

*Integrating SDGs in the MSc for climate change,  
sustainable agriculture, and food security  
(CCSAFS) program  
A rubric for assessing the integration of the Earth  
Charter into the CCSAFS program*

**EUROPE REGIONAL RCE MEETING 28-31 AUGUST 2018  
RCE BRITANY VANNES FRANCE**

**Vassilios Makrakis & Nelly  
Kostoulas**



Co-funded by the  
Erasmus+ Programme  
of the European Union



**CCSAFS**

Climate Change,  
Sustainable Agriculture  
& Food Security



University of Crete



# The CCSAFS objective

---

- The key objective is the development of an inter/multidisciplinary MSc program in Climate Change, Sustainable Agricultural and Food Security that will help promote the SDGs, especially SDG 2, in the two target countries, Egypt and Jordan and in the MENA region, in general.

# This objective will be met through:



---

- Carrying out capacity building for the involved staff from the partner institutions to design CCSAFS in line with the Bologna process, applying innovative and flexible teaching and learning methods.
- Development of a platform for blended learning supplemented by ICT labs.
- Development of Centers of Excellence in CCSAFS in each partner country university.



# A multi-stakeholder approach

---

- Applying a multi-stakeholder participatory curriculum development, involving both internal and external stakeholders, including students, staff, professionals, NGOs, local agricultural/food industry, government agencies. The MSc in CCSAFS is worth of 120 ECTS (90 ECTS course work & 30 ECTS thesis), established at Suez Canal University, Egypt and Jerash University, Jordan.





# Source of funding

---

- The MSc in CCSAFS is funded by the European Commission Erasmus + Capacity Building in Higher Education (<http://www.ccsafs.uoc.gr>), supporting the national policies for SDGs, especially SDG2 in implementation countries and the MENA region in general.



# SDGs Integration

---

- The impetus for integrating SDG2 in the MSc in CCSAFS comes from the following key facts:
- the Southern Mediterranean area is highly threatened by climate change and the challenge of meeting the future needs for food security is immense.



# Rationale

---

- Food security in line with sustainable development implies that agriculture should meet both production and environmental targets.
- Food security in the MENA region isn't just about exploiting scientific and technological advances to increase crop yields.
- Agricultural production will be challenged by various economic, social and environmental factors.





# Filling gaps

---

- The demand for scientists with expertise in the agriculture/food sector is likely to increase in the next decade in the countries. There are also skills shortages in areas of expertise such as plant and crop breeding, plant physiology and pest management, large animal physiology and health, soil science, and horticulture.



## Cont....

---

- There is also need 1) to bridge the gap between researchers, advisers and farmers; 2) to make climate change-related information more accessible and relevant to the local actors; 3) to improve the information and knowledge sharing between key stakeholders; 4) to 'give a voice' to groups and individuals that are often excluded; 5) to strengthen local empowerment and the ability to self-organise in response to external climatic disturbances and food insecurity.

SEM	CORE COURSES	CH	ECTS	OPTIONAL COURSES (CHOOSE ONE)	CH	ECTS
1	Climate Change, Sustainable Agriculture and Food Security (Sustainable Agriculture-UNIPAD)	3	10	Sustainability Justice and Food Security	3	10
				Small Scale Farming, Indigenous Knowledge and Local Food Supply	3	10
				Social Entrepreneurship in the Organic Food Industry (UNIPAD)	3	10
	Climate Change Adaptation and Mitigation	3	10	To be chosen one		
2	Sustainable Management of Soil and Water (Water Resources Management-UNIPAD)	3	10	Risk Analysis in the Food Chain	3	10
				<del>Precision Farming (UNIPAD)</del>	3	10
				Consumer <del>Behaviour</del> , Food Security and Marketing	3	10
	Research Methods and Advanced Statistics Analysis (Advanced statistics-UNIPAD)	3	10	To be chosen one		
3	Economics of Climate Change, Sustainable Agriculture and Food Security ( <del>Agrifood Economics and Policy-UNIPAD</del> )	3	10	Sustainable and Ethical Livestock Management (Sustainable livestock systems-UNIPAD)	3	10
				Sustainable Fisheries and Food Security	3	10
				Unsaturated Soil in Arid and Semi-arid Region	3	10
	GIS Applications in Climate Change, Sustainable Agriculture and Food Security	3	10	To be chosen one		
	<b>Total</b>	18	60	Three optional courses	9	30
4	<b>Thesis</b>	9	30	<b>Total for the MSc CCSAFS</b>	<b>36</b>	<b>12011</b>



# SUSTAINABLE DEVELOPMENT GOALS

**1** NO POVERTY



**2** ZERO HUNGER



**3** GOOD HEALTH AND WELL-BEING



**4** QUALITY EDUCATION



**5** GENDER EQUALITY



**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**10** REDUCED INEQUALITIES



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



**14** LIFE BELOW WATER



**15** LIFE ON LAND



**16** PEACE, JUSTICE AND STRONG INSTITUTIONS



**17** PARTNERSHIPS FOR THE GOALS



# Major ESD Activities/Projects up to 2022

Campaigning for reducing plastic bags

Mapping indigenous knowledge

Connecting cultural heritage with eco-tourism and local history

Reorienting University Curricula to Address Sustainability (RUCAS): A Tempus Euro-Mediterranean Project

Climate Change and Sustainability Policy (CLIMASP): A Tempus Euro-Mediterranean Project

Climate Change, Sustainable Agriculture & Food Security (CCSAFS): An Erasmus + Euro-Mediterranean Project

Developing Teachers' Capacity for Refugee Children's Education (RefTeCp): An Erasmus + Euro-Mediterranean Project

Developing Education for Sustainability enabled by ICTs (ICTeEfS): An Erasmus + Euro-Asian Project

Developing Academic Teaching to Enable Integration of SDGs (PUAT): An Erasmus + Euro-South African Project



# Integrating the Earth Charter

---

- The Global Earth Charter Initiative

<http://earthcharter.org/>

- The Earth Charter Hellas

<http://www.earthcharterhellas.edc.uoc.gr/>



# What is the Earth Charter

---

- A product of a **decade-long, worldwide, cross cultural dialogue** on common goals and shared values
- Began as a United Nations initiative, but it was carried forward and completed by a global civil society initiative
- Was launched as a people's charter **in 2000**



# What is the Earth Charter

---

- The drafting of the Earth Charter involved **the most inclusive and participatory process ever associated with the creation of an international declaration**
- Over 5000 organizations and governments endorse and uses the EC

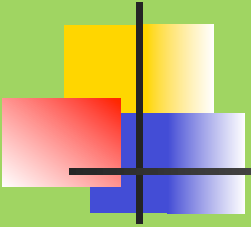




---

The Earth Charter ethical framework is used as a tool and framework to the CCSAFS curriculum development.

As a pedagogical tool, the Earth Charter can help teachers and students to clarify their habits of mind and challenge some of their views about building a more sustainable society.



- The Earth Charter does not indoctrinate by requiring the homogenization or standardization of cultures or beliefs; on the contrary, it encourages learners to identify and refine their own beliefs, prompting them to act accordingly. Through a rubric, CCSAFS course developers are guided to integrate the Earth Charter principles.

## The central messages of the Earth Charter include:



---

The global challenges we are facing are interconnected and systemic.

- Our interconnected challenges require integrated answers; fragmented or one-sided solutions do not work.
- For finding integrated solutions, we need a holistic vision grounded in core values that are shared across national and cultural boundaries.

The Earth Charter joins the HEAD, the HEART and the HAND(3Hs)





# How can the Earth Charter be infused in the CCSAFS curriculum?

---

- Vertically (Introducing Earth Charter and its connection to climate change, sustainable agriculture and food security as a unit within a CCSAFS course).
- Horizontally (Integrating the Earth Charter concepts, values and methodologies within CCSAFS curriculum units).



# Some examples

---

*Under Section III, Principle 9, refers to the need to "Eradicate poverty as an ethical, social, and environmental imperative" (SDG 1). In saying that, it puts the issue of poverty in its right direction that is, stressing its connection to ethics as it can be seen in Principle 10a "Promote the equitable distribution of wealth within nations and among nations" (SDG 10).*

# Differences between the SDGs and the Earth Charter



---

*The EC puts its principles on respect for nature and ecological integrity first, whereas the SDGs start with the social and economic agenda. The order of the principles in the EC reflects recognition that humanity is an interdependent member of the greater community of life, people are dependent on Earth's life support systems, and the human economy is a sub-system of the planetary ecosystem.*

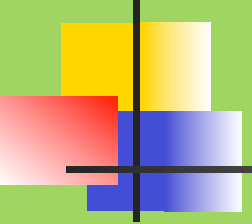


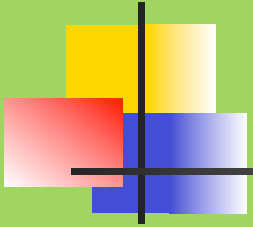
# Continue...

---

- SDGs are more action-oriented, with the targets setting concrete and measurable objectives with specific deadlines (mostly 2020 or 2030). On the contrary, the EC principles are ethical values that are timeless and can be used as guides and inspiration for actions.



- 
- 
- The SDGs are also considered “aspirational” for each individual country. The EC adds a spiritual dimension which is missing in the SDGs (EC 14.d). The Earth Charter also emphasizes the responsibility and the acknowledgment of this responsibility by all.



---

Thank you