

Sustainable Mediterranean

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First year's progress of the MSES Action Plan
Proceedings of the 1st Meeting of the Mediterranean ESD Committee

22-24 November 2017

This issue of Sustainable Mediterranean is co-produced by the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSD) and the Pedagogical Institute of Cyprus / Ministry of Education and Culture



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MEDIES



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This special issue of the Sustainable Mediterranean Newsletter is devoted to the "1st Meeting of the Mediterranean ESD Committee/Regional Training on ESD" that took place on 22-24 November 2017 in Nicosia, Cyprus and was co-organised and co-supported by the Ministry of Education and Culture and the Pedagogical Institute of Cyprus, the SWIM-H2020 SM Programme and the GWP-Med (first day) with the technical support and the provision of secretariat by the UNESCO Chair on Sustainable Development Management and Education in the Mediterranean (of the University of Athens) and the MEDIES of MIO-ECSDE. It was actually a direct a follow-up on the outcomes and implementation of the decision of the Ministerial Conference in Cyprus (Nicosia, 8-9 December 2016) in which the Action Plan of the Mediterranean Strategy on ESD (MSESD) was endorsed. The meeting brought together representatives from all major Intergovernmental Organisations active in the region (UNESCO and UNESCO Office in Venice, UN Environment/MAP, UNECE, UfM and League of Arab States) with those from Ministries of Education and Environment and the Civil Society from 18 countries namely, Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Egypt, Greece, Israel, Italy, Jordan, Lebanon, Malta, Mauritania, Montenegro, Morocco, Palestine, Tunisia. The events aimed on one hand, to review and discuss how the Action Plan of the MSESD has been used, integrated and valued within the existing Programmes and Initiatives of the countries and the associated International and Regional Organisations, one year after its adoption. On the other hand, the meeting informed in depth the decision-makers and, in particular, Mediterranean Parliamentarians in the challenges, opportunities and efforts for further and effective ESD promotion, while it served as an advanced training on issues related to the ESD theory and practice.

In the first day (on 22 November 2017) more than 110 participants were hosted by the House of the Representatives (Parliament) of the Republic of Cyprus and chaired by Mr Adamos Adamou, Chairman of the Parliamentary Committee for the Environment of Cyprus and co-chaired by Mr Kyriacos Xadjigiannis, Chairman of the Parliamentary Committee of Education. The participants discussed potential synergies in the fields of Education and Sustainable Development and re-confirmed their commitment in advancing ESD in their countries and in the region (see paragraph on the Outcomes, on page 46).

The second day exclusively reserved for the ESD community (60 participants) was officially opened by the Minister of Education & Culture of Cyprus (at that time), Prof Costas Kadis, Chairman of the Mediterranean Committee on ESD, who expressed the appreciation and commitment of the countries and the Secretariat to the work of the Committee, and by the President of COMPSUD, Prof Mohamed Rejdali, from the Moroccan Parliament who stressed the importance of the MSESD for the society and the work on sustainable development, particularly today, in the framework of the SDGs. During the sessions all participants were engaged in sessions about experiences on ESD plans, programmes and initiatives related to the implementation of the MSESD and its AP, the links to the strategies and action plans for implementing the SDGs at national level (either in the formal or in the non-formal education), highlighting lessons learnt, challenges and opportunities. The sessions were co-chaired/facilitated by Dr Aravella Zachariou, Pedagogical Institute of Cyprus and Chair of the UNECE ESD Steering Committee and the undersigned (M.S.).

The meeting was concluded by identifying common challenges in the application of ESD by the countries' representatives and concrete suggestions for overcoming them as well as on the way forward in the region about the promotion and application of the AP/MSESD. The important role and need for further strengthening of the Mediterranean Committee on ESD was emphasised by all participants as a major facilitator of their work and as an asset for this unique region.

The present Issue includes the interventions and presentations made during the event in order to capitalise on the efforts for promoting and scaling up SDG4 and ESD in the region using the AP of the MSESD as our main available regional tool in place.



Prof. Michael Scoullos,
Chairman, MIO-ECSDE
MEDIES Coordinator
Director, UNESCO Chair on ESD in the Mediterranean, University of Athens



Address by the Cyprus Minister of Education and Culture Mr Costas Champiaouris

This publication is the culmination of an effort that began two years ago in Cyprus. Following an initiative of the Ministry of Education and Culture of the Republic of Cyprus, the Education for Sustainable Development (ESD) became the starting point for the cooperation of peoples, governments, organizations, scientists and every citizen of the Mediterranean, with a view to shaping a more creative, productive, fair, solidarity-based world based on the principles of sustainable development.

The adoption of the Mediterranean Strategy for ESD, in Cyprus (December 2016) brought together the Mediterranean Countries in order to share a common vision and work jointly for a better future in the Mediterranean, leading to the establishment of the Mediterranean ESD Steering Committee. The first meeting of the Committee, hosted in Cyprus (November 2017), apart from monitoring its implementation, also aimed to contribute to the exchange of good practices on ESD in the field of formal and non-formal education and to further promote dialogue between countries.

Our purpose is to co-address common environmental and sustainable development challenges in the educational process, as well as to seek common fields of cooperation, actions and initiatives that can contribute both to the mitigation of the environmental degradation phenomena, as well as to the formation of societies, which will ensure a better perspective for our citizens in terms of their personal, social, economic and cultural sustainability.

This publication is a first overview of the ESD actions implemented by the Mediterranean countries at formal and non-formal education level, while evaluating the results of its first year of implementation. Through countries' references and examples, it is intended to further define the priorities, the common issues of interest and the challenges for education and sustainability that are important to tackle together.

As the presiding country of the Mediterranean Commission for ESD, Cyprus reiterates, through this

publication, that the Sustainable Development Initiative for the Mediterranean is not just the medium but it is the springboard for collective and individual understanding of our role, our responsibilities and our rights. Above all, it is the vehicle that empowers citizens to shape a world that is more sustainable, a world based on dignity, prosperity, protection and conservation of natural ecosystems. At the same time, it demonstrates the obligation and the responsibility of our states and governments to implement these policies, particularly in the field of education, in order to ensure that every citizen lives in sustainable conditions.

With these few words, I would like to reconfirm that Cyprus remains dedicated to this ambitious and important Mediterranean initiative. I am sure that this release will be a useful tool at all levels and it will open new prospects for future releases of a similar type.

I would like to take this opportunity to thank all those who contributed to making this publication possible. My special thanks are also extended to the Cyprus Pedagogical Institute and the Unit for Environmental Education and Education for Sustainable Development, which is leading this effort, as well as to the Mediterranean Information Office (MIO), which provides the scientific and secretarial support to the Commission so that the Mediterranean Strategy for ESD becomes a reality.

In conclusion, it has to be said that the message of the Strategy, "The Planet is for all and the Mediterranean is our House", highlights the importance and the urgency of taking joint action in the direction of the Strategy's basic principles and aspirations.

Kostas Champiaouris,
Minister of Education and Culture
Republic of Cyprus

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Opening of the 1st Meeting of the Mediterranean ESD Committee



Prof. Kostas Cadis

*Minister of Agriculture, Rural Development and Environment
(former Minister of Education and Culture)*

It is with great pleasure that for the second consecutive year I am welcoming you to Cyprus. I am pleased that the efforts and initiatives that each and every one of us began in Cyprus last December with the Ministerial Meeting on the adoption of the Action Plan of the Mediterranean Strategy on Education for Sustainable Development, which is now taking 'flesh'. It is particularly promising that all Mediterranean countries, as well as the International and Regional Organizations have responded positively to this call for the first Meeting of the Mediterranean Committee for Education for Sustainable Development the launch of which, as you may remember, was unanimously agreed at our meeting last December.

The Action Plan is an important tool for all of us, both in our national contexts and in the context of a broader Mediterranean Partnership, in order to meet the challenges that our region faces. One year after the Ministerial Meeting, despite the progress that has been made at the regional level, as well as in all countries, we continue to face enormous pressure, challenges and problems, inhibiting the efforts made to achieve peace, social cohesion, security, justice, to institute human rights and the right of each of us to be creative and productive in societies based on the principles of sustainable development.

The fact that this Committee is made up of all the parties concerned makes it particularly important in terms of both function and scope. Moreover, the actions that we all collectively and individually take on concerning Education for Sustainable Development will truly serve and contribute to the international community's demand for social, economic, ecological and political sustainability.

The goals of Sustainable Development at the top of the Agenda 2030, adopted by all UN states and governments show the direction that our policies should follow. Education for Sustainable Development as an education of quality underpins all the goals of sustainability. The agreement and adoption of the Action Plan gives

the Mediterranean a powerful means of achieving a more effective approach towards the objectives of sustainability, focusing of course on the special circumstances and peculiarities of our region. Henceforth we wield in our hands this powerful tool allowing us to take the necessary actions and to face the challenges we must confront.

I would also like to note that the promotion and application of this Action Plan can make a major contribution not only to achieving the goals of the Mediterranean Strategy on ESD but also to the relevant international policies. Building on the UNECE Strategy for Education for Sustainable Development, the UNESCO Global Action Plan on Education for Sustainable Development, the UN Environment Programme, the UN Conventions on Biodiversity and Desertification, and the UNFCCC decisions on climate change, it is, in essence, a comprehensive policy document which implies a joint commitment to its implementation.

Yesterday your presence and your participation in the discussion at the House of Representatives on the Mediterranean Strategy, the positions and references to the good examples of practice in your countries and the support of the international and regional organizations can only be seen as the beginning of this effort.

For Cyprus and its government, Education for Sustainable Development is a key priority, recognizing that education at all levels and in all forms is the only option for shaping mindsets and developing citizenship competences compatible to sustainability. I will not expand on the policies adopted by Cyprus in the field of ESD because you will have the opportunity to be informed about them during the meeting. However, I would like to note that I am very proud of the efforts made by Cyprus in this field, as well as of the initiatives you are taking in this field.

Thank you.

Review of developments of the Mediterranean Strategy on ESD & its Action Plan. Progress made and the way forward



Prof. Michael J. Scoullos

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The process of the development of the Action Plan of the Mediterranean Strategy on ESD (2014-2016) took into account the realities of the region, trying to bring together all competent components to help Governments and the Education Community of the region to create solid foundations for ESD and enhance a peaceful, environmentally sound and prosperous society in the region and beyond. One year after the Action Plan's (AP) adoption (Nicosia Ministerial Conference, 2016) where the AP was endorsed, the countries have formed the 'Mediterranean ESD Committee', with the participation also of the International Organisations active in the region and namely, the League of the Arab States (LAS), the GAP of UNESCO, the UN Environment/ MAP, UNECE and the Union for the Mediterranean (UfM). The Chair is undertaken by the Ministry of Education and Culture of Cyprus, while MEDIES /MIO-ECSDE and the UNESCO Chair and Network on Sustainable Development Management and Education in the Mediterranean (University of Athens) were entrusted with the technical and scientific Secretariat, under the guidance of the Committee.

During the last year (2017) the international organizations that liaised with the AP, also committed to promote and streamline it. At the 17th Meeting of the Mediterranean Commission for Sustainable Development (MCSD, under UN Environment/ MAP) (Athens, 2017) the MSED / AP process was presented as an initiative and good practice fully in line with and advancing the implementation of the Mediterranean Strategy on Sustainable Development (MSSD). Actually, the MSED is an integral part of the MSSD. Additionally, the 1st meeting of the UfM Working Group on Environment and Climate Change (Barcelona, 2017), under "Increased Awareness and Education" mentioned: "*Stress the importance of working to increase awareness and education on environmental and climate change issues, including by supporting the implementation of the Action Plan of the Mediterranean Strategy on Education for Sustainable Development*". Last but not least, the AP is one of the Flagship Projects of the UNESCO Global Action Programme (GAP) on ESD (2015-2019) under the thematic area of "Advancing Policy on ESD". UNESCO also acknowledged the importance of the AP/ MSED during the Review Forum of the GAP (Canada, March 2017) and commended it as an example for inspiration for other regions.

During 2017, five 'Trainings of Trainers' were held in Jordan, Palestine, Tunisia and Algeria, organised in the framework of the EU funded Programme SWIM-H2020 Support Mechanism and MEDIES/MIO-ECSDE. The trainings aimed to serve as a 'demonstration' on how the MSED and its Action Plan can be put into force in the countries by state and non-state actors, as well as to build a critical mass of educators and other professionals with advanced ESD capacities. The seminars were combined with inter-institutional consultation meetings to better coordinate the ESD initiatives and the stakeholders of the countries. 250 educators and professionals engaged in SD/ESD were trained and gained a solid understanding of the MSED and its AP.

Review of developments of the MSED & its Action Plan

Findings based on the communication of the Secretariat with the countries (during missions, trainings and via e-communication) show that at policy level, progress has been attained: most of the countries have or are elaborating National Plans on ESD in accordance to the provisions of the AP/MSED. Significant changes in several countries have taken place after the adoption of the MSED (2014). In most cases, further opportunities to adapt and to better fine-tune the National Plans with the AP/MSED have been identified. In doing so, it was suggested that the AP/MSED should be utilised as a framework to complement, adapt, place in context and improve (through an adaptive management approach) the wealth of frameworks, experiences, initiatives and projects, existing on EE and ESD, given that the majority still focuses primarily on environmental aspects. Despite the gradual progress achieved, there are some common challenges identified by most of the countries. More specifically, the strengthening of the much needed interdepartmental and cross-sectoral collaboration and the effective coordination of the various initiatives on ESD (often supervised by different Ministries and Agencies) is highlighted by all countries. In some countries inter-ministerial committees have been established for the promotion of the SDGs where promotion of ESD has been included. Last but not least, the urgently needed human and financial resources for the promotion of ESD are still lacking at all levels. What is stressed by all countries

Table 1

A. Enhancing conditions for the proper implementation of the MSES		
1	Translate the MSES into the national language.	☺
2	Distribute it to the relevant authorities.	☺
3	Designate a focal point for regular contact and coordination.	☺
4	Draft/review/revise/amend, if needed, the National Plan on ESD.	☺
5	Promote a "Whole Institution Approach".	☺
6	Support community-based SD awareness raising activities, involving local authorities, media, CSOs/NGOs, as well as formal educational institutions.	☺
7	Familiarize educators with the pedagogical approaches of ESD.	☺
8	Synergize with international and regional processes (e.g. UNESCO/GAP, MSSD, SDGs), that could enhance the implementation of the MSES.	☺
9	Involve the Mediterranean region in contributing to the ESD agenda at global level.	☺
B. Objectives of the Action Plan		
1	Facilitate, through regional cooperation, the Min. of Education in their national ESD priorities.	☺
2	Raise awareness & recognition of the fundamental role of Education & ESD throughout the region.	☺
3	Ensure further support, mobilizing resources.	☺
4	Support the educational community in content development for ESD and in increasing human and material resources.	☺
5	Assist Ministries in mainstreaming awareness/education campaigns and initiatives related to the SDGs.	☺
6	Provide identified priority areas to donors and supporters in ESD key themes for the region.	☺
7	Help the countries to fulfill their international commitments related to ESD.	☺
8	Promote regional research projects.	☺
9	Enhance international cooperation among Educational Institutions & stakeholders on SDGs/SD in the region.	☺
10	Contribute in addressing, through regional educational activities, the economic and humanitarian crises.	☺
11	Facilitate better synergy between educational initiatives and the private sector.	☺

is the continuation of efforts in a more systematic and intensifying manner to secure continuity and adequate funding from i.e. national resources, bilateral donors, EU and international Programmes, etc.

This qualitative review is summarized in the following tables, where the symbol ☺ indicates very satisfactory progress; ☺: satisfactory progress; while ☺: indicates areas with very little progress.

The way forward

It is critical for MSES and its AP to receive more political support and to become better known among political decision makers, particularly as a prerequisite for the promotion of sustainable development and the Sustainable Development Goals (SDGs). Towards this

direction it is very important that the processes related to the AP / MSES be strengthened and become part of the countries' SD and their general, educational agendas. Additionally, the efforts to raise funds and to organise more capacity building activities (seminars, summer schools, e-courses, etc.) for more countries in the region will continue, at least on the part of the Secretariat. To this end, it is highly recommended to capitalize on previous experiences/projects and utilize the existing funding mechanisms (i.e. H2020, ERASMUS, UNESCO PP, etc.). Also, the Secretariat will continue to work in close collaboration with UNESCO within the GAP, with the UN Environment/ MAP - in the framework of the MSSD, with the UfM within the labeled Blue Green Med SC, etc. It is also, highly recommended for the countries to utilize the existing regional and international partnerships and networks (see MEdIES, MIO-ECSDE, UNESCO networks, Eco-schools, etc.) for exchange and advancing/scaling up activities.

UNESCO Global Action Programme on ESD: work at policy-level - Progress and the way forward



Miriam Tereick

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The Global Action Programme (GAP) on Education for Sustainable Development (ESD) is actually the follow-up to the UN Decade of ESD (2005-2014), acknowledged by the UN General Assembly. The overall objective of GAP is to generate and scale up ESD action to accelerate progress towards SD by, on one hand, the reorientation of education and learning and on the other, by enhancing the role of education in all relevant agendas and programmes that promote sustainable development.

Particularly in the framework of the Sustainable Development Goals (SDGs) the presence and role of ESD is continually increasing internationally and nationally. ESD and the GAP support the implementation of all 17 SDGs. "Education" is mentioned in 5 targets of the SDGs and in the SDG Target 4.7 which explicitly mentions about ESD: *"By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles."*

The GAP focuses on the following five Priority Areas of action:

- Advancing policy
- Transforming learning and training environments
- Building capacity of educators and trainers
- Empowering and mobilizing youth
- Accelerating sustainable solutions at local level.

At the same time, five Partner Networks (PNs) have been set up corresponding to each of the priority areas, including also the implementation of Flagship Projects.

Priority Action Area 1 (PAA1) Advancing Policy

The achievements at the policy-level, within the Priority Area 1 include actions related to COPs, guidance documents, monitoring SDG 4.7, as well as policy support at the country and regional level. Through PAA1, 432 strategic policy documents are supported and 701 programmes providing technical support for policy development are implemented at the country level. As an example, in Costa Rica, Vietnam and Kenya we follow the development of ESD policy as pilot countries, while the Mediterranean region has been identified as a good-practice regional example in advancing ESD policy, through the activities related to the Mediterranean

Strategy on ESD and its respective Action Plan. Moreover, the GAP is working on developing and providing guidance documents for policy-makers. Three main publications are currently available (also at the GAP website <https://en.unesco.org/gap>):

- Roadmap for GAP implementation (2014)
- Guidelines on climate change education (2016)
- Guide to address all 17 SDGs through education (2017)

The latter publication provides concise guidance on learning content and methodologies for teaching key sustainable development challenges. It is structured along the SDGs, providing age-specific learning content for each SDG. It addresses key competences needed to implement the SDGs, as well as transformative pedagogies in order to teach them, addressing the three main categories of learning objectives: cognitive, socio-emotional and behavioural. More precisely, the material focuses on the following ESD competences: Systems thinking, Anticipatory competency, Normative competency, Strategic competency, Collaboration skills, Critical thinking, Self-awareness, and Integrated problem-solving. The publication is available at <http://unesdoc.unesco.org/images/0024/002474/247444e.pdf>

Monitoring SDG Target 4.7

Regarding the monitoring of the SDG 4.7 that actually corresponds to the monitoring of ESD related processes, a global indicator has been agreed upon as follows: "The extent to which Global Citizenship Education (GCED) and ESD, including gender equality and human rights, are mainstreamed in (i) National education policies (ii) Curricula (iii) Teacher education (iv) Student assessment". In order to collect feedback for the global indicator the GAP Secretariat is using the following tools and methods:

- Partnerships to collect and analyze data;
- Analysis of Member State surveys;
- Dedicated website to publish trends, studies and reports.

Detailed information for the countries and interested organizations regarding the monitoring of the GAP and the SDG 4.7 is available at: <https://en.unesco.org/gced/sdg47progress>

The way ahead

The first phase of implementation of the GAP ends in 2019 with the final report to be aligned with SDG 4.7 monitoring. In the meantime, UNESCO aims to further strategically enhance ESD capacity and to finalize the GAP Flagship Projects. Initiatives that strengthen the regional

dimension are of great importance and will be continued. It is foreseen that the UNESCO Member States will be engaged in consultations during 2018 to discuss the future of ESD and of course, the Mediterranean region will have a particular role to play in these discussions.

Education for Sustainable Development in the Mediterranean: Regional Perspectives and Monitoring Challenges



Igor Kitaev

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The Mediterranean is a unique region because historically it is and was the crossroads of continents, civilizations, multiple ethnic groups, and their respective cultures and religions.

The SDG Target 4.7 calls, by 2030, “to ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles”. Education for Sustainable development (ESD) empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity. It is about lifelong learning, and it is an integral part of quality education. ESD is holistic and transformational education which addresses learning content and outcomes, pedagogy and the learning environment. It achieves its purpose by transforming society. It requires changes in the learning content, e.g. integrating critical issues, such as climate change, biodiversity, disaster risk reduction (DRR) and sustainable consumption and production (SCP) in the curriculum.

The latter should be achieved through policies and strategies, reforms of curricula, textbooks, teacher training and adequate monitoring. At the regional level, UNESCO recommends support of “Peer Learning”, whereby the role of universities is paramount for research and capacity-development. While the Education Agenda 2030 is global, progress in many areas is more

likely to happen at the regional level, particularly where qualitative and system-related information is needed. Countries are increasingly collecting better and more systematic information through quantitative indicators. This is insufficient, however. Comparative information is needed to understand how countries in similar situations have responded and to guide the governments in their next steps. The role of regional organizations is critical. Where such organizations include education among their concerns, this can help make the global education agenda more specific to national contexts. The UNESCO GEM Report highlights the experience of bodies (regional) such as the European Union. The European Union’s Education Strategy is supported by a Network that regularly provides policy information on key issues to member states, which exchange information voluntarily, and take part in forums to learn from peers.

Countries in a given region tend to have common education contexts. Their comparative reviews often reflect shared values, objectives and challenges. Regional organizations should help make the global education agenda more specific and relevant to the contexts of their members. Members of regional entities are therefore more likely to express deeper political commitment to, and national ownership of undertaking peer reviews. And the results of regional monitoring are much more likely to be used in policy-making and sustained over time, not least because governments have an interest in the performance of neighboring countries.

Universities and lifelong learning can support the SDG 4.7 in the Mediterranean with at least two different approaches. The first tends to focus on literacy acquisition and retention or on specific knowledge to generate behavioral change, demonstrating that education can facilitate changes in values, world views and behavior at the level of the individual, the community and society as a whole. The recent regional examples are the MAB Youth Forum, the annual UNESCO Summer Schools on ESD, and open-ended meetings of UNESCO Chairs specializing on ESD in the Balkans. Such activities are particularly successful when there is agreement on common values and on the best and most desirable behaviors, e.g. the idea that reducing food waste and energy consumption is important for sustainability and that people can reduce food waste and conserve energy at home.

The second approach focuses on the development of agency, competences and participation, demonstrating that education can facilitate reflective and critical learning, the acquisition of knowledge and skills, and greater agency in order to address complex sustainability issues, e.g. how to create a sustainable school or a carbon-neutral city. This is particularly important where uncertainty exists about what needs to be done or when context-specific solutions need to be identified through collaborative and iterative processes. Both educational approaches are complementary in generating critical learning and sustainability outcomes.

The transformation needed for a cleaner, greener Mediterranean requires integrative, innovative and creative thinking, developed jointly by educational institutions, governments, civil society organizations and the private sector. This collaboration calls for education that goes beyond the transfer of knowledge and desirable behaviors, by focusing on multiple perspectives – economic, ecological, environmental and socio-cultural, and by targeting empowered, critical, mindful and competent citizens. Such education can contribute to the realization of new forms of citizenship, entrepreneurship and governance that focus on the current and future well-being of the Mediterranean.

As agents of change in the educational response towards sustainable development, educators and trainers must first acquire the necessary knowledge, skills, values, motivation and commitment to introduce ESD into teaching and institutions, offering an education that is relevant and responsive to today's global challenges and which will help society in the necessary transition to sustainability. UNESCO supports the integration of ESD into pre-service and in-service teacher education with the emphasis on the sustainability of professional development programmes.

The Global SDG Indicator 4.7.1 measures the extent to which ESD is mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment. The Thematic Indicator 26 measures the percentage of students by age group (or education level) showing adequate understanding of issues relating to sustainable development. At present only a few Mediterranean, or South-East European countries collect this data. For those available it is assessed between Low and Medium (compared to High, for example in Sweden). The Thematic Indicator 27 measures the percentage of 15-year-old students showing proficiency in knowledge of environmental science and geo-science (also known as science literacy). In Slovenia it is estimated at 87%, in Italy at 81%, in Greece at 74%, in Cyprus at 62%, in Serbia at 65%, in Montenegro at 49%. This data is disaggregated by gender, usually showing better results for female students.

UNESCO has initiated consultations, asking the Member States to assess the monitoring of target 4.7. The Member States in particular are asked to report whether the above topics are included in their curricula and if so, at which levels of education and in which subjects, including human survival and well-being. Additional questions monitor the inclusion of these topics in textbooks, teacher education, student assessment/examinations, and programmes outside the school system, including non-formal education, informal education, adult education and media-based education. To increase response rates, the 2016 questionnaire included many more multiple-choice questions than ever before.

Nevertheless, as past low response rates showed, many national ministries are limited in their capacity to respond to such surveys, as they are in the resources needed to prepare high quality national reports. Gathering the information to be included is hampered by the need to coordinate responses across relevant ministries and departments. It is difficult to assure the objectivity and validity of self-reported information, which can lower its monitoring value. Therefore, more systematic and rigorous methodologies for monitoring country progress towards Target 4.7 are needed to improve country reports.

Overall, the SDG4.7 makes explicit the need for “all learners to acquire the knowledge and skills to promote sustainable development”. Currently, the proposed indicators refer only to the school-age youth population. Future data collection efforts should strengthen the knowledge base on out-of-school youth and all adults.

The Mediterranean Strategy on Education for Sustainable Development, an integral part of the Mediterranean Strategy for Sustainable Development (MSSD)



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Background

At their 19th Ordinary Meeting (COP 19) held in Athens, Greece, in February 2016, the Contracting Parties to the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean – Barcelona Convention¹ – adopted the Mediterranean Strategy for Sustainable Development² (MSSD) 2016-2025. The MSSD is a strategic policy framework, for all stakeholders and partners to transcribe the 2030 Agenda for Sustainable Development at the regional, sub-regional and national levels. Built upon a broad consultation process for securing a sustainable future for the Mediterranean region consistent with Sustainable Development Goals (SDGs), the MSSD is underpinned by the conviction that investment in the environment is the best way to secure long-term sustainable job creation and socio-economic development³.

After its official adoption, the challenge is now the MSSD implementation with the participation of all stakeholders, beyond the field of the environment, from national and local governments to civil society, academia, the private sector, and the support of regional institutions. Although facilitated by the UN Environment / Mediterranean Action Plan (MAP) – Barcelona Convention Secretariat⁴, the full delivery of the MSSD relies on coordinated, collective efforts, with the involvement of all Mediterranean decision-makers and stakeholders.

The Mediterranean Strategy on Education for Sustainable Development (MSESD) responds to these provisions. While the MSESD represents an integral part of the MSSD implementation under its Objective 6 “Governance in support to sustainable development”, its ownership, implementation and follow-up are ensured by national governments, supported by various stakeholders, and coordinated at the regional level by the recently established Mediterranean ESD Committee.

Rationale

Rendering compatible economic development, social inclusion and the preservation of natural resources, sustainable development relies on the education of current and future generations as a key prerequisite. *“Obtaining quality education is a foundation of sustainable development to improve people’s lives.”* The international community recognized the importance of education to achieve sustainable development through the adoption of the SDG4 *“Ensure inclusive and quality education for all and promote lifelong learning ...”*. Under the SDG4 focusing on Education for All, Target 4.7 refers explicitly to ESD: *“By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development.”*

Education is a pillar of social development. It is one of the most important criteria taken into account by the Human Development Index (HDI). Education is also of primary importance to foster citizenship, to move towards more sustainable consumption patterns, and to prepare citizens of today and tomorrow to adopt behaviours respectful of our fragile environment. As principles of sustainable development must be at the heart of all public policies, in an integrated manner, sustainable development and eco-responsibility must be at the core of citizenship and hence, it must be the cornerstone of education programmes as well. In other words, the public policies promoting ESD have a fundamental role to play in educating and forming eco-responsible citizens.

We are in a circumstance of urgency because 25% of the global population is less than 14 years old, and thus

1. The 21 riparian countries and the European Union are the Contracting Parties to the Barcelona Convention.

2. <https://wedocs.unep.org/rest/bitstreams/9737/retrieve>

3. The MSSD subtitle is “Investing in environmental sustainability to achieve social and economic development”.

4. <http://web.unep.org/unepmap/>

we must consider the youth as a partner for building a sustainable world. Education and gender equality are crucial concerns in the 2030 Agenda. The Education 2030 Framework for Action, agreed by the global education community in November 2015, recognizes that gender equality is inextricably linked to the right to education for all. Achieving gender equality requires an approach that “ensures that girls and boys, women and men, not only gain access to and complete education cycles, but are empowered equally in education and because of education”. The MSSD has taken up the objective of *Education for All*, notably for all the young adults, insisting on its importance in rural areas and especially for girls, in order to reduce the existing substantial disparities in the Mediterranean.

ESD is especially crucial in such a demographic context, since parents have been recently made aware, have become sensitized, and alerted about sustainable development issues. Therefore, the challenge is immense and actions from national governments are in need. Public policies should address both training of educators, who have an important role to play and a huge responsibility towards our children. Policies should also promote ESD at the University level with specific research programs. The amount of national public expenditures on Research and Development expressed as a percentage of Gross Domestic Product (GDP) is increasing in all Mediterranean countries – except in Croatia and Tunisia – but remains low overall. “Except in Israel where national public expenditures on R&D is about 4% of its GDP, the percentages are between 1 and 2,3% in France, Slovenia, Spain, Italy, and Turkey, and less than 1% in other Mediterranean countries” (Source: <http://obs.planbleu.org>).

Promotion of ESD: the Mediterranean/regional dimension as a bridge between global processes and implementation at national level

The MSSD promotes education, awareness raising and research for sustainable development (Strategic Direction 6.4), in particular through the implementation of the MSED. The latter is also referred to in the Athens Ministerial Declaration (COP19), which explicitly acknowledges the MSED for enhancing public awareness and the role of education for promoting sustainability and the implementation of the SDGs in the Mediterranean.

The MSED encourages the Mediterranean countries to develop and incorporate ESD into their formal education systems and in non-formal and informal education. This will equip people with knowledge and skills pertaining to sustainable development, giving them more competences and confidence, increasing their opportunities for actions towards a healthy and productive life, in harmony with nature and with concern for social values, gender equity and cultural diversity.

The MSSD addresses the issue of inadequate awareness, education, and research and innovation, regarding

sustainable development by means of the Strategic direction 6.4 “Promote education and research for sustainable development” and the recommendations of the following actions:

- 6.4.1: Implement the MSED, which promotes the integration of the principles, values and practices of sustainable development in all aspects of education and learning;
- 6.4.2: Strengthen knowledge and research capacity at the national level, through long-term provision of training opportunities, particularly in the specialised professions, the transfer of knowledge and research infrastructure development.
- 6.4.3: Strengthen the science-policy interface, to support decision-making on the basis of scientific analysis and data, research *fora*, seminars, and other opportunities for exchange.
- 6.4.4: Provide professional and vocational training for the management of protected areas.
- 6.4.5: Promote research and innovation by ensuring that large-scale programmes (e.g. European Union Horizon 2020) take into account Mediterranean priorities for sustainable development.
- 6.4.6: Encourage and support partnerships amongst countries and the exchange of good practices and knowledge in all aspects of education and learning for sustainable development.

In addition, the two following MSSD Strategic directions should be mentioned:

- Strategic direction 2.2 “Promote conservation and use of indigenous or traditional plant varieties and domestic animal breeds, value traditional knowledge and practices in rural management decisions”, with the following Action 2.2.2: Support the integration of traditional knowledge in education and training for rural and agricultural practices at national level; and,
- Strategic direction 4.1 “Increase scientific knowledge, raise awareness, and develop technical capacities to deal with climate change and ensure informed decision-making at all levels, recognizing and protecting the climate adaptation and mitigation services of natural ecosystems”, with the following Action 4.1.4: Raise public awareness through environmental education campaigns and ensure climate change is mainstreamed in the formal educational curricula.

Furthermore, the MAP system is producing Science Policy Interfaces for bridging the gap between scientists and decision-makers and for facilitating the definition of science based policies. These initiatives are aligned with the promotion of ESD and they demonstrate how Education and Science are of paramount importance for the achievement of sustainable development in our region.

Challenges

The Mediterranean countries face the following challenges in terms of ESD:

- **Monitoring:** There are many relevant Mediterranean experiences, but there is a lack of follow-up and reporting to measure their impacts and to capitalize on lessons learnt in order to replicate best available practices.
- **Integration:** The integration of sustainable development in all education programs is critical, from primary school to the highest levels of University, taking also into account non-formal and informal education.
- **Adaptation:** The promotion of ESD must be innovative and at the forefront of scientific discovery, relying on innovation for sustainable development, including all new technologies of information and communication, plus media and social networks.
- **Promoting plurality:** The recognition of all national and local specificities by default implies a strong

coordination of the various initiatives so they can move in the same direction and towards the same goals. There are various paths to reach the ultimate, common objective of promoting ESD. In this regard, the 1st Meeting of the Mediterranean Committee on ESD should be acknowledged because it gave visibility to a wide range of practices, which represent sources of inspiration for all participants.

It is fundamental that, individually and collectively, the Organizations gathered in the Mediterranean Committee on ESD facilitate the promotion of the MSED and its Action Plan, so that national policy-makers are able to make the best use of these regional policies that represent incentives for strengthening and adapting their respective national strategies and programmes of education at all levels.

UNECE Strategy for Education for Sustainable Development



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The United Nations Economic Commission for Europe (UNECE), the oldest of the UN Regional Commissions - was established in 1947. At present, 56 countries from Europe, Central Asia, and North America are members of UNECE. With its broad geographical coverage and sectoral mandate this intergovernmental structure is well-positioned to produce regional and global public goods, statistics, data and information, and to provide platforms and forums for establishing regional partnerships. UNECE serves as the Secretariat to many international agreements regulating transport, chemicals, environment, trade facilitation, electronic business, agricultural quality standards, public-private partnerships (PPP), energy and minerals (UNFC), statistical standards, etc.

Education has become the focal point of the interest of the Member States of UNECE relatively recently, and formally in 2005, when the UNECE Strategy on Education for Sustainable Development (UNECE ESD Strategy) was

adopted at the High level Meeting of Environment and Education Ministers in Vilnius, Lithuania. The relevance of the UNECE ESD Strategy and the continuing interest of the Member States in its implementation were reaffirmed in 2016 at the High level Meeting of Environment and Education Ministers in Batumi, Georgia.

The UNECE ESD Strategy is closely linked to the Mediterranean Strategy on ESD; several Member States take part in the implementation of both Strategies. The objectives of the UNECE ESD Strategy are much the same as for the Mediterranean Strategy on ESD. Therefore, there's a significant potential for cooperation, exchange of experience, and cross-enrichment between these two international platforms.

Through periodic national reporting to the UNECE ESD Steering Committee (the intergovernmental governing body at the high-level meetings) the Member

States regularly assess the progress in the Strategy's implementation. The latest exercise was concluded in 2016, at the Batumi High-Level meeting. The third evaluation report¹ is based on national reports received from 38 out of the 56 Member States of the UNECE. It demonstrates the solid progress accomplished by the Member States through cooperation, using the UNECE ESD Strategy format. Below are some highlights from the Report, demonstrating the progress, as well as the challenges in regard to the achievement of six objectives of the Strategy:

"Ensure that policy, regulatory and operational frameworks support ESD"

- Throughout the Strategy's original 10-year period, 74% of the Member States have laid the foundation necessary to advance ESD in national education legislation and regulatory instruments.
- ESD is now reflected in national education policy documents by over 90% in the reporting of member States.

"Promote sustainable development through formal, non-formal and informal learning"

- Reporting Member States still "in progress" or "still developing" towards a comprehensive implementation of ESD, mostly for the earliest levels of early childhood learning, and primary and secondary levels of formal education.
- Less is known about ESD in higher education, although Member States report that higher education institutions in the region are increasingly engaged in ESD.
- Progress on non-formal and informal learning varies. Non-governmental organizations appear to be playing a significant leadership role in the promotion of ESD in non-formal and informal settings.

"Equip educators with the competence to include sustainable development in their teaching"

- The Steering Committee established the ECE Expert Group on Competences to define more clearly the ESD competences educators need across the education system resulting in the Expert Group Report "Learning for the Future: Competences in ESD".
- Most Member States report that ESD is now in the stage of initial training (33% or 87%) and in-service training (34% or 89%), with over half also addressing ESD competences in training programmes for education leaders and administrators.
- Information available suggests that ESD in initial training is not systemic but rather made available through elective courses meaning that ESD is being promoted in teacher education, but that in many jurisdictions it is not yet fully integrated.

"Ensure that adequate tools and materials for ESD are accessible"

- 84% of Member States report that ESD has been included in the national curriculum framework.
- Government, academic and civil society stakeholders in all reporting Member States are involved in the development and production of ESD materials.
- Many Member States report the existence of national strategies, institutions and mechanisms to produce and make available ESD-related materials, particularly for primary, lower and upper secondary levels. However fewer Member States have given attention to quality criteria and approval of those materials.
- In some Member States, ESD resources and materials are generally lacking except for those provided by NGOs which are often project based.

"Promote research on ESD and the development of ESD"

- Support for the promotion of ESD research is at just under 70% in the Member States.
- Challenges in advancing ESD research are more evident in some parts of the ECE than in others.
- Areas of research include analysis of educational goals supporting sustainability, processes for the reorientation of education systems, development of active learning methods and evaluation of the outcomes, and the effectiveness of ESD.
- There is no designated database tracking ESD research, neither regionally nor at the Member State level.

"Strengthen cooperation on ESD at all levels within the ECE region"

- Across the UNECE region, the UNECE ESD secretariat has played a central role in promoting ESD among Member States and maintaining the focus on the Strategy beyond the original 10-year implementation period.
- Other regional forums and agreements across the ECE region have also proven to be important arenas for advancing ESD interests. For example, ESD assumes a central focus in the Nordic Sustainable Development Strategy of the Nordic Council of Ministers; and ministers of the environment of the Union for the Mediterranean has endorsed the Mediterranean Strategy on ESD.
- With regard to cooperation and networking, 95% of the Member States report that ESD implementation is a multi-stakeholder process.

Acknowledging that the Strategy has been an important contribution to the United Nations Decade of Education for Sustainable Development (2005-2014), the report identifies five key findings:

1. http://www.unece.org/fileadmin/DAM/env/esd/ESD_Publications/10_years_UNECE_Strategy_for_ESD.pdf

- a. Securing leadership and political will has been a critical factor in the Strategy's success.
- b. Under the Strategy, important advancements were made on policy integration, curricula, tools, resources and networking.
- c. Full integration of sustainable development knowledge, abilities and values, while well in progress, has yet to come into effect across all levels and types of education.
- d. The three priorities for phase III of the Strategy are proving to be challenging but they are necessary leverage points in a complete-system change.
- e. Recognition that ESD lies at the core of the purpose of education has increased, but it must be applied fully across all Member States.

The Batumi Ministerial Statement on ESD (2016), recognizing the necessity to use ESD in implementing the

2030 Agenda for Sustainable Development, in particular to achieve Goal 4, but also recognizing ESD as a cross-cutting theme that serves as an efficient tool for the achievement of the other SDGs, strongly supported the continuation of the implementation of the UNECE ESD Strategy and it called for the alignment of the work under the Strategy with the SDGs.

Parties to the Mediterranean Strategy on ESD could draw useful conclusions from the 12-year long experience of implementing the UNECE ESD Strategy. The opportunity for mutually beneficial collaboration between the two sister Strategies is already here; both instruments are fortunate to enjoy a motivated and competent leadership, supported by the political willingness of interested countries and partners. Hopefully this potential may be fully applied to the advantage of achieving the common objectives of both Strategies, and by extension, those of the Agenda 2030.

The UfM and the Mediterranean Strategy on Education for Sustainable Development



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Introduction

The Union for the Mediterranean (UfM) is an intergovernmental institution composed of 43 member countries from the Euro-Mediterranean region. Its mission is to enhance regional cooperation, dialogue and the implementation of concrete projects and initiatives with a tangible impact on Mediterranean citizens.

The Secretariat of the UfM had the pleasure to participate in the 1st Meeting of the Mediterranean ESD Committee / Regional Training on Education for Sustainable Development (ESD), given its strong focus on youth and sustainable development which are necessary to reach its strategic objectives and namely, human development, stability and integration.

The UfM has long recognized the valuable links existing between the UfM Positive Agenda and the Mediterranean Strategy on Education for Sustainable Development (MSESD). The formal endorsement of the MSESD took place on the occasion of the adoption of the UfM **Ministerial Declaration on Environment and Climate Change** in Athens, Greece, on 13 May 2014.¹ The UfM Secretariat facilitates its promotion, monitoring and reporting as specified in the MSESD and the role of the UfM has been additionally specified in the ESD Action Plan. In particular, the Priority Area 8, calls on stakeholders to support cooperation on ESD at the regional level, to review and facilitate the implementation of the Strategy and the active involvement of the Mediterranean region in contributing to the ESD agenda at global level; the Priority Area 11 calls for the strengthening of sub-regional

1. Declaration of the UfM Ministerial Meeting on Environment and Climate Change, Athens, 2014

cooperation. Programmes and fora relevant to the UfM, such as 5+5 for the Western Mediterranean sub-region on Water and the Ionian-Adriatic initiative are called upon to develop educational components through synergies.

The UfM is involved in different priority thematic issues related to the content of the Action Plan of the MSES, such as Climate Change Adaptation and Mitigation; Alternative Energy Sources; Cultural Diversity and Heritage; Empowerment of Women and Youth; Integrated Water Resources Management; Non-Conventional Water Resources (NCWRs); Marine Resources; Blue/Green Economy; Fisheries; Marine litter; Migration and Refugee Crisis; Sustainable cities; Urban environment; Sustainable Consumption and Production patterns; Sustainable Tourism; Private Sector and Public Private Synergies for SD.

Progress and Achievements of the Union for the Mediterranean on ESD in 2017

The UfM operates through three main pillars: political fora, regional policy, and projects with regional impact. By this operational methodology, many achievements in 2017 could be connected to the Action Plan of the MSES. Firstly, the UfM has promoted the goals of ESD through its regional meetings of the UfM Ministers, such as the second meeting of UfM Ministers of Foreign Affairs (2nd Regional Forum, Barcelona, Spain, in January 2017), and the sectorial Ministerial Meetings on Water (April 2017, Malta), on Sustainable Urban Development (May 2017, Egypt) and on Strengthening the Role of Women in Society (November 2017, Egypt).

During the 2nd Regional Forum, the new UfM Roadmap for Action was launched, highlighting the Euro-Mediterranean region's contributions to the global agenda and the interlinking of Mediterranean regional action with the Sustainable Development Goals. The UfM is also closely associated with the *"Euro-Mediterranean Declaration on Strengthening Cooperation on Research and Innovation"* (Valletta, Malta, 2017), whose main pillars are PRIMA (Partnership for Research and Innovation in the Mediterranean Area), an initiative to develop solutions for a more sustainable management of water and agro-food systems, and the *BLUEMED Initiative - Research and Innovation Initiative for Blue Jobs and Growth in the Mediterranean Area*, specifically cited in the Ministerial Declaration on Blue Economy, which offers a shared strategic framework for working towards a healthy, productive and resilient Mediterranean Sea that is better understood and more valued. It is designed to tap the full potential of the marine and maritime sectors, structuring transnational cooperation to create new 'blue' jobs and to promote and improve social wellbeing, sustainable prosperity and the status of the environment of the region and its surroundings.

Concerning regional policy dialogue, the UfM organised and/or participated in different regional platforms open to a multistakeholder approach. Among the most connected to the topics addressed by the MSES, is the

1st Meeting of the UfM Working Group on Environment and Climate Change, held in Barcelona on 14-15 March 2017, open to representatives of governments, agencies, civil society, the private sector, as well as environment and climate change experts. The aim of the meeting was to advance the regional agenda on environment and climate change for the next years. Back-to-back, the 5th meeting of the UfM Climate Change Expert Group took place in Barcelona on 16 March 2017. This group of experts aims to support all UfM Member States in the implementation of the Paris Agreement and to prepare for their nationally determined contributions. The UfM Expert Group provides an accurate understanding of the regional context and of possible synergies and complementarities among the national policies and measures in the region.

Focusing on Higher Education, the UfM participated in the 23rd Euro-Mediterranean Group of Senior Officials on Research and Innovation (Brussels, 28 November 2017). The Group of Senior Officials ensures the follow-up to the Valletta Declaration on Research and Innovation and the promotion of joint research initiatives on ESD topics such as PRIMA and BLUEMED. On the latter point, the European Commission and participating Member States are in close coordination with the UfM to extend the initiative to willing Southern and Eastern Mediterranean Countries.

Finally, the UfM contributed to the implementation of the Action Plan of MSES through its projects with a regional impact. To date, the UfM has endorsed through its labelling more than 50 projects within the 2 pillars of Regional Human Development and Regional Sustainable Development. Some examples of projects closely connected to ESD include:

- The **Euro-Med University of Fes**, currently celebrating its 4th academic year. Sustainable development is a horizontal topic, focusing on topics such as Renewable energy & Energy Efficiency or Environmental Engineering & Water Management. In 2017, the student enrollment was close to 700, while the **Euro-Med University of Fes** launched new programmes in partnership with renowned higher education institutions.
- The UfM-labelled project **Eastern Mediterranean International School (EMIS)** offers students aged 16-18 a two-year innovative educational programme preparing them for the International Baccalaureate Diploma. EMIS intends to provide an educational programme focused on intellectual stimulation and transversal skills development and it has developed a "green team", a student-led initiative which looks at how to make schools more sustainable. In 2017, the UfM supported the organization of its 3rd annual conference (YOCOPAS).
- The project **"Higher Education on Food Security and Rural Development"** aims to enhance cooperation between Mediterranean countries in the fields of food security and rural development through the improvement of postgraduate programmes offered by the International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM). It has offered scholarships on topics

connected to food security in the Mediterranean to highly qualified female candidates from the Southern Mediterranean and the UfM supports its Mediterranean Doctoral Platform providing training and financial support to PhD students.

- The “**BlueGreen Med-CS**”, project mentioned in the Action Plan of MSES, has set as its goal to strengthen existing and to promote new cooperation and financial opportunities among Euro-Mediterranean Civil Society Organisations (CSOs) dedicated to water and environment. Through a capacity building programme and a small grants scheme, the project will enable NGOs to acquire skills in various areas of sustainable development. The project will be implemented in Albania, Algeria, Lebanon, Morocco and Tunisia.
- As a last example, it is possible to cite the UfM-labelled project “**Plastic busters for a Mediterranean free from litter**”. The UfM supports it as a multi-partner effort to address the root causes of marine pollution. Beyond the development of concrete prevention and mitigation actions to be tested in several pilot areas, the project aims to enhance the awareness of stakeholders and catalyze change in their perceptions and attitudes towards waste.

Through its day-to-day work, the UfM employs a multi-stakeholder approach to ESD by mainstreaming sustainable development inputs among our partners, such as higher education networks and processes, which include UNIMED, EMUNI, the AECHE process, the Association of Arab Universities (AAU), the European University Association (EUA), the Global University Network for Innovation (GUNI),

the Mediterranean Experts on Climate and Environmental Change (MEDECC), and so on.

Conclusion

As a final point, all UfM activities contribute to the core of the Sustainable Development Goals (SDGs) and are at the ‘heart’ of the MSES:

- Achieve gender equality and empower women and girls (SDG5);
- Ensure availability and sustainable management of water and sanitation for all (SDG 6);
- Ensure Inclusive and Quality Education for All and Promote Lifelong Learning (SDG4);
- Promote Inclusive and Sustainable Economic Growth, Employment and Decent Work for All (SDG8);
- Take Urgent Action to Combat Climate Change and Its Impacts (SDG 13);
- Conserve and Sustainably Use the Oceans, Seas and Marine Resources (SDG 14);
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (SDG 15); and
- Promote Just, Peaceful and Inclusive Societies (SDG16).

In conclusion, the UfM follows a horizontal approach to ESD and supports the implementation of the Action Plan of MSES by promoting capacity building, training and education concerning Sustainable Development.



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Introduction: Efforts & initiatives in the field of education and scientific research in the light of the SDGs

The General Secretariat of the League of Arab States (LAS) participated in the 2nd Arab Regional Meeting on the Implementation of the SDGs / Education 2030 (Dubai, United Arab Emirates: 6-7/3/2017) followed by another meeting of the partners on 8/3/2017 organized jointly by UNESCO and the Regional Center for Educational Planning, based in the United Arab Emirates, in order to follow up on the progress in the implementation of the 2016 Regional Roadmap, and to agree on the road map for the next two years 2017-2018, as well as exchange of experiences and learning from other countries. The meeting also informed the Member States about the global and regional actions taken to implement the Education Agenda 2030. The Dubai Road Map (2017-2018) was adopted for implementation by Arab member states and specialized Arab organizations.

LAS participated in the 4th Regional SDG4 Education Partners Meeting on 17-18 October 2017 in Tunis to follow up the implementation of the “Dubai Road Map on Education in the Arab Region”. The meeting was attended by the UNESCO offices of various Arab countries, as well as the Paris UNESCO office, the UNESCO institute for statistics, ALECSO, UNHCR, the UN Relief and Works Agency for Palestine Refugees, the Arab Bureau of Education for the Gulf States, the World Food Program, the Education For All Foundation, the Arab Network for Literacy and Adult Education, the CCNGO organization and other civil society organizations.

Education for Refugees

The Arab League Educational, Cultural and Scientific Organization (ALECSO) created the initiatives “Education for Arab Children in Conflict Areas” (Syria, Yemen, Libya, Iraq and Somalia) and “Challenges of Education in the State of Palestine under Israeli Occupation”, adopted in March 2017 by the Economic and Social Ministers Council. The first meeting of the High Committee of the ALECSO initiative was held on 3/8/2017 in the premises of LAS to discuss the concept paper and the draft Plan of Action with the member states.

The LAS in cooperation with the United Nations High Commissioner for Refugees (UNHCR) and ALECSO, organized a regional high-level meeting on “Refugee Education in the Arab region: challenges and future prospects” (18 -19 May 2017, Tunisia) with one of its important recommendations “*Calling on the Arab Organization for Education, Culture and Science in coordination and in consultation with the General Secretariat of the League of Arab States and Arab States to prepare a draft of an Arab agreement to ensure the right of education for victims of conflicts in the Arab Region*”, and submitted it to the competent Councils of the Arab League for approval. Furthermore, the recommendations called the organizations and countries concerned, to join the ALECSO High Committee for the “Education of Arab Children in Conflict Areas”, as stipulated in the Economic and Social Council resolution 1231 (GC) of 16 February 2017.

Additionally, the LAS Department for “Education and Scientific Research” proposed an initiative to communicate with the Arab Universities giving scholarships to students - refugees in higher education and the education of refugees in general. Along these lines, and within the framework of the Memorandum of Understanding between the LAS and the former President of Portugal concerning the International Program for Supporting Syrian Students, the General Secretariat is also working on two projects proposed by President Sampaio:

- MED STRAND, aiming to provide scholarships for students of Medical Schools both inside and outside Syria, who have not been able to complete their studies and to provide specialized training courses for Syrian doctors inside Syria.
- MASC STRAND 2, aiming to provide scholarships for Master’s students in Social Sciences, Administration and Public Policies, providing soft skills education programmes, developing strategies to support job creation for Syrian graduates, organizing a range of activities to exchange ideas and brainstorming about rebuilding Syria.

The Arab Decade for the Elimination of Illiteracy 2015-2024

LAS in cooperation with ALECSO is working for the implementation and further promotion of the 'Arab Decade for the Elimination of Illiteracy' (2015-2024) in cooperation with the Higher Coordination Committee for the Arab Decade. A media plan is also under development, in cooperation with a team of specialized media professionals and experts. In parallel to the Decade, the Arab Strategy for Scientific and Technological Research and Innovation is underway, adopted in 2017. The General Secretariat organized a meeting on 25-26/7/2017 (Cairo, LAS premises) with the participation of Arab specialized organizations concerned and an executive plan of action for the Strategy was prepared.

ALECSO adopted a Strategy for the period "2017-2022" aiming to visualize its cultural, pedagogical and scientific policies in parallel to the implementation of the Sustainable Development Goals (SDGs) and particularly, the SDG 4, on Education.

Challenges for LAS in the further promotion of ESD

- Six (6) Arab countries are entangled in war conflicts and instability.
- 13 million children are excluded from education in the Middle East and North Africa according to the UNICEF report.
- There is a lack of resources for Education compared to other sectors and persisting poverty in several countries.
- The numbers of illiteracy rates have increased, especially of women, despite the expansion and diversification of its efforts.
- Awareness raising programmes for sustainable management are very much needed.

To conclude, I would like to confirm the support of the League of Arab States towards the MSES and its implementation within the framework of SDG4, by merging the concepts of Sustainable Development in education, in order to expand awareness of consumption patterns and how to protect the environment and the shared responsibilities towards the environment, society and the world as a whole.

ESD in the formal education system of Malta



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At least four policy milestones pave the way towards the implementation of ESD within formal education in Malta: the National Curriculum Framework (2012), the ongoing Learning Outcomes Framework approach, the national Framework for the Education Strategy for Malta 2014 – 2024 and most significantly, the more recently tailor-made National Strategy for Education for Sustainable Development for Malta (NSES, 2016).

The basis for the way forward with ESD lies within the National Curriculum Framework (2012) that had established ESD as a cross-cutting theme spanning the entire breadth of the primary and secondary curricular

configuration. The recent development of the NSES complements and is an important milestone in a practical and tangible way. The NSES also hopefully will set the ball rolling towards a more concrete Action Plan that should be designed to further facilitate the implementation of ESD across all the formal components of the curriculum.

The process towards the Maltese NSES

The formulation of Malta's NSES was addressed using a bottom-up research based approach. In 2013 a Board of Governors was appointed, chaired by representatives

from the University of Malta and consisting of representatives from the Ministries of Education and the Environment. The Board recruited researchers with the task to assess the extent to which ESD is implemented across various sectors of the economy focusing on the following target groups: Government entities; Environment and development organisations; Opinion makers, including the political parties and religious organisations; Civil society; Education stakeholders from public, private and Church schools; Influence groups, such as tourism and the Gozo business sector, as well as the media and arts. The feedback thus obtained at grassroots level served as the basis upon which to build the NSESD.

Policy actions in the NSESD

Malta's NSESD comprises nineteen (19) policy actions that reflect the need towards having an adequate mechanism by which ESD can eventually be implemented in all formal components of the curriculum. The drafting of the NSESD focused on the remit derived from the UNECE Strategy on ESD (2005) and the Mediterranean Strategy on ESD (2014).

Firstly, the NSESD mandates the need for a more robust legal, infrastructure and procedural set-up through which budgetary measures for ESD can be put into place. Secondly, there is recognition of the need for ESD training programmes to be available across all government agencies and also in the private sector. At the heart of the matter lies the underlying principle that ESD should serve as a platform by which a Circular Economy Policy can be promoted. Recent developments in the waste management sector, for example, stand witness to the fact that the government intends to be more proactive in favour of a circular economy process.

The NSESD advocates the setting up of a National ESD Platform specifically tasked with ensuring the implementation of ESD. This shall be done through an appointed team of experts who, as proposed by the policy, shall operate in collaboration with Focal Group ESD Committees from all economic sectors. This approach is meant to facilitate the permeation of ESD throughout the entire 'fabric' of the Maltese economy, engaging as many stakeholders as possible, whilst ensuring that ESD also serves in the promotion of sustainable lifestyles way beyond its role in the formal education domain.

At present, Malta is also engaged in yet another ambitious plan to prepare its National Sustainable Development Strategy update. The NSESD requires that ESD should be part and parcel of all this and the NSESD needs to be thoroughly integrated in the various recommendations that shall arise from this pivotal national policy exercise.

The NSESD mandates that ESD professionals take more active roles within national sustainable development structures, particularly those promulgated under the Sustainable Development Act. ESD should also start to feature more prominently in local and national plans and policies on sustainable development across the board. ESD should not be perceived merely as a pedagogical practice alone,

confined to the realms of the conventional educational process but as an essential tool by which the successful implementation of sustainable development can be delivered through the various plans and policies that occur at all levels.

Training in ESD shall be essential for all educators, both those directly engaged in the formal domain and those who are most active within the informal educational process. The contributions of ESD experts shall be vital in this respect. Moreover, ESD should feature as a compulsory component in initial teacher training that should also support and promote ESD research particularly at tertiary level (university education). The identification of experts who could serve such a purpose is probably very challenging but this should not hinder our efforts to eventually meet the rising expectations that shall emerge once the National Strategy for Sustainable Development is entirely formulated and eventually adopted.

A national registry of ESD experts should facilitate further recognition of the ESD process at par with the other academic disciplines. It should also enable the government and the private sector to help develop and support certified ESD programmes. The input of children and youth should be carefully valued in the ongoing present and future sustainable development consultation process. Furthermore, community-based ESD programmes, mostly of a hands-on nature, should be designed having in mind citizen empowerment.

The NSESD highlights the need for a more active and direct engagement of the Local Councils in the promotion and implementation of ESD. This is one particular aspect where the ESD experts are expected to contribute with urgency, bearing in mind the important role local governance structures can play as a grassroots movement.

Last but not least the NSESD heightens the need for Malta to be more proactive within the sphere of international and European *fora* on ESD, given the island's successful track record in the field, especially within the informal sector.

Significant achievements so far

Malta has a very successful EkoSkola Programme that aims to raise children's awareness, at all levels (primary and secondary) about environmental issues through both classroom study and action in the community. More recently, Maltese schools have also benefitted substantially from the Alter Aqua programme under EcoGozo which has brought together a collaboration between MIO-ECSDE, the Mediterranean Education Initiative for Environment and Sustainability (MEdIES), Nature Trust Malta and the EkoSkola programme¹.

The essential ingredients are thus already in place for the NSESD to serve its purpose as an essential device towards a more fruitful and successful implementation of the ESD process at its broadest extent, in both formal and informal education domains.

1. http://www.ecogozo.com/index.php?option=com_content&view=article&id=347&Itemid=51&lang=en



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Introduction

Cyprus is internationally acknowledged as an example of good practice in Education for Sustainable Development (ESD). Cyprus has endorsed the National Action Plan on Education for Sustainable Development (ESD), the country's flagship for the implementation of educational policies for ESD, permeating horizontally all other national policies such as the National Strategy on Adaptation to Climate Change, the National Strategy for Biodiversity, and the revised National Strategy for Sustainable Development. This National Action Plan on ESD is implemented systematically, monitored and revised according to the current international frameworks for ESD, i.e. the UNESCO Global Action Program (GAP) on ESD and the Sustainable Development Goals (SDGs). The National Action Plan on ESD is also based on the directions provided by the UNECE ESD Strategy and the Mediterranean Action Plan for ESD.

In this brief paper some representative examples of actions and initiatives undertaken in the context of the National Plan on ESD are presented which indicate the importance and the special emphasis that ESD is given within the Cyprus education system.



Fig 1 Paper recycling lab.

Progress and Achievements - ESD in formal Education

A major goal and priority of the Cyprus new Educational Policy focuses on the 'transformation' of the schools into 'sustainable' based entities, on meaningful interventions which take into consideration the needs and particularities of schools and students, as well as changes at the organizational, pedagogical and social level. Through the sustainable schools, the Cyprus educational system pursues to contribute to the creation of a culture and *ethos*, promoting a sustainable life-style for the students and the citizens, in general, based on the values of environmental protection, social cohesion, healthy living, justice and solidarity.

The establishment of the Sustainable School project in Cyprus is a mandate and it applies to all schools. Each school in Pre-primary and Primary education, on the basis of its own needs and idiosyncrasies, chooses its own theme of inquiry and the whole school community, by implementing the ESD School Plan (SEEP), studies it and carries it out, in order to bring changes both within the school and in the community.

The SEEP is closely linked with the ESD curriculum, which was introduced in the educational system in 2010. The curriculum consists of twelve thematic units in agreement with the international, regional and national ESD frameworks; these units are: forests, water, waste, poverty, urban development, desertification, production and consumption, energy, tourism, transport, culture, biodiversity. Each unit includes: a) Basic concepts related to the theme, b) Expected learning outcomes (differentiated at the various school grades).

At the end of the scholastic year the school is expected to identify possible topics for the SEEP of the following year. The monitoring and evaluation methods followed are mainly intended to guide the schools in identifying their needs, to develop an increased sense of ownership and to self-assessment systems, rather than instituting a centralized system for the control and evaluation of the schools.

In Secondary Education, despite the fact that ESD has not yet been introduced as a mandatory field, an important



Fig 2 'Reforming' in the school yard

initiative was introduced this year (2017-18) which relates to a Plan that the school undertakes for its improvement in relation to sustainable development. This Plan sets a priority task that the school works on throughout the year.

ESD in Non-formal Education

The National Network of Environmental Education Centers (NEEC) was developed as an alternative form of education that goes beyond traditional academic knowledge and the 'linear' teaching models, in order to set ESD at the heart of the educational system in Cyprus, as a transformative educational process. The NEEC offers more than 100 environmental educational programmes in its seven Centers. This is a representative example on how formal and non-formal education is effectively linked, connecting schools, students and the civil society with the local environment and the community. The EECs are not just an optional complementary ESD activity for schools but are integrated in the official educational process. The Centers facilitate the exploration of SD issues (e.g. water, biodiversity, local communities, local agriculture, etc.) within suitable environmental settings and through a variety of educational practices (field study, inquiry-learning, etc.). They offer educational programmes for all school levels, as well as trainings for educators, university students, parents and other special groups. At the moment more than 200.000 students, teachers, and professionals have participated. The Centers are located within museums, local workshops, natural and cultural history monuments and involve the local society in their activities as a valuable source for the propagation of the 'unwritten local wisdom' and the past experience found in traditional practices. The EECs have therefore the potential to promote intergenerational dialogue and to enable the local society to acquire first-hand experience and knowledge of the local environment and their cultural heritage.

Challenges - Lessons learnt – Opportunities

ESD in Cyprus is acknowledged as a form of education that leads to change and contributes to Quality Education.



Fig 3 The school garden

It is considered as an intrinsic part of the educational reform whose goal is that by 2030 all schools will have become sustainable schools. Even though ESD is a priority and supported by all means, challenges and obstacles still remain, concerning mainly: a) the lack of enactment of an official structure and mechanism for monitoring and upgrading ESD policies and actions, b) the lack of coordination and effective links among the parallel initiatives and strategies on topics that are under the umbrella of ESD and the SDGs (e.g. global education, developmental education, etc.) which often creates confusion, c) the gap that still exists between theory and practice, d) the need to further enable and support the involvement of local communities.

We consider that the regional policies like the Action Plan of the Mediterranean Strategy on ESD and the UNECE Strategy on ESD provide important guidance for the effective implementation of ESD at national level. Also, the efforts for jointly addressing the common challenges regarding ESD are important for sharing and learning from each other. This will give ESD a new impetus, and it will be widely recognized that this is the key tool for implementing SDGs.

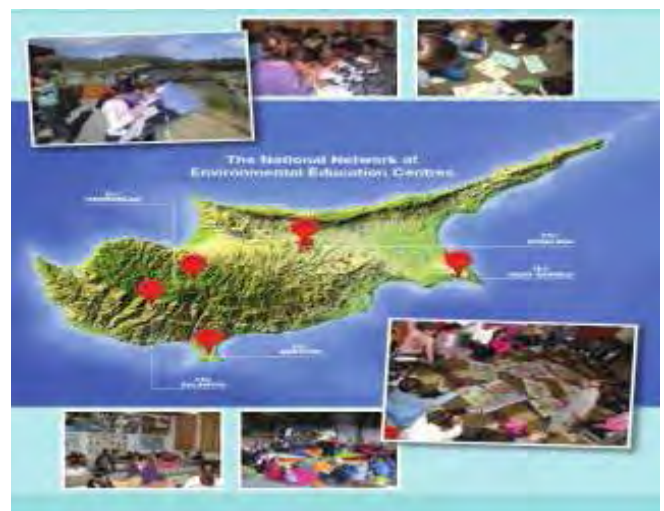


Fig 4 The Network of Environmental Education Centers (NEECs)

Aperçu sur l'Éducation pour le Développement Durable au Maroc



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Introduction

L'intérêt posé sur l'éducation, en tant que vecteur de changement, constitue un préalable clé pour réaliser le développement durable, la protection de l'environnement et la bonne gouvernance. Depuis les années soixante-dix du dernier siècle, on a constaté au Maroc, à l'instar de beaucoup de pays, la Genèse et l'évolution de l'éducation pour l'environnement et plus tard de l'Education pour le Développement Durable (l'EDD).

Au Maroc, on constate que le discours théorique sur l'EDD est en évolution croissante. Certes il y'a des initiatives EDD intéressantes menées aussi bien par les acteurs éducatifs institutionnels que la société civile, mais les résultats pratiques sont toujours modestes par rapport aux attentes. La dynamique de la société civile en matière de l'EDD était un catalyseur et un facteur déterminant pour que cette dernière prenne une place importante dans le système éducatif formel, notamment au niveau de l'enseignement collégial, secondaire et supérieur. Ceci a encouragé également le développement des partenariats fructueux dans le domaine de l'EDD entre les instances gouvernementales chargées de l'environnement et de l'éducation, les organisations de la société civile, le secteur privé et les médias. Parmi les organisations non gouvernementales les plus distinguées au Maroc dans la promotion de l'éducation pour l'environnement et le développement durable, il y'a la Fondation Mohamed VI pour la protection de l'environnement qui a un rayonnement national et international. D'autres initiatives menées par la société civile existent mais leurs impacts et leurs portées d'intervention varient en fonction des expériences et des moyens humains et matériels dont elles disposent (Programmes & activités de l'ASPANA, l'AESVT, AFAk, le CMED, etc.)

La place de l'EDD dans les stratégies & le plan d'action au Maroc

L'EDD figure explicitement comme un instrument majeur pour promouvoir la culture de la citoyenneté et la participation afin de contribuer à la protection de l'environnement et la réalisation des objectifs de développement durable tels qu'ils sont exprimés par la constitution du pays.

La constitution du Maroc de 2011 stipule clairement le droit au développement durable. En plus, une structure consultative œuvrant dans le domaine de l'environnement et le développement durable a été mise en place ; cette structure est le conseil économique, social et environnemental. A cela s'ajoute l'élaboration d'une stratégie nationale pour le développement durable 2016-2030, cette stratégie consacre plusieurs axes à l'Education pour le Développement Durable comme indiqué ci-dessous:

- L'axe stratégique 28: Renforcer la citoyenneté environnementale à travers les programmes de l'éducation, la sensibilisation et la communication;
- L'axe stratégique 29: faire de la recherche et de l'innovation des leviers pour la transition vers le développement durable;
- L'axe stratégique 30: renforcer les formations relatives aux métiers verts & au développement durable;
- L'axe stratégique 31: développer la culture en tant que facteur majeur pour une société durable.

Les départements ministériels de l'éducation nationale et de l'enseignement supérieur et la recherche scientifique s'efforcent de décliner ces axes stratégiques à des actions et des programmes éducatifs EDD, depuis le primaire jusqu'à l'université. A cet égard, une structure officielle dédiée à la promotion de l'EDD a été créée en 2010, il s'agit de la Direction des Programmes de l'Environnement et du Développement Durable. Cette structure a élaboré un plan ambitieux pour intégrer l'EDD dans les curricula de l'enseignement primaire et secondaire, selon une approche intégrée. A cela s'ajoute des activités parascolaires initiées par de nombreux Clubs œuvrant dans les domaines de l'environnement, des droits de l'homme, de la citoyenneté et de la santé.

Deux conclusions pourraient être dégagées de la situation de l'EDD au Maroc: premièrement il y'a encore une concentration sur l'éducation pour l'environnement plutôt que sur l'EDD et deuxièmement, on constate qu'au niveau du discours théorique et pédagogique relatifs au sujet, il y'a un certain nombre d'éléments de la stratégie Méditerranéenne pour l'EDD qui sont intégrés dans les orientations pédagogiques et méthodologiques relatives à la promotion de l'EDD dans le système

éducatif marocain formel et non formel. Ces éléments concernent, comme nous le verrons dans cette analyse, les compétences et les objectifs, les thèmes traités, les approches pédagogiques et les conditions et exigence de la mise en œuvre de l'EDD sur le terrain.

Le cadre référentiel légal pour la promotion de l'EDD au Maroc

Le Maroc a adopté la loi cadre 12-99 portant charte de l'environnement et du développement durable. Cette loi définit les objectifs fondamentaux de l'action de l'état, des autorités locales, du secteur privé et de la société civile en matière de l'intégration de la culture de l'environnement via l'EDD dans les cursus de l'enseignement et la formation. Elle suggère un certain nombre de principes et d'orientations qui se recoupent clairement avec les objectifs de la stratégie Méditerranéenne de l'EDD, ils constituent également des éléments de cadrage qu'il faut respecter lors de l'élaboration et de mise en œuvre des politiques, des stratégies, des programmes et des plans d'action de toutes les parties impliquées dans les domaines de l'environnement et du développement durable, y compris les structures éducatives, parmi ces principes, on peut citer:

- a. le principe d'intégration, qui consiste à adopter une approche globale, intersectorielle et transversale lors de l'élaboration et la mise en œuvre des politiques, des stratégies, des programmes et des plans de développement dans le moyen et long termes;
- b. le principe de territorialité, qui vise à prendre en compte la dimension territoriale, en vue d'assurer une meilleure articulation des mesures initiées par les différents niveaux de décision territoriaux et de favoriser la mobilisation des acteurs territoriaux au profit d'un développement humain, durable et équilibré des territoires;
- c. le principe de solidarité, qui permet dans sa triple dimension sociale, territoriale et intergénérationnelle d'augmenter la capacité du pays à affronter les vulnérabilités et à favoriser une utilisation rationnelle, économe et équilibrée des ressources naturelles et des espaces.
- d. le principe de précaution, qui prévoit la prise des mesures adéquates, économiquement viables et acceptables, destinées à faire face à des dommages environnementaux et des risques potentiels, même en l'absence de certitude scientifique absolue au sujet des impacts réels de ceux-ci.
- e. le principe de prévention, qui vise à prévoir des outils d'évaluation et d'appréciation régulière des impacts des activités susceptibles de porter atteinte à l'environnement, de préconiser et de mettre en œuvre des mesures concrètes pour supprimer ces impacts, ou du moins réduire leurs effets négatifs.
- f. le principe de responsabilité, qui exige que toute personne, physique ou morale, publique ou privée, a l'obligation de procéder à la réparation des dommages causés à l'environnement.

- g. le principe de participation dont l'objectif est la participation active des entreprises, des associations de la société civile et de la population dans les processus d'élaboration et de mise en œuvre des politiques, des stratégies, des programmes et des plans relatifs à la protection de l'environnement et au développement durable.

L'EDD dans le système pré-universitaire marocain

La situation de l'EDD au niveau du système éducatif formel primaire, collégial et secondaire se caractérise par ce qui suit:

- La prédominance des concepts relatifs à l'environnement ; les autres dimensions du développement durable devons être développer, notamment les volets de la société, de l'économie et de la bonne gouvernance;
- La priorité consacrée aux compétences-objectifs liés au savoir par rapport à ceux relatives aux capacités supérieures et aux objectifs affectifs (capacités d'analyse, de résolution de problèmes, d'évaluation, d'engagement et participation) ;
- L'approche pédagogique prépondérante est celle de la multidisciplinarité, avec peu de coordination et de synergie disciplinaires: les questions de l'environnement et du DD sont traitées dans les disciplines scientifiques (notamment les sciences de la vie et de la terre, les sciences sociales comme la géographie et l'éducation à la citoyenneté, l'éducation Islamique, les langues arabe, français et anglais);
- Les questions véhiculées par les curricula et les manuels scolaires consacrent peu de place au milieu proche de l'apprenant, par rapport au niveau spatial national;
- Notons aussi que des initiatives prometteuses en matière de l'EDD sont pratiquées via des canaux complémentaires aux programmes officiels comme les activités para-scolaires et les clubs éducatifs;
- Les thèmes les plus fréquents dans l'enseignement formel concernent en particulier: les différentes formes de la pollution, la question de l'eau, l'environnement urbain, l'aménagement du territoire, la biodiversité et les zones humides, les écosystèmes fragiles comme la montagne, les oasis et le littoral;
- Notons aussi l'existence de lien entre l'EDD formelle et l'EDD non formelle, traduite par des initiatives et des partenariats tissés entre les institutions scolaires et la société civile.

L'EDD dans l'enseignement supérieur

Le système de l'enseignement supérieur au Maroc comprend des établissements publics et privés. Il y a 14 universités publiques dans le pays, et un grand nombre des établissements privés. Les questions de l'environnement et du développement durable sont présentes dans des filières appartenant aux sciences

exactes et aux sciences sociales au niveau de la licence, du Master et de Doctorat (Facultés des Sciences & techniques, Ecoles d'ingénieurs, Facultés des lettres et sciences humaines et sociales). En plus des filières scientifiques comme la biologie, la chimie et la géologie, les dimensions de l'EDD commencent à trouver des places de plus en plus importantes dans des disciplines sociales telles que les sciences de l'éducation, la Géographie, la sociologie, les Sciences juridiques et économiques. A cet effet, des initiatives réussies relatives à l'intégration de l'EDD au niveau de l'enseignement et de la recherche scientifiques ont été initiées dans des établissements éducatifs comme la Faculté des Sciences de l'éducation (Université Mohamed V de Rabat) et dans des écoles normales supérieures ainsi que dans les centres de la formation aux métiers de l'éducation et la formation, répartis dans la plupart des régions du Maroc (comme les régions de Rabat-Salé -Kénitra, la région Casablanca-Settat et la région Marrakech-Safi). Il est à noter également que les étudiants dans ces institutions éducatives choisissent, de plus en plus, des thèmes relatifs à l'EDD pour leurs thèses de Master & de Doctorat.

La valeur ajoutée de l'EDD & ses retombées pédagogiques

Depuis le début du 21^{ème} siècle et grâce à la décennie des Nations-Unies pour l'EDD (2005-2014), on constate que dans le Maroc comme ailleurs, le discours et les pratiques éducatives liés à l'éducation relative à l'environnement dans un premier temps et à l'EDD dans un stade ultérieur, ont constitué une meilleure opportunité qui était à la base d'un renouveau pédagogique ayant comme principaux impacts:

- Le rapprochement entre les sciences sociales, les sciences exactes & les langues, et entre l'enseignement général et l'enseignement professionnel. L'EDD était une occasion pour commencer à réfléchir au sein des éducateurs sur l'intérêt de l'approche interdisciplinaire et le travail commun coordonné autour des questions sociétales comme l'école et le développement durable;
- De nouvelles approches et méthodes pédagogiques ont été adoptées & vulgarisées dans la pratique des classes comme par exemple le travail en groupe, la résolution de problèmes,

l'étude de cas, l'EDD à travers l'expression artistique et la créativité des élèves et étudiants, la recherche du terrain et l'apprentissage extra-muros;

- Une Incitation à l'innovation chez les enseignants et les apprenants grâce à la mise en place des activités d'enseignement et de recherche centrées sur les thèmes de l'EDD comme la campus-vert, l'éco-école, la citoyenneté, les droits de l'homme, la démocratie et les différents défis de l'environnement au niveau national, régional et international tels que le changement climatique, la transition énergétique, la valorisation des déchets et l'économie verte, la gestion intégrée des ressources en eau et des zones maritimes & côtières.

Conclusion

En guise de conclusion, on peut rappeler que le Maroc a pu réaliser des progrès remarquables en matière de l'intégration de l'EDD dans le système éducatif formel et non formel, depuis le primaire jusqu'à l'université, néanmoins et pour réaliser une véritable transition de l'éducation relative à l'environnement à l'éducation pour le développement durable, un certain nombre de contraintes et de problèmes devraient être surmontés. A cet effet, on remarque que si la synergie existe entre les actions éducatives relatives à l'EDD et la stratégie nationale pour le Développement durable (2016-2030), il y'a un besoin urgent de trouver plus de complémentarité et d'articulation entre ces actions éducatives et: (i) les 17 Objectifs de développement durable (ODD) 2015-2030, (ii) La Stratégie Méditerranéenne sur le DD et La Stratégie Méditerranéenne relative à l'EDD. Par ailleurs, la formation et le renforcement des capacités en EDD des éducateurs et de responsables chargés de l'élaboration des curricula et des manuels scolaires, ainsi que les acteurs de la société civile et des médias constitue également une condition préalable pour renforcer la place de l'EDD dans le système éducatif marocain formel, non formel et informel. Et enfin, la production des supports pédagogiques adéquats, l'encouragement du partenariat interne - externe autour de l'EDD et l'échange d'expériences à l'échelle nationale, méditerranéenne et globale sont aussi des conditions efficaces pour la promotion de l'EDD et la réalisation des objectifs de développement durable au niveau local, national, régional et global.

Mise en œuvre de l'Éducation au Développement Durable en Algérie



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Introduction

La conception et la mise en œuvre de l'Éducation au Développement Durable (EDD) en Algérie s'inscrivent dans un objectif global qui consiste à former «le citoyen responsable» à travers des programmes scolaires basés sur une entrée par les valeurs. Cela se traduit concrètement par des modes opératoires et d'actions qui renvoient concrètement à deux dimensions. La première englobe à la fois l'éducation à la citoyenneté et aux valeurs universelles: la culture de paix, les droits de l'homme et les différentes mesures éducatives de résilience contre les discours extrémistes.

A ce titre l'Algérie s'est engagée dans l'élaboration des manuels scolaires sur la base des valeurs inscrites dans les nouveaux programmes qu'à travers cette éducation l'enfant : sera plus conscient de l'existence des civilisations et des cultures différentes de la sienne afin de mieux accepter la diversité; valorise la tolérance et le vivre ensemble en bannissant le racisme et toute forme de violence; participe au dialogue par une écoute appropriée et accepte les

différentes approches; manifeste l'esprit de solidarité et d'entre-aide à travers la réalisation d'un objectif collectif.

Il s'agit, pour la deuxième dimension, des mesures en lien avec des questions de santé, d'environnement, de ressources naturelles et de sites et monuments historiques. Dans cet optique, le programme éducatif appelle à développer chez l'apprenant l'aptitude de: participer aux activités qui valorise la propreté, l'hygiène et la santé; participer aux activités qui valorise la beauté de la nature et sa protection; et de développer une conscience en ce qui relève de la protection des ressources, des sites géographiques et des monuments historiques.

On constate à travers la lecture de l'ensemble des Objectifs de Développement Durable (ODD),notamment de l'ODD4, de la Stratégie méditerranéenne pour l'éducation pour un développement durable (SMEDD) et de la Stratégie Nationale de l'environnement et du développement durable (SNEDD 2017- 2035), on constate des convergences sur beaucoup de points avec

Tableau 2 Activités confiées au secteur de l'éducation nationale par la stratégie nationale (SNEDD 2017- 2035) (source: SNEDD 2017- 2035)

Activité	Secteur chargé de
1.7 - Mettre en place un programme d'information, de sensibilisation et de communication dédiée aux acteurs de l'économie verte	<ul style="list-style-type: none">• Ressources en Eau et Environnement• Communication• Éducation nationale• Affaires religieuses et wakfs• Formation professionnelle• Autres secteurs concernés
1.1.5 Développer un programme de communication, de sensibilisation et d'éducation à la gestion intégrée des déchets	<ul style="list-style-type: none">• Ressources en Eau et Environnement• Communication• Intérieur et collectivité local• Éducation nationale• Affaires religieuses et wakfs• Poste et télécommunications• Autres secteurs concernés
2.3.8 Renforcer le programme de sensibilisation à l'économie de l'eau	<ul style="list-style-type: none">• Ressources en Eau et Environnement• Affaires religieuses et wakfs• Industrie et mines• Formation professionnelle• Éducation nationale

le contenu des programmes éducatifs. Il importe alors de souligner les opportunités que cela offre en ce qui concerne la conception et la mise en œuvre de plusieurs actions qui figurent dans les différents programmes.

Conception et élaboration du plan d'action

La Stratégie Nationale de l'environnement et du développement durable (SNEDD 2017-2035) élaborée par la commission nationale intersectorielle définit les grands axes et volets relatifs au développement durable et elle attribue aux différents départements ministériels des activités qui s'inscrivent dans leurs champs d'activités, et par conséquent, des tâches qui reviennent au champ de l'éducation. Dans la continuité de ce travail, la mise en place d'une commission qui regroupe les deux départements ministériels : le Ministère de l'Éducation Nationale et le Ministère des Ressources en Eau et de l'Environnement, était indispensable pour concrétiser certaines activités. Deux missions ont été confiées à cette dernière: la préparation d'un protocole pour signature entre les deux départements ainsi que l'élaboration et la mise en œuvre d'un plan travail pour l'année scolaire 2017- 2018.

Plan de travail du secteur de l'éducation nationale 2017-2018

Ce plan de travail axé sur la formation, appelle à l'intégration du thème de l'environnement dans toutes les formations destinées aux personnels pédagogiques et administratifs.

I. Formation

1. Formation initiale

- Dans les formations au niveau des Ecoles Nationales Supérieures;
- Lors de stages d'été destinés aux nouvelles recrues.

2. formation en cours d'emploi

- Lors des formations des personnels dans le cadre de leur promotion; inspecteurs; chefs d'établissements, intendants, etc.

3. Formation spécialisée

- Lors des formations des personnels dans le cadre de leur promotion: inspecteurs, chefs d'établissement, intendants, etc.

II Activités destinées aux apprenants

1. Les sorties pédao-écologiques

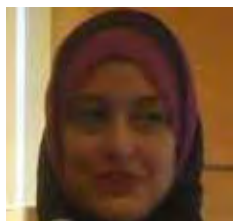
- Organiser régulièrement des sorties pédao-écologiques afin de sensibiliser les apprenants sur la prévention de l'environnement. Celles-ci doivent préalablement être préparées avec les apprenants soit par leurs enseignants accompagnateurs, soit par des animateurs désignés pour cette tâche;
- Prévoir des ateliers dans lesquels les apprenants doivent s'impliquer pleinement dans l'activité sous forme de travaux pratiques;
- Prévoir une évaluation sous forme de travaux de groupe en classe (travail oral ou écrit).

2. Mise en place des ateliers thématiques

- Photos, dessins;
- Recycle-art: travaux manuels à partir d'objets de récupération notamment le plastique;
- Créer des herbiers.

3. Autres activités

- Projections de films: documentaire scientifique, animés (de sensibilisation);
- Théâtre vert;
- Tenir une revue scolaire thématique.



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Introduction

Sustainable Development has become one of the millennium's most prominent concepts. Its importance lies in its integrated approach, as it guarantees that all policies, plans and programmes are designed to meet the current needs of development, without compromising the ability of future generations to meet their own needs. In addition, Sustainable Development raises the environmental and social issues on the same level as economic development. In order to achieve sustainable development, we have to use all available tools. Seminal among all available tools is education at all levels, formal and non-formal.

Importance of Education for Sustainable Development (ESD)

To shift people's attitudes towards sustainability, education focuses on moral and ethical perspectives and it is essential to reinforce values. In a nutshell:

Components of ESD

- Alerting the public to the need to achieve sustainable development and to the likely consequences of failing to do so.
- Focusing on the educational curriculum for sustainable development by incorporating acquired knowledge, competencies and values.



Fig 5 JICA volunteer with school students

- Objectives of ESD
- Create and build a Human Resource capital for Sustainable Development.
- Inform the public and stakeholders about Sustainable Development and its importance.
- Foster behavioral change and stimulate activism.

Progress and achievements in promoting ESD by the EEAA

The Egyptian Ministry of Environment (EEAA) plays an important role with the Ministry of Education in order to achieve an integrated educational process complying with the Sustainable Development Goals (SDGs), mainly through the following actions:

- Capacity building of staff and school teachers to be able to integrate the SDGs in the activities implemented with the students.
- Cooperation meetings on a regular basis with involved stakeholders.
- Reinforcing the integration of sustainable development concepts and goals in the curriculum (already indirectly placed, in all the categories)
- Adopt initiatives and encourage the youth to be involved in related activities.

To this end, the EEAA's stakeholders are the Ministry of Education, the Higher Council for Universities, the Culture Centers' Authority, the State Information Service, etc., as





Fig 6 International workshops



well as International Organizations (Arab League, UNDP, JICA, etc.) and the Civil Society Organizations (NGOs, Associations, Syndicates, etc.)

Characteristic examples of types of ESD actions organized, coordinated and applied by the EEAA are the following:

- Awareness raising campaigns on various topics, e.g. separating waste, conservation of resources (Energy, Water & Food), roof plantations, etc.
- Participation in international and regional meetings/workshops.
- Development of an Activities Guide, simplifying the issues related to sustainable development and the environment, through practical activities and scientific experiments.



Fig 7 BEZRA Cartoon Character



Fig 8 Green Days in schools & universities





Fig 9 Trips & lectures

- Artistic Activities: puppet show made from rice straw, cartoon characters, T.V. sports, literature-poetry, competitions, and exhibitions.
- Organization of events: Green Days and Weeks in schools and universities, festivals, national and international events.
- Organization of field trips to protected areas all over the country.
- Capacity building: workshops for school teachers and educators.
- Organization of meetings and workshops to mainstream citizens' knowledge; adult education and creating handicrafts from recycled materials.
- Publications and materials: children's magazine, posters, CDs, etc.

The aforementioned activities are in agreement with the internationally policy on ESD, in terms of themes and processes. Indicative themes of the actions are: Waste Management/Life Cycle of Products/Recycling; Climate Change Mitigation; Alternative Energy Sources, Resource conservation; Biodiversity; etc. In the organization and application of the activities EEAA is in cooperation with a variety of partners and stakeholders e.g. the Ministry of Environment, the Ministry of Education, Donors, NGOs, etc.

Challenges confronted in the application of ESD actions

- Building capacities to deal with the complex concept of sustainable development.
- Mobilizing financial resources needed for all the required actions related to addressing and fostering ESD (e.g. training, materials, etc.)

Opportunities

- More trainings are needed for both educators and local society.
- A fund-raising methodology needs to be developed.

Key lessons learnt

- Each country has its own 'model' in applying ESD according to its needs and institutional frameworks.
- Interactive activities (e.g. workshops, open discussion) are more effective.
- Placing sustainable development concepts throughout the curriculum is better than to condense it into one subject or unit.
- Building capacity for school teachers on ESD will expand the benefits accumulated from the relevant implemented activities with students.

An ESD example from the non-formal education system of Lebanon



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Introduction

In general, the non-formal ESD initiatives in Lebanon are built on or aim to support synergies and links with the Mediterranean Strategy on ESD, the Sustainable Development Goals (SDGs) and to provide the perspective/potential of a Mediterranean outreach of the particular projects. Actually, the Civil Society Organisations in Lebanon are very active in the field of awareness raising, training and ESD and there are numerous projects related to ESD as well as the SDGs. Indicatively:

- Youth X Change in the Mediterranean
- UNESCO ESD and "Youth X Change in the Mediterranean
- Youth ... The Ultimate Player in Sustainable Production and Consumption
- Green Demonstration Room
- Lebanese Youth as Messengers for Sustainability

- Training Workshops on "Work and Life Skills and Civic Engagement" for Youth in Lebanon (Lebanese and Syrian) Promoting Sustainable Development
- Environmental Improvement to Foster Sustainable Development and Inclusive Growth in the Municipality of Irkay.
- Civil Society in Action for Sustainable Development.

The project "Lebanese Youth as Messengers for Sustainability"

The project was an initiative to promote a culture of sustainability among the Lebanese children and youth, their families and the local communities. It was funded by the EU within the AFKAR III Programme that is managed by the Office of the Minister of State for Administrative Reform and was implemented in partnership with the Italian NGO "Armadilla", the Federation of Mediterranean NGOs "MIO-ECSDE" and the Lebanese NGO "ALMEE".



Fig 10 Loom weaving workshop for women



Fig. 11 Public events on sustainable consumption and environmental protection targeting families

The Center for Educational Research and Development (CERD) acted as an associate national body. The specific objective of the action is to empower the Lebanese pupils and youth to shape values and attitudes, to develop skills and capacities towards sustainable development and environmental protection, and to put these into practice to promote change at the local, national and regional levels. The main activities of the Project were:

- Workshops addressing 60 teachers of (secondary school level) on ESD teaching methods;
- Development and dissemination of a toolkit for educators;
- Seminars and workshops addressing 70 competent authorities, local associations and stakeholders;
- Establishment of working groups on different issues related to sustainable development and environmental protection.
- A contest of sketches on sustainable consumption and environmental protection.
- Production and dissemination of a documentary/ short-movie of the winning sketches of the above contest
- Public events on sustainable consumption and environmental protection targeting 350 family members.
- Sharing relevant materials and experiences of the project at the Mediterranean level, among Lebanon, Italy and Greece, through the MEDIES e-network.

Challenges

- The local actors and stakeholders addressed constraints perceived by their local communities:

- The need to increase their awareness about their role, their rights and responsibilities in the promotion of sustainable development.
- The need to motivate local administrators and governors to pay more attention to sustainable development issues.
- Overall there is a need to form a national strategy for ESD.

Opportunities– Positive impact of the projects

- The interest and enthusiasm of the participating youth in the contest is extraordinary.
- Women considered the activities of the Environmental Days very interesting, informative and enjoyable; they suggested organising more similar actions.

Outcomes and Lessons Learnt

- Education – in all its dimensions: formal, non-formal, informal – allows increasing awareness for all categories of the population. Teachers expressed the need of intensifying training courses, providing supportive educational materials and enriching the school curricula with non-formal education activities.
- The role of youth to induce change and to promote development in their surroundings.
- The importance of linking national initiatives with regional programmes and promoting collaboration at the Mediterranean level.



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Introduction

The Education Sector in Jordan receives special care from the Royal family for further development and improvement. Thus, a number of initiatives and incentive measures for the development of creative learning environments have been taken into consideration in order to be implemented in the country. The best example of this royal concern is the “Queen Rania Teacher Academy” (QRTA) which was established in 2009 to raise the quality of teaching in Jordan by developing the skills of teachers through continuous training and professional development. The 2013-14 UNESCO “Education For All Global Monitoring Report” identified QRTA as one of the key Organizations that provides training opportunities for the teachers to improve the quality of teaching, and in turn, student learning outcomes. Other examples of initiatives targeting improvement of Education are *Edraak*, *The Children’s Museum*, *Madrasati*, and *Queen Rania Award for Excellence in Education*.

Internationally, Jordan ranked high in the score regarding providing ‘Education For All’, with the percentage of enrollment in basic education amounting to 99.1% and an illiteracy rate of 8.9% in 2006, reduced to 6.7% in 2014. Jordan is ranked 10th in the World and 1st in Arab countries in the field of ‘Eliminating illiteracy for women’. The illiteracy rate among Jordanians is 8.1% for males and 10% for females. Furthermore, the number of Adult Education and Literacy Centers in 2017 were 89 (77 for female, 21 for male) educating 1330 students. There are 1162 public kindergartens, besides the several thousands of private kindergartens. Jordan hosted also about 145.000 Syrian students in its public schools.

Latest progress & achievements related to ESD

- A new section for “Education and Environmental Curricula” was established in the Ministry of Environment.

- A Database for environmental content in the current curricula has been developed.
- A Committee was launched by the Ministry of Environment to prepare the “Environmental Culture Curricula” for the primary school sector in cooperation with the Ministry of Education.
- The Ministry of Environment engages students in awareness raising activities e.g. Waste collection campaigns, the Creation of mobile game applications (Eco-Champ App), Environmental Comic Play, Theatre and Drawing competitions.
- Extra-curricular education projects targeted 100 schools in rural areas of Southern and Northern Jordan are organised jointly by the Ministry of Environment and the Ministry of Education.
- Jordan recently became a member of the Executive Board for UNESCO.
- A National Team on SDG4 on Education was established and is led by the Secretary General of the Ministry of Education.
- A National Strategy for Education was created (2006).
- 60 schools registered in the UNESCO Associated Schools Project Network (ASPNet).
- The “School Environmental Clubs”, which are obligatory in all schools, are carrying out many non-formal ESD activities, coordinated and supervised by the Ministry of Education.
- Capacity building courses and training for teachers are organised on a regular basis.
- 102 schools in Jordan applied for the “International Eco-Label for Schools” Programme, which started in Jordan in 2009, on a voluntary basis and coordinated by the Royal Marine Conservation Society (NGO) (at national level).

Challenges & Opportunities regarding ESD in Jordan

In the following table the main challenges, as well as the opportunities arising in relation to ESD in the country are summarized:

Table 3 Challenges and Opportunities related to ESD in Jordan

Challenges	Opportunities
Sustainable development concept is not adequately covered in the formal curriculum.	Create a system to include sustainable development concept in the curricula.
Massive influx of refugees into Jordan.	Many active International Organizations working on the refugee issue.
Limited research on ESD.	Encouragement of scientific research.
Coordination gaps among the Sectors and Institutions working on ESD.	The recently established National Team on SDG4.
Overcrowded classrooms; a two-shift system in most schools.	Many innovative initiatives.
Low enrollment ratio in pre-school education in rural and poor areas.	High enrollment rate in basic education overall.
Limited financial resources in governmental budget.	International support for Jordan.

Epilogue & Lessons Learnt

Effective education and investment in education and youth is undoubtedly a milestone for sustainable development and the enhancement of a quality of life for the next generations. Therefore, non-formal education is an effective tool to support formal education. More

engagement of the Civil Society and NGOs is required. Additionally, the extensive use of Information and Communication Technologies (ICTs) in the educational field and the support of scientific research are still very much needed.

Education for Sustainable Development in Greece



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Introduction

Education for Sustainable Development (ESD) in Greece is placed within the implementation of the UN Agenda 2030. The national implementation of the SDGs is coordinated at a high level and specifically, by the General Secretariat of the Government a Public entity, subject to the Prime Minister and to the Prime Minister's Office. In this framework the creation of a network of focal points from all Ministries and the mapping of existing policies

corresponding with the SDGs were initiated in order to identify any gaps and to design the appropriate new policies. Furthermore, Greece is going to present the Voluntary National Report at the High-Level Political Forum (HLPF) on Sustainable Development in July 2018. The framework for the ESD implementation is mainly based on (i) the UNESCO Global Action Plan on ESD, (ii) the UNECE Strategy for ESD, and of course (iii) the Mediterranean Strategy on ESD and its endorsed Action Plan. ESD is more than just teaching. Students and teachers are invited

to incorporate the principles of sustainability into their everyday life. The 17 SDGs have socio-political roots and therefore their implementation requires a transformative approach to education which should aim at shaping active citizens with critical thinking and developing their capacity for individual and collective action.

Progress and Achievements related to ESD in Greece

The Ministry of Education has planned actions for the integration of the basic principles of sustainable development at all levels of education, supported by a number of laws and Ministerial Acts. Additionally, it has promoted measures and policies at all education levels including the principles of Sustainable Development which are subject to the general education policy supporting the National SD Strategy.

At the formal level, school activities are carried out in schools at both Primary and Secondary level. The projects for primary education are implemented within the “flexible zone” of the curriculum (a specific period of time set aside within the school schedule wherein cross-thematic activities and projects are conducted), while in secondary schools projects are performed as extracurricular activities. Participation in projects, at both primary and secondary educational levels, is voluntary for teachers and students. The School Activities Coordinators, allocated in every Education Directorate provide overall support for the implementation of these programmes, to the participating schools and to teachers. It is noteworthy to mention that both in primary and secondary education during the last school year (2016-2017) 7.522 ESD projects were implemented by 6.151 schools (engaging 209.781 students and 22.519 teachers), while 816 teacher seminars were organized by the Education Directorates where 15.902 teachers were trained.

Additionally, there is a network of 53 Centers for Environmental Education/ESD/Life-Long Learning, officially assigned to offer educational programmes for teachers and students at all levels of education. The Centres are assigned to facilitate the teachers coordinating ESD programmes and activities and to promote cooperation among schools. These Centers enhance community-based training for groups of professionals and provide a hub for communication and consultation between local authorities, governmental and non-governmental organizations and educational institutions. Six new Centers are in the pipeline and are expected to be fully functional for the next school year (2018-19).

Key lessons-learnt

The experience acquired from all the past years made evident the necessity to move from separate actions and activities to a more integrated plan for putting ESD into practice. In this context, the Ministry has proposed a new structure of implementing ESD, in relation to the UNESCO/GAP and the priorities of the Action Plan of the Mediterranean Strategy on ESD.

A legislative framework for ESD is currently being designed by the Ministry of Education that will integrate the related fields: Environmental Education, Health Education and Culture, into a common sustainable whole-school approach. Also, the aforementioned ESD Centers will have a more central and coordinating role in the overall promotion of ESD. Additionally, it has proposed to link the ESD school activities with the SDGs, in order to advance understanding and mainstreaming.

The Greek education system is centralized and generally, it is typically structured in a top-down approach in policy and decision making. However, in the case of the application of ESD, a more participative process has been followed involving the stakeholders. In primary, secondary and vocational education curricula, ESD does not constitute a separate subject but it is integrated in several subjects as a cross-cutting issue. Although, the integration of ESD has reached a certain level, much more work needs to be done.

It is worth mentioning the contribution of Higher Education in the promotion of ESD. All Pedagogical Schools of the Universities of the country include an ESD course. This means that efforts are being made to provide future educators with the necessary professional competences. Furthermore, research on ESD is carried out in the Universities.

At the non-formal level, activities are carried out by different stakeholders (Ministries, NGOs and Civil Society, local communities, UNESCO Chairs, Museums). Examples of ESD involving various stakeholders from the formal and non-formal approaches to education are presented below:

“THE GREEN CULTURAL ROUTES”

Since 2012, the Ministry of Culture and Sports is coordinating a project entitled “The Green Cultural Routes”, contributing to the promotion of SD by educating citizens on the protection and conservation of the country’s cultural and natural environment linking with SDG4.7 where “*culture’s contribution to SD*” is emphasized. The project was designed as a contribution to the National Action Plan for ESD. It was pilot implemented in 2012 and since 2014 it runs on a regular basis. The project is actually a testimony to the contribution of Museums to sustainable development through ESD. In 2018, 140 stakeholders from 36 prefectures have planned a number of cultural events throughout Greece, in collaboration with 22 Municipalities, 21 Primary and Secondary Education Departments, 5 Environmental Education Centers, Museums, 3 Universities, schools, cultural associations, environmental organizations, associations and citizen cooperatives, many volunteers and the Ministry of Culture Councils. Activities and events are going to take place for the general public and the students, including presentations and exhibitions, educational activities, thematic tours, walks, hiking, cycling, artistic events, etc. An example of an older educational activity is the one entitled: “*Pottery: Art from soil and water*” (see photo XX) within “The Green Cultural Routes” in 2016. Its activities took place at Levithra Park

located in the archaeological site next to Mount Olympus, with the cooperation of the Olympus Environmental Education Centre, engaging primary and secondary education teachers and students.

“GEPARKS AS LEARNING PLACES FOR ESD”

Educational activities lie at the core of the UNESCO Global Geoparks operations. Taking this into account, the National Museum of the Lesvos Petrified Forest, located on the island of Lesvos organizes and implements educational programmes and activities on ESD using the Geopark as a learning location for ESD. Here are some examples of these projects: “Climate Change: I learn about its repercussions observing the Petrified Forest”; “Earthquakes & Volcanoes: Natural Hazard Risk Mitigation”; “I adopt and protect the Petrified Forest; I participate in cleaning and preserving fossils - Young Paleontologists”; “Petrified and modern ecosystems in the Lesvos Petrified Forest (Petrified Forest Parks, Nissiopi Marine Park)”. These educational projects, targeting primary and high school students, cover a broad range of activities such as fossil excavation and conservation, identifying landscapes and landforms, observing nature and bird watching. School visits are organized all year round, contributing to the local economy (educational/environmental tourism). Additionally, educational activities for the local schools are organised in order to raise awareness on the importance of the natural monuments and landmarks and conservation.

Epilogue

Challenges can be converted to opportunities. In formal education, the commitment of teachers and students is remarkable in carrying out ESD projects, on a voluntary basis. Particularly for secondary education, the extracurricular



Fig.13 Educational activity in the Lesvos Geopark on earthquakes

activities are not integrated in the daily school schedule. An appropriate framework must be legislated. In non-formal education, the activities carried out are not part of a specific coordinated action. It is important to make clear that the implementation of the SDGs and consequently the SDG4/ EDUCATION 2030 is country-led and country-driven. As it is a long-term agenda, it is important to develop cooperation and synergies with all stakeholders.



Fig. 12 Green Cultural Routes (2016) pottery activity snapshot at a local community

Implementing ESD in Montenegro

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Introduction

Education is a key tool to secure a better life for each child, as it has the power of transforming human lives. Education for sustainable development (ESD) means working with students to encourage them to think about global citizenship and environmental protection, social justice, ethics and wellbeing, and how these relate to ecological and economic factors; to think about the consequences of their actions and how society can adapt, to ensure a sustainable future. ESD is implemented in the Montenegrin education system by developing the key SD strategies at governmental level in order to implement the ESD goals defined in schools as part of the reform processes.

Even though there is no separate ESD strategy at present, a lot has been done since 2007 until today. ESD is included in the national strategy as a “goal” to be achieved and as the means of reaching sustainable development. As the Annex to the “Strategic Plan of the Education Reform” (2005-2009), the “Action Plan on Integrating Sustainable Development in the Education System of Montenegro” for the period 2007-2009 was written in 2007, by the Ministry of Education, the Bureau for Education, the VET Centre, the Examination Centre and the Bureau for Textbooks and Teaching Aids. This Action Plan, aimed to “create conditions for the strategic introduction of SD content in our education system” in line with the UNECE ESD Strategy (2005). Additionally, the National Strategy in the field of Climate Change by 2030 was adopted in September 2015. The present National Sustainable Development Strategy up to 2030 was adopted on 7 July 2016, and the National Biodiversity Strategy with its Action Plan (2016-2020) have both included ESD in their main goals and action plans. In 22 April 2016, Montenegro signed the Paris Agreement in the area of climate change, and ratified it on 11 October 2017.

ESD in the educational system

ESD content is integrated in compulsory subjects, optional subjects, cross-curricular topics and extracurricular activities. The goal is to increase the teaching time of these topics in all education programmes and activities. In order to make improvements, we have

designed and implemented the cross-curricular topics at all education levels. Eight (8) cross-curricular topics have been defined in keeping with the Montenegrin priorities, tradition and commitments, and in line with the international strategic documents in the field of sustainable development (UNECE ESD Strategy, Global Education Agenda 2030, UNESCO GAP on ESD). The preconditions identified for the achievement of the ESD goals are: a) inclusion of cross-curricular topics in the school work plan, the curricula, and the professional skills development and training programmes of teachers and school staff; b) participation of the local community and the wider public in the school “culture”; and c) students, teachers, staff and local community to engage for a more dynamic and more effective school. The topics identified for ESD are the following:

1. Climate Change
2. Green Economy (Food safety, food and sustainable agriculture; Forests; Energy sector; Technology; Tourism)
3. Environmental Protection: Waste; Chemicals management; Noise pollution; Air; Acid rain; Water; Natural renewal and protection of environment / eco-remediation
4. Sustainable Cities and Settlements: Raising awareness of values of space; rural patterns of living; Sustainable transport; Emergency action principles
5. Biodiversity
6. Health Education
7. Education and Human Rights: Social, civic, multicultural education and peace education; Gender equality; European integrations (EU); Consumer education.
8. Entrepreneurial Learning.

Several methodological guidelines for ESD have been produced and most of them are accessible at the Education Bureau website: http://www.zavodzaskolstvo.gov.me/rubrike/obrazovanje_odrzivi_razvoj/.

Training programmes targeting teachers and school management staff have been developed and delivered, and more than 25% teachers out of their total number have participated in such training courses. All teachers now implement cross-curricular topics through compulsory

subjects and extracurricular activities (that are included in the annual school plan, the annual teacher plan, the teaching lesson plan, and the CPD plan). Montenegro is a new member to the Eco-schools network, only since 2016. So far, there are actually 50 registered pilot schools, which covers 20% of all schools in Montenegro. We expect to receive the first green flags in September 2018. Apart from the “Eco-schools, several other international-wide programmes are implemented in the country, as well: the “Education for Sustainable Futures: ESD in the Western Balkans” a project developed by the Regional Environmental Centre - REC and funded by the Rockefeller Brothers Fund with co-financing from EuropeAid and the Kosovan Ministry of Education, Science and Technology; the *R.A.V.E. SPACE* project, “Raising awareness of values of space through education”; the two-year project “Eco-remediation in education”, the Project “School4City”, the cross-curricular programme “Education in emergency situations”, and the project “Healthy lifestyles and Climate Change”, etc.

Regarding ESD in the preschool education sector (3 to 6 years old) the inclusive Curriculum *“Linking knowledge, skills and values through topics: Healthy lifestyle, Security, Care for others, the Environment and Basic economic principles”* was developed providing learning activities and opportunities for using the SD concept creatively in the development of the school materials.

An example of ESD good practice in formal education that we also want to mention is the introduction of the “Climate Change” cross-curricular topic (including global warming and climate change adaptation). To this end, UNDP Montenegro, the Ministry of Sustainable Development and Tourism – Directorate for Climate Change and the Bureau for Education Services, have developed and accredited four Training Programmes for Teachers related to climate change.

Examples of Programmes related to ESD

The example of the ASPnet flagship project “Whole-institution approach to climate change”

The “UNESCO Associated School Network” is a global network of education institutions (over 10.000 in 181 countries) dedicated to promoting and applying the principles and values of UNESCO through: education projects, celebration of UN and UNESCO dates, cooperation with other ASPnet schools, piloting innovative approaches and UNESCO’s education materials, as well as sharing best practice. The four priority areas of UNESCO ASPnet are: peace and human rights, ESD, the UN’s role and priorities and intercultural learning. The new ASPnet flagship project on the “whole-institution approach” (WIA) to climate change was launched in June 2016. The project aims to support ASPnet schools *“in their efforts to reduce climate change by taking action and advancing actions at all school levels and including all school stakeholders”* (in total 250 schools from 25 countries are taking part). The main task of the participating schools is to produce and implement the climate action plans. The WIA is implemented at all institutional levels: from

governance, teaching and learning, campus and facility management to cooperation with the local community. The steps of using the WIA approach are the following:

- Situation analysis,
- The collection of data,
- Producing action plans, and
- Implementation of the action plans.

At national level, the project is coordinated and implemented by the Ministry of Education in cooperation with the Bureau of Education Services. Nine education institutions - from preschool to university level - are piloting the WIA for climate change. Among the main activities carried out so far are: the national training for 18 facilitators in September 2017; the translation and adaptation of the ASPnet guide on the WIA *“Let’s get ready for climate change”*, shared between the participating schools; building the action teams in all nine institutions and developing the action plans, to guide the ongoing implementation. To stimulate learning, we carried out a visit to the Primary school “Radoje Cizmovic” in Niksic, where we organised an ERM sit-down demonstration and built in the schoolyard a plant system of reeds to purify the school’s waste water, which afterwards is used for irrigating the school’s orchard and vegetable garden. The experimental and demonstration classes are taught at the site and visits are organized for teams of students and teachers from participating schools.

Challenges in the implementation of ESD

A main challenge in the way ESD is applied in the formal system is the manner of monitoring and evaluation of the learning processes and the assessment of the students’ competences, which should take place in a more systematic way. Furthermore, the cross-subject of ESD is included in national curricula, but the related themes are still in the process of integration and need to be further promoted and supported. One more challenge we are facing is the lack of adequate funds to achieve project sustainability. Also, the lack of time and motivation of the school heads and teachers reflect the need for continuous training and the establishment of a system of reward. However, the WIA action plans are part of the institutions annual work plans, helping to ‘transform’ the school management and planning a sustainable school framework. Incorporating ESD content at all institutional levels means ‘greening’ school strategies and activities. ESD projects give opportunities for cooperation, for making partnerships and for networking.

Lessons learnt

- Climate change is more than ever an urgent issue and appropriate actions should be promoted and incorporated in the missions and strategies of educational institutions focusing on the ways students learn and on the daily operation of the institution. Climate actions covering all dimensions can improve the performance of an institution.

- Reorientation towards healthy low-carbon lifestyles and the sustainable operation of an institution as a whole, contribute to environmental and climate protection.
- The active engagement of all stakeholders: students, teachers, managers, non-teaching staff, parents, the local community, is key to a successful implementation of ESD, particularly through the WIA. Volunteer-based work in schools and the local community is also important and effective.
- The integrated approaches are important for success: inclusion of ESD topics in all subjects; teachers of different subjects should jointly plan lessons; etc.
- The WIA approach leads to a richer cooperation with local partners in order to solve a local issue (e.g. setting up a recycling centre, a school garden, a town cycling campaign, waste water recycling, etc.).

ESD in Bosnia and Herzegovina



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The educational system of Bosnia and Herzegovina

According to the constitution of Bosnia and Herzegovina, the area of Education is in the exclusive and undivided jurisdiction of ten cantons in the Federation of BiH, the Republika Srpska entity and the Brcko District of BiH. Each one of these administrative units has its own education ministry. This means that there are 12 ministries of education in Bosnia and Herzegovina. The Ministry of Civil Affairs was established in 2003 at the state level and has the responsibility of coordinating the activities. It also represents the country in the international educational setting.

The goal of the current and forthcoming reforms is to build an education system oriented towards the labour market needs, so that education will boost the overall socio-economic development and its integration in the European education space. This integration of education is implemented by ensuring legal, institutional and other standards in education. Over the past period, BiH has regulated all levels of education at national level: pre-school, elementary, secondary, secondary vocational education, as well as tertiary. The process of implementation of education reform is largely supported by the adopted strategic documents. Over the past three

years, four strategic documents have been adopted, mostly developed within EU/IPA projects:

- *Principles and Standards of Adult Education in Bosnia and Herzegovina* (Official Gazette BiH, no: 39/14) which specifies policies and legislation on adult education in Bosnia and Herzegovina. So far, most educational authorities have adopted their own laws in the field of adult education and lifelong learning.
- *The Strategic Platform for the Development of Adult Education in the Lifelong Learning Context for Bosnia and Herzegovina for 2014-2020* (Official Gazette BiH, no: 96/14) was created as a response to the needs of society in times of globalization and the rapid changes in the labour market. It lays the foundation for the work and cooperation of competent authorities, institutions, organizations and individuals at all levels of government in Bosnia and Herzegovina, with the aim of adopting and fully implementing the necessary strategic and other policy documents related to adult education.
- *Action Plan for the Development and Implementation of the Qualifications Framework in Bosnia and Herzegovina 2014-2020* (Official Gazette BiH, no: 28/15) - the agenda of key activities of the Qualification Framework in BiH, including

methodology, standards, deadlines and financial resources.

- *Priorities for Higher Education Development in BiH 2016-2026* (Official Gazette BiH, no: 35/16).

Also, in the last year, the Ministry of Civil Affairs of Bosnia and Herzegovina introduced to the competent education authorities in Bosnia and Herzegovina the Incheon Declaration “*Education 2030: Inclusive and Equitable Quality Education and Lifelong Learning*”, and its implementation is expected in the forthcoming period.

How ESD is present in the educational system

There are no separate laws on sustainable development in BiH at canton level, entity or state level. Sustainable development is included in the existing laws on agriculture, forestry, water management, energy, regional development and the protection of the natural environment. Education for Sustainable Development (ESD) is largely applied as Environmental Education (focusing on Ecology) within the related school subjects such as: Biology, Environment, Nature and Society, etc. or within the study of ecological subjects.

When it comes to curricula, Ecological Education significantly overlaps with ESD, but Ecological Education is not a sufficient substitute for ESD due to the lack of socio-cultural and economic dimensions. The environmental aspect is the most prominent aspect of ESD and it is represented at all grades except the first one, which indicates that education systems recognize the relevance

of the environmental aspect. The socio-cultural aspect of ESD is second in terms of representation. The economic elements of ESD are least represented, which suggests that the development of the framework curriculum and the programmes concerned was not carried out in accordance with the principles of sustainable development and that the economic aspect was not appropriately taken into account.

It is important to mention recent activities carried out by the Agency for Pre-primary Elementary and Secondary Education (APOS0). In 2015, APOS0 developed the “Common Core Curricula” based on learning outcomes, where the learning outcomes related to sustainable development are incorporated into the natural and social sciences. Furthermore, in 2017, APOS0 developed the “*Guidelines for the development of accreditation standards for teacher training in secondary vocational education*”. Priority areas for continued professional development of teachers in vocational education are defined within the framework of the standards. Sustainable development is one of the priority areas for teacher training, in order to develop competences to include sustainable development in their areas of teaching.

Closing remark

ESD must be viewed as a comprehensive “package” of quality education and learning in Bosnia and Herzegovina that includes key issues such as: poverty mitigation, sustainable income, climate change, gender equality, corporate social responsibility and the protection of indigenous cultures.

The commitment of the Italian Institutions in updating the Strategy for ESD



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ESD in the Italian Formal Education System

The Italian Strategy for ESD was updated by the Ministry of Education in the “Plan for Education for Sustainability” on the 28th of July 2017. The Plan meets the goals of the Education Agenda 2030. However, the roadmap towards the implementation of ESD in Italy has been long and difficult, marked by the following steps:

- 2009, 2010, 2014, Guidelines for Environmental Education.
- 2015, Strategy for ESD, Law 221.
- 2015, Reform of School Education with the Art.6/ Law 107, underlining the importance of knowledge and respect for the environment together with active & democratic citizenship.
- 2016, Agreement for the National Operative Program (PON).
- 20-22 November 2016, the “Paper of Rome”, a Strategic Paper co-signed by the Minister of Education and the Minister of Environment.
- 18 July 2017, the Strategy for ESD presented to the UN High-Level Political Forum by the Minister of Environment.
- 28 July 2017, the update of the Strategy for ESD by the Minister of Education in the “Plan for Education for Sustainability”.

The National Operative Programme 2014/2020 (PON) for schools, financed by the Structural European funds, is an important step. Additionally, the meeting of the “*States General*” brought together the Ministries of Education and Environment, universities and research institutes, NGOs (as Legambiente and WEEC secretariat) as well as the productive and economic sector to discuss and to agree upon the Strategy for ESD for the implementation of the Agenda 2030, including, projects, methods, and actions; all presented in the so-called “Paper of Rome”. They also identified the following priority areas: climate change, green economy, legality and environment protection. The most important supporting principles of the Paper of Rome stem from existing opportunities such as alternative school-work to involve students from secondary schools in start-ups and research projects thanks to the agreements between schools, public and private companies and enterprises.

The update of the Strategy for ESD

The updated Strategy for ESD that was presented on the 28th of July 2017, was based on 20 actions in four ‘macro’ areas that intend, among others, to ensure that all the buildings of the Ministry will be sustainable, from the central buildings to all the schools and Universities (overall budget approx. 5 million euro). Moreover, all the staff and teachers will be trained to promote awareness and competences regarding ESD. For teacher training and the introduction of ESD in all schools at all levels, 20 million euros have been allocated. Additionally, tertiary education and research are encouraged and financially supported in the delivery of training, courses and graduate degrees in ESD. Scholarships for student mobility are financed by 65 PhD grants consistent with the goals of Agenda 2030.

Information and Communication Technologies (ICTs) will be further applied not only for dissemination purposes, but also for establishing effective links and networking between primary schools and research institutions and universities in order to exchange and work together on good practices of sustainability.

The institutional effort of the Ministry of Education on ESD has always been carried out in synergy with the Ministry of Environment. However, the Minister of Education is particularly involved in many strategic choices. For example, Vector 4 of Agenda 2030 calls for quality education through applying ESD, serving as an across the board element for the necessary changes; at the same time it offers awareness and effective communication. In the National Education System, ESD is not considered just a further discipline, but it is integrated in the main Subjects. In the 2015 Guidelines that the Ministry developed each discipline is re-examined from the point of view of ESD. Furthermore, territorial agreements are strongly supported to involve Local Authorities and Civil Society to contribute to ESD programmes with central administration and schools.

The Plan for Education for Sustainability

The process of updating the Strategy of ESD into a Plan for Education for Sustainability was undertaken by a Working Group of experts, ministry directors and managers

who worked to facilitate networking and collaboration among experts and educators in ESD, for the promotion of actions and for the dissemination of knowledge and skills, lifestyles and models of sustainable production and consumption. This Working Group made proposals for actions about (a) the mainstreaming of ESD in all levels of education (b) the development and support of research on ESD (c) the re-orientation of university didactics and curricula towards sustainability (d) the enhancement of non-formal and informal ESD (e) the support of governance in regards to the “Whole Institute Approach” (WIA) to ESD.

The Plan actually meets the goals of Agenda 2030, by making sustainability the main axis and by addressing the WIA approach from buildings and infrastructure to the professional development of teachers, and from administration and governance to didactics, pedagogy and action research. Moreover, the plan was informed by the Paper of Rome (States General) that recommends addressing ESD through an interdisciplinary and trans-disciplinary approach, according to a systemic vision. The Paper of Rome calls for the use of interactive, participative and innovative methodologies, requiring an emotional and behavioural involvement, besides rational thought. It proposes to ensure suitable training for teachers and educators, developing the competences to build interdisciplinary approaches and participative teaching methodologies, and also to effectively assess their impact. It also requires the involvement in ESD of

a wider spectrum of actors: educators, students, parents and families, the local society, associations, institutions, universities, research, unions and teams, in simple words, an alliance between the educational institutions and the beyond-school world. Additionally, the Paper advises and insists on building a stronger association with the territory basis, through concrete experiences in the field and exploration of the area.

Epilogue

Knowledge is fundamental in fighting poverty, in supporting the economy, and in promoting an open and inclusive society. Thanks to the three-dimensional approach of ESD: environment-society-economy, the challenge may turn into an opportunity. As a matter of fact, sustainability doesn't rely just on education and didactics but also on the context and institutions. Schools and Universities, as “micro-worlds”, need to become completely sustainable, in a “Whole Institution Approach” (in order to cause shifts in infrastructures/ buildings, governance-institutions, content-curricula and pedagogy). ESD must be included in programmes and curricula throughout all the school years and beyond, in life-long learning initiatives and plans, as well as in the non-formal and informal education initiatives. Last but not least, support, inclusion and empowerment of Non-Governmental Organizations (NGOs) and Civil Society involvement in ESD needs to be ensured.

Empowerment of Egyptian Youth



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Introduction

“Education for sustainable development must promote creative and effective use of human potential and all forms of capital to ensure rapid and more equitable economic growth, with minimal impact on the environment” (Environmental Education and Sustainable Development: A Further Appraisal, Canada).

The year 2015 has witnessed significant global commitments that would have a great impact on the development process till 2030. In September, 2015 the Sustainable Development Goals (SDGs) were launched in New York. SDGs embrace a universal approach to the sustainable development agenda. They explicitly call on governments, business and civil society to use creativity and innovation to address development challenges and recognize the need for governments to establish an effective mechanism for monitoring and assessing the implementation. Our main focus is on Sustainable Development Goal 4: Ensure inclusive and equitable education and promote lifelong opportunities for all.

Who are we?

The Arab Office for Youth and Environment (AOYE) was established in 1978 and considered one of the oldest and most active NGOs in Egypt working in the fields of environment and sustainable development, focusing on youth and children. In 2012, during the preparations for RIO+20, AOYE has initiated the Egyptian Sustainable Development Forum (ESDF) as a “think tank” to facilitate the dialogue process among different stakeholders on how to integrate sustainability in different strategies and policies on the national and local levels, using a participatory approach. Youth (as it is proven that they are the main tool of change) are considered one of the main stakeholders that AOYE and ESDF believe could play a great role in mainstreaming sustainable development, once their capacities are developed and being better informed of the different aspects of sustainable development.

Activities targeting school students

a) The Change is Your Responsibility:

This project targeted 180 school students between the age 8-14 aiming to raise their awareness on their environmental rights; the right to live in a clean and healthy environment, through changing their behavior towards their environment, getting them better informed about different environmental problems and discuss their role and contribution to solve them, in addition to teaching them how to be a positive actor in the community and to deliver these messages to their family members, their neighbors and colleagues.

b) Improving Environmental Conditions through a Participatory Approach to reduce the impact of Climate Change: Practical Solutions for Sustainable Livelihoods

One of the main components of the project is raising the awareness and developing the capacity of 40 youth and 80 children on the Sustainable Development Goals (SDGs), focusing on the impacts of climate change and the importance of renewable energies through different interactive activities.

Activities targeting university students

The main objective of those activities is to build the capacities of university students and develop their skills towards Sustainable Development Goals (SDGs) and the National Strategy on Sustainable Development: Egypt’s Vision 2030, to ensure their future involvement in the developmental process in Egypt. During the first phase of the project entitled “The Role of Youth in Mainstreaming Sustainable Development Elements” (June-December, 2016), the Egyptian Sustainable Development Forum in collaboration with the German Embassy in Egypt succeeded in building the capacities and developing the communication and negotiation skills of 60 youth from 10 Egyptian universities participated in this phase. During the second phase of the project entitled “Climate Change and its impact on Development in Egypt”



Fig.14 AOYE and ESDF awareness raising activities with youth

(April – December 2017), 160 youth from 16 Egyptian Universities participated in this phase and the activities were organized in 3 different governorates. In both phases, ESDF was keen to focus on the “Knowledge Aspect” in which the students were introduced to the Global commitments; Sendai Framework on DRR, Sustainable Development Goals SDGs and the Paris Agreement on Climate Change (COP21), Energy- water- food – ecosystem nexus, National Strategy on Sustainable Development: Egypt’ Vision 2030 and Macro National Projects, in addition to integrating sustainability in different sectors. Also the “Skills Aspect”, developing the youth skills on models for green jobs, communication, networking and negotiations skills, problem-solving skills, as well as special skills of designing and implementing sustainable initiatives either within their universities or in their surrounding local communities. Those activities were complemented by field visits to enable the students to see practical activities on the ground and initiate dialogue around those activities. Then each university group designed an initiative that deals with sustainable development and the ESDF succeeded in supporting the implementation of five of those initiatives. Furthermore, the main results of the youth activities were forming the “Egyptian Youth Forum for Sustainable Development” including now more than 400 youth from different universities and 12 out of the 16 Universities formed a Committee for Sustainable Development

Challenges vs opportunities of ESD

Challenges included lack of vision, wrong attitudes about environmental issues and sustainable development, low

qualitative education and training, lack of trust by young people that they can be part of the decision-making system, weak community participation, bureaucratic procedures and limited funding.

While **opportunities** were effective partnerships established with Universities, empowerment of youth is a national priority (Global Youth Forum in Sharm El Sheikh- Nov. 2017), youth engagement in future activities related to sustainable development (UNISDR - Arab Youth Group for Resilience, etc...), utilizing social media to reach out to more youth, as well as effective networking through university youth groups to increase the number of interested and engaged youth.

Key lessons learnt

- Youth participation / involvement in the development process is essential;
- Effective partnership is the core for success;
- The importance of integrating sustainable development aspects in school and university curricula and extra curricula activities;
- The need of linking national initiatives and programs to regional and international programs on ESD;
- Exchange of experience among the region to learn from other countries;
- Good governance ensures the implementation of national and local planes on sustainable development;
- Trainings and capacity building activities are essential to have a distinguished generation.

Conclusions of the 1st Meeting of the Mediterranean ESD Committee /SWIM-H2020 Regional Training on Education for Sustainable Development (ESD) Nicosia, 22-24/11/2017

During the sessions and discussions it became evident that, at the policy level, progress has been made. Most of the countries have or are elaborating National Plans on ESD in accordance to the provisions of the AP/MSESD. Significant changes in several countries have taken place after the adoption of the MSESD (2014). In most cases, further opportunities to adapt and better fine-tune the National Plans with the AP/MSESD have been identified. In doing so, it was suggested that the AP/MSESD should be utilised as a framework to complement, adapt, place into context and improve the wealth of frameworks, experiences, initiatives and projects, existing for EE and ESD- through an adaptive management approach - given that the majority of the countries still aim their focus primarily on environmental aspects. In spite of what has been achieved so far some common challenges have been identified that have not been addressed in applying ESD in formal systems:

- The financial challenge: The political will for ESD implementation needs to be accompanied by concrete and budgeted activities. Many countries face the challenge of the lack of resources, competent staff, materials, and financial resources. There is a need for further effective fund-raising by capitalizing on the existing mechanisms e.g. national resources, EU Programmes (i.e. H2020, ERASMUS), the UNESCO Participation Programme, bilateral donors, private foundations and international donors to continue and expand activities for the application of the AP/MSESD.
- The “silo effect” and the lack of inter-departmental and inter-institutional cooperation and coordination is not yet overcome; The need for

strengthening systematic inter-departmental collaboration and effective coordination of the formal and non-formal initiatives on ESD, which are supervised by different Ministries: Education, Higher Education & Research, Vocational Education, Environment, Water, Health, Youth and various Agencies, was highlighted by all countries. There is a need to create solid institutional frameworks and to ensure the continuity of the ESD efforts.

- The monitoring and reporting on ESD was highlighted. Data recorded in a systematic way is an issue at national and at regional/international levels. There is a need to improve the international reporting overlaps regarding ESD. Initially, the AP of the MSESD has been designed taking this perspective into account. Most countries reported that the evaluation of ESD programmes needs to be improved as well.
- The strengthening of ESD activities at Higher Education is still necessary in terms of: curricular reorientation, the application of teaching and learning pedagogy, as well as the enhancement of research in the field of ESD.
- Gender issues need to be properly integrated in the AP/MSESD implementation, based on a factual assessment of roles and needs, in order to be effective.

In addition to the above, the participants suggested the consolidation of synergies between the countries with the Mediterranean Commission on Sustainable Development (MCSD), the UN Environment/MAP-Barcelona Convention system, the UfM labelled Blue Med initiative. The



Fig. 15 Family photo of the 1st Meeting of the Mediterranean ESD Committee

concluding discussion focused on the need for continuing and following up the work carried out. It was suggested that the next meeting of the Mediterranean Committee on ESD should be dedicated to the monitoring and evaluation of the implementation of the AP according to relevant indicators; and additionally, to concentrate on the exploration of existing and new opportunities and frameworks for fund-raising. In this respect, all the representatives of the International Organisations re-confirmed their full support for the promotion and application of the MSES D through its AP.

Outcomes of the meeting of Mediterranean Parliamentarians, Ministry Officials & other Stakeholders, 22 November 2017, House of the Representatives of the Republic of Cyprus

On 22 November 2017, more than 110 participants were hosted by the House of the Representatives (Parliament) of the Republic of Cyprus. The meeting was chaired by Mr Adamos Adamou, Chairman of the Parliamentary Committee for the Environment of Cyprus and addressed by Mr Kyriakos Chatzigiannis, Chairman of the Parliamentary Committee for Education and offered a unique chance to participants to discuss possible synergies in the fields of Education and Sustainable Development. The outcomes of the discussion which were unanimously approved by the participants will be shared with the Parliaments of the Mediterranean countries and with other decision-making bodies by the House of the Representatives of the Republic of Cyprus.

From the interventions and the discussion among representatives of the Union for the Mediterranean (UfM), UNESCO, UNECE, UN Environment / MAP, the League of Arab States (LAS), Parliamentarians, members of the Circle of Mediterranean Parliamentarians for Sustainable Development (COMPSUD) and representatives of Civil Society, from Egypt, Albania, Algeria, Bosnia and Herzegovina, Bulgaria, Greece, Jordan, Israel, Croatia, Cyprus, Lebanon, Malta, Morocco, Mauritania, Montenegro, Palestine, Syria, Tunisia, the following findings emerged:

During 2016-2017, the Mediterranean faced, and continues to face, a number of crises, environmental, social and economic, which undermine the potential of the countries bordering it to progress. These crises directly impact social, political and cultural relations, hampering the conditions for a peaceful coexistence and sustainable development of the people and societies of the region and its wider neighborhood.

The Sustainable Development Goals (SDGs), accepted by all the Mediterranean countries and the whole planet, provide a promising milestone for the orientation of the actions of the countries of the region and of their social partners, if and only, however, societies and especially young people cooperate and coordinate their efforts towards their implementation. Many are currently

enrolled in various levels of education and will gradually take the reins of their countries and the responsibility to promote and implement very demanding and difficult decisions and action.

Based on the above, it is of high priority for all the countries of the region to systematically promote education, training and awareness raising on Sustainable Development, which should be prioritized and politically supported by the Parliaments of the countries of the region and financially supported by Governments and International Organizations.

Despite the exceptional preparation and content of the Mediterranean Strategy on Education for Sustainable Development (MSES D) and its Action Plan, and despite the progress and positive efforts made by several countries in the region, the gap between needs and corresponding actions in the field of ESD is still significant. Both the existing inadequate and often inappropriate institutional frameworks, as well as the lack of the necessary human and material resources are responsible for this gap. There is also a significant mismatch between declared positions, suggestions and recommendations concerning education, information and public participation in the various International and Regional / Mediterranean Meetings and Treaties (e.g. Climate, Biodiversity, etc.) and the corresponding actions and investments at national and regional level. The role of the Parliaments is crucial in putting the appropriate legislation in place, ensuring the ratification of relevant International Conventions, as well as for the adoption of the respective budgets.

The rapid increase in the percentage of young people, especially in the southern and eastern shores of the Mediterranean, combined with the increased rates of unemployment and underemployment and their displacement as refugees and migrants, makes their access to quality education and the theoretical and applied elements of education and training on all of the interrelated aspects of Sustainable Development imperative and urgent.

The funds currently available for ESD, including the related programs of Environmental Education, Citizenship Education, Climate Change, Health Education, Human Rights, etc., in the Mediterranean countries, address a minimum percentage of the actual needs. In some countries, there is inactivity or even withdrawal of funding, as well as of actions related to linking formal and non-formal education.

On the basis of the above, the participants unanimously adopted the following messages and recommendations, which they kindly ask the President of the House of Representatives of Cyprus to convey to the Parliaments and Governments of the countries of the Union for the Mediterranean, the European Commission and all the participating International Organizations. They:

- *Welcome the efforts of countries to reform and modernize their institutional frameworks towards*

strengthening ESD, in line with the Mediterranean Strategy on ESD and its Action Plan.

- *Welcome the efforts of countries to implement the Sustainable Development Goals (SDGs) highlighting the urgent need to strengthen ESD as an integral part of the National Strategies for implementing the SDGs. The Parliaments of the countries of the region can convene special sessions to raise awareness and promote such relevant initiatives.*
- *Express their satisfaction for the capacity building activities on ESD provided by the SWIM-Horizon 2020 Support Mechanism, funded by the European Union, and express the wish for its continuation and expansion.*
- *Point out that it is absolutely necessary for the promotion of Sustainable Development and relevant SDGs and for addressing the multiple crises that the region faces, to advance and strengthen ESD and promote the Mediterranean Strategy for ESD and its Action Plan, so that the Ministries of Education of the countries are able to use these tools for strengthening and adapting their respective national strategies and programmes in formal education at all levels.*
- *Highlight that all other relevant Ministries should assist in developing and integrating, within the countries' educational systems, non-formal education and public awareness raising processes on sustainable development, by integrating and encouraging the activities of civil society and in particular of NGOs dealing with ESD, as well as those of the relevant International and Regional Networks.*
- *Request the countries of the region, the European Union, the relevant International Organizations*

and institutional donors to support national and Mediterranean wide/ Regional programmes on capacity building on ESD, in particular teachers' trainings. A five-fold increase of the national budgets for ESD is proposed for its radical reinforcement, over the next five years. In the same context, it is suggested that the activities related to ESD under the Horizon2020 Initiative for a Cleaner Mediterranean and of the SWIM-Horizon2020 Support Mechanism are continued and strengthened.

The Parliaments of the countries of the region can actively support the necessary legislative work and approve appropriate funding mechanisms for the promotion of ESD.

- *Ask the Secretariat of the Mediterranean Committee on ESD to continue its valuable support focusing its efforts on mobilizing resources and working for the repetition of this important initiative of the Cypriot Parliament, and organizing a future joint session of Parliamentarians, educators and civil society representatives in another Mediterranean Parliament.*

On the basis of the above, I call for the joint adoption of the text of the conclusions, which, as an initiative of the Cypriot House of Representatives, will be sent to all Parliaments of the Mediterranean countries. Finally, I note that the Cypriot Parliament will take the initiative to host a meeting of the Parliaments of the Mediterranean countries to discuss the role and common actions we can undertake towards the enhancement of Education for Sustainable Development in the Mediterranean.



Fig. 16 Snapshot from the Meeting at the Cyprus House of the Representatives, from left to right: Aravella Zachariou, Cyprus Pedagogical Institute, Adamos Adamou, Chairman of the Parliamentary Committee for the Environment of Cyprus, Eleni Eliades, Director of the Parliamentary Committees Services, Cyprus, Kyriakos Chatzigiannis, Chairman of the Parliamentary Committee for Education, Michael Scoullou, UNESCO Chair on ESD in the Mediterranean, Ms Dionysia Avgerinopoulou, Circle of Mediterranean Parliamentarians for Sustainable Development (COMPSUD)



MIO-ECSDE

The Mediterranean Information Office for Environment, Culture and Sustainable Development, is a Federation of Mediterranean Non-Governmental Organizations (NGOs) for the Environment and Development. MIO-ECSDE acts as a technical and political platform for the intervention of NGOs in the Mediterranean scene. In cooperation with Governments, International Organizations and other socio-economic partners, MIO-ECSDE plays an active role for the protection of the environment and the sustainable development of the Mediterranean Region.

Background

MIO-ECSDE became a federation of Mediterranean NGOs in March 1996. Its roots go back to the early 80s, when the expanding Mediterranean membership of the European Community encouraged the European Environmental Bureau (EEB) to form its Mediterranean Committee supported by Elliniki Etairia (The Hellenic Society for the Protection of the Environment and the Cultural Heritage). The Mediterranean Information Office (MIO) was established in 1990 as a network of NGOs, under a joint project of EEB and Elliniki Etairia and in close collaboration with the Arab Network of Environment and Development (RAED). The continuous expansion of MIO-ECSDE's Mediterranean NGO network and the increasing request for their representation in Mediterranean and International Fora, led to the transformation of MIO-ECSDE to its current NGO Federation status. Today it has a membership of 128 NGOs from 26 Mediterranean countries.

Our Mission

Our mission is to protect the Natural Environment (flora and fauna, biotopes, forests, coasts, natural resources, climate) and the Cultural Heritage (archaeological monuments, and traditional settlements, cities, etc.) of the Mediterranean Region. The ultimate goal of MIO-ECSDE is to promote Sustainable Development in a peaceful Mediterranean.

Major tools and methods

Major tools and methods used by MIO-ECSDE in order to achieve its objectives are the following:

- Promotion of the understanding and collaboration among the people of the Mediterranean, especially through their NGOs, between NGOs and Governments, Parliaments, Local Authorities, International Organizations and socio-economic actors of the Mediterranean Region.
- Assistance for the establishment, strengthening, cooperation and co-ordination of Mediterranean NGOs and facilitation of their efforts by ensuring the flow of information among relevant bodies.
- Promotion of education, research and study on Mediterranean issues, by facilitating collaboration between NGOs and Scientific and Academic Institutions.
- Raising of public awareness on crucial Mediterranean environmental issues, through campaigns, publications, exhibitions, public presentations, etc.

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The views and opinions expressed in Sustainable Mediterranean for individual contributions do not necessarily reflect those of EEB, MIO-ECSDE or those of any other sponsors of MIO-ECSDE.

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