Proceeding of AFED’s 12th Annual Conference
ENVIRONMENTAL EDUCATION IN ARAB COUNTRIES
14-15 November 2019, Le Bristol, Beirut

The Arab Forum for Environment and Development (AFED) launched its annual report, Environmental Education in Arab Countries, at its 12th conference on 14-15 November 2019, at the Bristol Hotel in Beirut. The report provides the first comprehensive survey of environmental contents in school and university curricula across the Arab countries, in view of identifying gaps and recommending pathways to enhance the role of education in advancing environmental protection and implementing the Sustainable Development Goals (SDGs).

The conference followed an innovative format based on large roundtable presentations and discussions among authors and delegates. The report and conference were dedicated to the memory of Dr. Abdulrahman Al-Awadi, Chairman of AFED Executive Committee and Founding Board Member, who passed away in July 2019.
BADRAN: DEVELOPING SKILLS TO FACE CHALLENGES

The sessions opened with a welcoming speech by the Chairman of AFED Board of Trustees, Dr. Adnan Badran, who said that environmental awareness and sustainable development should be built through teaching and environmental education at all levels. He said “Environmental education is a process of teaching and learning that aims to promote values and concepts that lead to people’s awareness of the environment and its challenges, and contribute to the development of skills to meet these challenges in order to make informed decisions.”

SAAB: A MESSAGE OF HOPE

AFED Secretary General Najib Saab presented AFED work report for 2019, pointing out that the previous AFED reports maintain their position as the most respected reference on Arab environment. The forum’s magazine website, Environment and Development, continued to reach an increasing number of users, up to 26 million a year. Saab added that, in conjunction with the conference, AFED published a manual for environmental education as a reference for school
environmental curricula, which will also be available online. AFED also continued to play a pivotal role with regional and international partners in 2019, by contributing to 25 environmental policy reports and researches, and being elected to the board of two international networks. Declining funding in an explosive region remains the main challenge for AFED, a situation that threatens the organization’s ability to continue its work.

**Day one – Thursday 14 November 2019**

**ENVIRONMENT AND SUSTAINABILITY EDUCATION IN ARAB COUNTRIES**

First day conference sessions revolved around the role of education in achieving sustainable development, environmental education in Arab universities, a discussion of the proposed syllabus for first year university students entitled “Introduction to Environment and Sustainability”, as well as a special presentation regarding the Mediterranean Strategy on Education for Sustainable Development.

**SESSION 1: EDUCATION FOR SUSTAINABLE DEVELOPMENT**

The first session was entitled “Education for Sustainable Development” and was moderated by Dr. Ibrahim Abdel Gelil from the Arabian Gulf University. Panelists included Dr. Ahmed Al Qabany Manager of Climate Change Division at the Islamic Development Bank, Roula Majdalani, Director of Sustainable Development Policies Division at ESCWA, Dr. Abdulkarim Sadik from Kuwait Fund, and Dr. Fadi El Hage, Director of Eco-Citizenship and Sustainable Development Chair at Saint Joseph University.

**ABDELGELIL**

Dr. Abdel Gelil presented the first chapter of the report “Environmental Education and Education for Sustainable Development: Evolution and Global Trends” (EE & ESD) on behalf of the author Dr. Ahmed Gaber. The chapter aims at providing an understanding of EE and ESD, their evolution through the years, their incorporation in education systems, as well as current trends. The presentation included a discussion and analysis at the following topics: 1. EE and ESD and their evolution throughout the years, including key milestones worldwide 2. The relationship between EE and ESD, as well as successful case studies and 3. Current trends in ESD, education content and competency-based education, including the various pillars for achieving sustainable performance.
**AL QABANY**

Dr. Ahmed Al Qabany tackled the ESD from the IsDB point of view: “We, at IsDB, are committed to alleviating poverty, promoting human development, Islamic finance and enhancing cooperation amongst member countries in collaboration with our development partners. The IsDB group is fully committed to the SDGs. It recognizes that development objectives vary from one country to another. It also supports the implementation of this transformative agenda according to the needs and priorities of its member countries, through a collaborative approach, and in partnership with bilateral and multilateral development financing institutions, the private sector and civil society”.

**MAJDALANI**

Ms. Roula Majdalani commented on the report saying that “AFED report was distinguished this year by its future outlook and its focus on youth engagement, that has a major impact on the future of sustainable development. Sustainable development is a holistic project, that should be included in education systems in order to generate societal change and make sure that the future is comprised of better citizens. One important matter that could have been added to the report is the role of technology and green economy in the education for sustainable development. An upsurge in knowledge and awareness on environmental issues and sustainable development, is seen in today’s youth generation, that is full of hope for a better future. This awareness is a result of numerous workshops and educational programs that international and local organizations are working on, among which is ESCWA”.

**SADIK**

Former Senior Adviser, Kuwait Fund- KFAED and AFED report co-editor Dr. Abdul Karim Sadik commented on the first chapter saying: “Human behavior has imposed mounting pressure on available natural resources, leading to environmental crises. The Arab region, in particular, faces daunting challenges such as a rapidly growing population, unsustainable consumption patterns, pollution, water scarcity, drought, desertification, and threats of climate change. Education for Environment and Sustainable development underpinned by the interrelated economic, social and environmental dimensions is essential for equipping those entrusted with implementing policy change with the knowledge and skills to resolve issues and problems, and raises awareness of individuals and enables them to make proper decisions and devise solutions based on knowledge and informed decisions”.

**EL-HAGE**

Dr. Fadi El-Hage tackled the subject of integrating complexity and inter-disciplinarity for an efficient ESD by affirming that ESD is part of the Sustainable Development Goals. He stated the SDGs Target 4.7 which notes that “By 2030, ensure that through education for sustainable development and sustainable lifestyles, all learners acquire the knowledge and skills needed to promote sustainable development”. He also presented the findings of the International Association of Universities (IAU) 2nd Global Survey Report on Higher Education and Research for Sustainable Development that showed that most universities seem to be working on SDG 4, quality education, which is an objective directly related to university mission.
SESSION 2: ENVIRONMENTAL EDUCATION IN ARAB UNIVERSITIES

This session on “Environmental Education in Arab Universities” was moderated by Dr. Adnan Badran, Chairman of AFED Board of Trustees and chancellor of Petra University in Jordan. The panelists included Najib Saab, AFED secretary general, Dr. Djihan Hassan, Adjunct Professor at the American University in Cairo, Dr. Ammar Olabi, Associate Dean of the Faculty of Agriculture and Food Sciences (FAFS) at AUB and Dr. Huda Mahmoud, Professor, Biological Sciences, Kuwait University.

BADRAN

Dr. Badran presented a brief on the history of Environmental Education starting with the 1972 Stockholm conference where interest in environmental education began, and the UN Development Program in Nairobi was initiated from the conference, followed by the 1977 “Tbilisi” conference for environmental education, and the “Earth and Agenda 21” conference in 1992, and we must pay tribute to the work of Rachel Carson that woke up the world on the dangers of environmental pollution, and UNESCO (1970), which paved the way for environmental education.

In the Arab world, after the Stockholm and Tbilisi conferences, the Arab Organization for Education, Culture and Science initiated the development of environmental education curricula and the writing of its books, and we now need a new start, in order to achieve the goals of sustainable development, by enabling of environmental education in our modern curricula.

SAAB

Najib Saab presented the findings of the chapter “Environmental Education in Arab Universities” on behalf of Dr. Riyad Hamzah, president of the University of Bahrain. Saab said that AFED report found that during the last decade, Arab universities witnessed a rapid increase in programs related to the environment and sustainable development. Collectively, the 57 universities surveyed offer 221 degree programs on environmental topics. Postgraduate programs are typically research-oriented. Saudi Arabia and Egypt have been found to be the most active in environmental research output.

HASSAN

“Education for Sustainable Development in Arab Countries” was the title of the 3rd chapter presented by Dr. Djihan Hassan who tackled the Evolution of EE and ESD in the Arab Region along with the Arab States Involvement in ESD on the Regional and National ESD Programs and Initiatives.
She also presented some ESD Challenges in the Arab Region such as the limited availability of resource materials in Arabic, the lack of regional, sub-regional, country and institutions’ cooperation/coordination, and the lack of necessary funding, training and legislation

OLABI
Dr. Ammar Olabi presented the Faculty of Agriculture and Food Sciences (FAFS) – AUB’s strategic goals related to the Environmental Education at university level. FAFS main goals stressed on integrating research in support of water, energy and food security, resilient environments and health and nutrition, establishing a regional multidisciplinary research, education and community service hub for Water and Food Security and delivering outstanding student experience.

MAHMOUD
Dr. Huda Mahmoud raised 3 major points in her intervention: 1. AFED should communicate with the Ministries of Education and Higher Education in all Arab countries enlightening them with the information included in the current report. They should be encouraged to benefit, adapt and implement the recommendations included within, 2. Governments in Arab countries should be encouraged to recognize the environmental programs’ alumni by creating new job opportunities for them and 3. All postgraduate programs should include specific modules encouraging students to establish their private business after graduation as a solution for the lack of job opportunities in the current job market.

SPECIAL PRESENTATION
A special presentation was hosted at AFED conference on The Mediterranean Strategy on Education for Sustainable Development (MSESD). Mr. Giuseppe Provenzano from the Union for the Mediterranean (UfM) who gave the presentation, noted that the endorsement of the Mediterranean Strategy on Education for Sustainable Development (ESD) by UfM took place in Athens, Greece, on 13 May 2014, on the occasion of the first UfM Ministerial Meeting on Environment and Climate Change.
The UfM is involved in different priority thematic issues, such as Climate Change Adaptation and Mitigation, Biodiversity, Empowerment of Women and Youth, Water and Marine Resources, Blue/Green Economy, among others.

The UfM mainstreams sustainable development education through a multi-stakeholder approach, which includes partners such as higher education institutions and processes.

In order to promote education on sustainability at all levels (both formal and informal), the UfM is working, jointly with the Regional Activity Centre for Sustainable Consumption and Production of the United Nations Environment Programme - Mediterranean Action Plan (SCP/RAC) and the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), on the publication “Education for Sustainable Consumption, Behaviour and Lifestyles”.

Lunch on the first day was sponsored by Crescent Petroleum, AFED corporate member.

SESSION 3: INTRODUCTION TO ENVIRONMENT AND SUSTAINABILITY: PROPOSED SYLLABUS

The 3rd session discussed a proposed syllabus on Environment and Sustainability, to be given to first year university students. The session was moderated by Dr. Ibrahim Abdelgelil, Adjunct Professor, Arabian Gulf University, Bahrain (AFED report co-author) and panelist included HE Dr. Mahmoud Duwairi, Professor, University of Jordan, former Minister of Agriculture; Dr. Bassam AlMahasneh, Dean of Engineering at Al-Ahliyya Amman University, Dr. Abdulkarim Sadik, AFED report co-editor and Dr. Fadi El-Hage, from Diane Foundation –USJ.
ABDEL GELIL

Dr. Ibrahim Abdel Gelil presented the proposed syllabus of the introductory course on Introduction on Environment and Sustainable Development”. He stated that: “This course is designed to introduce the essential concepts of environment and sustainable development to junior-level university students from all faculties and specializations. It examines the complex environmental issues in a multidisciplinary approach. The course will focus on the environment through its many diverse interrelationships with the social and economic aspects of sustainable development, through various modes of delivery, including case studies from the Arab region”.

DUWAYRI

Dr. Mahmoud Duwayri indicated that he was pleased when asked to review the draft syllabus and in consultation with the university professors offering the course in Jordan. For now, the proposed syllabus for Introduction to Environment and Sustainability is an excellent contribution to University Education in the Arab World he said. “I believe we should go ahead and disseminate this syllabus and work with the University professors who are teaching the course in each university. I suggest that in Jordan AFED can work with Shoman Foundation and Petra University to convene a meeting with professors in Jordan who are teaching the introductory course so as to introduce the syllabus. This can be done in each Arab country and we should note waste the time”, he concluded.

MAHASNEH

Dr. Bassam Mahasneh’s intervention on the syllabus was the following: “AFED summarized the main interest of the Middle East toward the Environment and its application in education. Good understanding of needs of students to the environmental education and very promising youth appears in the conference from different countries of the Middle East. It is hoped that all universities in the Middle East will adopt a course in the field of environment as an elective course to make the environment as part of our life style”.

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SADIK
Dr. Abdul Karim Sadik participated in the discussion saying: “The proposed syllabus is comprehensive and covers a wide range of issues related to environment and sustainable development. It is intended to be a curriculum for an introductory course on environment and sustainable development. It is an integrated syllabus which takes into consideration the interrelated economic, social and environmental dimensions of sustainable development. It constitutes a guide for preparing a textbook which addresses the issues of environment and sustainable development in the Arab region”.

HABIB
Dr. Rima Habib, Professor and Chairperson of the Department of Environmental Health, FHS, AUB commented on the syllabus with the following remarks: “My main critique of the course syllabus proposed by AFED is the lack of the human health dimension in the suggested topics. The linkage between the environment and human health should be incorporated. This will include the effects of human activities on the environment and the impacts of the environment on human health. The linkages between the environment, human health and sustainable development should be incorporated”.

Day one of AFED conference ended with an open discussion with the delegates.

Day 2 – Friday 15 November 2019
Schools and University Students: Power of Future

Conference sessions resumed on Friday, where three sessions were held discussing Environmental Education in Arab Schools, and launching AFED’s Environmental Education Manual for Schools as well as a special session of AFED’s Future Environment Leaders Forum (FELF) with student representatives from Arab universities entitled: “We are the Future”.

Day 2 kicked off with a special viewing session of a selection of winning short movies from the 2019 International Environmental Film Festival in cooperation with ATED, Morocco.

SESSION 4: ENVIRONMENTAL EDUCATION IN ARAB SCHOOLS
The session entitled “Environmental Education in Arab Schools” was moderated by Dr. Nada Oweijane, President of the Center for Educational Research and Development, Lebanon. Panelists included Charbel Mahfoud (AFED report co-author), Abdelilah Tazi, Professor and President of Talassemiane Association for Environment & Development in Morocco and Sawsan Bou Fakhreddine, Director General of AFDC, Lebanon.
OWEIJANE

Dr. Nada Oweijane raised essential and crucial points in her intervention mainly 1- Developing the educational curriculum with all its human, technical and material elements and requirements, to become an interactive curriculum 2- Developing targeted programs and specialized training courses for all workers in the educational sector, especially teachers, as well as producing guides and educational resources, and working to establish clubs to support this culture in schools, competitions, environmental carnival, green cinema, eco-tourism, 3- Promoting educational media 4- Adopting the criteria of the ecological school or the green school, ensuring security, protection and the environment in line with the needs of learners and the needs of society. 5- Coordination between ministries, directorates, public and private schools, and the accompanying institutions concerned, 6- Insuring of laws and practical decrees for these purposes.

MAHFOUD

Mr. Charbel Mahfoud presented the findings of AFED chapter on EE in Arab schools where sustainable development has become a standard topic in textbooks of most Arab countries, but topics such as green economy and green growth are generally lacking. Still, such concepts have been spotted in certain countries, such as ecological footprint as part of the geography curriculum in Syria, and green economy as part of the new high school programs in Lebanon. Classes in which environmental concepts were covered most were grade 5 – the last of the elementary level – and grade 11, before the last year at the high school level. Grade 6, the first intermediate class, was the weakest in coverage of environmental concepts.

TAZI

Presented the Talasamtan scope of work mainly on Environment and Environmental Education, Solidarity Eco-Tourism, Valuation of local products and supporting women and integrating them into their own socio-economic environment. Tazi stated that throughout the year, the association organizes many programs with environmental clubs in educational institutions, awareness-raising, training for environmental activists, and how to create environmental clubs and green spaces.
In addition, it helps educational institutions to obtain an international emblem related to ecological schools, that work with students throughout the year on environmental topics and projects that concern renewable energies, waste management, water management, forest fires...

The association also organizes an international festival of environmental films, where the opportunity is open for cinematic clubs in educational institutions to participate in the competition for short films dealing with environmental issues, and the association displays these films in its awareness programs throughout the year.

The association organizes also an environmental carnival to celebrate the World Environment Day, culminating in a year of work with educational institutions that produce paintings that touch on environmental issues which students worked on throughout the year.

BOU FAKHREDDIN

AFDC long work and partnerships in the field of environmental education was presented by Sawsan Bou Fakhreddin who highlighted the role of the organization in organizing teachers training programs, implementing different recycling programs in collaboration with official entities such as the ministry of education, ministry of environment and improving the environmental curricula in partnership with the Center for Educational Research and Development.

SESSION 5: AFED ENVIRONMENTAL EDUCATION MANUAL FOR SCHOOLS

HADDAD

AFED Environmental Education Manual for Schools was presented by Raghida Haddad, Senior Advisor, AFED and editor of the manual, followed by discussion and country experiences from Jordan. Ms. Haddad showed the different contents of the handbook with all the sections and chapters and gave an explanatory presentation of the full contents of a sample chapter with all resources types that the teachers and students can benefit from.
ABOULHASSAN
Dr. Layla Aboulhassan, Professor, University of Jordan and former member of Higher Council of Education commented on the schools guide by saying that “This guide enriches and fills a gap in the Arab Library, and it comprises an integrative and holistic approach to the topic of environment and sustainable development. The guide focuses on the learner and the teacher and contains essential questions and topics that are linked to our daily life in addition to suggesting activities and actions. I believe that this guide can be used at various levels and stages, including general non-specialized courses for university students.

SAMARA
Sahar Samara, EMS representative ECO-SHOOL supervisor at Rosary school in Jordan gave a brief overview of the school experience in the context of environmental education.

SESSION 6: WE ARE THE FUTURE

The final session included discussions with more than 50 students from different universities in the Arab region under the “Future Environment Leaders Forum” (FELF).

The session was moderated by Dr. Leila Dagher, Associate Professor of Economics at AUB who tried to get answers to some questions from the students such as: Would you be interested to have a course entitled Introduction to Environment and Sustainability? If it is offered as elective, would you select it? How do you evaluate courses and programs related to environment at your university?

Students reiterated their mission to promote youth’s involvement in environmental education, and their vision to create a forum that would support youth’s role and deliver their voice where it matters.
AFED’s new report, Environmental Education in Arab Countries, found that during the last decade, Arab universities witnessed a rapid increase in programs related to the environment and sustainable development. Collectively, the 57 universities surveyed offer 221 degree programs on environmental topics. Postgraduate programs are typically research-oriented. Saudi Arabia and Egypt have been found to be the most active in environmental research output. The report noted that Arab universities can further accelerate their contribution to sustainability by integrating all of the SDGs into their learning and teaching activities, research, and community initiatives. It observed specific weakness in the domains of environmental law and green economy. One pivotal recommendation of the report is offering an introductory course on environment and sustainability to all first year university students.

An AFED survey of school textbooks and curricula found that environmental topics most popular in Arab schools are ecosystems, natural resources, pollution and sustainable development. In contrast to the inclusion of the rather new topic of sustainable development, the survey found that climate change was absent or not adequately discussed in 40 percent of the countries. The report recommended that big challenges facing the region such as water scarcity, desertification, drought, marine pollution and dangers of sea-level rise due to climate change, have to become a central part of the curricula.

Although a strong trend can be seen in the inclusion of environmental topics in the curricula, progress remains uneven across Arab countries and educational institutions. More so, it is evident that there is a clear gap between the Arab region and other parts of the world when it comes to environmental education. In part, this is due to the ongoing unrest and conflict in some Arab countries. Paradoxically, some of the countries which are in a state of turmoil, like Iraq, Lebanon and Syria, had taken serious measures over the past years to integrate environment and sustainability into their education systems. Another problem is the lack of funding for national and regional initiatives to promote sustainable development topics at schools and universities. As most initiatives are dependent on international donors, they are largely not sustainable.

The report concluded that education is a major driver for a shift to more sustainable lifestyle that ensures harmony with nature and a balanced use of resources. It also equips those entrusted with executing change with the necessary working tools and appropriate knowledge. Education has the power to nurture empowered, engaged and skilled citizens who can map the way towards a balanced, greener and safer planet.

AFED report Environmental Education in Arab Countries is downloadable at www.afedonline.org/webreport2019/afedreport2019.htm. The report will be presented in selected countries over the coming months, to allow a chance of discussion for those who couldn’t be in Beirut.