system. Different institutions and ministries that have a stake in vocational education often work in silos, leading to fragmented strategies and policies, duplicative efforts, and inefficient resource utilization. This lack of effective coordination hampers the development and implementation of a coherent VET strategy, affecting its ability to respond to youth unemployment effectively.

**The limitation of the feedback mechanism and involvement of youth:** In Tunisia, there's a lack of a robust feedback mechanism and inadequate involvement of youth in the design and implementation of vocational education policies and programs. Young people, the primary beneficiaries of these programs, are often left out of the decision-making processes. This omission leads to a disconnect between the vocational training programs and the real needs and aspirations of the youth. In the absence of an effective feedback system, it becomes challenging to identify gaps, adapt to changes, and ensure the relevance and quality of vocational training. For a system aimed at youth empowerment, the limited engagement of the youth themselves represents a significant missed opportunity.

**The challenge of youth and workforce migration:** One of the significant challenges facing Tunisia is the migration of its youth and vocationally trained workforce. Despite the country's robust investment in VET programs, a notable proportion of its educated and skilled population is seeking employment opportunities abroad. This phenomenon, often referred to as "brain drain", is fueled by factors such as limited domestic job opportunities, low wages, and aspirations for better living standards. The migration of vocationally trained individuals poses a considerable challenge for Tunisia, as the country loses valuable human capital that could contribute significantly to its economic growth and development. Addressing this issue necessitates a multifaceted approach, which could include improving domestic job market conditions, offering competitive remuneration, and fostering an environment conducive to entrepreneurship and innovation.

**Bridging ministries, civil society, and international NGOs for VET Program efficacy:** Collaborative efforts between Tunisian ministries, civil society, and international organizations have been instrumental in bolstering the potential of VET programs. By pooling resources, knowledge, and expertise, these entities have succeeded in enriching program content, thereby enhancing their capacity to equip young people with relevant and market-oriented skills. The partnership has also facilitated an exchange of global best practices in vocational training, introduced innovative methodologies, and fostered a more inclusive and equitable learning environment. However, despite these achievements, the coordination and alignment of these cooperative efforts often leave room for improvement. A lack of an overarching coordination plan has been observed, leading to potential duplications of effort, inefficiencies, and disjointed program development. The International Development and Cooperation departments within the different ministries, for instance, could significantly benefit from a more comprehensive and cohesive communication strategy. Such a strategy would streamline the flow of information and ensure that all stakeholders are operating from a unified understanding, thereby improving the effectiveness of collaborative initiatives and boosting the overall impact of the VET programs on youth employability in Tunisia.



### 3.4. Türkiye

Türkiye is a transcontinental country bordered by eight countries and surrounded by three different seas: The Aegean Sea, the Black Sea, and the Mediterranean Sea. Its strategic location has played a crucial role in its history and economic development. Türkiye boasts a diverse cultural heritage due to its historical interactions with various civilizations and its geographic location bridging Europe and Asia. Its culture is a blend of Ottoman, Islamic, Greek, Roman, and Byzantine influences. The country's cultural diversity is reflected in its architecture, art, music, and cuisine. Türkiye has experienced a significant growth in tourism accompanied by the economic and political restructuring since the turn of the century (OECD, 2018).

Turkish is spoken by the majority of the population. Additionally, there are several minority languages spoken in different regions. It has a predominantly urban population, with major cities like Istanbul, Ankara, and Izmir acting as economic and cultural centers. The country has made significant strides in education, healthcare, and infrastructure development. The country's economy is based on industry, commerce, tourism, and a traditional agricultural sector. It is known for its manufacturing industries, including automotive, textiles, electronics, and machinery. Additionally, Türkiye is a major agricultural producer, particularly in the cultivation of grains, fruits, and vegetables. According to the most recent OECD data, provided on the webpage, Türkiye has experienced fluctuations in its economic performance over the years, with periods of rapid growth and challenges (OECD, 2023b).

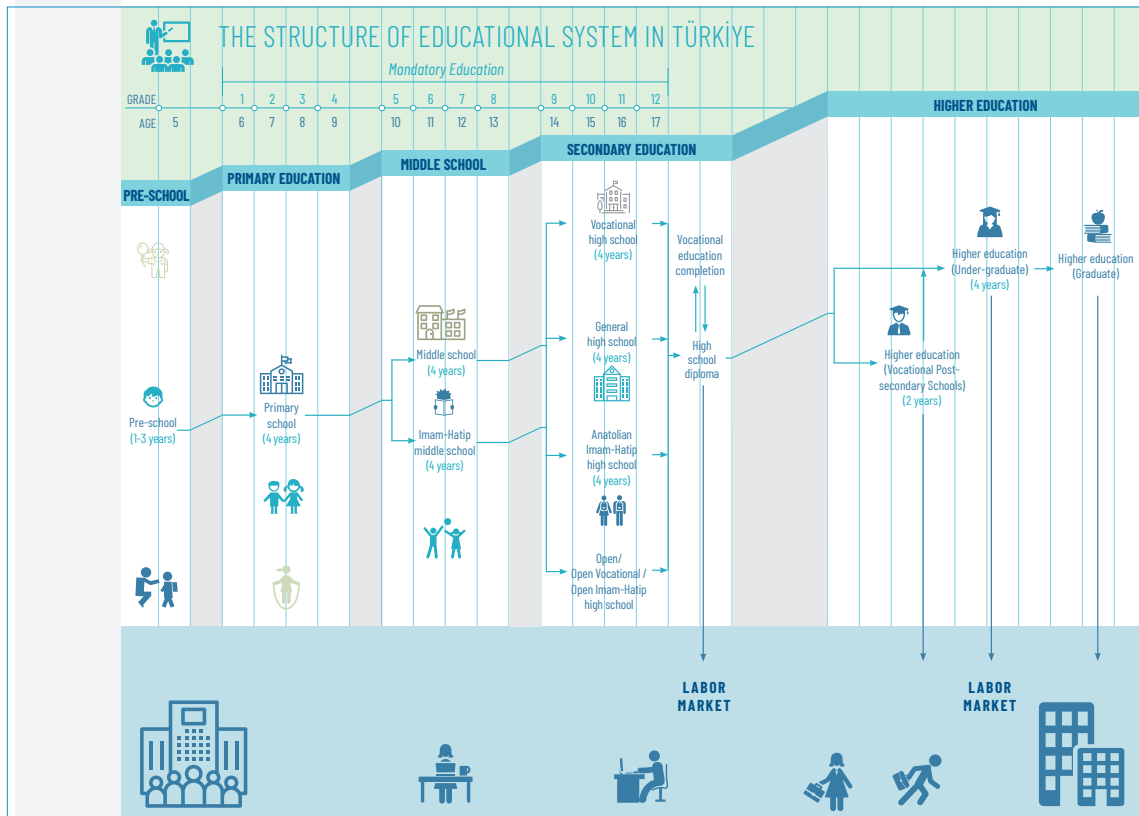
#### 3.4.1. Education and VET in Türkiye

In Türkiye, high schools are compulsory in addition to primary and secondary schools. The secondary education system is divided into vocational and academic (Figure 5).

VET in Türkiye is offered both formally and non-formally. It is offered formally in public and private secondary education institutions and at higher education level in vocational schools and faculties. In addition, the Ministry of National Education (MoNE) also offers VET programs as distance education. VET is organized by various public and private organizations under the supervision of the MoNE. VET schools and centers offer opportunities for individuals to enhance their vocational knowledge, acquire new skills, and even prepare for higher education. In addition, there are special vocational schools for students with disabilities (Figure 6). The aim of VET is not only to prepare students for the professional world but also to enable them to pursue further education (Milli Eğitim Bakanlığı, 2022).

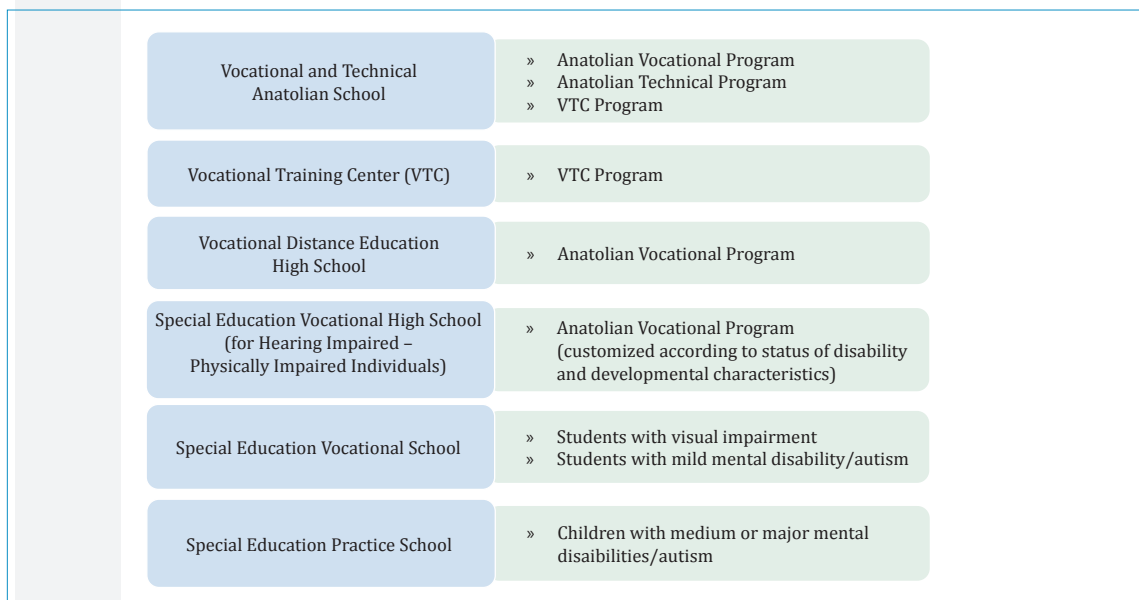
VET is offered in Türkiye through three different programs: The Anatolian vocational program, the Anatolian technical program (school-based VETs), and the VTC program (workplace-based dual system). The 9th and 10th grade courses in vocational education schools share common academic courses with general high schools. From Grade 10 onwards, students choose their field of study. In Grades 11 and 12, students attend school for one or two days and work in the workplaces the other days. There is an important difference between vocational and technical programs. Vocational programs have a higher enrollment rate of around 60%, while technical programs

**FIGURE 5** The structure of educational system in Türkiye



Source: Ministry of National Education (2018).

**FIGURE 6** Types of VET programs in Türkiye



Source: Milli Eğitim Bakanlığı (2022).

have a rate of 30%. Technical programs are more academically oriented. In the VTC Program-Apprenticeship Training, students receive skills training in enterprises four days a week in their professional fields. They have one day dedicated to general academic courses and theoretical education on their profession at school. Vocational and technical programs offer 50 fields and 107 branches, while VET Centers provide 184 branches under 34 fields. In addition, lifelong learning opportunities are available to people of all age groups through various institutions, including İŞKUR, and Public Education Centers, and municipalities (Milli Eğitim Bakanlığı, 2022).

Student performance in Vocational and Technical Education High Schools is evaluated through exams held throughout the year. Successful students receive a diploma and the title Technician, allowing them to open independent businesses related to their fields. In vocational centers, students must pass a skill exam, and those successful in the mastery exam at the end of the 12th grade receive the Certificate of Mastery, enabling them to establish independent businesses (Eurydice, 2023).

In the 1990s, nearly half of the students in Türkiye attended vocational education. However, in the late 1990s, the Council of Higher Education of Türkiye changed the regulation regarding the calculation of the university entrance exam scores. Due to this change, graduates of vocational high schools faced difficulty in getting admission into an undergraduate program unrelated to their field of vocational specializations. In other words, students viewed this change as a major obstacle that prevented them from pursuing education in an area outside of their high school specialization. Accordingly, interest in vocational school education decreased significantly in the subsequent years and vocational schools faced a crisis in terms of attracting qualified students (Çelik, 2011; Gür & Çelik, 2016). In the early 2000s, only one-third of the students pursued vocational education. Since 2003, new vocational education policies, including transitioning to university without university entrance exams, and campaigns emphasizing the importance of vocational education have helped to increase the inclination towards vocational education (Özer et al., 2011). In the early 2010s, over half of the students were directed to vocational education when quotas for academic education were restricted. However, in 2017, the number of students opting for vocational education started to decrease due to changes in the secondary education transition system that steered students away from vocational education. According to data from 2021, approximately 60% of new enrollments go to academic education, while 40% opt for vocational education. Additionally, there were 4 million students in general high schools and 2.5 million in vocational education (Yurdakul and Şahin-Demir, 2022).

Improving vocational education has been a crucial government policy for many years. Especially in the last two decades, numerous international projects with substantial budgets have been implemented to enhance vocational education. Some of these projects include Strengthening Vocational Education and Training System Project-MEGEP (2002-2007), Modernization of Vocational Technical Education in Türkiye-MTEM (2003-2007), Development of Human Resources through Vocational Education Project-İKMEP (2008-2010), and Development of Vocational Skills Project-MESGEP (2012-2014). These projects aimed to renew the infrastructure of vocational education schools, update curricula, and provide teacher training (Bozgeyikli, 2019).

Despite significant progress in improving vocational education in Türkiye, certain challenges still remain. Efforts to enhance vocational education primarily focus on improving vocational skills and pay less attention to students' academic skills. Additionally, while a few vocational high schools in recent years require high academic achievement, students with poor academic skills often end up attending vocational high schools, leading to negative perceptions of these institutions in society. Although the private sector has increased its contribution to vocational education, it is still predominantly publicly funded, with limited support from private enterprises. Employment rates for graduates of vocational high schools and general high schools are similar, resulting in comparable incomes for both groups (Özer et al., 2011). Another critical issue is that a high percentage of vocational high school graduates end up working in fields unrelated to their studies due to various factors, such as the inability to find a job in their chosen field, low wages, lack of necessary vocational skills, lack of experience, and challenging working conditions. This indicates that the relationship between vocational education and the labor market is still weak (Suna et al., 2020).

### 3.4.2. Funding of VET in Türkiye

In Türkiye, the financing of vocational education and training (VET) primarily relies on the central government budget. The Ministry of National Education (MoNE) and the Ministry of Finance collaborate to allocate an annual subsidy for VET schools situated in Organized Industrial Zones. Apart from government funding, additional financial resources stem from various sources. These include funds obtained from international projects, income generated by public sector entities and non-governmental organizations (NGOs), and revenue from enterprises operating revolving funds within schools. International donors also play a significant role by supporting VET initiatives and projects. ISKUR provides financial support for vocational courses catering to unemployed individuals (UNESCO-UNEVOC International Centre, 2022)

Türkiye has participated in European Union-funded projects aimed at improving vocational education and training systems. This collaborative effort was co-financed under the European Union Instrument for Pre-Accession Assistance 2014-2020 (IPA-II) and encompasses three key components: Technical Assistance, Grants, and Goods Purchase. These funds are used to enhance the quality and relevance of vocational education programs and align them with European standards. This collaboration has played a vital role in advancing the VET landscape, ensuring the development of a skilled and competitive workforce capable of meeting the challenges of today's dynamic labor markets (Eurydice, 2023)

Furthermore, private (non-profit) education providers, such as NGOs and occasionally industries, contribute to financing level 5 short-cycle postsecondary education. Lifelong learning is financed jointly by the state and the private sector, with citizens also contributing through fees, unemployment insurance, union membership, and charitable donations. Additionally, several employers invest in VET by providing training and contributing to employers' associations' training funds (UNESCO-UNEVOC International Centre, 2022).

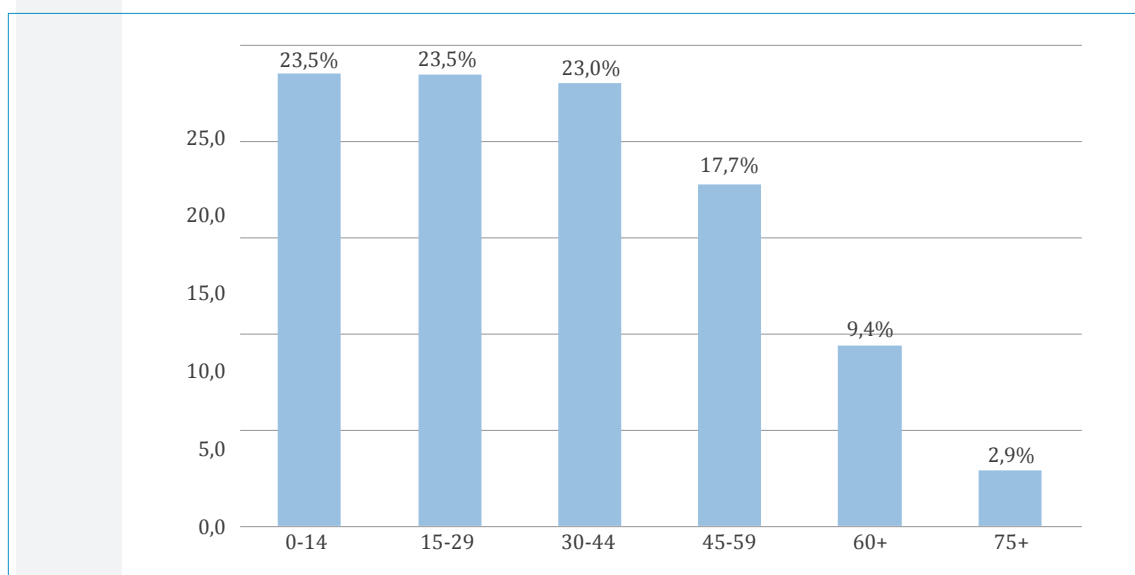
### 3.4.3. Youth Unemployment and active labor market policies (ALMPs) in Türkiye

Türkiye has a very young population, with about 23,5% of the population being under the age of 15 and another 23,5% being between the ages of 15 and 29 (Figure 7).

According to 2022 data, unemployment rates in Türkiye (10.5% in total; 9% for men; 13.5% for women) are quite high compared to OECD countries (5% in total; 4.8% for men; 5.3% for women). Additionally, labor force participation and employment rates in Türkiye are below the averages of OECD countries. Specifically, the youth unemployment rate for individuals aged 15-24 in Türkiye is 19.5% in total, 16.4% for males, and 25.4% for females, whereas in OECD countries, it is 10.9% in total for both males and females (OECD, 2023b). Accordingly, the youth unemployment rate in Türkiye is well above that of OECD countries and is particularly high for women (OECD, 2023b). Furthermore, women's participation in labor force is quite low. While the lack of hope in finding a job is a significant reason why men do not participate in the labor force in Türkiye, half of the women who do not participate in the labor force cite being busy with housework as their primary reason (TÜİK, 2023).

Regarding the population aged 15 years and older, the unemployment rate decreases as the level of education increases, while the employment rate rises (TurkStat, 2023). However, in the youth population, the unemployment rate increases with higher levels of education. For instance, based on data from 2020, the unemployment rate among young people is 14.3% for illiterates, 20.4% for those with less than high school education, 27.6% for high school graduates, 25.2% for vocational or technical high school graduates, and 35.8% for university graduates. It is estimated that a significant proportion of unemployed young people are recent graduates,

**FIGURE 7** Türkiye age breakdown (2021)



Source: United Nations, 2022.

those who have recently completed their military service, those living with their families, and those seeking work for the first time for similar reasons. According to the National Youth Unemployment Strategy paper, the most critical problem concerning youth unemployment in Türkiye is the unemployment of young higher education graduates. This is mainly due to the mismatch between the skills acquired and market demands, as well as limited opportunities to create new business areas and find suitable employment. In response to this issue, programs have been launched to enhance the relationship between the sector and universities, introduce practical programs in various sectors, and implement a national internship mobilization. İŞKUR organizes vocational training courses and on-the-job training programs, while İŞKUR and the Small and Medium Enterprises Development Organization (KOSGEB) provide entrepreneurship trainings and grants for program completers (Çalışma ve Sosyal Güvenlik Bakanlığı, 2021).

According to the information provided on the İŞKUR website, the “NBUY” project aims to train high-skilled IT professionals through specialized courses. Additionally, incentives are provided to employers hiring unemployed individuals, especially young people and women, with subsidies on social security premiums. Furthermore, the “NEETPRO” program focuses on supporting the employability of young people who are neither in employment nor in education (İŞKUR, 2023a). Various initiatives like career days and employment fairs bring employers and job seekers together. The “Social Work Program” allows university students to work in public institutions, contributing to social welfare while gaining valuable experience.

In addition to these efforts, Türkiye also implemented the “AİPP – II” project between 2008 and 2010, focusing on supporting the entry of young people and women into the workforce and enhancing İŞKUR’s effectiveness in providing local-level employment services through an active employment measure and grant plan (İSKUR, 2023b). Another significant initiative was the “National Youth Employment Program for Dignified Jobs: Antalya Pilot Region Application”, implemented from 2008 to 2011 (Rittersberger, Ercan, Mütevellioglu, & Coşkun, 2012). This program aimed to increase employment participation, particularly for young women and vulnerable groups in the labor market, by implementing employment policies that cater to their needs. Furthermore, between 2010 and 2013, the “Supporting Youth Employment Operation - GENÇ I” aimed to foster greater youth engagement in the job market within Türkiye. It focused on enhancing their employability and entrepreneurial skills while implementing effective active labor market policies to bolster youth employment prospects (Human Resources Development Operating Structure, 2018).

To address this issue, various programs were launched to improve industry-university collaboration, introduce practical training, and implement a national internship mobilization. KOSGEB provides entrepreneurship training and grants to enhance youth employability. Monitoring the effectiveness of these initiatives is crucial for achieving significant and sustainable reductions in youth unemployment. All of these initiatives aim to address youth unemployment and increase youth employability in Türkiye.

According to the National Youth Employment Strategy, one of the most structural problems of labor markets in Türkiye is informality. In 2020, the rate of informal employment was

estimated to be 83.5% in agriculture and 19.3% in non-agricultural sectors, making Türkiye's informal employment relatively high compared to OECD and EU countries. This prevalence of informal and irregular work, especially among young people, poses serious economic and social problems and affects the quality of jobs available for the youth. According to ILO data, informal job rates are much higher among youth compared to adults globally. This is not only a problem of unemployment and creating new jobs for young people in labor markets, but also the scarcity of decent jobs and the fact that young people are not employed in such jobs (Çalışma ve Sosyal Güvenlik Bakanlığı, 2021).

In addition to youth unemployment, NEET is also a major problem in Türkiye. The NEET rate for 20-24 age population in Türkiye in 2021 is 33.2% in total, 22.8% for men and 44% for women, while the average for OECD countries is 16.2% in total, 15.2% for men and 18.4% for women (OECD, 2023d). The NEET rate of young people in Türkiye is the highest among OECD countries. Moreover, the NEET rate of young women is almost double that of men. In other words, almost one in every two young women is NEET. In addition, the NEET rate increases as the level of education decreases. Coming from disadvantaged social groups, being a woman, having a low level of education, having a migration background, having a different ethnic origin and having a disability are factors that increase the level of being NEET (ETF, 2020; Eurofound, 2012, 2016; ILO, 2012). The fact that almost one third of young people in Türkiye are NEET, disconnected from employment and education, can lead to significant social risks and marginalization of young people (Coşkun and Çelik, 2022). Therefore, it is important to ensure that young people participate in employment or education.

#### 3.4.4. Highlights from the Field Study: Strength, Current Challenges, and Future Prospects

**Availability of vocational training:** Türkiye has a very strong vocational educational system with schools and centers across the country. Moreover, many schools and centers are either close or within the industrial areas.

**Strong public financing of vocational training:** Türkiye has heavily invested in education, in general, and vocational training, in particular, in the recent decades. The commitment of the Turkish government in education is an important asset in developing and implementing policies. A principal in a vocational high school has stressed that they do not have a serious shortage and their school's needs are being met very well with public resources.

**Poor reputation of vocational training:** Due to the political interventions to the university entrance system and vocational education in late 1990s, Turkish vocational education has long suffered from a poor reputation of vocational education. However, at least in certain study areas in certain vocational schools, it is becoming a more appealing alternative to general education. Recently, the Turkish government has opened several vocational high schools that were able to attract top students (Box 6). While the input indicators on these few schools are good, studies should be conducted to see whether the students and/or graduates have a clear route to the labor market in a skilled profession or they pursue their higher education in more academic

fields. Moreover, more should be done to correct the image of VET for the majority of vocational students who may have chosen VET programs due to low academic achievement and may have low self-esteem.

**BOX 6** *Improving reputation of vocational education by attracting top students*

In order to counter the poor reputation of vocational schools, the Turkish Ministry of National Education (MoNE) has opened several high-profile vocational schools by building partnerships with the private sector. Turkish commerce giant Sabancı group cooperated with the MoNE and established Dilek Sabancı Vocational and Technical Anatolian High School in 1997. Turkish defense giant ASELSAN has cooperated with the MoNE and established the country's first vocational and technical high schools specializing in defense industry systems in 2019. The company provides the necessary equipment for workshops and laboratories. It also provides scholarship and internship opportunities for able students (Daily Sabah, 2019). Similarly, the Digital Transformation Office of the Presidency of Türkiye, the Head of Defence Industries of the Presidency of Türkiye, and the MoNE established Technopark Istanbul Vocational and Technical Anatolian High School as the Türkiye's first cyber security high school in 2020 (The Digital Transformation Office, 2020).

**Multisectoral cooperation on vocational education:** While the public support of vocational education has always been high, the private sector's contribution has been very limited. For a successful vocational and technical education system, multisectoral cooperation is a necessity (Box 7). Moreover, more cooperation between public institutions is necessary for diminishing youth problems. "Youth Offices" have been established in 118 campuses as a result of a successful cooperation between the Ministry of Youth and Sport and The Council of Higher Education, an overarching body responsible from all higher education institutions in Türkiye. Youth Offices aim to contribute to the volunteering activities on campuses as well as the dissemination of such activities (YÖK, 2019, 2022) (Box 7).

**The mechanisms to protect the graduates of vocational education:** There is wide public support for vocational programs and many participants have pointed out that the graduates of vocational programs should be rewarded in higher education in technical fields, hiring and/or employment. Several participants have pointed out that additional points can be given to graduates of vocational high schools in their pursuit of higher education in technical fields that are close to their high school education. A labor economist who has worked on the Turkish labor market suggested that the minimum wage should be increased for graduates of vocational and technical programs who work in dangerous areas. Otherwise, graduates from vocational and technical schools prefer to work in non-dangerous jobs with a similar salary. This creates an inefficient and a very costly vocational education system.

**Limited relationship between vocational programs and employment:** While there are about more than 300 thousand graduates from vocational and technical high schools each year, there

**BOX 7*****Increasing multi-sectoral cooperation on vocational education in Türkiye***

The Union of Chambers and Commodity Exchanges of Türkiye (TOBB), TOBB University of Economy and Technology (TOBB ETU) and the Ministry of National Education (MoNE) signed a cooperation protocol concerning vocational training in 2019. The purpose of the protocol is to “improve the social and mental skills of students and teachers, and to increase their professional knowledge, skills and foreign language proficiency in the vocational fields taught in schools in order to train the qualified manpower needed by the sector.” TOBB and MoNE signed “My Profession My Life Job and Internship Program Cooperation Protocol” in 2022. The protocol aims to “to provide internship and employment opportunities for students and graduates within national and international companies through the My Profession is My Life Portal.” Lastly, TOBB and MoNE signed “Vocational Training Centers Cooperation Protocol” in 2002 to “ensure the coordination of the education system with the developments in the sector; to meet the need for qualified human resources needed by the sector; and to contribute to employment.” Through these protocols, TOBB and MoNE equip/support workshops and laboratories of schools based on new technologies, grant scholarships to successful students, provide in-service training or on-the-job training for teaching personnel, update curricula and educational material, carry out studies that will enable companies to meet the human resources they need from Vocational Training Centers.

Multisectoral cooperation on vocational training in Türkiye proved to be very successful in terms of changing the image of vocational training. A participant has emphasized that the businessmen used to only criticize the failure of vocational schools in the past. There was very limited cooperation between the public and private sector. Now, with the close cooperation between TOBB and MoNE, vocational schools can now attract able students. It will have to be observed whether this cooperation could also increase the employment prospects of graduates of vocational schools.

are not enough job openings for these graduates. Moreover, there are vocational programs such as “assistant midwife”, “assistant nurse”, “assistant health care technician”, but there is no direct employment area in the public health sector for people with such titles.

**Limited curricular differentiation:** While there is a limited curricular differentiation between academic and vocational tracks, the curriculum and textbooks need further differentiation. A school principal pointed out the curriculum as a weakness as follows: “It is wrong that vocational education and other high schools have the same curriculum. The courses should be modular. The student will learn a profession. Those students who want more academic knowledge could go to science high schools. Vocational students take detailed courses. It is not compatible with their work.” In other words, a more hands-on or practice-oriented approach is needed in the curriculum.

**Educated unemployment and skills mismatches:** As the higher education participation has substantially increased in the last two decades, the number of employed as well as the number

of unemployed graduates also increase. In other words, while the number of diploma holders rapidly increases, the skills that graduates have become more important in finding a job. An expert on youth employment stressed that a national skills strategy is needed to ensure the youth can reach their full potential and play a more constructive role in a rapidly changing global economy. Skills needed in the labor market should be closely monitored and regularly reported. New technologies do not bring unemployment, but bring a lot of possibilities for the youth. Unless the youth have the necessary new skills demanded by the labor market, they will be unemployed. This is the biggest risk to youth unemployment. Unemployment of the youth is a risky situation not only in terms of the labor force but also a big social issue that needs to be dealt with.

**Limited mission differentiation between vocational/technical high schools and postsecondary vocational schools:** The link between vocational high school and postsecondary vocational schools is very weak. People with vocational high school diplomas and general high school diplomas take the same courses. Moreover, program durations are also a concern. An expert in vocational education stressed that some of the jobs are disappearing and vocational programs cannot adapt. There should be a compensation/mastership program (e.g. 6 months of training.) The same expert also warned that expectations from vocational programs should be more realistic. Employers want a dual system, but they expect the state to give money for four years. Rather, there is a need for general and basic skills be taught at school, but vocational and technical skills be provided in a workplace and in a shorter period.

**“Nylon” or “spectre” internships:** Employers value job experience a lot and internships are a great way for students to get real job experience. Many participants have expressed their concern related to internships that do not give meaningful tasks to students in practice. Students become passive watchers and could not perform even the basic tasks. Supervisors don’t want to take risks and thus do not create meaningful job tasks for students. Interns need to feel welcomed and valued.

**High value-added production:** Several participants have suggested that Türkiye has a great production capacity in many areas, including infrastructural construction, mining, and industry. Türkiye has recently been able to domestically-produce an electric car, i.e., TOGG. Türkiye has also been heavily invested in the defense industry and now exports various types of drones. Some key informants suggested that Türkiye should focus more on high value-added industrial production in order to become more competitive and create demand for skilled people who have an education in vocational/technical and/or higher education. Further industrial investments are needed to create more jobs for the youth.

**A sudden drop in fertility rate:** As women’s participation in education and higher education continue to increase, so does their average marriage age. Türkiye has experienced a sudden drop-in fertility rate from 2.1 in 2011 to 1.7 in 2021 and 1.6 in 2022 (TURSTAT, 2023). As this rate is not enough for sustaining Türkiye’s current population and shows that Türkiye’s total population might decrease in the coming decades, an expert in demography considered this a high risk for Türkiye’s sustainable economic growth in the coming years.

**Monitoring activities need to be strengthened:** Türkiye has a great capacity in terms of producing national development plans and/or strategy documents, such as the National Employment Strategy 2014-2023 and the National Youth Employment Strategy 2021-2023. This capacity should further be strengthened with the monitoring and reporting. In line with the basic premises of program evaluation, new public programs should be designed in a way to monitor progress and report it in time.



### 3.5. Case Country Studies: A General Evaluation

**The level and trend of developments in youth unemployment exhibit significant variations across world regions.** Regional averages indicate that youth unemployment rates are particularly elevated in the MENA regions (Kluve, 2014). In terms of our case studies, Germany, which is a non-OIC case country, continues to be an exception, with a relatively low youth unemployment rate attributed to its successful apprenticeship system. The youth unemployment rate in Germany has historically been relatively low compared to the other countries. Germany's low youth employment can only be replicated by other countries through policies emphasizing both academic and vocational education, along with government investment, business collaboration, and fostering a culture of respect for vocational education. In Europe, employment guarantee-type approaches have proved to be instrumental in reducing youth unemployment (Escudero and López Mourelo 2017). Clear certification and career advancement pathways can aid students in making informed career choices. As of 2023, the youth unemployment rate in Germany is around 6.1%--which is the lowest in the EU (German Federal Statistical Office, 2023). However, for the other countries including Türkiye, Tunisia, and Uganda as well as most OIC member countries, the situation remains challenging.

**The dual education system is a key feature of the German VET system, which combines theoretical education with practical training.** This approach provides young people with the necessary skills and knowledge to meet the needs of the labor market. According to a study by the OECD, the dual education system has contributed to low levels of youth unemployment in Germany (OECD, 2010). There is a widespread belief in many countries around the world that VET is less valuable than academic education. Using a few crucial strategies, Germany has been able to combat this perception. First, both academic and vocational education are given equal weight in the German educational system, with both resulting in successful careers. The German government and business community's acknowledgement of the critical role vocational education plays in the economy contributes to this reinforced recognition. Second, there is a high standard of vocational education in Germany, with a focus on hands-on training and apprenticeships that enable students to gain knowledge and skills that are applicable to the workplace. This strategy guarantees that vocational education creates skilled, well-trained professionals. Finally, the business community in Germany supports vocational education, ensuring that the training programs are in line with the current and future demands of the labor market. Students, parents, and the public are more likely to see vocational education favorably thanks to this alignment.

**The suggestion of using Germany’s VET system as a means to address the economic or social problems of other countries is frequently made.** Some emphasize the significance of providing skilled worker training to encourage growth and innovation, while others aim to tackle youth unemployment and support the social integration of young people. What are the implications of Germany’s VET system being proposed as a model for other countries? The wider the objectives of vocational training, the greater its potential impact on society, as long as these objectives are not just theoretical (Euler, 2013). When dual vocational training systems incorporate elements that promote economic, social, and individual objectives, they become more widely accepted. This is especially crucial in countries where university education is the dominant standard and vocational training is considered secondary.

**In Türkiye, Tunisia, and Uganda, youth unemployment rates have historically been significantly higher than the adult unemployment rates, following the persistent pattern observed in numerous developed and developing nations.** According to 2022 data, unemployment rates in Türkiye (10.5% in total; 9% for men; 13.5% for women) are quite high compared to OECD countries (5% in total; 4.8% for men; 5.3% for women). A research study carried out in Türkiye and Spain revealed that elevating the rate of higher education enrollment does not result in a reduction in youth unemployment. According to the ILO’s 2022 projection, Türkiye’s youth unemployment rate stood at 19.0% in 2023, as reported by ILOStat. Tunisia has been facing challenges with youth unemployment, similar to other countries in the region. Based on ILO’s 2022 estimation, the youth unemployment rate in Tunisia was 37.1 %, which is considerably high (ILOStat, 2023). Uganda has also been struggling with high youth unemployment. The youth unemployment rate according to ILO in Uganda was estimated at 6.6 % (ILOStat, 2023). Even though Uganda appears to have a relatively low youth unemployment rate, this is primarily due to a significant level of underutilization of youth labor, which is particularly high in the country (ILO, 2017). Factors such as economic developments, government policies, and demographic changes influence the youth unemployment rate in the country. Additionally, access to formal employment and quality jobs emerges as a key policy issue, particularly in low-to-middle-income countries. Moreover, countries with a large share of the young population, including Uganda, experience additional challenges related to demographic pressures.

**When comparing the youth unemployment rates in three different countries, it is evident that each nation faces unique challenges in providing sufficient employment opportunities for young people.** Tunisia stands out with the highest youth employment rate, reflecting the severity of the economic and financial crisis. Türkiye follows with a substantial youth employment rate, indicating the need for targeted measures to address the issue. Although Uganda has a lower youth employment rate compared to the other two countries, underutilization of youth labor remains a significant concern, emphasizing the importance of effective policies and initiatives to improve the situation. All in all, youth employment is a pressing issue in these three countries, demanding attention and efforts to create better prospects for young individuals in the labor market. Furthermore, the problem of youth unemployment is exacerbated by “scarring effects,” as prolonged unemployment spells negatively impact long-term labor market outcomes such as earnings and employment, disproportionately affecting young workers due to their early occurrence in the life cycle (e.g., Gregg and Tominey, 2005).

**Addressing these youth unemployment challenges requires tailored approaches and policies, taking into account the specific economic, demographic, and social contexts of each nation.** According to UN's (medium variant) projections, all three countries' fertility rates will drop and the negative trend in terms of net migration will continue (**Table 4 & Table 5**). The reader should also be reminded that, as covered in the chapter on case studies, Turkish official statistics for 2022 indicate that the drop in fertility rate is sharper than the projected value. Türkiye has experienced a sudden drop-in fertility rate from 2.1 in 2011 to 1.7 in 2021 and 1.6 in 2022 (TURSTAT, 2023). Technological changes also affect the countries and a detailed guide for digitalization of VET is provided in the last chapter.

**TABLE 4 UN projections for total fertility rates (live births per woman)**

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Türkiye	1.92	1.89	1.88	1.86	1.85	1.84	1.84	1.83	1.82	1.82	1.81
Tunisia	2.11	2.09	2.06	2.04	2.02	2.01	2.00	1.99	1.98	1.96	1.95
Uganda	4.69	4.58	4.47	4.36	4.24	4.13	4.03	3.93	3.84	3.74	3.65

Source: UN Department of Economic and Social Affairs, Population Division (2022)

**TABLE 5 UN projections for net migration rates (per 1,000 inhabitants)**

NMR	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Türkiye	-0.96	-0.82	-3.53	-3.70	-3.51	-3.20	-2.84	-2.51	-2.25	-1.89	-1.48
Tunisia	-0.76	-0.75	-0.32	-0.32	-0.32	-0.32	-0.31	-0.31	-0.31	-0.31	-0.31
Uganda	0.98	0.95	-2.51	-2.59	-2.33	-1.96	-1.60	-1.18	-1.03	-0.92	-0.82

Source: UN Department of Economic and Social Affairs, Population Division (2022)

**According to data from the ILO, the global youth employment-to-population ratio (EPR) experienced a decline from 48.8% to 36.9% between 1995 and 2015, with an annual average decrease of nearly 0.5%.** This reduction was most significant in upper-middle-income countries, but relatively weaker in low- and high-income countries. Regional variations were observed, with Eastern and Southern Asia experiencing the most substantial decline, while sub-Saharan Africa saw a comparatively weaker reduction, and Northern, Southern, and Western Europe showed no decline at all. Yet, during the years spanning from 2015 to 2019, there was a noticeable resurgence in the EPR amid an employment boom in high-income countries. Simultaneously, the rate of decline in the EPR considerably decelerated in middle-income countries. The decrease in youth EPR can be attributed to increasing educational enrollment, particularly in countries experiencing higher standards of living, where young individuals have more opportunities to pursue further education. Nevertheless, declining EPRs can present challenges when they lead to higher youth NEET rates, as observed in 2020 (ILO, 2022a).

**In Türkiye and Tunisia, youth unemployment reduction has been a persistent challenge, particularly among higher education graduates.** The high unemployment rate among young higher education graduates is attributed to the skills-market demand mismatch and limited suitable job opportunities. While skills mismatches are a big concern for Uganda as well, the unemployment of the educated youth seems to be a bigger problem for Türkiye and Tunisia.

**The impact of rural-urban migration, international migration, and fertility trajectories on youth unemployment varies depending on various factors.** International migration can have both positive and negative effects on youth employment in sending and receiving countries. Young individuals often view migration as a cost-benefit calculation, seeking improved living conditions and better job prospects. In times of political instability and high youth unemployment, migration tends to increase.

**In Germany, Türkiye, Tunisia, and Uganda, the trends in fertility trajectories have significant implications for youth unemployment.** The emergence of a large youth population due to high fertility rates can create both opportunities and challenges for these countries. In lower- and low- income countries like Tunisia and Uganda, where high fertility rates persist, the “youth bulge” becomes a critical concern for youth unemployment as it leads to a surplus of young job seekers entering the labor market. Limited employment opportunities in these countries exacerbate the issue, with insufficient economic growth being identified as a critical determinant of youth unemployment in Africa. In contrast, high- and upper-middle-income countries like Germany and Türkiye experience demographic changes with projected declines in their youth populations, which could support policies aimed at reducing youth unemployment. Addressing youth unemployment in these countries requires proactive measures to create sufficient job opportunities and harness the potential of their young populations. Strategies to enhance employment prospects, particularly in sectors like agriculture, and promoting rural development to reduce the rural-urban migration trend can play a vital role in mitigating youth unemployment challenges (Ebaidalla, 2016; O’Higgins, 2001; Guloba et al., 2022; Egessa, Nnyanzi, and Muwanga, 2021).

**In Germany, the success in reducing youth unemployment can be attributed to its highly regarded VET system, which equips students with practical skills that employers value.** Efforts to improve the quality and availability of VET programs have also played a role in lowering youth unemployment rates, particularly in regions with stronger economies and more job opportunities. However, regional disparities persist, with some areas experiencing higher youth unemployment due to less developed VET systems and limited training opportunities. To address these disparities, the federal government has launched initiatives aimed at enhancing vocational training in regions with higher youth unemployment and aligning it with the needs of local employers and industries.

**In Türkiye and Tunisia, reducing youth unemployment relies on addressing key factors, including the skills mismatch between graduates and job market demands, creating suitable job opportunities, and fostering industry-university collaboration to align**

**educational programs with market needs.** The implementation of national internship and on-the-job training programs, as well as entrepreneurship support, plays a significant role in enhancing youth employability. Continuous monitoring and evaluation of initiatives are essential to ensure their effectiveness and achieve sustainable reductions in youth unemployment rates. In Türkiye, efforts to reduce youth unemployment are made through various measures and programs by İŞKUR and other governmental agencies. These include job placement services, career counseling and guidance at universities, vocational training courses, job orientation tests, and skill development programs. In Tunisia, similar measures have been enacted to combat youth unemployment. For instance, the National Agency for Employment and Self Employment (ANETI) has implemented employment matchmaking services. These services are designed to invigorate the job market on national, regional, local, and sectoral levels, chiefly through the establishment of a network of employment and self-employment offices. Acting as vital hubs, these offices connect job seekers with potential employers, thereby fostering a more efficient and effective job matching process and aiding in the reduction of youth unemployment. Simultaneously, various Tunisian ministries and institutions have been implementing strategies in alignment with the national development plan, with a prime focus on bolstering self-employment and entrepreneurship. These strategies encompass the execution of several interconnected VET and entrepreneurship programs. The primary objective of these initiatives is not merely to equip individuals with skills and knowledge but to instill a culture of entrepreneurship. This approach ensures a comprehensive response to the pressing issue of unemployment, fostering economic resilience, and creating a proactive and self-sustaining workforce. By intertwining VET and entrepreneurship programs, the strategy amplifies their collective impact, providing a more robust solution to combat the unemployment challenge in Tunisia.

**The main barriers to reducing youth unemployment in Uganda include high fertility rate leading to a young population, limited job opportunities in the current labor market, negative perceptions of agriculture, inadequate vocational skills, and challenges in transitioning from school to the labor market.** The education system's focus on theoretical education and the mismatch between graduates' skills and employers' demands contribute to the unemployment issue. Additionally, the high cost of vocational training and the lack of access to new technologies pose barriers for youth seeking skills development. Entrepreneurship is emphasized as a crucial aspect for economic growth and job creation, but skills mismatches and the stigma associated with vocational education hinder progress. Modernization of agriculture and promoting tourism are identified as potential solutions, while labor externalization to other countries has become an alternative for some youth seeking better job prospects.

**In terms of financing vocational education, there are significant differences between countries.** Türkiye has a widespread vocational training system in the country and it is free of charge. In Tunisia, it is based on a sustainable model as a special tax is collected from employers for vocational training. The Professional Training Tax mechanism in Tunisia is a noteworthy example of good practice, harnessing public and private resources to fund a crucial part of the country's education system - vocational training. Uganda offers vocational training for a fee and this creates a barrier for many unemployed youth in accessing quality vocational training. Uganda needs financial support for scaling its vocational training courses.

**There are also differences in the roles of international organizations in Türkiye, Tunisia, and Uganda in terms of vocational education and youth unemployment.** In Türkiye, the central government and national institutions are very strong; international organizations work with relevant national institutions in policy-making and contribute to policy processes. In Tunisia, international organizations work with national authorities. However, prevention of irregular migration, especially to Europe, is an important agenda item for international organizations. In Uganda, international organizations have important responsibilities. International organizations play a role in capacity building in many areas, especially vocational training. The support of international organizations and the need for improved policy implementation and monitoring capacity are especially emphasized in Uganda to tackle the issue effectively.

Youth unemployment continues to be a huge concern that requires an urgent policy intervention for OIC member countries due to the relatively high youth population and high youth unemployment rates in OIC member countries (SESRIC, 2018a). Based on the literature review as well as country case studies, the policy recommendations are as the follows:

- **Effective macroeconomic policies should be adopted to foster economic growth, stability, and job creation.** Economic growth is a prerequisite for absorbing the increasing number of educated youth into the labor market.
- **Review education curricula to address the issue of youth unemployment and skills mismatches.** Education systems should equip the graduates with the necessary skills required to find decent jobs: technical skills, communication skills, and entrepreneurial skills. Curriculum reform to take into consideration the economic and social needs. It is being reformed and meant to be very practical oriented. The curriculum not only in primary education but also in secondary and higher education should be redesigned to match employment needs of the labor market (Egessa, Nnyanzi, and Muwanga, 2021). Improve the technical and vocational education and training system (TVET) and ensure that it caters to the needs of youth and employers (OIC Labour Market Strategy 2025 Action 2.2.4).
- **Invest in second-chance education programs for youth who have dropped out of the educational system at an early stage to ensure that they have the basic literacy and numeracy skills** (OIC Labour Market Strategy 2025 Action 2.2.8).
- **Ease transition from school to work for youth through promoting internship and on the job training programs** (OIC Labour Market Strategy 2025 Action 1.3.4). Design apprenticeship programs, and extend job search and career counseling services to youth (OIC Labour Market Strategy 2025 Action 5.4.2). Unless there is an effective transition from school to work, many educated youth will end up in either informal or low-paid jobs. Alternatively, ease transition from school to work will help educated youth in finding stable and skilled jobs (Alfonsi et al., 2020). For the youth fund and youth entrepreneurship to have a lasting impact, the promotion of youth entrepreneurship should be approached comprehensively (not only the credit component) and it should target productive sectors with high employment creation potential (Ahaibwe & Kasirye, 2015).

- **Identify the challenges faced by the female, young and elderly population that discourage them to be active in the labor market** (OIC Labour Market Strategy 2025 Action 1.3.1). Design and implement targeted education programs to improve skills of youth, women and adults living in rural areas (OIC Labour Market Strategy 2025 Action 1.4.1). To counter norms that encourage child marriages, girls should be provided training to empower them to resist being forced into early marriage and legislative framework to eliminate child marriage should be enforced. The governments, especially in Uganda, should align existing laws and policies surrounding the age of marriage to eliminate any loopholes in the existing legal framework. Moreover, media and community leaders should provide support in the fight against child marriages (Sahadevan et al., 2023).
- **To increase the attractiveness of the industrial sector in Türkiye, a study is needed to assess the potential of differentiating the minimum wage according to the region, the industrial sector or the professions.** With a new legal setup, an increase in the minimum wage of vocational/technical graduates will orient them to find jobs in their fields of study. VET is very expensive due to special equipment especially in industrial fields. This expensive form of education becomes inefficient when the graduates work in other fields.
- **Cooperate with civil society organizations that are specialized on youth and women skills upgrading and employment issues** (OIC Labour Market Strategy 2025 Action 5.3.9).



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**GUIDE FOR  
ESTABLISHING/IMPROVING  
VOCATIONAL EDUCATION SYSTEMS  
AND OTHER RECOMMENDED  
LABOR MARKET INTERVENTIONS  
AIMED AT REDUCING  
YOUTH UNEMPLOYMENT**

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#### **4. GUIDE FOR ESTABLISHING/IMPROVING VOCATIONAL EDUCATION SYSTEMS AND OTHER RECOMMENDED LABOR MARKET INTERVENTIONS AIMED AT REDUCING YOUTH UNEMPLOYMENT**

In this part, a detailed guide with a step-by-step approach to assist the member countries in establishing or enhancing their vocational education and training (VET) systems is provided. The guide takes into account the varying development levels of OIC Member Countries on this matter and offers specific recommendations accordingly. Additionally, during the preparation of the guide, research has also been conducted to gather relevant information regarding the following questions:

- What are the efforts/policies/regulations/instruments that can be utilized to reduce youth unemployment, youth informal employment and NEET?
- Are there any specific risks for OIC member countries in meeting targets? Are certain OIC member countries more prone to policy risks (such as capacity limitations, financing gaps etc.) or natural risks (such as climate change, associated famines and other risks)?
- What are the lessons to be learned from unsuccessful practices and the measures that can be taken to overcome the challenges faced?
- How can OIC member countries from different regions and with different resources, regulatory framework, institutional and organizational set-ups, disadvantages etc. replicate the success stories in terms of improving youth labor outcomes.
- How can the financing gaps be met?
- What should be the role of NGOs, international organizations and donors in complementing national policies?
- How can the vocational education systems be digitalized?
- How can countries integrate an online system to their vocational education applications?
- How can a simple application process for employees and employers be designed through an online platform?
- For each challenge specified in the previous sections, what are the efforts/policies/regulations/instruments that can be utilized to overcome?
- How can monitoring indicators be produced to follow up progress?

**The aspiration is that this Guide will indeed prove to be useful in your endeavors in improving vocational education and reducing youth unemployment.** The structure, quality, financing, infrastructure and digitalization level of vocational education in OIC member countries differ according to the countries. For a more efficient guide, this report defines the basic principles for policies to improve vocational education and reduce youth unemployment. Some OIC member countries have many of these principles we have defined. However, they can benefit from this guide to see the deficiencies in their policies and systems and to improve their existing practices, policies, and systems. This Guide is more useful for countries with high youth unemployment rates and weak vocational training systems.

**Reforms to be made in the vocational education system to reduce youth unemployment should have a holistic approach.** Because, usually more than one governmental organization is responsible for vocational training. The institutions that provide training or deal with certification and employment are differentiated. In addition, when the labor market and other stakeholders are taken into consideration, it is necessary to have a holistic approach to develop successful policies and establish a system. This guide has been prepared in a way to ensure that both public institutions and labor market and other stakeholders act in effective cooperation with this holistic approach. The other most important principle in this guide is the establishment of a close cooperation between the labor market and the public sector, with the private sector contributing more to the decision-making, governance, financing and training processes. In addition to all these, this Guide has an inclusive approach. The Guide aims to reduce social inequality in all policies and practices.

**While the Guide includes seven steps and it is not written for any specific country, this report provides some policy recommendation in adapting the Guide according to the development levels of OIC member countries.** In grouping OIC member countries, the report follows the income group classification developed by the World Bank (**Table 6**). At the end of each step of the Guide, the report provides policy modifications regarding the needs and contexts of each group.

**TABLE 6** The development levels of OIC member countries according to the World Bank income group

World Bank income group	Low	Lower-middle	Upper-middle	High
OIC member countries*	Afghanistan Burkina Faso Chad Mali Gambia Guinea Guinea-Bissau Mozambique Niger Sierra Leone Somalia Sudan Syria Togo Uganda Yemen	Algeria Bangladesh Benin Cameroon Comoros Côte d'Ivoire Djibouti Egypt Indonesia Iran Kyrgyz Republic Lebanon Mauritania Morocco Nigeria Pakistan Palestine Senegal Tajikistan Tunisia Uzbekistan	Albania Azerbaijan Gabon Guyana Iraq Jordan Kazakhstan Libya Malaysia Maldives Suriname Türkiye Turkmenistan	Bahrain Brunei Darussalam Kuwait Oman Qatar Saudi Arabia United Arab Emirates

\* This classification of OIC member countries is taken from SESRIC (2022b).

#### 4.1. Identify Challenges and Risks of Youth Unemployment, Youth Informal Employment, and NEET

**Addressing the pressing challenges of youth unemployment, youth informal employment, and NEET requires a comprehensive and multi-faceted approach.** One crucial aspect is the creation of job opportunities through supportive macroeconomic and developmental policies that promote economic growth and entrepreneurship. Concurrently, investing in education and skills development becomes paramount to equip young individuals with the necessary qualifications for available and emerging job openings. Vocational training programs, technical education, and apprenticeships must be enhanced to bridge the gap between skills demanded by the labor market and those possessed by the youth. Labor market information systems play a vital role in identifying skill gaps and job trends, enabling targeted employment programs to be implemented.

**Active Labor Market Policies (ALMPs) encompassing job search assistance, labor market training, incentives for private sector employment, and public sector job creation can significantly reduce youth unemployment and create opportunities for decent work.** Moreover, supporting youth entrepreneurship through funding, mentorship, and business development services can foster job creation and innovation. Public-private partnerships are instrumental in designing tailor-made policies, while wage and training subsidies can motivate employers to hire young individuals. Emphasizing gender-inclusive policies and continuous monitoring and evaluation of employment programs contribute to sustainable progress in addressing these challenges and promoting the well-being of the youth workforce (SESRIC, 2016).

**The latest ILO estimates suggest that young people, women, low-skilled, and informal workers continue to face challenges finding productive jobs, highlighting the need to prioritize addressing youth unemployment, inactivity, and precarious work in economic recovery policies** (ILO, 2022a). Governments and policymakers need to implement targeted efforts and policies that address the specific challenges faced by young people, especially in the context of the COVID-19 pandemic. The pandemic's impact has been particularly harsh on young individuals, including school-leavers, apprentices, and new labor market entrants. It has also disproportionately affected young women and heightened risks of domestic violence. As the focus shifts from immediate relief to supporting economic recovery and fostering resilient economies, it is crucial to address the shortcomings in reaching young people.

**Governments should provide targeted macroeconomic support to boost labor demand.** Fiscal and monetary policies should also be coordinated and complemented by improved employment strategies. Addressing labor market misalignments is crucial for a stronger and more resilient labor market, promoting stable economic growth and a better future of work (ILO, 2022a).

**International cooperation is essential to address fiscal constraints faced by developing countries, where many young people live.** The countries must wisely spend, mobilize domestic resources, and implement reforms to strengthen social protection systems and support small enterprises' growth. Global initiatives, such as debt relief and social protection, are vital for achieving Sustainable Development Goal 8 and extending coverage to vulnerable populations, including young individuals (ILO, 2022a).

**Although there have been positive developments in education and employment indicators in OIC member countries in recent years, the indicators are still more negative than those in other regions of the world.** In other words, OIC member countries show lower values in various indicators such as the labor force participation rate, employment to population ratio, share of the labor force with tertiary education, and average skills levels compared to other developing and developed countries (SESRIC, 2018a).

**The risks faced by OIC member countries in achieving the goals of improving vocational training and reducing youth unemployment vary.** Some OIC member countries, especially those in Sub-Saharan Africa and South Asia, are more vulnerable to risks, whereas high-income

OIC member countries are more resilient. The risks faced by OIC member countries in reducing youth unemployment can be listed as follows:

- **Weak macroeconomic outlook and lack of stability:** Poverty and weak macroeconomic structure are a major problem in a significant number of OIC member countries (**Box 8**). Many countries in Sub-Saharan Africa, East Africa, and West Africa have a GDP per capita below one thousand USD. Most of the world's poorest countries are OIC member countries (World Bank, 2023a). The majority of the global poor currently reside in South Asia and Sub-Saharan Africa, where public resources are underutilized, and the government underfunds many basic services. The unfavorable macroeconomic situation and lack of stability hinder the emergence of new business opportunities, and young people are also negatively affected due to their low level of skills and experience. Additionally, many OIC member countries do not offer a favorable entrepreneurial environment for youth (SESRIC, 2018b). An ineffective political system and poor governance worsen the social and economic conditions of the population and increase the severity of poverty in a country or region (ILO, 2016; USAID, 2022).

**BOX 8**

***Weak macroeconomic outlook in OIC member countries***

According to the World Bank, Worldwide Governance Indicators 2022, a significant number of OIC member countries scored low in six dimensions of this indicator, namely effectiveness, regulatory quality, rule of law, and control of corruption (World Bank, 2023b). This trend was also evident ten years ago, where countries with the highest poverty levels among OIC member countries had the lowest performance on this indicator. Civil conflicts and wars are important causes of poverty in many OIC member countries (SESRIC, 2015). They lead to political instability and inadequate access to state-provided services, while also weakening economic investments. Consequently, conflicts represent one of the most critical obstacles for countries in reducing youth unemployment (ILO, 2021b). Furthermore, the majority of existing high-level conflict zones are also situated in OIC member countries. The world conflict map shows that conflicts are particularly concentrated in sub-Saharan African countries (The Heidelberg Institute for International Conflict Research, 2023).

- **Poor infrastructure and low level of human capital:** Low government spending on basic services and poverty coexist, leading to significant capacity gaps in both qualified human resources and physical infrastructure in these sectors in OIC member countries. The lack of basic infrastructure hampers efficient service delivery and access to health and education services. For example, the education sector in Sub-Saharan Africa faces challenges in terms of the number of teachers and the quality of education for children (SESRIC, 2015). The low level of education in OIC Member States is one of the key risks to reducing youth unemployment and decent work. Literacy, retention and participation rates are particularly low in Sub-Saharan Africa and in South Asia (SESRIC, 2018b, 2020). In addition, these regions have the lowest rates of access to higher education.

- **Poor quality of education:** Overcrowded classrooms and a high student-to-teacher ratio present obstacles for millions of youth in OIC member countries to receive quality education. Thus, OIC member countries should aim to improve not only educational access but also the quality of education provided to young people (SESRIC, 2018b, 2020). One of the significant issues negatively affecting the quality of education is the considerably low education expenditures in OIC member countries. These countries spend the least on education and have a limited number of teaching personnel. In 2020, OIC member states on average spent 3,068 USD per student, while the world average was 6,377 USD. The expenditure per student in developed countries exceeds 13,000 USD. There is also big differentiation in OIC member countries in terms of spending as well. Notably, countries such as Brunei Darussalam, Oman, Bahrain, and Malaysia spend more on education per student than the world average, while education expenditures in Sub-Saharan Africa remain quite low (SESRIC, 2022).
- **Existing gender disparity:** Particularly, the high dropout rate of girls and early marriage are obstacles for young girls and women to acquire the necessary skills. Moreover, young women face disadvantages in accessing employment opportunities compared to men (Ayed, 2021; Sahadevan et al., 2023; USAID, 2022). In *the OIC Labour Market Strategy 2025*, participants from OIC member countries identified lack of women participation in the labor market as one of the key challenges (SESRIC, 2018a).
- **Poor basic skills, knowledge and skills mismatch:** The weak link between education and labor markets poses one of the most important challenges. In *the OIC Labour Market Strategy 2025*, skills mismatch is identified as the most important challenge in OIC member countries (SESRIC, 2018a). Poor education skills of the labor force and unplanned supply of workers in different sectors are among the challenges faced by labor markets (Bruno et al., 2017; Scarpetta et al., 2010). Additionally, low levels of education and skill levels of the labor force, along with problems in youth transitioning from school to the labor market, are identified as the leading challenges defined in *the OIC Labour Market Strategy 2025* (SESRIC, 2018a).
- **Labor market structures and rigidities:** With the exception of a few OIC member countries, most OIC member countries lack labor market flexibility and an appropriate mechanism to facilitate the transition of young people from one job to another, similar to developed countries. Due to this rigid structure of the labor market in OIC member countries, youth have difficulty in finding a job (SESRIC, 2018b).
- **Illegal Migration:** High unemployment, lack of education and skills among youth, and political instability contribute to illegal migration. Along these illegal migration routes, young people encounter abuse, exploitation, and danger to life, making the journey unsafe (Redlin, 2022). Especially in OIC member states in Africa and South Asia, illegal migration of youth remains a major problem (SESRIC, 2018b). In our field study, illegal youth migration was also defined as a major challenge especially in Tunisia.

- **Brain Drain:** One of the most important challenges for OIC member countries is the migration of highly skilled youth. Well-educated young people leave their countries to access better living conditions and seek new opportunities. Brain drain, in general, poses a major challenge for all OIC member countries (SESRIC, 2018b).
- **Climate change:** Climate change is a phenomenon that is intensely discussed worldwide, and its effects are experienced by the whole world, including OIC member countries. Climate change leads to abnormal weather conditions and unexpected natural disasters, such as floods, droughts, or tsunamis. Additionally, it contributes to the increase of migrants, refugees, or displaced populations escaping from negatively-affected environments and moving to suitable locations (ILO, 2021b; USAID, 2022). The environmental impacts affect agriculture and many other sectors. Low and lower middle-income OIC member countries are highly vulnerable to environmental shocks, and environmental degradation is a major determinant of high incidence of poverty in the majority of these countries (SESRIC, 2014, 2015). Among OIC member countries, climate change is a major threat to South Asia and Sub-Saharan Africa. The geographical location of these countries and their dependence on the agricultural sector increase their vulnerability. People in these regions mostly live in rural areas and depend on the agricultural sector. Climate change can affect the agricultural sector through various channels such as temperature increase, precipitation and precipitation distribution, carbon concentration, extreme weather events such as floods, droughts, and storms, and intensification of pest growth. OIC member countries are projected to experience significant productivity losses. Several OIC member countries with high incidence of poverty, such as Senegal, Mali, Niger, and Pakistan, are expected to suffer the highest loss of agricultural productivity (SESRIC, 2015).
- **Water scarcity:** OIC member countries are classified as a water-stressed region, with 29 OIC member countries experiencing water stress, and 18 of them facing critical stress. MENA and ECA regions are more affected by water scarcity (SESRIC, 2021). Water management is not only a sustainability issue; it also directly affects agriculture. The lack of sufficient water and rainfall in agricultural areas leads young people to leave these areas, causing agricultural production to decline and youth unemployment to increase in cities.

**POLICY MODIFICATION 1*****Identify challenges and risks of youth unemployment, youth informal employment, and NEET***

For low-income and lower-middle-income countries:

- Focus on identifying challenges and risks such as poor quality of education; poor basic skills, knowledge and skills mismatch; poor infrastructure and low level of human capital;
- weak macroeconomic outlook and lack of stability.
- Recognize the challenges of informal economies and the need for gradual formalization.
- Cooperative with international organization to deal with illegal migration.
- Develop strategies to benefit from migrated skilled human resources

For upper-middle-income and upper-income countries:

- Focus on skills mismatches in a rapidly changing digital economy.
- Consider challenges brought by climate change and develop policies for sustainable economy.
- Develop strategies to tackle issues related to underemployment and skill underutilization.

## 4.2. Learn From Failure and Develop Strategies for Replicating Success Stories

**It is utmost important to gain the insights from the past unsuccessful projects and make sure that funds are being utilized for training or establishing new businesses.** To address the current limitations in financial, technical, and human resources, Uganda seeks valuable technical assistance from international organizations and other nations, including OIC member countries like Türkiye and Qatar. This assistance is not solely centered around financial support, as expressed, but also encompasses the need for expertise and technical knowledge to effectively address the country's challenges.

**The experience of addressing youth unemployment in OIC member countries during the aftermath of the COVID-19 pandemic has also yielded valuable lessons.** Firstly, it is essential to integrate VET strategies into broader economic and social policies by collaborating with various government departments and sectors. This comprehensive approach ensures the successful implementation of VET programs. Secondly, the pandemic highlighted the critical role of care work, both paid and unpaid, in maintaining functional economies and societies during crises. Strengthening institutions such as employment services and social protection systems is crucial for effective policy delivery. Lastly, investing in strong VET institutions, supported by

efficient employment services and robust social protection systems, can greatly enhance the effectiveness of strategies to combat youth unemployment. By embracing these lessons and fostering cooperation among stakeholders, OIC member countries can develop more resilient and sustainable solutions to empower their youth in the job market.

**Enhancing youth labor outcomes in OIC member countries, which possess varying characteristics, resources, and regulatory frameworks, necessitates a comprehensive strategy that acknowledges and addresses the distinct obstacles encountered by each country.** In this sense, OIC member countries can learn from Germany's successful vocational education model to improve youth labor outcomes. Germany's dual system, combining school-based education and company-based training, has been proven more effective than school-based VET (Eichhorst et al., 2013). To replicate this success, OIC member countries should adopt a combination of policy approaches tailored to their unique labor market conditions. The research suggests that a comprehensive approach is crucial in addressing youth NEET rates (Eichhorst et al., 2013).

**Investing in vocational training and collaborating with businesses will help ensure that OIC member countries' youth possess skills aligned with current and future labor market demands.** By fostering collaboration between governments and the private sector, OIC member countries can replicate the success of Germany's dual vocational training system. OIC member countries can refer to Jespersen, Munch, and Skipper's (2007) cost-benefit analysis of active labor market programs in Denmark, which highlights the positive impact of subsidized job training in the public and private sectors. Equal access to vocational training for all students, regardless of socioeconomic background, can help reduce social inequality and enable social mobility (European Commission, 2019).

**To effectively implement vocational education, OIC member countries should emphasize the importance of academic and vocational education equally.** Governments must invest in vocational training and work with businesses to meet labor market needs. Cultivating a culture that values vocational education and highlighting VET as a viable career option will encourage youth participation. Clear certification and career advancement pathways can assist students in understanding potential career options (European Commission, 2019). By integrating these elements and fostering strong collaboration between government, industry, and educational institutions, OIC member countries can work toward achieving improved youth labor outcomes, similar to the success observed in Germany's labor market.

**POLICY MODIFICATION 2**

***Learn from failure and develop strategies for replicating success stories***

For low-income and lower-middle-income countries:

- Prioritize scalable solutions and local success stories that can be adapted with minimal infrastructure and limited resources.
- Emphasize the importance of academic and vocational education equally.

For upper-middle-income and upper-income countries:

- Investing in vocational training and collaborating with businesses will help ensure that OIC countries' youth possess skills aligned with current and future labor market demands
- Encourage international partnerships in replicating success stories.



**4.3. Develop A Legal Framework and Policies to Overcome the Risks and Challenges**

**To address the challenges of youth unemployment, several efforts, policies, regulations, and instruments can be utilized.** Above the report discusses various challenges and risks facing policies to reduce youth unemployment such as lack of stability, poor quality of education, existing gender disparity, skills mismatch, illegal migration, brain drain, and climate change.

**Governments and international organizations can advocate for inclusive policies that reduce discrimination, promote social inclusion, and cater to the needs of vulnerable groups, including young women and people with disabilities.** Investing in education and skills development is crucial to prepare young people for the labor market and improve their employability. Active labor market policies (ALMPs) such as job search assistance, labor market training, incentives for private sector employment, and public sector employment can create more opportunities for job seekers and reduce overall youth unemployment rates.

**Governments should develop/revise national legislative framework and institutional structure on VET and reform the legislation according to the needs of the labor market.** In line with *the OIC-TVET Strategic Roadmap 2020-2025* (OIC, 2019), some possible legislative reforms to overcome the challenges in youth unemployment are given in **Box 9**.

**BOX 9**

***Possible legislative reforms to overcome the challenges in youth unemployment***

Some of the legislative reforms, policies, and instruments that could be used to overcome challenges related to youth unemployment are as follows:

- Identify which ministries and organizations are responsible for VET policies.
- Review the legislative and regulatory framework to improve cooperation between the public and private sectors.
- Identify labor market needs by conducting regular research while preparing VET programmes in accordance with the needs.
- Request support from OIC and member countries with successful VET systems for human and financial resources in developing VET programmes.
- Review the VET management system. If necessary, make reforms to make the system work efficiently.
- Regional VET structures should be established, especially in large countries in terms of population and geography, and the administrative and financial management of all VET centers should be defined within a legal framework.
- Work on strengthening cooperation between vocational training centers.
- Integrate the private sector into VET programmes by requesting the assistance of stakeholders.
- Develop dual and alternating school-work trainings.
- Promote lifelong learning.
- Develop programmes that ensure access to VET for all.
- Make legal arrangements to reduce the informal economy.
- Prepare legal regulations for the recognition of the qualification system of VET institutions.
- Set up legal provisions for the recognition of skills acquired in active life or prior learning.
- Set up legal provisions facilitating the participation of employees access to continuous or lifelong vocational training;

**Fostering partnerships between national governments and NGOs, international organizations, and donors can help ensure the sustainability of youth employment programs.** Ensuring coherence with national policies and aligning efforts with national goals is essential to achieve lasting impact. Moreover, addressing demographic changes, such as fertility rates, and creating a favorable business environment through good governance and strong institutions can contribute to reducing youth unemployment. By considering these multifaceted approaches, stakeholders can work together to overcome the challenges posed by youth unemployment and NEET rates effectively (**Box 10**).

## BOX 10

***Possible solutions to challenges in youth unemployment***

Some of the policies and instruments that could be used to overcome challenges related to youth unemployment are as follows:

- Effective policies to reduce poverty should be implemented.
- Policies and programmes should aim to reduce social inequality.
- Governments should spend more on basic services.
- Literacy and enrolment rates should be increased.
- Projects and programmes should be developed to reduce drop-outs and ensure that every child has access to basic education, especially socially excluded children.
- The physical and technological infrastructure of schools should be improved, and efforts should be made to reduce the class sizes and the ratio of students per teacher.
- New schools and classrooms should be built and new qualified teachers should be employed into the system.
- Since teacher quality is the most important indicator of the success of an education system, efforts should be made to improve both the field knowledge and pedagogical skills of teachers in pre-service and in-service trainings to improve teacher quality.
- It should be aimed for every child to receive quality education.
- Efforts should be made to reduce gender inequality. to increase the awareness of parents about the importance of schooling for girls.
- The most needed skills should be identified by conducting research on labor markets and training programmes should be developed for these skills and young people should be provided with the necessary skills in these programmes.
- Issues that prevent young people from being active in labor markets need to be identified.
- Policies that ensure macroeconomic stability and sustainable growth should be developed by taking youth unemployment into account.
- Entrepreneurship should be supported. To do this, young entrepreneurs should be offered financial opportunities. Young entrepreneurs should be provided with tax and social security support. Entrepreneurship training should be popularized.
- Projects, programmes and campaigns should be developed to prevent early and forced marriage of young women and raise social awareness. In addition, legal arrangements should be made to prevent early and forced marriage.
- National strategies should be developed for illegal migration and efforts should be made to inform young people about the dangers of illegal migration.
- Improving youth's vocational skills, improving the social security system for unemployed young people, developing policies to increase the participation of NEET in education or employment.
- Policies should be developed to reverse the brain drain. For this purpose, qualified job opportunities with high income levels should be provided for educated and trained youth and effective policies should be implemented to increase the employment of educated youth.
- Awareness of the society on climate change should be raised and it should be ensured that they take this problem seriously. For this purpose, climate change and its impacts should be a part of the school curriculum (SESRIC, 2018a, 2018b).

### POLICY MODIFICATION 3

#### *Develop a legal framework and policies to overcome the risks and challenges*

For low-income and lower-middle-income countries:

- Develop regulations and enforce policies to restrict informal employment.
- Encourage micro and small business growth.
- Develop inclusive policies that reduce discrimination, promote social inclusion, and cater to the needs of vulnerable groups.
- Request support from OIC and member countries with successful VET systems for human and financial resources in developing VET programs.

For upper-middle-income and upper-income countries:

- Address challenges related to skills development in emerging fields and digital labor platforms.
- Support young entrepreneurs with tax and social security incentives.

## 4.4. Develop A Guideline for Digital Transformation of National VET Systems

**Digitalization causes significant changes in workplaces and the structure of the labor market.** It is inevitable that training and VET processes will also be digitalized to ensure that skills are suitable for the labor market. At this point, understanding the meaning of digitalization in education and VET is crucial. Digitalization does not simply involve transferring what is done in the traditional face-to-face system to an online system. It is a comprehensive process that encompasses various aspects such as education, certification, guidance, employment, in-service training, and re-skilling. Three different concepts are used to describe VET digitalization: Digitization, digitalization, and digital transformation. These concepts do not have the same meaning. Digitization refers to a more technical stage, involving the transfer of information formats into a digital format. Digitalization refers to organizational change that automates and streamlines information and processes. On the other hand, digital transformation refers to the transformation of the national skills system and VET institutions as a whole system. By digitalization of the national skills system and VET, we mean a total systemic change that goes beyond simply transferring what exists in the face-to-face system to the digital domain. This report refers to digitalization as a systemic digital transformation. The digitalization of the vocational education system includes, on the one hand, the digitalization of school and workplace training systems, and on the other hand, the transformation of the entire education system in the country into online systems. Additionally, it involves the establishment of a continuous lifelong learning system for employees and employers with online platforms (Busemeyer et al., 2019; ILO, 2021d, 2021e). Therefore, this guide for the digitalization of the national skills system and VETs will explain step by step how to digitalize vocational training, how countries can integrate online systems into VE applications, and how to design a simple online system for applications for employees and employers.

**A digitalized system is needed to ensure that education processes are not disrupted and skills continue to be acquired in crisis situations such as a pandemic** (IIEP-UNESCO, 2022; ILO 2020, 2021c, 2021d, 2021e). Digitalization is important for vocational education in three ways. First, schools play an essential role in enabling citizens to participate in a changing world with new skills. Secondly, the process of digitalization presents novel teaching resources and approaches, including computers and interactive whiteboards, which can be employed in flipped classrooms or blended learning environments. Thirdly, digital competencies, tools, and content are available not only within vocational schools but also at apprentices' workplaces. New digital processes have changed the workplace. For example, 3D printers and digital marketing. One of the most important pressures on vocational education is how well it can respond to this change and transformation in the labor market (Delcker, 2022). In addition, changes in work processes and the spread of digitalization to the entire social sphere necessitate the digitalization of the VET system and the national skills system. To respond to the rapid transformation in the labor market, there is a need for a fast-responding system that will train the necessary skills. With digitalization, it becomes possible to focus on the skills needed by the labor market and respond quickly to the demands (**Box 11**).

**BOX 11** *The benefits of digitalization in a VET system*

- **Data-driven decision making:** Traditional national systems are data-poor. Digitalization enables analytics and reporting to work quickly and efficiently. This allows the performance of the system to be measured and informs supply side planning.
- **Improving quality, efficiency, and reliability:** A well-designed and implemented digitalized system reduces costs, saves time, and ensures quality.
- **Enabling an expansion of learning opportunities:** Digitalization enables more programs to be implemented and more students to be reached than in the traditional system. Even those who cannot attend face-to-face programs can access digital courses and improve their skills.
- **Increasing access and participation in employment by improving skills:** With flexible learning hours, individuals can have more opportunities to improve their skills.
- **Providing unlimited communication with digital technologies:** Best practices, content, and experiences from different regions and countries can be accessed (ILO, 2021d).

**It is important to recognize that there are significant risks and challenges caused by digitalization.** Digitalization brings significant changes to labor markets. The use of robots and automation processes indicates the potential elimination of many traditional jobs (UNESCO, 2021). While some argue that the effects of digitalization on labor markets are negative, leading to mass unemployment, growing inequality, and further polarization, there are also optimistic approaches suggesting that digitalization will create new job opportunities and have a positive

impact on employment, growth, and welfare in the long run (Busemeyer et al., 2019; IIEP-UNESCO, 2022). In the past, many radical technological changes did not immediately create new jobs, but in the medium and long term, new technologies did lead to the emergence of new employment opportunities. Digital transformation will likely eliminate certain professions and jobs, which will be replaced by robots or software, negatively affecting many old traditional sectors. However, other areas such as IT, HR, social services, and platform economies are expected to experience growth. While digitalization may progress more slowly in developing countries and emerging economies, many innovative companies and startups are being established in these regions (Busemeyer et al., 2019). Convincing society about the need for total systemic digital transformation is especially crucial in places where digitalization is still in its early stages and where negative effects of automation are evident. It is essential to help the society understand and embrace the change brought about by digital transformation; otherwise, there may be resistance to change (IIEP-UNESCO, 2022).

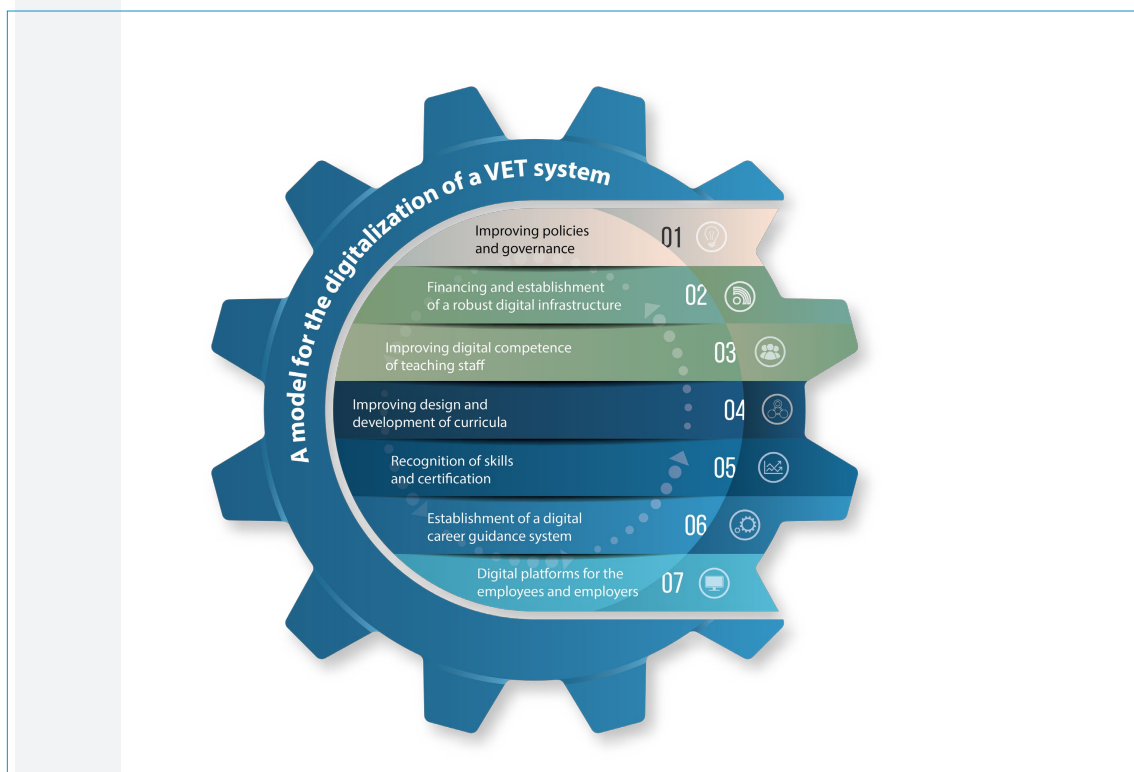
**Challenges such as weak electrification networks, limited technical and financial access, and disparities between rural and urban areas further hinder digitalization efforts in MENA regions.** Internet access rates are notably low in economically poor countries. As of April 2023, only 65% of the world's population has access to the internet, compared to 23% in Eastern Africa, 28% in Middle Africa, 48% in Western Africa, and 49% in Southeastern Asia (Statista, 2023). Although there are significant initiatives to increase internet access, these efforts are not evenly distributed across society. Computer use is limited, and access to the internet and digital training is mainly through smartphones. Lack of qualified personnel and suitable and equipped training facilities result in a lack of digital skills training in these countries (IIEP-UNESCO, 2022). Hence, countries should consider the following challenges during the digitalization of the VET system: Non-affordable access to the internet; lack of or poor quality of internet infrastructure; need for sufficient bandwidth for online or blended training; students' lack of basic digital knowledge and their unfamiliarity with using online digital systems and learning spaces; teachers' and students' need for support (ILO, 2021d). Developing effective policies to address these challenges is crucial for a successful digitalization process.

**It is important to ensure that the process of digitalization of skills and the VET system does not lead to new inequalities.** During the Covid-19 pandemic, digital technologies facilitated young people's access to education, including vocational training, enabling a large number of them to continue their education. However, those who lacked sufficient digital equipment were completely deprived of these training opportunities, highlighting the existing inequalities. Moreover, the technological capacities of schools and the qualifications of teachers varied significantly, further contributing to disparities. Additionally, inadequate digital capacities in households resulted in a digital divide, risking the widening of inequalities. Therefore, it is crucial to consider and address equality issues in different regions, schools, and households during the digitalization process (Busemeyer et al., 2019).

#### 4.4.1. A model for the digitalization of a VET system

Digital transformation of VET and the national skills system needs to be realized in a systemic way. It encompasses more than just the use of digital technologies in teaching or learning; it also involves governance and management of education and training institutions, the utilization of new technologies by labor markets, and the development of new skills (ILO, 2020). Therefore, creating an ecosystem for the digitalization of the VET system is essential (GIZ, 2022). The European Framework for Digitally Competent Educational Organizations (DigCompOrg), prepared by the European Commission, provides the framework for this ecosystem, defining the digitalization of VET education. The ecosystem involves setting and implementing a vision with effective leadership and management, adopting teaching and learning practices that incorporate digital skills, assessing the acquired skills, and preparing content and curricula for the newly defined skills in effective collaboration with all stakeholders (Brolpito et al., 2016). Based on these principles, this report prepares the following guide to build a robust VET system. To establish a digitalized VET system in OIC member countries, critical issues must be considered. Digital infrastructures vary across countries, and some countries already have successful digital VET systems. Here, the report describes the features that a successful digital VET system should have (Figure 8). For countries without any digital VET system, those just beginning to establish one, or those with only partially successful systems, this guide will provide the necessary steps to achieve a successful digital VET system.

**FIGURE 8** A model for the digitalization of a VET system



Source: Ministry of National Education

#### ***4.4.1.1. Improving policies and governance***

**Governance is key to ensuring to build an effective digitalized VET system.** First and foremost, it requires defining the vision for the desired digital system and then formulating implementation plans and a management and governance model. The following steps should be taken into account in building a digitalized VET system:

- **Conduct research to identify the country's skills needs and existing VET infrastructure, and share the results with relevant stakeholders.** When initiating the digitalization process, each country needs to develop long-term plans tailored to its specific needs. This entails conducting a labor market needs analysis, collecting data, defining essential skills to establish a skill-compatible process, and determining the in-demand skills. Additionally, each country should assess its own digital capacity, plan and research the transformation of various processes, identify which skills will be automated and which new job skills will be needed. Conducting such research is vital to avoid wasting time and resources in the digitalization of the VET system. A successfully established digital VET system can provide young people with opportunities to find qualified jobs. During the process of conducting, reporting, and disseminating research, strong relationships should be established between educational and employment institutions (Busemeyer et al., 2019).
- **Build a digital VET system according to countries' own skills needs and shortages.** The digitalization process can be financially demanding. It has been observed in field studies that establishing VET infrastructure is challenging, and countries often face difficulties in modernizing their VET infrastructure. Therefore, digital VET investments need to be rationally planned, making the most efficient use of limited resources. Rather than developing common skills for all OIC member countries, each country should identify its own skill needs/shortages and plan training programs and infrastructure development accordingly. In particular, in countries with an informal sector, digitalization steps should be carefully calculated to have a meaningful impact on development. A strategic approach to the digital transformation of VET and skills systems should be planned based on the level of digitalization in each country/region (ILO, 2021c, 2021d).
- **Create a digital VET vision.** It is necessary to determine what the key policies are and how resources will be provided. For this, a digital VET vision should be created first (Busemeyer et al., 2019; ILO, 2021d). In the digital VET vision, VET and skill systems and digitalization policies should be strongly established. A systemic approach should be adopted when building a digital VET system. Because many institutions are responsible for digitalization and VET, therefore a systemic approach should be adopted (ILO, 2020).
- **Provide the legislative base:** Essential legal arrangements must be made. This involves determining the responsibilities and duties of institutions and organizations, specifying who will prepare and disseminate the skill standards and curriculum, and ensuring quality control and assurance of service providers. In many countries, the VET and skills system is managed by multiple actors, with the national training (or VET) authority

taking charge of policies, resource allocation, and support for training providers. It is responsible for monitoring training effectiveness and ensuring the system's efficiency and quality. Numerous ministries (employment, education, finance), digitalization service providers (ITC, digital office), and labor markets benefit from the service. It is essential to identify the government bodies responsible for various aspects of the VET system such as provider registration and accreditation authority. Additionally, it is crucial to establish legal protocols for privacy and data security (Busemeyer et al., 2019; ILO, 2021d).

- **Develop a digital VET strategy plan.** This plan should clearly define how VET institutions will be guided, including their responsibilities, objectives, infrastructure, and resources (Brolpito et al., 2016).
- **Ensure effective leadership and change initiatives.** Active leadership is essential to drive change and should actively involve all stakeholders in the digital transformation. This entails building awareness, knowledge, and ownership through networking and engaging relevant stakeholders using the tools provided by digitalization (ILO, 2021d). Additionally, it involves identifying, articulating, and reporting the advantages for all stakeholders resulting from the use of digital technologies tailored to their specific needs, which define the changes brought about by the transformation.
- **Define digitalization of work processes and its administrative aspects.** This encompasses the establishment of digital applications, websites, electronic documentation systems, online survey and analysis tools.
- **Facilitate the digitalization of learning content development and distribution.** The fundamental principles regarding which skills to teach and how to prepare and deliver their content should be determined.
- **Ensure digital inequality does not escalate.** The digitalization of the national VET and skills system should be inclusive and prevent the widening of the digital divide (Busemeyer et al., 2019; IIEP-UNESCO, 2022).

#### *4.4.1.2. Financing and establishment of a robust digital infrastructure*

Financing and resource utilization must be optimized for efficient digitalization. While some rich OIC member countries boast robust digital infrastructure, many others have weaker systems, making it challenging for governments to ensure the country's digital transformation and digital VET system solely with their own resources. Thus, governments need to explore different funding sources to support these endeavors. Apart from infrastructure, significant financial resources are required for staff training, setting up digital platforms, and developing digital content. Moreover, individuals benefiting from digitalization must have access to digital tools and broadband connectivity. Specifically, for the successful digitalization of the VET system, both students and instructors need adequate digital infrastructure and devices. Additional resources can be found through international organizations, donors, and private companies (**Box 12**; see also Secure Finance to Initiate Vocational Training And Active Labor Market Programs). By using their limited resources effectively, countries will enable a wider population to benefit from the digital VET system (**Box 13**).

**BOX 12** *Finding resources for digitalization*

- The digitalization of the VET system will contribute to the private sector, as they will employ young people trained through digital VET. It is crucial for the private sector to play a role in developing digital VET infrastructure. Moreover, large companies can extend their internal VET training programs to the public sector either for free or at minimal cost (ILO, 2020). Requests for financial support can also be made to large technology companies to assist in establishing digital infrastructure (IIEP-UNESCO, 2022).
- To provide financial support for digital VET, projects can be submitted to international organizations that offer loans and grants, such as the Islamic Development Bank, Africa Development Bank, and the World Bank. Additionally, support can be requested from various donor countries.

**BOX 13** *Efficient use of resources for digitalization*

- Encourage sharing of technological tools and equipment among VET institutions to share costs (ILO, 2021d).
- If trainers and learners do not have digital tools, digital tools such as computers can be given to users for a short time during the course.
- As will be discussed below, if teachers are highly qualified and produce their own training content, it will reduce the costs of preparing digital content.
- A certain portion of the education budget should be allocated to the development of digital skills and infrastructure in VET institutions (ILO, 2021d).
- Public investments should be made to build the necessary infrastructure, especially in remote locations where the cost-benefit ratio discourages private sector participation (ILO, 2021d).
- Public VET centers should be given more management flexibility and encouraged to establish partnerships or initiate projects (ILO, 2021d).

**A robust digital infrastructure, including mobile broadband, is essential for a successful digital VET system.** Therefore, collaborative efforts involving telecommunication companies, education and training institutions, employment-related organizations, and relevant government agencies are crucial to establish the required infrastructure (ILO, 2020). The lack of technical infrastructure poses a significant obstacle to the digitalization of VETs. Special attention should be given to addressing infrastructure deficiencies, especially in rural and disadvantaged regions, to prevent the widening of digital inequalities (Busemeyer et al., 2019). Conducting a thorough assessment of the existing digital technological equipment, such as computers, in all VETs is very crucial. Based on the data collected, digital investment plans should be developed accordingly. To ensure seamless access to digital resources, support from the telecommunication sector to provide broad internet connectivity to VETs is also very important. When collaborating with foreign partners, projects that align with the country's goals rather than solely based on foreign partner offers should be prioritized. This approach will better serve the specific needs and objectives of the nation.

#### ***4.4.1.3. Improving digital competence of teaching staff***

**The competence of the teaching staff in utilizing new digital content and methods is a critical factor in the successful establishment of digital VET.** Studies in countries that have adopted digital VET have highlighted the significance of teacher skills as a major concern. For instance, in certain African countries, providing digital training to teachers, instructors, administrators, and managers has been identified as a key challenge for implementing digital VET systems (IIEP-UNESCO, 2022). Similarly, in the case of Serbia, the digitalization of VETs has resulted in teachers merely transferring existing curricula to electronic platforms without innovating their teaching approaches or enhancing the learning experience using technology. It is crucial to understand that digital education goes beyond replicating face-to-face content, teaching methods, and practices in digital environments and tools (Brolpito et al., 2016). To address this, teacher competencies must be developed in alignment with the demands of the digital era. This involves conducting training activities to enhance the digital skills of teachers, trainers, and supervisors, ensuring their effectiveness in the digital realm.

**Quality teachers play a pivotal role in the success of digital VETs.** They need to stay updated with new and evolving digital trends and tools and effectively impart this knowledge to students who are preparing for the future workforce. However, it should be acknowledged that many teachers currently lack sufficient digital knowledge and skills. The level of their digital expertise directly impacts the utilization of digital VET tools, curriculum delivery, and classroom experiences. Thus, the digital proficiency of teachers stands as a significant limiting factor in the advancement of digitalization in VET. Emphasizing the education, training, and development of VET teachers, trainers, and in-company trainers becomes imperative to foster skill development in the field and enhance the overall quality of VET.

**Teachers need to be equipped with digital skills through both pre-service and in-service training programs.** VET teacher education curricula must include digitalization topics, but the focus should remain on vocational subjects to ensure proficiency in a wide range of professional skills relevant to digital VETs. Teachers should possess the ability to effectively use digital tools. Educators with developed digital competence can seamlessly integrate digital tools and software into their teaching methods, enabling effective learning experiences with students. Conversely, teachers lacking digital skills may struggle to incorporate technology in student learning activities. To provide high-quality digital VET, teachers must act as instructional designers, crafting comprehensive learning pathways that combine school- and work-based experiences, along with distance and simulation-based learning opportunities for students. VET staff should also be familiar with specialized technologies like AI, VR, and AR. Additionally, VET staff should possess the skills to assess students' performance within the digital system. Pre- and in-service teacher training programs, along with management training systems, should adhere to internationally recognized standards. Consequently, these training processes should be regularly updated and improved (GIZ, 2021b).

**Quality teachers need to be retained within the education system.** To achieve this, we must work towards making teaching an attractive profession, particularly in developing countries. The scarcity of experts in technological and digital working environments poses a significant challenge for both developing and developed nations. The lack of digital skills among teaching staff is a major bottleneck. However, in developing countries, it becomes challenging to find qualified teachers due to low wages, leading competent individuals to prefer working in the private sector. To address this issue, collaboration between the private and public sectors is essential to ensure that well-qualified personnel are engaged in teaching roles in schools (Busemeyer et al., 2019). Notably, educators and teachers with industry experience should be involved in providing vocational training that aligns with the industry's skill demands (GIZ, 2021).

**Successful implementation of digitalization requires coordination among teachers, support staff, and administrators and collaboration with the VET sector.** Managers should possess familiarity with digital technologies to ensure optimal performance. An IT-savvy manager can raise awareness, drive organizational behavior change, motivate the team, and utilize budgets more effectively for development and technical upgrades (IIEP-UNESCO, 2022). Every VET center should have dedicated IT support staff. One of the crucial aspects of digitization is the presence of backup personnel, technicians, etc., to promptly address any breakdowns in computers or other digital tools. Such support is essential to prevent disruptions in the learning process for students and teachers alike (Brolpito et al, 2016). Establishing continuing education centers is vital to enhance teachers' professional skills, including teaching techniques, materials development, and curriculum design (ILO, 2020). Close collaboration with the private sector should be established and course contents and teaching methods should be updated in accordance with their demands. In addition, trainers working in the private sector should also provide training in VETs.

#### ***4.4.1.4. Improving design and development of curricula***

The digital transformation of the labor market has led to new teaching requirements, as emerging professions demand fresh skills, necessitating updates in vocational training curricula (Busemeyer et al., 2019). In today's rapidly changing technological landscape, labor markets require swift adaptability in knowledge and skills. To meet these demands, modular vocational training modules should be designed with a holistic approach, ensuring learners gain relevant professional qualifications (Busemeyer et al., 2019; GIZ, 2021b). Establishing a digital system for trainers and teachers would facilitate interactive lessons and effective communication with various stakeholders, including employers, career advisory services, and other partners (ILO, 2021d). There are different types of digital training materials (**Box 14**).

**BOX 14*****Types of digital training materials***

1. Moodle shells, or similar products, are shorter course programs where resources are loaded, and learning and practice tasks, encompassing forum questions and live class session outlines, are incorporated. Furthermore, the created assessment tasks can be downloaded and utilized on alternative platforms through this framework.
2. Trainer and learner packs treat skills as packages that can be used in VET institutions to meet accreditation and quality requirements. Contained within these comprehensive packages is a learner's self-directed workbook that includes information, exercises, and assignment tasks. Accompanying this, there is a trainer's guide featuring session plans and assessment notes. The workbook's learning sequence incorporates pre-designed assessment tasks, alongside assessment tools like observation checklists and rubrics.
3. Self-paced modules offer course contents and assessments tailored to each individual's pace (ILO, 2021d).

**Learning management system (LMS):** The LMS offers essential “course management” functions, providing 24/7 access to course materials, assessments, and automated reporting of test results. LMS can be implemented in workplaces to serve students and enable employees to enhance their skills. Various methods can be utilized within the LMS, such as web-enhanced face-to-face, blended and collaborative learning, and distance learning (ILO, 2021d).

**Digitalizing assessment of training:** Most teachers and trainers find it highly useful to create, manage, and monitor web-based assessments, utilizing testing tools and functionality for homework upload and monitoring (ILO, 2021d). The results can be quickly and reliably monitored using various evaluation tools, streamlining the evaluation process with accurate and automatic reporting. In an LMS, competency-based training and assessment should be evidence-based. For remote evaluation, the following methods can be employed:

- **Online portfolios:** The training and work outputs portfolio can be displayed through the online tool under development.
- **Demonstration of practical knowledge and skills:** Learners can showcase their practical knowledge and skills through video recording.
- **Web conferences:** They can demonstrate their skills via web conferences.

**Learning analytics for assessing program effectiveness:** Learning platforms gather and retain learners' digital footprints automatically, encompassing written texts, task completion time, and navigation behavior (ILO, 2021d). These data should be analyzed to identify the most effective parts and the areas where the course system may be lacking.

#### *4.4.1.5. Recognition of skills and certification*

**Recognition and certification of new skills are of utmost importance.** With digitalization, new skills are emerging, and it becomes crucial to establish clear standards for these skills. Furthermore, a transformation in the process of recognizing and certifying these new skills in digitalized VETs is inevitable. The establishment of a national qualifications and accreditation authority, if nonexistent, is necessary. It is essential to define the training modules and the corresponding skills they encompass. Additionally, skills frameworks, such as the European Skills, Competences, Qualifications, and Occupations, should be developed (ILO, 2020). The digital certification system should ensure that digital badges are recognized as equivalent to diplomas in existing formal certification options. The use of technologies to introduce, expand, or strengthen mechanisms for Recognition of Prior Learning (RPL) is also crucial. These mechanisms can recognize skills acquired through informal, non-formal, or formal learning and aid users in participating in and completing the process (ILO, 2021e).

#### *4.4.1.6. Establishment of a digital career guidance system*

**The establishment of a digital career guidance system for VET is crucial for enhancing employability and increasing individuals' job prospects.** A digital system is expected to provide information about labor market conditions, access to job opportunities, and pathways to employment. These services should be accessible to individuals employed in the informal sector, self-employed, unemployed, or underemployed, and those outside the formal training system. Digital technologies play a significant role in connecting employment services with training centers and workplaces (ILO, 2021e). The career guidance system should offer multimedia and interactive resources, providing a media-rich experience and personalized support by leveraging the possibilities offered by digital technologies and continuous interaction (**Box 15**).

**BOX 15*****Components of a digital career guidance system***

A digital career guidance system should include:

- Tools for evaluating attitudes and skills related to specific career pathways.
- An online self-assessment tool to assess one's own skills.
- Databases for occupational education, training, and employment opportunities.
- Tools to maintain a CV and a career portfolio.
- Instructions in career decision-making.
- A tool to match people's skills with the demands of labor markets (ILO, 2020, 2021c).

Additionally, a digital career guidance system should provide the following policies:

- Enable quality career and employment service networks to offer real-time labor market information through digital access.
- Establish comprehensive multi-channel digital career guidance platforms and integrate career development support with digital education platforms.
- Adopt a user-centered approach to online or hybrid career guidance tools, aiding individuals in utilizing and accessing online counseling services effectively (ILO, 2021e).

***4.4.1.7. Digital platforms for the employees and employers***

**Digital technologies play a growing role in supporting employability services and facilitating connections between training centers and workplaces.** The main focus of the policy, strategy, program, and services of the digital VET system is not limited to school-age youth aiming to enter the job market for the first time. These services play a crucial role in reaching individuals outside the formal education system, including the unemployed, or employed in the informal sector. VETs, by their very nature, strive to enhance job placement and employment opportunities. Digitalized VETs are instrumental in increasing employability, promoting decent work, and enhancing productivity. In this regard, there are various digital measures and services to enhance productivity (**Box 16**).

**BOX 16**

***Measures and services to enhance productivity***

**Employment services:** Digital educational content plays a crucial role in skills development, benefiting both job seekers and those already employed by enabling them to enhance their skills and explore new opportunities. As a result, the presence of such tools can facilitate employers' and workers' engagement with the digital VET system by providing self-help portals, developing employability skills through training modules, supporting digital mentoring and counseling services, and facilitating matching for work experience, apprenticeship, and internship programs (ILO, 2021d).

**Skills for employability and productivity:** Retraining programs should prioritize the acquisition of skills that boost productivity and employability. Alongside technical expertise, it is crucial to develop and deliver modules that cover various non-technical skills, including social, emotional, cognitive, and metacognitive abilities. By focusing on both technical and non-technical competencies, individuals can become better prepared for the workforce, leading to increased productivity and better employment prospects (ILO, 2021d).

**Post-training strategies for employability:** To address challenges like skills mismatch and obsolescence, employees are already engaging through various communication channels. Therefore, it is essential to provide the required guidance, support, and training services through a digital platform. Customized online courses can be identified to offer short-term skills development programs, covering topics such as time management, networking, entrepreneurial skills, and making informed career choices (ILO, 2021d).

**POLICY MODIFICATION 4**

***Develop a guideline for digital transformation of national VET systems***

For low-income and lower-middle-income countries:

- Prioritize affordable and realistic solutions for setting digital infrastructure.
- Build partnerships with tech companies for online learning.

For upper-middle-income and upper-income countries:

- Provide opportunities for employee upskilling training to enhance productivity and to adapt automation.
- Pilot projects related to digital transformation of VET and share your lessons with other OIC member countries.

#### 4.5. Establish Clear Roles and Responsibilities for NGOs, International Organizations, and Donors

**Governments, international organizations, NGOs, and donors have a crucial role to play in promoting inclusive policies that address the needs of vulnerable groups, while reducing discrimination and promoting social inclusion.** The ILO has been actively involved in improving young people's working conditions. NGOs and international organizations can advocate for youth employment policies, as demonstrated by the Global Initiative on Decent Jobs for Youth, a partnership involving various organizations committed to creating quality jobs for young individuals (Global Initiative on Decent Jobs for Youth, 2023). To ensure effectiveness, these efforts should align with national policies on youth employment, and close collaboration between all stakeholders, including national governments, is essential for sustainable and impactful outcomes. Long-term partnerships, capacity-building, and securing funding resources are also key factors in ensuring the sustainability of youth employment programs.

**Awareness on the relevant OIC institutions should be increased.** It has come to light through this recent research that OIC member countries are largely unaware of the support and resources available to them through various OIC institutions. This lack of awareness may hinder the optimal implementation and success of vocational education and training initiatives, ultimately contributing to the persistence of youth unemployment. Therefore, this report aims to shed light on key OIC institutions and the specific support they provide to member countries in the realm of VET, facilitating informed decision-making and fostering collaboration for a more prosperous future **(Box 17)**.

##### **BOX 17** *List of OIC institutions regarding youth policy*

**The OIC General Secretariat:** It was established during the First Islamic Conference of Foreign Ministers in February 1970 in Jeddah, Kingdom of Saudi Arabia. It serves as the administrative center of the OIC (OIC - Organisation of Islamic Cooperation, 2023). The General Secretariat comprises a Secretary General and supporting staff, responsible for critical functions such as bringing important matters to the organization's attention, ensuring the implementation of decisions, resolutions, and recommendations from Islamic Summits and Ministerial meetings, providing working papers and memoranda to Member States, and coordinating the work of relevant OIC organs (OIC - Organisation of Islamic Cooperation, 2023). It focuses on promoting communication among Member States, facilitating consultations and exchange of views, preparing the program and budget of the General Secretariat, and submitting annual reports on the organization's work to the Council of Foreign Ministers. The OIC General Secretariat's role is crucial in enhancing vocational education and training to reduce youth unemployment in OIC Member Countries by fostering cooperation, knowledge sharing, and efficient implementation of programs and initiatives.

BOX 17

**List of OIC institutions regarding youth policy (continued)**

**Committee for Economic and Commercial Cooperation (COMCEC):** It was established in 1981 to promote economic and commercial cooperation among OIC member countries. It plays a significant role in supporting vocational education and training programs to reduce youth unemployment by facilitating regional and international partnerships and providing technical assistance in various economic sectors. In the context of VET and combating youth unemployment, COMCEC plays a vital role in supporting projects aimed at enhancing skills development, entrepreneurship, and employment opportunities for young individuals. The OIC-VET framework has introduced capacity-building initiatives in nine distinct areas; statistics, agriculture and environment, economy, finance and trade, employment, health, information, communication and transportation, labor and social security, social policy, and tourism. These programs encompass a wide range of sub-topics, aiming to strengthen expertise and competencies within each sector (COMCEC, 2021).

**Islamic Cooperation Youth Forum Development Center (ICYF-DC):** The primary objective of the ICYF-DE is to empower and engage young people from OIC Member States, in a number of activities related to diplomacy, capacity building, leadership development or cultural exchange. A range of activities and initiatives, ranging from conferences, workshops, seminars, trainings to Cultural Exchange Programmes, are being carried out by the ICYF-DE. The objectives of these actions are to enhance the skills, competences and capacities of young people so that they can be active contributors within their societies and in the global community. It actively collaborates with international organizations, governments, and institutions to enhance vocational education and training opportunities for young people. By fostering entrepreneurship, leadership, and innovation, ICYF-DC contributes to reducing youth unemployment and creating a conducive environment for economic growth (ICYF-DC, 2023).

**Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC):** It is a subsidiary body of the OIC and operates as an independent international organization. In order to increase the Statistical, Economic and Social Development capabilities in OIC member countries, SESRIC has a primary focus on conducting research, providing training and technical assistance. It is a platform where Member States can share their knowledge, expertise and data for the purpose of supporting evidence in policy making and decision making processes (SESRIC, 2023). With a focus on promoting sustainable economic growth and social progress, SESRIC offers technical expertise and capacity-building support to improve vocational education and training systems.

**Islamic Development Bank (IsDB):** It is an international finance institution, operating in accordance with the principles of Islam. Its main aim is to support development and social progress in OIC Member States through providing funding and technological assistance for various development projects. According to information

## BOX 17

**List of OIC institutions regarding youth policy (continued)**

from the Islamic Development Bank Group (2023), the bank's projects concern a wide range of sectors, including equipment and infrastructure development, education and training, entrepreneurship support, industry partnership, agriculture, research and development, healthcare, and energy. As a key player in supporting socioeconomic development, IsDB invests in education, including vocational education and training initiatives, to equip the youth with relevant skills that match industry needs. IsDB has been a strong advocate of South-South Cooperation (SSC) among its member countries since its inception, fostering collaboration to address common development challenges. Through the Technical Cooperation Program (TCP), IsDB facilitates the exchange of skills and knowledge among member countries, offering capacity development interventions to address immediate needs. Additionally, the Reverse Linkage mechanism, piloted since 2012 and now mainstreamed into IsDB's ordinary projects, enables member countries and non-member Muslim communities to share expertise and resources, promoting autonomous development and enduring partnerships (Islamic Development Bank, 2023).

**The Islamic World Educational, Scientific and Cultural Organization (ICESCO):**

It focuses on enhancing education and promoting scientific and cultural exchange among OIC member states. Within the context of VET, ICESCO provides technical assistance, shares expertise, and facilitates cooperation between member countries to strengthen vocational training systems and empower young individuals with valuable skills. ICESCO has set forth strategic goals to promote sustainable development, knowledge production, and cultural diversity among its member states. These goals include strengthening educational systems to ensure sustainable development and reduce inequality, accelerating integration into global economies while focusing on knowledge production, scientific development, and environmental protection. It aims to build peaceful, inclusive, and prosperous societies while respecting local cultures and protecting heritage (ICESCO, 2023).

**OIC Labor Center:** It aims to consolidate and empower social development efforts of member states while coordinating relevant organizations in the field of labor, employment, social protection, and human capital development. It seeks to promote the implementation of Frameworks, Declarations, and Resolutions adopted by the Islamic Conference of Labor Ministers, ensuring the implementation and promotion of objectives from relevant Conventions and Recommendations of the International Labour Organization adopted by OIC member states. The center's objectives include strengthening cooperation and expertise for the promotion of labor, employment, and social protection, supporting the development of a sustainable and accessible social protection system, enhancing solidarity in meeting the UN Sustainable Development Goals, and promoting the development of skilled and competitive workforces. Additionally, the center aims to raise public awareness about labor-related challenges, address demographic challenges, provide support for the implementation of international agreements, and stimulate discussions on effective employment tools for vulnerable populations (OIC, 2015). It is worth noting that the center will be headquartered in Azerbaijan.

**POLICY MODIFICATION 5**

***Establish clear roles and responsibilities for NGOs, international organizations, and donors***

For low-income and lower-middle-income countries:

- Focus on your needs and prioritize affordable and sustainable solutions.
- Raise awareness on OIC institutions for capacity building and financing projects.

For upper-middle-income and upper-income countries:

- Focus on effective collaboration among international organizations and donors.
- Define clear roles for aid organizations to prevent inefficiencies.

## 4.6. Secure Finance to Initiate Vocational Training and Active Labor Market Programs

**To meet the financing gaps and address the challenges of youth unemployment, inactivity, and precarious work, a comprehensive approach is needed.** As countries shift their policy responses from immediate relief to long-term recovery, a focus on reaching young people is crucial to prevent lasting economic and social impacts. Prioritizing youth employment and vocational training programs in economic recovery policies can help prevent a potential jobs crisis from becoming a social crisis (ILO, 2012, 2022a).

**Enhanced international cooperation is essential to support developing countries, where a large proportion of young people reside, by mobilizing domestic resources, strengthening social protection systems, and implementing financial reforms** (see also Box 17 for a list of OIC institutions regarding youth policy, including IsDB). Moreover, significant investments in green transition and climate change adaptation, including deploying and scaling up relevant technologies, can contribute to sustainable economic growth and provide opportunities for young people in emerging sectors (ILO, 2022a).

### POLICY MODIFICATION 6

#### *Secure finance to initiate vocational training and active labor market programs*

For low-income and lower-middle-income countries:

- Enhance international cooperation and mobilize domestic resources from a variety of sources including microfinance.
- Prioritize cost-effective solutions due to limited resources.

For upper-middle-income and upper-income countries:

- Encourage corporate social responsibility initiatives and public-private partnerships for skills development.

## 4.7. Develop Monitoring Indicators to Follow Up Progress

There are existing indicators and roadmaps such as the OIC-TVET Strategic Roadmap 2020-205 that should continue to be monitored. New indicators should also be developed and monitored in the following areas:

- Unemployment rate of graduates by field of study, region, and sex.
- The number of new apprenticeship and traineeship registrations.
- The number of work placements for transition year.
- Participation of population aged 25-64 in lifelong learning programs.
- Challenges of employers in filling vacancies.
- Challenges of students in finding jobs and their career progression following their graduation.
- Level of collaboration between employers and educational institutions.
- Top skills demanded by employers and skills shortages.

### **POLICY MODIFICATION 7**

#### ***Develop monitoring indicators to follow up progress***

For low-income and lower-middle-income countries:

- Prioritize simple data collection methods that require minimal infrastructure and limited resources.
- Highlight key development indicators such as Sustainable Development Goals.

For upper-middle-income and upper-income countries:

- Consider real-time data collection and machine learning for trend analysis related to skills shortages in a rapidly changing job market.



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## CONCLUSION

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## 5. CONCLUSION

**The purpose of this research report is to develop effective VET strategies to reduce youth unemployment in the OIC member countries to show the member countries how to establish an effective vocational education system or improve the existing systems.**

In this study, firstly the theoretical background and key concepts were presented, the current status and trends in youth unemployment are analyzed; and labor market tools used against youth unemployment in the world and within the OIC are examined. Secondly Germany, Türkiye, Uganda and Tunisia is chosen as case studies to examine their vocational education systems and the status of youth unemployment and the efforts made to reduce youth unemployment. This study examined Germany via literature review and field visits were made to three other countries. While preparing the Guide, this study benefited from the experiences of countries that have been successful in vocational education and have digitalized their vocational education system by taking technological developments and digitalization into account. In addition, the study benefited from the strategic documents and policy reports prepared by OIC institutions such as SESRIC and COMSEC. In addition, reports by international organizations ILO, UNECO and European Commission as well as the reports of GIZ, which works on vocational education and youth unemployment in many OIC member countries were used. Governmental reports and websites as well as the information obtained during field visits were also used.

**Youth unemployment is not only a problem of poor and developing countries but also of developed countries.** Thus, it is a global concern. The youth unemployment rate in OIC member countries is much higher than in other countries. Moreover, unemployment of young women is much higher than that of men and is a chronic problem. In addition to youth unemployment, the rate of NEET youth is quite high in OIC member countries.

**Long-term youth unemployment can be a threat to countries.** Long-term unemployment may result in youth subsistence work or criminal activities in the informal sector for income. Economic instability, poor education and social support systems can push young people into joining criminal organizations. Elevated rates of youth unemployment possess the potential to amplify socio-economic disparities and exacerbate insecurity within the country.

**There are many challenges that OIC member countries face in their efforts to reduce youth unemployment.** These include weak macro-economic outlook and lack of stability, size of the informal sector, illiteracy and low level educational participation, poor quality of education, existing gender disparity, poor basic skills, knowledge and skills mismatch, labor

market structures and rigidities, illegal migration, brain drain, climate change, fertility rate, and high youth bulge.

**Policies and programmes need to be developed to reduce poverty, improve the system and quality of education, and strengthen the link between labor market and education.** In this sense, VET plays an important role to reduce youth unemployment. It is necessary to transform the VET system in accordance with the needs of the digital age. This report developed a roadmap for digitalizing the VET system. Digitalizing the VET system is not only the transfer of training from face-to-face to online platforms. In addition to training, digitalization of VET includes all these dimensions of improving teacher quality, preparing digital contents, organizing training modules according to new skill needs, certification, guidance, employment, in-service training, and re-skilling.

**The digital transformation of VETs should be addressed in a systemic way.** An ecosystem should be created, including a vision with effective leadership and management, adopting teaching and learning practices that incorporate digital skills, assessing the acquired skills, and preparing content and curricula for the newly defined skills in effective collaboration with all stakeholders. In addition, a digital career system should be established and should be accessible to employees and employers. In this platform, employees will have the opportunity to acquire new skills, update their skills and see new job opportunities, while employers will have the opportunity to update the skills of their employees and find suitable candidates for new skills.

**With well-defined roles, responsibilities and policies, joint work can be carried out with NGOs and international organizations.** It is clear that especially countries with weak income and capacity need both human and financial support. Technical and financial support can be obtained from OIC affiliated or associated organizations such as COMCEC, ICYF-DC, SESRIC, IsDB, and ISESCO for improving vocational training and reducing youth unemployment. An effective monitoring mechanism should be established to see how successful the implemented policies are.

**Promoting social inclusion, and catering to the needs of vulnerable groups, including young women and people with disabilities, should be taken as the key issue in all policies and practices to improve VET and reduce youth unemployment.**

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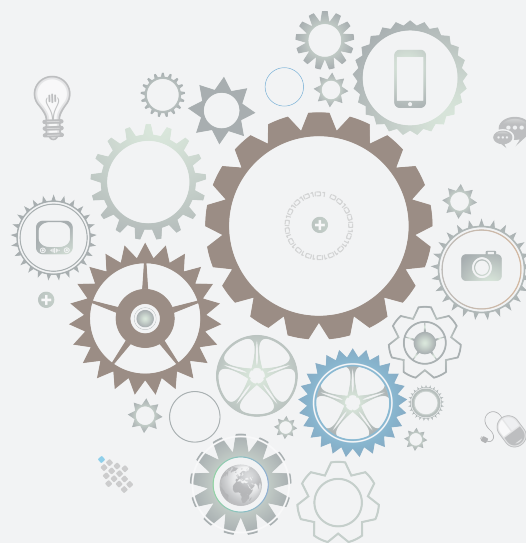








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