Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem

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MedOpen – a virtual training course on ICZM in the Mediterranean

Final report of the 2015 CV&C Advanced training session

PAP/RAC MedOpen team

Priority Actions Programme Regional Activity Centre (PAP/RAC)

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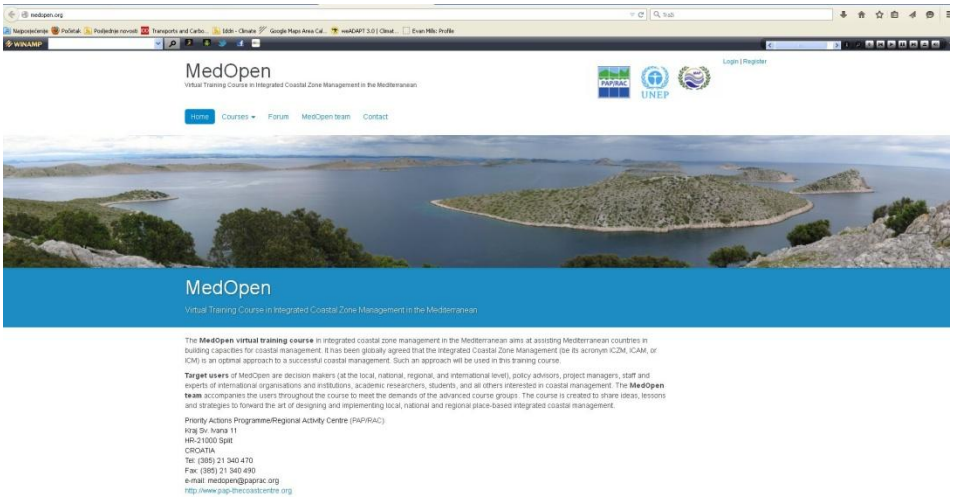
About MedOpen

MedOpen, an on-line training course on integrated coastal zone management (ICZM) in the Mediterranean has been implemented by PAP/RAC since 2004. The aim of this course is to assist Mediterranean countries in building capacities for coastal management. Target users of MedOpen are decision makers (at the local, national, regional and international level), policy advisors, project managers, staff and experts of international organisations and institutions, academic researchers, students, and all others interested in coastal management.

The MedOpen ICZM training course includes the Basic and the Advanced module. The Basic module is continuously available to users, open to everyone and completely automated.

The Advanced module requires a higher degree of commitment. The Advanced sessions are announced and organised from time to time by PAP/RAC. The MedOpen team, including the experienced lecturers and the PAP/RAC co-ordination and technical support, accompanies the users throughout the course to meet the demands of the advanced groups. The sessions are created to share ideas, lessons and strategies to forward the art of designing and implementing local, national and regional place-based integrated coastal management.



MedOpen home page

On-line module on Climate Variability and Change (CV&C)

About CV&C training session

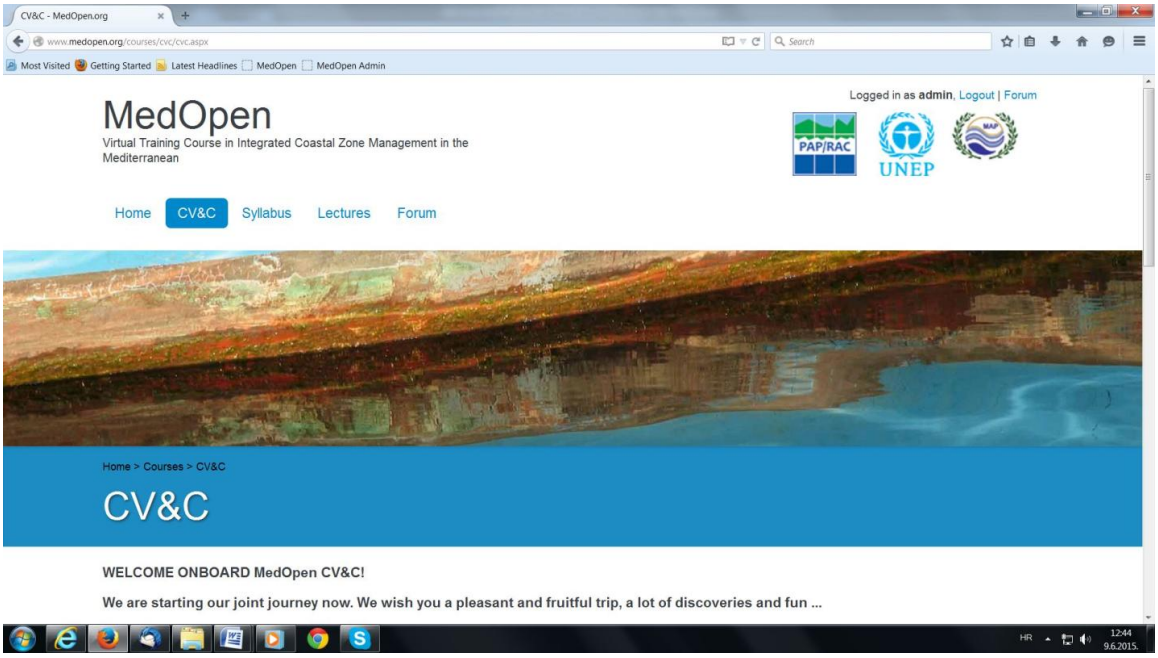
The on-line training session on CV&C is an integral part of the MedOpen training course. It has been prepared and launched in May 2015. In addition to raising awareness and improving knowledge of CV&C aspects in the Mediterranean, the aim of this training session is to enhance

policy dialogue and build / improve capacities on implications of CV&C considerations, the ICZM Protocol and other related national policies.

Just as the original MedOpen, it includes the Basic and Advanced modules. This first Advanced CV&C session was in particular intended for the GEF eligible countries in which the ClimVar & ICZM project - complementary to the GEF/UNEP/World Bank Strategic Partnership for the Mediterranean Sea Large Marine Ecosystem, i.e. the MedPartnership initiative, is being carried out. In addition to four lectures introduced weekly at the discussion forum, it included the other materials available for download (for example, the scientific articles dealing with CV&C issues) and required a regularly participation in Forum discussions and preparation of a Final essay. Duration of the Advanced session was four weeks, i.e. from 4 to 31 May 2015.

Participation

Out of 24 candidates who applied for the training, 15 were selected from the following GEF eligible countries: Albania, Algeria, Croatia, Lebanon, Libya, Morocco, Tunisia and Turkey. Priority was given to those whose educational background and professional experiences were closely related to the contents to be explained and discussed in this training session. Nine trainees, who actively participated in Forum discussion and prepared a positively assessed Final essay, were awarded the PAP/RAC MedOpen Advanced CV&C certificate.



CV&C home page

CV&C team

Prof. Dr. Maria Snoussi was engaged as Lecturer. In addition to weekly introducing lectures to students, she administrated the topics for discussion *via* CV&C Forum and moderated Forum discussions on a daily basis. She also provided advice on the selection of the topics proposed by students for their Final essays and followed the Final essay preparation.

The project co-ordination was carried out by PAP/RAC. Ms. Branka Barić was responsible for the project overall co-ordination and supervision, while Mr. Sylvain Petit provided technical support throughout the project implementation.

A complete List of CV&C Advanced students is attached as Annex I, short biographies of the CV&C team members as Annex II, while the Syllabus is attached as Annex III to this Report.

Grading of students' work

The overall work of students was assessed by grading their participation in Forum discussions and their Final Essays. Posts' and Karma's points indicating students' level of participation were also taken into consideration. Out of 15 registered (one of them did not participate at all), nine students in total successfully completed this Advance CV&C training session. The grading table is included in Annex IV.

Forum discussions per lecture, including an introduction to each lecture, are attached as Annex V. Lecturer's report including the evaluation of Forum discussions and Final essays (i.e. grading and individual comments), as well as the overall remarks, problems encountered and ideas for future improvements, is attached as Annex VI.

Final Essays prepared by students are available at request in a PDF format. A detailed review of PAP/RAC work carried out per week / month before, during and after the training session is also available at request and could be provided in a PDF format.

Post-course evaluation by students

Upon conclusion of the session, students were asked to fill-in a Post Evaluation Questionnaire prepared by PAP/RAC. One of the difficulties the students faced with during the Course was the "workload" and "other commitments", which prevented them from taking a more active part in the session. In spite of this, the CV&C team tried to encourage them to join the others and participate even at their own pace. Also, at request of the majority of students, the session was prolonged for one week so that they could be able to prepare their Final essay properly.

In addition, the difficulty preventing some students to join more actively this session was the language barrier. Namely, it was felt that some students had difficulties with expressing themselves in English.

PAP/RAC will benefit from their comments and evaluation of the session included in the Post Evaluation Questionnaires, which, as usual, will be taken into consideration for the

improvement of the future MedOpen CV&C editions. The Post Evaluation Questionnaires filled-in by students are attached as Annex VII and make an integral part of this Report.

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ANNEX I
LIST OF CV&C ADVANCED STUDENTS

5015 CV&C Advanced training session (4 – 31 May 2015)

LIST OF TRAINEES

NAME AND SURNAME	EDUCATIONAL BACKGROUND	CONTACT e-mail	INSTITUTION	COUNTRY
	CV&C 2015			
1. Georges AKL	MS in environment, Doctorand, third year at University Saint Joseph	g.akl@moe.gov.lb	Ministry of Environment, Head of natural resources protection department	**LEBANON**
2. Jamal ALIBOU	PhD in Water sciences and Planning; Member of the National Scientific and Technical Committee on Climate Change (CNST-CC)	jamal.alibou@gmail.com	Expert-consultant on Environment, Water Resources and Climate Change Hydraulic, Environment and Climate Department Hassania School for Public Works (EHTP) at Casablanca, Morocco	**MOROCCO**
3. Oula AMROUNI	PhD Geology**:** Marine Sedimentology	oulabz@yahoo.fr oula.amrouni@instm.rnrt.tn	National Institute of Marine Sciences & Technologies	**TUNISIA**
4. Mohamed CHERIF	Engineer, Hydraulics and Rural Planning	cherif.officiel@gmail.com	Engineer Environmentalist Dpt. of Environment, Planning and Sustainable Development - IDEACONSULT – STUDI group	**TUNISIA**
5. Ayse Kaya	PhD Social Environmental	akayad@yahoo.com	Environmental Engineer; ***Expert***	**TURKEY**

DUNDAR	Science , Ankara University Research Title; Climate Change Adaptation Research According to MAP in Mediterranean Region; Comparative Example Turkey Mediterranean Coastal Areas		***- Technology Development Foundation of Turkey, Environmental Projects Group, Ankara***	
6. Bashir ELMEDHEN	PhD, Combustion Engineering, Modelling of Liquid Fuel Combustion in Furnaces	ba_medhem@gmail.com ba_medhem@hotmail.com	HSE manager, National Oil Corporation, Libya, (Jul. 2013 – present); Member of National Climate Change Committee (present); Member Oil Ministry climate change negotiation team at OPEC (present)	**LYBIA**
7. Nada ITANI RAAD	Ph. D, Environmental Engineering	nadairaad@gmail.com	PhD, LEED AP Environmental Engineering Head, EEHS	**LEBANON**
8. Majda JURIĆ	PhD student at the Faculty of Maritime studies, Dpt. of Marine and Coastal protection	Majda.Juric@mzoip.hr	Senior Expert Adviser, Ministry of Environment and Nature Protection, Rijeka	**CROATIA**
9. Nawel KHELIL	PhD candidate in integrated coastal zone management and foresight; Coastal Environment Master's degree	nawkhelil@gmail.com	Internship within the oceanographic research laboratory, ENSSMAL, 2013 (1 month); Internship in the laboratory (Certified) of the wastewater treatment plant of Oued Beni Messous (SEAAL), 2012 (1 month); Investigator in the field, for the evaluation of beach attendance for the	**ALGERIA**

			National Commissioner of the Coast (CNL), 2011 (15 days)	
10. Migena KUKLI	Eng., Environmental engineer EMPH in emergency & disaster management	migenakukli@yahoo.com	Document Control Specialist Devoll Hydropower Sh.A. (a project of Stakraft AS.), Albania	**ALBANIA**
11. Yolanda KOULOURI	PhD in Marine Biology-Ecology	yol72@hcmr.gr	Hellenic Centre for Marine Research	**GREECE**
12. Mehmet METAJ	Forestry Engineer	mehmet.metaj@yahoo.com	Executive Director of the ALBAFOREST Centre, and Environmental NGO in Albania	**ALBANIA**
13. Marilda OSMANI	PhD (present), Faculty of Agriculture and Environment, Elbasan, Albania	marildaosmani@hotmail.com	Professor in Chemistry Department, Faculty of Natural Sciences, Elbasan, Albania	**ALBANIA**
14. Senka RITZ	M. Sc. Biology	senka.ritz@ekonerg.hr	Expert adviser in the field of environmental and nature protection, EKONERG - Energy Research and Environmental Protection Institute, Ltd., Zagreb, Croatia	**CROATIA**

ANNEX II

CV&C TEAM MEMBERS' SHORT BIOGRAPHIES

Ms. Maria Snoussi
Lecturer

Maria Snoussi is Professor at Mohammed V University, Rabat-Morocco since 1990 and Head of the "Coastal Environment & Climate Change" Research Group at the Faculty of Sciences. Holding a PhD in Coastal Geosciences from the "Université Bordeaux I" France in 1986, she has extensive experience on coastal issues such as land-ocean interactions focusing on the "river-basin to sea" continuum and Integrated Coastal Zone Management. She had been Head of the ICZM UFR (*Unité de Formation et de Recherche*) for 10 years at the Faculty of Sciences and since 2005 she included a module on Vulnerability and Adaptation of coastal areas to Climate Change at the Master level. Her teaching includes coastal processes, DPSIR, climate change and sustainable development of the coastal areas. She gave courses on these topics at the universities of Cadiz and Plymouth in the framework of Erasmus Mundus Masters, as well as at Dickinson College in Pennsylvania as Fulbright.

Prof. Snoussi has been Chair of the "Coastal Systems" Committee at CIESM, member of the LOICZ Scientific Steering Committee, Team leader (Water) at the scientific board of the IGCP/UNESCO, National project leader of the CAMP Morocco, and is currently member of the Global Ocean Observing System (GOOS) of the IOC/UNESCO and Theme leader of "Coastal Ecohydrology" at the MEDFRIEND/UNESCO Program. *She also is (has been) partner/ leader in several research national, EU and international projects, and consultant for UNEP, IOC, IUCN and WWF.*

Ms. Branka Barić
Co-ordination

Branka Barić is a Programme Officer at the UNEP/MAP's Priority Actions Programme Regional Activity Centre (PAP/RAC), responsible for MedOpen. In 16 years with PAP/RAC, Ms. Barić has been involved in a number of projects, most of them ICZM related, such as the Coastal Area Management Programmes (CAMPs) for Albania, Israel, Lebanon, Slovenia and Montenegro; CAMP Assessment; EIA and SEA; Projects in Africa; Integrated Coastal Area and River Basin Management (ICARM); PlanCoast; Landscape Management; COAST project; etc. She is the author and co-author of conference proceedings and technical reports related to ICZM.

Ms. Barić co-ordinated the 2012 and 2013 MedOpen Advanced editions organised for the PEGASO and SHAPE project partners, respectively. Currently, she is co-ordinating the preparation and implementation of the 2015 CV&C training session being organised in the frame of the ClimVar project, which is in particular intended for candidates coming from the GEF eligible countries.

Mr. Sylvain Petit
Technical Support

Sylvain Petit, Programme Officer at the UNEP/MAP's Priority Actions Programme Regional Activity Centre (PAP/RAC), provides technical support to MedOpen. He has a MSc degree in Territorial Dynamics, specialization in economic strategy, from the Aix-Marseille III University (2008). He also graduated in strategic development of tourism. Through internships and in various projects he has been working in the field of integrated coastal zone management. During the past years, starting at PAP/RAC, he mainly worked on international co-operation project building and follow-up.

On several projects and missions, he joined the teams of the Conservatoire du Littoral in Aix-en-Provence (France) and the Conservatoria delle Coste in Sardinia (Italy). At PAP/RAC he has been contributing to the ICZM stocktaking analysis, animation of the interactive forum and in the drafting of a new visual concept for the governance platform within the FP7 PEGASO project. Mr. Petit provided technical and when needed all other support in the implementation of the 2013 MedOpen training course organised for the SHAPE project partners. Since recently, he is in charge for the implementation of the Coastal Area Management Programme (CAMP) France. Currently, Mr. Petit is taking an active part in the preparation and implementation of the 2015 CV&C training session being organised in the frame of the ClimVar project, which is in particular intended for candidates coming from the GEF eligible countries.

ANNEX III

SYLLABUS

WEEK	LECTURES	PRACTICALS	RESPONSIBLE
week 1 **4 – 10 May**	1. *Introduction to CV&C science and practice with particular reference to Mediterranean coastal zones*	DISCUSSION	**Maria Snoussi, PhD** **Professor**
week 2 **11 – 17 May**	2. *Presentation of the international legal and policy framework to address CV&C issues*	DISCUSSION FINAL ESSAY: • Introduction • Proposal of Final Essay themes by the lecturer • Selection of themes by trainees	
week 3 **18 – 24 May**	3. *Current and future CV&C impacts and approaches to their mitigation and adaptation*	DISCUSSION FINAL ESSAY: Final Essay preparation	
week 4 **25 – 31 May**	4. *Examples of good practices*	DISCUSSION: • Discussion on the topics proposed • Conclusions and ideas for future FINAL ESSAY: Final Essay finalisation and submission	

In parallel min. 2 guided discussions on CV&C topics

Examples of discussion subjects:

- Interest and usefulness of the lesson contents?
- Is it matching with your current activities?
- Missing consideration/information?
- Your experience in regard to what you read?

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ANNEX IV

GRADING TABLE

	STUDENTS	CV&C FORUM COVERING 4 LECTURES	FINAL ESSAY	Posts	Karma	Course Finish - Game Points (/100)	NUMBER OF TASKS STUDENT GOT INVOLVED	FINAL RESULTS	E-mail
1	AKL George	/	/	/	/	/	/	/	g.akl@moe.gov.lb
2	ALIBOU Jamal	/	/	/	/	/	/	/	jamal.alibou@gmail.com
3	AMROUNI Oula	✪✪✪	✪✪✪	6	12	38	2	✪✪✪	oulabz@yahoo.fr
4	CHERIF Mohamed	✪✪	✪✪	6	8	56	2	✪✪	cherif.officiel@gmail.com
5	DUNDAR 5. Ayse Kaya	✪✪	✪✪✪	8	16	59	2	✪✪	akayad@yahoo.com
6	ELMEDHEN 6. Bashir	/	/	/	/	/	/	/	ba_medhem@gmail.com
7	Nada ITANI RAAD	✪✪✪	✪✪✪	12	23	36	2	✪✪✪	nadairaad@gmail.com
8	Majda JURIC	✪✪✪	✪✪	9	22	55	2	✪✪	Majda.Juric@mzoip.hr
9	KHELIL Nawel	✪	✪✪✪	3	5	/	2	✪✪	nawkhelil@gmail.com
10	Migena KUKLI	/	/	/	/	/	/	/	migenakukli@yahoo.com
11	KOULOURI Yolanda	✪✪✪	✪✪✪	9	30	67	2	✪✪✪	yol72@hcmr.gr
12	METAJ Mehmet	✪✪	✪✪	11	19	27	2	✪✪	mehmet.metaj@yahoo.com
13	OSMANI Marilda	/	/	/	/	/	/	/	marildaosmani@hotmail.com
14	RITZ Senka	✪	✪✪	3	8	/	2	✪✪	senka.ritz@ekonerg.hr

ANNEX V

FORUM DISCUSSION WITH INTRODUCTIONS TO LECTURES

Welcome note, Intro to Lecture 1 and discussion

Welcome note by lecturer

This virtual training session on Climate Variability and Change (CV&C) will take you through the different stages of Integrated Coastal Zone Management (ICZM), showing how climate change is relevant to that stage, what kinds of actions are needed to address climatic effects, and what information is available in the literature on these effects, especially in the Mediterranean region. The four lectures of this session will show how to mainstream CV&C into coastal management strategies, which legal and policy frameworks exist, to what extent the coastal zones of the Mediterranean are vulnerable to CV&C impacts and what are the best instruments to assess these impacts and adaptation measures. Our knowledge of climate change is expanding all the time, but we are still making decisions in a framework of uncertainty. Hence, it is important that the ICZM system be flexible and open to new information.

This training session is in the first place designed to discuss the topics the four lectures are dealing with, to share ideas and to exchange experience – all this for the good of your work, and even for your future activities. Our main concern is to fullfil the expectations that you have expressed when registering for this training session. The ideal platform for achieving this goal is a fruitful and challenging discussion with a focus on building and improving your CV&C knowledge in coastal zones.

"It depends on all of us, on our capacity to interactively communicate through the MedOpen CV&C forum, to make such an ambitious challenge possible!" (The MedOpen Team).

We are very pleased that you have joined our team. Welcome aboard the MedOpen CV&C trainee!

Your lecturer,

Maria Snoussi

Lecture 1: Intro & discussion

Lecture 1: CV&C science and practice with particular reference to Mediterranean coastal zones

1 Posts 1 Karma

Senka Ritz posted this 17 hours ago Spam?

a. What is, in your opinion, the most challenging impact of CV&C for coastal managers?

Since the risk on coastal systems is the integrated outcome of drivers' associated hazards, exposure, and vulnerability, it seems that the most challenging impact of CV&C for coastal decision maker / manager is anticipation of societal, environmental and economic implications and respond to the very critical factor according to the full information on drivers, trends and their main effect on ecosystem.

Sound sustainable development includes acknowledgement of all significant impacts (climate-related drivers – sea level, severe storms, winds and waves, freshwater input etc., their effect – erosion, flooding, saltwater intrusion etc., trends and information on projections) in integrated management system so community-based adaptation measures are implemented in such manner that needed outcome is successful coastal management.

b. To what extent the vulnerability of coastal zones is different between the Northern, and the South eastern shores of the Mediterranean?

Studies confirm findings on substantial regional differences in coastal vulnerability between the Northern and the South eastern shores of the Mediterranean that depends on their sensitivity and adaptive capacity. Most countries in South, Southeast, and East area of the Mediterranean are particularly vulnerable to sea level rise due to rapid economic growth and coastward migration of people into urban coastal areas. South, Southeast, and East Asia; Africa; and small islands were identified as most vulnerable and considered to be affected mainly by higher sea levels, increasing temperatures, changes in precipitation, larger storm surges, and increased ocean acidity. Human activities had continued to increase their pressure on the coasts with rapid urbanization in coastal areas and growth of megacities with consequences on coastal resources.

2 Posts 2 Karma

mjuric posted this 7 hours ago Spam?

a. What is, in your opinion, the most challenging impact of CV&C for coastal managers?

The challenge is to fail to take into account all the factors that lead to climate change and the impact on the environment or the ecosystem as a whole. Human activities (transport, industry, tourism, urbanization, concreting green areas, deforestation etc.) largely lead to climate change (greenhouse gases, temperature increase / heating, melting glaciers, tides, sea level increase / ocean, soil erosion, salintet, impact on biodiversity, etc.). Efforts to various directives, regulations, etc., lead to a reduction of greenhouse gas emissions, to stabilzira temperature in the range of 2 ° C by 2050 (emission must fall to about 11 Gt C by 2050 –„IPCC 2014“) etc., are a good way to influence climate change, but if it's short enough period to 2050 or it is too long a period?

Transportation, as the largest emitter of greenhouse gases, which contribute to climate change, has a pressure on the coastal zone and melts and sea. In the White Paper are given guidelines for reducing greenhouse gas emissions in transport by 2030. The goal is to transport as much focus on rail and ships (which leads to reduction of green space and increased load of marine ecosystems).

Tourism is increasingly growing, especially nautical tourism, where tourism countries rapidly increasing number of marinas and other tourist facilities on the coast. How develop tourism and increase tourist capacity, and keep the untouched nature that more tourists of 21 century seeking?

- The sharp rise construction along the coast, especially in the case of unplanned, leading to the devastation of the coast (deforestation leading to soil erosion, leading to minimized concreting green areas and the negative impact on biodiversity).
- The problem of agricultural fields near the sea (rinsing soil into rivers that flow into the sea, etc.).
- Every factor affecting climate change should be considered for a particular area in particular, given the specificity of the area (closed sea, the rugged coastline, currents, water temperature, depth of the sea etc.).
- It should separate area on the micro region according to their specific characteristics, as well as grouped factors that influence climate change, because the coastal part of the specific ecosystem that should be monitored continuously, ie. to conduct the monitoring. In accordance with the parameters to be monitored (factors influencing climate change in relation to the micro-region and its characteristics) may be able to create a model of monitoring, which would monitor changes (possibly reducing the effects of climate change).

b. To what extent the vulnerability of coastal zones is different between the Northern, and the South eastern shores of the Mediterranean?

I agree with a participant Senka Ritz, but I would like to add: the diversity of the coast, temperature, salinity, currents and tourism development.

Post Edited 7 hours ago

 1 Posts 1 Karma

Maria Snoussi posted this just now Spam?

Hello Senka and Majda! Good to meet you on the Forum!

a. Senka, you are absolutely right when saying that 'anticipation' is one of the most important aspects to deal with coastal risks and CV&C impacts. We will expand on that in Lecture 4 on « Examples of best adaptation practices ». For now, we could say that to be proactive, we need to have accurate knowledge on climate variables and trends. However, future projections and models are still tainted with many uncertainties. Thus, for coastal managers, it is very challenging to plan and manage in such an uncertain future!

a. Majda, yes I totally agree with you that coastal managers should consider both climate and non-climate drivers of change, and should work towards synergies between mitigation (reduction of GHG) and adaptation measures in all sectors, especially the most contributors ones to global warming. Moving towards low carbon societies and economies remains a challenge at global level!

b. Regional differences between the Mediterranean shores include both exposure to climate hazards, vulnerability and resilience to CV&C, e.g. most of the Southern countries are already witnessing water stress and desertification and future projections foresee a worsening situation! High rate of population growth, less resources, increased exposure to extremes weather events and poor planning, will lead to increased conflicts, insecurity and migration …So, both of you have captured these (physical, socioeconomic and governance) differences.

Thanks both of you and see you soon for further discussion!..

Have a great week

Maria

 2 Posts 2 Karma

Nada I Raad posted this 34 minutes ago Spam?

Hi everyone,

Nice to be part of sharing information

a. What is, in your opinion the most challenging impact of CV&C for coastal managers?

Mediterranean region is diverse and unpredictable. In order to prevent future impact on the former region there should be international unified regulations and laws that all Mediterranean countries should abide including general public and private sector. Also, a need for mainstreaming

Global society might succeed in reducing emissions but still we need solutions for impacts associated with human activities related to infrastructure. There are many unsustainable developments throughout the region that affecting the climate change as erosion and less green areas due to construction activities.

Education and awareness regarding effects of climate change is something we should achieve to reach the public. Research, models, data collection etc.. are among factors that should be ongoing to educate and pursue common people that climate change is something serious and should make an effort to prevent any future human activities impacts.

b. To what extent the vulnerability of coastal zones is different between the Northern, and the South eastern shores of the Mediterranean?

Mediterranean region is one of the most vulnerable to the impacts of climate change, particularly its southern and south-eastern parts. North African and Eastern-Mediterranean countries are more vulnerable than the Euro-Mediterranean. According to the data provided, countries located in the former regions (North African and Eastern-Mediterranean) like Croatia, Albania, Algeria, Egypt, Tunisia, Syria have ongoing hazard activities. Major hazards that are ongoing are erosion, flooding and saltwater intrusion. Other hazards are but not limited to:

- Extent tourist season
- Extension of summer drought
- Forest Fires
- Increase salinization
- Soil erosion
- Increase in sea level
- Negative impact on coastal services and infrastructure
- Decrease soil moisture
- Loss of habitat

Looking forward for more sharing
Thanks
Nada

 1 Posts 1 Karma

YOLANDA posted this 25 minutes ago Spam?

Hi everyone,

I would like to add my opinion, too, concerning the two questions arisen from Lecture 1.

As far as the first question, I agree with the above-mentioned approaches. Apart from taking into account both climate and non-climate drivers of change as well as anticipation and working towards synergies between mitigation and adaptation measures in all sectors under the uncertainties derived from future projections and models, I would like to add the matter referred to the publication of the added material. Maybe the challenge is also to take into account the scale and complexity which are also critical regarding coastal populations, settlements and infrastructure for climate risk and adaptation studies. Rather the issue focuses on the number of actors that are potentially impacted, and need to be considered in climate change risk and adaptation studies from coastal managers. The number and variety of actors then determines the methods and approaches that should be used.

The other thing that came to my mind with this question is more specific and related to two climate-related drivers which are sea level in combination with storms and their effects, e.g. submergence, flood damage, erosion, saltwater intrusion, rising water tables/impeded drainage, wetland loss, , coastal infrastructure damage and flood defence failure. These are really challenging impacts of CV&C for coastal managers who have to cope with possibly with all the above mentioned approaches.

As far as the second question I also agree with the other participants and I would like to add some thoughts too. In addition to the observations that have been made in the different areas of the Mediterranean Sea concerning climate change and variability, the northern shores have been extensively developed earlier than the south eastern shores of the Mediterranean. So, the countries of the northern shores had to deal with effects of CV&C and other effects from coastal development without really knowing what to expect in the future. Uncertainties have to be dealt also by the countries of the south eastern shores of the Mediterranean which are under intense coastal development. They may also do not know what to expect for the future concerning CV&C and they may be more vulnerable than the northern ones but the countries of these shores could take lessons from the mistakes of the northern ones in order to mitigate several effects.

Attachment:Lecture 1.docx

 3 Posts 5 Karma

mjuric posted this 9 hours ago Spam?

Dear all,

I would like to add something.

Dear Yolanda, I agree with you but by the second question I would like also add only that those areas that were previously faced with the effects of CV & C do not know that all of them consequences are expected and other areas of the Mediterranean can learn from them, but the nature of those who will respond to each area specific, it could say "chemical language" to accumulate negative effects on all areas, so there is "saturation nature / saturation point" and the possible "fracture / unknown disaster" (as when, for example, a burden spring and tested its strength / flexibility; load bearing up to the critical point). For centuries, and nature itself changes (changes in temperature, sea level, volcanic eruptions, earthquakes, etc.), Only, the monitoring is not carried out in the distant past. Thus, for example, notes the extinction of some species due to certain changes in certain areas. The question is to which point (amount of certain factors that affect the extinction of these species) and species resist these negative effects (because of the accumulation of this effect)?

Dear Nada, I completely agree with you especially regarding education. Education and awareness regarding effects of climate change is something we should achieve to reach the public. It is important but how can we how is it possible to improve the awareness of the wider population? How to pursue common people that climate change is something serious and should make an effort to prevent any future human activities impacts? Constant reporting, educating from kindergarten onwards, the public, media, various activities, making films with bad scenario withnegative effectson nature (simulations) ….

I agree with everything that mentioned, but here's a little to spread the discussion and to give an idea, perhaps be found a good solution (one of the many good solutions).

Thanks our lecturer, Ms. Snoussi on comments.

I look forward to the inclusion of the other participants, as well as the female population who broke the ice.

Majda

Post Edited 9 hours ago

1

Quote
Edit Delete


2 Posts 2 Karma
YOLANDA posted this 1 hour ago Spam?

Dear participants good morning,

Dear Majda, I totally agree with you that there are certain issues and matters for certain areas. Each case is unique in a way! However, there are already common practices to be adjusted and implemented in every case. For example, ICZM protocol and ICZM process are characterized by flexibility and adjustment in order for each country to cope with relevant issues such as CV&C.

Looking forward to hearing more in this fruitful discussion!

Best regards,

Yolanda


2 Posts 2 Karma
Maria Snoussi posted this 1 hour ago Spam?
Good morning all!

This is very dynamic and exiting debate girls 😉**!**

To channel the discussions, I would like to remind you that we will have the opportunity to discuss more extensively on policies and regulations, impacts and adaptation in the next lectures. But anyway, this brainstorming is an interesting lead-in!

So, first, we all agree on the role of education, awareness, research, monitoring, improving models that Nada raised and this is also linked to question b!

Second, Majda Yes, throughout Earth's history the climate has varied considerably and it took centuries to millennia to adjust and adapt! But CC has never happened so fast!… It's a matter of time scale, but also adaptive capacity and resilience! And yes there are thresholds not to be exceeded, otherwise irreversible breakdown occur. Resilience is precisely " the ability of a system to anticipate, absorb, accommodate or recover from the effects of a hazardous event in a timely and efficient manner »(IPPCC, 2012) So, the more resilient ecosystems are, the more they will cope with CC.

Third, Yolanda highlighted one more critical and challenging point for mainstreaming CV&C: Involvement of all stakeholders and all sectors, this is what is called "Inclusive Governance" and you will be given an example (*Climagine* Approach) in lecture 4. This is in fact the Achilles heel of an integrated approach such as ICZM.

Now, for the second question: there is recurrent debate in developing countries on whether or not they should take lessons from the mistakes of the developed countries… but this is another debate!...

The northern, eastern and southern countries of the Med have different physical settings, different economic, social and cultural levels, success and failure coastal strategies, but they face more or less the same climatic hazards. So how to address the unavoidable impacts of CC in the coastal areas? How to be prepared wherever you live and whatever uncertain is the future?? There are 'no regret' and 'win-win' approaches and **Yolanda put her fingers on the most important one: The ICZM process, which proved to be the best tool for a sustainable development of coasts and which deal with climate and non-climate forcing. ICZM Protocol is a binding instrument but it leaves some windows and the possibility for countries to adapt some of its provisions to their specific nature in their National ICZM strategies.**

Thanks for your inputs and looking forward for more contributions!

Have a nice day!

Maria

1 Posts 1 Karma

Ayse Kaya posted this 1 hour ago Spam?

Dear participants,

I agree all for your comments. In Turkey, adaptation subject is very important for climate change issues. It will be important also for the ICZM protocol. ICZM proses should be reviewed according to the country's conditions. This protocol should be explained better to the Decision-makers.

Best regards,

Ayse

1 Posts 1 Karma

oula amrouni posted this 10 hours ago Spam?

Dear all

First I want to express my interest to this emerging exchange related to the discussion of the CV and C in the MED region. The coastal vulnerability becomes our common challenge. Both the regional/national/ Mediteranean community implied the made maker, engineering, scientific and socio-economic partner for the ICZM strategy.

a. What is, in your opinion, the most challenging impact of CV&C for coastal managers?

The IPCC and CIRCE project assessment reveals serious increasing of the in water temperature and SLR. The major impacts of climate change in the Mediterranean coastal regions are produced by SLR and change in storms frequencies and intensities.

The Tunisian coasts were unfortunately directly marked by those effects. Several sandy beaches regressed or disappear for the most Human-frequented since this later decade!!!!

Even though this climate data assessment, the northern Africa areas are yet unknown,. In fact, the seasonal evolution of the coastal dynamic structure, the regional fluctuation of the wave refraction under the human structure, the reducing sand supply sources and the changing runoff of the catchments to the coastal zone.

The MED coastal areas are so complexes system because of the different environment and factors (physical setting , geomorphological and biological characteristics, etc).

We have to share our experience and to exchange the national ICZM strategies i.e mistakes. The future programs of the IPCC groups are toward new generation of simulation and CC impact. Regional and short temporal scale and seasonal monitoring of the coastal evolution are essential to improve an adapted system of protection and preservation of the natural resources.

b. To what extent the vulnerability of coastal zones is different between the Northern, and the South eastern shores of the Mediterranean?

I agree with the opinion of Senka Ritz, the coastal zones in different part of the MED basin are vulnerable and show sensibility to the CC effects. As said Nada, the North African and Eastern-Mediterranean countries are more vulnerable than the Euro-Mediterranean.

I just want to add the continued aggression of the coastal dune, one of the principal sediment budgets key.

The Opinion of Yolanda summarise another problematic: the difference of the CV&C knowledge of the northern and southern coastal zone of the MED basin. The list of coastal southern ME region hotspots to sea-level rise established by Satta, 2014 required an urgently adaptation change of the current status.

The difference is HOW the socio-economic (with all the actors of the ICZM dynamics) community acts to reduce the critical damage and to join the international CC challenge trend to reduce the greenhouse gas emissions.

Dear Mjuric and Nada: yes, education will be essential to gain purpose and for the successful of each protection program for the coastal protection: the public is the principle actor of the IZCM process.

The developing countries have to participate but are there an existing regional programs and funds to achieve this ambitious goal? That's the question

Thank you Pr. Maria for your previous replies, I appreciate this dynamic debate .

4 Posts 5 Karma
YOLANDA posted this 37 minutes ago Spam?

Dear participants hi again,

I would like to add something to what Ayse wrote. I think that it is important to support the bottom up planning and management on a local, regional and national level engaging in each specific case all interested sides, in order to have a holistic view about the issues to be faced and their cumulative effects concerning CV&C. Participation and awareness are the key elements for an efficient and effective government.

Best regards,

Yolanda

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4 Posts 5 Karma
YOLANDA posted this 22 minutes ago Spam?

Dear Oula,

I haven't seen your comments before as they were in the second page and I made a comment which, after your contribution, seems out of time. Really sorry for this. I really enjoyed your really useful and interesting response to all the comments made before.

Best regards,

Yolanda

3 Posts 7 Karma
Maria Snoussi posted this 10 hours ago Spam?

Dear all,

The exchange of ideas and local experiences is really nice and fruitful! Thanks to all of you!

Dear Oula, thank you for sharing the information on the Tunisian coast! Erosion represents the situation prevailing in most of the coasts. At global level, between 75 and 90% of the coasts are retreating! For the Med Region, you can find more information in the EUrosion Project documents (http://www.eurosion.org/).

You are right when you say that there is less information on the N. African coast. But sometimes data exist, but they are not accessible! either because they are not published, or they are just not shared! Networking between scientists and all data providers is crucial when dealing with a crosscutting and transboundary issue such as CV&C. What we lack also is long-term data (time-series) and in this regard long-term monitoring is a key! Anyway, science remains the foundation for CV&C adaptation strategies. South-South co-operation between ICZM actors can also provide added value when preparing their national strategies.

In the next lecture, you will find some of the existing policy frameworks at regional or sub regional level, and in lecture 4 we will introduce the existing financing programmes.

Any coastal strategy or plan should involve all the stakeholders including the general public and local population. Such inclusive governance is based on the assumption that all stakeholders have something to contribute to the process of coastal adaptation. Bottom-up approach, suggested by Yolanda is indeed the best way to improve the local "ownership" of strategies and ensure that decisions meet citizen's needs. During this participatory process, and as said by Ayse for Turkey, ICZM Protocol should be better explained and promoted among all stakeholders.

Hope this comment complement your inputs!

Best,

Maria


1 Posts 1 Karma

M.Cherif posted this 59 minutes ago Spam?

Good morning 😃

a - The most challenging impact of CV&C for coastal manager lies in the methodology of community adaptation studies to develop community adaptation strategies but also in managing the increasing risks due to climate change and predict the impact of these strategies on the environment. The problem of scale also arises as an important factor in management and should be well studied.

b - The difference between the North ans South Eastern shores of the Mediterranean systems lies in their adaptation system related to climatic, environmental and economic, depending also of government strategies and community activities.
As it said, sea level rise is an issue for Northern and Southern shores in the Mediterranean and the unconscious of the problem and accepting potential losses.

 1 Posts 1 Karma

Mehmet posted this 26 minutes ago Spam?

The risk of climate change-induced damage to human and economic development in coastal Mediterranean areas. The combined effects of sea-level rise and subsidence, changes in upstream river discharge, increased frequency and intensity of tropical cyclones, and erosion of coastal embankments pose a serious threat to the natural resource base and livelihood opportunities of coastal communities.
Given the general lack of institutional capacity to systematically identify and address climate-driven changes in risk patterns, the Governments should take into priority of their own countries governance to proposing a projects to reduce the vulnerability of coastal communities to climate change-induced risks in coastal districts.

This reconsideration of Mediterranean basin management in the light of climate change will be a positive measure to:

a. Enhancing the resilience of coastal communities and protective ecosystems through community-led adaptation interventions, focusing on coastal afforestation and livelihood diversification;
b. Enhancing national, sub-national, and local capacities of government authorities and sectoral planners to understand climate risk dynamics in coastal areas and implement appropriate risk reduction measures;
c. Reviewing and revising coastal management practices and policies with a view on increasing community resilience to climate change impacts in coastal areas; and
d. Developing a functional system for the collection, distribution and internalization of climate-related knowledge.
e. Integrated management, involving natural resources of marine areas and human resources development.

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 3 Posts 6 Karma

Nada I Raad posted this 2 days ago Spam?

Dear Majda,

Awareness and education are the basic to understand why we need to protect the environment. I think if countries came up with regulation and laws with consequences for not complying then people will make more effort to abide by such rules. Simultaneously, we can continue reaching young and adults and community to educate them and be part of decision making.

Quote
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2 Posts 5 Karma
Mehmet posted this 2 days ago Spam?

Albania and Climate Change Issues

In Albania, the debate on climate change does not play a significant role either in politics or in the media or in society. This is due to the fact that after the fall of communism - 20 years ago - the problems of transition in the political, economic and social, are high priorities (issues of opening new working places or income insurance, seen as more important than climate change).

But this is partly because of Albania's contribution to the global greenhouse effect is relatively small today, and the impact of climate change on Albania, by many today in the country, is not perceived properly.

However, this does not mean that Albania face the issue of climate change to be displayed indifferent and passive. In 1995, Albania ratified the Convention on Climate Change (UNFCCC). In 2004, it passed a law to ratify the Kyoto Protocol and to implement it in the country. Since 1998, it has been set up in the Ministry of Environment of Albania, a separate office. With UNDP support, the office deals specifically with the issues of climate change and its impact on the energy situation in the country.

Contribution to the global greenhouse effect is small

Albania as a country - for now - contributes relatively little to global greenhouse effect. Once in heavy industry (as metallurgy) from the time of communism, due to depreciation and lack of profitability, is not invested and is not used more intensively, CO2 emissions have decreased. Just recently there are again processed metals (especially in the area of Elbasan). A second important reason is that about 90% of Albania's energy (95% of energy) the produce hydropower and one of them is obtained almost no CO2 emissions.

A third important reason is that energy consumption per capita in Albania is relatively small. Greenhouse gas emissions per capita in Albania go to about three tonnes, which recorded below

average (in industrialized countries, emissions recorded about four times higher) of industrialized countries.

Transport, public traffic and agriculture are the main sectors in Albania, responsible for releasing greenhouse gases. However, it should be noted that Albania's economy has suffered a growing epidemic across the past 15 years. Needs and power consumption Based on this conclusion, has also undergone a rapid growth.

For years, there is an average increase in GDP of 6% per annum. Transport sector with its rapid growth is due to become even greater contributor of CO2 emissions in the atmosphere.

The consequences of global climate change for Albania

Although Albania itself contributes on a relatively low greenhouse gas emissions, the effects on global emissions growth are already visible place. Albania will be affected (and even now is involved):

Temperature rising (in 2050, growth is expected to average annual temperatures of 2 degrees C and in 2100 by 4 degrees, compared to today);

Lack of rainfall (in 2050, it is expected a reduction of annual precipitation of 5-10%, while in 2100 even by 10-20% compared to today);

Atmospheric irregularities, especially precipitation furious;

Increasing sea level (sea level could rise by 2100 to 50 centimeters).

By 2050, about 60,000 people are expected to be directly affected by the changes caused by the effects of climate change, in 2100 the number could go well over 100,000 people.

Since today marked the following phenomena, which is likely to strengthen significantly in the future:

- The growth of average annual temperatures (short seasons winter and prolonged drought in summer);
- Increase the number of sunny days and reduction in rainfall;
- Humidity on a hot day, with a greater frequency of heavy precipitation;
- The Adriatic Sea is strongly affected by global warming: Water is currently growing at about a centimeter a year and the Adriatic Sea has warmed since 1970, with a half degrees Celsius;
- Mountain landscape usually cold temperatures and proximity to the warm shores of the Mediterranean, favor an increase in rainfall, the intensity of which is difficult to predict. Frame such precipitation intensity changes more strongly than before.

Also seen nowadays, the days of summer (especially August recorded a strong increase in the volume of hot days), marking the longest period of drought. Winters are shortened in duration, but add frequent rainfall and heavy, which during 2010, in January and December, caused dramatic flooding of the city of Shkodra (Albania's north, located on the River Drin).

Adriatic Sea area has already grown from a few feet (and probably will continue to rise) and has led while in severe damage to the economies of coastal agricultural zone. Areas of agricultural lands, forests of pine and many already contain salt lakes and sources of drinking water are no longer usable.

Albanian government measures to tackle climate change

Government of the Republic of Albania was taken relatively early with the problem of "climate change", while addressing the topic. In 1995, it was ratified "Framework Convention on Climate Change (UNFCCC) and the United Nations. As mentioned here before, the Ministry of Environment, responsible for the case, has set up since 1998 an office to deal with relevant topics in coordination with UNDP.

In a first step, it was located areas of cooperation to implement the Convention for Climate Protection (ratified by the government, with a special law in 1995).

About 30% of Albania's surface is forested. In the tradition of the communist system, responsible, and watchdog was state forest land. Because the state in this area functioned badly, that every Albanian took from the forest always what they wanted and what they needed.

In 1999, it drafted a strategy for the conservation of biodiversity and in 2001 adopted a strategic plan for forest management. In 2008, the Ministry of Environment made a difference in the fields of duties and responsibilities, by passing a law that gave local authorities more responsibility for the management of forests and pastures.

With this step aims to reduce the use of wild forests and stopohet indiscriminate cutting of trees. Since 2000, the area of forests has begun to increase again.

The use of land for grazing by farmers and indiscriminate logging of trees to be used for heating in households, had led to several years ago in a drastic drop in Albania forests. In 1991, due to the very bad economic situation of the people, they were cut more forests. And the production of greenhouse gases at this time, due to burning of forests witnessed a very high growth. Until 1997, emissions began to fall, and only after this year, as a consequence of economic growth, they began to grow again.

Programs and adopted by the government aimed at reforestation already surfacing and protecting soil from erosion, improving water quality and enhancing biodiversity.

In 2004, a law was passed to implement the decisions of the "Kyoto Protocol (1997), previously ratified by the Albanian government. The law of 2004, thus constitute the basis for undertaking a variety of activities and programs for environmental protection (Clean Development Mechanism) in collaboration with the World Bank, the Austrian Technical Cooperation for Development and the Italian government.

In 2008, it was drafted by the Ministry of Environment, a National Strategy for Climate Change. This strategy (2007 - 2013) was approved by the Council of Ministers of the Republic of Albania. National Strategy includes the fields of energy, transportation, industrial development, the use of environmentally friendly techniques, etc.

The strategy also talks about how much will sensitize the population to preserve the environment and how to apply specifically to the above strategy ideas.

Programs, collaborations and agreements of the Government of Albania in recent years aimed at sustainable development and the implementation of projects related to climate change. The themes of these programs are different:

reduction of CO2 emissions, reforestation of forests, construction of other plants hydro power production, increased biodiversity, improved energy efficiency, use of recycled materials and renewable resources, increased use of solar panels, reducing and prevention of soil erosion.

Scientific studies

There are a number of scientific studies that deal with climate change in recent years in Albania and treat the effects of climate change, being confronted with government programs to achieve the required results:

Country Assessment Report on Climate Change (2005);

Second National Communication of Albania to the Convention United Nations Framework on Climate Change (2009);

Policy Document on the Albanian policies for "Carbon Finance" (2009);

Climate change assessments - An assessment of climate change risk and adaptation in Albanian Energy Sector (2009 Climate Vulnerability Assessments - An Assessment of Climate Change Vulnerability, Risk, and Adaption in Malaysians Energy Sector).

Current scientific studies show that Albania will be one of the worst affected countries in Europe from climate change. Events and extreme weather phenomena such as major rainfall, prolonged periods of drought, but also increase the level of the Adriatic Sea, is expected to be among the basic consequences. Worrying is that the capacity of the Government and the country, are quite modest and low in order to afford the above-mentioned effects that come as a result of climate change.

Climate change in the Albanian media

As mentioned earlier, climate change play in politics and in the local media in Shqipëeri, still a secondary role. Internal issues, such as corruption, economic policy and especially those long current political disputes between the government and the opposition in parliament, was given a priority value to the discussion. This trend is expected to change only when the country becomes the subject of natural disasters caused by climate change.

In January 2010, and again in December 2010, the largest river of Albania, after heavy rains, came from his bed. We talk about the biggest flood recorded Drini River for more than 150 years. About 50% of the city of Shkodra area (115,000 inhabitants) remained for several days in the power of water. Major damage was caused to buildings, some of which were upgraded since he did not have official permission, and were built close to the riverbanks. In connection with these disasters, the media widely reported. But do not take essentially true background and flooding problems.

The media also as worldwide, even in Albania, report with pleasure sensations when disasters occur or sensational, but background and concrete problematic issues where discuss the long-term effects of climate change in the country, are very sporadic and superficial by these last.

Consequences of climate change within the population, still paid little attention. Population continues to build closer to the coast and also at risk from flooding rivers. Even prohibitions or restrictions are not taken more into account.

Yet most of the population is not sufficiently informed and aware of the causes and consequences related to global climate change and its impact on their daily lives.

Prospects

Albania is one of the richest countries in water reserves, estimated by marine areas and the number of rivers (carries eleven big rivers). But in Albania, only about 35% of these reserves is used in plants. Investors are encouraged by the Government to grasp exploit this potential. Wind energy, solar energy and generating energy derived from biomass, not yet constitute a subject for debate in Albania. However, there is a major potential for investors in the field of renewable energy.

Environment ministry promises to do everything to deal with climate change. Albanian Minister of Environment participated in leading a delegation of specialists in the Cancun Climate Summit (December 2010).

Just as it was expected from the small to the Conference, Albania did not play a significant role and inherent in its work. In Bangladesh, climate change will continue to not play well in the coming years, a significant role in the political debate.

However, there is another factor that can encourage this trend. Albania will join the EU. Environmental protection and climate change are issues, of course, should be treated with appropriate care to meet EU membership criteria. And the Albanian government is motivated to fulfill and implement reforms that lead to the fulfillment of the request and European standards.

But even here it should be noted that in relation to climate change and environmental protection, found the will of the Albanian government to fulfill reforms, but lack the financial resources and real capacities considered too limited.

(Prepared by: Mehmet Metaj*), May, 8, 2015

www.albaforest.com

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4 Posts 11 Karma

Maria Snoussi posted this 2 days ago Spam?

Hello all

Thanks Cherif and Mehmet for your interesting contributions! Cherif you have rightly pointed out the importance of studies in climate risk management and adaptation options, in order to help coastal managers and planners making the most appropriate choices.

Mehmet also raised the issue of climate risks and the need to enhance the institutional capacity to manage it. Indeed, to prevent climate hazards become climate disasters in coastal areas, there is an urgent need to reduce the vulnerability and increase the resilience of coastal communities, and as suggested by Mehmet, government have to put such measures on the top of their agendas.

Have a nice weekend and see you next week!

Maria

Lecture 2: Intro & discussion

Lecture 2: Mediterranean and international legal and policy framework to address CV&C issues

admin posted this 2 weeks ago Spam?

Hello everyone! This is our second lecture and we are going to look at the legal and policy frameworks that address the dimension of climate change in coastal management and set up the enabling conditions for sustainable coastal and marine areas development.

As you are well aware, "business as usual" is no longer valid as an option to ensure the sustainability of coastal and marine resources in the context of climate change! Therefore, there is a need to revise existing policies, laws and strategies in an integrated manner and on a participatory process. Key to succeed in addressing the crosscutting and transboundary CV&C issues at the Mediterranean level is the mutual political commitment of all countries in the Basin.

This lecture gives an overview on some of the legal and policy frameworks that currently exist at the international and Mediterranean levels and explicitly address CV&C impacts on coastal management. The list is far to be exhaustive and it appears from it that currently, a plethora of CV&C-related initiatives exist at international and regional levels; however, with few exceptions, they are not yet fully being considered in coastal management. In fact, there is still some scepticism due to the inherent uncertainties of CV&C impacts at the local and national levels, in addition to lack of awareness in some cases. Such an attitude does not help the integration of climate considerations and coping strategies into the existing national policy framework and institutional set up.

As an example of useful policy resource, I strongly recommend you to have a look at the *European Climate Adaptation Platform* http://climate-adapt.eea.europa.eu/ designed to support policy-makers at EU, national, regional and local levels in the development of climate change adaptation policies through several useful resources and tools.

Regarding legal instruments, the ICZM Protocol, a unique legal instrument in the entire international community and the Mediterranean region, is the first regional tool that deals extensively with the issue of CV&C, both at the strategic level (by requesting countries to mainstream CV&C issues into national ICZM strategies and plans) and local levels (by requesting countries to define, *inter alia*, the coastal setback zone).

For the Forum I invite you to consider the following questions:

- **Is there any other policy framework - not mentioned in the lecture - that you are aware of and which could be of interest for the region?**

- **You are (or suppose you are) a policy-maker, how useful are the existing frameworks and guiding policy documents at the Mediterranean level for your national and local coastal management?**

Please keep your answers brief…

I wish you a very good week and see you on the Forum!

Maria

Post Edited 14 hours ago
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 6 Posts 10 Karma
Mehmet posted this 13 hours ago Spam?

Hello from Tirana, Albania

I am trying to pronounce and answer to your questions as flllowing:

(i)- **Is there any other policy framework - not mentioned in the lecture - that you are aware of and which could be of interest for the region?**

As far as I am familiar with “Mediterranean and international legal and policy framework” you have fully listed them within your lecture 2.

(2)- **You are (or suppose you are) a policy-maker, how useful are the existing frameworks and guiding policy documents at the Mediterranean level for your national and local coastal management?**

Albania was taken relatively early with the problem of "climate change", while addressing the topic. In 1995, it was ratified "Framework Convention on Climate Change (UNFCCC) and the United Nations and other subsequent climate change documents.

About 30% of Albania's surface is forested. In the tradition of the communist system, responsible, and watchdog was state forest land. Because the state in this area functioned badly, that every Albanian took from the forest always what they wanted and what they needed. In 1999, it drafted a strategy for the conservation of biodiversity and in 2001 adopted a strategic plan for forest management. With this step aims to reduce the use of wild forests and stopohet indiscriminate cutting of trees. Since 2000, the area of forests has begun to increase again.

The use of land for grazing by farmers and indiscriminate logging of trees to be used for heating in households, had led to several years ago in a drastic drop in Albania forests. In 1991, due to the very bad economic situation of the people, they were cut more forests. And the production of greenhouse gases at this time, due to burning of forests witnessed a very high growth. Until 1997, emissions began to fall, and only after this year, as a consequence of economic growth, they began to grow again.

In 2004, a law was passed to implement the decisions of the "Kyoto Protocol (1997), previously ratified by the Albanian government. The law of 2004, thus constitute the basis for undertaking a variety of activities and programs for environmental protection (Clean Development Mechanism) in collaboration with the World Bank, the Austrian Technical Cooperation for Development and the Italian government.

In 2008, it was drafted by the Ministry of Environment, a National Strategy for Climate Change. This strategy (2007 - 2013) was approved by the Council of Ministers of the Republic of Albania. National Strategy includes the fields of energy, transportation, industrial development, the use of environmentally friendly techniques, etc. The strategy also talks about how much will sensitize the population to preserve the environment and how to apply specifically to the above strategy ideas.

Albania is one of the richest countries in water reserves, estimated by marine areas and the number of rivers (carries eleven big rivers). But in Albania, only about 35% of these reserves is used in plants. Investors are encouraged by the Government to grasp exploit this potential. Wind energy, solar energy and generating energy derived from biomass, not yet constitute a subject for debate in Albania. However, there is a major potential for investors in the field of renewable energy.

However, there is another factor that can encourage this trend. Albania will join the EU. Environmental protection and climate change are issues, of course, should be treated with appropriate care to meet EU membership criteria. And the Albanian government is motivated to fulfill and implement reforms that lead to the fulfillment of the request and European standards.

But even here it should be noted that in relation to climate change and environmental protection, found the will of the Albanian government to fulfill reforms, but lack the financial resources and real capacities considered too limited and thus the harmonized legal framework and international ratified conventions and is not yet completely and rigorously implemented.

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6 Posts 10 Karma

Attachment:Climate Change_Comment(2).docx

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4 Posts 7 Karma

Nada I Raad posted this 9 hours ago Spam?

Is there any other policy framework - not mentioned in the lecture - that you are aware of and which could be of interest for the region?

I would refer to the following websites:

http://pubpages.unh.edu/~jlu36/climate_change_adaptation.pdf

Climate Change Adaptation in the Middle East and North Africa: Working Paper No. 2 Challenges and Opportunities Jeannie Sowers and Erika Weinthal September 2010

http://sidaenvironmenthelpdesk.se/wordpress3/wp-content/uploads/2013/04/MENA_Env-CC-Policy-Brief-2010.pdf

Environmental and Climate Change Policy Brief - MENA1

You are (or suppose you are) a policy-maker, how useful are the existing frameworks and guiding policy documents at the Mediterranean level for your national and local coastal management?

There are many resources provided by this course. They are of great help to adopt or adjust the laws and regulation to fit the area needed.

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5 Posts 13 Karma
YOLANDA posted this 40 minutes ago Spam?

From a quick view I have found several other policy frameworks which are maybe of less or of more importance, too. (1) The framework set in the 7th Environment Action Programme to 2020 "Living well, within the limits of our planet" is also referring to mainstreaming adaptation into other EU policy fields. (2) In April 2013 the European Commission adopted a Green Paper on insurance in the context of natural and man-made disasters. (3) The Regional Framework for Action aims to protect health, promote health equity and security, and provide healthy environments in a changing climate in the WHO European Region. (4) The Danube River Basin Climate Adaptation Strategy which is an agreement among countries of the Danube River Basin on an adaptation strategy to climate change, with main aim to cope with future changes in temperature and precipitation that will affect water used in different sectors in all Danube Basin countries. (5) The Hyogo Framework for Action (HFA) is a 10-year UN lead plan to explain, describe and detail the work that is required from all different sectors and actors to reduce disaster losses. (6) The Animal health strategy and climate change which focuses on preventing rather than reacting to animal diseases. Its Action plan considers the influence of Climate Change on Animal Health. And last but not least (7) The UNEP/MAP - GEF MedPartnership is a collective effort of leading organizations (regional, international, non-governmental, etc.) and countries sharing the Mediterranean Sea, towards the protection of the marine and coastal environment of the Mediterranean. The MedPartnership is led by UNEP/MAP and the World Bank and is financially supported by the Global Environment Facility (GEF), and other donors, including the EU and all participating countries.

As far as the second question is concerned, several days ago I have been to a “ClimaTourism” Meeting where an officer of the Region of Crete referred to the plethora of legal frameworks and policy documents on an international, national and regional level that should be taken into account. From one point of view he was right because you have to be aware of all these different Conventions, Protocols, Strategies, Directives and maybe you also have to deal with some contradictory points or at least with some “grey zones”. Unfortunately, the conclusion is that this is actually an “excuse”, at least for Greece, for having no really implementation, except

for a few cases. Adaptive management is really needed in order to cope with different issues, problems and particularities. I also believe that even if the bottom up procedure (public awareness and participation) is really important, the top-down process is equally important for the protection of the environment, the sustainable development and the prevention of risks and hazards.

Best regards,
Yolanda
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 2 Posts 4 Karma
Ayse Kaya posted this 3 days ago Spam?

Dear Participants,

Hi from Turkey,

I want to express my opinion for this section shortly.

Is there any other policy framework - not mentioned in the lecture - that you are aware of and which could be of interest for the region?

As you know, ICZM Protocol has not been ratified by Turkey. These issues should be resolved.

However, as described in the additional reading document (Coastal setbeack zones in the Mediterranean), 100 m rule for “shoreline buffer zone”, and is provided by Coastal Law. There are exceptions and abuses for this rules. (Article 8-2 ICZM Protocol). It is necessary to comply with the Coastal Law.

Also you have listed all “Mediterranean and international legal and policy framework” as I known. Thanks for information.

You are (or suppose you are) a policy-maker, how useful are the existing frameworks and guiding policy documents at the Mediterranean level for your national and local coastal management?

Studies and projects on “climate change adaptation” continues for Turkey. With the recently completed an adaptation project has obtained significant water recovery.The project summary document are available for your additional information. I could give more details because of I worked on this project.

Have a nice weekend.

Ayşe
Post Edited 3 days ago
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5 Posts 15 Karma
Maria Snoussi posted this 2 days ago Spam?

Dear all,

Sorry for my late reaction! I was participating to the final conference of the Medpartnership/ClimVar Conference…

Thank you Mehmet for having shared with us the policy experience of Albania especially regarding forests. Forests are indeed a significant greenhouse gas sink and so are powerful way to CC mitigation. On the other hand, as we are looking at the coastal areas, forests provide many other ecosystem services (such as stabilizing soils and fighting against erosion, regulating water flows, etc.), which should be preserved and integrated in an overall adaptation strategy of the coastal areas to CV&C. As you rightly pointed, Albania -like many other countries in the Med- need strengthened capacity and additional financial resources to fulfill their climate change and environmental commitments.

I also thank you Nada and Yolanda for the valuable complementary resources you provided us. The Medpartnership Project in particular, in which all of the GEF-eligible countries are involved, has a comprehensive component on ICZM and CV&C, and came out with elaboration of « Guidelines for adapting to Climate Variability and Change along Mediterranean coasts" and a "Regional Adaptation Framework for Climate Change in the Mediterranean", in addition to other very interesting and useful documents that are all freely accessible.

Having all these guiding documents available, what is important for countries now, is to start actions in order to implement adaptation measures and mainstream them in the overall coastal strategies and plans, otherwise it could be too late if we wait too long…

I also support the combination between the bottom-up and top-down procedures raised by Yolanda, to strengthen the capacity of all stakeholders and guide the policymakers.

Dear Ayşe, thanks for your input. It will be nice if you could share on the Forum the project summary document on CC adaptation in Turkey (in an attached file). Otherwise, as you are working on this project, you can propose part of it as a subject for your final essay?? It's of course up to you!

Have nice weekend too and see you next week!
Maria
Post Edited 2 days ago
1

Quote
Edit Delete

2 Posts 5 Karma
oula amrouni posted this 2 days ago Spam?

Is there any other policy framework - not mentioned in the lecture - that you are aware of and which could be of interest for the region?

The list of the convention and declaration is adopted to ensure the sustainability of coastal and marine resources in the context of climate change, but unknown for the most in the civil and scientific range. The Tunisian government works to integrate international policy framework adapted to the regional and coastal variabilities. The coastal ecosystem is protected by a detailed frameworks rules, the next step is to respect those rules to preserve the coastal resources.

- **You are (or suppose you are) a policy-maker, how useful are the existing frameworks and guiding policy documents at the Mediterranean level for your national and local coastal management?**

I'm scientific but, the existing frameworks are useful to establish collaboration within the national ICZM strategies. In Tunisia, the institutional projects were oriented to the existing coastal problems (pollution, erosion, flooding, etc) related to the Climate Change Variability.

Lecture 3: Intro & discussion

Lecture 3: Impacts of CV&C on the major socio-economic sectors in the Mediterranean coastal areas and adaptation strategies

Hello everyone!

As an introduction to this lecture devoted to the impacts of CV&C on the key economic sectors, population and coastal land in the Mediterranean region, I would like to emphasize three important underpinning issues:

- Population growth, economic development and urbanization represent a primary driver of change for coastal systems (AR5, 2014);
- The Mediterranean region is one of the main climate change hot-spots;
- Climate change will interact differently with the variety of human activities and other drivers of change along coastlines of developed and developing countries.

With this in mind, it is clear that assessing what will be the potential effects of CV&C on the Mediterranean coastal areas over the next decades is not an easy task! In this lecture we will investigate the possible impacts of CV&C on the major economic sectors that contribute to GDP and employment in the coastal zones of the Mediterranean countries including: **tourism, agriculture and fisheries,** all of which are very climate sensitive. These sectors could be affected either positively or negatively by CV&C that brings heat waves, unseasonable cold, drought, storms, and heavy rain, which can affect tourist comfort and safety, crop yield and water requirements, and fish distribution and migration patterns. So, depending on each sector, there will be some "winners" and some "losers" countries from climate change!

In any case, local coastal businesses and policy-makers will need accurate, tailored information to plan for these changes so they can adapt to the expected impacts.

What about **coastal people** and their **assets?** More than a third of the population lives in less than 12% of the surface area of the Mediterranean countries! So, you can guess that they are very exposed, together with settlements and infrastructures to the risk of coastal flooding and erosion induced by rising sea level and storm surges. Risk is also increased by poorly planned development, which often brings more people in vulnerable areas. The knowledge of the potential impacts of climate changes and related hazards is therefore crucial for current and future land use planning and other coastal development policies.

Regarding **adaptation** responses what is interesting here is that there is not "one fits all" adaptation strategy. Adaptation being implemented at local level, it is very specific-location and sector-dependent.

Finally, don't forget that a local CV&C adaptation measure should be considered as part of an actual or potential ICZM strategy, which through replication and scaling up, may convince and help mainstreaming CV&C into coastal management policies.

More details on adaptation responses good practices will be given in Lecture 4.

For this week, after reading the lecture text and the additional reading material (i.e. a scientific article), as well as some of its recommended documents and according to your own experience, I invite you to consider the following questions for discussion:

1. **Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?**

2. **Did you find the content provided in the lecture useful? And does it match with your current activities?**

Have a great week!

Maria


6 Posts 11 Karma
Nada I Raad posted this 53 minutes ago Spam?

1. Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?

   Tourism, agriculture, fisheries, business and residential areas (building and homes close to the seashore in Lebanon) will be affected by CV&C.

2. Did you find the content provided in the lecture useful? And does it match with your current activities?

   Information provided is beneficial and open eyes for more serious problems in the future pending CV&C.
   My consultant work is related to environmental issues as CV&C.


5 Posts 14 Karma
mjuric posted this 4 hours ago Spam?

Hello everyone,

1. **Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?**

   I agree with Nada, but I would like to add that the traffic is also very important factor. Yes traffic is a lot related with tourism, but also with trade and life general. Tourism we can

separate at the branches and specify eg. nautical tourism (yachts, marinas, etc.), as well as cruise ships (cruise tourism) as the main factors affecting on theenvironment (and construction along the coast is big problem, which is mentioned Nada).

Also, I would add, and exploitation of oil and natural gas in the Adriatic, which was a big debate and the dilemma in Croatia.

2. Did you find the content provided in the lecture useful? And does it match with your current activities?

The information we get in, not just this lesson, but in previous lessons are helpful. I'm working on tasks related to the protection of sea and coastal, and air pollution; the environmental protection in general and projects that are related to this issue.

I wish you a nice day (this very hot day in Split - Croatia)!

Majda

* I apologize at my non-appearance at the forum last week, it was a very turbulent week.

Post Edited 4 hours ago

4 Posts 6 Karma

Ayse Kaya posted this 1 hour ago Spam?

Hi,

1. **Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?**

   I also agree with Majda and Nada. Tourism, agriculture, fisheries, traffic, residential areas and industrial areas & sectors (especially sectors which use water huge amounth) will be affected by CV&C.

2. **Did you find the content provided in the lecture useful? And does it match with your current activities?**

   All information at these lectures was very useful for me also. My working area is related this issues. And I am studing CV&C subject for my pdh thesis also.

Have a nice day. (Ankara-Turkey is also very hot, it is above seasonal temp.)

Ayşe


7 Posts 18 Karma
Maria Snoussi posted this 9 hours ago Spam?

Hi all,

Dear Nada, Majda and Ayşe, you all agree on the key economic sectors that are most vulnerable to CV&C. In addition to those cited in lecture 3, there are many others (Energy, health, forests, industry…) and oil and gas offshore exploitation, added by Majda, is also certainly vulnerable especially to extremes whether events like storm surges that could disturb production and put people and the whole platform at risk of flooding. But, I think that this kind of activity put more pressures on the marine environment than it is impacted by CV&C!!

Regarding the issue of "traffic" I would say 'transport' including terrestrial and maritime transport that could be directly or indirectly affected by CV&C and extremes events. There are many studies on this topic, as it is not only local or national but also global issue!

Ayşe, I totally agree with you when you raised the issue of water, and all sectors use more or less water and are thus vulnerable to CV&C; many Med countries will lack this resource in the future!

Majda, I've got your contribution to lecture 2, don't apologize. Turbulence can shake you but is sometimes needed to 'aerate' at least in aquatic systems.

I'm glad that you found the lectures helpful for your current activities. I hope that the additional downloadable documents are useful too.

I wish you nice week and mild temperatures!


7 Posts 20 Karma
YOLANDA posted this 21 minutes ago Spam?

Dear all hi,

As far as the first question concerning socio-economic sectors most vulnerable to CV&C, I have to mention that this sector for Greece is coastal tourism. According to data released annually by the Association of Greek Tourism Enterprises (SETE) and the Bank of Greece, tourism is a major contributor to Greek economy and a sector of rising competitiveness at global level and especially coastal tourism. Tourism accounts for 18% of Greece's GDP and employs more than 900,000 people, accounting for one fifth of the workforce. Coastal erosion is probably the most

important current effect along with coastal flooding, storm surges and waves, wind waves, saltwater intrusion, coastal infrastructure damage and flood defense failures, increased jellyfish blooms, the water supply and quality particularly on islands and in more arid coastal areas also for the residents. The provision of many resources and trading opportunities has drawn human settlement in coastal areas of Greece and therefore expose residents to a range of hazards regarding CV&C issues. Considering also the minimum distance of 30 m from the coastline for all construction and land use, which is actually less than this distance, you can imagine the future negative effects. For the moment higher summer temperatures is not an issue. On the contrary, there is a longer warm weather tourism season. Though agriculture and fisheries account for only 4% of Greece's GDP, are also among the most vulnerable sectors to CV&C. Especially in fisheries, marine biological invasions will probably drive profound and large-scale changes in coastal fish assemblages having already negative effects on this sector (e.g. destruction of fishing gears, changes in total catch of marine fish) along with overexploitation of the fish stocks.

As far as the content of this lecture, I have found very useful the mini reviews of the impacts of CV&C on the different socio-economic sectors and especially the ones on coastal tourism and coastal population as well as on fisheries which are closest to my research activities, since I am currently involved in different projects concerning coastal zone management (e.g. marine pollution, marine spatial planning, fishing gear effects, smart specialization for coastal tourism) and marine biological invasions, e.g. marine fish.

Best regards,

Yolanda

 13 Posts 30 Karma

Maria Snoussi posted this 17 hours ago Spam?

Dear Yolanda,

Thank you for your interesting contribution. You perfectly outlined the importance of coastal tourism but also how it could be affected by CV&C in Greece. On one side coastal tourism is a driver for development like in many Med Countries but in the other side, it may exert multiple pressures on the marine and coastal environment (e.g. seafront resorts, marinas, increased demand for natural resources, especially water…) and therefore weakens their resilience and increases their vulnerability to CV&C. Now with the Article 8 of the ICZM Protocol, Greece has to respect, in the future the 100m setbacks. But maybe for many coasts it is too late! In this case other strategies (protection by hard and/or soft structures, strategic or managed retreat…) have to be undertaken to cope with CC. This applies to all built-up areas on the coast. When it comes to tourism sector alone, its vulnerability is more related to the activity as a business. Will tourists continue visiting Greek coasts and islands in the future?? (Problem of increased jellyfish, less water, less sandy beaches (?), increased whether extremes, and so on). I think yes, if some adaptation measures are proactively undertaken and mainstreamed into coastal planning and management.

Kind regards

Maria

2 Posts 3 Karma
M.Cherif posted this 1 hour ago Spam?

Hello every one,

1. **Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?**

Actually, I am from Tunisia. Here, experts fear that climate change is affecting the geological and seismic hazards. Moreover, according to several studies, sea level rise, indirectly caused by global warming, will reactivate or amplify the coastal erosion processes in the north of Tunisia. So we face may issues dues the climate change specially in socio-economic sectors in the coastal zones includings Tourism, Agriculture, Fisheries mentionned in Lecture 3 but also in Water ressources which are threatened by water scarcity and wil impact il all these sectors whatsoever in productivity but also in development.

2. **Did you find the content provided in the lecture useful? And does it match with your current activities?**

I think that your lectures are very useful to me. Currently I am working as an environmentalist in a consulting office and we deal in our our project with impact assessment , development plans and managment plans.

I would think all of you for your participations and specially the admins for efforts.

Have a nice week-end.

8 Posts 13 Karma
Mehmet posted this 10 hours ago Spam?

1. **Which socio-economic sectors in the coastal zones of your country are the most vulnerable to CV&C?**

Albania is one of the richest countries in water reserves, estimated by marine areas and the number of rivers (carries eleven big rivers). But in Albania, only about 35% of these reserves is used in plants. Investors are encouraged by the Government to grasp exploit this potential. Wind energy, solar energy and generating energy derived from biomass, not yet constitute a subject for debate in Albania. However, there is a major potential for investors in the field of renewable energy.

Just as it was expected from the small to the Conference, Albania did not play a significant role and inherent in its work. In Albania, climate change will continue to not play well in the coming years, a significant role in the political debate.

However, there is another factor that can encourage this trend. Albania will join the EU. Environmental protection and climate change are issues, of course, should be treated with appropriate care to meet EU membership criteria. And the Albanian government is motivated to fulfill and implement reforms that lead to the fulfillment of the request and European standards.

But even here it should be noted that in relation to climate change and environmental protection, found the will of the Albanian government to fulfill reforms, but lack the financial resources and real capacities considered too limited.

2. Did you find the content provided in the lecture useful? And does it match with your current activities?

I have found the content of lecture provided useful although it does less match with my current activities. The Albanian coast as part of Mediterranean has accountered the similar environmental issues and climate change visible consequences and imperative better and sustainable measures and decision – making are an immediate demand-driven and immediate actions.

Best wishes,

Mehmet

Quote
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17 Posts 38 Karma
Maria Snoussi posted this 9 hours ago Spam?

Hello Cherif and Mehmet

Thanks for your contribution. Yes Tunisia face acute problem of coastal erosion, which is a big issue for tourism in addition to water shortages. But, Sherif what do you mean by "CC is affecting the geological and seismic hazards"? I think rather that CC and especially sea level rise is locally affected by the geological setting (uplift, subsidence) and we have to take this when assessing the local impact of SLR. Is it what you wanted to raise? Or I have misunderstood?

Mehmet, you just repeated what you have already posted as a comment for lecture 2! Sorry if the information provided in this lecture don't match with your current activities… You can find useful information on CC impacts in Albania in http://unfccc.int/resource/docs/natc/albnc2.pdf

Kind regards and don't forget to submit your proposal for the final essay!

Maria


3 Posts 4 Karma
Nawel2 posted this 6 hours ago Spam?

Hello everyone ! Very happy to join the forum 

I have to say , that it's very intersting to read you all! I think that we have a great opportunity to know more from each other especially about the problems that every country faces.

So i will talk you about Algeria , in our country more than 40% of the population leave in a stripe coast of 50 km ! which represents a very small part of the country ,and the most of the socio-economics activities are implented their , such as industry,51 % of the industrial park is installed their . we find all kind of industry , like rafinery, which is an important element of our economy.So you can imagine in the futur if there is any raising of sea leavel , we will have to disloge all these infrastructure , which could be built in the interior of the country.

About the water, wel all know that the Med countries are suffring from the scarcity of water. So in Algeria , we have invested in the desalination stations , which have solved the problem of the water in a major part of the coastal zone.

Also about agriculture and fisheries, the algerian authorities have launched a ambitious program for the devellopment of the fisheries and aquaculture , but when we read the plan we clearly sea that at no time the CC were integrated in the strategy of development.

I clearly find the course very intersting , very easy to read and updated! i'm working on coastal zone managment in the center of algerian coast , so the problems that been cited in the course must be integrated in my reflexion. I also much apreciated the legislative framwork.

See you soon!

Nawel


Quote
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 23 Posts 49 Karma
Maria Snoussi posted this 17 hours ago Spam?

Hello Nawel !

Thank you for your input and for having shared with us the Algerian issues with regard to CV&C in the coastal areas. You have quite rightly raised the multiple pressures on the coastal strip as well as the weaknesses in the existing setoral strategies regarding the integration of CV&C. ICZM which is by definition an integrative process take into consideration CV&C impacts and adaptation (Cf. the ICZM Protocol). This is why the ICZM strategy and all coastal plans should include these considerations. I'm pretty sure you will have a lot to say from the analysis of the Algerian ICZM strategy that is the topic of your final essay !

Just one point regarding the desalisation of sea water, ok it's one of the measure to cope with water shortages, but it needs a lot of energy and as such indirectly contributes to CC !

Do you know that water losses and waste (due to irrigation techniques), leakages in the distribution networks… account for about **40% of total water demand** across the whole Mediterranean region !! (Blue Plan, 2009). So I think the first and foremost measure we should take is to ensure retrieving these lost amounts of water! Isn't it?

Kind regards

Maria

Lecture 4 – Intro & Discussion

Lecture 4: Examples of good practices in CV&C impacts and adaptation

Hello everyone,

This is our last lecture and after having studied the effects of CV&C on coastal zones, we will investigate here examples of best approaches that should help guide communities as they build national or local adaptation strategies for sea level rise.

To be able to take decisions on how best to adapt, it is essential to have access to reliable data on the likely impact of climate change, the associated socio-economic aspects and the costs and benefits of different adaptation options. If you have such data available, the **DIVA** (Dynamic and Interactive Vulnerability Assessment) model is one of the best tools to assess biophysical and socio-economic consequences of sea-level rise and socio-economic development on coastal systems, as well as adaptation strategies. The application of DIVA to the coast of Croatia, undertaken recently in the framework of the MedPartnership/ClimVar & ICZM project (UNEP/MAP/PAP/RAC) (Hinkel et al., 2015) is given as example.

Another good practice when dealing with CV&C adaptation of coastal areas, presented in this lecture, is the involvement of all stakeholders at the outset of the process to ensure ownership of adaptation interventions. Such a participatory and inclusive process aims to debate common issues, breaking the barriers of communication between the different stakeholders, and encouraging them to define collectively a common sustainable future for the coasts. To address the specific challenges of CV&C in coastal zones, the "**Climagine**" approach, developed and tested within the MedPartnership sub project "Integration of CV&C into national ICZM strategies" (ClimVar & ICZM), is a participation-based tool to support "territorial managers" and local decision-makers in addressing CV&C issues in ICZM process. This approach was tested in Tunisia and Croatia.

Finally, information on the **finance** for adapting to CV&C, including the use of fiscal instruments and finance sources and mechanisms (Public and Private) will be provided.

For this lecture, I invite you to consider for the Forum the following questions:

1) **Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.**
2) **In your opinion, what are the main obstacles to implement adaptation measures to CV&C in coastal areas?**

Looking forward for your comments!

I wish you a great week

Maria


8 Posts 17 Karma
Nada I Raad posted this 1 hour ago Spam?

1) **Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.**

Structural adaptation that are already implemented in the coastal areas related to climate change could be minimum or nil **A** pilot project on rainwater harvesting is currently being implemented at the Ministry of Environment in cooperation with UNDP. Outcome of the project includes increasing the water harvesting, reducing the pressure on pumping from the underground water and reducing the risk of salinity in both soil and water. CAMP Lebanon project, proposals were made to develop new settlements or extensions to the existing towns in the hinterland areas. Installation of solar panel to save energy and gas emission was completed in many area in Lebanon including areas close to the coastal areas

2) **what are the main obstacles to implement adaptation measures to CV&C in coastal areas?**

Finding, cost, overlapping of law and jurisdiction, reach and teach people


23 Posts 49 Karma
Maria Snoussi posted this 13 hours ago Spam?

Hi Nada

Thanks for your quick feedback! Rainwater harvesting is for sure a good measure to address the lack of water during dry periods. It's "no regret" or even "win-win" strategy. Dams also serve to store water, however, when build close to the coast, they are detrimental to the sedimentary budget and contribute largely to coastal erosion. Better manage spatial planning, avoiding urban sprawl and reducing the urban pressure on the coast is also an option increasingly proposed for coastal megacities. Solar energy is rather mitigation than adaptation option.

For the second question, what do you mean by Finding?? (Financing?). The lack of integration of existing policies and laws, as well as the lack of awareness are indeed among the most important barriers for adaptation.

Kind regards
Maria

 8 Posts 15 Karma

Ayse Kaya posted this 16 minutes ago Spam?

Hi All,

1) Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.

Structural adaptation that are already implemented in the coastal areas related to climate change could be minimum in Turkey also. There was an impotant Project about adaptation which is called "MDG-F 1680 Enhancing the Capacity of Turkey to Adopt Climate Change" In addition of this Project; Cleaner Production (Eco-efficiency) Programme has been started in Turkey as a sub-programme of United Nations programme that is supported by Spanish government and came into force in 2008. Pilot region of Joint Programme is Seyhan River Basin of Turkey and Ministry of Environment and Forestry is main beneficiary this programme. At this region, from the point of view that "adaptation to climate change can be procurable with cleaner production and eco-efficiency applications", in the related industry act of the UN Joint Programme Eco-efficiency (Cleaner Production) Programme came into force in the responsibility of UNIDO.

Due to being a sub-programme of "adaptation to climate change" themed UN Joint Programme, in the pilot scale level "water consumption" part of cleaner production is taken into account. Being suitable to the UN programme methodology, establishment and dissemination of eco-efficiency and cleaner production concepts with all dimensions are aimed.

In the scope of programme, first priority sector in Seyhan River Basin were determined in the context of environmental and economical parameters. These are, Textile-Leather, Food-Beverages, Chemical Products and Metal Processing-Machinery sectors.

Acoording to the “water consumption” approach; projects have been implemented in 3 companies and average water consumption ratio from the projects in the refereed companies was 30-35% and total reduction amount was 420,000 m^3/year. This project was accepted Turkey’s succes story for Rio+20.

2) what are the main obstacles to implement adaptation measures to CV&C in coastal areas?

There is same problems for Turkey. The most important one the lack of integration of existing policies and laws. Addionally, the lack of awareness and financial problems are also important barriers for adaptation.

Best Regards,

Ayşe

9 Posts 19 Karma
Nada I Raad posted this 2 hours ago Spam?

Hi Maria,

Financing

sorry for the typo error

Thanks

10 Posts 20 Karma
Nada I Raad posted this 3 hours ago Spam?

I just need to share the following stories related to CV&C

1-How Arctic ozone hole was avoided

The Antarctic ozone hole would have been 40% bigger and a hole over the Arctic would have opened up if ozone-depleting chemicals had not been phased out, according to research.
Read more:
http://www.bbc.co.uk/news/science-environment-32845485

2-El Nino could 'disrupt food markets'

The El Nino event predicted for later this year has the potential to increase food prices, say climate scientists.
Read more:
http://www.bbc.co.uk/news/science-environment-32815460
3-Antarctic in 'dramatic' ice loss
Satellites have recorded a big sudden change in the behaviour of glaciers on the Antarctica Peninsula, according to a UK-based team.
Read more:
http://www.bbc.co.uk/news/science-environment-32837201


9 Posts 29 Karma
YOLANDA posted this 12 hours ago Spam?
Hello everyone,

I agree with all of you that a lot more should be done for adaptation strategies relevant to CV&C. I also agree with the main obstacles you have referred in order to implement adaptation measures to CV&C in coastal areas. As far as Greece is concerned, we tend to “follow” Directives, Strategies, Protocols etc and so many other initiatives on a European and Mediterranean level. So there is in a sense a relatively strong top-down approach which seems to work further as long as Regions take over. The most difficult approach is the bottom-up one, i.e. public participation and awareness. So, having already started answering to the second question, to my opinion, another main obstacle is from the bottom-up approach the local interests and from the top-down approach the political will.

As far as the first question, within the framework of the MedPAN Association and the MedPAN North project, IUCN Med in collaboration with RAC/SPA is addressing the impact of climate change on Mediterranean MPAs with the long-term aim of building a strategy for assessing and minimizing the risk posed by climate change to marine and coastal ecosystems. This work will build towards the medium-term goals of the SAP BIO Programme at the Mediterranean level (UNEP-MAP-RAC/SPA, 2009), which include improving coordinated actions across Mediterranean MPAs, informing adaptive approaches to climate change for effective MPA management, initiating a climate alert warning system at different geographical scales and reducing vulnerability within MPAs. A key goal of this programme is to identify the most

appropriate parameters for monitoring climate change impacts on biodiversity in MPAs at a Mediterranean scale. That will enhance our understanding of how marine communities respond and help managers assess the condition of their sites and the environmental changes that are occurring there. To address this goal there were several meetings to bring together climate change researchers, biodiversity scientists and protected area stakeholders covering a wide range of expertise. The resulting discussions and the work conducted since then have been compiled into a guide for Mediterranean MPA managers. It aims to give some guidance on how to measure the impact of climate change on the marine biodiversity of protected areas and how to improve planning for the mitigation of future impact. It also summarizes the most important threats to and effects on Mediterranean marine biodiversity that have been observed to date and outlines the many uncertainties that still exist in understanding ecological responses to climate change. The guide is thus intended as an aid and managers may choose to use any of the several different monitoring plans and indicators outlined, depending on their particular circumstances and management objectives.

MPA CASE STUDY 1 was "Vulnerability assessment of sea turtle nesting beaches in Zakynthos MPA, Greece": In Greece, the National Marine Park of Zakynthos and the University of the Aegean recently conducted a vulnerability assessment to examine the potential climate change impacts and adaptation responses in sea turtle nesting beaches, which in general have not yet been properly examined or fully understood. The Marine Park holds the most important nesting sites for the endangered loggerhead turtle Caretta caretta in the Mediterranean. Its management objectives are to preserve the natural environment and conserve the ecological balance of the marine and coastal area of Laganas Bay and the Strophadia Islands, to protect the sea turtles and other species, and to develop conservation activities in Zakynthos. Information from this vulnerability assessment will help managers to prioritize conservation efforts, use realistic measures to mitigate potential sea-level threats and establish a long-term monitoring and alarm system. Training for the Park staff in the use of the tools that have been produced will enable them to carry out future vulnerability assessments and develop an adaptive planning.

Best regards,

Yolanda

 11 Posts 17 Karma
Mehmet posted this 16 hours ago Spam?

1) **Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.**

   - **In Albania among other actions and documents approved and implementing projects there are to be mentioned:**

- **Strategy and Project on Integrated Water Resources Management;**
- **Carbon sequestration Project in the community-based forest and pastures resources;**
- **Regarding forest ecosystem degradation there is just initiated WB-Environmental Services Project, consisting of promoting ecosystem environmental services and community-based best practices development.**
- **Watersheds and inundation prevention measures through watershed rehabilitation and management, by application of combined biological measures and human resources management**

2) what are the main obstacles to implement adaptation measures to CV&C in coastal areas?

The main obstacles to implement adaptation measures to CV&C in coastal areas is know-how of CV& C and lack of climate change NGOs networks and also investments on low and middle-income countries.

Mehmet

11 Posts 17 Karma
Mehmet posted this 15 hours ago Spam?

Hello once again,

I wanted to add to the structural adaptation strategies that are already implemented in the coastal areas in your country,

- Albania's Three National Communications developed to the UN Framework Convention on Climate Change (UNFCCC);

Thank you and best regards,
Mehmet

25 Posts 51 Karma
Maria Snoussi posted this 13 minutes ago Spam?

Hello everyone and thanks for your contributions to make the forum interactive!

Sorry if my first question was not very clear! So, I would like just to remind you some definitions:

Adaptation/Mitigation: While adaptation aims to lessen the adverse impacts **(consequences)** of climate change, mitigation looks at limiting climate change by reducing the emissions of GHGs (**causes**) and by enhancing "sink" opportunities.

Structural/non-structural responses: Structural measures often referred to as "hard protection" or "armouring", are designed to decrease for example shoreline erosion or reduce coastal risks associated with wave damage and flooding. Non-structural measures include soft armouring (e.g. beach nourishment, bioengineering…), early warning systems, modifications in public policy, management practices, regulatory policy, and pricing policy.

Having reminded that, the contributions covered all these aspects, which is good, but the question was only on adaptation and only on structural measures. Anyway, it was interesting to learn more about what is done or planned in different countries!

- Ayşe, thanks for your input. MDG projects are indeed aimed to accelerate the achievement of the MILLENNIUM DEVELOPMENT GOALS and Adaptation to CC is one of the main goals. Clean Production contributes to reduce GHG emissions and then to mitigate CC. By reducing the water consumption in the factories designed by the project, this project is a synergy between adaptation and mitigation measures, generally highly recommended by scientists. So, it is indeed a success story!

-Yolanda thanks for your detailed contribution, which include many examples of non-structural responses. By protecting marine biodiversity, managed MPAs are themselves a kind of adaptation to global/climate change and call for monitoring and proactive approaches to tackle the impacts of CV&C. Assessing the Vulnerability of sea turtle nesting beaches is very interesting project and the results should be replicated in other places. By the way, vulnerability assessment to CC includes exposure assessment but also adaptive capacity assessment.

-Mehmet thanks for sharing some of the projects implemented in Albania. These are for adaptation and mitigation to CC, and most of them are mainly non-structural measures (IWRM strategy, Ecosystem-based, community-based and human resources managements,…). Biological measures are also categorized as "soft" measures.

 26 Posts 52 Karma
Maria Snoussi posted this 2 minutes ago Spam?

Hello again

As regards to the question on obstacles to adaptation, you all have agreed on many of them. Indeed they are more or less the same around the Med. In my view lack of political will is one of

the top hindrances in many countries. Because if politicians show a strong will, all the rest could be overcome: they can raise funds, coordinate between different sectors and stakeholders (including NGOs and public), combining top-down and bottom-up approaches, ask for capacity building and know-how and technology transfer….

For more information if you are interested (Nada, this is for you!), I attached here two documents about Adaptation barriers and how to overcome some of them. You will see that even in California, a well-developed and rich state, they have many barriers to implement CC adaptation!

Kind regards

Maria

Attachment: Barriers to CC Adapt Moser.pdf

Quote
Edit Delete

29 Posts 63 Karma
Maria Snoussi posted this 3 days ago Spam?
I couldn't upload 2 docs in one post, so please find attached here the second doc.
Attachment:Barriers Adapt_CC.pdf
2

Quote
Edit Delete

6 Posts 12 Karma
oula amrouni posted this 2 days ago Spam?

> Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.

The coastal areas extended to 1700 km of coasts, whose 500 km are sandy beaches has been exposed to the intense urbanisation since le last decade, and the non respect of the natural component of the coastal ecosystem (dune field, wetland, lagoon, sebkas, etc.).

The land use practises were developed in Tunisia since the set up of specialized agencies of the protection of the coastal zones. One of the national successful strategy adopted to reduce the human action, is the destruction of the "***anarchic building***" implemented in the banned or sensitive areas. Several national projects are also launched to correct the mistakes of the wave breakers structures (whish caused severe erosion of the beach, eutrophication, flooding, etc).

The protection of the coastal dune by the natural fences (wind breakers) have been introduced on the Tunisian coast (since 1999, Mahdia Beach, APAL Agency, Ministry of Environment). This environmental protection leads to the progression of the sediment budget by natural sedimentary processes (coastal drift and aeolian sand supply).

The DIVA application applied recently on the Tunisian coast is also a successful tool to perform our national knowledge to adopt sufficient strategy of CC adaptation. The data base including the shoreline evolution, the dune ridge width, the sea level rise, etc, associated to the socio-economic development; will be the first tool to classify our exposed area to flooding, and SLR and furthermore to prevent to consequence and reduce if possible the costs.

2) In your opinion, what are the main obstacles to implement adaptation measures to CV&C in coastal areas?

Financial problems, project funding.

A special thanks to Maria and all particpants for your constructives comments.

Oula

0

Quote
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29 Posts 63 Karma
Maria Snoussi posted this 13 hours ago Spam?

Dear Oula

Thanks for your interesting contribution. I guess the destruction of the "*anarchic building*" is governed by legislation? This is at least a way of deterring and discouraging future building in these unbuildable areas. Any hard structure structures (e.g breakwater, dykes…) will inevitably disturb the sediment budget of the coastal and offshore sediment transport and adversely affect the downdrift structures. Adapting to future climate change means upgrading existing and

constructing new structures to account for escalating risks. Windbreaker is more a soft measure and is generally combined with hard structures to stop erosion.

Tunisia was lucky to be one of the pilot sites for the application of the DIVA Tool. Even if preliminary, the results are very interesting and could support coastal managers in developing adaptation measures and in allocating resources to the most vulnerable areas.

It was a real pleasure working and exchanging with you and with all the participants

Kind regards

Maria


6 Posts 8 Karma
M.Cherif posted this 2 hours ago Spam?

Hello everybody,

1) Are you aware of any structural adaptation strategies that are already implemented in the coastal areas in your country (e.g. to fight coastal erosion, inundation, water shortages, ecosystems degradation,…). Please give one successful example.

I agree with oula, in Tunisie several projects have been established and several strategies have been implemented to fight against the impacts of climate change. We can cite
- Circle-Med
- Fem project
- ClimVar
- GTZ

It was Marseille Center for Mediterranean Integration (CMI). Created in 2009, the center is a regional platform for knowledge sharing and learning in support of public policy choices. The MIC of urban programs could facilitate dialogue, knowledge and its use by the public and policymakers.the study on "climate change adaptation and resilience to natural disasters in the coastal cities of North Africa" analyzed the degree of exposure of the four sites to natural disasters, including floods and storm surges, earthquakes and tsunamis, and extreme weather events becoming more frequent due to climate change. The project ran from June 2009 to June 2011 and provided the tools necessary to evaluate the risks and costs of potential losses, and to move towards reforms and investments to allow cities to adapt to change climate and increase their resilience to natural disasters.

2) what are the main obstacles to implement adaptation measures to CV&C in coastal areas?

one of the main obstacle to implement adaptation measures is Finacial Problems but also lack of policies the lack of people's participation in the fight against climate change and lack of awerness

 31 Posts 66 Karma

Maria Snoussi posted this 14 hours ago Spam?

Dear Cherif

Thanks for your contribution which completed what Oula posted. Indeed, there are many projects dealing with ICZM and CC in Tunisia and there are many interesting outputs from these projects. It will be interesting to evaluate the outcomes of these projects, i.e. the concrete actions implemented from these projects. This is why I also agree that availability of financial resources are important to follow up such projects and implement the actions identified.

Best regards

Maria

ANNEX VI

LECTURER'S REPORT

CV&C-MedOpen 2015

The 1-month on-line training course on CV&C was organized in the framework of the ClimVar & ICZM project with the aim to build / improve individual capacities on integration of CV&C considerations into the ICZM process and other related national policies. 15 participants from 7 countries were selected to follow this course. As regards to the participation, 60% of the 15 candidates have been actively participating, in the two organized activities i.e. the forum and the final essay.

Forum Discussion Evaluation

The general level of participation in the forum discussions was rather satisfactory. A total of 67 comments were posted, with an average rate of 5 posts per participant. 36% of the participants posted more than 8 contributions.

One can note that the lectures that have attracted the most debate are those dealing with the scientific aspects of CV&C and with national best practice examples. The lecture related to the political and legal aspects got the least of posts, probably because of the profile of participants mainly dominated by scientists and managers.

Language could be also a limitation of posting for some participants, even if they were willing to more express their views.

Final essays Evaluation

9 out of 14 students (64%) submitted individual final essay. The topics of the essays were very diverse and based primarily on the educational background of the participants (Table 1). The challenge for them was to integrate climate issues to their background knowledge and field of interest; most students were able to do so; however, for some of them environmental issues were still dominant in their essays and climate issues were not integrated in an appropriate way. This is not really surprising since climate science and impacts are still new challenges and need some time to be digested and correctly integrated as an additional driver of global change.

The criteria used for the grading, were based on the consistency of the presentation; the ability to structure it logically; the ability to place it in a broader context, and the relevance to the training aims.

Final essays grading, titles authors' name and Educational background

Grading	Final Essay Title	Name & surname	Educational Background
3 stars	Marine biological invasions and CV&C: An ICZM approach for the case of the Mediterranean Sea	Yolanda KOULOURI	Marine Biology-Ecology
	Evolution of sandy coasts in Tunisia in the context of Climate Change, and adaptation strategy	Oula AMROUNI	Marine Sedimentology
	Barriers to implement ICZM as an adaptation option to CV&C	Nada ITANI RAAD	Environmental Engineering
	CC adaptation strategies in coastal Mediterranean areas of Turkey	Ayse Kaya DUNDAR	Social Environmental Science
	Analysis of the integration of CC in the new ICZM strategy in Algeria	Nawel KHELIL	ICZM and Coastal Environment
2 stars	The effects of climate change on water resources in Tunisia and adaptation strategies	Mohamed CHERIF	Hydraulics and Rural Planning
	Monitoring Adriatic Sea in Croatia as a key tool to detect ecosystem changes.	Majda JURIĆ	Marine and Coastal protection
	Forests and Climate Change in Coastal Area of Albania	Mehmet METAJ	Forestry
	Ecological values, threats and recommendations to maintain and restore coastal biodiversity in Croatia in the face of climate change.	Senka RITZ	Biology

Final Essays Individual Comment (in alphabetical order)

Oula Amouni: ***Coastal evolution of sandy coasts in Tunisia in the context of Climate Change, and adaptation strategy***.

The analysis of coastal sediment dynamic of the most vulnerable beaches in Tunisia is very interesting and takes into account the long shore and cross shore transport, as well as wind dynamics. It also consider short-term (storms) as well as mid to long-term evolution (diachronic analysis). In my opinion, the analysis would have been clearer if the results have been structured in a Drivers-Pressures-Impacts-Response Framework, as such the drivers of coastal erosion, even human or climate would be highlighted. Great deal of information is given but the links between the results of the fieldwork and climate change are not very clear; it would have been good to say few words on how the beaches will evolve in the future with rising sea level? The adaptation options proposed include structural and non-structural measures and refer in an appropriate way to ICZM process, highlighting the role of participation in such process, which is a good point.

Mohamed CHERIF: ***The effects of climate change on water resources in Tunisia and adaptation strategies.***

In reading your essay, we learn a lot on the impacts of CV&C on several sectors in Tunisia, which is good but at the same time drowns a little bit the water sector, which is in principle the topic

of your essay. It would have been desirable to more focus on the reduction of water resources due to global warming in coastal areas and its consequences on other water-dependant sectors such as agriculture, tourism, households, etc. The analysis of the impacts and the policy framework are well described. It is good to having reminded that Tunisia is already used to droughts and floods (like all the North African countries) and then have developed coping measures to deal with climate variability impacts. Adaptation strategies presented concern different sectors some of which are not related to water resources (coastal erosion, degradation of coastal flora, turtles…). The conclusion and discussion paragraph deserve to be a bit more developed.

Ayse Kaya DUNDAR: ***CC adaptation strategies in coastal Mediterranean areas of Turkey.***

The presentation of the essay is well structured. After describing the impacts of CC in the Mediterranean in general and in Turkey in particular, you focused on the Ecoefficiency Project at Seyhan River Basin, as an example of adaptation to CC. This project is particularly relevant since it deals with the crucial issues of climate change, including both mitigation through clean production and adaptation by reducing water use, energy use, pollution load, GHGs emissions, while maintaining the competitive power of industrial production. What are also relevant are the participatory process, education and awareness campaign, public-private partnership, all of which are also the core components of the ICZM and IWRM processes. However, we cannot limit adaptation to CC in Turkey (the title of your FE) to this single project, which concerns mainly the industrial sector in a watershed without highlighting the impact on coastal areas.

Nada ITANI RAAD: ***Barriers to implement ICZM as an adaptation option to CV&C.***

The presentation is very interesting and rich of information. However it would have gained in value and clarity if it had been better structured into chapters for easier reading. When talking about ICZM, one has the impression that there is confusion between ICZM Protocol (already set up and couldn't be changed), ICZM strategy and ICZM process that should include goals,….. The set of barriers you have mentioned are all very relevant, highlighting the importance of data, monitoring, finance, as well as the policy-science interface and the inclusive governance. The documents I posted on the forum would certainly have been useful to complete this set... but overall, the work is well done.

Majda JURIĆ*:* ***Monitoring Adriatic Sea in Croatia as a key tool to detect ecosystem changes.***

The topic you have analysed is relevant and you have successfully highlighted the importance of monitoring in a transboundary sea-region to detect ecosystem changes. However, the overall impression for monitoring is that you have much more detailed the impact of human activities and the related consequences in terms of pollution than the possible impacts of CC. It would have been good to dig a bit more into the latter direction. Besides, many of the pollution monitoring parameters you mentioned are also suitable for detecting the impacts of CC, but we must recognize that the attribution of an ecosystem change to a climate or non-climate driver is not easy, as the impacts can result in cumulative or antagonistic effects.

Nawel KHELIL: ***Analysis of the integration of CC in the new ICZM strategy in Algeria*.**
This is an interesting presentation, clear and easily readable. The structure is logical and follows a conductive thread. Regarding the chapter on 'Vulnerability of coastal zones in Algeria' it would have been interesting to deepen the analysis by referring to the information provided in the National communications where there is entire chapters on vulnerability and adaptation. The application of SWOT analysis is a good simple approach to highlight the strengths and the opportunities as well as weaknesses and threats, and in this regard, your analysis is quite interesting showing that overall there are much more strengths and opportunities than weaknesses and threats, which means that the ICZM strategy is an appropriate and win-win option for climate change adaptation and could effectively help decision makers and planners.

Yolanda KOULOURI: ***Marine biological invasions and CV&C: An ICZM approach for the case of the Mediterranean Sea***
This is a very interesting and well-written presentation (in the format of research paper). The subject is well documented from a large bibliographic analysis, which demonstrates a good working knowledge of the issue. The chapter on the Mediterranean case is well detailed with a suite in the ideas. It's interesting to have tried to attribute the phenomenon to different climatic and non-climatic drivers focusing on the latter ones. Regarding jellyfish proliferation, the impact on tourism should also be cited as it is impacting tourism industry in many places in the Med. It was also good to have integrated biological invasions in the wider context of marine biodiversity in the Mediterranean. The fairly comprehensive analysis of policy and legal frameworks specific to this issue, reported in chronological order as well as the relevant articles of the ICZM protocol, were much appreciated. The precautionary principle as described is indeed a proactive "no regret" measure.

Mehmet METAJ: ***Forests and Climate Change in Coastal Area of Albania***
The issue of forests in the context of CC is interesting in two respects (i) as carbon sinks (mitigation of GHGs emissions) and (ii) as providers of many ecosystem services to human being (role in adaptation). Your presentation provides a large amount of interesting information, but still not well structured. There are many redundancies and the reader could feel lost between the paragraphs on 'Vulnerability of forests-Overview' and 'Vulnerabilities in Albania; and between 'measures to tackle climate change' and 'Adaptation strategies'? It would have been more logical to group these paragraphs, highlighting the specificities concerning CC impacts on the Albanian forests and possible adaptation measures. Another point that can confuse the reader is the description of marine species, while the title announces only topic of forests in coastal areas. Regarding the policy framework, it is interesting to note the evolution (increase/decrease) of the forest cover and its link to the evolution of management policies.

Senka RITZ: ***Ecological values, threats and recommendations to maintain and restore coastal biodiversity in Croatia in the face of climate change.***

The objectives of your essay are clear and the presentation pleasant to read; it provides an

outline on coastal biodiversity facing CC and other human pressures in the Mediterranean. However, it is not easy to distinguish what is specific to Croatia compared to what is common for the whole Mediterranean. It would have been interesting to a little deepen the impacts of CC on biodiversity and on the most vulnerable habitats in Croatia by giving some concrete examples. You referred to Natura 2000 directive and network in a very appropriate way, underlining the benefits of such protected sites in mitigating the impacts of climate change. The recommendations are exhaustive and very relevant; you promoted the ecosystem-based management as an integrated approach, but it would be good to refer to ICZM Protocol too!

Overall remarks

From the first lecture, the students have expressed great interest in the issue of CC and the posted comments was coming from all directions and treating all facets of the CV&C. Then the following courses allowed to further detail each topic and channel the debate. The students did not hesitate to share specific examples of their country; they also realized that many of the barriers and constraints to the integration of CV&C in coastal strategies are the same for all countries concerned and thus the needs can be expressed on a regional scale.

During the final essay preparation phase, the identification of the topics was very interactive with significant exchanges with each student. Some of the students preferred exchanging by email, where they seem more confortable rather than posting on the forum.

The final subjects and titles were discussed and fixed and then students realized that the time allocated to finalize the essay was too short, so taking into account this request, we (the administration and the lecturer) decided to extend the deadline for one more week so as to enable them to prepare properly their Final Essays.

The contents of the Final Essays were rather satisfactory in terms of relevance and consistency. Most of them were drafted as reports; only one of them was drafted in the format of an article.

Problems encountered and ideas for future improvement

- Write a report that could be a draft of an article to be published later on was a challenge for the students and this requires time to mature thoughts and draft something substantial. Therefore, from the starting, the time allocated for the final essay should be long enough to allow the students not to be stressed in this final phase of the training. One suggestion could be to guide students with a template stating the structure, the importance of bibliographic references, illustrations….

- In some FE “copy and paste” from the lectures or from other documents were too evident, and one cannot extract what is the proper work of the student and its capacity to synthetize. As an ethical suggestion: students should commit themselves to refer all the work taken from the bibliography.

- Virtual discussions are always impersonal, a photo of each student posted on the forum, or even on a Face Book group created especially for the MedOpen course may bring closer and more relaxing the participants. We know the power of such social network. The group could be kept alive even after the end of the training session by sharing and exchanging information on CV&C and ICZM (videos, announcements of trainings and conferences…).

- Individual training within a group is important, but we must think also about how the trained students could transfer what was learned to other persons in their institutions and thus increase the scope of people targeted. Dissemination could be through a leaflet, a brochure or a poster, with the main messages of each lecture, drafted by the students and distributed to their colleagues. The best dissemination brochure or poster could be awarded by PAP/RAC in the form of e.g. support to a conference or at least mentioned explicitly in the certificate.

- One student was particularly remarkable for her very relevant and concise comments. My suggestion for the next MedOpen course is to assign an assistant to the head lecturer, chosen among the best former participants, and who will play the role of catalyser for the forum discussions. The PAP/RAC could reserve a small salary for this task.

ANNEX VII

POST-EVALUATION BY STUDENTS

User: MAJDA JURIC
Course: CV&C Course
Share with us your ideas on how to improve ICZM in future...
More practices, the Directive and other regulations are defined but practical use is needed.
Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.
Yes
Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)
The course is good defined and we had all supports but for me, the day and week is to short. It canbe continue in this way.

--------- advanced questions -------

Topic/content:
- What was good?
It is interesting and fun, not like other tests.
- What could have been better?
Always cpuld be better, but I can find what! I am satistfied with this course.
Training methodology:
- What was good?
The technicl support is good and apsolutly our teiner Maria!
- What could have been better?
More time. Yes the week is O.K. for lecture and comments, but we have other obligations so for me the day ruout so quickly.
Documents/material:
- What was good?
The Summary of lecture and list of literature.
- What could have been better?
I couldn' find some of the mentioned literature.
Trainers:
- What was good?
YESSSSSSSSSSSSSS
- What could have been better?
PAP/RAC Co-ordination and Technical Assistance:
- What was good?

YESSSSSSSSSSSSSSSSS
- What could have been better?

User: Ayse Kaya Dundar

Course: CV&C Course
Share with us your ideas on how to improve ICZM in future...
Regional modeling studies can be done.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.
All lectures are very effective. DIVA Model application may be added for a small exercises.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)
I like this course. If you have an opportunity, I like to use the DIVA model for the Mediterranean coast of Turkey

--------- advanced questions -------

Topic/content:
- What was good?
Adaptation contents were explanatory. Lecture 4 was very useful.

- What could have been better?
Model studies can ben explained shortly. Croatian example was very illuminative. Thank you also to those who contribute to the Project.

Training methodology:
- What was good?
It was very usefull.

- What could have been better?
Climagine apprach can be explained in detail also.

Documents/material:
- What was good?
All documents contain sufficient knowledge.

- What could have been better?
-

Trainers:
- What was good?
All participants are well-intentioned and they follow training

- What could have been better?
-
PAP/RAC Co-ordination and Technical Assistance:
- What was good?
Very good and helpfull.

- What could have been better?
-

User: Nada Itani Raad

Course: CV&C Course
Share with us your ideas on how to improve ICZM in future...
excellent way to share and discuss ideas

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.
Who we have to contact to participate in future projects

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)
Like the content of the course and references

--------- advanced questions -------

Topic/content:
- What was good?
topic and content open my eyes to many resources

- What could have been better?
Wish that all participate in sharing and discussing ideas, although an opportunities was offered to them

Training methodology:
- What was good?
Like online courses where I can work at my own paste

- What could have been better?

Documents/material:
- What was good?
Like the materials and resources

- What could have been better?

Trainers:
- What was good?
Discussion and sharing ideas. I would not hesitate to take other courses
Thank you

- What could have been better?

PAP/RAC Co-ordination and Technical Assistance:
- What was good?
very helpful, respond to all our questions and concerns
Thank you

- What could have been better?

User: Mehmet Metaj

Course: CV&C Course
Share with us your ideas on how to improve ICZM in future...
Review and update the determined actions to stimulate national, regional and local initiatives through coordinated promotional action, cooperation and partnership with the various Mediterranean actors concerned with a view to promoting efficient governance for the purpose of integrated coastal zone management.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.
Although the (4) lectures were well-found and appropriate for the Mediterranean basin conditions it is useful also to additionally provide with lectures and recommendations for mountains and continental climate adaptation approaches of the Mediterranean countries governance.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)
Although the (4) lectures were well-found and appropriate for the Mediterranean basin conditions it is necessary to adopt them with a tangible approach for relevant Mediterranean country-based conditions and climate vulnerability and climate change conditions.

--------- advanced questions -------

Topic/content:
- What was good?
Everything regarding evaluation was good

- What could have been better?

The better thing within topics could be to have additional topics concerning individual countries CV & C issues

Training methodology:
- What was good?
Everything regarding training method was good

- What could have been better?

Documents/material:
- What was good?
Everything regarding documents and materials delivered was good

- What could have been better?

Trainers:
- What was good?
All involved trainers within Cv &C cources were of perfect quality and performance

- What could have been better?

PAP/RAC Co-ordination and Technical Assistance:
- What was good?
The PAP/RAC co-ordination was of high quality and perfect organization

- What could have been better?

User: Yolanda Koulouri

Course: CV&C Course
Share with us your ideas on how to improve ICZM in future...
I strongly believe that the discussion forum is a very good "tool" for these virtual training courses because it keeps in touch partcicipants and the lecturer and the more the interaction between the participants and the lecturer the stronger the tool of discussion forum. I also think that maybe if the training course is longer then the participants start to be looser with discussion forum.

Now, when you have gone through all the lectures, do you still have some remaining questions (or new ones!)? In such a case, please, send them to the Discussion forum.
I wouldn't say that I have questions remaining from the lectures, but I would say that there are questions arisen from the discussion forum.

Share with us your comments on this course! (What did you like, what did you dislike, what is missing, ideas for the next run ...)
I think that if the training course is longer than one month, then the participants and the lectures may become looser with the virual training course. On the other hand, it is difficult to have a long course because you need commitment from the participants and it is not always easy due to other obligations. I think that the 3-month course on ICZM was the optimum, though a little hard to fully follow.

--------- advanced questions -------

Topic/content:
- What was good?
Very interesting and informative lectures as well as the questions arisen from the lectures.

- What could have been better?
I think that we should discuss more the additional material.

Training methodology:
- What was good?
Of course, the discussion forum.

- What could have been better?
I think that there should be more interaction between the participants in the discussion forum, i.e. comments on each other's comments.

Documents/material:
- What was good?
The lectures were really informative.

- What could have been better?
The additional material could be more extensive.

Trainers:
- What was good?
Maria Snoussi was really good on responding to our comments and her questions arisen from each lecture were very interesting.

- What could have been better?
I would like her to be a little more "provocative", but I also understand that management issues are sometimes "sensitive" to discuss especially if you have to deal with different cultures.

PAP/RAC Co-ordination and Technical Assistance:
- What was good?
Branka is great as usual especially with her kind "reminder" e-mails! The technical support was also very effective.

- *What could have been better?*
Nothing could have been better.