

Towards a
Union for the Mediterranean
Strategy on developing new
Vocational pathways
in Higher Education



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The document has been produced with the financial assistance of
the German Development Cooperation (GIZ).

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ACKNOWLEDGEMENT

This report is the result of a collaborative work between several key partners of the Union for the Mediterranean team and the Union of the Mediterranean Confederation of Enterprises (BUSINESSMED). They constituted the Steering Committee members who actively participated in the improvement and editing of this work. We are grateful for the advice and feedback we received from them, and we believe that this report would not have been possible without their contributions. We would like to thank the following distinguished members of the steering committee:

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We would also like to thank Itaf BEN ABDALLAH, Senior Advisor, Higher Education and Research Division at UfM, who provided unconditional support, guidance, and inspiration throughout the duration of the technical assistance.

The authors wish to thank all institutions and experts who shared their valuable opinions, feedback, and comments that have added value to this report. The authors who contributed to this report are:

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The technical assistance mission commissioned to BUSINESSMED by the UfM was coordinated by Takoua MRABET under the supervision of Jihen BOUTIBA, Director General coordinated of BUSINESSMED.

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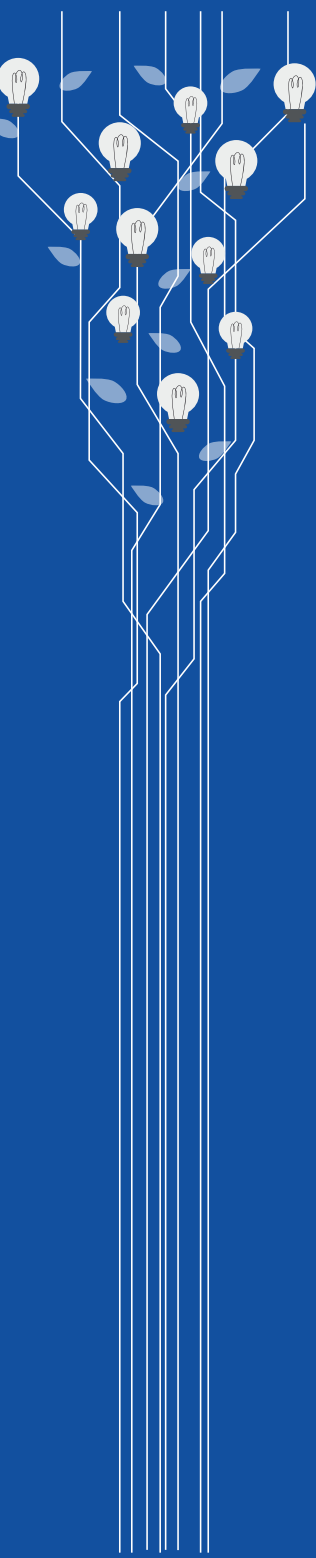


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ABBREVIATIONS

BSOs	Business Support Organizations
CEDEFOP	European Center for the Development of Vocational Training
CSOs	Civil Society Organizations
CoVE	Centers of Vocational Excellence
CMI	Center for Mediterranean Integration
ECVET	European Credit System for Vocational Education and training
EQF	European Qualification Framework
EMUNI	Euro-Mediterranean University
ETF	European Training Foundation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GCC	Gulf Cooperation Council
GDP	Gross Domestic Product
HE	Higher Education
IEMED	European Institute of the Mediterranean
ILO	International Labor Organization
MENA	Middle East and North Africa

NEET	Not in Education, Employment, or Training
NGOs	Non-Governmental Organizations
PPP	Public Private Partnership
SDG	Sustainable Development Goals
SEMED	South and Easter Mediterranean Countries
SMCs	South Mediterranean Countries
SMEs	Small and Medium Enterprises
STEM	Science, Technology, Engineering and Mathematics
UfM	Union for the Mediterranean
UNESCO	United Nations Educational, Scientific and Cultural Organization
UN	United Nations
UNIMED	Union of the Mediterranean Universities
VET	Vocational Education and Training
WBL	Work Based Learning
WEF	World Economic Forum

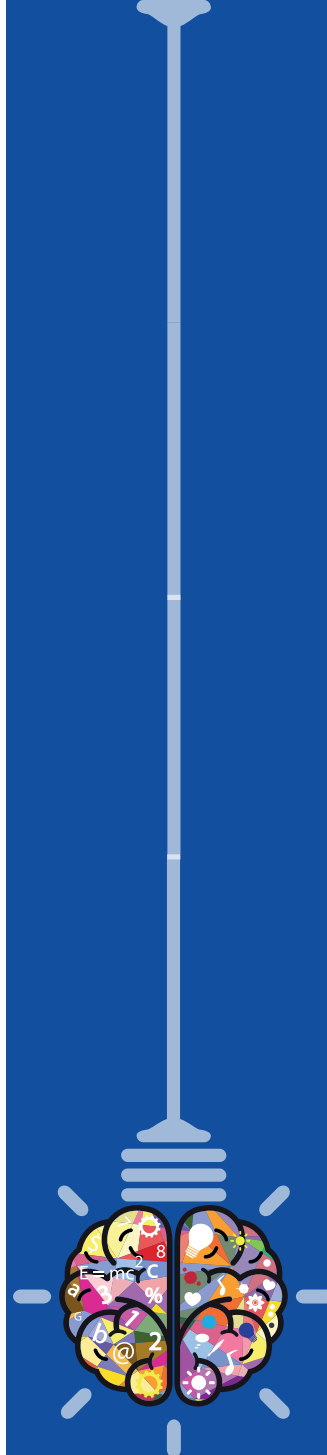
EXECUTIVE SUMMARY

This report presents the outcomes of a technical assistance launched by the Union for the Mediterranean (UfM) to investigate the potential role of Higher Education (HE) and Vocational Education and Training (VET) systems to tackle the issues of youth unemployment and skills mismatch prevailing in the South Mediterranean Countries (SMCs). The report is divided into two parts: the first part outlines the outcomes of the mapping of the existing interventions in the region, including the highlights of the best practices and the analysis of empirical data collected through focus group discussions with several stakeholders and an online survey disseminated among the UfM network. The second part of the report details a set of recommendations and policy actions aiming to fuel the discussion during a proposed regional dialogue where regional stakeholders can further explore ways to pave the way to a robust strategy to develop HE and VET collaboration. It also includes a conceptual framework that outlines the key pillars needed to design a workforce development initiative to tackle youth and women employment and skills development. Finally, the second part provides a concrete example of a proposed pilot project in the green skills.

The following points summarize key issues tackled in the second part of this report:

Effective skills development initiatives that respond to the specific needs of the SMCs labor market settings are essential. It is suggested that this initiative is undertaken through the development of innovative post-secondary pathways equivalent to the European Qualifications Framework level (EQF) level 4-6 and/or EQF 7-8. Higher Education institutions are invited to look for new approaches to forge strong and sustainable linkages with the private sector and respond effectively to important occupational skill areas by developing the required technical skills of vocational pathways.

■ The recommendations and policy actions should serve as guidelines to fuel the discussions that would take place in the regional dialogue on the synergies between HE and VET in the reform and development of vocational pathways that can better prepare youth for a future job. They are also key policy actions that can pave the way to a robust strategy to develop HE and VET collaboration and to support an appropriate strategy to reduce skills mismatch and unemployment of youth in the Mediterranean, particularly in the South.



■ The regional dialogue could be an opportunity to discuss the region priorities in regard to tackling youth and women employment and skills development through a sustainable collaboration between HE and VET. The regional dialogue is also meant to promote understanding between UfM stakeholders in UfM Member States and to facilitate regional dialogue and collaboration to explore themes of common and emerging interest in Higher Education and vocational pathways and discuss issues of relevance regarding skills mismatch and unemployment of young graduates and NEET populations.

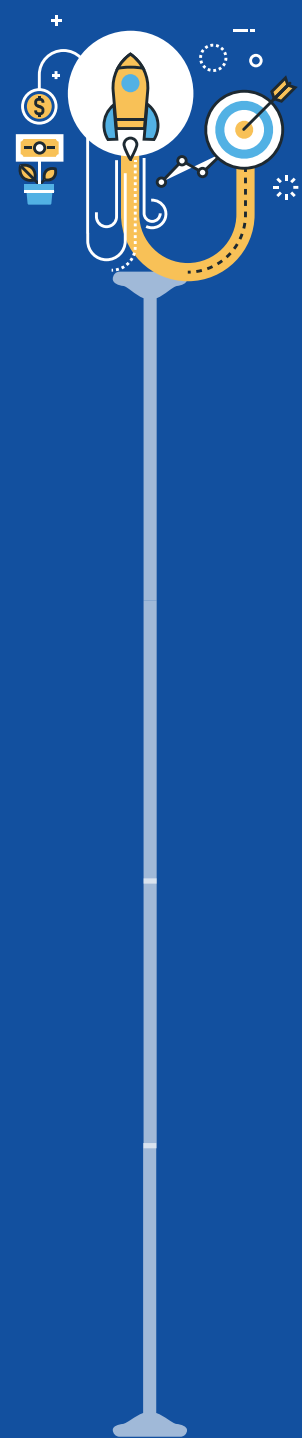
■ Framing the pilot project that could come out of the regional dialogue is also important. To successfully address the employment and skills development issues, there is a need to use a workforce development framework to help design and develop a concrete pilot project that includes detailed interventions. This framework includes four pillars. Each pillar promotes a set of interventions to be conducted on a group of beneficiaries. Four different beneficiaries are identified: job seekers, employers, employment services, and public institutions. This project framework can be used to design a sector-specific workforce development intervention such as green, blue, or digital sectors. It can also be used to design a generic workforce development intervention where the four pillars are used as a reference to design interventions that can impact on any aspects of a sector value chain.

■ It is proposed that the workforce development conceptual framework is used to design and develop a pilot project to promote green skills through postsecondary vocational pathways. This pilot project illustrates the establishment of organic linkages between Higher Education institutions and postsecondary vocational pathways equivalent to EQF level 4-6.

■ The pilot project will respond to the needs of the Mediterranean region regarding education, training, and skills development. A particular vantage point for this broader approach will be the added value of education, in connection to supporting Youth and Women, Economic Development, and the Environment, as a crucial tool to promote possible post-secondary vocational pathways that can be revisited by establishing innovative synergies between Higher Education and Vocational Training.

■ A possible partnership between HE and VET should highlight the 5 objectives raised in the regional dialogue:

- Promote LLL and encourage upskilling and reskilling of both youth and adults
- Address skills development to reduce skill mismatch
- Promote career guidance and entrepreneurship
- Encourage collaboration between educational institutions and the private sector
- Address enabling environment for public stakeholders/institutions



■ One possible concrete partnership between HE and VET can be delineated by the launch of a regional initiative to promote the development of green skills in postsecondary pathways. It is proposed that this initiative can have the following concrete actions:

- Co-creation of curricula at EQF-levels 4-5 and EQF-6-7 targeting upper secondary graduates.
- Training of trainers through Erasmus Teachers Academy.
- Collaboration with technology institutes and engineering schools to co-create curricula in green skills.
- Partnership with industries adopting green processes in environment related industries such as renewable energy, waste management, water conservation, sustainable environment, etc. or other industries such as manufacturing, agriculture, textile, tourism, etc.
- Partnership with private and public national and regional research centers to apply innovative solutions for green industries within a pre-selected consortium.
- Development of labor market intermediary systems for the anticipation and monitoring of skills needs for the green jobs and the listing of occupations in high demand, including occupations related to green sectors.
- Set up of labor market information systems for the assessment on the employment trends in green economy and disseminating the information regionally.
- Promotion of collaborations and partnership with the platforms of Centers of Vocational Excellence to share best practices in providing high-quality vocational skills, supporting entrepreneurial activities, and fostering inclusion and innovation.
- Organization of regional conferences to promote best practices in greening SMCs economies through skills development.
- Organization of matching events to link up employers with qualified profiles with green skills.
- Promotion of gender equality in green jobs since newly emerging occupations are not gender stereotyped. Encourage women in Science, Technology, Engineering et Mathematics (STEM) to orient their postsecondary studies to green pathways.
- Encouragement of Public Private Partnerships (PPP) initiatives in Education through a green initiative such as BALANCE project and GREENOVET project highlighted (see last section of this report).

■ The proposed strategy seeks a more inclusive growth in the Mediterranean region which would enable access to sustainable employment for youth and women to raise their livelihoods and ensure sociopolitical stability and offer an alternative economic solution to the deep roots of illegal migration and brain drain. The development of innovative Vocational Education pathways in key sectors such as green, digital, and blue economies is essential for delivering that growth.



■ The technical mission is culminated by a digital event held on January 27, 2022, that aims to present the results of the analysis and mapping efforts as well as the several consultations, parties and expert's exchanges of best practices and expertise. The event intends to increase understanding and visibility among participants of the new strategy and discuss and present proposals and possible pilots as a general reflection of how the UfM region could mobilize Higher Education and possible vocational pathways at the service of its citizens. The digital event is also an opportunity to facilitate engagement from relevant stakeholders to develop immediate actions and to propose a way forward to build the strategy.





BACKGROUND

Youth Unemployment in the Southern Mediterranean Countries (SMCs) has been a socio-economic challenge, putting increasing pressure on the labor market, as well as impacting on social and political trends, lowering institutional resilience and potentially increasing the risk of attractiveness of the extremist influences. This endemic youth unemployment is a multi-faceted issue. It can undoubtedly be justified by macro-economic factors (slow economic growth, regional fragmentation, pandemic, global recession, macroeconomic and demographic trends.); however, it seems that the increasing skills mismatch between industry needs, and the education outcomes is considered as one of the fundamental factors behind unemployment and underemployment of youth and women in an increasingly complex regional labor market. The entire Mediterranean region, and particularly the Southern and Eastern Mediterranean region struggles with the rising trend of skills mismatch which is prompted by a skewed and sometimes outdated education system (at all levels and particularly for Vocational Education and Higher Education, which also suffers from skills mismatches). Overall, the educational system is failing to provide youth with the necessary skills set to respond to labor market needs.

In addition, the Covid-19 pandemic had differential impacts across SMCs depending on their growth status. Due to their excessive economic and social vulnerabilities, SMCs suffered more economic and financial impacts. Several international studies (World Bank (2020b), OECD (2020), IEMED (2021)) reported that the SMCs remain the least integrated region in the world: it suffers from an endemic unemployment and a vulnerable private sector that generates low skilled jobs. Besides the overreliance on public sector employment, 60% of the jobs available are generated by the informal

Several studies including World Bank (2020b), OECD (2020), IEMED (2021) reported indicators that confirm the low integration ratio of the Mediterranean region in comparison with the rest of world regions

sector. Obviously, the economic context of the region negatively impacted on the social outlook, which is distinguished by a rampant poverty rate, the absence of robust social security provisions, and an increasing gender inequality.

Following the outbreak of the Covid-19 pandemic, labor market indicators in the SMCs highlighted high levels of unemployment and informal employment, with particularly high impacts among the large youth population and women. In addition, SMC economies rely heavily on services for employment, with 50 percent or more of employment in this sector. The highest labor market impacts are being seen in tourism, construction, and transport and logistics, which have been closed completely. Agriculture has remained open, but with limitations that have impacted workers, many of whom are informal, seasonal, or refugees. The digital sector in many countries is finding it relatively easier to redirect operations, given the new reliance on the digital economy to continue work in all sectors. There is also a widespread increase in public and private sector demand for innovations through online learning platforms.

It is estimated that women in the larger Arab world will lose approximately 700,000 jobs because of the outbreak of the pandemic (ESCWA, 2020). The effects of the pandemic on women and men workers are also dependent on the sector and conditions of their employment which typically differ for male and female workers. In the private sector, SMCs women represent a significant share of the workforce in the low segments of the manufacturing industry, which was severely affected by disruptions from both the supply and demand shocks. In Tunisia, 26% of women are employed in the manufacturing sector, where they are over-represented in low-skilled and low-paying sectors such as the textile sector (OECD, 2020) which went to a complete stop during many months. Women are also highly susceptible to hold insecure, part-times jobs: data estimate that 47% and 48% of women hold part-time jobs in labor markets such as Morocco and the Palestinian Authority, respectively (ILO, 2020). Also, nearly 62% of all female workers are informally employed in the SMCs region (ILO data) (OECD 2020).

In the SMCs region, the share of women in professional and technical jobs is estimated to double by 2030 through digitalization, online platforms, and entrepreneurship. However, enhanced women's digital skills and access to technology is a necessary but not sufficient step: despite representing 34% to 57% of science, technology, engineering, and mathematics (STEM) graduates and outperforming boys in digital skills, few SMCs women pursue their careers in STEM occupations or entrepreneurship. (OECD WEEF, 2021).

While all SMCs implemented social distancing measures by either closing businesses entirely or shifting operations to minimize contact, support funds for employers, employees, and informal workers have been established with different degrees, only in some countries of the region, such as Algeria, Egypt, Jordan, Morocco, and Tunisia. The Covid-19 pandemic and ensuing lockdown measures implemented to contain it, affected labor markets in the SMCs with massive increases in unemployment across all sectors and segments. Unemployment rates were further impacted as overseas workers are repatriated—frequently from GCC countries stressed by low oil prices and their own Covid-19 mitigation strategies.

Recent World Bank report (2021) on the post pandemic economic outlook of the SMCs indicate that the mitigation of the Covid-19 restrictions coupled with the vaccine rollout had a positive impact on SMC economies, and slowly but surely, the South Mediterranean region economy has begun to bounce back from the economic ravages of the Covid-19 pandemic, and a growth in GDP of 2.8 was reported by the end of 2021 (World Bank 2021).

In the same vein, the Euro-Mediterranean labor market has witnessed major changes during the last two decades and skill needs have diversified to include not only skills required by production and manufacturing occupations, but also new skills dictated by digital and service-based occupations, in addition to soft skills and 21st century skills that are globally recognized for their role in accelerating the transition from education to work. Indeed, there is an apparent increasing demand for skills coupled with economic, social, and technological developments. The ever-challenging context of globalization, technological progress and market economy development have dictated the upskilling and the reskilling of the existing and upcoming workforce to be able to improve productivity and enhance competitiveness. In this thought-provoking context, a plethora of studies , and projects have been conducted to explore the role of HE and VET to align skills required by employers in the present and future labor market to improve productivity and competitiveness in the sectors which are critical for the achievement of national employment and development goals.

Southern Mediterranean countries registered a decline ranging from -3.5% in Jordan, -4% in Morocco, and Tunisia up to -6.4% in Algeria and -10.9% in Lebanon. Egypt is an exception where a 3% growth is reported

The mapping section will lay out some of the prominent studies and projects that attempted to tackle the key role that Higher Education can play in collaboration with the Vocational Education to tackle Youth unemployment

SCOPE OF THE TECHNICAL ASSISTANCE

The Union for the Mediterranean (UfM) puts Higher Education and Vocational Training at the core of its agenda. It has been actively working on reducing the impact of the skills mismatch on the employment of youth and women in the Mediterranean region. As an intergovernmental organization, UfM navigates a multi-faceted stakeholder environment that represents its member states commitment to a common cooperation agenda. UfM is working towards supporting its member states in contributing to the Global Development Agenda, particularly to the achievement of the 2030 Sustainable Development Goal (SDG) 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all, the SDG 8-6: Reduce the proportion of youth not in employment, education or training (NEETs) and SDGs where research and innovation as well as gender equality (SDG5) play a crucial role. UfM strives to strengthen the capacity of Higher Education institutions, research centers, VET centers, and HE policymakers to improve the employability of their graduates and researchers so that they can find or create meaningful job opportunities and contribute to innovation in their local and regional economies.

The Higher Education system strives to diversify the curricula to cope with the workforce readiness and facilitate its transition from education to work and from job to job. This is accomplished through the integration of 21st Century skills, the implementation of active methods of teaching and learning, and the stimulation of a learning culture that encompasses innovation and entrepreneurial attitudes. The ultimate purpose is to achieve quality in education. UfM is aware of the importance of adopting a multistakeholders' approach to tackle issues related to skills development and youth employment. For UfM, involving Higher Education and Vocational Education stakeholders in exploring areas of collaboration to develop 21st skills and integrate them in the curricula and to design targeted interventions that aim at improving the skills of graduates is an important initiative that can foster transformative agendas in the region.

The UfM seeks to enhance regional cooperation, dialogue and the implementation of concrete projects and initiatives with tangible impact to address three strategic objectives: human development, stability and integration. One way to achieve these objectives is to address issues related to environmental degradation and climate change issues. Addressing environmental issues in the Mediterranean region and promoting the green economy can be one of the pathways to pursue to build a robust linkage between Higher Education and Vocational Education. Greening the economies of the Mediterranean countries is a hot topic and the 2030 GreenerMed agenda illustrates this interest. The agenda calls for a regional structured framework to accelerate the transition of the Mediterranean region towards a green, circular, and inclusive economy. The agenda addresses key environmental issues in the Mediterranean that require cooperation across borders and sectors, calls for natural resources preservation and facilitating employment creation and improving the quality of life for all.

UfM launched a technical assistance to investigate possible linkages between Higher Education and vocational pathways, paving the way for the adoption of a strategy on its potential added value in the field subject through the drafting of a proposed action plan. The technical assistance includes

a drafting and promotion of an operational strategy assessing the state of the art, best practices, gaps, existing policy tools, available opportunities, niches for action and recommendations on Higher Education vocational pathways in the Mediterranean.

The proposed strategic action plan examines how to reduce the skills gap to guarantee decent employment for the region's youth. An urgent reform of the HE and VET systems seems to be a priority in the policy agenda. Effective skills development initiatives that respond to the specific needs of the SMCs labor market settings are essential. It is suggested that this initiative is undertaken through the development of innovative post-secondary pathways equivalent to EQF level 4-6. Higher Education institutions are invited to look for new approaches to forge strong and sustainable linkages with the business sector and respond effectively to important occupational skill areas by developing the required technical skills of vocational pathways.

To align its strategic policy dialogue with the EU new agenda for Mediterranean Region, UfM invites its partners to consider developing innovative interventions to address common challenges, including youth employability. These innovative interventions can be in line with the green and digital skills which represent key skills for the jobs of the future. The present technical assistance opted to highlight one aspect of these innovative interventions and explored the possibility of developing skills for green transition into Higher Education programs offered at post-secondary levels equivalent to EQF levels 4-6 and 7-8 and targeting new occupations in the green economy. This orientation towards facilitating green growth through skills development can be the right pathway towards more inclusive regional economies that can create employment opportunities for youth and women. This innovative intervention can promote collaboration between Higher Education and Vocational Education since the focus will be on developing vocational pathways to develop green skills.

The proposed strategy seeks a more inclusive growth in the Mediterranean region which would enable access to sustainable employment for youth and women to raise their livelihoods and ensure sociopolitical stability and offer an alternative economic solution to the deep roots of illegal migration and brain drain. The development of innovative Vocational Education pathways in key sectors such as green, digital, and blue economies is essential for delivering that growth.

The Union for the Mediterranean has mandated Businessmed to conduct a technical assistance on the possible synergies between HE and VET. Given this fragmented regional background of interconnections between Vocational Training and Higher Education, there is a need to reinforce coordination and cooperation to capitalize all these different initiatives, sharing best practices and identifying challenges. In addition, while assessing current and previous initiatives on HE and VET to allow a better understanding of the success and failures of development interventions in education area, UfM plans to formulate an appropriate strategy on HE and VET projects' promotion.

For reference, this is the link to the joint communication: https://eeas.europa.eu/headquarters/headquarters-home-page/92844/joint-communication-southern-neighbourhood_en

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STRUCTURE OF THE REPORT

The present report outlines a coherent proposal for a strategy on the role and possible added value of the UfM in the field of Vocational Education, particularly in connection with Higher Education. The work includes an extensive desk research on HE and VET, and an analysis of empirical data on the subject matter, gathered through online surveys and semi structured interviews and meetings with relevant stakeholders. UfM partners including ETF, CMI, GIZ, EMUNI, and Unimed constituted a steering committee that played a key role in supporting the technical team with insightful comments and feedback on the proposed strategy shared during several steering committee meetings held during the technical assistance.

In addition, the report maps out major initiatives and best practices carried out regionally with regards to skills development and youth and women employment in the SMCs. Assessment of these initiatives enabled the technical team to put forward detailed recommendations and concrete proposals on the role of the Union for the Mediterranean, particularly regarding possible pilot actions to promote HE and VET collaborations.

The technical mission is culminated by a digital event held on January 27, 2022, that aims to present the results of the analysis and mapping efforts as well as the several consultations, parties and expert's exchanges of best practices and expertise.

The event intends to increase understanding and visibility among participants of the new strategy and discuss and present proposals and possible pilots as a general reflection of how the UfM region could mobilize Higher Education and possible vocational pathways at the service of its citizens. The digital event is also an opportunity to facilitate engagement from relevant stakeholders to develop immediate actions and to propose a way forward to build the strategy.

METHODOLOGICAL NOTE

To conduct the present study, the following methodological guidelines were followed:

- 1 — Mapping of VET and HE regional initiatives to tackle skills mismatch and to promote youth and women employment.
- 2 — Organization of three steering committee (SC) meeting to oversee the project's progress and to foster exchanges of expertise and best practices on existing policy tools, actionable instruments, wider ecosystem interactions and available opportunities for improving Vocational Education and training, particularly in relation with Higher Education. Major SC members are UfM, ETF, CMI, EMUNI, UNIMED, GIZ.
- 3 — Collection of empirical data by developing and disseminating an online survey to be shared with partner networks in the selected countries. Also, semi-structured interviews are conducted with key stakeholders from the private sector, public sector and programs experts in HE and VET. Collected empirical data is then analyzed and used to support arguments advanced in the current research.
- 4 — Organization of a digital meeting to present the final report of the technical mission.
- 5 — Drafting of the final report.

DESIRED OUTCOMES FOR THE STUDY

To conduct the present study, the following methodological guidelines were followed:

- 1 — Initiate a regional dialogue to discuss the urgency to reset regional strategy towards youth and women employment and skills development in line with the New Agenda for the Mediterranean as communicated by the European Union in 2021 to renew partnership with the Southern Neighborhood.
- 2 — Outline what can be a proposed framework of a regional strategy to recommend shaping the post-covid reset policy actions regarding youth employment, skills development, and possible synergies between Higher Education and vocational training to develop postsecondary vocational pathways equivalent to EQF level 4-6 and EQF level 6-7.
- 3 — Outline a set of recommendations and policy actions to fuel the regional dialogue on the urgency of developing innovative vocational curricula targeting green, blue and digital transitions in the Mediterranean economies.
- 4 — Develop a proposal for a pilot project targeting skills for the green transition.

PART I

MAPPING| EMPIRICAL ANALYSIS| ASSESSMENT OF BEST PRACTICES



OVERVIEW OF VOCATIONAL EDUCATION & TRAINING INTERVENTIONS

This section provides an overview of EU funded Vocational Education and Training (VET) and skills development programs with a particular focus on initiatives that target youth and women employment and 21st century skills development in Southern Mediterranean Countries (SMCs). The objective of this section is twofold: to provide a general overview of the EU funded programs that tackled the VET sector in the Mediterranean region and to present a thorough analysis of these programs. The section illustrates donors' different strategic approaches to skills development and the range of targeted interventions that they designed and implemented. The technical assistance presents an in-depth analysis of selected projects and programs by highlighting project objectives, implementation procedures and impact on the selected beneficiaries. The aim is to identify best practices and underscore lessons learnt from previous interventions.

The analysis refers to data that have been collated from a range of sources, including ETF recent reports (2020, 2021) on the vocational centers of excellence and on the assessment of Torino process, UfM recent reports Vision and Actions to Promote Employment in the Southern Mediterranean (2021) and Reinforcing the Nexus in the Mediterranean: A handbook for Academic, Industry and Policymakers (2020). The scope of this desk research covers recent publications issued in 2018 onwards, with a special focus on recent publications that make provision for the post pandemic global context. The desk research will review previous research findings to gain a broad understanding and knowledge of European funds that have been providing support to SMCs to tackle youth unemployment and skills mismatch. It therefore highlights the major findings from studies and projects carried out by UfM, ETF, CEDEFOP, UNEVOC, and GIZ.

YOUTH UNEMPLOYMENT IN THE MIDDLE EAST & NORTH AFRICA

According to the UN (2020), the MENA region (including SMCs) is one of the most youthful regions in the world with 50% of the region's population aged below 24. However, youth unemployment rate in the region ranges between 25% and 35%. It seems that the increasing youth population bulge that is expected to be a demographic dividend in the MENA region has turned into a demographic bomb that is closely associated with youth unemployment, underemployment and brain drain. In addition, there are 21 million NEETs in the region which represents one third of youth population. 43% of NEET populations are women and 62% of women are informally employed (ILO 2018). Female unemployment in the MENA region significantly reduces women's contribution to the regional GDP by 18% (WB 2019). It seems that the predominance of the informal sector, the vulnerability of the region's sluggish economies and the endemic labor market demand/supply mismatches found across the region have urged the donor community to place increasing focus on how best to support the improved functioning of labor markets in MENA countries.

The challenging situation of youth in the SMCs exacerbated during the pandemic which has deepened already existing socio-economic and gender inequalities and put the region's labor markets under pressure because of the increasing rates of unemployment, number of NEET population, informal employment, and poverty rates. According to a recent publication by IEMED (2021), The Covid-19 crisis has hit economies that were already struggling, as evidenced by chronically low GDP per capita growth rates, high unemployment rates for young people and graduates, rising inequalities in health and education, and subpar trade integration. The Covid-19 Crisis has highlighted the vulnerability of labor market operations in these SMCs and underscored the urgency to reduce high levels of informality and put in place longer-term sustainable social support systems for the informal and self-employed.

It has become vital for SMCs governments to adjust their employment policies, to upgrade the vocational and Higher Education sectors and to enable the business environment and encourage private sector growth and job creation. Long-term sustainable supply and demand-side solutions to youth unemployment and skills mismatch are required to expeditiously address the critical need to adjust labor markets to meet new economic challenges and opportunities.

The rampant unemployment and incessant illegal migration casting a pall over economic and socio-political stability across many Southern Mediterranean Countries have been a government priority. Governments of SMCs are highly inflexible in their operation with limited capacities to respond effectively to shifting paradigms and trends in the labor market demand and to efficiently increase youth employability. These governments have traditionally overregulated the private sector and pushed youth to aspire for public sector jobs. During the pandemic, the public sector was compelled to mitigate the impact of the pandemic by focusing on the containment measures that shifted public finance expenditure to the detriment of expenditure in private sector development and youth capacity building.

VET AND HE AS MAJOR ACTORS OF YOUTH EMPLOYABILITY

Youth unemployment is tackled from different perspectives and several stakeholders are responsible for this pressing issue. According to UfM (2020), a wide variety of initiatives involving academia, governments, businesses/industries, and civil society representatives have been developed and implemented but all these initiatives outlined possible solutions to be chosen to reduce the burden of unemployment. Most of these initiatives were successfully implemented and impacted positively on the target beneficiaries but they need to be scaled up to be able to overturn the unemployment trend. For this reason, UfM (2020) suggested renewing the call to action and doubling efforts to address the endemic unemployment of youth in the Mediterranean region.

To double the efforts, stakeholders in the countries are required to work together towards developing a focused and comprehensive strategic action plan that requires a number of critical success factors, undertaken in a phased approach over a mid to long term timeline. These stakeholders represent pivotal actors in driving youth capacity building, private sector development, youth employment, social inclusion, and poverty reduction. They play a key role in decision making processes at different levels: the macro, meso and micro levels. They can be represented by the CSOs, local NGOs, BSOs as well as government entities and private sector firms.

Education is responsible for the quality of labor market supply. Both VET and HE sectors contribute to building the human capital of the region, however, education alone, from primary to Higher Education, is not the sole responsible for supplying a workforce with skills that match the need of the labor market demand. As stated by UfM (2020), a multistakeholder approach is needed to tackle youth employment and reinforce the human capital in the Mediterranean region. In this multilateral approach, the role of VET and HE can thrive thanks to the support of the appropriate stakeholders.

Since Shanghai consensus on the VET system issued in 2012 (UNESCO 2012), there is no doubt that globally, countries have realized that investing in the vocational pathways is of paramount importance for economic growth, sustainable development, and social inclusion. Globally, several countries have investigated whether the VET system can be determinant of youth employment and a driver that can impact on youth labor market situation. Recently, several studies conducted by Cedefop (2018,2019,2020), ETF (2020), UNESCO-UNEVOC (2013), and many others have revealed that there is a high probability that the labor-market oriented vocational system can considerably contribute to reducing the skills gap and accelerating the employability of youth. These studies demonstrated how the VET sector can be a solution to tackle the double challenge of youth employability and unemployment and

how it can contribute to reducing the skills gap, accelerating the labor market insertion of job seekers and lead to considerable reduction of the mismatch between skills offer and demand.

In addition, the ongoing coordination between members of the Inter-Agency Group on Technical and Vocational Education and Training (IAG-TVET group) have made encouraging developments that have significantly enhanced the knowledge-sharing and the understanding of the key issues related to the VET sector. The inter-Agency Group has leveraged the work accomplished by its members and facilitated the design and implementation of more effective VET policies and recommendations to improve the VET sector role and to attain better economic productivity and prosperity. The VET sector has gained significant interest and it is seen as a potentially powerful solution to increase productivity, accelerate growth and create a more balanced and resilient society.

The VET sector role is to supply skills in demand by the labor market, however, the level of demand needs has to be increased in the first place to effectively allow the VET sector support to impact on the VET workforce. In the current situation, with the dual constraints caused by the recession and the Covid-19 pandemic, the labor market is disrupted. The demand for skills is usually triggered by industries' increased competitiveness and steady growth which leads to job creation. This highly uncertain outlook of the labor market increased the burden of the skills suppliers. Due to recent economic recession caused by the pandemic, millions of jobs have disappeared, and thousands of new ones are emerging. Both current workers who saw their jobs disappear and future workers who see no job opportunity amidst this crisis will need support. They need to be reskilled and upskilled to be able to fit into the new jobs that emerged during the pandemic and will continue to expand during the upcoming years.

It seems that the pandemic has created an opportunity for the vocational sector to thrive. Indeed, the pandemic seems to have accelerated the advent of future jobs and imposed on employers the pressing need to reskill their workforce to be able to cope with the technology-induced economic growth and competitiveness.

The recent World Economic Forum report on the future of jobs (October 2020) revealed that the double disruption caused by the pandemic and the accelerated technology pace made future jobs available today and increased the need to reskill the actual workforce and upskill the upcoming workforce. One of the efficient ways of approaching the workforce upskilling and reskilling is to use the VET system to build the capacity of the workforce in a cost-effective and effective manner.

Also, the HE sector can actively contribute to reducing skills gap and lowering youth unemployment. UfM (2020) report several best practices in the region that illustrate how partnership between the vocational and the Higher Education can be productive. The section below enumerates major UfM labeled interventions that involved either the VET or the HE or both.

IAG-TVET group was convened by UNESCO in 2008 to coordinate efforts in delivering policy advice and research on TVET
Its members are UNESCO, ILO, UNIDO, ADB, IDB, CEDEFOP, ETF OECD and EC

UNION FOR THE MEDITERRANEAN INITIATIVES

The Union for the Mediterranean (UfM) has been very active in promoting youth employability in the Mediterranean region to reduce/close the gap between labor demand and supply and support private sector development to foster job creation. Currently, there are seven UfM labelled projects under the Higher Education division in addition to the network of UfM partners developed through the creation of EMUNI and Euromed University of Fes. The seven ongoing UfM labelled projects promote Higher Education graduates' employability and work towards reducing skills gap to facilitate Higher Education graduates' transition from study to work. The following is a brief sketch to illustrate the scope of each project:

Euromed-RRM – Implementing a Rapid Response Mechanism for Higher Education in Emergencies in the Euro-Med region: Provides a scholarship program that enables young people caught in humanitarian crises such as refugees and students from the host communities to get a job. The program offers academic and non-academic skills support to 300 beneficiaries mainly from Syrian refugees increasing their potential to obtain Higher Education degree and find a job after graduation.

SEMED – Startup Europe Mediterranean project contributes to innovation, digital transformation, and sustainable economic growth in the Euro-Mediterranean region by interconnecting all the key actors of innovation ecosystems through a digital platform attuned to the requirements of the Euro-Mediterranean region. The project aims to enhance the nexus between innovation and employability and increasing digitalization in the Mediterranean.

High Opportunity for Mediterranean Executive Recruitment (HOMERe) project: targets high-achieving students in their last year of study before graduation who receive career insertion support to accelerate their transition from an academic environment to a professional environment through internship opportunities in one of the participating countries.

BlueSkills project promotes opportunities for “Blue” marine and maritime careers by developing skills, exchanging knowledge, and valorizing research for more sustainable Mediterranean Sea. Its aim is to develop new curricula and increase employability in the marine and maritime sectors. By supporting the Euro-Mediterranean communities of the Blue Economy stakeholders through Higher Education, research and innovation, the project enhances the shared knowledge of the Mediterranean Region.

Med Nouvelle Chance Project: addresses the socio-professional integration of young people, particularly of those who are not in education, employment, or training (NEET). It does this by strengthening cooperation among stakeholders, in particular second chance schools.

Higher Education on Food Security and Rural Development project: aims at enhancing cooperation between Mediterranean countries in the fields of food security and rural development through the improvement of postgraduate programs offered by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM).

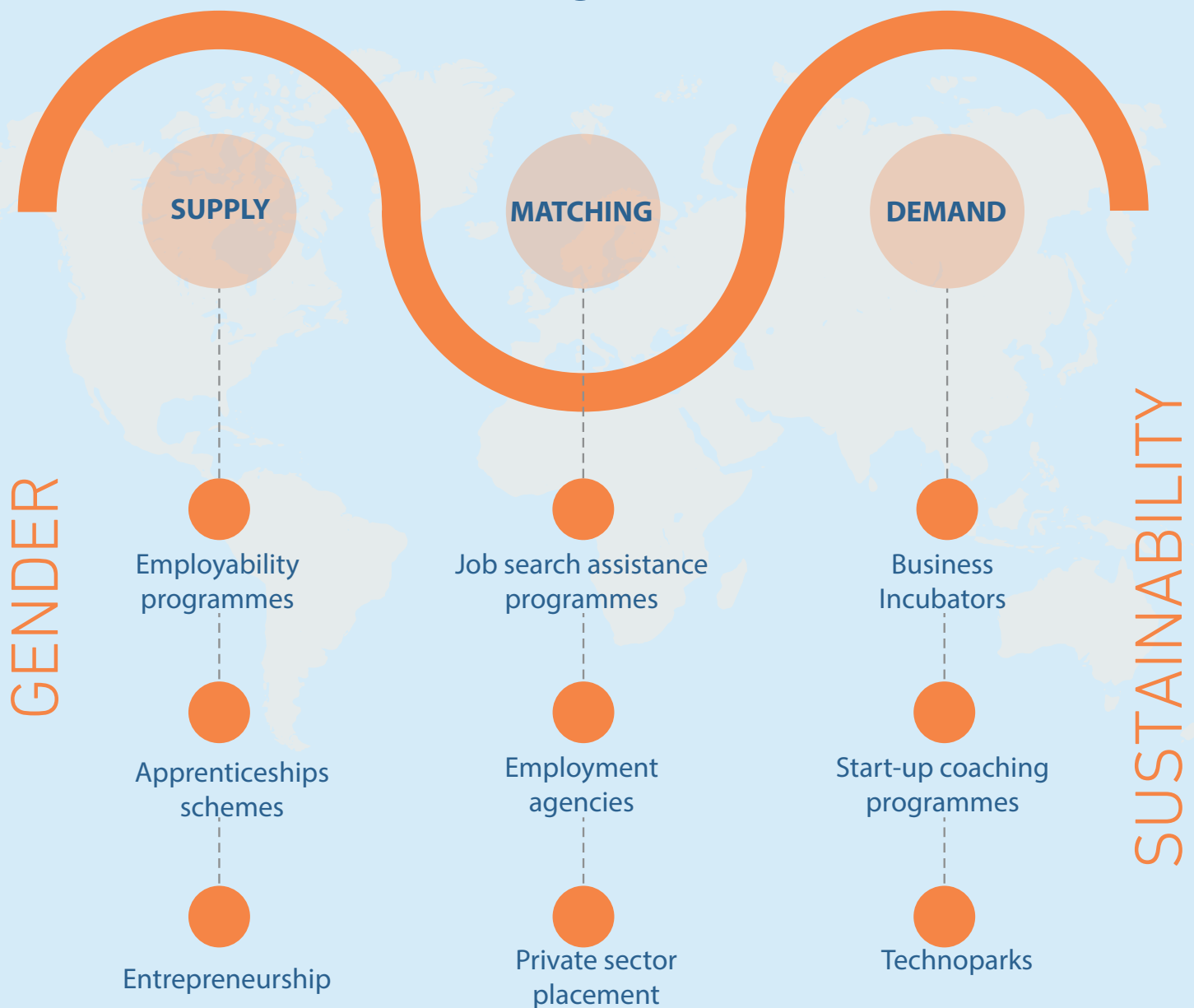
UfM Economic Development and Employment Division has launched the Med4Jobs initiative to boost youth employment in the Mediterranean region and to promote private sector development and increase its job creation potential. Med4Jobs gathers the expertise of key stakeholders that work on youth employability in the Mediterranean region including ILO, UNIDO, OECD, ETF, GIZ and UNCTAD. Med4Jobs initiative selects best initiatives that address the Med region labor market needs. The initiative also contributes to the promotion of job creation and Small and Medium Enterprises development by working closely with related partners in the region. Med4Jobs promotes a demand-driven approach to skills gap.

Figure 1 below illustrates the importance of joining efforts of several stakeholders to tackle the employment issue in the Mediterranean region. From the supply side, it is important to design and implement employability programs that build the capacity of youth. These capacity building interventions must be linked to apprenticeship schemes through solid collaboration with the private sector. Besides, fostering an entrepreneurship culture in the Mediterranean region is important to create jobs and reduce youth unemployment. From a demand side, private sector enterprises must be supported through technical assistance support schemes. In addition, to foster entrepreneurship opportunities, the eco-system must be set up to grow startups. Business incubators, startup coaching programs and techno parks are provisions to empower startups. According to UfM vision, labor market intermediary mechanisms such as job search assistance programs, employment agencies, and private sector placement centers are essential to foster skills matching. Youth employment and employability can be improved if gender equality is promoted, decent work conditions are available and national, regional, and local partners are involved in the entire process. Program sustainability remains the requirement to scale up such initiatives at the regional level.

Figure 1: A Multi-stakeholder approach to tackle employment in the Med Region:

COMMUNITY BASED APPROACHES

EMPLOYMENT



From this perspective and under the Med4Jobs initiative, UfM Economic Development Division has overseen 13 projects that strive to increase the employability of youth and women, close the gap between labor demand and supply and foster a culture of entrepreneurship and private sector development. The following table summarizes UfM labeled projects under the Med4Jobs initiative:

Table 1: UfM labeled projects under Med4Jobs Initiative

Project Title	Type of Intervention	Beneficiaries / Countries
Generation Entrepreneur	Sustaining an environment of entrepreneurship by providing business skills training to youth	Algeria, Egypt, Jordan, Lebanon, Morocco, MPalestine & Tunisia.
Maharat Med	Developing youth employability & entrepreneurial skills to transform job seekers into job creators	Egypt, Jordan, Morocco, &Palestine
MedNC-New Chance Mediterranean Network	Promoting exchange of best practices among centres working for the socio-professional integration of young people	Algeria, Egypt, France, Lebanon, Morocco, Portugal, Spain & Tunisia
HOMERe - High Opportunity for Mediterranean Executive Recruitment	Using internship mobility to combat the skills mismatch	Algeria, Egypt, France, Greece, Italy, Lebanon, Morocco, Spain & Tunisia.
Mediterranean Entrepreneurship Network	Mentoring and support for new-business starters	Morocco and Tunisia
Young Women as Job Creators	Promoting entrepreneurship among young women about to graduate from university	Albania, Egypt, Jordan, Morocco, Palestine, Spain and Tunisia
Euro-MedUniversity of Fes	New regional centre of excellence for higher education, research and innovation	All UfM countries
Skills for Success	Employability skills focusing on disadvantaged & unemployed women	Egypt, Jordan, Lebanon, Morocco and Tunisia

Project Title	Type of Intervention	Beneficiaries / Countries
Promoting women empowerment for inclusive and sustainable industrial development in the MENA region	Women economic empowerment in the MENA region	Algeria, Egypt, Jordan, Lebanon, Morocco, Palestine and Tunisia
CEED GROW	Growing and scaling SMEs with a particular focus on women	Albania, Morocco and Tunisia
YouMatch - Toolbox Project	Knowledge-share platform to improve sustainable employment services for young people	Algeria, Egypt, Jordan, Morocco, Palestine and Tunisia
Establishment of a Regional Platform for the Development of Cultural and Creative Industries and Clusters	To leverage these industries' potential to create new employment opportunities	SMCs
Incorpora - A labor integration program	Facilitating access to employment for vulnerable people	Morocco and Tunisia

- UfM labeled projects represent a wealth of information to better map out the upcoming interventions that will build on what has already been achieved by UfM labeled projects. The following represent strengths that UfM can capitalize on:
 - A strong network composed of 42 countries and a large spectrum of partners that can support in the project design and implementation.
 - Similarities and differences between countries (North vs. South), with best practices available from Northern countries.
 - Strong influence on policy makers owing to the diplomatic role of UfM.
 - UfM already piloted a plethora of projects that target youth unemployment and skills mismatch which gives long standing experience to tackle larger projects with regional impact on youth employability.
 - Availability of funds to undergo deep restructuring of the labor market trends in the region.

- Possibility to take a step back and evaluate the previous projects to assess what worked and what did not work.
 - Comprehensive knowledge management about the region's endemic unemployment and skills mismatch.
 - The overlapping efforts of the triple helix of academia, industry and government generates an innovative environment where opportunities to develop impactful interventions to tackle youth unemployment are abundant.
-
- In contrast, UfM labeled projects represent areas of improvement and few weaknesses can be depicted:
 - The complexity of implementing project activities with regional scope.
 - The difficulty to guarantee project sustainability after UfM and its implementing partners exit the project owing to the lack of engagement of local project partners.
 - The budgets allocated to UfM labeled projects are small in comparison with other donors' budgets which limits the project scope of work and reduces the number of beneficiaries and restricts the impact of the intervention.
-
- Still, UfM can identify niche areas that represent an opportunity to promote youth employment in the region. By adopting a cross-sectoral approach, UfM can link vocational and Higher Education education to employment.
 - Co-creating curricula for Vocational Education certificates/diplomas. Higher Education stakeholders have the expertise and knowledge to develop Higher Education degree for Vocational Education instructors. This can take the form of a professional master program in a specific area of expertise.
 - Offer continuous professional development to vocational instructors to continue building their pedagogical skills. Higher Education experts can be involved in this capacity building process whether through training or research provisions. This type of professional/academic development will raise the level of teaching and learning in Vocational Education institutions.
 - Focus on upper secondary vocational diplomas which can be co-managed by VET and HE. Restructure the path and create flexible legal and financial frameworks.

Recently, UfM has undertaken a major research initiative and developed an informative handbook 'Reinforcing the innovation-employability nexus in the Mediterranean'. The research project involved several stakeholders including universities, research centers, policymakers, industry, and intermediary institutions. The handbook addressed youth unemployment issue in the Mediterranean region and mapped out previous and current European and Mediterranean initiatives to improve youth employability.

The research adopted the so-called Triple Helix Model theories that consider that boundaries between spheres are increasingly fading and blurry which brings about a system of overlapping actions. According to the handbook, the best way to tackle youth unemployment is to consolidate efforts of the three spheres: academic, industry and government. In addition, the handbook claims that the interactions between the three spheres provide an innovative environment where knowledge flows dynamically in all directions. The handbook presents a rich selection of best practices on tackling youth unemployment that can be replicated or tweaked.

The handbook sketches 146 program initiatives and best practices and presents a literature review of 1,350 publications. It selected 11 themes related to youth employability namely skills, teaching and learning, collaborative doctorates, international mobility, and internship to career services, knowledge exchange, partnership for innovation and digital innovation to capacity development inside Higher Education institutions.

UfM' s Innovation-Employability Nexus framework represents best practices and available tools that can be used to reinforce career opportunities of university graduates by including multiple stakeholders in the process. However, collaboration between different spheres that have diverse scope is not always a source of innovation. It can be a complex process that cannot be implemented owing to the legal and financial constraints imposed by the sphere systems. To illustrate, academia is dictated by strict rules that concern curriculum development stages and cannot freely collaborate with industry unless provision for curriculum development is modified/softened. Likewise, government cannot partner with private sector stakeholders unless clear terms on Public and Private Partnerships (PPPs) are defined and approved. Also, in some SMC countries where governments are inflexible, political will become key to guarantee ownership and sustainability of multi-stakeholders' reform initiatives.



OTHER EUROPEAN-DONORS INITIATIVES

European Training Foundation Initiatives (ETF)

ETF strives to strengthen relations between EU and its neighborhood countries and operates within EU external relations policies. ETF mandate constitutes improving skills by promoting innovative teaching and learning, assuring quality in vocational training, promoting digital skills learning, and encouraging continuing education. ETF also works on promoting employability by prioritizing work-based learning, entrepreneurship, and career development to ensure a smooth transition from education to work. Also, ETF supports public and social stakeholders' capacity building and encourages more participatory governance models and stronger coordination mechanisms.

ETF develops several types of interventions including projects, campaigns, and activities. ETF major ongoing projects include 1) promoting vocational excellence, 2) engaging enterprises in skills development and 3) analyzing of skills demand. For instance, ETF initiated the project ETF network of excellence which promotes EU's initiative of center of vocational excellence (CoVE). Under this initiative, ETF works on strengthening the network of vocational centers by promoting eight themes: work-based learning, pedagogy and professional development, entrepreneurial vocational centers, digital skills, alternative governance and financial autonomy, green skills and social inclusion and equity. ETF developed an assessment tool that helps centers align their development with that of other members of the network. ETF network of excellence represent a valuable opportunity for vocational institutions in the SMCs to join the network and commit to improve their centers' structure, functions, and processes.

ETF network of experts developed a plethora of studies, surveys, and assessment reports on vocational excellence, skills development, and human capital development. The present report highlights one of ETF recent publications (2020, 2021) which represent a valuable reference to gain knowledge on the findings and recommendations prepared for the VET sector development. ETF (2020,2021) recent studies addressed the skills gap issue related to human capital development in the Mediterranean region. ETF (2020) study promoted the role of the VET sector in human capital development. It highlighted the key role of centers of vocational excellence and how they can be an engine for Vocational Education and training development.

■ ETF (2021) reported three emerging issues related to human capital development that need to be addressed urgently:

- Underutilized human capital hampers growth and job creation
- Social inclusion and gender gap leads to human capital loss to foster socioeconomic prosperity
- Insufficient preparedness to anticipate and address the future skills demands

■ The report also outlined the main challenges SMCs face hindering the process of human capital development. According to the report, improved education level that the region population attained did not translate into better labor market outcomes due to the endemic skills gap and skills mismatch which is caused by several macroeconomic factors. The study outlined the following as major challenges facing policymakers to address the unemployment of youth in the region:

- The fast growing and dynamic socio-economic global context that led to major changing patterns in trade and technology and imposed new skills development that the region could not cope with owing to other challenging social aspects.
- The rising of the informal sector and the importance of public sector jobs for unemployment graduates.
- The long-term unemployment of youth and negative impact of the waitlist leading to waste of youthful energy and potential.
- The deep gender inequality apparent in the high unemployment rate of female graduates.
- The unfair distribution of economic resources.
- The political challenges in several countries of the region.
- The weakness of the private sector and inability to create quality jobs that can absorb the high unemployment of graduates.
- The lack of education-to-work transition support increases graduate waitlist and reduces their qualifications due to the long inactivity

■ Most SEMED countries selected the Vocational Education and Training sector as one of the priority sectors to tackle youth unemployment and skills mismatch. However, these countries allocated insufficient financial resources to reform the sector and showed weak institutional capabilities to lead structural reforms. The VET sector remained unable to reduce the skills mismatch and anticipate labor market needs.

■ ETF (2021) assessment of the Torino Process indicates that SEMED countries accelerated the implementation of structural reforms in the SEMED countries and that the Covid 19 pandemic was one of the triggers to induce this acceleration. ETF (2021) outlined three major VET policy reforms areas that SEMED countries targeted to tackle youth unemployment and skills mismatch:

- Enhance partnerships with the private sector for skills anticipation and development by taking into consideration the skills need in the labor market and considering sector diversification and SME development as a key driver of socio-economic prosperity.
- Modernize and diversify VET provision by enhancing pedagogical skills with the implementation of competence-based approaches and encouraging teachers' continuous professional development provision and reforming curricula based on needed skills required by the labor market.
- Ensure inclusiveness and accessibility of skills for all including individuals with disabilities, low qualifications, migrants, etc. There is also a focus on adult learning through lifelong learning provisions and measures to prevent school dropouts and accelerate the transition from education to work.

■ Following the assessment of the Torino Process, ETF (2021) enumerated a list of priorities for actions to take to urgently tackle the skills development issue in the SEMED countries:

- Foster the establishment of a multilevel and multistakeholder governance ecosystem at national, sectoral and local levels that can steer skills development to respond efficiently to real socioeconomic needs
- Diversify and sustain the financial mechanisms of VET to address the various needs and ensure budget sustainability.
- Establish a lifelong learning culture and reinforce adult education to ensure economic growth, social inclusion, and digital/green transition.
- Make provisions for Skills development to ease labor market transition, support job creation and reinforce inclusion.
- Create the conditions for a lifelong career guidance system.
- Regulate and extend WBL for more effective and faster transition.
- Prioritize key competences notably on digitalization and entrepreneurial learning
- Gather data for better skills anticipation and matching, and monitoring labor market outcomes.

To support SEMED countries effectively and efficiently implement these policy action reforms; the support of the donors' community is essential. As a matter of fact, EU commitment to human capital development in the Mediterranean region has been translated into the need to build solid and sustainable partnerships to tackle issues related to economic recovery and sustainable development following the Covid19 pandemic. EU engagement in the SEMED region is part of the policy framework and priorities set out in the European Neighborhood Policy in 2021. EU agenda also includes fighting climate change, renewing commitment to the rule of law, addressing forced displacement and irregular migration.

CEDEFOP Studies

- Following the recent EU joint communication proposal (2021) to renew EU partnership with Southern Neighborhood within the framework of European Neighborhood Policy, a new, ambitious, and innovative agenda for the Mediterranean relaunches North-South cooperation and outlines provisions to realize the untapped potential for a shared vision to help the region achieve post-Covid19 pandemic economic and social recovery. The new agenda underscores the importance of investing in the Region's youth and empowering its participation as an agent of change and proposes the following:

- Support the mainstreaming of youth in national policies,
- Help our partners improve their education systems governance
- Give priority to addressing structural causes of school dropouts; young people not in lack of opportunities, education, employment, or training; skills mismatches, youth unemployment; and brain drain.

- The proposal underscores the importance of capitalizing on SMCs educational systems and their role in developing the skills needed to facilitate education to work transition. The proposal highlights the importance of prioritizing NEET population in the SMCs and calls for immediate actions to address the structural causes that led to the significant increase in NEET population in the South.

In addition, the new EU agenda for the Southern Neighborhood stresses on the importance of effective coordination and partnerships across policy spheres to tackle employment and education opportunities and outlines specific action to enhance human development interventions. Examples of cooperation include the following:

- Participation in EU programs like: Erasmus+, Marie Skłodowska-Curie Actions under Horizon Europe, Creative Europe Program, as well as in relevant European networks
- Cooperation and experience sharing in accompanying innovation efforts and support to the development of smart specialization strategies

- Cooperating on digital education under the 2021-2027 digital education action plan
- Cooperating on Platforms of Centers of Vocational Excellence (CoVE) including through the ETF Network of Excellence, to create local "skills ecosystems" and enhance reskilling.
- Cooperating in the anticipation of skills needs and, in the design, and development of skills and strategies in a lifelong learning perspective, with the support of the European Training Foundation for Vocational Education and training (VET), skills and capacity development, including skilling for green jobs and green economy.
- Supporting integrated approaches and the capacities of relevant ministries (education, employment, health, culture, and social protection) to improve the access and quality of services to young people and people not in education, employment, or training (NEETs).

Moreover, there are numerous EU funded initiatives that have been working on developing policy papers, studies, empirical analysis, etc. to tackle the issue of youth unemployment and skills mismatch taking into consideration the importance of developing/reforming the Vocational Education and Training Sector in collaboration with other sectors including Higher Education sector and the private sector.

CEDEFOP is one of EU agencies that supports the promotion, development, and implementation of the EU policy in the field of Vocational Education and training (VET) as well as skills and qualifications policies. CEDEFOP role is to enhance and disseminate knowledge, provide evidence and services for policymaking, including research-based conclusions, and facilitate knowledge sharing among and between EU and national actors. Recently, CEDEFOP has focused on specific themes to promote the role of the VET sector as a viable solution to reduce the skills mismatch and increase the employability of youth in European countries. CEDEFOP studies focus on three main areas: skills and labor markets, VET knowledge centers for lifelong learning, VET systems and qualifications. Although CEDEFOP focus is mainly on EU Vocational Education systems and strategies, it is worth exploring whether those initiatives can be transferred to the Southern Mediterranean Countries taking into consideration the specificities of the Vocational Education pathways in these countries.

GIZ was commissioned to support UfM to promote youth employability in Southern and Eastern Mediterranean countries. The project, entitled Support to the Union for the Mediterranean (UfM) on Employment and Trade, was initiated in 2017 and effectively contributed to addressing the unemployment and skills mismatch issues in the region.

GIZ contributed to the implementation of Med4Jobs program by participating in the development of the Toolbox Project under the YouMatch activity. GIZ role consisted in developing working tools to be used by employment services in the region. The aim was to build the capacity of career centers facilitators/advisors so that they improve their support to youth in search for a job. The toolbox included information about job orientation, job preparation or job placement services. It includes good practices and case studies of existing methods implemented in the region. The toolbox was a good initiative to promote an innovative approach to support youth in transiting from education to work. The initiative was also tackling the skills mismatch issue and focused on creating an effective matching mechanism between employers and job seekers.

Since the Arab Spring that spread in the Mediterranean region, hundreds of donors' funded initiatives have been designed to counter the rampant youth unemployment that further exacerbated the socio-economic situation in the region. These initiatives attempted to tackle the skills mismatch issue by continuously promoting collaboration between vocational institutions and private sector stakeholders.

Joint CMI-UfM-Grand-Duchy of Luxembourg “Initiative on Employability through Vocational Training and Skills Enhancement in the Maghreb Countries.

In 2015, the Luxembourg Presidency of the Council of the European Union acknowledged that weak vocational and educational training systems could be an attempt to the efforts made by Maghreb countries to build a better future for their youth guaranteeing the necessary stability and development for their economic growth. For this reason, it launched, with the support of the CMI and the UfM, the ‘Initiative on Employability through Vocational Training and Skills Enhancement in the Maghreb Countries’. On 16 July 2015, at the informal meeting of the Council for ‘Employment, social policies, health, and consumers’ (EPSCO) that took place in Luxembourg, Euro-Maghrebi Ministers welcomed this proposal that is an response to the high unemployment rate among youth in the Maghreb (Algeria, Morocco, and Tunisia) that have a social, political, and economic impact on Euro-Mediterranean countries.

At a first stage, the Initiative would be launched in Maghreb countries. However, it is aimed to be extended to all Southern Mediterranean countries.

An innovative Approach: The objective of the Initiative is to enhance quality and pertinence of training and skills delivered to Vocational Education trainees in the Maghreb countries through the set-up of sectoral networks of high-level Vocational Education centers, benefitting from strategic partnerships with the North and the South of the Mediterranean and the associated industrial sectors. These North-South and South-South partnerships are aimed to harmonize certificates and skills delivered by the network's institutions and to encourage cooperation based on co-production and academia-industry collaboration for each sector. The expected result is a growth of youth employability through better quality training and better matching with local and regional labor market needs.

- Two characteristics make the Initiative innovative and complementary to existing actions in Vocational Training in the Mediterranean.
 - The regional South-South and North-South approach: Maghreb countries decided to work together for the implementation of all the actions of the Initiative, making the joint participation of the three beneficiary countries a condition for proposed actions eligibility. This means that Maghreb countries will jointly take part in all sectorial networks of vocational training centers to coproduce training programs in cooperation with the private sector in order to reach the same quality level in the three countries thanks to the collaboration of European centers of excellence
 - The bottom-up approach: This Initiative comes from a demand by beneficiary countries to act in sectors and with actions that have been identified following an analysis of the vocational training ecosystem in the context of their local work environment. The private sector demand and national development strategies have also been taken into account. The level of participation in the Initiative also follows a subsidiarity principle: the beneficiaries and network members are the vocational training centers themselves instead of the national institutions they are subordinated to

OVERVIEW OF HIGHER EDUCATION INTERVENTIONS

This section provides a mapping and overview of the situation of the Higher Education system in the South Mediterranean region and the challenges it has faced during this exceptional period with a particular emphasis on suggested solutions and alternatives. Indeed, one of the main purposes of education is to make learners employable but the COVID-19 pandemic has drastically impacted the rules of the job market. In fact, in the Mediterranean, youth are bearing the brunt of the crises and undergoing exclusion on the economic, social and political levels with high unemployment and a lack of opportunities. Furthermore, the pandemic has not only widened the skills gaps but also accelerated the arrival of the future of work with automation and Artificial Intelligence.

According to the World Economic Forum article entitled *The Future of Jobs and Skills in the Middle East and North Africa: Preparing the Region for the Fourth Industrial Revolution*, the South Mediterranean region remains plagued by a slow pace of technological change and a lack of opportunity and so university graduates suffer from long-term unemployment. The pace of job creation for new labor market is too slow; consequently, more than three-quarters of youngsters turn to informal work without written contracts in places like Egypt, Jordan, Lebanon and Tunisia. As a result, Southern Mediterranean countries need technology such as digital platforms that lower transaction costs for businesses in underdeveloped areas and create jobs in new and existing sectors. Amazon, for instance, estimates that nearly 10,000 data scientists may be needed for the cloud industry in the Middle East’.

Besides, the consequences are not only the disruption from the pandemic-induced lockdowns but also the economic contraction and technological adoption by companies that will ‘transform jobs tasks and skills by 2025’. Furthermore, the poor incentives of public financing of education are the source of the problem and so private education is a way to improve labor market outcomes of graduates. Moreover, skills gaps continue to be high and have become a major hindrance to business operations and stable growth. Therefore, the public sector tries to provide stronger support for reskilling and upskilling and simultaneously companies need to invest in better metrics of human and social capital.

The same Report also states that in the next five years, 40%, and 50% of all employees will need reskilling and so companies and the public sector need to take measures to involve the VET sector that will provide stronger support to HE to train new graduates.

In the same context, in 2010 the EURO-MED Plan for Higher Education and Research proposed a roadmap to strengthen ties and cooperation between academic institutions through exchange programs for students and teachers and establishing equivalence between joint university degrees, as well as boosting collaboration in certification of competence for Higher Education graduates in scientific and technical sectors. It even set out a plan for cooperative projects in scientific research and technological innovation to be carried out through fostering ties and partnerships between research centers and units. The objective of the roadmap was also to establish a 'Euro-Mediterranean network through fully exploiting patents, boosting cooperation and exchanging expertise between technological groups in the partner countries. It also aimed to promote development-related research units within economic enterprises, particularly those operating in promising sectors and innovative activities'.

In 2020, the UfM undertook a major research initiative that resulted in an enlightening handbook titled Reinforcing the innovation-employability nexus in the Mediterranean and piloted a plethora of projects that target youth unemployment and skills divergence. The handbook focuses on a total of 11 themes and includes a section entitled teaching and learning that states that 'life has never been more uncertain for university graduates' as learners face a highly complex and ambiguous environment and need support to overcome challenges. It claims that HE's and research centers are key drivers of change.

The present mapping exercise also focuses on the literature that depicts the gaps and challenges faced by the SMCs and re-examines the already proposed reforms in light of the developments of the job market after the Fourth Industrial Revolution. Indeed, we can identify two types of challenges regarding HE, which are pedagogical due to low quality of education and lack of alignment of graduate skills with professional skills, and economic because of poor budgets and regional gaps.

This report even contributes to the debate in Southern Mediterranean countries regarding the role of Higher Education in skill formation and employment. For instance, it is noteworthy mentioning the example referred to in the HHS Public Access Author manuscript, which shows that unemployment among Higher Education graduates in Egypt and Jordan is an indication of the mismatch between the output of the Higher Education system and the requirements of the labor market.

The EMUNI Annual Conference and Governing Bodies' Meetings in partnership with the UfM underlined that internationalization improves the quality of education and research activities and extends opportunities. It also facilitates intercultural understanding and exchange of knowledge. It is noted too that in terms of

improvements to further accelerate internationalization, attention should be paid to well-known challenges such as the availability of the internet that is a crucial issue posing a challenge in parts of the Mediterranean region. Besides, the EU continues to be an indispensable element to the internationalization in the region through Erasmus programs and funds. Simultaneously, digital transformation goes hand in hand with the application of the skills gained through internationalization. In addition, the emergent opportunities are widening the gap in the use of online resources for individuals, institutions and countries, which widened the regional gap and inequality due to shortage in digital skills and digital amenities. It is also highlighted that science is often pointing to the required policy measures.

The 2021 public virtual event, co-organized by the UfM and the CMI, called A quality Higher Education for all in the Mediterranean: towards a renewed Higher Education agenda, highlighted that the disruption caused by Covid-19 has prompted a general rethinking around the roles of education and employment and has underlined the need for socio-economic transformation, through improving the quality of education and investing in employability skills. It is estimated that in the South Mediterranean region, 300 million young people would join the labor market by 2050, requiring both the creation of millions of jobs and a duly prepared and skilled young generation. Moreover, event documentation noted that ‘the persistent gap between the skills acquired at universities and the requirements of the job market is one of the major structural issues that the education sector in the region faces. Indeed, over 32% of enterprises in some South Mediterranean Countries have identified labor skill levels as a major constraint to hiring’.

This challenge can start to be addressed by a succession of interventions engaging multiple private and public stakeholders, within the context of broader government strategies. At this event, increased internationalization was recommended, in a context in which the gap between the skills acquired at universities and the requirements of the job market appears as one of the major structural issues faced by HE. Internationalization is likewise a crucial factor in determining the quality of Higher Education. It holds significant advantages for students, in terms of gains in the 21st century skills, to boost employability. Hence, a regional strategy ought to be promoted, to deepen internationalization in the region and make it a higher priority for HE institutions as well as wider stakeholders. This event also underlined the aspirations of the 2007 Cairo Declaration towards the creation of a Euro-Mediterranean Higher Education and Research Area, which aimed to rethink Higher Education against current challenges and opportunities. Its overall purpose was to begin to pave the way for a new agenda for Higher Education in the Mediterranean region; as such, this event was an opportunity for the UfM and CMI to synthesize and propose a way forward to relevant stakeholders.

The 2020 CMI-World Bank Report the Internationalization of Higher Education in the Middle East and North Africa, conceived to stimulate much-needed regional policy dialogue on the topic, provides a crucial baseline in research on internationalization. The report detailed the benefits of internationalization, recognizing that internationalization has an important role to play in delivering relevant and quality education and boosting students' 21st century skills that are crucial for their employability in today's labor markets. It assessed the current state of internationalization in the region's Higher Education systems and provided policy recommendations. The report affirmed that internationalization was a critical part of the reforms needed in education and training in the region, with recommendations including raising awareness on internationalization and making it a higher priority for institutions and governments in the region. More specifically, the report recommended implementing internationalization understood in a broad sense, including internationalization of curricula, highlighting the importance of the mobility of people, ideas, knowledge, and skills. With regards to the Covid-19 pandemic, the report suggested that despite the challenges this has brought, the crisis has also provided an opportunity for MENA to accelerate its efforts to internationalize its Higher Education systems, through increased internationalization 'at home'.

Within this context, it is stated that ensuring a quality and relevant Higher Education for all in the Mediterranean region has become an urgent step for wider regional development and responds to the UN Sustainable Development Goal 4. In fact, internationalization can be an important means of building global citizenship, which is a key priority today for UNESCO in its work towards meeting SDG 4 on education. SDG 4 is made up of 10 goals and targets the increase of the relevant youth skills including technical and vocational ones, decent jobs and entrepreneurship. It also intends to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all'. Moreover, it aims equal access for all women and men to affordable quality technical, vocational and Higher Education as Target 4.3 claims. In the same vein, the 2021 UfM study entitled The Internationalization of Higher Education in the Mediterranean-Current and Prospective Trends. The study commissioned by the UfM to UNIMED focused on 10 countries Algeria, Egypt, Israel Jordan, Lebanon, Libya, Mauritania, Morocco, Palestine, and Tunisia and investigated the internationalization of Higher Education and the opportunities available at the national and regional levels and defining country-specific recommendations aimed to address national and regional challenges. Among the main recommendations, this study suggested applying in the Southern Mediterranean countries the initiative of Erasmus+ traineeship, which is only present at the EU level, that supports internships, work experiences, apprenticeships abroad for students enrolled in a three-year and master's degree course and for doctoral students. This type of mobility will not only improve students' communication skills and their language and intercultural competences but also their transversal skills and entrepreneurial spirit.

The same source mentions that to combat some of the interconnected challenges faced by the South and East Mediterranean region, there is a need for reforms to foster youngsters' inclusion and this requires serious investments in human capital, together with 'a rethinking of education to include increased, smarter mobility, not only of people, but also of knowledge and skills' as stated in the 2020 CMI-World Bank report previously mentioned. In the same context, the article entitled Closing the Skills Gap published in the World Economic Forum stated that closing the global skills gap could add US\$11.5 trillion to global GDP by 2028 and so it is recommended that Higher Education and training systems keep pace with the new demands of labor markets and embrace change to meet future needs. The B2O ITALY Employments & Education Policy paper states that the world faces an economic and employment crisis of historic proportions. The impact of today's crisis on youth and long-term employment prospects prioritizes skill gap issue and suggests trainings and career guidance to stimulate job matching and creation. Moreover, the academic backgrounds of graduates should be developed by fostering digital and human skills and also learner's soft skills, which are required by today's employers, such as teamwork, problem-solving and leadership. Thus, Higher Education must provide learners with adequate and relevant job skills and prepare them to be active members in society. Hence, universities are meant to be a pivotal place to prepare young people for their role in industry and are responsible for that mission.

Indeed, the HE systems must diversify the university programs and curricula and make them cope with the workforce readiness by enhancing and developing further the 21st Century skills and at the same time shifting towards more active methods of teaching and learning that engage students to release their creativity and potential for innovation. As a result, it is crucial to stimulate a learning culture that encompasses innovative and entrepreneurial attitudes to improve students' employability and professional integration. Thus, both policies and academic degrees are meant to be strategically tailored to fit the needs of the society and economy. Besides, youngsters are expected to be ready for coming industrial revolutions.

In May 2020, the World Bank Report entitled Higher Education Context: Impact of COVID-19 in MENA, acknowledged that the different challenges and effects of the COVID crisis triggered MENA countries to make an enormous effort and succeed in implementing distance education. They moved most of their courses online such as The Virtual University of Tunisia, which offered courses via distance learning, made its platform to other local universities to help them move their courses online. Morocco also used several distance education channels to reach as many students as possible. Thus, the pandemic has provided an opportunity to build digital capacity and strengthen system management for universities and Higher Education institutions.

To conclude, it is crucial to examine the state of the art of existing actions and missions relating both vocational and HE and the potential alignments between the two educational systems in order to build a possible collaboration and strategize linkages

and synergies. The coexistence of high unemployment and skills shortages illustrates that producing the same graduates cannot be the solution. To succeed in facing these new challenges, both educational systems need to ensure that the right mix of skills is being taught and learned and this can be ensured if there is a linkage between HE and VET. Besides, it is essential to provide the correct balance of skills for the labor market and supply a mix of HE and Vet collaboration by coordinating their role. However, we notice that both educational systems are currently explored separately in most cases without referring to any clear connection or correlation. In this context, it is important to acknowledge that to cope with the requirements of the new job market, there should be a focus on a strategy that synergizes both vocational and Higher Education systems to fit the new requirements. Indeed, in a world committed to lifelong learning, and with a job market requiring a skilled and adaptable labor force, it is essential to build clear pathways between the Vocational Education and Higher Education sectors. Moreover, the growth of Higher Education continues to improve but the creation of partnerships between vocational and HE is still limited as the movement between and within these two educational sectors is complex.

The COVID-19 impact has accelerated the arrival of the future of work with automation and digitalization. Consequently, the gap between the skills acquired at universities and the requirements of the job market have widened and have become one of the major structural issues. In fact, the pandemic has not only made the skills gap broader but also the need to close it more urgent especially with the quick rise of artificial intelligence. This calls for new investments and mechanisms for upskilling and reskilling both human skills and digital skills. As a consequence, education and training systems need to keep pace with the new demands of labor markets that are continually challenged by technological disruption and the evolving nature of work. As jobs are changing and technological advances continue, some skills are becoming obsolete while demand for others is rising. Such shifts are creating new jobs and high unemployment among Higher Education graduates is widening.

This section contributes to the debate in SMC countries regarding the role of Higher Education in skill formation and employment in important ways. The aim is to explore the challenges related to HE and the solutions required to young people to acquire the necessary tools needed to cope with the 21st century skills and jobs. Moreover, it is crucial to explore the horizons for a future collaboration between Higher Education and Vocational Training to ensure good matching between skills acquisition and labor market needs knowing that these needs are evolving and that a synergy between both educational systems can be a solution to reduce youngsters' unemployment. One key challenge for the region entails reshaping countries' skills development in line with their exposure to the jobs landscape of the future. Few of the SMCs are fully prepared to better the quality of their education and staff training systems to fit the right skills brought by the Fourth Industrial Revolution. In order to build a better world of work, it is necessary to implement innovative solutions to have the right tools and

competencies and to have a strategic vision to stimulate the entrepreneurial potential. With the future jobs, youngsters have to acquire the right skills for new jobs and ways of working and build the new competences required whether they are technical or human. These organic skills need to be developed in specific disciplinary and professional contexts and fostering technical and digital skills is as important as developing the learner's soft skills and even the entrepreneurial ones.

While the online education and training industry has seen a surge in interest from digitally connected workers in lockdown, it was crucial to best prepare youngsters for the post-pandemic economy. Moreover, the interest for the e-learning and distance education Higher Education programs has to expand with new insights into the modernization of the educational system. Indeed, higher levels of numeracy are essential across many more occupations and developing the technical and entrepreneurial skills stimulates a learning culture that encompasses the joint development of technical expertise and entrepreneurial attitudes. As the demand for digital skills increases, so is the demand for soft skills such as communication, teamwork, problem solving and self-management, which are essential to support both effective teamwork and creative linkages across disciplines and specializations.

Furthermore, the 21st century skills prioritize entrepreneurship education with the intent of producing graduates who are expected to create entrepreneurial impact within organizations. Indeed, entrepreneurial skills such as analytical and critical thinking skills have proved to be essential. All these skills overlap and complement the hard and technical skills and so the educational systems have to work more on developing strategies to enhance skills development. Hence, if we state that Higher Education is one of the keys to career opportunities, education must be available in more flexible and innovative forms to enable lifelong learning. This will be essential both for deepening skills and re-skilling as new ones evolve.

Skills mismatch has been blamed for the unemployment of educated youth and social unrest in the wider SMCs. As there is a substantial mismatch between the output of the Higher Education system and the needs of the labor market, the gap between the skills learners acquire and the skills they need is becoming more obvious. Moreover, there is an insufficient understanding of the disruptive changes underway in the Fourth Industrial Revolution and a lack of alignment of firms' talent strategies with their broader innovation strategies. Graduates need a kind of Higher Education that prepares them for the new world of work. Various forces need to be at play whether they are societal or financial or technological but there are powerful constraints. In fact, the challenges that the educational institutions face can be categorized into social, economic, and pedagogical.

The social background of youngsters does not offer the best conditions for them to acquire the right required skills especially in unprivileged regions called also 'shadow areas'. Because of the poor conditions, this regional gap engenders unequal opportunities since one of the biggest issues is the lack of access to internet and fiber

optic that haven't reached all regions. Consequently, youngsters are not up to date and lack the skilling and upskilling necessary for the jobs of tomorrow. Moreover, they are not motivated and willing to take collaborative actions. Another structural challenge in the SMCs is that investments in female education have not translated into equal employment gains for women as their participation in the labor market is inferior to that of men. Hence, it is necessary to advance economic gender parity.

The social gap is not the only challenge that HE faces as the economic and financial issue is serious and needs real solutions. Indeed, technical tools to cope with the new digital world are necessary but it is hard to keep up with the pace of digitalization because of the lack of equipment needed. As there is no financial support to integrate the expensive adequate required materials, it is necessary to have an allocated budget for this purpose. Moreover, there is an insufficient understanding of the challenging changes of the Fourth Industrial Revolution. Indeed, the lack of alignment of graduate skills with professional skills especially after the Covid-19 requires a reshaping and reframing of the curricular and the proposition of common and overlapping courses. Moreover, there is a huge absence of qualified teachers and specialists in the new digital market which urges an intellectual renewal and innovation. The low quality of education is also due to poor trainings and difficulty in the design and development of subject specific skills and the bad working and learning conditions. Besides, there is no alignment of programs and courses with future national reforms. Furthermore, there is a shortage of university partnerships with the private sector and few exchange and open university programs.

In this context, UfM plays a prominent role in promoting regional cooperation in the field of Higher Education, research, and innovation. It also strives to foster youth employability in the region and to address skills mismatch. Its role and the value-added support is crucial to promote possible linkages between HE and post-secondary vocational pathways by establishing innovative solutions and recommendations. The SMCs need to make the investments and reforms needed today to strengthen its workforces for the economy and labor market of tomorrow. Indeed, the public and private sectors need to work together to ensure that the talent pool is expanded and better skilled for the future. Thus, one of the solutions is shaping the future of education, gender and work and this can be achieved thanks to the support of the region's stakeholders through public and private collaboration, which has to seek to close skill and gender gaps.

As the challenges for Higher Education are becoming more significant, to meet them universities need to give teaching and curriculum design a greater priority. Having the right skills and competencies are also key with training. HE has a vital role to play and the learning systems must help students to gain the right skills whether they are hard or soft and set them on a path of lifelong learning. Learning systems must catch up, ensuring that everyone leaves school with strong skills so that they can make a smooth transition into work and adulthood. Students learn better by engaging in

activities that help them understand which technologies, methods and creative practices can incite innovation. They have to be able to develop their skills in team collaboration and communication. They also have to build a skills strategy that must be solid and strong to link between the worlds of education and work.

Future education should not just prepare students for jobs but stimulate them to see the possibilities for innovation. Digital new jobs require new capabilities and graduates need cultural competencies to be effective practitioners. They even need skills to analyze and interpret data and digital communication. Hence, promoting educational innovation and communication by creating new areas and modernizing science and technology has become a must.

As the pedagogical approach has to enhance the development of students' specific skills and improve the quality of education and research, it is important to consider policy implications in terms of new opportunities for curricula innovation and new relationships between institutions and local economic and social actors.

Apart from the specific subject oriented learning and the new relevant skills, the Higher Education systems in the region should respond through the diversification of new university programs, technical and professional degrees granted by polytechnic institutes and open university programs. Moreover, as there is a wide interest in e-learning and distance education especially after the pandemic, globalization, digitalization and other mega-trends have sparked changes that are radically affecting the current working lives. Indeed, internationalization is one of the most important developments that globalization has brought to Higher Education worldwide. It is also a crucial factor in determining the quality of Higher Education and research activities. It even extends opportunities and enhances the quality and standards of teaching and research. Moreover, raising awareness on internationalization and prioritizing it is a key priority today. In fact, global learning enables the acceleration of learning through the exchange of insights and experience, which enhances students' employability and professional integration.

To cope with the new challenges, the Higher Educational system should develop modern pedagogies based on a collaborative and interdisciplinary approach to research and teaching and to advance the entrepreneurship culture at the university, which can facilitate the closure of the skill labor market gap. However, parallel to Higher Education reform and skills development initiatives, it is crucial to suggest other proposals to support market-based reform in the field of Technical, Vocational Education and Training. In fact, in order to address skills mismatch and tackle the unemployment issue, collaboration between both educational systems can be the right solution.

The Higher Education system strives to diversify the curricula to cope with the workforce readiness and integrate the 21st Century skills by implementing an up-to-date learning culture that encompasses innovation and entrepreneurial approach.

As the social and economic trends have widened the skill gaps that have increased graduates' unemployment, it is crucial to find an alternative to reduce the rate of unemployed graduate learners. In fact, Higher Education and training systems have to keep pace with the new requirements of labor markets and strengthen their partnership through collaborative programs and events. Thus, in addition to the question whether Higher Education prepares students adequately for the new labor market, another one can be added to enquire if Higher Education is crowding out other pathways to skills offered by vocational and professional programs. Aware of the need to develop a solution to face this issue and to work deeply on skills development, it is recommended to find synergies between HE and Vocational pathways and reinforce collaboration between both educational systems since it would allow tackling in a more holistic way the current challenges related to youth employability and human capital in the Mediterranean region.

It is noteworthy mentioning that the literature regarding the cooperation between HE and Vocational is limited. Indeed, the mapping report shows that HE and Vocational are explored separately without referring to any clear connection or correlation. Parallel to Higher Education reforms, it is crucial to implement initiatives to support vocational training and to make both systems cooperate more. Moreover, there is a need for new insights into the modernization and digitalization of both educational systems and for joint teaching and training programs whether they are academic, technical, or administrative.

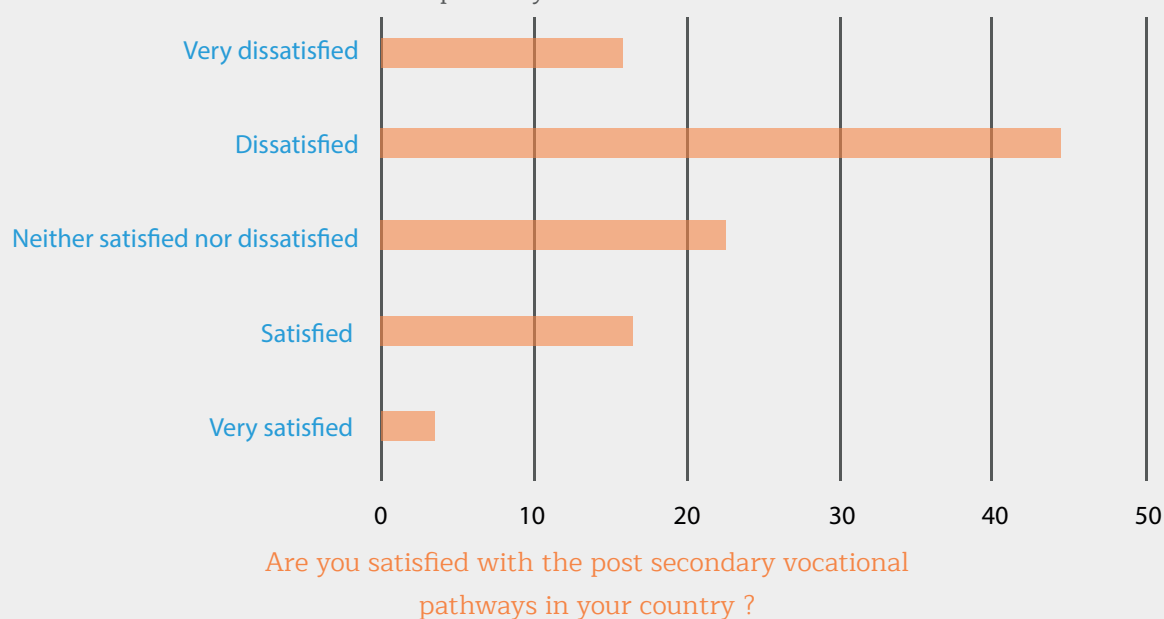
Both systems should build strategies and programs to prepare youngsters for the future of work and this collaboration should start by a stronger support to pedagogy and by creating opportunities to develop further the linkages with local and regional stakeholders via technical and vocational Higher Education as intermediary institutions in the processes of technical change. Indeed, it is important to foster solid foundation skills and stronger links between the worlds of education and work by innovating the curricula and the pedagogical approach and developing the entrepreneurial spirit. Moreover, it is recommended to establish mechanisms to promote technical digital skills and soft skills through targeted trainings that can be taught by the same teachers in both systems, for instance through the development of common teaching modules. Furthermore, emphasizing project-oriented research may help stimulate the necessary institutional and programmatic diversification of Higher Education and strengthen the institutional credibility of technical and vocational Higher Education by engaging local external actors in training the labor force. Indeed, the alignment of programs and courses between HE and Vocational pathways makes each system match the other and develops their overlap.

It is also essential to put into action a strategy to strengthen partnerships by involving learners from both systems and making them organize collaborative programs and share coordinating events. This creates a real alliance and makes them exchange their experiences through workshops and debates.

EMPIRICAL DATA ANALYSIS

As part of the requirement of the technical assistance, an online survey was designed and disseminated amongst UfM and Businessmed Network in the region to gather stakeholders' opinions, perceptions of and views on issues related to the development of a strategy to strengthen linkages between Higher Education and vocational pathways. Respondents from the six selected countries (Algeria, Egypt, Jordan, Morocco, and Tunisia) who mainly belong to three areas (Higher Education and Vocational Education sectors, businesses, development projects' experts, and public institutions' leaders) provided their opinion on several issues raised in an online questionnaire. The following represents sample questions and results obtained from the survey:

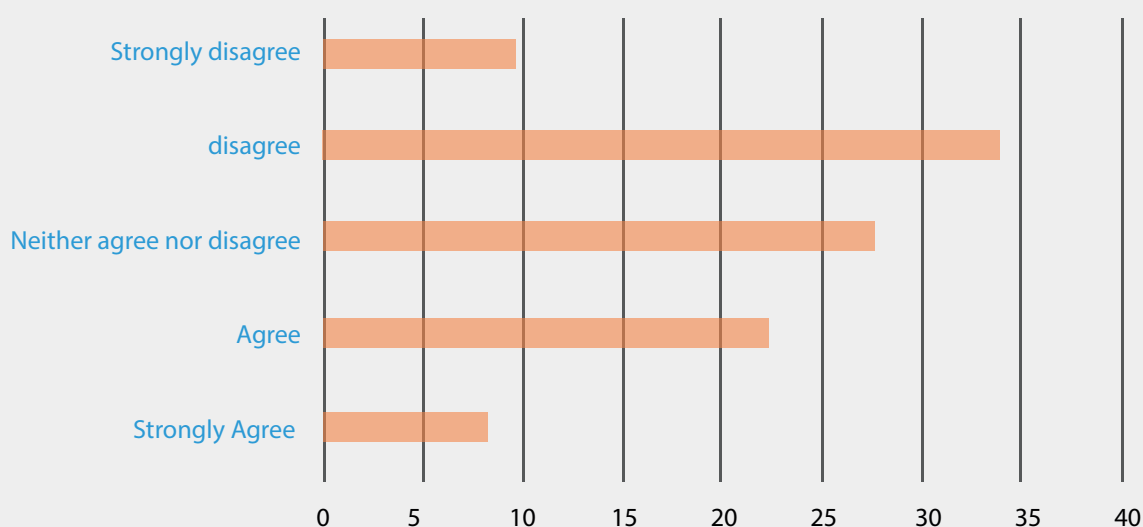
- 1.** 45% of the respondents declared unsatisfied with the postsecondary vocational pathways offered in their countries



- 2.** 2.38% of the respondents reported that they are dissatisfied with the skills acquired by graduates from post-secondary vocational pathways in their countries.



3. 34% of the respondents assert that there is no flexible and transparent collaboration between vocational and Higher Education



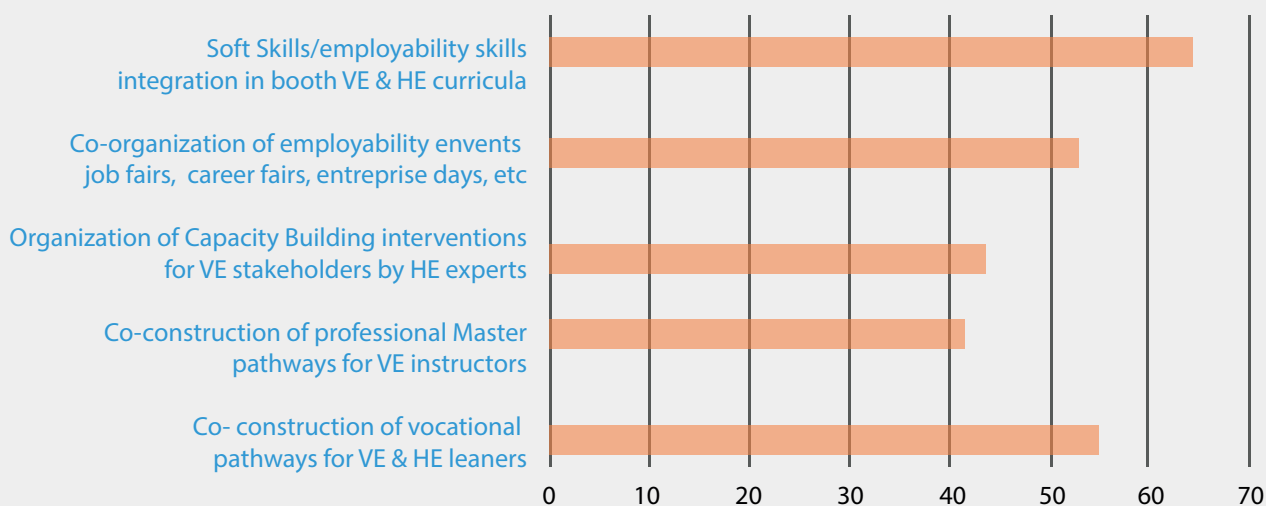
Do you agree that in your country, there is a flexible and transparent collaboration between vocational and Higher Education?

4. 64% of the respondents claimed that Higher Education pathways have a more positive image than Vocational Education pathways. In addition, 36% of the respondents believe that Vocational Education is negatively perceived and does not guarantee employment.



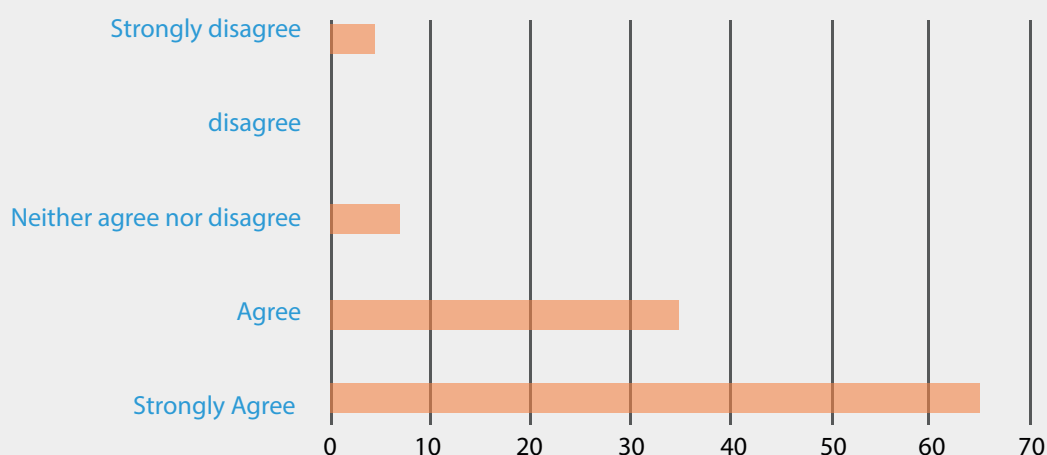
Three statements related to perceptions of image VET and HE in the region

- 5.** 64% of the respondents claimed that one of the fields that could foster cooperation between Higher Education and Vocational Education is to integrate soft skills in both VE and HE curricula. Also, 52% of the respondents think that the co-organization of employability events such as job fairs is important to foster such collaboration.



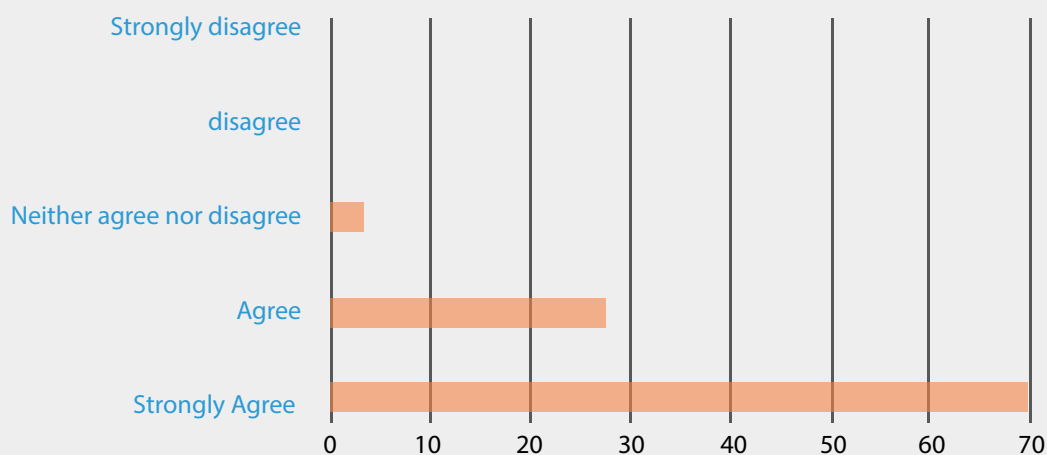
Which of the following fields could foster cooperation between Higher Education and Vocational Education?

- 6.** 63% of the respondents strongly agree that to counter youth unemployment among Higher Education graduates, South Mediterranean countries should improve postsecondary pathways to attract youth. Another 32% also share the same view.



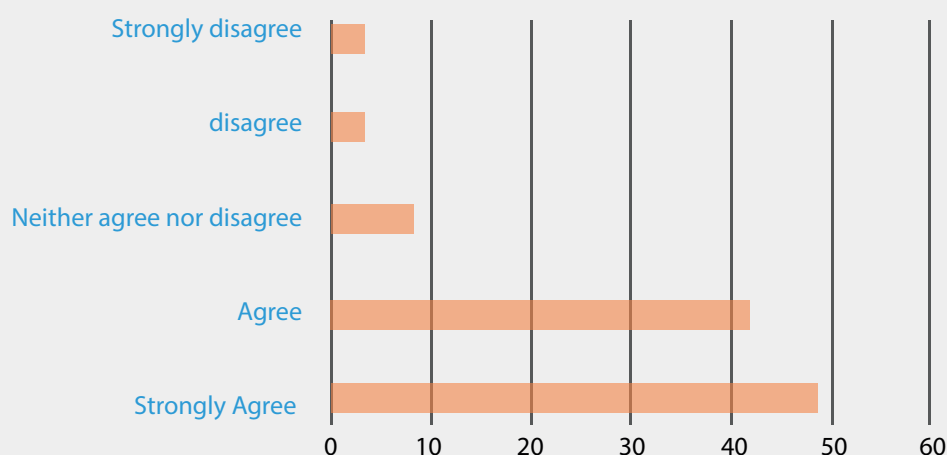
Do you agree that to counter youth unemployment among Higher Education graduates, South Mediterranean countries should improve postsecondary pathways to attract youth?

7. 98% of the respondents agree and strongly agree that developing and restructuring vocational centers can significantly contribute to solving the increasing number of NEET population in the region.



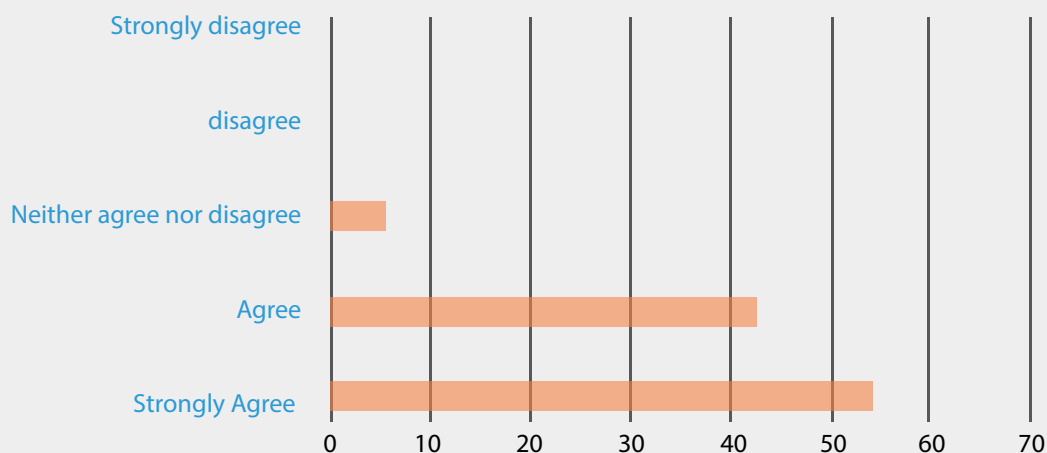
Do you agree that to contribute to solving the problem of youth not in education, employment or training (NEETs), South Mediterranean countries should aim to raise the quality of, and restructure, basic vocational centers?

8. 90% of the respondents agree and strongly agree that one possible form of collaboration between Vocational Education and Higher Education could be related to technical/pedagogical support in curriculum development/reform.



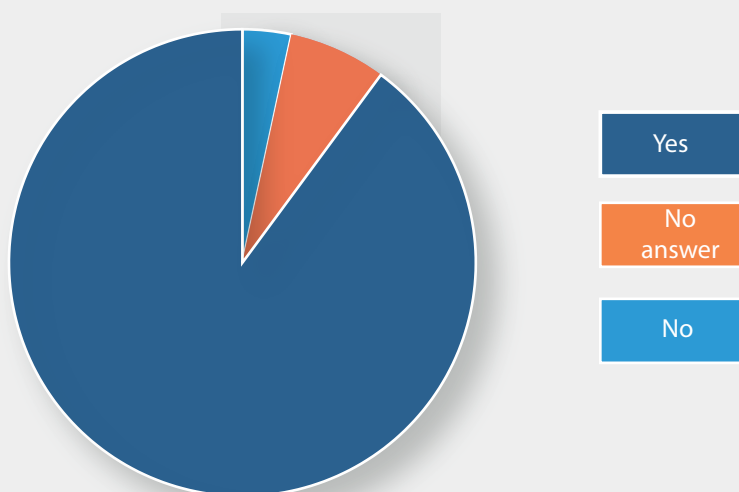
Do you agree that possible forms of collaboration between Vocational Education and Higher Education could be related to technical/pedagogical support in Curriculum development/reform?

9. 96% agree and strongly agree that Higher Education can support Vocational Education reform initiatives through Training of Trainers and Continuous professional development for Vocational Education instructors.



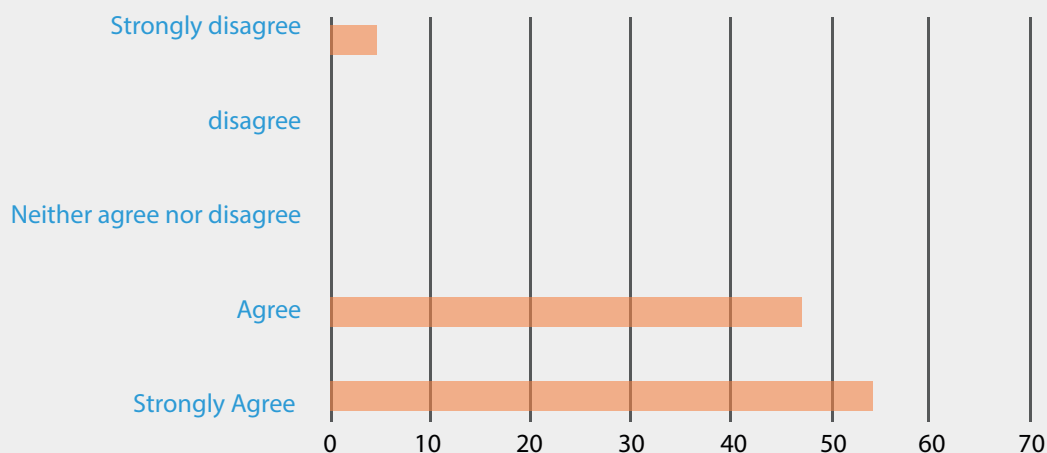
Do you agree that Higher Education can support Vocational Education reform initiatives through Training of Trainers and Continuous professional development for Vocational Education instructors?

10. 90% of the respondents agree and strongly agree that one possible form of collaboration between Vocational Education and Higher Education could be related to technical/pedagogical support in curriculum development/reform.



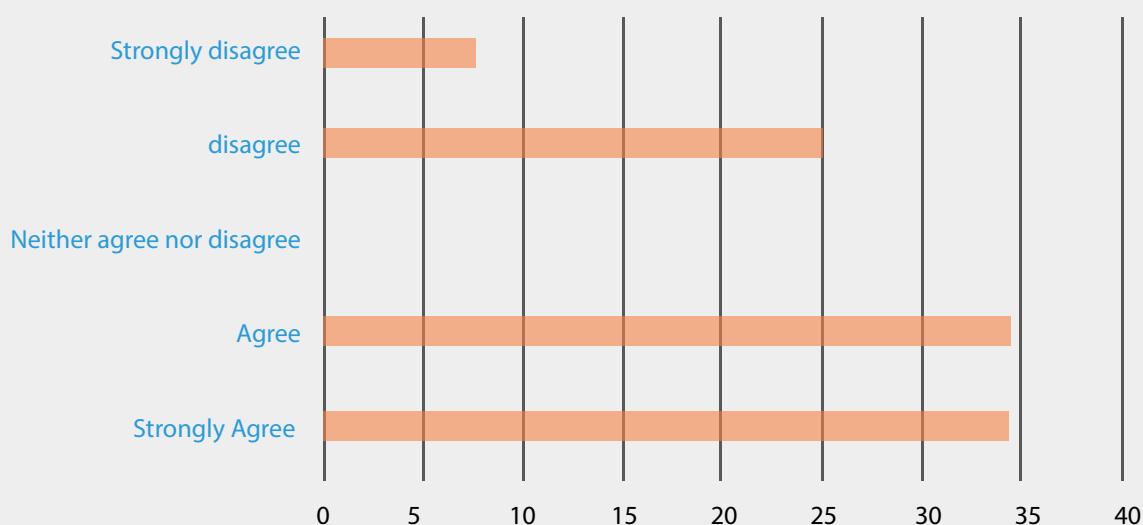
Can both Vocational Education and Higher Education take a common practical approach to prepare youth and women for the new workplace?

11. 98% of the respondents agree and strongly agree that Higher Education institutions must innovate by including more post-secondary vocational pathways to their Technical Institutions.



Higher Education Institutions must innovate by including more post secondary vocational pathways to their Technical Institutions.

12. 68% of the respondents opt for one single governing body for all three areas of education, whereas 42% of the respondents disagree and opt for separate entities to manage educational levels. Surprisingly, most of the respondents who are against unifying the governing body do not have this status in their own countries.



Do you think that all education levels (primary, secondary, vocational and Higher Education) should be under the same authority/Ministry?

PART II

RECOMMENDATIONS & POLICY
ACTIONS| REGIONAL DIALOGUE
CONCEPTUAL FRAMEWORK FOR
A WORKFORCE DEVELOPMENT
INITIATIVE | PILOT PROJECT IN
GREEN SKILLS



RECOMMENDATIONS & POLICY ACTIONS

The mapping of the HE and VET in the Mediterranean region, the assessment of the existing actions and initiatives carried out so far, and the analysis of challenges and possible opportunities in the field of HE and VET have enabled to identify best practices and success stories implemented in the region. A set of recommendations for future actions can be generated from this study to further enhance the potential of HE institutions and their synergies with vocational pathways. They pertain in large part to how public stakeholders are incentivized, how academia is empowered, how industries are engaged in the reform projects, how synergies with donors and civil society partners are established to improve the socio-economic inclusion of youth and women, and how monitoring and evaluation, communication and outreach tools, and innovative forms of Public Private Partnerships (PPP) can contribute to the regional dissemination of a sustainable intervention.

The recommendations and policy actions outlined below should serve as guidelines to fuel the discussions that will take place in the regional dialogue on the synergies between HE and VET in the reform and development of vocational pathways that can better prepare youth for a future job. They are also key policy actions that can pave the way to a robust strategy to develop HE and VET collaboration. The present report outlines 5 types of strategies that tackle 5 priorities:

- 1.** Empower public sector by building the capacity, strengthening multi-level and multi-stakeholders' governance, and diversifying funding.
- 2.** Promote private sector engagement with HE and VET by strengthening bilateral collaboration, PPPs, and concrete involvement in policy cycle, focusing on the development of new for the existing and future workforce.
- 3.** Enhance HE and VET project sustainability by working with local CSOs and NGOs, ensuring project ownership and public stakeholders' engagement, and developing project exit strategies.
- 4.** Improve youth and women employment by reducing skills mismatch, tackling gender inequality, and skilling the NEET.
- 5.** Scale up pilot project through MEL, Communications & Outreach, and regional collaborations.

Recommendation 1: Empower public HE and VET by building the capacity of public HE and VET institutions, strengthening HE and VET governance, and allocating more financial, human, and material resources to modernize/rebuild HE and VET institutions' infrastructure compliant with the digital age requirements.

Policy Actions

1.1. Building the capacity of HE and VET institutions

HE and VET institutions should be modernized and reformed by developing new curricula that fit the needs of the labor market. HE institutions should bridge the skills gap by building solid and sustainable partnerships with industries that can support the reform project by providing the needed know-how and expertise to modernize the curricula, improve practical teaching and provide work-based learning opportunities to students and graduates to facilitate the education to work transition process.

Within the framework of the EU New agenda for the Mediterranean, HE institutions of the SMCs should participate in the Erasmus+, Horizon Europe, Creative Europe Program, and other similar European initiatives that strive to build solid partnerships with HE institutions from SMCs. HE institutions should benefit from cooperation and experience sharing with European HE institutions by getting the support of the latter in innovation and development of smart specialization strategies.

In addition, HE institutions from SMCs should benefit from digital education action plan 2021-2027 to modernize their infrastructure and prepare for the digital age. Education institutions of SMCs should build cooperation with EU platforms such as the Centers of Vocational excellence. They could also be part of the ETF Network of Excellence to be able to create skills ecosystems and develop the required reskilling and upskilling curricula. HE institutions in SMCs should be able to anticipate skills needs and should develop skills for its current and future workforce using lifelong learning strategies to upskill and reskill the workforce for green and digital jobs.

1.2. Strengthening HE and VET governance

HE and VET institutions should improve their management capabilities. They should be more autonomous and benefit from a flexible policy and regulatory environment and a solid accountability framework. Such improvement in governance can have a spillover effect on research, innovation, and internationalization of education institutions, especially at Higher Education level. Attaining autonomy in financial and academic governance may increase HE and VET institutions' internationalization opportunities. Autonomous institutions are better equipped to prioritize internationalization as a key objective in their development agenda.

HE and VET governance can be further enhanced with the adoption of a mixed governance style where both private and public stakeholders share the responsibility of managing the education institutions. Adopting a new public management approach can help improve efficiency, effectiveness, and general performance of public education institutions. Building a network of Public and Private Partnership (PPP) can help

leverage private sector knowledge and skills about business management and innovation. However, PPP approach to public education institution governance remains a complex endeavor that represents many challenges including the accountability and the government control which necessitate to put in place a strong regulatory and management system that is usually missing from public institutions.

1.3. Increasing and diversifying public funding for HE and VET

Although public expenditure has been steadily increasing in the SMCs since the last decade, the increase was not at the same rate as enrollment of youth in education. This is mainly due to the sectoral competition as priorities in public budgets go to healthcare, social welfare, and food subsidizing at the expense of education sectors. However, financing education is key as it impacts on youth access to education, quality of education, and efficiency at the institutional level. Also, allocation of public funding of education in the SMCs does not follow a performance-based approach. It is mainly based on input factors such as the number of students, number of staff, and type of institution. As most SMCs in the region are going through a reform of the HE and VET sector to tackle the issue of skills mismatch and unemployment, public funding should be increased and diversified. Knowing that the region's governments have more pressing priorities to allocate more significant budgets to, education receives the small share of the budget. In this vein, governments should look for different sources of funding to increase the budget allocated to education. Public and private partnership (PPP) in financial management is a possible solution that has been implemented recently in several countries such as Morocco (les cités des métiers), and Egypt (ICT sector). PPP allows to bring more funding to the education sector at the same time education equity and social inclusion are preserved.

Recommendation 2: Promote Higher Education and Vocational Education and Training institutions engagement with private sector by strengthening bilateral collaborations, consulting with key economic sector partners on skills needs, and participating in upskilling and reskilling existing and new workforce.

Policy Actions

2.1. Strengthening bilateral collaboration

Although the formal private sector in the SMCs economies is relatively small, it remains a significant driver for job creation, livelihood improvement and social inclusion. SMC governments should encourage bilateral collaboration between HE and VET institutions and industries. This collaboration can take several forms:

- Promoting work-based learning opportunity.
- Developing new curricula tailored to the needs of the private sector.
- Organizing employability and career event to link up employers with job seekers.
- Developing skills forecast surveys and analyzing data related to skills needs by sector and by geographical location.
- Engaging in policy dialogue about the importance of the VET sector.
- Promoting and raising awareness of the VET sector role in improving the employability of youth and women.

2.2. Consulting with private sector partners on current and future skills needs

HE and VET institutions should develop skills survey and skills forecast solutions and regularly conduct assessment of the labor market to identify the current and future skills needs by sector and geographical location. This initiative can be led by both public and private stakeholders. Ministry of labor or public employment services can initiate skills forecast surveys. Private employment services can also invest in this type of initiative. To efficiently implement labor market information systems, a robust collaboration with the private sector is needed. Building clusters of firms and lead firms facilitate the collection of the needed data about skills needs. Current and future labor markets are becoming more complex, and identifying and confirming the skills needs for green, blue, and digital economies is a challenging task. For instance, green skills are not exclusive to environment related occupations only, they do concern other economic sectors such as services, manufacturing and transport and logistics. Green skills are cross cutting skills that need to be meticulously examined. With a close collaboration with businesses operating in sectors adopting the green transition, surveying the required green skills and translating those skills in the new training curriculum becomes a more straightforward activity.

2.3. Participating in upskilling and reskilling existing and new workforce

Several studies argued that vocational pathways represent an adequate solution to tackle the skills mismatch issue through the adoption of reskilling and upskilling mechanisms for current and future workforce. Vocational pathways seem to be the essential educational solution to streamline upskilling and reskilling activities. Vocational curricula can adapt to the skills development process given the flexibility and accessibility with which they are characterized. In partnership with the industry, new courses can expeditiously be developed focusing on key skills areas. Besides, private sector businesses can show interest in supporting Vocational Education providers in developing new curricula to upskill and reskill the future workforce in a manner that they can achieve maximum productivity.

In addition, HE and VET institutions should participate in implementing education policies that encourage lifelong learning. To enhance access to quality and industry-focused vocational pathways, public-private partnership should be strengthened by promoting collaboration between industries and public education institutions focusing on HE vocational pathways.

Recommendation 3: Enhance Higher Education and Vocational Education and Training bilateral project in a sustainable manner by strengthening synergies and partnerships between donors and CSOs, ensuring project ownership and local partners' engagement, and developing a robust sustainability and exit strategy.

Policy Actions

3.1. Strengthening synergies and partnership between donors and CSOs

CSOs can bring a unique knowledge and awareness about their communities' challenges. They can play an impactful role as advocate for change, and they can facilitate knowledge exchange on issues related to project design or implementation. They can identify the right profiles who can benefit from the project activities. They can be a source of accurate information to collect the needed data to contribute to targeted actions for their communities. They can also support in the monitoring and evaluation of project activities targeting their communities.

The number of NGOs and CSOs that have been created in the SMCs region has skyrocketed since the 2011. Since then, some organizations have been very successful in helping their communities improve their livelihoods and attain social and economic inclusion. Others still need financial and capacity building support to be more impactful in their communities. CSOs should receive support to further develop their community services and remain an active and impactful partner and stakeholder in a multi-stakeholder-based approach to tackle the employment of youth and women in the SMCs.

A donor-funded initiative that targets HE and VET should develop solid partnerships with key CSOs that play an important role in youth and women empowerment. There are many relevant synergies that can be explored and that can help donor funded projects to reach out vulnerable project beneficiaries in a more efficient way.

3.2. Ensuring project ownership and partner engagement

Donor funded projects related to HE and VET skills development should develop partnerships and build relations with local stakeholders at an early stage of the project implementation. They should involve and engage local stakeholders who should be invited to participate in the project development. They should also engage local governments and public institutions and increase their project ownership. These local stakeholders represent permanent structures that can help sustain the project activities when primary funding ends by using their infrastructure, workforce, and budget whenever possible. It is also important to try to institutionalize local groups and build their capacity and obtain community advocacy about the benefits of the project. For instance, career development centers at Higher Education or vocational institutions should be institutionalized prior to project exit to guarantee the ownership of their activities and to make sure that they will be engaged with the new institutionalized structure after the project ends.

3.3. Developing a robust sustainability and exit strategies

Donor-funded projects tend to focus on project development and implementation and undermine the importance of preparing project exit. By doing so, the sustainability of the project activities becomes at risk. Donor-funded projects should integrate sustainability provisions within project components from the start and include it in the project vision and ensure that at all project life cycle, sustainability provisions are carefully considered and reached.

In addition, donor funded project should also ensure a continuous communication and outreach strategy to reach a large audience that is informed about the project realizations and can help support it in many ways. A database of project resources, achievements, outcomes should be created and shared with local partners to secure information sharing and knowledge management about the project themes. Also, it is important to diversify funding sources during the primary funding by including in-kind financing and adopting cost-sharing mechanisms. This strategy could further engage local partners and have their buy-in.

The development of a sustainability plan can ensure a successful transition from initial funding to follow-up support, including an exit strategy that ensures crucial interventions contribute to self-reliance in implementing future activities. It is essential to ensure a strategically planned withdrawal of the project resources (whether financial or human) to promote the sustainability of project goals and activities. The exit strategy should include provisions to address issues that arise at the project close-out stage

Recommendation 4: Improve youth and women employment by reducing skills mismatch, tackling gender inequality and skilling the NEET population through the acquisition of technical and entrepreneurship skills.

Policy Actions

4.1. Reducing skills mismatch

Unemployment coexists with an unmet demand for skills combined with unfulfilled vacancies because there are delays in adjustment in the education and training sector. SMCs education institutions should tackle the issue of skills mismatch to reduce unemployment. Future skills forecasting mechanisms implemented in developed countries by specialized institutions such as CEDEFOP in EU should be developed in SMCs to support education institutions identify the needed skills and undergo skills development according to future labor market needs. In addition, training and career guidance support should be provided to job seekers in a systematic way to ensure a smooth and rapid labor market insertion. Young graduates' education to work transition can be accelerated through intensive training in employability skills, digital skills, and soft skills much needed by the labor market and usually missing from graduates' profiles.

Youth unemployment is also associated with the lack of decent jobs for Higher Education graduates in the SMCs. The private sector is unable to create enough jobs to accommodate the increasing number of job seekers graduating each year. The SMCs are amongst the least economically integrated region with a vulnerable private sector that generates low skilled jobs. It is important to continue promoting international cooperation and foreign investment to develop SMCs and accelerate their regional integration and improve their socio-economic indicators to allow the private sector to grow.

Moreover, it is crucial to continue developing innovative labor market intermediation mechanisms such as job matching portals, career development centers, employability events (jobs fairs and enterprise days), skills forecasting and surveys, internship opportunities, etc. These mechanisms are increasingly efficient to inform the labor market on existing workforce and advising jobs seekers on existing work opportunities, thus increasing job matching opportunities.

4.2. Tackling gender inequality

Women in the SMCs have always lived under unfair social norms that intensified their vulnerability and weakened their resilience and ability to cope with the impact of socio-economic challenges on their livelihoods. In some SMC countries such as Syria, Libya and Palestine among others, the conflict has exacerbated extreme poverty among women, incessant gender-based violence, internal displacement, and human trafficking.

The vulnerability of women in the SMCs manifests itself in child marriages, susceptibility to becoming internally displaced persons (IDPs), and widowed and working women having to defy a patriarchal society with rigid gender roles to survive. Not surprisingly, some SMC countries ranked low in the World Economic Forum's Global Gender Gap index for the past decade. Women in the SMCs face deeply entrenched gender inequality rooted in a culturally and religiously patriarchal society. These rigid social norms in turn cause deep economic inequality preventing women from pursuing such basic life opportunities as education and employment.

SMC governments should adopt a more inclusive approach to gender equality. They should strengthen the application of the principles of the rule of law. They should also promote advocacy actions and adopt legal reforms that integrate gender mainstreaming into public policy dialogue. They should also progress in the reform of the personal status and prioritize solving issues related to women literacy, violence against women, women poverty and marginalization, women unemployment, and women role in the care economy.

4.3 Reducing NEET population and promoting social inclusion for vulnerable youth and women

The mapping activity revealed that the increasing number of the NEET population in the SMCs is alarming and puts the region in a challenging situation. Higher Education can have a role in promoting a plan to reduce the number of NEET. HE can support the capacity building of VET instructors who are responsible for skilling the NEET population. VET instructors of this population with special needs must be well trained on which adequate pedagogy to use and how to develop the skills and capabilities of a NEET learner. Also, UfM second chance initiative should be scaled up to reached out to a larger number of NEET youth and women.

Recommendation 5 : Scale up successful pilot projects by developing robust monitoring, evaluation and learning mechanisms, showcasing project impactful actions through communication and outreach mechanisms, and promoting triangular partnerships North-South and South-South.

Policy Actions

5.1. Developing a robust monitoring, evaluation and learning mechanism

The mapping of regional initiatives in skills development and youth and women employment revealed that it is quite challenging to scrutinize the veracity and attribution of project outcomes to the program donor and implementer. This is mainly because of the lack or absence of internal and external monitoring, evaluation and learning structure within the program management structure. Donors should systematically include an internal MEL system within the program and should appoint external MEL experts to audit the program activities and outcomes. Result-oriented MEL reporting is important to inform about the program potential to be scaled up or replicated. It can also provide valuable information related to best practices and lessons learnt that can inform future projects about previous projects outcomes.

5.2. Encouraging frequent regional dialogue and disseminating through communication and outreach mechanisms at the regional level (using UfM network)

Regional dialogues can help disseminate the information about ongoing strategic interventions to tackle the issue of youth employment. However, setting up a robust communication and outreach campaign to showcase the project activities and highlight its achievements is also important. It is crucial that regional partners are aware of projects implementations and learn more about what is being implemented in the neighborhood countries. Communication outreach can avoid duplicating similar interventions or missing out important activities that are being implemented in a similar context.

5.3. Promoting triangular partnerships North-South and South-South

Coordination between project partners is a key element for the successful implementation of a regional project. This coordination should not only be bilateral between North and South Med countries. It should also include triangular partnerships between North and South partners as well as South and South partners. This triangular partnership is efficient in informing the three parties about the specificities of each partner and capitalize on the diversity and the dissemination of best practices at the country level.

PROMOTING A REGIONAL DIALOGUE ON THE HE/VET COLLABORATION

It is proposed that the recommendations outlined above should serve as entry points to regionally discuss the best ways to promote HE and VET collaboration and to support an appropriate strategy to reduce skills mismatch and unemployment of youth in the Mediterranean, particularly in the South and East. To finalize, scale up and sustain this strategy across its region, UfM would support the regional dialogue to explore emerging interest in Higher Education and vocational pathways and discuss issues of relevance regarding skills mismatch and unemployability of young graduates and NEET populations. The regional dialogue can be considered as an opportunity to outline a set of policy recommendations to be discussed with partner countries. In addition, a concrete pilot project with a detailed action-based approach can be suggested as an example of implementation of the said strategy. This project could be supported by a wide variety of stakeholders in the UfM region, each within its mandate. The pilot project will respond to the needs of the Mediterranean region regarding education, training, and skills development. A particular vantage point for this broader approach will be the added value of education, in connection to supporting Youth and Women, Economic Development, and the Environment, as a crucial tool to promote possible post-secondary vocational pathways that can be revisited by establishing innovative synergies between Higher Education and Vocational Training.

The regional dialogue is meant to promote understanding between UfM stakeholders in UfM Member States and to facilitate regional dialogue and collaboration to explore themes of common and emerging interest in Higher Education and vocational pathways and discuss issues of relevance regarding skills mismatch and unemployment of young graduates and NEET populations. UfM plays a significant role in promoting a regional dialogue and cooperation in the field of Higher Education, research, and innovation. It also strives to foster the development of vocational training as a key solution to reduce unemployment of youth, promote social inclusion and prevent violent extremism. This dialogue may also be an opportunity to exchange best practices and share experiences between North and South as well as South and South countries. The following represent priority headlines to be discussed in the regional dialogue. Each priority aims at increasing employability of youth in the Med region.

Promote LLL and encourage upskilling and reskilling of both youth and adults

As it is well documented by the recent publication of World Economic Forum (2020) on the Future of Jobs, more than ever, the world of work is subject to periods of change ranging from a recession to a global pandemic to a fourth industrial revolution characterized by an age of automation. This has displaced millions of jobs but has also contributed to the emergence of millions of new others. This also means that everyone in the workplace should understand that it is essential to stay up to date with the skills required by the labor market. To do so, a culture of lifelong learning should be disseminated among UfM partner countries, and a joint action plan should be developed in order to facilitate education to work transition as well as reinforce job retention and career change/development mechanisms.

Address skills development to reduce skill mismatch

The emergence of new jobs and the ever-changing needs of the labor market dictates the need to continuously develop new skills. These skills range from technical and digital skills to soft and life skills. Unfortunately, initial training curricula at different levels of education (primary, secondary and Higher Education) do not include systematically the required and up to date skills which further widen the skills gap. Urgent actions should be taken to reduce this skills gap and it seems that an appropriate and effective action is to focus on vocational pathways at the Higher Education level. Higher Education diplomas commonly known as postsecondary vocational pathways and equivalent to EQF levels 4-6, are usually designed in consultation with private sector representatives taking into consideration the needs of the labor market in terms of skills and competencies. Usually, private sector representatives such as BSOs build a tight network with Higher Education institutions that offer vocational pathways. The role of BSOs is to link up these educational institutions with the relevant industries so that they can further explore ways to develop vocational skills that fit with the needs of these specific industries. In addition, hands-on training and collaborative learning and apprenticeship usually characterize these pathways. Private sector firms engaged with these educational institutions accept to offer apprenticeships to enable graduates to acquire professional skills needed in the labor market.

Promote career guidance and entrepreneurship

In the changing labor market environment, both employers and job seekers need to be well-informed by having access to adequate labor market information and matching mechanisms such as job matching portals, job fairs and networking events, etc. These matching mechanisms allow better flow of information and enable both employers and job seekers to meet and be informed on both the offer and demand sides. In addition, young graduates need career guidance to prepare for the job search journey equipped

with the right tools and skills. CV writing, interview skills, networking, and communications skills are some of the essential requirements to start a successful journey in search for the dream job.

Encourage collaboration between educational institutions and the private sector

HE and VET institutions should develop/reform curricula in close partnership with the private sector to respond to the needs of labor market. Engagement with the private sector can take several forms:

- Involvement in the promotion of the work-based learning opportunity among SMEs.
- Collaboration with educational institutions to develop new curricula tailored to the needs of the private sector.
- Implementation of donors' funded projects designed to support employability of youth and private sector engagement.
- Organization of employability and career events to link up employers with job seekers.
- Development of skills forecast surveys and analysis of data related to skills needs by sector and by geographical location.
- Involvement in policy dialogue about the importance of post-secondary vocational pathways
- Creation and management of innovative training centers dedicated to upskilling and reskilling current and future workforce according to the skills needed for future jobs.
- Promotion and awareness raising of the vocational pathways in improving the employability of youth and women.

Address enabling environment for public stakeholders/institutions

To facilitate the dialogue between private stakeholders and the education/training institutions, public stakeholders or governments should be able to be part of this dialogue as a facilitator. Public institutions should enact laws that can enable public private partnerships for example. Public stakeholders should adopt a collective governance where decisions are taken on a bottom-up fashion and not from a top-down fashion. Also, public institutions should enable an environment that encourages investment and partnership and creates a dynamic for job creation and employment. The collective governance approach can foster PPP initiatives in education⁷.

During the regional dialogue, UfM and its partner countries should discuss these five urgent priorities that support UfM initiative of promoting employability of youth through initial and continuous learning accommodated by vocational pathways.

⁷ Initiatives of private sector involvement in managing publicly owned or built vocational centers have recently been developed in Morocco. Les Cités des Métiers et des Compétences are innovative models of co-governance of Vocational Education institutions

CONCEPTUAL FRAMEWORK OF A WORKFORCE DEVELOPMENT INITIATIVE

As outlined above, the regional dialogue could be an opportunity to discuss the region priorities in regards to tackling youth and women employment and skills development through a sustainable collaboration between HE and VET. Policy actions presented above could be entry points to fuel the regional dialogue but what comes next is crucial. Framing the pilot project that could come out of the regional dialogue is also important. To successfully address the employment and skills development issues, there is a need to use a workforce development framework to help design and develop a concrete pilot project that includes detailed interventions. The purpose of this section is to examine and articulate the key pillars that constitute the workforce development framework. This framework includes four pillars. Each pillar promotes a set of interventions to be conducted on a group of beneficiaries. Four different beneficiaries are identified: job seekers, employers, employment services, and public institutions. This project framework can be used to design a sector-specific workforce development intervention such as green, blue, or digital sectors. It can also be used to design a generic workforce development intervention where the four pillars are used as a reference to design interventions that can impact on any aspects of a sector value chain.

Pillar 1: Capacity Building and Training

A short-term action plan to deal with skills mismatch is to conduct training programs for job seekers to ameliorate their skills and capacity to find a job that matches their profile. There are several types of training and selecting one of the other depends on the needs of the employers. All types of training interventions are meant to be targeted and customized according to both employer needs and beneficiary skill shortages. In other words, they are designed to be demand-driven and based on the detailed labor market, and training needs assessments. Ideally, such training should be a combination of both theory and practice, with the practical component given top priority.

- **Intensive training:** targeted interventions that can focus on specific economic sectors that can generate hundreds of jobs in the selected SMCs. The training should be demand driven and should respond to the needs of the labor market in terms of technical skills required to fulfil the job. The training curriculum should be designed in collaboration with private sector firms.
- **Pre-employment training:** to overcome the skills gap, newly graduates can be offered pre-employment training opportunities to enhance their skills and knowledge in the area of their specialty. This type of training is also designed in partnership with private sector firms that are actively looking to hire new profiles but cannot find the right fit. Providing pre-employment training to a selected number of graduates can improve their job matching capabilities.
- **On the job training:** this is a targeted intervention that involves upskilling the existing workforce to master the new skills required by the jobs of the future/digital jobs imposed by the digital age/automation and the post-covid era.
- **Online training:** the automation and the post-covid era accelerated the need to conduct online training to reach out a larger number of beneficiaries and overcome the constraints of the pandemic. It is estimated that even post pandemic, the online training option will remain convenient to undergo upskilling and reskilling interventions for new and existing workforce.

Pillar 2: Career Development promotion

Career-related services include job counseling, job placement, and job-search assistance. Job placement activities reflect the fact that there are frequently mismatches between labor demand and supply. Employment-related services provide job seekers with information about vacancies and employers with information about the qualifications of job seekers. Interventions include events such as job fairs and career days, counseling workshops on job search techniques, and career readiness workshops on resume preparation and interview skills. They also include on-line job matching platforms that facilitate the matching process between the labor supply and demand.

- **Job fairs:** They are employability events that are essential in enhancing labor market information systems; as they facilitate information sharing about existing employment opportunities, as well as the skill types and levels of job seekers. Job Fairs use a job matching/intermediation approach to address a significant information gap that exists between both sides of the labor market. The job matching process is meant to close this gap by providing needed information for job seekers

about suitable job opportunities available in the labor market. Jobseekers also learn how to market themselves and network to find a job and connect potential employees with employers. This approach can significantly reduce the costs and timeframes required for filling job openings.

- Youth counselling and mentoring: job seekers and university graduates need counselling to orient them towards available jobs in the labor market. They also need to be informed on the tools needed to apply for these jobs. CV writing workshops, interview skills preparation and job search techniques workshops are targeted activities that can be designed for job seekers. Employment services, university career centers and privately-owned training centers can be in charge of promoting this type of activities. Here again the role of the private sector is important to participate in the development of such activities.

Pillar 3: Entrepreneurship

Entrepreneurship interventions have the two-fold objective of generating work for the self-employed or business owners and creating further employment through job creation within new businesses. These interventions focus on introducing beneficiaries to the concept of how to build their own business and how to become engaged in managing a sustainable income-generating activity. Some initiatives can offer coaching and training on how to access capital as well.

- Basic training for vulnerable youth and women
- Innovation-led training for young graduates

It is also important to include entrepreneurship skills in the initial or continuous training pathways. Specific modules related to entrepreneurship studies can be incorporated as a cross-sectional course/module for all types of specialties.

Pillar 4: Institutional Outreach/Strengthening

Institutional outreach/strengthening interventions focus on curriculum development, partnerships, mechanisms of coordination, and national employment policy reform – all of which contribute to supply-side upscaling. Such interventions are meant to strengthen public services offered by labor ministries and employment agencies, and to reform/develop national curricula used by national VET and Higher Education institutions. Such interventions aim to: (1) reform employment policies; or (2) enhance the efficient design and conduct of educational and training programs in a manner which helps improve workforce development and employment generation outcomes. The establishment of partnerships with private sector associations, service providers, and enterprises can also contribute to the creation of effective workforce development outreach mechanisms related to work-based learning activities, such as

on-the-job training, internships, apprenticeships, and job-search engines. Such public-private partnerships can also contribute to effectively linking beneficiaries to employment opportunities.

- **Improving Labor Market Information Systems (LMIS):** This can include observatory units that can regularly provide education institutions with the skills needed in the labor market and the new jobs created by the main economic sectors.
- **Empowering labor related institutions:** It is important to build the capacity of employment related public institutions such as employment centers and Ministries of Labor. Several topics can be addressed including career counseling, job fair organization, employers' prospectations, etc
- **Reforming labor-related policies:** SMCs need to re-examine labor-related policies to further incentivize employers to recruit new graduates.
- **Reforming existing curricula or creating new ones:** initial and continuous education can be improved through an effective partnership between the private sector and the education institutions. This collaboration can enhance the content of the curricula and reduce the skills gap.

The four pillars represent the conceptual framework of a workforce development intervention. Each pillar can be referred to in the design of the concrete project activity. More than one pillar can be mentioned to develop larger interventions that address several beneficiaries. Using a straightforward conceptual framework can help develop tailored interventions that can have significant impact on the targeted beneficiaries.

PROPOSED PILOT PROJECT: GREENING THE SOUTH MEDITERRANEAN REGION: PROMOTING GREEN SKILLS THROUGH POST SECONDARY VOCATIONAL PATHWAYS

In the present technical assistance, it is proposed that the workforce development conceptual framework is used to design and develop a pilot project to promote green skills through postsecondary vocational pathways. This pilot project illustrates the establishment of organic linkages between Higher Education institutions and postsecondary vocational pathways equivalent to EQF level 4-6. As stated above in the section dedicated to promoting regional dialogue, the partnership between HE and VET should highlight the 5 objectives raised in the regional dialogue:

- Promote LLL and encourage upskilling and reskilling of both youth and adults
- Address skills development to reduce skill mismatch
- Promote career guidance and entrepreneurship
- Encourage collaboration between educational institutions and the private sector
- Address enabling environment for public stakeholders/institutions

One possible concrete partnership between HE and VET can be delineated by the launch of a regional initiative to promote the development of green skills in postsecondary pathways. It is proposed that this initiative can have the following concrete actions:

- Co-creation of curricula at EQF-levels 4-5 and EQF-6-7 targeting upper secondary graduates ⁸.
- Training of trainers through Erasmus Teachers Academy.
- Collaboration with technology institutes and engineering schools to co-create curricula in green skills.
- Partnership with industries adopting green processes in environment related industries such as renewable energy, waste management, water conservation, sustainable environment, etc. or other industries such as manufacturing, agriculture, textile, tourism, etc.

⁸ According to the EQF (European Qualifications Framework), synergies between HE and VET can include co-creation of curricula at various levels. For levels 4-5, curricula development can include higher national diploma graduates (holders of Baccalaureate in Algeria, Lebanon, Morocco, and Tunisia, holders of Tawjihi in Jordan, and holders of Sanawiya amma in Egypt). For level 6-7, curricula development can include university graduates and also VET instructors looking for lifelong learning opportunities

- Partnership with private and public national and regional research centers to apply innovative solutions for green industries within a pre-selected consortium.
- Development of labor market intermediary systems for the anticipation and monitoring of skills needs for the green jobs and the listing of occupations in high demand, including occupations related to green sectors.
- Set up of labor market information systems for the assessment on the employment trends in green economy and disseminating the information regionally.
- Promotion of collaborations and partnership with the platforms of Centers of Vocational Excellence to share best practices in providing high-quality vocational skills, supporting entrepreneurial activities, and fostering inclusion and innovation.
- Organization of regional conferences to promote best practices in greening SMCs economies through skills development.
- Organization of matching events to link up employers with qualified profiles with green skills.
- Promotion of gender equality in green jobs since newly emerging occupations are not gender stereotyped. Encourage women in Stem to orient their postsecondary studies to green pathways.
- Encouragement of PPP initiatives in Education through a green initiative such as BALANCE project and GREENOVET project highlighted below (see box 1&2 below)

The project funding structure can be supported by the new Erasmus plus program. The 2021-27 edition of the Erasmus plus program is a key instrument for building knowledge, skills and attitudes on climate change and sustainable development in the European Union and beyond. The program aligns with the objectives of the European Green Deal, an ambitious program aiming to make the European Union carbon neutral by 2050. The green strand in Erasmus plus reflects the importance of education and skills in facilitating and enabling the green transition. At the same time, the program itself strives for carbon-neutrality by promoting sustainable means of transport and environmentally responsible behaviors. Other forms of funding can be explored such as GIZ, EU, ILO, etc.

EU new agenda to renew its partnership with South Neighborhood invites to explore opportunities of the green transition to relaunch cooperation and realize the untapped potential of the shared region, building on key elements of the European Green Deal⁹. Most developing countries have already started the process of greening their

⁹ The European Green Deal is a set of policy initiatives by the European Commission with the overarching aim of making the European Union climate neutral in 2050. It aims at increase the EU's greenhouse gas emission reductions target for 2030 to at least 50%. The plan is also to review each existing law on its climate merits, and also introduce new legislation on the circular economy, building renovation, biodiversity, farming and innovation

economies as part of the post pandemic economic recovery, in addition to the regional and global integration process that has been initiated to fully implement the 2030 agenda for sustainable development.

The Mediterranean region represents one of the hotspots in the world that face challenging climate change and environmental degradation issues. At the same time, the region embodies a great potential to develop solar and wind resources which represent a significant source of clean energy. According to the ILO (2018) report on world employment social outlook, the transition to green economies has already changed the world labor market outlook and will lead to the potential creation of 24 million jobs in the next decade. The report also advances that an estimated 250 million jobs could be created over the next decade if industries prioritize the adoption of green solutions in their businesses.

The greening process has a significant impact on the labor market leading to an increased demand for green jobs. Also, green jobs extend over a wide range of industries including renewable energy, waste management, water conservation, technologies, agriculture, transport, textile and garment, and tourism and hospitality industries to name a few. The transition towards a greener industry also requires a diverse range of skills to be acquired by current and future workforce at different occupational levels.

However, the successful transition to a greener and environmentally sustainable economy necessitates education and training systems to support the overall process to ensure the availability of a trained workforce. ILO (2018) reports on green economy stated that there is already evidence that skills mismatch represents a major obstacle to the green transition in several sectors such as renewable energy, the renovation of buildings, construction, and manufacturing, which are all looking for green skills. It is estimated that the lack of knowledge of the environment related skills, the absence of active labor market intermediation mechanisms and the lack of investment in skills development for the green transition are still hindering the achievement of an effective transition to the green economy.

The transition to a green economy requires a systemic overhaul in the production system on a large-scale and across several sectors equivalent to an industrial revolution. The transition necessitates advancement in cutting edge technologies, innovative changes in the manufacturing processes, and dramatic structural transformations in adopting new policies and developing new financial mechanisms. Skills development interventions have a significant role to play in greening the industry. A collaboration between HE and VET is necessary to create robust synergies to support the decarbonization process through lifelong learning provisions.

PROPOSED PROJECT SNAPSHOT: GREENING THE SOUTH MEDITERRANEAN REGION: PROMOTING GREEN SKILLS THROUGH VOCATIONAL PATHWAYS

OBJECTIVES

The Greening the South Mediterranean Region project promotes opportunities for green jobs by developing the needed skills, exchanging knowledge, and valorizing research and innovation for a more sustainable and environment friendly Mediterranean region. Its aim is to develop new vocational curricula and increase the employability in the green economy in a cross-sectoral manner.

BENEFICIARIES

The project is expected to benefit young university students, instructors, researchers, public institutions partners and private sector firms and startups.

LOCATION	PARTNERS	DURATION
1. Algeria	<ul style="list-style-type: none">- One university from each partner country that offers post-secondary vocational pathways in green skills.- One private or public research center dedicated to green research and innovation	2 years
2. Egypt		TOTAL COST
3. Jordan		TBC
4. Lebanon		IMPLEMENTER
5. Morocco		Several partners from UfM network
6. Tunisia		

ACTIONS

- Develop new post-secondary vocational curricula in green skills.
- Organize capacity building and training workshops for instructors.
- Create clusters of private sector firms operating in the green economy and develop partnerships with project partners to participate in the training and recruitment of the project beneficiaries.
- Organize matching events to bring employers with qualified profiles with green skills.
- Strengthen regional collaboration and network on green skills and green jobs.
- Expand CoVE structures in the selected SMCs and develop partnership with CovE in developing countries.

POSSIBLE KEY PERFORMANCE INDICATORS

- At least 600 SMEs involved in the promotion of the green economy receive technical assistance and training and participate in the recruitment of graduates through work-based learning opportunities or entry-level positions.
- At Least 1500 jobs are generated from partner firms.
- At least 3 new postsecondary vocational pathways are developed and approved by Higher Education National Commissions in each partner countries.
- At least 2 ERASMUS + regional projects in the green skills development are developed to promote HE and VET collaboration.
- At least 6 vocational institutions join the EU centers of vocational excellence.

Box 1: EU Best Practices: The balance project (<https://balanceproject.eu/about>)

Background:

The BALANCE project addresses a key priority of the EU related to environmental and climate goals. According to the Green Action Plan small and medium-sized enterprises (SMEs) have an essential role in achieving a greener economy as there are currently 25 million SMEs operating within the EU market. The BALANCE project aims to develop and provide SMEs decision-makers with an innovative program, based on ECVET, that will help them transform into greener operations while improving their financial literacy and enhancing their environmental awareness.

Project partners:

The BALANCE consortium: Inspire NGO (Bulgaria) Txorierri (Spain) , CCSDE (Ireland) , IDEC (Greece) EuroGeo (Belgium) and Emphasys (Cyprus). The project is funded by Erasmus Plus.

Project target group:

Direct Target Groups: SME's decision-makers who have not taken any actions related to greener measures, as well as SME's business consultants in order to reach as many SMEs as possible.

Indirect Target Groups: SMEs employees and relevant stakeholders such as, SME's associations and national agencies, incubators, environmental NGOs, relevant policymakers and adult trainers.

Project Approach and Innovative aspect:

The project has been designed to come up with the following tangible results:

- 1-A report over best environmental practices that have already been implemented within EU
- 2-A dedicated training program for Greener SMEs
- 3-An E-Learning program accessible to all
- 4-Workshops/webinars and multiplier events to help more micro-SMEs to embrace a greener future.

The BALANCE project uses an innovative multidisciplinary approach as it combines 3 main aspects:

- 1-Environmental knowledge
- 2-Financial literacy
- 3-Communication and Qualification of the employees.

This approach is unique for the project, as well as essential to the enterprises as it answers the question of HOW to make operations greener. Although the general awareness of environmental action is high in the EU, the practical aspects on how to transition into greener operations remain unclear. Additionally, the project is innovative as it sets a goal to increase the literacy of change management of SMEs.

Box 2: EU Best Practices, The GREENOVET Project: <https://www.greenovet.eu/index.html>

GREENOVET is an international Project, comprising 18 European Partners and co-funded by Erasmus+ Program of the European Union.

The Project fosters the development of Vocational Education and Training (VET) Excellence in Green Innovation across Europe and through the establishment of Centres of Vocational Excellence (CoVEs) that enable an innovative, inclusive and sustainable economy.

The CoVEs focus the knowledge, resources and infrastructures of the key stakeholders into the development of innovation and skills ecosystems, contributing to regional development, and promoting environmental, social and economic development in Europe, through green and sustainable innovation processes enabled by VET Excellence.

In an early stage, the project includes four regions, in different parts of Europe, with different development and challenges: Styria (Austria), Vaasa (Finland), Skopje (North Macedonia), and Leiria (Portugal). GREENOVET brings together regional VET providers at different levels (upper-secondary VET and higher VET), local companies (larger ones and SME), sector and employer representatives, regional governments, as well as regional innovation agencies. However, it also stretches to a national level by involving national ministries and social partners as associated partners, assuring coordination and coherence across governmental levels.

Project objectives:

- To establish four fully functional and interconnected CoVEs (Centres of Vocational Excellence) in Green Innovation, embedded in the local innovation and skills ecosystems.
- To enable Greentech projects, conducted by education providers of secondary and Higher Education students, jointly and in interconnected VET scenarios.
- To interconnect the industry with VET providers on EQF levels 4-8.
- To establish and strengthen innovative teaching methods and educational trends in VET through the CoVEs.
- To bring closer the green innovation opportunities to a broader public in Europe.
- To foster the employability and entrepreneurial readiness of VET students, preparing and connecting them to the labour market.
- To adapt technical, pedagogical and didactical skills of VET teachers to the upcoming environmental, social and economic challenges.

This project's Consortium gathered all relevant stakeholders from the partner countries, as well as, a group of EU partners carrying considerable experience in applied research area, technology transfer and curricula modernization. The project is implemented by a consortium of 30 partners (18 full and 12 associated), with the necessary profile, competences, experience, and expertise to successfully deliver all aspects of the project.

CONCLUSION

The analysis conducted in this report is an attempt to explore innovative ways to promote HE and VET collaboration to tackle the issues of youth and women unemployment and skills mismatch in the SMCs. A set of recommendations and policy actions were suggested as entry points to further discuss possible collaboration between HE and VET to promote vocational pathways in key economic sectors such as green, blue, and digital economies. It was proposed that this partnership can be further explored in the course of a regional dialogue that includes regional stakeholders from the public sector, the private sector, and other key actors including donors, NGOs, and CSOs. The main objectives of this regional dialogue include promoting lifelong learning culture, encourage skills development, strengthening career guidance and entrepreneurship, engaging with the industries, and enabling public stakeholders. In addition, it was suggested designing a concrete regional project in green economy to promote the collaboration between HE and VET by developing postsecondary vocational pathways that promote 21st skills development. The analysis revealed that there are possible synergies between HE and VET that should be explored in the SMCs to better tackle the issue of employment and skills development.

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APPENDICES

APPENDIX 1: FOCUS GROUP DISCUSSION

The purpose of the focus group discussion is to gather the perspective and feedback of major industry and partner stakeholders to include in the final report and share some of the questions related to a possible collaboration between VET and HE with a focus on upper secondary pathways that can be managed by Higher Education institutes to pave the way for a regional dialogue.

Participants are invited to select relevant questions and to describe their point of view and develop initiatives from their own country and institution. They are also asked whether they have an idea about synergies between VET and HE in their country.

First focus group on January 13th, 2022

PARTICIPANTS

Union Tunisienne de l'Industrie, du Commerce et de l'Artisanat (UTICA)

Confédération Générale des Entreprises Algériennes (CGEA)

Confédération Générale des Entreprises du Maroc (CGEM)

Jordan Chamber of Industry (JCI)

Federation of Egyptian Industries (FEI)

The representative of Egypt covers the topic of the efficiency of the development partners and the ongoing series of projects built on the previous ones. All the players are part of developing a strategy but the main problem is the sustainability to build new projects with the same quality.

The Tunisian representative focuses on the role of UTICA to better youngsters' employability. The experience has proved to be successful as there are two success stories in Tunisia; a professional license and a new concept that started last year, which is an applied co-constructive license. This license is open to all whether they are students from VET and HE or workers to progress in their job. It targets motivated youngsters who want to develop their skills in a chosen specialty for a specific job and also those who want to create their own enterprise. Learners become certified and specialized in new sectors such as food industry, wood, handcraft, chemistry and also the digital, electronic and mechanic sectors.

This project implies the full participation of professionals from curriculum development till the signature of their diploma and so learners are recruited directly by the involved enterprise. The advantage is that it is short training that lasts 3 to 4 months. The objective of these two important actions has been achieved. The professional license still exists but professionals are not involved any more as they were replaced by university teachers and so the principles and objectives set at the beginning have changed. As a result it is not as successful as it used to be and the impact has reduced.

As Morocco is concerned, it uses the co-construction strategy supported by the private sector but the problem is that there are no available classrooms so they have to limit the number of candidates. The new strategy is through successful training centers managed by professional programs and the private sector for 2 years after the baccalaureate certificate and taught by trainers from the private sector. There are 12 delegate management institutes specialized in automation, real estate, energy, textile, green.....This new tendency, which is called the post Bac training, gives good results and is co-managed by not only the public sector but especially

the private one that is really concerned and invests in the infrastructure, governance, specialties and budget. The Algerian representative explains that there is no anchored relationship between HE and VET. The idea was launched and the vision is to make HE benefit VET by working on a strategy called short training but the problem is the supply and demand, that is why they are establishing new jobs but the rhythm is still slow. The representative of Jordan states that some projects were implemented and the last in date was between 2019 and 2021. Now, there is a new commission to determine the needs to make standards to each sector to design a curriculum for each occupational standard, for each sector, in order to implement new programs supported by the ILO. There is no vocational ministry in Jordan and so the program is under the labor ministry that collaborates with the educational ministry.

Second focus group on January 20th, 2022

PARTICIPANTS

The University of Sousse in Tunisia

The Lebanese University

In Lebanon the structure and the system are almost the same as in Tunisia. There is also the technical license of 2 years after the baccalaureate certificate and there are even 2 Master's degrees entitled Research MA and Professional MA targeting the job market. The problem is that there is a cultural belief that the technical path is for weak students and so the image of VET is not as good as HE. Besides, there is a lack of renewal and there is no validation of the acquired competences but there is a continuous training whose credits can be validated only through CNAM. The Lebanese university has the special faculty of technology that gives a diploma after 2 years and has 5 specialties. It is different from all the other faculties that require 3 academic years and that do not necessitate trainings. The other weakness is the online teaching as the university was not ready for that during the pandemic, which led to new training programs. As the syllabus is concerned, it is based more on the evaluation of competence than on the traditional evaluation. There is also a focus on soft skills and life skills that are not acquired during the courses but are means of communication. However, there is a need to update the courses and this is difficult because of the bad health and economic conditions in Lebanon as the majority of students will not be able to afford transport to the university after the end of the pandemic. The last point mentioned is that there is just one ministry in Lebanon with 3 different directors. Moreover; there is a law that allows a pathway to the Higher Education level without the baccalaureate certificate with certain conditions like the success in the technical baccalaureate.

The Tunisian representative states that there were two types of licenses the general license and the applied license, which does not exist anymore since September, after courses during 2years and a half and a 6month compulsory internship. There are also 2 master's degrees; the research MA and the professional MA that targets the job market. VET is abandoned in Tunisia and there are no more specialties like BTS, which led to the loss of certain jobs such as painters and plumbers; what is missing is the professional baccalaureate that paves the way for a professional license. The other point to mention is that in Tunisia; there is a lack of recognition of certain competences and no validation of the acquired competences by sitting for special tests. What is exceptional is that there is a 10 percent quota to enable trainees to integrate a professional Master's degree. What is also important is the participation of professionals but they are no more motivated. The main objective of ISET was

to have a professional path and the applied license should have been integrated there as different from the fundamental license. There are also the co-constructed trainings that fit the needs of enterprises; it is a piecemeal training in L3 and M2. It is a training in which 50 percent of the trainers are professionals and the others are university teachers. The strength is the release training that copes with the needs of the region where the university is established. All universities and even ISET have this co-constructed path. However, pathways are not allowed and the baccalaureate is a must to integrate the university.

After Covid-19, there is a new support from the World Bank to set career centers, certifications and employability programs through trainings for learners, teachers and staff. The objective is to develop the soft skills and to launch a cross disciplinary teaching apart from the fundamental and option modules. However, there is a delay because of the pandemic and there is a lack of specific regional needs as standardization is an obstacle that limits the choice and the requirements of universities. As a result, it is important to acquire autonomy and to be practical. Moreover, there is a bad management of the funds of the projects PAQ as there is no financial autonomy and this is a real obstacle. Consequently, trainers are not motivated anymore. Finally, it is suggested to harmonize between the primary, secondary and Higher Education education and to train learners to better their general knowledge, their critical thinking and communication skills hence it is a must to change the 3 educational systems. Finally, it will be great to have a professional baccalaureate, a professional Master's degree and a professional PHD.

APPENDIX 2: BEST PRACTICES

Morocco Cités des Métiers et des Compétences (Les CMCs)

The Moroccan government set up the so-called ‘Cities of Professions and Skills’ in every region of the Kingdom. The national project closely monitored by the King aims to reform the vocational training system by benefiting from successful international experiences in the field, notably the adoption of the dual system that involves the support of the industries in providing work-based learning opportunities for learners. The cities are multi-sectoral and multifunctional structures that will become a strategic lever for competitiveness and a major factor of the integration of the youth into working life. The Moroccan government has announced the development of 12 joint-stock companies that would be responsible for running the recently instituted Cities of Professions and Skills.

Morocco’s Office of Vocational Training and Employment Promotion oversees the establishment of the 12 companies that will handle the project. The office will create a real estate company responsible for managing the entire business, which will then form specific agreements with other management companies according to individual circumstances. The project is an innovative PPP initiative in the SMCs.

The BlueSkills Project

The BlueSkills project promotes opportunities for “Blue” marine and maritime careers by developing skills, exchanging knowledge and valorizing research for more sustainable Mediterranean Sea. Its aim is to develop new curricula and increase employability in the marine and maritime sectors. By supporting the Euro-Mediterranean communities of the Blue Economy stakeholders through Higher Education, research and innovation, the project will enhance the shared knowledge of the Mediterranean Region.

Actions

- Advanced Studies Master Program: 20 to 25 students per year.
- Summer School: 30 to 35 trainees per year.
- Research Mobility: Multilateral scholarships available for BlueSkills researchers (extra or existing funding) mainly for PhD and Post-Doc programs; 1-2 Researchers hosted by a Project Partner per year.
- Professional Traineeship: Multilateral scholarships available for BlueSkills students (extra or existing funding); 1-2 Researchers hosted by a Project Partner per year (Training and Research in BlueSkills Partner’s Labs).
- Specific Workshops (Organization of minimum one thematic workshop on one main issue identified 20 to 25 participants per year), Conferences (Organization of minimum one event per year related to blue topics; general outreach: approx. 50 per year).
- Further contributions in particular for awareness and divulgation besides publications.
- Project Management: The BlueSkills Network: Mediterranean institutions actively engaged in the euro-med region.
- Online Portal Management: Content creation on the official portal www.blue-growth.inogs.it.

The goals of the project are:

- Promoting capacity building on Blue Economy sectors in the Euro-Mediterranean region and knowledge transfer among the blue economy stakeholders;
- Boosting transferable skills and promoting employability for young professional and researchers in the Mediterranean;
- Raising awareness on ocean governance, climate change and sea level rise, marine biodiversity and ecosystem functioning, sustainable blue economy and ecosystem based management, maritime spatial planning (MSP), and all challenges and opportunities related to the marine and maritime sectors in the region; and
- Strengthening regional cooperation and networks on blue growth in the Euro-Mediterranean region

The expected results include direct individual beneficiaries (young scientists, researchers and Ph.D. students; project managers, economists, engineers or other professionals; policy-makers, administrators) in the range of 120-140 direct beneficiaries per year, or 600-700 for the five-year project.

The project cost is valued as € 999,600 spanning across five years and ten countries, currently fully financed by the Italian Ministry of Education, Universities and Research (MIUR) and implemented by the National Institute of Oceanography and Applied Geophysics (OGSToolbox)

The YouMatch Project

The “Toolbox Project” will focus on selected employment services for young people as pilot examples. Based on case studies of existing approaches within the MENA region, a peer group together with a facilitators’ team will analyze substantial criteria and success factors for the implementation of the identified tools and help in their development and elaboration towards implementing innovation and transferring projects in one or more partner countries.

“YouMatch” focuses on the link between labor supply and demand with the key idea of improving job matching for young people. The project addresses the challenge of bringing young people and especially young women into sustainable employment and offering them long-term prospects through innovative solutions. “YouMatch” offers stakeholders and practitioners from labor ministries, business associations, civil society organizations and employment promotion programs a platform to discuss the universal success factors of existing employment services for young people. It helps to identify good examples, further develop and implement innovative labor market solutions, transfer tailored models into different country contexts and share lessons learnt. To support this process, a demand-driven toolbox will be developed together with the participants in the platform. Valuing existing knowledge and the experience of peers in participating countries and beyond is crucial to achieve sustainable results. Throughout the process, expertise from international organizations and countries which can provide good practices will be incorporated as and when required.

The results and recommendations of “YouMatch” will be shared on the platform of the global initiative and introduced in relevant discussions at the regional and global levels.

The final objectives of the “YouMatch – Toolbox Project ” are promoting innovative labor market services, building on knowledge generated within the beneficiary countries, sharing good practices and lessons learnt, increasing the visibility of their own approach and finding partners to advance on the adoption and implementation of promising solutions.

With a total budget of €1.05 million, the project is totally funded by the Federal Ministry for Economic Cooperation and Development of Germany (BMZ) and implemented by GIZ in Algeria, Egypt, Jordan, Morocco, Palestine and Tunisia.

