

Centers of Excellence for CCSAFS

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Sustainable Agriculture and Food Security

Project Acronym: CCSAFS

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Disclaimer

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EXECUTIVE SUMMARY

WP5 has an objective to set-up the appropriate human, institutional and technical infrastructure for the successful implementation of the CCSFS program. The infrastructure is perceived by three interconnected domains: 1) human; 2) institutional and 3) technical. With respect to the human infrastructure, the activities developed in the previous three WPs will provide the required teaching staff readiness and pedagogical environment. However, the readiness of teaching staff should be accompanied by certain institutional support.

According to D5.1, a Centre of Excellence (CoE) focussing CCSAFS will be established in each partner institution. A report on the processes and practices for the development and institutionalisation of the Centres of Excellence must be delivered soon. Such CoEs will be instrumental not only in promoting the CCSAFS program but also supporting the blended learning environment. To play their role, these Centres will be equipped with a Blended Learning laboratory (e.g., computers, peripherals, videoconferencing, software) to support students online.

A Centre of Excellence (CoE) focusing on CCSAFS has been established in each partner institution. This process has been facilitated by a template which has been thoroughly discussed and approved by partners in both countries. Accordingly, each partner university adjusts its own policy on the basis of the CCSAFS CoE model developed that includes: vision, mission and core value statements, which represent the key priorities in the CoE which must reach in alignment with the mission, vision and core values. Strategic goals are general statements about what the CoE needs to accomplish to meet its mission, vision and core values. Specific action plans or activities formulated to implement each strategic goal. These are the specific activities or objectives addressing each strategic goal, along with verifiable indicators and SDGs. There are also key outcomes in a time perspective and placement of the strategic goals with their corresponding specific activities and indicators in a time perspective. The CCSAFS CoEs will be instrumental not only in promoting the CCSAFS program but also supporting the blended learning laboratories to support students in combining face-to-face and online learning. In the following we present the reports received by each partner.



CCSAFS Centre of Excellence Al-Azhar University

Introduction

Excellence of Al-Azhar University means shared facility to provide high quality services such as teaching, training, consulting to the wider community and civil society, in multi-disciplinary courses and projects.

Being first movers to address different issues that has social impact like;

- 1. Bridging the gap between the theoretical and practical issues.
- 2. Continuous improvement.
- 3. Creativity
- 4. Evaluation
- 5. Connectivity with the community
- 6. Conductivity
- 7. Bridge the gap between industry and academic objectives
- 8. Leadership
- 9. Capacity building
- 10. Transferability (transfer of knowledge and exchanging experience).

In order to achieve excellence in Al-Azhar University there's the need of highly motivated staff equipped with advanced skills and knowledge working in synergy on most urgent environmental problems. For CCSAFS Centre of Excellence, the team should address both theoretical and practical issues related to Climate Change, Sustainable Agriculture and Food Security (CCSAFS), within an institutional friendly environment, providing for funding, facilities (equipment) and support.

- 1. Inviting stakeholders and connecting with them in different aspects as internships
- 2. Research on burning issues
- 3. Adapt any innovative ideas e.g. graduation projects
- 4. Having capacities to blend the academic with the theoretical and applied issues

Strategic Orientation

- 1. Evaluating current situation and furthering basic research
- 2. Promoting innovation
- 3. Economic and social development
- 4. Reaching local community
- 5. Fostering international collaboration knowledge exchange in climate action (13,16; 17;10*)
- 6. Empower the role of law representatives to achieve equity and environmental integrity (16; 12*)
- 7. Increasing awareness and training, supporting and connecting stakeholders, academics and civil society (*bridge the gap*) (8; 16; 12; 4*)
- 8. Provide leadership in sustainable development (13;4; 6;17*)

Institutional Supporting/Operational Conditions

- 1. Cooperation between CoEs in partner countries and exchange experience
- 2. Facilitate and provide managerial support to establish international agreements and cooperation on the field of Climate Change (CC) (17*)
- 3. Disseminate the centre's goals and achievements (4, 17, 10*)
- 4. Steering committee to supervise ethical issues

Impacts and Capacity Building

- 1. Research capacities related to CCSAFS
- 2. Socio-economics and training within Al-Azhar University in cooperation with other universities based on societal needs (1; 2; 3; 4*)
- 1. Infrastructure to host advanced research facilities (12; 15; 13*)
- 2. Training new experts in the field of CCSAFS (4; 10; 17; 1*)
- 3. Consulting and advising for Sustainable Agriculture (SA) management (16; 17*)
- 4. Providing new technology for CC mitigation (8; 9*)
- 5. Develop new strategies for Food Security (FS) (17; 8; 9; 13*)
- 6. Develop new research projects on FS in changing environment (13; 7; 8; 15; 4*)

Mission statement CCSAFS CoE

Raise academic and student performances by means of active learning. Provide an educational environment based on humanity and creativity, without spatial and temporal restrictions. Develop learning strategies founded on modern and new electronic technologies to compete in an international frame. With positive cooperation, contribute to build a new learning and teaching community on the themes of CCSAFS.

The CCSAFS centre of excellence in Al-Azhar University is devoted to provide experts and expertise to address and deal with the emerging problems of climate change and its impacts on food security and agricultural sustainability.

- 1. The centre will actively educate a new generation of professionals with holistic approach and multidisciplinary knowledge, representing the bridge between academies, policy makers, stakeholders and society.
- 2. The centre will provide advanced ICT technology in the fields of CCSAFS to students, teachers, researchers and experts.
- 3. The CoE concentrates on involving Al-Azhar in large national projects that can have a wide impact on the Egyptian community and enable researchers and students to implement their research results and have direct links to the real world. Student initiatives and pilot projects developed at the grassroots level will also be supported by the CoE
- 4. The CoE focuses on urgent topics in its immediate surroundings, especially research problems that require an interdisciplinary approach.
- 5. Meet training needs by arranging training, re-training and skill upgrading programmes for educated youth and already employee
- 6. The centre will implement continuous and blended learning in the University

Vision statement of Al-Azhar University CoE

A consultancy and training Centre committed to solving real world problems related to CCSAFS using sustainable policies, innovative teaching program and research.

The core value statements of Al-Azhar University CoE are:

- 1. Innovation To foster and disseminate novel solutions and approaches to CCSAFS problems by means of multi-disciplinary research, education, training and consultancy.
- 2. Strategic planning To forecast and plan milestones and goals to develop suitable strategies to drive the Centre towards the goals integrating core values.
- 3. Networking To create and strengthen collaboration within the Centre staff and with research institutions, academics, civil society, NGOs, policy makers at local, regional, national and international level. To create partnerships based on open exchange of ideas and opportunities.
- 4. Ethics to ensure ethical treatment based on an inclusive culture, equity, merit and moral principles.

The strategic goals of Al-Azhar University CoE are:

- 1. Strategic Goal 1: The centre will supply advanced training and multidisciplinary education and technological resources for students, researchers, and society involved in CCSAFS.
- 2. Strategic Goal 2: The Centre will create new education resources based on ICT technologies related to CCSAFS.
- 3. Strategic Goal 3: The centre aims to establish continuous cooperation relationships with other institutions and centres of excellence in the field of CCSAFS, to exchange students and staff.
- 4. Strategic Goal 4: The Centre will provide consultancy for auditing courses and training materials for the courses and programmes of CCSAFS.

The specific action plan of Al-Azhar University CoE is:

SG_1

- 1.1. Allocate the appropriate space for stablish the Centre of Excellence equipped with the suitable facilities including the ICT lab comprising hardware and software.
- 1.2. Establish a management and steering committee for the centre.
- 1.3. Hold a kick-off meeting for all persons involved in the CCSAFS project and further key administrators, to introduce the centre and its functions.
- 1.4. Produce specific and excellent training programme through expertise in CCSAFS field.
- 1.5. Produce dissemination tools, e.g. a special document for the CCSAFS website and in printed form to introduce the centre also with courses, seminars and meetings by invited experts in the field of CCSAFS.

SG_2

- 2.1. Use CoE facility for introducing non-traditional teaching methods based on ICT technology.
- 2.2. Carry out a workshop for (AZHU, HU, SCU and ASU) members to discuss non-traditional education and the use of the ICT lab as an effective tool.

- 2.3. Train staff member on integrating ICT tools in their teaching to students through workshops in partner universities.
- 2.4. Integrate blended learning in educational process.

SG_3

- 3.1. Use the CoE during special course sessions for discussions, meetings and dialogues with students and scholars abroad.
- 3.2. Establish and join already existing national and international education and research platform for CCSAFS purposes.
- 3.3. Use the ICT lab during special course sessions for discussions, meetings and dialogues with students and scholars abroad.

SG_4

- 4.1. CCSAFS project team, together with the centre steering committee will revise course contents every year to reduce the gap between education process and labour market
- 4.2. An annual meeting with external and internal stakeholders will be held to audit to program
- 4.3. Achieve the availability of training and courses materials for the stakeholders
- 4.4. Develop the resources and capacities available at centre of excellence for modelling and producing inventories and databases

Strategic goals and their corresponding specific activities and indicators in a time perspective:

SG₁:

- A- Sustainable development dissemination workshops for undergraduate and staff member
 - 1- Organize monthly workshop about SD using online meetings to attract students and rise awareness.

SG_2

- A- Sustainable agriculture
- 1- Organize workshops for professors and experts to share technology, techniques, management issues and real life best practices in modern sustainable agriculture
- 2- Organize field visit for farmers and students to train them and help them to be aware of current environmental problems and methods of face them.

SG_3

- A- Engage stakeholders
- 1- Design schedule for many tasks to engage community, NGOs and businessmen to cope with national or international problems like Climate change

Steps to monitor and follow up the implementation:

- 1- An internal management committee will be established with the task to propose new action plans and activities based on the yearly report analysis and surveys.
- 2- Yearly reports by coordinator of every partner (we can design template like biannual report)
- 3- Internal and external surveys to be update always with opinions and suggestion about CoE activity

Key Strategic Goals and Activities	Short Term Key Outcomes	Medium Term Key Outcomes	Long Term Key Outcomes
What we plan to do (key strategic goals and activities, indicators)	What do we expect to achieve by 2020	What do we expect to achieve by 2025	What do we expect to achieve by 2030
Strategic Goal 1: The centre will supply advanced training and multidisciplinary education finding the human and technological resources for students, researchers, and society involved in CCSAFS			
Activities: 1.1. Allocate the appropriate space for establishing the Centre of Excellence equipped with the suitable facilities including the ICT lab comprising hardware and software. Indicator(s): completed preparations and installed equipment.	Space and preparations are settled (two laboratories and one lecture room). Necessary equipment are purchased and installed. The first group of CCSAFS master students are registered and started their		
1.2. Establish management and steering committee for the centre Indicator(s): reports for continuous meetings and decisions are documented, updated strategic plans and activities of the centre.	studies. Established management /steering committee, its members and roles are specified.	active in monitoring, evaluating and revising the centre, its strategic	active in monitoring, evaluating and revising strategic goals and
1.3. Hold every year a kick-off meeting for staff (academic and administrations) from faculty of agriculture staff involved in the CCSAFS project and further key administrators, to introduce the center and its functions, its objectives and the services provided. indicators: uploaded on the faculty web-	Training sessions and programs are implemented on CCSAFS and other related-environmental issues at academic and civil society levels.	goals and activities; updated action plan; issuing Euro-Arab Diplomas for CCSAFS students	activities; updated action plan

	site and recorded minutes of meeting			
1.4.	Produce specific and excellent training programme through expertise in CCSAFS field for academic and non-academic staff. Indicators: training materials documented, certificate of attendance are issued, feedbacks of participants.	Dissemination documents and	The centre expanded its training activities to include staff from academic and research institutes to benefitting from the training facilities.	
1.5.	Produce dissemination tools and documents, website, posters, flyers, information sessions by invited experts in the field of CCSAFS. Indicators: dissemination plan is developed, dissemination documents and tools are available for others		Continuous updating for dissemination, Dissemination tools and methodologies will be updated	Continuous updating for dissemination, Dissemination tools and methodologies will be updated,

^{*17} Sustainable Development Goals set by United Nation General Assembly

Strategic Goal 2: The Centre will create new education resources based on ICT technologies related to CCSAFS

Activities:

2.1. Use the Centre of excellence facilities for introducing non-traditional teaching methods based on ICT technology

Indicator(s): number of courses based on ICT, Revised course curricula including course objectives and learning outcomes.

2.2. Organize workshops and training sessions for faculty members to discuss non-traditional education and using ICT lab as an effective tool.

Indicators: number of participants in the training/workshops, evaluation (assessment) of the training, diversity of trainees.

2.3. Integrate blended learning in educational process

Indicator(s): number of developed courses using blended learning techniques

CCSAFS course sessions being held at the ICT lab facility using non-traditional methods during the Pilot phase

The Centre will provide new education resources based on ICT technologies related to CCSAFS. Integrate ICT tools in CCSAFS master courses to start pilot assessment.

More interest from staff in adopting and using ICT tools in courses relevant with climate issues impacts

Established blended learning lab to teaching courses for CCSAFS courses

The centre hosts not only CCSAFS courses, but courses from different programs are updated using ICT tools.

Improved students learning and better teaching methods. Spread of using ICT in other courses. capacity building of staff in using ICT tools

Spread use of blended learning labs by staff and students from other faculties

Continuous organization of conferences and lectures

Increasing number of courses taught at the centre from different faculties. Increasing number of faculty members familiar with using and adopting new ICT methodologies.

Wide spread of using ICT tools in teaching different scientific disciplines. Continuous the role of the centre in building the capacity of staff and alumni.

More faculty members are adopting non-traditional methods in teaching, e.g. problem-based learning etc...

Spread use of blended learning labs by staff and students from other faculties

^{*17} Sustainable Development Goals set by United Nation General Assembly

continuous cooperation relationships with other		expertise and consultations	
institutions and centres of excellence in the field of		for academic and civil	
CCSAFS, to exchange students and staff.		societies in CCSAFS	
		problems.	
Activities:		Increasing contacts with	
3.1. Establish internal and external cooperation with		and demands for	
institutions and centres of excellence in the field of		consultations and	Increased in number of
researches on CCSAFS and other emerging fields,	Database on internal and external	environmental advices	signed contracts and
Indicator(s): number of signed contracts and	bodies interested in researches and		agreement
implemented and on-going research projects	scientific activities relevant with		
	CCSAFS are prepared		
		Continuous reviewing	Continuous organization
3.2. Organize conferences and introduce guest		processes for CCSAFS	of conferences and
speakers on issues relevant with various climate		curriculum to ensure the	lectures
effects	Prepare for the first international	program competences are	
Indicator(s): number of organized	conference	achieved.	
conferences, diversify of the centre activities.		December musicate and	
2.2 Write and submit a managel for the and assembly		Research projects are implementing, capacity	In anagging contacts with
3.3. Write and submit a proposal for the endorsement of the centre by SCU council		implementing, capacity building in performing	Increasing contacts with and demands for
of the centre by SCO council	Centre officially endorsed by SCU	researches on SA and FS in	consultations and
Indicator(s): : proposal written and submitted	management, as a centre or unit	changing climate	environmental advices
to university management; response of	under Centre for Training and	changing chinate	chynolinental advices
management	Consultations		
munugomont	Constitutions		
3.4. Write and submit proposals for national and			
international founding on teaching or research on	The Centre staff work to find		
CCSAFS	international and national	Stakeholders inputs are	
Indicator(s): : proposals written and	collaborations to compete for	documented and strategic	
submitted	project funding.	plan for the centre is	
		updated	Continuous reviewing

^{*17} Sustainable Development Goals set by United Nation General Assembly

Strategic goal 4: Consultancies for auditing and peer-review for CCSAFS courses and training materials, and for similar programs of CCSAFS. Activities: 4.1. CCSAFS project team, together with the centre steering committee will revise course contents every year to reduce the gap between education process and labour market Indicator(s): number of reviewed courses and training materials, name of contacted institutions/universities/faculties 4.2. Organize annual meeting with external and internal stakeholders to update the strategic plans and collect new suggestion that improve the effectiveness of the centre.	Courses are already reviewed and implemented for students registered in the CCSAFS master. First annual meeting is organized gathering internal and external stakeholders (policy makers, key staff in governmental and non-governmental organizations,	Computers and educational equipment are updated, new ICT methodologies are installed, capacity building for staff Dissemination tools produced and updated on (CoE) webpage – knowledge about the role of the centre in the wider community spread	processes for CCSAFS curriculum to ensure the program competences are achieved. Continuous updating of the strategic plan, suggestions to improve the role and activities are studied and implemented
Indicator(s): updated plans, reports on annual meetings are prepared.4.3. Develop the resources and capacities available at	alumni)		Computers and
centre of excellence to continue provide its services. Indicator(s): updated equipment and educational resources, trained staff and students.	The already education and research platform established for CCSAFS are used.		educational equipment are updated, new ICT methodologies are installed, capacity building for staff will be raised

^{*17} Sustainable Development Goals set by United Nation General Assembly

Infrastructure for CCSAFS CoE

	Equipment	Quantity / Items	Specification
1	Personal computer	25	Dell , Intel Core I 5 with Screen 19" dell
2	Printer	2	HP Laser jet Pro, 3*1 (Scanner+ scan+ printer)
3	Interactive white board with projector	1	Epson Projector with 4.2*1.5 white board
4	Video conference	1	Polycom group 310HD, 48 inch full HD LED TV

^{*17} Sustainable Development Goals set by United Nation General Assembly

Photos of Equipment purchased from CCSAFS project budget



^{*17} Sustainable Development Goals set by United Nation General Assembly



^{*17} Sustainable Development Goals set by United Nation General Assembly







CCSAFS Center of Excellence in Climate Change, Sustainable Agriculture and Food Security

ASWAN UNIVERSITY

Table 1:

Key Strategic Goals and Activities	Short Term	Medium Term	Long Term
	Key Outcomes	Key Outcomes	Key Outcomes
What we plan to do (key strategic goals and	What do we expect to achieve	What do we expect to	What do we expect to
activities, indicators)	by 2020	achieve by 2025	achieve by 2030
Strategic Goal 1: The centre will supply advanced			
training and multidisciplinary education finding the			
human, technological and financial resources for			
students, researchers, and society involved in			
CCSAFS			
Activities:			
1.1. Allocate the appropriate space for	Space and preparations are		
establishing the Centre of Excellence	settled (two laboratories and		
equipped with the suitable facilities	one lecture room). Necessary		
including the ICT lab comprising	equipment are purchased and		
hardware and software.	installed. The first group of		
Indicator(s): completed preparations	CCSAFS master students are		
and installed equipment.	registered and started their		
• •	studies.		
1.2. Establish management and steering	Established management	Management committee	Management committee
committee for the centre	/steering committee, its	active in monitoring,	active in monitoring,
Indicator (s): reports for continuous meetings	members and roles are specified.	evaluating and revising	evaluating and revising
and decisions are documented, updated		the center, its strategic	strategic goals and
strategic plans and activities of the centre.		goals and activities;	activities; updated action
		updated action plan;	plan
1.3. Hold every year a kick-off meeting for	Kick-off meeting accomplished	issuing Euro-Arab	
staff (academic and administrations)	and knowledge about the center	Diplomas for CCSAFS	
from faculty of agriculture staff	and its function well spread in	students	
involved in the CCSAFS project and	SCU.		
further key administrators, to introduce			

	the center and its functions, its objectives and the services provided. indicators: uploaded on the faculty web-site and recorded minutes of			
1.4.	Produce specific and excellent training programme through expertise in CCSAFS field for academic and non-academic staff.	Training sessions and programs are implemented on CCSAFS and other related-environmental issues at academic and civil society levels.	The centre expanded its training activities to include staff from academic, research institutes and civil society organizations to	
1.5.	Indicators: training materials documented, certificate of attendance are issued, feedbacks of participants. Produce dissemination tools and documents, website, posters, flyers, information sessions by invited experts in the field of CCSAFS. Indicators: dissemination plan is	Dissemination documents and tools are printed (knowledge about centre spread	benefitting from the training facilities. Continuous updating for dissemination, Dissemination tools and methodologies are updated, publicize in international conferences	Continuous updating for dissemination, Dissemination tools and methodologies are updated, publicize in international conferences
1.6.Us	developed, dissemination documents and tools are available for others se the space and available resources of the center for teaching activities and seminar sessions by experts in climate issues and its impacts. Indicators: number of participants, titles of lectures and seminars are documented.	Students and staff members from different faculties are using and benefitting from the facilities in education,	More interest and increasing enrolments in master in CCSAFS, Students and faculty members have the opportunity to discuss with external stakeholders	The center is used for teaching activities of other courses

Strategic Goal 2: The Centre will create new education resources based on ICT technologies related to CCSAFS

Activities:

2.1. Use the Centre of excellence facilities for introducing non-traditional teaching methods based on ICT technology

Indicator(s): number of courses based on ICT, Revised course curricula including course objectives and learning outcomes.

2.2. Organize workshops and training sessions for faculty members to discuss non-traditional education and using ICT lab as an effective tool.

Indicators: number of participants in the training/workshops, evaluation (assessment) of the training, diversity of trainees.

- 2.3. Train staff members on integrating ICT tools in their teaching to students through workshops in partner universities.
 Indicators: number of participants in the training, number of courses adopting ICT after 1 year.
- 2.4. Integrate blended learning in educational process

Indicator(s): number of developed courses using blended learning techniques

CCSAFS course sessions being held at the ICT lab facility using non-traditional methods during the Pilot phase

The Centre will provide new education resources based on ICT technologies related to CCSAFS. Integrate ICT tools in CCSAFS master courses to start pilot assessment. (started in 2019)

More interest from staff in adopting and using ICT tools in courses relevant with climate issues impacts

Established blended learning lab to teaching courses for CCSAFS courses

The centre hosts not only CCSAFS courses, but courses from different programs are updated using ICT tools.

Improved students learning and better teaching methods. Spread of using ICT in other courses. capacity building of staff in using ICT tools

Spread use of blended learning labs by staff and students from other faculties Increasing number of courses taught at the centre from different faculties. Increasing number of faculty members familiar with using and adopting new ICT methodologies.

Wide spread of using ICT tools in teaching different scientific disciplines. Continuous the role of the center in building the capacity of staff and alumni.

More faculty members are adopting non-traditional methods in teaching, e.g. problem-based learning etc...

Spread use of blended

Spread use of blended learning labs by staff and students from other faculties

Detahase on internal and external	Continuous organization of conferences and lectures	Increased in number of signed contracts and agreement
bodies interested in researches and scientific activities relevant with CCSAFS are prepared	Prepared and provided expertise and consultations for academic and civil societies in CCSAFS	Continuous organization of conferences and lectures
Prepare for the first international conference	problems. Increasing contacts with and demands for consultations and environmental advices	Increasing contacts with and demands for consultations and
Centre officially endorsed by SCU management, as a centre or unit under Centre for Training and Consultations	Continuous reviewing processes for CCSAFS curriculum to ensure the program competences are	environmental advices
The Centre staff work to find international and national collaborations to compete for project funding.	Research projects are implementing, capacity	Continuous reviewing processes for CCSAFS curriculum to ensure the program competences are
	Prepare for the first international conference Centre officially endorsed by SCU management, as a centre or unit under Centre for Training and Consultations The Centre staff work to find international and national collaborations to compete for	Database on internal and external bodies interested in researches and scientific activities relevant with CCSAFS are prepared Prepare for the first international conference Centre officially endorsed by SCU management, as a centre or unit under Centre for Training and Consultations Consultations Centre staff work to find international and national collaborations to compete for project funding. Conferences and lectures Prepared and provided expertise and consultations for academic and civil societies in CCSAFS problems. Increasing contacts with and demands for consultations and environmental advices Continuous reviewing processes for CCSAFS curriculum to ensure the program competences are achieved. Research projects are implementing, capacity building in performing researches on SA and FS in

Strategic goal 4: Consultancies for auditing and peerreview for CCSAFS courses and training materials, and for similar programs of CCSAFS. Activities: 4.1. CCSAFS project team, together with the centre steering committee will revise course contents every year to reduce the gap between education process and labour market Indicator(s): number of reviewed courses and training materials, name of contacted institutions/universities/faculties 4.2. Organize annual meeting with external and internal stakeholders to update the strategic plans and collect new suggestion that improve the effectiveness of the center. Indicator(s): updated plans, reports on annual meetings are prepared. 4.3. Annual surveys and auditing by external auditors from NAQQEA will be performed Indicator(s): Survey outcome 4.4. Develop the resources and capacities available at centre of excellence to continue provide its services. Indicator(s): updated equipment and educational	Courses are already reviewed and implemented for students registered in the CCSAFS master. First annual meeting is organized gathering internal and external stakeholders (policy makers, key staff in governmental and non-governmental organizations, alumni) The already education and research platform established for CCSAFS are used.	Stakeholders inputs are documented and strategic plan for the centre is updated Computers and educational equipment are updated, new ICT methodologies are installed, capacity building for staff Dissemination tools produced and updated on (CoE) website – knowledge about the role of the center in the wider community spread	Continuous updating of the strategic plan, suggestions to improve the role and activities are studied and implemented Computers and educational equipment are updated, new ICT methodologies are installed, capacity building for staff
Indicator(s): updated equipment and educational resources, trained staff and students.			

Monitor implementation of the Plan and update the Plan as Needed -

Usually, a Task Force or specific committee needs to be established to follow-up and ensure the implementation. There is need for regular reflection on the extent to which the strategic goals are being met and whether action plans/activities are being implemented.

There's many steps to follow up the implementation of CoE:

- 1- An internal management committee will be established with the task to propose new action plans and activities based on the yearly report analysis and surveys.
- 2- Annual reports must be prepared to monitor the progress of activities and ensure continuous provided services and sustainability
- 3- Internal and external stakeholders' surveys must be completed to ensure their contributions which should strengthen and sustain the Centre
- 4- National quality assurance organization
- 5- Outcomes and strategic plans computable with National and international challenges

Aswan University Excellence Centre of CCSAFS

The centre was equipped with:

30 Personal Computer (Acer Core i5)
2 multifunction printer (Hp LaserJet Enterprise MFP M527)

1 video conference system

1 smart board











CCSAFS Center of Excellence in Climate Change, Sustainable Agriculture and Food Security Heliopolis University for Sustainable Development





By definition, excellence is the quality of being outstanding or extremely good. The Center of Excellence has become a significant part for realizing higher education and research to be a first mover addressing the burning issues that has social impact. CoE is continuously creative and evaluating the corrective decisions addressing all the community threats bridging the gap between the theoretical and academic innovation. We foster the environmental liability through transferability of knowledge and exchanging experience applying the interdisciplinary and multidisciplinary learning approaches among the center's intensive capacity building sessions.

The Center of excellence condense stakeholder requirements, ensure visibility and alignment across the program maintaining a clear and focused strategy. As such, inviting people from industry and connecting with different aspects as internship, providing insight and oversight responsibilities among researching on burning issues and do action research to identify the appropriate calibers able to move on researching. CoE adapt all the innovative ideas from students, teachers and professors addressing them as students' graduation projects and could reflect them into community service real projects and investing in capacities which blend the academic with the theoretical aspect. As a result, CoE is a critical component in moving your CRM program to the next level of maturity and expanding the value it provides.





Mission:

The Centres' mission is building a human capacity necessary to address the unique climate change adaptation, sustainable agriculture and food security through teaching, action-oriented research, development of innovative technologies and community participation. Also by providing the Massive Open Online Courses (MOOCs), experts' advice, partnership, workshops, info sessions, and field trips to address the challenge that climate change poses for agriculture and food security in the two target countries and in the MENA region, in general.

Vision:

To steer climate change, and sustainable agriculture sciences toward the co-production of new knowledge, and co-design the food security together with other stakeholders through a solid and trans disciplinary approach with the ultimate goals to achieve sustainable development.

Values:

Values are increasingly important in strategic action planning. Develop four to six core values that the Centre would like to operate. Consider values related to interdisciplinary teaching, curricula and research, climate change, sustainable agriculture and food security.

- 1. Ethics in education, research, & application
- 2. Availability, Accessibility, and Equal Opportunity
- 3. International and inter-cultural collaboration and cooperation
- 4. Inter-disciplinary focus in education, research, and application
- 5. Quality in education, research, and application
- 6. Respect for ecology & biodiversity

Objectives





- 1. Carry out capacity building for the involved staff from the partner institutions:
 - a) to design post-graduate curricula in line with the Bologna process
 - b) To design and develop inter/multidisciplinary course curricula at the post-graduate level.
 - c) To apply innovative and flexible teaching and learning methods.
- 2. Develop a platform for blended learning supplemented by laboratories to support the MSc. programme and function as life-long learning resources.
- 3. Accredit and implement the MSc. programme under the guidance of the Higher Education Accreditation Commissions, starting with the first cohort of students at the third year of the project. Carry out diagnostic, formative and summative assessment activities across the project design, development and implementation process.





CoE's Strategic Orientation

- Evaluating current situation and how can we improve it through research (SDG 9)
- To reach local community (SDG 16 & 17)
- Identifying the local and national resources (SDG 12)

Institutional Supporting/Operational Conditions

- Have cooperation between centers of excellence in partner countries and Exchange experience (SDG 4)
- Technology exchange between countries (SDG 9)
- Water management projects (SDG6)

Impacts and Capacity Building

• Research capacity, socioeconomic and training within the university in cooperation with other universities based on societal needs (related to all SDGs mainly 1, 2, 3, 4)

Strategic Goals

Strategic Goal 1: Establish the center followed by the ICT tools.

Strategic Goal 2: Provide human resource expertise from all faculties in HUSD, EBDA, and SDF.

Strategic Goal 3: Provide training and interactive sessions to M.Sc. CCSAFS students and undergraduate the faculty of agriculture in organic at HU.

Strategic Goal 4: Synergy with the 4 centers at the universities in Egypt, and outside.

Strategic Goal 5: Cooperate with Egyptian Government (ministry of irrigation and water resources management & the ministry of agriculture and land Reclamation).





Key Strategic Goals	Activities	Short-Term Key Outcomes	Mid-Term Key Outcomes	Long-Term Key Outcomes
What we plan to do	How we plan to do it	2018 Expected Outcomes	2020 Expected Outcomes	2025 Expected Outcomes
SG1: Establish the centre followed by the ICT tools.	A1.1: Have a location and design it to fit the needs.	Have the centre established with staff dedicated to operating and coordinating activities	Provide the Massive Open Online Courses (MOOCs)	The centre should be in a central position of the university with council comprised of faculty members
SG2: Provide human resource expertise from all faculties in HUSD, EBDA, and SDF.	A2.1: Communicate with the deans of the faculties for providing HR expertise in the field of CCSAFS.	Cooperation from all of the faculties in HUSD, EBDA, and SDF.	Coordinate the activities on a wide level.	Investigate to host experts from outside.
SG3: Provide training and interactive sessions to MSc CCSAFS students and undergraduate the faculty of agriculture in organic at HU.	A3.1: Reorient select courses agreed upon by the different faculties.	Have a process established for the continuous revision and revisiting reoriented courses to ensure that all meet minimum standards.	Provide workshop for MSc CCSAFS students.	Provide workshop for faculty of organic agriculture at HU and outside.
SG4: Synergy with the 4 centres at the universities in Egypt, and outside.	A4.1: Get approval from the Supreme Council of Universities (SCU).	Exchange the ideas with the 4 universities (Heliopolis, Aswan, Al-Azhar, and Suez universities).	Submission process to the SCU.	Externalize locally and globally.
	A4.2: Look for external accreditation bodies.	universities).	Feedback and enhancement process.	

SG5: Cooperate with Egyptian Government (ministry of irrigation and water resources management & the ministry of agriculture and land Reclamation).









CoE's ICT Lab

	CoE's ICT Lab	
Equipment	Function	Supporting Photos of the equipment
34 PCs	The PCs were used in a) the pilot assessment of the programme b) the peer-reviewing of the courses c) Organization and conduction of training workshops.	









University of Crete

Interactive Smart Whiteboard with a **Projector**

The Smart Board and the projector are used in the training sessions and the demonstration of presentations.





HP LaserJet Pro Printer

The printer is used in printing the training sessions materials, reports, and some of the dissemination







Climate Change,



University of Crete









Center of Excellence in Climate Change, Sustainable Agriculture and Food Security

Faculty of Agriculture, Suez Canal University, Ismailia, Egypt

The Center of Excellence at the nexus of Climate Change, Sustainable Agriculture and Food Security is being established at Faculty of Agriculture, Suez Canal University as the second output of the Cofounded EU Erasmus plus project "Developing a MSc Programme in Climate change, Sustainable Agriculture and Food Security". It is an inter-disciplinary, long-term teaching, research and capacity-building body. The project's idea has been raised to promote the SG2. The center is working in three dimensions; education to developing an inter-disciplinary curriculum for post-graduates and serve continuing education needs of professionals. Research to undertake high-impact, multi-disciplinary problem driven research for solutions to climate impacts and sustain agriculture, build long term scientific capacity and systems for study climate change and climate futures. Human recourses development to create a pool of multi-disciplinary researchers and serves the growing need for climate change impacts professionals. Consequently the establishment of CoE in CCSAFS is exclusive for Suez Canal University because of its privacy in terms of location and being the experience center for the Suez Canal and Sinai regions which are considered the main pillars of the development of modern Egypt.

Center's Mission

The Centre represents an innovative entity devotes to provide fundamental understanding and expertise to address and deal with emerging problems of climate change and its impacts on food security and agricultural sustainability from local to global scale.

Center's Vision

Gain and distribute knowledge and skills on how to achieve sustainable agriculture and food security that are exacerbate by changing climate by bringing together teaching, training, outreach and consultancy concentrating on Egyptian society.

Core values of the center/ key priorities in the center

Innovation: it will be a central in offering and disseminating state-of-the-art solutions and approaches to achieve sustainable agriculture and food security in the face of climate variables and environmental problems, through implementing multi-disciplinary research, education, training and consultancy.

Strategic planning: the center will be a corner stone in planning and developing strategies towards not only agricultural sustainability to secure food, but also in connecting SDG's with Egypt's vision for 2030.

Networking: the center will play a pivotal role to establish and reinforce collaborations with other excellence bodies, research institutions, universities, schools and NGO's at local, regional and global levels. In this context, establishing partnership agreements between SCU and such bodies will ensure the internationalization of the center to exchange ideas and opportunities.

** Strategic goals the Centre needs to be accomplished to meet its mission, vision and core values including:

Strategic Goals

Strategic Goal 1: Establish infrastructure facilities and approve CoE Management Board (CMB)

<u>Strategic Goal 2</u>: Develop a coherent multi-disciplinary problem-driven research group, manpower by strengthening training to build long-term scientific capacity and serve R&D needs for CCSAFS.

<u>Strategic Goal 3</u>: Integrate teaching and assessment methodologies based on ICT technologies and resources.

<u>Strategic Goal 4</u>: Establish partnership and mutual cooperation between SCU, and unique bodies and CoE's relevant with climate variables and effects.

The following Table presents specific action plans or activities to be implemented to address each strategic goal with their indicators in a time perspective according:

Key Strategic Goals and Activities	Short Term	Medium Term	Long Term
	Key Outcomes	Key Outcomes	Key Outcomes
What we plan to do (key strategic goals and activities , indicators)	What do we expect to achieve by 2020	What do we expect to achieve by 2025	What do we expect to achieve by 2030
Strategic Goal 1: Establish infrastructure facilities and approve CoE Management Board (CMB) Activities: 1.1. Allocate the appropriate space for establishing the Centre of Excellence equipped with the suitable facilities including the ICT lab comprising hardware and software. Indicator(s): completed preparations and installed equipment.	1.1. Space allocated for the establishment of CoE is identified. Infrastructure is settled down including: air conditions; electricity, painting and security windows are fixed. Two ICT labs have been established, one lab with 13 PC's, one data show and one interactive board. The second lab has 14 PC's and one data show. One managerial office has 1 laptop and MF unit (printer, copier and	1.1. Updating equipment and infrastructure, purchasing software ad research equipment 1.2. continuous coordination and management	1.1. Updating equipment and infrastructure, purchasing software ad research equipment 1.2. Continuous coordination and
 1.2. Establish management and steering committee/ Management Council for the centre Indicator(s): reports for continuous meetings and decisions are documented, implemented activities, updated strategic plans, risks, obstacles are discussed and documented. 1.3. Continuous managerial meetings for the CoE Board (academic and administrations) 	scanner). A third lab has been established and equipped with: 13 PC's, one Data show, one MF unit and one documentation camera. Both laboratories in the second floor are allocated for teaching MSc courses in CCSAFS. The lab in the third floor will be allocated for implementing other activities relate to the center.	1.2 & 1.3. Management Board active in monitoring, evaluating and revising the center, its strategic goals and activities; updated action plan.	management 1.2. & 1.3. Management Board active in monitoring, evaluating and revising strategic goals and activities; updated action plan

to introduce the center and its functions, its			
objectives and the services provided.			
indicators: uploaded on the faculty web-			
site and recorded minutes of meeting			

- 1.4. Develop and implement dissemination strategies in the field of CCSAFS.

 Indicators: dissemination plan is developed; dissemination documents and tools are available for others.
- 1.2. The CoE has been authorized by as excellence unit by Council of Faculty of Agriculture and SCU Council. Further, CoE Management Board (MB) has already identified and certified. The management Board including: technical and administrative formation.
- 1.3. Kick off meeting fundamentally has been organized to introduce the center to staff from faculties of SCU, stating the center's objectives, activities and duties. Further. continuous managerial meetings for MC are organized monthly-bimonthly. All managerial, technical and financial issues are discussed. Reports for meeting minutes are documented.
- 1.4. Dissemination tools such as brochures, info sessions, and exhibitions during conferences, SCU website followed and updated.

1.4 Continuous updating for dissemination tools and methodologies, publicize in international conferences, SCU website. 1.4 Continuous updating for dissemination tools and methodologies, publicize in international conferences, SCU website. **Strategic Goal 2:** Support training to build long-term scientific capacity and serve R&D needs for CCSAFS.

Activities

2.1.Prepare training needs, training materials

Indicators: Names and subjects of courses, prepared training materials

- 2.2.Organize training programmes in CCSAFS-related field for academic and non-academic staff.
 - **Indicators**: printed training materials, registration for the course, attendance sheets, certificate of attendance, feedbacks and assessment.
- 2.3.Invite speakers and experts in the field of CCSAFS either locally, regionally or internationally for lecturing and seminars about climate issues and its impacts.

Indicators: Name, titles, discipline and origin of speakers; number of participants, titles of lectures and seminars, attendance sheet, issued certificates.

- 2.1. Training needs, trainer's experiences and stakeholder categories have been identified based on prepared questionnaires. Training materials have been prepared.
- 2.2. Develop a coherent multidisciplinary problem-driven research groups and manpower. A number of training courses has been delivered by comprehensive team of researchers, experts and educators. They have been collaborated across disciplines to build the capacities of various stakeholders (academic and nonacademic) in related fields with climate change issues, (modeling, analysis and assessment; sustainable agriculture strategies, food security issues. It is expected to organize 10 training sessions during 2019/2020
- 2.3. A number of lectures addressing: climate issues, food security and Arab communities, SDG's and linking with society welfare, issues of sustainability

- 2.1. Updated training needs and materials based on emerging interests.
- 2.2. The center will be a unit for providing not only scientists but also, farmers with transformative technology that will allow them to sustainably manage and conserve their resources.
- 2.2.Build a corps of young scientists who understand the importance of working across disciplines to find innovative solutions to the growing challenges of climate variability and future agricultural production.

2.2.The centre expands its activities in supporting, guidance, and training to wider audiences to include staff from academic, research institutes and civil society organizations.

2.3.Internationalization the center through increasing number of foreign lecturers and audiences.

Strategic Goal 3: Integrate teaching and assessment methodologies based on ICT technologies.

Activities:

3.1. Upgrade teaching and assessment methodologies based on ICT technologies and resources.

Indicator(s): number of courses comprising ICT methods either belongs to the MSc in CCSAFS or others...

3.2.Organize workshops and training sessions for faculty staff on ICT integration into university curricula.

Indicators: attendance sheet, training evaluation, quality of training, diversity of trainees, course titles, ICT methods.

and connection with agriculture domains, etc. has been provided to interested staff from different disciplines within SCU and outside.

- 3.1. Different ICT tools have been teaching integrated assessment methods, into MSc courses in CCSAFS during pilot phase. Other courses from different disciplines/departments will be benefit also. CCSAFS staff at SCU and other EG partner institutions must collaborate on this issue.
- 3.2. About 15 training workshops been provided during 2019/2020 for SCU staff on integration of ICT and blended learning into taught courses.

- updated courses has been increased from other faculties at SCU or other universities.
- 3.1. CCSAFS curriculum has been updated and revised to cope with the new and emerging subjects of CCSAFS by project's team and MB to reduce the gap between education and labor market
- 3.2. Training on new ICT methods integration has been expanded for staff outside SCU.

- 3.1. Number of updated of 3.1. Number of updated of updated courses has been increased from other faculties at SCU or other universities.
 - 3.1. CCSAFS curriculum has been updated and revised to cope with the new and emerging subjects of CCSAFS by project's team and MB to reduce the gap between education and labor market
 - 3.2. Training on new ICT integration has been expanded for university staff outside SCU.

Strategic Goal 4: Establish partnership and mutual cooperation between SCU with unique bodies and CoE's relevant with climate variables and effects.

Activities

4.1 Establish internal and external cooperation with institutions and centres of excellence in the field of researches and education on CCSAFS and related fields.

> **Indicator(s):** number of signed implemented agreements. Internship protocols

4.1 A number of agreements have been established between SCU and organizations active in the field of CCSAFS. Example of such bodies is Arab Union for sustainable development and Environment (www.ausde.org). agreements have been included. agricultural companies, Ministry of Environment and enterprise. Involvement of NGO's and civil society organizations is paramount.

Connect with other centers in the SCU active in interdisciplinary education and research CCSAFS has been strengthened.

Internship protocols have been signed between management board of CCSAFS master programme and enterprises, organizations working in agricultural activities.

- 4.1. Number of agreements including international bodies and CoE's has been implemented to develop interdisciplinary research and education plans.
- 4.1. Interdisciplinary research and educational proposals has been developed by qualified team (CCSAFS project team and trained staff) and submitted to the funding agencies.
- 4.1. The center has become an international body has various agreements with international institutions/organizations/ and CoE's to develop interdisciplinary research and education plans.
- 4.1. Number of proposals and agreements has been expanded.

Number of students registered for MSc in CCSAFS has been increased.

Monitor implementation of the Plan and update the Plan as Needed

It is important to monitor and follow up the running of strategic goals, and their associated activities to ensure that the planned activities are achieved precisely and on time. Therefore, the center's management board with steering committee will be in charge of technical and administrative issues. They should control the quality of implemented activities and the quality of the outcomes/products. The committees must prepare reports to the higher management board of Faculty of Agriculture (Faculty Dean and Vice Dean for the Environment and community Services Affaires).

Steps to follow up the implementation of CoE:

- 1- Management Board (MB) will be established and approved by the Faculty of Agriculture and SCU councils. The board will be responsible for following up the implementation of technical and administrative issues, update and suggest new strategic goals to improve the center performance and roles. The Management Board format is:
 - Dean of Faculty of Agriculture
 - Vice Dean for the Environment and Community Services Affairs
 - Center's Manager
 - Three staff members from the Faculty of Agriculture (Associate Professors).
 - Financial officer
 - Secretary
- 2- MB will prepare biannual reports stating the progress of and planned activities, obstacles and risks to ensure the continuation of provided services and sustainability.
- 3- Internal and external stakeholders' participation must be completed to ensure their contributions in updating courses structure and joining alumni qualifications with market needs. That is must strengthen and sustain the Centre implementation.
- 4- Strengthen the scientific networks for research and education to address pressing issues of climate change and agriculture along with other related areas.

Establishment of ICT Laboratory

Lab Mission

Provide a variety of educational services in response to the increasing demand through the effective recruitment of modern technologies within the CoE for CCSAFS in accordance with local and international quality standards.

ICT Lab Objectives

- 1. Contribute to the traditional educational process to raise the level of student achievement.
- 2. Support continuous communication between community members and students studying the program.
- 3. Highlighting research mobility and presenting existing and completed research.
- 4. Provide the opportunity for increasing numbers of students to obtain education according to the approved standards.
- 5. Use the latest technology to enhance the learning process.
- 6. Raising the efficiency of teaching staff in e-learning and distance learning.

ICT Lab Philosophy

- 1. The Blended laboratory is designed according to the educational philosophy of the society.
- 2. The Blended lab is designed and developed in the light of theories such as structural theory, behavioral, cognitive or combining more than one theory.
- 3. The design of the Blended laboratory depends on the concept of the curriculum adopted by the master program (traditional helix technological the input based inputs, processes, outputs and feedback integrated and interactive in building the curriculum).
- 4. The Blended lab design depends on taking into account the technical bases in the design of the master program in order to achieve the efficiency and effectiveness of this program for the learner, especially if he is self-taught.

Roles to be played by the ICT Lab

- 1. Reduce learning expenses dramatically compared to e-learning alone.
- 2. Provide face-to-face communication, which increases the interaction between the student and the coach, students and each other, students and content.
- 3. Strengthening humanitarian aspects and social relations between learners and teachers.
- 4. Sufficient flexibility to meet all the individual needs and learning patterns of learners at different levels, ages and times.
- 5. Making use of technological progress in design, implementation and use.
- 6. Enrich human knowledge and raise the quality of the educational process and thus the quality of the educational product and the efficiency of teachers.
- 7. Encourages communication between different cultures to benefit from all that is new in science.

- 8. Many scientific subjects are very difficult to teach electronically in full, especially such as high skills and the use of learning mixture is one of the solutions proposed to solve such problems.
- 9. Moving from group learning to student-centered learning, in which students become active and interactive.
- 10. Integrates the systems of assessment formative and final for students and teachers.
- 11. Enriches learner's experience and learning outcomes, and improves formal and informal learning opportunities.
- 12. Provides flexibility in terms of implementation at the program level, strengthening current institutional strategic directions in learning and education, including opportunities for strengthening disciplines and internationalization of curricula.
- 13. Makes optimal use of physical and virtual resources.

Functions

- 1. Provide face-to-face communication, increasing interaction between student and trainer, students and each other, students and content.
- 2. Enhance the humanitarian aspects and social relations between learners and teachers.
- 3. flexible enough to meet all the individual needs and learning patterns of learners at different levels, ages and time- zones as the Master program will accept students from all over the world.
- 4. Enrich human knowledge and raise the quality of the educational process and thus the quality of the educational product and the efficiency of teachers.
- 5. Encourage communication between different cultures to benefit from all that is new in science.
- 6. Many of the scientific subjects contained in the Master's program are very difficult to teach electronically in full and in particular, such as practical skills and productivity and the use of learning mixture is one of the solutions proposed to solve such problems.
- 7. Moving from group learning to student-centered learning, in which the student becomes active and interactive.
- 8. Integrates the systems of assessment and formative and final for students and teachers.
- 9. Enriches the learner's experience and learning outcomes, and improves formal and informal learning opportunities.
- 10. Provides flexibility in terms of implementation at the program level, strengthening current institutional strategic directions in learning and education, including opportunities for strengthening disciplines and internationalization of curricula.

Identify Place and Needed Preparations for ICT lab

1- An official request letter was prepared by the SCU institutional Coordinator of the project (Prof. Manal Hefny) and handled to the Dean of Faculty of Agriculture in May, 2017. The letter included requests for: a place to establish the ICT laboratories, management office, specifications for the necessary preparations/equipment and necessary maintenance for the already established equipment and furniture as follow:

Equipment/ Furniture
6 Air Conditions
Computer Tables (8)
Computer Chairs (16)
Painting
Electrical repairs
Safety windows
Repairs carpentry
Managerial Office furniture
Internet connections

- 2- The Faculty Dean issued a managerial decision specifying two laboratories in the second floor and one laboratory in the third floor of the "Agronomy and Animal Production Departments Building", to establish the ICT laboratories. Each lab has an area of 18 m² (6 m * 3 m). A managerial office with an area of 2* 2 m².
- 3- Accordingly, another request letter was prepared by The Faculty Dean to the university president asking for purchasing the necessary equipment/furniture, providing required maintenance for the already existed equipment and furniture.
- 4- The University president signed the letter covering the required expenses from the university budget to establish the laboratories.
- 5- From June, 2017 workers and employees started the procedures for preparing the laboratories. Collecting price offers and organizing relevant committees to: collect suitable, price offers, technical investigation of the offers, contacting suppliers and purchases inventories.
- 6- From the university budget, the following has been purchased: six air conditions, 16 computer chairs, and eight computer tables. Paints, safety windows, and electrical works have been also completed. In addition to the already existed furniture.

Processes and Practices for the Purchased Equipment

The process of equipment purchasing for the establishment of CoE and Blended learning laboratories for teaching MSc courses in CCSAFS, followed the general tender that has been organized by the department of Purchases at Faculty of Agriculture and SCU.

1- The list of equipment specifications, number and items were identified by a committee including:

Prof. Manal Hefny (Prof. of Crop Breeding-SCU Coordinator for the CCSAFS project)

Dr. Nehal Lotfy (Assistant lecturer, Fac. of Education-Project member)

Mr. Basem Abdelghany (ICT Master Student, Teaching Assistant, Fac. of Education).

- 2- The list was given to the employee at the purchasing department in Fac. of Agriculture to prepare the tender specifications including the rules requested by the companies to participate in the tender.
- 3- The tender specifications attached with letters signed by the Dean of Faculty of Agriculture which approve his acceptance to purchase the specified equipment and the tender content, were sent to the purchasing department at university to continue other procedures.
- 4- A committee from purchasing section was formed and prepared necessary documents to accomplish the tender procedures and equipment purchasing.
- 5- The committee has prepared tender specifications, official letters to be presented to the university president, prepared list of contacted suppliers
- 6- Invitation for tender was sent to 14 companies specialists in educational equipment. The time span for tender announcement was two weeks.
- 7- Then, companies were invited to bring their technical and financial offers and come to the office for purchasing at SCU on 5/3/2018 at 10.0 am for technical offers investigation.
- 8- All necessary and relevant documents/letters for managing the tender has been collected (committees meetings, correspondence letters, technical, financial, order forms and equipment inventory) in the attached folder.

Type of Equipment Purchased (1st purchases)

PC's (27)

Laptop (1)

Interactive Board (1)

White Board (1)

Data Show (1)

MFP (Laser Multifunction Printer with Wi-Fi) (1)

Where has the equipment been installed?

The purchased equipment has been installed in <u>two</u> laboratories within the Center of Excellence. One laboratory has 13 PC's, Data Show and interactive board. The second has 14 PC's, one laptop.

The second MF unit has been installed in the managerial office. Both laboratories are located in the second floor of the Agronomy and Animal Production Departments Building.

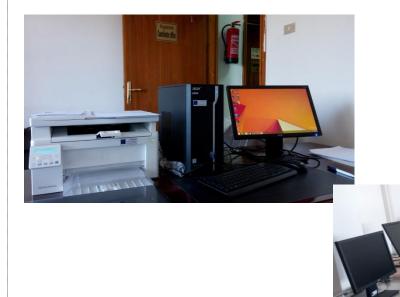
Establishment of the third ICT laboratory

The third ICT lab (5 m * 6 m) was established in the third floor, the following equipment were purchased and installed according to the university regulations: 13 PC's (Dell), one interactive data show (Epson), one white board, one presenter, one wireless microphone, one documentation camera, one laptop and one multifunction unit (scanner, photocopier, printer).

The establishment of three laboratories will give high flexibility to perform all activities related with CoE and MSc programme in CCSAFS at the same time.

Summary of Purchases

- 40 PC's
- 3 Laptops
- 3 Data Show (1 EPSON EB-536Wi, 1 Infocus, 1 EPSON 1795 F)
- 1 Interactive IBoard
- 1 White board
- 1 Documentation Camera (Elmo Document Camera L-12 iD)
- 3 MFP (Photocopier, Scanner, Printer)
- 2 Presenter
- 1 wireless microphone













Equipment type	Function				
<u>40</u> PC's	Organizing Training workshop				
	Teaching CCSAFS master courses				
	Pilot-assessment of master courses				
	Review and monitoring courses updating				
	Seminars				
Three Projectors	* Training workshops				
	* Teaching CCSAFS master courses				
One Smart IBoard	*Seminars				
<u>Three</u> Multi-	* Are used for printing teaching materials for				
function units	CCSAFS courses.				
	* Printing training materials and questionnaires for				
	CCSAFS master courses and training workshops.				
	* Photocopy and scan project's supporting				
ELMO	* Support screen recording video and audio				
ELMO Documentation	* Support screen recording, video and audio recording, can make electronic courseware easily.				
Camera	* Scan books, notes, homework, test paper,				
Camera	handwritten teaching plan, and experimental device.				
	* Capture image smoothly and display full-screen				
	image, the teacher can be more vivid to display				
	various experimental operation.				
Three labtop	* Are used for teaching CCSAFS master courses,				
	8				
	* Perform Pilot assessment of CCSAFS courses,				
	* Prepare project's documents and reports				
Two Presenters	Are used for teaching lectures, seminars. workshops				
Wireless	Is used for Seminars and CCSAFS master lectures				
Microphone					









FOR CCSAFS IN Jerash University- JORDAN

Sep 2018



Centers of Excellence for CCSAFS Jerash University- JORDAN

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Project Acronym: CCSAFS

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Duration: **3 years** Budget: **€ 919 842**









PRODUCED BY THE CLIMATE CHANGE, SUSTAINABLE AGRICULTURE AND FOOD SECURITY (CCSAFS) PROJECT:

Jerash University CCSAFS Team

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EXECUTIVE SUMMARY

WP5 has an objective to set-up the appropriate human, institutional and technical infrastructure for the successful implementation of the CCSFS program. The infrastructure is perceived by three interconnected domains: 1) human; 2) institutional and 3) technical. With respect to the human infrastructure, the activities developed in the previous three WPs will provide the required teaching staff readiness and pedagogical environment. However, the readiness of teaching staff should be accompanied by certain institutional support.

According to D5.1, a Centre of Excellence (CoE) focusing CCSAFS will be established in each partner institution. A report on the processes and practices for the development and institutionalisation of the Centres of Excellence should be delivered. Such CoEs will be instrumental not only in promoting the CCSAFS program but also supporting the blended learning environment. To play their role, these Centres will be equipped with a Blended Learning laboratory (e.g., computers, peripherals, videoconferencing, software) to support students online. A Centre of Excellence (CoE) focussing on CCSAFS has been established in each partner institution. This process has been facilitated by a template which has been thoroughly discussed and approved by partners in both countries. Accordingly, each partner university adjusts its own policy on the basis of the CCSAFS CoE model developed that includes: vision, mission and core value statements, which represent the key priorities in the CoE which must reach in alignment with the mission, vision and core values. Strategic goals are general statements about what the CoE needs to accomplish to meet its mission, vision and core values. Specific action plans or activities formulated to implement each strategic goal. These are the specific activities or objectives addressing each strategic goal, along with verifiable indicators and SDGs. There are also key







outcomes in a time perspective and placement of the strategic goals with their corresponding specific activities and indicators in a time perspective. The CCSAFS CoEs will be instrumental not only in promoting the CCSAFS program but also supporting the blended learning laboratories to support students in combining face-to-face and online learning.

The following process will lead to the construction and the foundation of CCASF center of Excellence:

- 1) The center will belong to the deanship of higher education in Jerash University and the Dean of higher education will be responsible for initiating the process that will lead to the construction of the Center.
- 2) An appointed committee of 5 members will prepare the needed requirements for this center.
- 3) A director or a manager of this center must be appointed by the preparatory committee with the approval of the dean of higher education.
- 4) Finally, the Center must become operational in some institutional setting after setting the budgetary requirements for this project..

1. BACKGROUND:

Jerash University is establishing a master programme in Climate Change, Sustainable Agriculture and Food Security (CCSAFS), with the cooperation of other Jordanian universities (University of Jordan UJ, Jordan University of Science and Technology JUST, Mutah University MUTH), Jordanian Universities (Aswan University, Al Azhar University ALZU, Hiliopolis University for Sustainable Development HUSD, Suez Canal University SCU and SEKEM Development Foundation SDF) and European Universities (University of Crete UOC, the University of Padua UNIP, Frederick University FU and the Regional Centre of Expertise in Education for Sustainable Development RCEGR. The Centre of Excellence is the platform where Jerash University shares this knowledge and experience with its key accounts and other interested parties such as architects, and









contractors.

A CCSAFS Center of Excellence is the right achievement for Jerash University

- It strikes an appropriate balance between change and continuity, aiming to empower existing stakeholders working within existing mechanisms and structures to be as effective as possible in formulating and achieving climate change, sustainable agriculture and food security goals.
- It has proven itself as an effective model within Jordan, the region, and internationally to achieve the 17 SDGS put by the united Nation.
- It can adapt effectively to the changing needs and opportunities of the local Jordanian needs and the surrounding nations needs.

The Center of Excellence can succeed by meeting high-priority immediate needs

- Provide technical training in support of preparing high-quality proposals for the Green Climate Fund and other climate-related investment windows.
- Provide digests of relevant science targeted at the specific needs and capabilities of Jordanian stakeholders.
- Provide training for critical assessment methodologies such as loss-and-damage estimation, climate model downscaling, and integrated assessment scenarios.
- Create a safe, neutral space for stakeholders to develop pragmatic solutions to problems that stand in the way of effective collaboration, such as information sharing.
- The primary focus should be on working within Jordan, but the Center should also devote significant effort at the international and regional level, especially within the Mediterranean and the Middle East.

2. RATIONALE FOR A CCSAFS CENTER OF EXCELLENCE

It's the time for bold leadership in Jordan regarding CCSAFS

- The MSc CCSAFS in Jordan made the initiation of a CoE to be complementary subject for this programme in order to be connected to other programs and the other world interested in the subject.
- The Paris Climate Agreement provides a framework for urgent action across the entire mitigation and adaptation agendas within an architecture that calls for all countries to do their part.
- Steps taken within the coming couple of years will determine the well-being of Jordanians for generations to come.
- The international community has mobilized mechanisms to support ambitious leadership with policy guidance, technical support, capital investment, and donor contributions.

Effective leadership requires institutional innovation

- Responding effectively to climate change challenges requires coordination across government agencies; partnerships across government, private sector, and civil society; and bridges between science and policy communities.
- No country has governance institutions optimized for such tasks. Innovation is required.

A CCSAFS CoE is the right project for Jordan

- It strikes an appropriate balance between change and continuity, aiming to empower existing stakeholders working within existing mechanisms and structures to be as effective as possible in formulating and achieving climaterelated goals.
- It has proven itself as an effective model within Jordan, the region, and internationally.
- It can adapt effectively to changing needs and opportunities.

The CCSAFS CoE can succeed by meeting high-priority immediate needs for









the MSc program

- Provide technical training in support of preparing high-quality proposals for the Green Climate Fund and other climate-related investment windows.
- Provide digests of relevant science targeted at the specific needs and capabilities of Jordanian stakeholders.
- Provide training for critical assessment methodologies such as loss-anddamage estimation, climate model downscaling, and integrated assessment scenarios.
- Create a safe, neutral space for stakeholders to develop pragmatic solutions to problems that stand in the way of effective collaboration, such as information sharing.
- The primary focus should be on working within Jordan, but the Center should also devote significant effort at the international and regional level, especially within the Mediterranean and the Middle East.

3. STRATEGIC FRAMEWORK

The construction of the CCSAFS CoE will reflect the views of the stakeholders, leadership teams of the CoE and other partners in initiating the CCSAFS MSc programme at Jerash University.

MISSION

Building human capacity necessary to address the unique climate change adaptation needs and sustainable policy of vulnerable communities through teaching, action-oriented research, development of innovative technologies and community participation. This will result in the mitigation of the expected worse condition and to sustain agriculture and food security.

VISION

To be the center of choice for innovative climate change, Sustainable Agriculture







and Food Secutity (CCSAFS). This will be accompanied with sustainable policy education, research and training as well as a sustainable center committed to excellence at the service of its students, scholars and the wider community in the area of climate change and sustainable policy.

VALUES

- Commitment to:
- Sustainability and to acting in an environmentally friendly way
- Innovation and excellence
- Doing good for the whole
- Climate-challenge driven
- **Integrity**; Honesty, trust and openness to our stakeholders through commitment to delivering results and taking responsibility for our actions
- Equity and Fairness; Embrace diversity, gender equity, impartiality and nondiscrimination in all our activities
- **Professionalism**; At all times we act with due care and process, providing quality service and interventions, being reliable and responsible as we strive for excellence while taking pride in all that we do and say
- Collaboration and team spirit; Internal and external collaboration by supporting one another, respecting one another's view and making our work environment fun and enjoyable. We strive to ensure our teams have areas that are celebrated by all
- **Creativity and Innovativeness**; We respect individuality, knowledge, skills, ideas and capabilities that each individual brings to the team towards developing

4- Our work

The Center of Excellence's core values include an organizational culture that is flexible and adaptable to changing political and social landscapes, emphasizes continuous improvement and places high importance on transparency, communication and sharing of knowledge.









MODEL

The CoE is located institutionally outside of any single government ministry or agency.

The CoE is organized around service-provision and bridge-building. Its mission, staffing, and operations are all designed to deliver the most useful services to government and private sector actors in a position to design and implement effective climate change responses, but who are limited by various constraints. Its goal is not to produce or manage climate change responses, but to help others do so. In order to succeed at this task, the Center needs to have a major focus on networking and bridge-building.









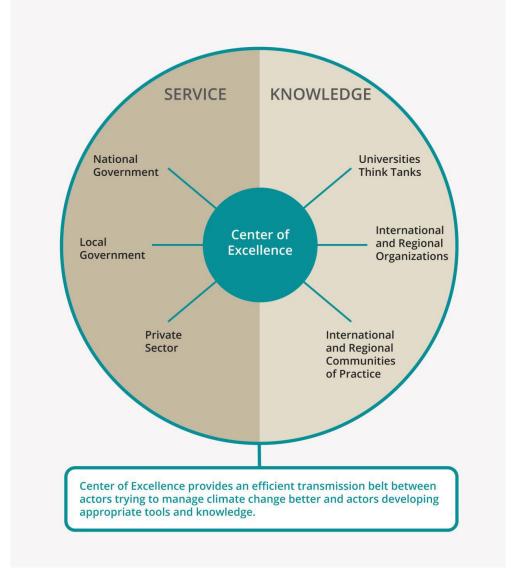


Figure 1: Diagram: a model for the center of excellence

The CoE helps actors in government and the private sector become more effective at responding to climate change. It does so by providing valuable services and by improving links between scientists, communities of practice and decision-makers.

5.DATA AND INFORMATION

There is a need for better circulation and sharing of data and information between the various technical, governmental and academic institutions within







Jordan. Organizations such as the Ministry of Environment (MOENV), the Ministry of Agriculture (MOA), the Department of Statistics (DOS), the Royal Society for the Conservation of Nature the (RSCN) Royal Scientific Society (RSS) and the Royal Jordanian Geographic Center (RJGC) collect relevant data, however various constraints related to accessing this data are evident throughout Jordan.

This would call for a national data sharing policy in Jordan to facilitate the sharing and use of large amounts of data generated through public funds and residing within government entities. Developing a data sharing declaration similar to the one by the UN is key to overcoming data sharing challenges:

Principle 10 of the United Nations Declaration on Environment and Development (Rio de janeiro, June 1992), stated

".....each individual shall have appropriate access to information concerning the environment that is held by public authorities and the opportunity to participate in the decision making process. States shall facilitate and encourage public awareness and participation by making information widely available."

There are several specific things the Center can do to improve access to and use of relevant data.

- It can create inventories, catalogs and documentation of relevant data located in Jordanian government agencies.
- Where policies mandate or allow for sharing of data across agencies, the Center can provide training and technical guidance on options for sharing data in practice.
- It can identify high-priority data that could be useful in made accessible, and recommend government action to permit such data to be shared.
- It can provide high-value integrated data products, especially products linking climate information with economic, health, and social outcomes.
- It can develop tools and provide training in data discovery, data integration, and data analysis.



Experience in other countries has shown that the above activities are far more effective if they are preceded by a Presidential declaration on government data that at a minimum states a firm and clear commitment to sharing data across government agencies. Such a declaration can be followed up with more specific regulations and procedures, as needed, but having a strong declaration early on is valuable.

6. ACTIVITIES AND TIMEFRAME

The creation of the CoE is planned in three phases with the expected timeframe for completion of 24 months for all of Phase I, II and III as shown in Table (1):

1. Phase I: Establish the centre as a core of Jerash University (3-4 month duration).

The objective of Phase I is to share and refine the strategic framework and establish the initial set-up of the center with the objective of starting small and progressively growing.

2. Phase II - Develop the curricula and syllabi in line with the centre's values – (3-month duration)

The objective of Phase II is to initiate the core values of the center according to the proposed syllabi, institutionalize processes and execute on quick win projects.

3. Phase III - Connect with the other centers in the university aimed at interdisciplinary studies and research – (12-month duration)

The objective of Phase III is to execute the functions of the CoE, become fully functional and operate at scale.



Table (1): The Framework of CoE process construction at Jerash University.

Key Strategic Goals	Activities	Short-Term Key Outcomes	Mid-Term Key Outcomes	Long-Term Key Outcomes
What we plan to do	How we plan to do it	2018 Expected Outcomes	2020 Expected Outcomes	2025 Expected Outcomes
Phase I: Establish the centre as a core of Jerash University	P 1.1: Communicate with the deans of the faculties for establishing courses and a curriculum for the center P 1.2: Agree upon a single center in the university for the interdisciplinary studies	Have full cooperation from the different faculties in the process Have a location of the center approved by the president of the university	Have the center established with full-time staff dedicated to operating and coordinating activities on a university-wide level	The center should be in a central position of the university with council comprised of faculty members from each of the university's faculties
Phase II: Develop the curricula and syllabi in line with the center's values	P 2.1: Develop the outlines for the curricula P 2.2: Choose a method and template for the establishment of the courses and syllabi P 2.3: Develop the syllabi and modules in-line with the program	Have a program fully developed by the center addressing CCSAFS	Have a process established for the continuous revision and revisiting reoriented courses to ensure that all meet minimum standards	Developing a Masters degree in CCSAFS
Phase III: Connect with the other centers in the university aimed at inter-disciplinary studies and research	P 3.1: Mapp university centers for inter-disciplinary studies P 3.2: Integrate the centers into a single cluster A3.3: Develop a plan for interdisciplinary research and education addressing CCSAFS	Have the plan fully established for CCSAFS	Have several publications and educational programs on CCSAFS	The interdisciplinary approach to CCSAFS institutionalized









7. DESCRIPTION OF FUNCTIONS AND SERVICES

The main functions and services of the CoE are outlined below:

A. Bridging Science and Practice

- Help stakeholders (students, teachers and relevant people) understand and use relevant science.
- Help articulate priority research needs to science communities.
- Publicize and encourage effective activities within Jordan that bridge science and practice.

B. Advisory Services to the Government al Agencies and ministries

- Technical guidance on how to utilize relevant climate science and climate data in developing policies to sustain agriculture and improve food security.
- Improving the technical quality of interactions with international donors and science centers.
- Training on assessment methodologies relevant to climate mitigation and adaptation.
- Provision of focused briefs and alerts on science and policy developments relevant to Jordanian officials and agencies.

C. Promotion of effective coordination of climate change relevant activities across Jordanian Society

- Play a leading role to help identify priority needs and opportunities for enhanced coordination; be a safe and trusted place to discuss such needs.
- Suggest specific solutions to coordination challenges grounded in emerging best practices
- Develop an active network of governmental officials and agencies at all levels relevant to climate change action.









D. Education / Training

- Capacity building of experts/professionals or practitioners to address climate change issues in planning, design and management of projects.
- Coaching and mentoring and trainings to facilitate the transfer of knowledge and technology related to managing risk and reducing vulnerabilities to climate change.
- Provide a venue and network to accommodate ongoing education and training needs

E. Communications and Outreach

- Convene workshops involving international organizations and donors, local governments, civil society, and private sector.
- Become an effective venue for identifying practical solutions to common challenges related to climate mitigation and adaptation
- Produce and share information across stakeholders (e.g., annual reports, quarterly reports, publications, policy briefs, working papers, websites, social media)
- Build community of practice and network
- Provide a mechanism for organizing personnel exchanges that help meet critical climate needs (e.g. visiting scholar programs)
- Increase the understanding of the risks of climate change and possible impacts of climate change
- Share success stories of effective coordination. Promotion of effective multistakeholder coordination.

8. OPERATING MODALITIES

To succeed the CoE must adopt operating modalities that reinforce its commitment to service, and its commitment to excellence.









To reinforce its commitment to service, it could adopt two primary service modalities:

- Provision of public goods that enhance the effectiveness of the entire climate change policy community within Jordan, for example such possible services as updates on relevant science; training on methodologies for use in risk assessment and program design; information and data portals; convening of seminars and workshops; operation of a virtual "climate change help desk" through which stakeholders can receive technical guidance. To help build good will it would be useful if the Center selected one such public good for early development.
- Provision of targeted services to select stakeholders, for example such possible services as detailed training on specific technical skills; technical assistance on project proposals for venues such as the Green Climate Fund or World Bank; assistance on designing projects, programs, or regulations. To be fair and to be effective, such targeted service provision should be based on a clear strategic plan and should be designed to provide very specific services on a rapid time frame.
 - To reinforce its commitment to excellence, it could adopt two primary quality modalities:
- Internally, a commitment to learning and evaluation. There should be a set of capabilities and mechanisms through which the Center continually measures the impact of its actions and learns from its experiences. These capabilities should be used to test alternatives approaches to service delivery, to ascertain the effects of the Center's work, and to achieve continual improvement.
- Externally, engagement with regional and international climate change networks to
 ensure that the Center remains fully abreast of emerging science and practice, and
 to ensure that the Center becomes an integral part of the global community of
 practice dedicated to linking climate knowledge to action.







The Center of Excellence can succeed by meeting high-priority immediate needs:

- Provide technical training in support of preparing high-quality proposals for the
 Green Climate Fund and other climate-related investment windows.
- Provide digests of relevant science targeted at the specific needs and capabilities of Jordanian stakeholders.
- Provide training for critical assessment methodologies such as loss-and-damage estimation, climate model downscaling, and integrated assessment scenarios.
- Create a safe, neutral space for stakeholders to develop pragmatic solutions to problems that stand in the way of effective collaboration, such as information sharing.

9. CONCLUSION

Several factors were considered when developing the concept and design of the CoE, such as the input obtained from stakeholders at the workshops in Jordan, the lessons learned from relevant international and national experiences and the high-priority needs within Jordan. The next step is to share this concept and design document with key players within Jordan and to plan a targeted meeting in Jerash to obtain feedback and refine the details.









CCSAFS Project:

Developing an Interdisciplinary MSc Programme in Climate Change, Sustainable Agriculture and Food Security

Project Number: 573881-EPP-1-2016-1-EL-EPPKA2-CBHE-JP

Report for Center of Excellence & ICT labs at The University of Jordan

October, 2019

Prepared by:

Prof. Ahmed Al-Salaymeh

Eng. Leena Marashdeh

Eng. Tahani Adi









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Executive Summary

The objective of the present document is to overview the established Center of Excellence & ICT labs at the university of Jordan (UJ); its location objectives, resources, activities, achievements, sustainability strategies, communication tools, and official documents for its establishment.

The University of Jordan role in the project is mainly to lead WP2: Situation Analysis & Strengthening Stakeholders' Inputs, that dealing with the stakeholders' involvement in the project, It will thus provide close assistance together with NGOs and other stakeholders to carry out successfully the activities for mapping CCSAFS student competences. Also; play a key role in ensuring that the guidelines for strengthening stakeholders' inputs are taken into consideration in the CCSAFS curriculum development (WP4). UOJ will help in hosting national and the regional workshops (WP3) in Jordan in cooperation with other partners. It will also participate in the internal assessment of the CCSAFS courses through peer reviewing. In addition; It will also assist in the selection of the 1st cohort of students for the MSc. programme in CCCSAFS (D5.4). Moreover; UJ will also provide support to other Jordanian universities at the validation and implementation stage (WP7) as well as for the dissemination of the project outcomes (WP8).

While the master program of CCSAFS will be implmented at Jerash University, the university of Jordan will be resbonsible to develop, and assess selected courses within the program and cooperate in piloting these courses at Jerash University and also piolting selected courses within the existing curriculas at the University of Jordan.

The establishment of the Center of Excellence & ICT labs comes under WP5: Setting-up the CCSAFS Infrastructure & LMS Platform, which aims to set-up the appropriate human, institutional and technical infrastructure for the successful implementation of the CCSAFS program/Courses.

The main aim of establishing the Centers of Excellence for CCSAFS is to promote and sustain the CCSAFS program/ courses implementation and support the blended learning environment in the partner universities. To play their role, these Centers will be equipped with a Blended Learning tools (e.g., computers, peripherals, videoconferencing, software) to support the enrollement of the students in the online courses that will offered at e-learning Learning Management System (LMS) of the project. A website providing information about the programme will be created, and will provide a direct link to the E-learning platform based on Moodle and Mahara. The combination of these two will support the development of an online community of practice. The participating staff in the









CCSAFS programme will be equipped with the necessary skills for using these technologies through the continuous online capacity building workshop (WP3). As the CCSAFS will be piloted at the spring semester of 2018-19 academic year, a call for applications will open, selecting the first cohort of students based on defined criteria. It is planned to select about 40 students.

Purpose of the Center of Excellence & ICT labs at UJ

The main purpose of establishing the CCSAFS center at UJ is to support and sustain the aims and outcomes of the interdisciplinary CCSAFS project that were developed within the project and promote the use of ICT tools within the programe/courses by teaching staff and students.

Specific objectives of the center

The specific objectives of the center are as follow:

- 1. Create new education resources based on ICT technologies related to CCSAFS.
- 2. Support and promote the implementation of the interdisciplinary CCSAFS MSc programme/courses that were developed within the project
- 3. Reinforces the institutionalization of integrating Food Security, Sustainable Agriculture and Climate Change into curricula.
- 4. Provide equipped ICT labs for teaching the electronic/MOOCs courses of CCSAFS program
- 5. Provide equipped ICT labs that enable students to use the needed software that are needed within the CCSAFS courses
- 6. Disseminate the produced e-books for the guidelines and training materials through various databases.
- 7. support the development of an online community of practice
- 8. Improve the capacities of the teaching staff in using blended learning tools
- 9. Promote the student performances through introducing the active learning concept, providing an educational environment based on humanity and creativity, without spatial and temporal restrictions and developing learning strategies founded on modern and new electronic technologies to compete in an international frame.
- 10. Provide advanced training and multidisciplinary education finding the human, technological and financial resources for students, researchers, and society involved in CCSAFS.
- 11. Provide consultancy for auditing courses and training materials for the courses and programmes of CCSAFS.
- 12. Establish continuous cooperation relationships with other institutions and centers of excellence in the field of CCSAFS, to exchange students and staff.









The approach for Center of Excellency

The center will achieve its objectives through the following approach:

- Allocate the appropriate space for establish the Centre of Excellence equipped with the suitable facilities including the ICT lab comprising hardware and software.
- Develop the resources and capacities available at center of excellence.
- ➤ Hold periodic meetings for all persons involved in the CCSAFS project and further key administrators, to introduce the center and its functions.
- Produce specific and excellent training programme through expertise in CCSAFS field.
- Carry out a workshop for Jordanian faculty members to discuss non-traditional education and the use of the ICT lab as an effective tool.
- > Train staff members on integrating ICT tools in their teaching to students through workshops in partner universities.
- Integrate blended learning in educational process.
- Establish internal and external cooperation with institutions and centers of excellence in the field of researches on CCSAFS and other emerging fields,
- > Organize conferences and introduce guest speakers on issues relevant with various climate effects.
- Write and submit a proposal for the endorsement of the center.
- An annual meeting with external and internal stakeholders will be held to audit to program/courses.
- Annual surveys by external evaluators to be performed.









Center vision

To be recognized as a center of excellence that develops and provides educational resources, training, and solutions for the current and emerging sustainable agriculture, food security and climate change challenges at local and regional levels.

The Core values represent in the Centre

- Innovation: To foster and disseminate novel solutions and approaches to CCSAFS problems by means of multi-disciplinary research, education, training and consultancy.
- > Strategic planning: To forecast and plan milestones and goals to develop suitable strategies to drive the Center towards the goals integrating core values.
- Networking: To create and strengthen collaboration within the Centre staff and with research institutions, academics, civil society, NGOs, policy makers at local, regional, national and international level. To create partnerships based on open exchange of ideas and opportunities.

The Organizational Structure of the center

The established center will be part of the School of Agriculture at The University of Jordan, where it will serve teaching of graduate courses related to CCSAFS program.

A steering committee consisting of the following staff members will be responsible in achieving the center goals:

- 1- Dean of Agriculture School
- 2- The Chairman of Land Water and Environment Department
- 3- Prof. Ahmed Al-Salaymeh, Faculty member at Engineering school
- 4- Prof. Jawad Al-Bakri, Faculty member at Agriculture school
- 5- Prof. Abbas Al-Omari, Researcher at Water, Energy and Environment Center (WEEC)









Center Resources

The center resources are as follow:

Financial resources

• Small budget allocated from UJ budget yearly – basically to handle

Human resources

- One Lab Supervisor
- One Research Assistant
- UJ community: Faculty members, researchers, graduate students and Students
- Volunteers

Infrastructure

- Three blended learning labs at (Agriculture school, Engineering School, and Nursing school)
- Existing Research labs inside The university of Jordan









Equipment of the Blended Learning Labs

Three blended learning laboratories were established in different Schools (Agriculture school, Engineering School, and Nursing school) each lab has different capacity and serve different levels of students. Every lab has been equipped with the needed hardware's and software.

The established labs in UJ serve around 65 students daily which make the average number of students using the Labs monthly more than 1000 student

The Equipment for each lab are as follow:

Equipment of Agriculture School lab

Item	Quantity
Personal Computers (Desktop)	18
2. Photocopier Machine	-
3. Garmin GPS	1
4. Navigate System (Garmin Drive)	1

Equipment of Nursing School lab

Item	Quantity
Personal Computers (Desktop)	12
2. Photocopier Machine	-
3. Garmin GPS	-
4. Navigate System (Garmin Drive)	-

Equipment of Engineering School lab

Item	Quantity
Personal Computers (Desktop)	24 from previous project (CLIMASP)
2. Photocopier Machine	1
3. Garmin GPS	1
4. Navigate System (Garmin Drive)	1









1- CCSAFS Lab in the Agriculture School















2- CCSAFs Lab in Nursing School













3- CCSAFS Lab in the Engineering School















The official letter for Establishing the Center at UJ



THE UNIVERSITY OF JORDAN

كة ب الرئيسس Office of the President Ref: 1/2018/ 2 3 8 8 Date: 26 7/2018

Letter of Consent

Project title: Developing a MSc in Climate Change, Sustainable Agriculture and Food Security

To:

- 1) Mr. Franco BurgioEACEA Officer
- 2) Prof. VassiliosMakrakis Project Coordinator

The University of Jordan as a partner University in the CCSAFS CBHE Erasmus plus project [573881-EPP-1-2016-1-EL-EPPKA2-CBHE-JP] is committed to take all measures in order to institutionalize the Center of Excellence in CCSAFS in its premises.

The CCSAFS Center of Excellence will play a pivotal role in the implementation and sustainability of the MSc in CCSAFS and at the same time provide assistance to other university entities to promote CCSAFS research and connect with other similar initiatives locally and globally.

In particular, my institution by October 2018, which marks the pilot and implementation phase of the CCSAFS project, will provide a detailed plan for the institutionalization of the CCSAFS Center of Excellence according to the CoEmodel produced and the additional guidelines provided by the Project Coordinator.

Professor Dr. Imad K. Salah. Acting President, University of Jordan.









CCSAFS Climate Change, Sustainable Again thure & Food Security





Centers of Excellence for CCSAFS at Mutah University

Prof Omer Maaitah Mutah University





Progress Against Deliverables & Milestones

WP5: Task 5.1.

- Establishing Centers of Excellence for CCSAFS at Mutah University Infrastructure for this center is perceived by three interconnected domains:
 - Human (teaching staff readiness and pedagogical environment),
 - Institutional and
 - Technical





- MU center
- 1) The Centers of Excellence established at Mutah University in 23-7-2018
- 2) Centers of Excellence at Mutah University equipped by
- 30 desktop computers which provided by the project
- Data show and smart board provided by Mutah University
- Tables and chair
- All electrical connections
- Proper room
- The center located at Scientific Deanship (first floor-New administrative building)





- 3)The average number of students using the Labs daily is of 40. The average number of students using the Labs monthly is of 750-800.
- 4) The student using the lab to search about anything (multi use). Most of the presentation is about the climate change
- 5) Some lecture will be provided
- 6) Eng. Emad Halsa is responsible for the lab
- 7) Capacity building (Omer Maaitah, Dr. Mohamed Majalee, Dr Mahsneh, Dr Saif Nawayseh, Atef Mahadeen, Adel abdel Ghanee and Dabour and Sameeh Sarayerah)
- 8) There is 8 presentation about the climate change and other s





Climate Change,
Sustainable Agriculture
& Food Security









Climate Change,
Sustainable Agriculture
& Food Security







CCSAFs of Excellence Center Office Project co-funded by the European Union / Erasmus+ Programme





Climate Change,

& Food Security



MU'TAH UNIVERSITY

President Office



جامعة مؤتة

مكتب الرئيس

Ref.: 106.50.3591 Date: 23.7.2018

الرقـم : التاريخ : الموافق :

Dear Gant holder of CCSAFS

It is my pleasure to inform you that Mutah University has established an office for CCSAFS of Excellence as a requirement of the Erasmus plus project entitled "Developing an Interdisciplinary MSc Programme in Climate Change Sustainable Agriculture and Food Security/ CCSAFS".

Sincerely yours,

Prof. Thafer Assaraira President of Mutah University







of Excellence Center Office
Project co-funded
by the European Union
Erasmus + Programme





Climate Change,
Sustainable Agriculture
& Food Security





Managerial Meeting

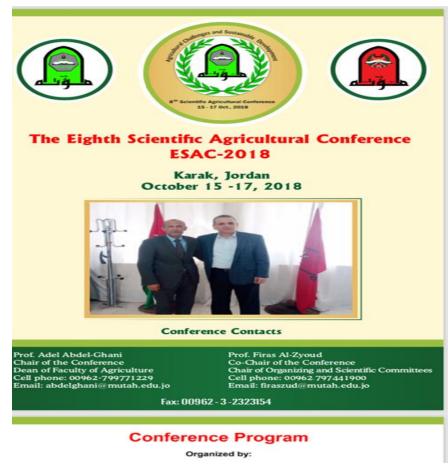






• Dissemination in Mutah radio FM, Facebook, lectures and

conferences







About the project

- Climate projections for the Middle East and North African (MENA) region indicate warmer and drier
- conditions with increased frequency of natural disasters. Agriculture is one of the most vulnerable
- economic sectors to climate change, mainly due to the limited availability of water and land
- resources in the two target MENA countries (Egypt and Jordan). There is future risk of higher skills
- shortages in 'niche' areas related to the impact of climate change to agricultural sectors and food
- production. In particular, there is need for highly specialised scientists in the field of agriculture and
- food security who want to combine scientific and social or policy skills to better understand and
- make significant contributions to climate adaptation and mitigation in agriculture and food security.
- It is critical to integrate agricultural science with related subjects that impact on sustainability and
- food security such as geo-politics, legislation and regulation, consumer pressures, economics,
- agro-ecology and environmental stewardship, especially at the post-graduate level.





- An inter/multidisciplinary MSc programme in Climate Change, Agricultural Development and Food
- Security (CCSAFS) is urgently needed. CCSAFS is driven by the Bologna process and a multistakeholder
- approach advanced through a participatory or negotiated curriculum, innovative
- methodologies such as the 10Cs transversal skills in a problem-based learning environment
- enabled by ICTs, blended learning, SDGs and agro-food entrepreneurship in teaching, learning
- and outreach activities. Graduates will be equipped with interdisciplinary knowledge and agrofood
- entrepreneurship and ethics to promote sustainable agricultural production, food security and
- climate change adaptation. CCSAFS will help to overcome the threats to agriculture and food
- security in a changing climate, exploring new ways of helping vulnerable rural communities to
- compact hunger and adjust to local, regional and global changes in climate.

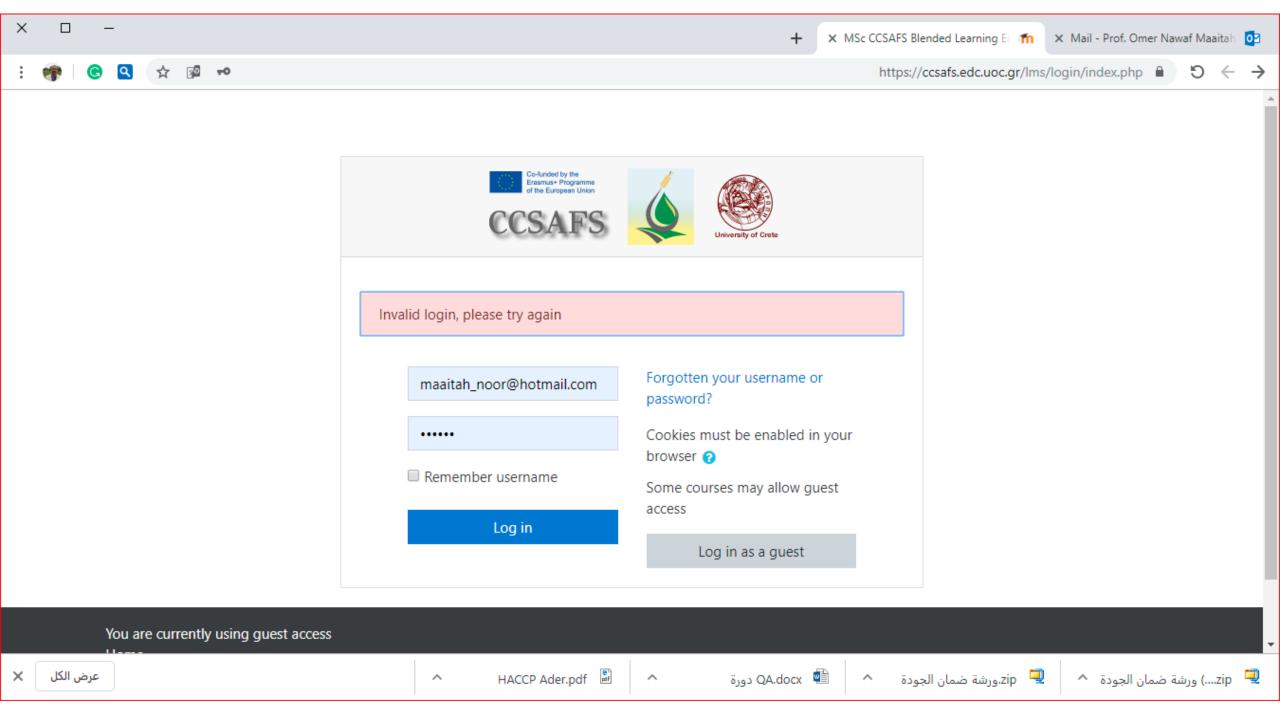


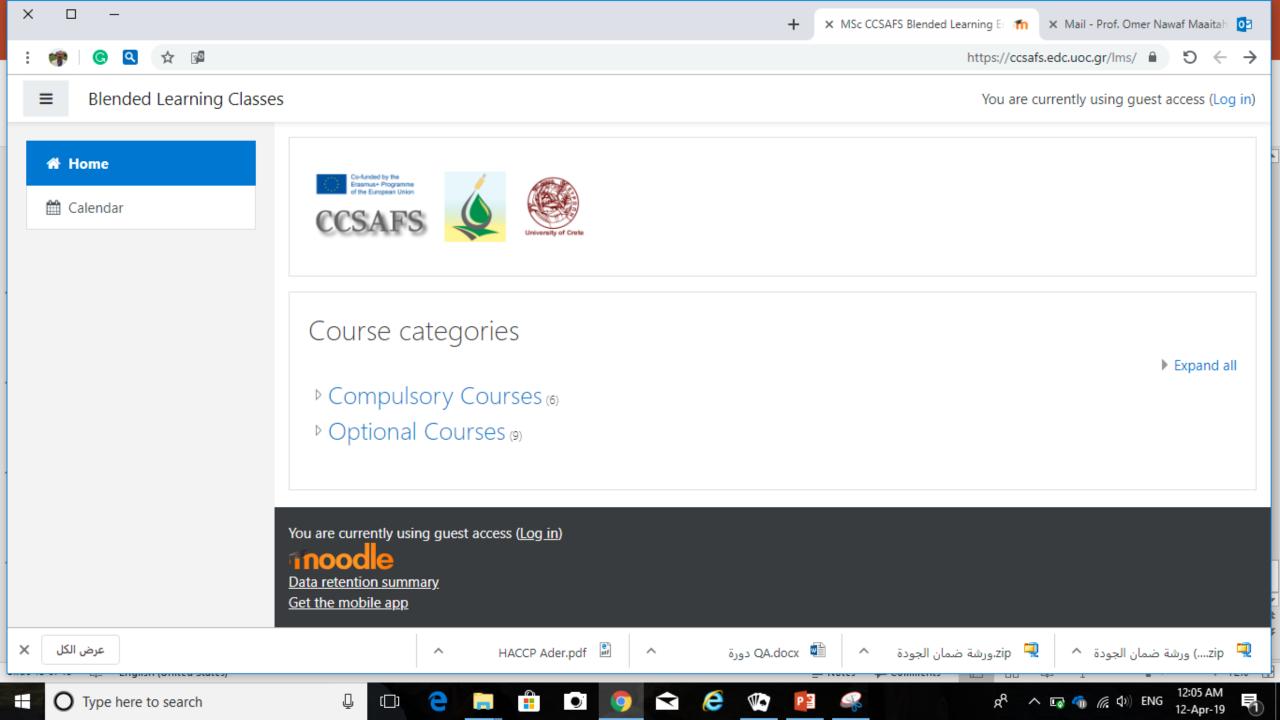


CCSAFS Climate Change, Sustainable Agriculture & Food Security



- Training Material
- Introduction to Climate Changes
- التغير المناخ في التغير المناخ Arabic Introduction to Climate Changes
- Role of Climate on soil
- Climate change in AlGHwar (in Arabic). التغير المناخي في منطقة الاغوار الجنوبية
- Climate Change Global Warring
- التغير المناخي في العالم •
- Weather changes
- Sinkholes
- GUIDELINES FOR THE SDGs





SWOT

Name of the Institution: Mutah University	Name of the SWOT facilitator: Mohamed Majalee	e-mail
Name of the SWOT participants	Function at the Institution	e-mail
Prof. Omer Maaitah	Dean of Postgraduate studies	Maaitah_noor@hotmail.co m
Dr Mohamed R. majalee	Staff member	m_r_almajali@yahoo.com
Dr Saif Nawayseh	Director of International office	Saif982@yahoo.com

Strengthen points

- Climate change is a hot topic in Jordan
- Climate change is a global warning
- Jordan faces catastrophic due to climate change last year (Dead sea disaster)
- Jordan faces problem in food security
- Organic food is a demand to Jordanian people

• Forest trees such as cypress and oak, olive trees, grasses, thorns and shrubs









Jordan University of Science and Technology

Development Phase Center of Excellence

The Centers of Excellence established at Jordan University of Science and Technology in **DATE**, and "CCSAFS Excellence Lab", and located in the buildings of Engineering Faculty.

The Center of Excellence at Jordan University of Science and Technology was equipped by **30** desktop computers, the lab already was provided with datashow and smart interactive board. All supporting materials and suitable environment (e.g. conditioning, educational materials, and desks and technological issues) were provided by JUST as Co-Finance with this project. Around 40-45 students use daily this lab for educational purposes, mainly for the fields of climate change.







Developing a MSc Programme in Climate Change, Sustainable Agriculture and Food Security (CCSAFS)

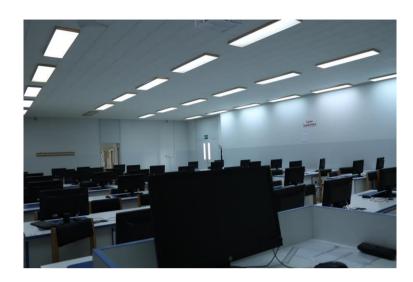


Table 1:

Key Strategic Goals and Activities	Short Term	Medium Term	Long Term
	Key Outcomes	Key Outcomes	Key Outcomes
What we plan to do (key strategic goals and activities, indicators)	What do we expect to achieve by 2020	What do we expect to achieve by 2025	What do we expect to achieve by 2030
Strategic Goal 1 : The centre will supply advanced training and multidisciplinary education finding the human, technological and financial resources for students, researchers, and society involved in CCSAFS			
Activities: 1.1. Allocate the appropriate space for establishing the Centre of Excellence equipped with the suitable facilities including the ICT lab comprising hardware and software. Indicator(s): completed preparations and installed equipment.	Space and preparations are settled (two laboratories and one lecture room). Necessary equipment are purchased and installed. The first group of CCSAFS master students are registered and started their studies.		
1.2. Establish management and steering committee for the centre Indicator(s): reports for continuous meetings and decisions are documented, updated strategic plans and activities of the centre.	Established management /steering committee, its members and roles are specified.	Management committee active in monitoring, evaluating and revising the center, its strategic goals and activities; updated action plan;	active in monitoring, evaluating and revising strategic goals and
1.3. Hold every year a kick-off meeting for staff (academic and administrations) from faculty of agriculture staff involved in the CCSAFS project and further key administrators, to introduce	Kick-off meeting accomplished and knowledge about the center and its function well spread in SCU.	issuing Euro-Arab Diplomas for CCSAFS students	F

the center and its functions, its objectives and the services provided. indicators: uploaded on the faculty web-site and recorded minutes of			
1.4. Produce specific and excellent training programme through expertise in CCSAFS field for academic and non-academic	Training sessions and programs are implemented on CCSAFS and other related-environmental issues at academic and civil society levels.	The centre expanded its training activities to include staff from academic, research institutes and civil society	
staff. Indicators: training materials documented, certificate of attendance are issued, feedbacks of participants.	Dissemination documents and tools are printed (knowledge	organizations to benefitting from the training facilities. Continuous updating for dissemination,	Continuous updating for dissemination,
1.5. Produce dissemination tools and documents, website, posters, flyers, information sessions by invited experts in the field of CCSAFS. Indicators: dissemination plan is developed, dissemination documents	about centre spread	Dissemination tools and methodologies are updated, publicize in international conferences	Dissemination tools and methodologies are updated, publicize in international conferences
and tools are available for others 1.6.Use the space and available resources of the center for teaching activities and seminar sessions by experts in climate issues and its impacts. Indicators: number of participants, titles of lectures and seminars are documented.	Students and staff members from different faculties are using and benefitting from the facilities in education,	More interest and increasing enrolments in master in CCSAFS, Students and faculty members have the opportunity to discuss with external stakeholders	The center is used for teaching activities of other courses

Strategic Goal 2: The Centre will create new education resources based on ICT technologies related to CCSAFS

Activities:

2.1. Use the Centre of excellence facilities for introducing non-traditional teaching methods based on ICT technology

Indicator(s): number of courses based on ICT, Revised course curricula including course objectives and learning outcomes.

2.2. Organize workshops and training sessions for faculty members to discuss non-traditional education and using ICT lab as an effective tool.

Indicators: number of participants in the training/workshops, evaluation (assessment) of the training, diversity of trainees.

- 2.3. Train staff members on integrating ICT tools in their teaching to students through workshops in partner universities.
 Indicators: number of participants in the training, number of courses adopting ICT after 1 year.
- 2.4. Integrate blended learning in educational process

 Indicator(s): number of developed course

Indicator(s): number of developed courses using blended learning techniques

CCSAFS course sessions being held at the ICT lab facility using non-traditional methods during the Pilot phase

The Centre will provide new education resources based on ICT technologies related to CCSAFS. Integrate ICT tools in CCSAFS master courses to start pilot assessment. (started in 2019)

More interest from staff in adopting and using ICT tools in courses relevant with climate issues impacts

Established blended learning lab to teaching courses for CCSAFS courses

The centre hosts not only CCSAFS courses, but courses from different programs are updated using ICT tools.

Improved students learning and better teaching methods. Spread of using ICT in other courses. capacity building of staff in using ICT tools

Spread use of blended learning labs by staff and students from other faculties Increasing number of courses taught at the centre from different faculties. Increasing number of faculty members familiar with using and adopting new ICT methodologies.

Wide spread of using ICT tools in teaching different scientific disciplines. Continuous the role of the center in building the capacity of staff and alumni.

More faculty members are adopting non-traditional methods in teaching, e.g. problem-based learning etc...

Spread use of blended learning labs by staff and students from other faculties

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Strategic Goal 3: The centre aims to establish continuous cooperation relationships with other institutions and centres of excellence in the field of			Ingraced in symbol of
CCSAFS, to exchange students and staff. Activities: 3.1. Establish internal and external cooperation with	Database on internal and external	Continuous organization of conferences and lectures	Increased in number of signed contracts and agreement
institutions and centres of excellence in the field of researches on CCSAFS and other emerging fields, Indicator(s): number of signed contracts and implemented and on-going research projects	bodies interested in researches and scientific activities relevant with CCSAFS are prepared	Prepared and provided expertise and consultations for academic and civil societies in CCSAFS problems. Increasing contacts with	Continuous organization of conferences and lectures
3.2. Organize conferences and introduce guest speakers on issues relevant with various climate effects Indicator(s): number of organized conferences, diversify of the center activities.	Prepare for the first international conference	and demands for consultations and environmental advices	Increasing contacts with and demands for consultations and environmental advices
3.3. Write and submit a proposal for the endorsement of the center by SCU council	Centre officially endorsed by SCU management, as a centre or unit under Centre for Training and	Continuous reviewing processes for CCSAFS curriculum to ensure the	
<pre>Indicator(s): : proposal written and submitted to university management ; response of management</pre>	Consultations	program competences are achieved.	
3.4. Write and submit proposals for national and international founding on teaching or research on CCSAFS Indicator(s): proposals written and submitted	The Centre staff work to find international and national collaborations to compete for project funding.	Research projects are implementing, capacity building in performing researches on SA and FS in changing climate	Continuous reviewing processes for CCSAFS curriculum to ensure the program competences are achieved.

Strategic goal 4: Consultancies for auditing and peerreview for CCSAFS courses and training materials, and for similar programs of CCSAFS. Activities: 4.1. CCSAFS project team, together with the centre steering committee will revise course contents every year to reduce the gap between education process and labour market Indicator(s): number of reviewed courses and training materials, name of contacted institutions/universities/faculties 4.2. Organize annual meeting with external and internal stakeholders to update the strategic plans and collect new suggestion that improve the effectiveness of the center. Indicator(s): updated plans, reports on annual meetings are prepared. 4.3. Annual surveys and auditing by external auditors from NAQQEA will be performed Indicator(s): Survey outcome 4.4. Develop the resources and capacities available at centre of excellence to continue provide its services. Indicator(s): updated equipment and educational	Courses are already reviewed and implemented for students registered in the CCSAFS master. First annual meeting is organized gathering internal and external stakeholders (policy makers, key staff in governmental and non-governmental organizations, alumni) The already education and research platform established for CCSAFS are used.	Stakeholders inputs are documented and strategic plan for the centre is updated Computers and educational equipment are updated, new ICT methodologies are installed, capacity building for staff Dissemination tools produced and updated on (CoE) website – knowledge about the role of the center in the wider community spread	Continuous updating of the strategic plan, suggestions to improve the role and activities are studied and implemented Computers and educational equipment are updated, new ICT methodologies are installed, capacity building for staff
resources, trained staff and students.			