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Skills in the Water sector in Lebanon Overview of the needs after COVID-19

National Webinar's Report Tuesday May 12, 2020

Skills in the Water Sector in Lebanon

Overview of the needs after COVID-19

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Background

YEM is a 36-month regional project funded by the European Union (EUR 2M) and implemented by UNESCO over the period of 2018-2020. The project targets eight beneficiary countries in the South Mediterranean region: Algeria, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia, where the aim is to support youth employment through improved skills anticipation and assessment systems, and through the promotion of quality and relevant TVET and regional collaboration.

The global COVID-19 pandemic has severely impacted many sectors including countries' economy, the labour market and the educational sector. With an estimated rise between 5.3 and 24.7 million in the number of those unemployed globally, the impact on youth employment is likewise probable to be severe given that youth (15-24) are already 3 times more likely to be unemployed than adults. Hence the need to start planning an adequate response to the challenges generated by the pandemic.

The "Skills in the Water Sector in Lebanon" webinar explored the value chain of the water sector: its occupations, jobs and skills needed, previous initiatives, and future plans, with the purpose of anticipating the skills needed for this prominent sector. All of the above-mentioned subjects were addressed by experts from the water sector and from the education field. The experts were at first introduced by Mr. Oussama Ghneim, the moderator of the webinar and the project Team Leader of YEM project, who also highlighted the three components of the project, and shed light on the importance of anticipating skills in the development of TVET Curriculum. Throughout the webinar, Mr. Ghneim was guiding the speakers during their presentations and made sure that the audience was gaining the most out of the presentations

The platform SLIDO was used with the intention of ensuring more interactivity during the webinar by expressing opinions and asking questions, keeping the webinar open to any inquiry and the audience more engaged. More than 55 people took part in the webinar all believing that this sector had the ability to create a lot of potential job opportunities under different fields and specialization.

This webinar was moderated by Mr. Oussama Ghneim YEM project team leader, and supported by Mrs. Nazha Alam, Ms. Line Zaylaa and Ms. Amal Nazzal from UNESCO – Beirut.

Speakers' Speech Summaries



Mr. Salim Shehadeh programme specialist UNESCO Regional Bureau - Beirut

He started the webinar by briefing about the current situation and explaining the YEM project's objectives and expected results

He stated that technological change, globalization and demographic changes have an impact on labour markets and education and training systems, and that there is broad consensus on the importance of anticipating labour market needs in order to match the skills taught in the education system with the skills needed in the labour market, he also indicated that "employment and employability, especially for young people, is a common priority for the YEM countries".

Mr. Shehadeh stressed about the impact of the COVID-19 on education sector and on youth employability in the near future and highlighted that the situation after COVID-19 pandemic will not be the same, in fact the world will face a lot of challenges with job opportunities thus professions and skills anticipation are needed in order to equip the youth with the required skills.

He highlighted that an opportunity presents itself to TVET providers in the Water sector to develop strategies, establish partnerships with the private sector, review the curricula, train the teachers, coach and monitor the implementation of different activities and programs, hence the relevance of the webinar organized by UNESCO.



Ms. Maria El Hassrouny Programme manager for TVET and local development Delegation of the European Union to Lebanon

She affirmed that through the Youth Employment in the Mediterranean's project, implemented by UNESCO, the European Union aims to establish and strengthen a link between vocational and technical education systems and labour markets.

She insisted on the importance of vocational trainings in building up the skills needed for the future needed professions and emphasized about the value of the water sector and the jobs that this sector can ensure despite the need of qualified employees to ensure the highest required services.

The European Union supported a lot of initiatives in the water sector since the beginning of the Syrian crisis, Ms Hassrouny mentioned that the European Union has invested more than EUR 100 million in projects around Lebanon, in the Bekaa in particular through the Bekaa Water Establishment. And now during the period of COVID-19, this sector will be of a high priority since water sector is key for reducing the transmission of the virus.

Nevertheless, she insisted that the sector is in need of support because water establishments have not been provided with sufficient resources to provide a reliable level of service. In addition, the level of collected fees remains low which put the water establishments under stress to provide the service. Investments are to improve infrastructures and management. However, it is crucial to also have qualified staff in the sector, to ensure the best possible level of service. Not to forget that the Delegation of the European Union to Lebanon has supported various initiatives to promote the Water sector among job seekers. One example was the initiative held at the American University of Beirut (AUB) in 2019 through the international partner ACTED entitled Youth Conference Water in Lebanon – Turning Current Challenges into Future Opportunities.

At the end of her intervention, Ms. Hassrouny shed the light on the youth component who should be provided by work and life skills to be better prepared for the future opportunities and to keep them always aligned with the needs of the labor market.



Mr. Walid El Baba Expert Managing Director WEBCO SARL

This was followed by a series of presentations starting by Mr. Walid el Baba, the expert and managing director of WEBCO SARL, who described water as a symbol of wealth if it is well operated and conserved, he highlighted that SDG6 stipulates that "safe and affordable drinking water for all by 2030 requires to invest in adequate infrastructure, provide sanitation facilities and encourage hygiene".

Mr. El Baba stated that many factors are affecting the quality and the quantity of the water such as population growth, urbanization, economic growth and climate change, as for the applications water could be used as potable water for domestic use, or treated water form waste as well as water for Irrigation and purified water for Industry.

He also underlined the different positions and job opportunities that can be occupied throughout the water value chain, showing that this sector displays a lot of professions that could be divided into two categories engineers and technicians. He then specified that the following professions are needed in the Water sector: "Plumbers, welders for steel and plastic pipes, fitters for special jointing like grooved for big pipes diameters, electricians (for motors, contactors, relays etc..), electronic technicians for control, automation, instrumentation and chemical technicians for water analysis, chemical dosing products etc..".

Mr. El Baba explained then that the technicians constitute 95% of the total of professions thus the vocational institute should be prepared to deliver the most advanced skills for the youth to prepare them for the potential occupations.



Mr. Rizk Rizk Director General Bekaa Water Establishment

Mr. Rizk Rizk, the director general of Bekaa water establishment, outlined the Bekaa water establishment as a public institution with financial and administrative autonomy and a subordinate of the Ministry of Energy and Water, it is the exclusive institution that administer the water sector covering the potable water, irrigation water and treatment of sewage.

He explained that "the COVID-19 crisis led to a change in work modalities in the water sector like adopting the remote working system as an alternative plan to meet the needs and follow up on work. Mr Rizk mentioned that the sector needs specialists who master the following tools and technologies: Water Balance, the GIS system, SWMS and SCADA systems.

He also stated that specialists are needed to develop and manage the Call Center of the Bekaa Water Establishment, and the e-payment modalities. With all been said about the skills needed and the profession that can be secured by the water sector Mr. Rizk guaranteed that more than 3000 opportunities can be filled by skilled workers in the near future thus the need to have well trained people ready to occupy the required positions.

At the end, he insisted that the establishment works hard to preserve everyone's right to service clean, safe water and sewage treatment under all conditions.



Dr. Mohamad Abou Haidar Advisor for the director general of TVET-DGVTE

Dr. Mohamad Abou Haidar, Advisor for the director general of TVET-DGVTE, praised UNESCO for organizing this timely webinar which he described as needed especially during this critical period where the country is facing a lot of challenges on the economical level. He emphasized that the objectives of the Directorate are to increase the graduates' abilities and to provide them with the necessary skills to keep up with the rapid change of the labor market needs, for this reason the directorate has been working and partnering with international and local organizations as well as with public and private sector in order to develop new curricula and to secure the necessary equipment to better shape the skills of the youth in regards of the future professions.

Mr. Abou Haidar stated that the directorate worked previously with the Swiss business council in Lebanon providing 21 technical schools with clean potable water and training the teachers on professions related to water distribution, in addition to preparing with a local NGO a series of educational trainings and a booklet that served as reference for the latest technology in the field of potable water and distribution channels. However, he added that the technical schools are lacking with water specializations and so forth they are willing to work with all the sectors and organizations to better understand the occupations and skills needed in this sector.

Mr. Abou Haidar hoped that after the COVID-19 crisis, the economic will shift to be more productive thus focusing on agricultural and industrial sectors, therefore technical and vocational training should be given high priority by both public and private providers since trainings impart the necessary skills leading to the production of craftsmen, technicians, and other skilled personnel who will be enterprising and self-reliant.



Mr. Georges Honein Power and Control Manager at Phoenix Machinery Private sector

Mr. Georges Honein, representing the private sector, power and control manager at phoenix machinery, gave an overview of the Water Management System and the occupations and skills needed.

He defined water supply as a vital problem for people and this imposes the need to know the information regarding consumptions, resources and production implying a continuous supervision on water supply process to avoid any problem and to maintain normal functioning parameters. He added that proper solutions imply automation and monitoring architectures which contain: a supervision and control system, programmable logic controllers, pressure and water quality sensors, power meter, drives and safety equipment. The informatics systems present the possibility of analyzing, processing, storing and retrieving the data, leading to an optimum functioning and reducing the operation costs. In this way, the automated system monitors and control the technological parameters in the water distribution stations, which will allow the optimum functioning of the pumping system, safety and endurance growth in the equipment and efficient energy usage.

All this will require technicians and people with technological and digital skills that can lead and operate automated machinery and can anticipate skills needed in the water sector.



Mr. Wadih Yared Materials Scientist and Technical Consultant Private sector – API

Mr. Wadih Yared, materials scientist and technical consultant, also representing the private sector, started by introducing API Company's profile briefly, and its vision for the future as a concrete example of the Lebanese manufacturing capabilities in the area of Water and highlighted potential employment opportunities.

He then explained the different factors that affect a water pipe's performance, he stressed on the scientific knowledge in the field of plastics processing and on the role and importance of operators, engineers and installers. He insisted on the need for a well-trained and educated workforce, while stressing the importance of self-awareness and respect for the world around us as key factors for both success and survival in this delicate environment we live in.

Mr. Yared then added that having an understanding of basic theoretical knowledge especially when it comes to professions that requires digital skills in the water field is a must and no doubt that knowledge will constitute an important career enhancing factor.



Mr. Youssef Ghantous Secretary General Lebanese Solar Energy Society (LSES) - NGO

Mr. Youssef Ghantous, Secretary General of the Lebanese Solar Energy Society (LSES), describe how the water and energy are related in many aspects since both are resources that are dwindling with the unplanned behavior of the humans.

He explained how both are a source of sustainable development and that they can provide employment opportunities for the youth if the proper capacity building is provided for them. He added that LSES has been involved in many projects that combine sustainability with job creation in the energy and water sectors such as solar pumping and solar water heating.

Mr. Youssef assured that many opportunities are available so there is a need to develop knowledge for the youth in these areas by cooperation among all the local and international stake holders along with efforts coordination. He then added that following their experience, the water industry attracted a lot of motivated youth who showed their willingness to attend various training in the field whereas this sector needs young professionals with different skills and backgrounds to integrate new technology and break down challenges into solutions.

The sector of water is vital for the sustainable development both on the economic level and on the human resources level.



Mrs. Samar Boulos General Manager Safadi Foundation NGO

Mrs. Samar Boulos, General Manager at Safadi Foundation gave a small brief about the SAFADI Foundation (SF) and its mission to support sustainable development in Lebanon. Mrs. Boulos talked about the experience of the SAFADI foundation with the vocational trainings and their relation with youth, she stressed about the importance of the coordination with the private sector specially to anticipate the skills that will be needed in the market so they can draft curricula, prepare trainings and ensure job opportunities once youth will be trained.

As for the support of the water sector in Lebanon, the SAFADI foundation conducted an online rapid assessment to study the skills needed for this sector as well as to better understand the point of view of youth regarding the water sector projects and job opportunities in Lebanon. The assessment findings highlighted that in general the youth have limited understanding and knowledge of the sector services, yet 70% of Youth expressed their interest in working in the water Sector.

In conclusion, Mrs. Boulos provide few recommendations based on the SAFADI Foundation's experience in the TVET sector, she emphasized about the promotion of the Green TVET including water specialties, thus training youth on new and emerging operating technologies, the development of a demand driven curriculum, conduction of awareness regarding water industry as well as the creation of a context where a new profession can be introduced and tested.

The presentations were followed by an interactive and lively discussion between participants who shared their concerns and spoke of the challenges the water sector faces.

Conclusion

Overall the "Skills in the Water Sector in Lebanon" webinar offered an important platform to gather the thoughts of actors and experts coming from different sectors all reflecting the community demands and highlighting the need to have a clear overview of skills anticipation regarding the water sector since it has the potential to offer a lot of job opportunities in the near future.

Around 3000 estimated vacancies can be secured by the water sector as per the experts' opinion. Across most water occupations, the professions are diverse, from engineers to installers, distributors, systems operators and technicians. Nonetheless careers in water are not just in high demand, they are also undergoing rapid changes. Thus, vocational institutions should be prompted in collaborating with all the sectors involved to provide and equip learners with the knowledge and skills in the productive, distributive, and service industries for self or paid employment. The trainings will prepare the student to earn a living through water occupations in which success depends largely on technical information and on the understanding the technology as applied to modern design, production, distribution, and services.

The discussions and reflections that took place were valuable yet many questions remain to be answered in-depth, such as the responsibility of the public and private sector when it comes to drafting curriculum following the market demand and offering job opportunities, the definition of the required skills to better shape a skillful employer, the transferable skills from other sectors such as construction that could fill the gap, the job opportunities that can be outsourced as well as the willingness of the youth to be engaged and committed to such professions.

All the speakers and experts expressed their willingness to collaborate, join effort and to go further and support any public or private partnership process.

This webinar represented the first step towards a more detailed study and research in the water sectors, market needs, gaps as well as skills required.

ANNEXES

Annex 1. Invitation



National Webinar Tuesday, May 12, 2020, from 2:00 PM to 3:30 PM ¹ The YEM Project (Youth employment in the Mediterranean) is a 36-month regional project funded by the European Union and implemented by UNESCO over the period of 2018-2020, the overall objective is to support national authorities, the private sector, TVET providers and Youth organisations in the South Mediterranean region, in understanding and anticipating labour market changes with a view to inform the design, implementation and evaluation of relevant. TVET policies, strategies and programmes, aimed at increasing youth employment and entrepreneurship.

Annex 2. Concept Note

Introduction

In the last few months of 2020, we have all seen how the novel Coronavirus COVID-19 has affected many countries around the world. It is already clear to many experts that the world after this pandemic will not be the same. While governments face significant challenges linked to the impact of COVID-19, Healthcare and Education are among the priorities of governments' responses worldwide.

Lebanon, like the most of Arab counties, faces significant socio-economic challenges such as a high unemployment rate, particularly among youth, leading many young people to feel frustrated and disengaged.

Employment and employability, especially for young people, is a common priority for the YEM1 Countries. Technological change, globalization and demographic changes have an impact on labour markets and education and training systems. There is broad consensus on the importance of anticipating labour market needs through the application of different complementary quantitative and qualitative methods.

Governmental agencies are working with international organizations, private sector partners and civil society to find solutions. There is a need to strengthen national dialogue on future skills needed through identification of employment growth drivers and building of related scenarios on employment demand. To this end, and based on YEM's activities and previous policy dialogue with concerned TVET policymakers in Lebanon, the Water sector has been selected for study in terms of skills needed for the various jobs it offers.

TVET has always been considered the main pillar in providing the labour market with skilled workers, in different sectors and particularly in the Water sector. However, more attention needs to be paid to the Water sector.

¹ The YEM Project, (Youth employment in the Mediterranean), is a 36-month regional project funded by the European Union and implemented by UNESCO over the period of 2018-2020, with an overall objective to support national authorities, together with the private sector, the TVET providers and the Youth organisations in the South Mediterranean region, in understanding and anticipating labour market changes with a view to inform the design, implementation and evaluation of relevant TVET policies, strategies and programmes, aimed at increasing youth employment and entrepreneurship.

After COVID-19, an opportunity presents itself to TVET providers in the Water sector to develop strategies, establish partnerships with the private sector, review the curricula, train the teachers, coach and monitor the implementation of different activities and programs.

Focus and Objectives

Building on various YEM initiatives and activities in the past, notably the policy dialogues with the Ministry of Education – Directorate General of VTE (DGVTE) and with the Ministry of Labour – National Employment Office (NEO), the "Skills in the Water Sector in Lebanon: overview of the needs after COVID – 19" webinar will explore the value chain of this sector, occupations, jobs and skills needed, previous initiatives, and future plans. The webinar will also serve as a "voice for youth" to share their concerns regarding skills and jobs in the Water sector.

The objectives are as follows:

- Initiate a dialogue at the policy level with concerned stakeholders
- Share knowledge in the water sector in terms of occupations, jobs and skills needed and ongoing initiatives
- Develop awareness of the situation and skill gaps after COVID 19
- Expose Youth to this sector in terms of employment and skills needed
- Explore propositions by -the EU funded YEM project implemented by UNESCO in this field.

Guiding Questions

- What jobs and skills needed in the Water sector?
- Are there any planned initiatives in this sector for skills development in TVET?
- What are the lessons learnt from previous experiences / initiatives in term of jobs and skills needed?
- What impact has COVID -19 had on the Water sector?
- What do the youth think? Are they aware about the opportunities presented in it? Are they interested in developing the needed skills to work in the sector?
- What can the YEM project and UNESCO offer?

Audience

Ministry of Education – DGVTE (officials and teachers), NEO (officials and employees), private sector representatives, local and international NGOs working in the field, engineers and youth NGOs.

Technical specifications and language

The webinar uses Microsoft Teams Live as a technical platform Participants do not require a Microsoft Teams account but can connect as guest.

The working language of the webinar is Arabic; the presentation will be posted in English. Questions and comments will be accepted in Arabic, English, and French using the chat function.

Annex 2. Agenda

Time	Item	Speaker	Remarks
14.00- 14.05	Introduction and purpose of this webinar	Mr. Salim SHEHADEH Mr. Oussama GHNEIM	UNESCO
14.05-14.15	An overview of the European Union's support to the Water and TVET sectors in Lebanon	Ms. Maria EL HASSROUNI	Programme Manager for TVET and Local Development Delegation of the European Union to Lebanon
14.15-14.25	An overview of the sector (what Jobs and skills are needed in the sector?)	Mr. Walid El BABA	Expert – Managing director WEBCO SARL
14.25-14.35	What are the needed skills from the point of view of the public sector?	Mr. Rizk RIZK	Director General Bekaa Water Establishment
14.35-14.45	Does TVET cover the needed skills?	Mr. Mohammad ABOU HAIDAR	Advisor for the Director General of TVET DGVTE
14.45-14.55	Challenges in term of skills needed from the point of view of the private sector. What impact has COVID - 19 had on the Water sector?	Mr. Wadih YARED	Materials Scientist and Technical Consultant API - Private sector
14.55-15.05		Mr. Georges HONEIN	Power & Control Manager Phoenix Machinery – Private sector
15.05-15.15		Mr. Youssef GHANTOUS	Secretary General LSES – NGO

15.15-15.25	The point of view of youth: Are they aware about the opportunities in the Water sector? Are they interested in developing the needed skills?	Mrs. Samar BOULOS	General Manager Safadi Foundation NGO
15.25-15.35	What can the YEM project and UNESCO offer?	Mr. Salim SHEHADEH Mr. Oussama GHNEIM	UNESCO
15.35-15.45	Q&A		

Cannot join the Webinar live?

The video recording of the webinar will be made available after the event.

Subscribe to the YEM Community of Practice to access the recording as well as share your questions and views on the YEM General Discussions thread.

Annex 3. Press Release

https://ar.unesco.org/news/lywnskw-tnzm-ndw-br-Intrnt-hwl-Imhrt-Imtlwb-fy-qt-Imyh-fy-Ibnn-Imh-m-n-Ihtyjt-bd-kwfyd-19

> اليونسكو تنظم ندوة عبر الانترنت حول "المهارات المطلوبة في قطاع المياه في لبنان: لمحة عامة عن الاحتياجات بعد كوفيد-19"

أدى وباء كوفيد-19 إلى وضع غير مسبوق حيث تم تعطيل التعليم لما يقارب 1.6 مليار طفل وشاب عالمياً، في ظل فرض الحكومات الإغلاق الكلي أو الجزئي للمدارس والمؤسسات التعليمية، بما في ذلك تلك التي تقدم التعليم والتدريب التقني والمهني والتعليم العالي في محاولة لاحتواء انتشار الفيروس. انعكس ذلك تحديًا إضافياً على المنطقة العربية (التي في الأصل تعاني من تواجد أكثر من 13 مليون طفل وشاب خارج المدرسة بسبب النزاعات)، فهي تواجه في الوقت الحالي تواجد أكثر من 100 مليون متعلّم خارج المدارس وفقاً للرّصد العالميّ لإغلاق المدارس بسبب كوفيد-19.

على هذه الخلفية وفي إطار مشروع "دعم توظيف الشباب في المتوسط" المموّل من الاتحاد الأوروبي والذي تنفذه اليونسكو، وهو مشروع مدّته ثلاث سنوات يهدف إلى تحسين جودة التعليم والتدريب التقني والمهني، والى تعزيز تشغيل الشباب، وتشجيع روح المبادرة لديهم، في ثمانية بلدان من منطقة البحر الأبيض المتوسط، نظّم مكتب اليونسكو الإقليمي للتربية في الدول العربية – بيروت في 12 ايار 2020 ندوة عبر الانترنت حول "المهارات المطلوبة في قطاع المياه في لبنان: لمحة عامة عن الاحتياجات بعد كوفيد-19".

هدفت هذه الندوة الى تقديم لمحة عامة حول احتياجات قطاع المياه في لبنان، لا سيّما بعد وباء كوفيد-19، والمهارات المطلوبة وتحدّيات العمالة فيه. وتصب الندوة في مجال دعم جهود أصحاب القرار، ومقدمي خدمات التعليم والتدريب التقني والمهني والشركاء الاجتماعيين في التخطيط لتطوير وتحديث التعليم والتدريب التقني والمهني ليتمكن من مواكبة احتياجات سوق العمل المستقبلية، لا سيما في قطاع المياه.

شارك في الندوة مدير عام ورئيس مجلس ادارة مؤسسة مياه البقاع، المهندس رزق رزق، ومستشار المديرة العامة للتعليم والتدريب التقني والمهني في وزارة التربية والتعليم العالي الدكتور محمد أبو حيدر، ومسؤولة برنامج التعليم والتدريب التقني والمهني والتنمية المحلية في بعثة الاتحاد الأوروبي في لبنان السيدة ماريا حصروني، وممثلون عن القطاعين العام والخاص، كما مجموعة من الشباب.

شحاده

في مقدّمة الندوة، وبعد كلمة ترحيبية ألقاها مسؤول برنامج "دعم توظيف الشباب في المتوسط" في مكتب اليونسكو في بيروت الأستاذ أسامة غنيم، تحدّث أخصّائي برنامج التعليم والتدريب التقني والمهني في مكتب اليونسكو في بيروت، الأستاذ سليم شحاده، وجاء في كلمته: "من الواضح أنه في الوقت الراهن، يحتل كلِّ من الرعاية الصحية والتعليم المرتبة الأولى في أولويات الحكومات في العالم العربي. إلاَ أنّه، في الوقت نفسه، تواجه البلدان العربية تحديات هامة أخرى، لعل أبرز ها القضايا الاقتصادية، التي تحول دون توظيف الشباب. لا يختلف لبنان عن غيره من الدول العربية، فالتحديات الاجتماعية والاقتصادية كبيرة: ارتفاع معدل البطالة، لا سيما بين الشباب، عدم وجود فرص عمل كافية لتلبية احتياجات جميع مقدمي الطلبات، مما يؤدي إلى فك ارتباط الشباب وشعور هم بالإحباط، وبالإضافة إلى ذلك، آثار أزمة كوفيد-19". وأضاف: "تعتبر العمالة وإمكانية التوظيف، وخصوصاً بالنسبة للشباب، أولوية مشتركة للبلدان المشاركة ببرنامج "تشغيل الشباب في البحر الأبيض المتوسط. وكما هو معروف، فإن التعليم التقني والمهني هو الركيزة الرئيسية في تزويد سوق العمل بالعمّال الماهرين، في مختلف القطاعات، ومنها في قطاع المياه. غير انه في كثير من الأحيان لا تتطابق حاجات السوق مع مخرجات التعليم التقني والمهني والمهني والمهني والمهني. ويهدف هذا المشروع إلى الألم، لعما محروف، فإن هذا الإطار، كان المشروع المؤلف من جزئيات ثلاث، لعل اهمها جزئية تعزيز نظم توقع المهارات والتعليم والتدريب في المجال التقني والمهني والمهني. ويهدف هذا المشروع إلى الإسهام في تشغيل الشباب وريادة الأعمال في منطقة جنوب البحر الأبيض المتوسط. إنطلاقاً من توقع الصعوبات التي يواجهها سوق العمل، سيقدم المشروع والتدريب في المجال التقني والمهني. والمهني ويهدف هذا المشروع إلى الإسهام في تشغيل الشباب وريادة الأعمال في منطقة جنوب البحر الأبيض المتوسط. إنطلاقاً من توقع الصعوبات التي يواجهها سوق العمل، سيقدم المشروع والمريب في المجال التقني والمهني. والفطاع الخاص، والقائمين على التعليم والتدريب في المجال التقني في المجال التقني والمهنية، والقطاع الخاص، والقائمين على التعليم والتدريب في المجال التقني والمهني، ومنظمات الشباب، وذلك من أجل تصميم وتنفيذ وتقييم البرامج والسياسات ذات الصلة بالتعليم والتدريب

حصروني

ثم كانت كلمة لمسؤولة برنامج التعليم والتدريب التقني والمهني والتنمية المحلية في بعثة الاتحاد الأوروبي في لبنان السيدة ماريا حصروني جاء فيها: "تدعم بعثة الاتحاد الأوروبي في لبنان التعليم والتدريب التقني والمهني من خلال مبادرات ومشاريع عدة من بينها مشروع اليونسكو "دعم توظيف الشباب في المتوسط "، كما أنّ قطاع المياه هو في أوليات اهتمامات الإتحاد الأوروبي في لبنان. فقد قدّم الاتحاد الأوروبي 100 مليون يورو لدعم هذا القطاع وتطوير البنى التحتية فيه". وأضافت: "هذه الندوة بغاية الأهمية للاحتياجات الكبيرة في قطاع المياه كما أرهميته الراهنة في الحدّ من تفشّي فيروس كوفيد-10".

أبو حيدر

بدوره رحب الدكتور محمد ابو حيدر، مستشار المديرة العامة للتعليم المهني والتقني – الدكتورة هنادي برّي، بموضوع المنتدى وشكر القيمين عليه وأشار في مداخلته إلى أن الاختصاصات في التعليم المهني والتقني في مجال المياه قليلة وتقتصر على التمديدات الصحيّة بالرغم من أهمية هذا القطاع خاصة في ظل انتشار وباء كورونا. وفي هذا السياق أشار إلى مبادرة حصلت مؤخرا هدفت الى تأمين مياه الشرب النظيفة في عدد من المدارس والمعاهد المهنية، والى وتدريب المعلمين حول تقنيات تتعلق بالمجال. كما أكّد دعم الدكتورة هنادي برّي لمشروع توظيف الشباب في المتوسط لما يمكن أن يقدمه هذا المشروع من دعم فني وعلمي في مجال استشراف المهارات، وأكد استعداد المديرية الدائم للتعاون مع مختلف الجهات الفاعلة الرسمية والخاصة والجمعيات والهيئات الشبابيّة من أجل تطوير التعليم المهني والتقني.

ثم تحدث كل من مدير عام ورئيس مجلس ادارة مؤسسة مياه البقاع المهندس رزق رزق، والأساتذة وليد البابا ووديع يارد وجورج حنين ممثلين القطاع الخاص، كما الأستاذ يوسف غنطوس والسيدة سمر بولس عن المؤسسات غير الحكومية والمجتمع المدني. استعرض المتحدثون الاحتياجات والمهارات المطلوبة في قطاع المياه وأبرز التحديات فيه، لا سيما لجهة توظيف الشباب.

Annex 4. Webnote

YEM Webinar Series

Skills in the Water Sector in Lebanon: Overview of needs after COVID 19

In the first months of 2020, the outbreak of COVID-19 pandemic has created significant challenges for governments worldwide. And while the response to the pandemic has been multifaceted, Healthcare and Education were among the top priorities of governments' responses.

Lebanon, like most of the Arab countries, faces significant socio-economic challenges such as a high unemployment rate, particularly among youth, leading many young people to feel frustrated and disengaged. The COVID-19 crisis is expected to exacerbate economic challenges in countries affected by the pandemic, leading to more unemployment among the youth.

Against this backdrop, and in the context of the Youth Employment in the Mediterranean Project (YEM), UNESCO Beirut organized on 12 May 2020 a national webinar on "The Skills in the Water Sector in Lebanon: Overview of the needs after COVID - 19". The webinar, which was attended by 60 participants representing the public and private sector in Lebanon, as well as youth organizations, aimed at exploring the value chain of the Water sector in Lebanon, the occupations, jobs and skills needed in this sector, as well as at allowing the youth to share their concerns.

The webinar was attended by high-level personalities, including Ms Maria El Hassrouni, Programme Manager for TVET and Local Development at the Delegation of the European Union to Lebanon; Mr Rizk Rizk, Director General of the Bekaa Water Establishment; Dr Mohammad Abou Haidar, Advisor for the Director General of TVET at the Ministry of Education and Higher Education.

The event started with the welcome remarks by Mr Oussama Ghneim, Team leader of YEM project, who highlighted the three components of the project, and shed light on the importance of anticipating skills in the Curriculum development in TVET. Then, Mr Salim Shehadeh, UNESCO Beirut's Programme Specialist for TVET, made a speech in which he highlighted that "employment and employability, especially for young people,

is a common priority for the YEM countries". He explained that technological change, globalization and demographic changes have an impact on labour markets and education and training systems, and that there is broad consensus on the importance of anticipating labour market needs in order to match the skills taught in the education system with the skills needed in the labour market. Mr Shehadeh said that after COVID-19, an opportunity presents itself to TVET providers in the Water sector to develop strategies, establish partnerships with the private sector, review the curricula, train the teachers, coach and monitor the implementation of different activities and programs, hence the relevance of the webinar organized by UNESCO.

In her turn, Ms El Hassrouni assured that the European Union supports TVET in Lebanon through a variety of initiatives and programmes, including the YEM Project. She highlighted that the Delegation of the European Union to Lebanon is committed to supporting the Water sector in Lebanon and mentioned that the European Union spent 100 million EUR to this end. The European Union is planning to support the operations of the water establishments with a specific response package of approximately EUR 10 million in the future to ensure that service levels will be guaranteed during Covid-19 as the Water sector is key for reducing the transmission of the virus.

Then, Dr Abou Haidar praised UNESCO for organizing this timely webinar, given that the water sector can provide solutions to the ongoing COVID-19 crisis. Abou Haidar stressed on the need for a better understanding of the occupations and skills needed in the water sector, and spoke of the commitment of the Directorate General for TVET to work with all public and private stakeholders to develop and strengthen the TVET sector in Lebanon.

This was followed by a series of presentations. Mr Walid El Baba, Managing Director at WEBCO SARL, presented an overview of the value chain and occupations in the water sector in Lebanon. Mr El Baba highlighted that SDG6 stipulates that "safe and affordable drinking water for all by 2030 requires to invest in adequate infrastructure, provide sanitation facilities and encourage hygiene". Stating that "It is time to put more efforts and investment in our human resources mainly in skilled technicians for a clean water system", he said that the following skills are needed in the Water sector: "Plumbers, welders for steel and plastic pipes, fitters for special jointing like grooved for big pipes diameters, electricians (for motors, contactors, relays etc..), electronic technicians for

control, automation, instrumentation and chemical technicians for water analysis, chemical dosing products etc..".

Then Mr Rizk, Director General of the Bekaa Water Establishment, presented an overview of the impact of the COVID-19 crisis on the water sector. He explained that "the COVID-19 crisis led to a change in work modalities in the water sector: when we adopted remote working, we discovered the need for new skills and specializations". Mr Rizk mentioned that the sector needs specialists who master the following tools and technologies: Water Balance, the GIS system, SWMS and SCADA systems. He also stated that specialists are needed to develop and manage the Call Center of the Bekaa Water Establishment, and the e-payment modalities.

Mr Wadih Yared, Materials Scientist and Technical Consultant at API, spoke of the challenges in terms of skills needed from the point of view of the private sector. After a brief introduction of API's profile and vision for the future, Mr Yared presented Lebanese manufacturing capabilities in the area of Water and highlighted potential employment opportunities. He stressed on the importance of sound scientific knowledge in the field of plastics processing and on the role and importance of operators, engineers and installers. Mr Yared insisted on the need for a well-trained and educated workforce, while stressing the importance of self-awareness and respect for the world around us as key factors for both success and survival in this delicate environment we live in.

Mr Georges Honein, Power & Control Manager at Phoenix Machinery, gave an overview of the Water Management System and the occupations and skills needed. He explained that: "Water supply represents a vital problem for people, and this imposes the need to know the information regarding consumptions, resources and production. This implies a continuous supervision of the water supply process in order to allow any problem that could appear to be solved, and in the same time, to maintain normal functioning parameters". Mr Honein added: "Proper solutions imply automation and monitoring architectures which contain: a supervision and control system for the real time installation, programmable logic controllers with Wireless feature communication and dedicated field devices as level, pressure and water quality sensors, power meter, drives and safety equipment. The informatics systems present the possibility of analyzing, processing, storing and retrieving the data, leading to an optimum functioning and reducing the operation costs. In this way, the automated system monitor and control the technological parameters in the water distribution stations, which will allow the optimum functioning of the pumping system, safety and endurance growth in the equipment and efficient energy usage".

Mr Youssef Ghantous, Secretary General of LSES NGO, presented the work of a youth NGO. Mr Ghantous said: "Water and energy are related in many aspects. Both are resources that are dwindling with the unplanned behavior of the humans. Energy is important for water availability and water can be the source of energy. On the other hand, if well planned they can be both a source of sustainable development and can provide employment opportunities for the youth if the proper capacity building is provided for them". He added that: "LSES focuses on advocating the use of Renewable Energy and Sustainability in Lebanon. It has been involved in many projects that combine sustainability with job creation in the energy and water sectors such as solar pumping and solar water heating." Mr Ghantous stated that "there are still many opportunities to develop youth knowledge in these areas, and cooperation and coordination are required among all local and international stakeholders to achieve this objective".

Lastly, Mrs Samar Boulos, General Manager at Safadi Foundation, gave an overview of the youth's understanding of the water sector in Lebanon based on an online rapid assessment conducted by Safadi Foundation and aimed at studying the skills needed in this sector and looking at the point of view of youth regarding the water sector projects and job opportunities in Lebanon. Mrs Boulos presented the findings of this assessment as follows: "In general the youth have limited understanding and knowledge of the sector since most of them assumed that the Lebanese government is the one responsible of the sector exclusively and that despite the abundance of water residents are still paying to get water services. 65% of youth are aware of some implemented projects in Lebanon under the water sector, while 76% of youth considered that the water sector is open to creating job opportunities, however, their perception of needed skills in this sector revealed a limited knowledge of the sector, whilst 70% of youth expressed their interest in working in the water sector." Mrs Boulos said that the Safadi Foundation as a highly experienced TVET provider, recommends the following: "Promoting Green TVET and training youth on new and emerging operating technologies; developing a demand-driven curriculum; conducting awareness-raising activities regarding the water industry; building networking including among students, trainers, and employers; and developing a learning environment by providing new technologies".

The presentations were followed by an interactive and lively discussion between participants who shared their concerns and spoke of the challenges the water sector faces.

IMPORTANT NOTE

The video recording of the webinar is available below (link). Subscribe to the YEM Community of Practice to share any views or discuss related topics on the YEM General Discussions thread. https://www.youtube.com/watch?v=XBYnRVXiCWQ&feature=emb_title

Resources:

YEM Knowledge Platform https://unevoc.unesco.org/yem/YEM%20Home

Unemployment in Lebanon Findings and Recommendations, MoL, 2019 <u>http://www.databank.com.lb/docs/Unemployment%20in%20Lebanon%20Findings%2</u> <u>Oand%20Recommendations%202019%20ECOSOC.pdf</u>