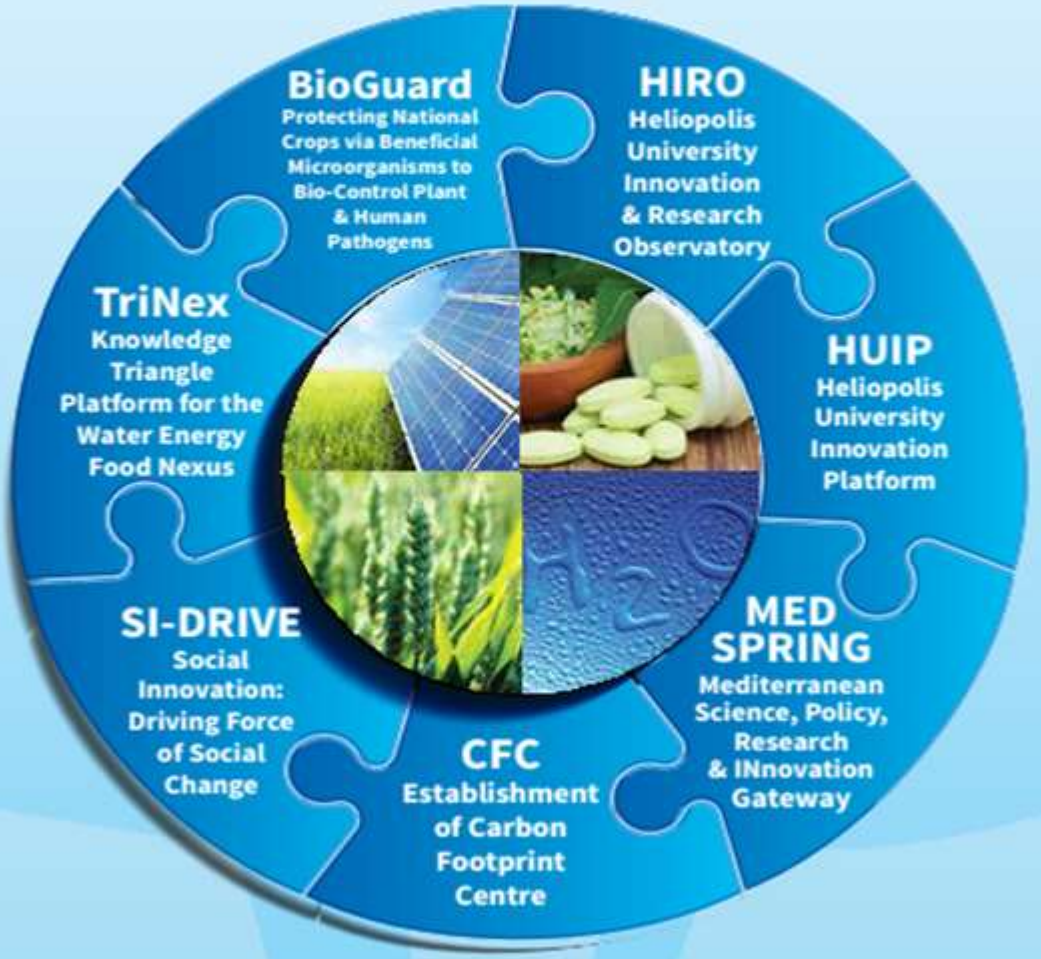
جامعة هليوبوليس
Heliopolis University
for Sustainable Development

HELIOPOLIS UNIVERSITY

Research & Innovation Brokerage Event



HU Research & Innovation Day

The General Purpose of this event is the improvement of the competitiveness and the quality of the research and innovation cycle at Heliopolis University. Our Specific objective is to foster synergy and cooperation between the different research endeavours internally, in the university, as well as in the Egyptian research community at large.

1 Strengthening the link between academic research and industry needs

Project owner: TU Graz

Project management (SEKEM): Bianca Fliß

Duration: 3 years

Involved Entities: Consortium of 11 partners (incl. 5 MENA and 3 European universities)

Outcomes:

- Strategy paper on how to establish a chair on innovation
- Staff trainings on innovation
- Master twinning projects

Project Rationale:

The EU higher education policy towards the MEDA countries is to strengthen the role of higher education institutions in society at large; to address the "knowledge triangle" of education, research and innovation at university level; and to encourage links between higher education institutions and the labour market, including the promotion of entrepreneurship and the creation or support of business start-ups.

In 2007, The United Nations Industrial Development Organization UNIDO, agreed to provide technical support to UNCHIAN. In the framework of this initiative, the UNIDO financially and technically supported a workshop that has been organised in Vienna (2007). This workshop allowed representatives from the MEDA universities to discuss with the three EU universities the main R&D and innovation problems. This workshop concluded that the MEDA Universities have several problems should be addressed to qualify them to benefit from such initiatives. The MEDA universities have no mechanism to work with the industry, no technology transfer offices, no Technology Transfer Policy (TTP) and no skilled staff to translate the industry need to R&D subjects. The conclusion was to apply for a TEMPUS project to establish a "University Chairs on Innovation".

The overall objective of this project is bridging the gap between the innovation needs of industry and the supply of universities, in terms of human resources and technologies by establishing a "University Chair on Innovation".

Important to mention, that the overall objective of this multi-country project is in the same line with the EU program-wide priorities (Higher Education and Society) and it matches also the two main national priorities identified by the involved MEDA countries (Development of partnerships with enterprises and Knowledge triangle: education-innovation research).

Tempus UNCHAIN is 3-year project (2009-2011) under European Commission - TEMPUS IV for

- Establishing University Chairs on Innovation in the MEDA Region
- Developing Technology Transfer Policy and Training of Chair Holders
- Initiating a re-skilling program on Innovation
- EU MEDA Twinning MSc Thesis Program
- Developing an EU-MEDA Virtual Environment and Strategy for University-Industry Cooperation in Innovation

2 Reorient University Curricula to Address Sustainability

Project owner: University of Crete
Project management: Matthias Keitel
Start: Oct 2010, **End**: Oct 2013
Involved Entities: HU, SDF + 5 ME Univ. + 6 European Univ. + UNESCO + 2 NGOs
Budget:
Outcomes:

- Training for teaching staff (Community of Practice)
- University curricula that address sustainability

In a nutshell:

The RUCAS (Reorient University Curricula to Address Sustainability) is an E.U. TEMPUS project led by the Dpt. of Primary Education of the University of Crete that was launched on October 2010 with a 3-yr duration. Main goal of RUCAS is to support the development of ESD in the Higher Education sector in developing countries (Egypt, Jordan and Lebanon) with the help of developed countries (Greece, France, Ireland, Italy, Sweden).

Project Rationale:

Higher Education Institutions in the Arab region face challenges related to the slow progress regarding the implementation of the UN Decade (2004-2015) of Education for Sustainable Development (ESD). This is due to a number of barriers such, limited staff awareness and expertise and lack of appropriate curricula, new teaching methods and courses to address ESD. In response to these needs and priorities, six HEIs from the EU joined efforts with six HEIs from the Arab region and an UNESCO Regional Office and pioneering NGOs to form a Consortium to tackle the identified constraints and needs. The ambitious goal of the project is to help partner HEIs in the Arab countries (Egypt, Jordan and Lebanon) to embed ESD into their curricula. The Project undertakes a wide range of activities to develop resources, revise and develop new curriculum initiatives, build capacity and strengthen national and regional networks.

The Partners:

- University of Crete Greece- Applicant- Leader
- University of Athens Greece: Dpt of Chemistry and Dpt of education in preschool age
- Dublin City University Ireland
- Stockholms University Sweden
- University of Padova Italy
- University of Bordeaux3 France
- NGOs
- MIO/ECSDE and MEdIES, Greece

The Partners from Arab countries of Mediterranean are:

- Suez Canal University, Egypt
- Heliopolis University for Sustainable Development Egypt
- Hashemite University Jordan
- University of Jordan Jordan
- Notre Dame University Lebanon
- University de La Sagesse Lebanon
- UNESCO Regional Office Beirut for the Arab States, Lebanon
- SEKEM Development Foundation (SDF), Egypt
- League of Independent Activists (IndyACT), Lebanon

3 Development of Joint International Master Degree and Lifelong Learning Framework in Mechatronics (JIM2L)

Project owner: Bochum University of Applied Science

Project management (HU): Bianca Fliß

Project Lifetime: 15. October 2011 – 14. October 2014

Partners: Consortium of 11 partners (incl. 5 MENA and 3 European universities)

Outcomes:

- Curriculum for a joint master degree (MSc) in Mechatronics in;
- Mechatronics training courses for engineers from the industry supporting lifelong learning;
- Well trained staff members at the participating;
- Advanced laboratories for Mechatronics studies;

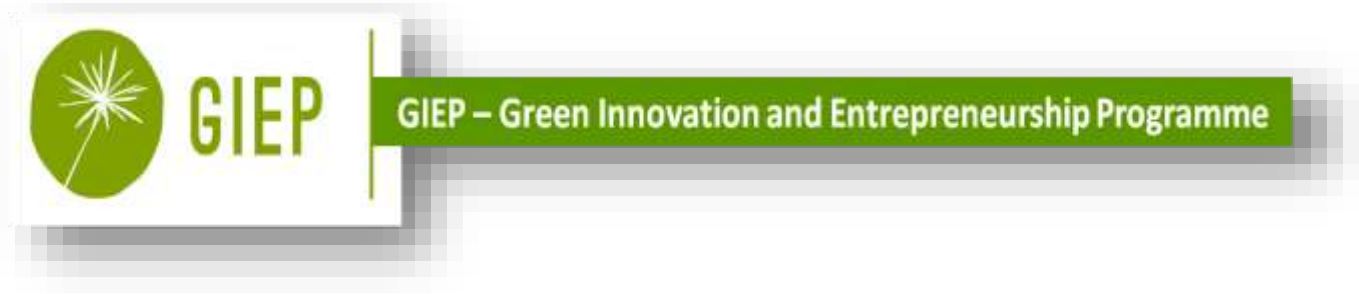
Project Rationale:

The main idea of JIM2L is to establish a joint international MSc program in Mechatronics combined with a lifelong learning strategy is motivated by the need of higher education systems to adapt to changing economic and social environments within a modern information society. Looking at the economy and industry in Egypt (EG) and Jordan (JO), the demands for young engineers are different from those in more industrialised countries. In small and medium sized enterprises the work of one engineer may cross over between several engineering discipline fields; in larger enterprises the Mechatronics engineer may lead a team, maximising effective management and production through software and electronic knowledge. The introduction of Mechatronics engineers causes a positive reorganisation in many firms. Recognising this fact, many countries in the Middle East have started to integrate Mechatronics, the modern engineering field with its interdisciplinary triangle of mechanical, electronic and information technology engineering into their higher education programmes, - mostly as BSc programs. The further development and strengthening of these first steps in engineering education towards closer networking

between industry and universities is an important goal which is pursued with this project. Based on the experience of the former project DIMPTOT the consortium is striving to develop a curriculum for a MSc degree in Mechatronics in accord with the Bologna Convention. This degree not only enhances the higher education systems in EG and JO, but also supports the establishment of a sustainable bridge between the countries and with Europe in the vital industrial engineering field of Mechatronics. The MSc degree will be the basis for a PhD degree later on. The curricula will take into account the different economic spectra in EG with its wide diversity including agriculture, tourism, a dominant textile industry and other industry fields. In JO the situation is different. The part of the agriculture is significantly smaller than in Egypt. Here the mining and chemical industries are the main industrial employers. Also a steady growth in the logistic industry has occurred during the past years.

Wider and specific objectives in the JIM2L are:

-Development the curriculum of a Mechatronics Master degree;
-Development of an industry linked curriculum of a lifelong learning framework in Mechatronics together with the new Training Centres to be established;
-Establishment national Industry-University networks in the beneficiary countries in Mechatronics;
-To define statutes and articles of national networks for Mechatronics engineers trained university staff/lectures through EU universities and industry companies;



4 Green Innovation and Entrepreneurship Programme (GIEP)

Sector: Higher Education

Name of organisation: HU/SDF

Location of the action: Egypt

Cost of the action (EUR): 999,904.30

Lead partner: Politecnico di Milano

Donor: EC Commission

Duration: 15/10/2012 to 14/10/2015

European Partners:
RWTH Aachen, TU Graz, Fondazione Politecnico di Milano, Politecnico di Milano

Egyptian Partners:
Aswan University, Alexandria University, American University Cairo, Zagazig University, SEKEM, Soil&More, Heliopolis University

Project Objectives:
The wider objective is to „promote and implement Green Innovation and Entrepreneurship concepts nationwide and provide the market with the sustainable developers“. The specific objectives are;

1) Developing a joint/double MSc program on “Green Innovation and Entrepreneurship” GIEP.
2) Establishing green technology labs.
3) Developing the capacities of the academic members.
4) Developing a Web-based online Learning Management System.
5) Pilot implementation of GIEP and EG & EU accreditation.

Project Outcomes:
Since the project just started 6 month ago, many activities are still under way. In the first period of the project a Needs Analysis has been carried out among industries, international organisations and students, to identify the market problems and needs, expected qualifications of the post graduates of GIEP and recommendations of GIEP. Furthermore the development of the cooperation model agreements between the involved universities is currently being elaborated as well as a first draft of the proposed GIEP content.

EDUCATION

5 Knowledge-Triangle Platform for the Water-Energy-Food Nexus (TriNex)

Applicant: Heliopolis University

Budget: 880 000 €

Duration: 36 Months

Partners:

Politecnico di Milano (Italy), RWTH Aachen (Germany), Montpellier SupAgro (France), Alexandria, Uni, Cairo Uni, Heliopolis Uni, AUC, Bibliotheca Alexandria (Egypt), TU Graz (Austria)

Project Objectives:

The first objective is the development of a platform wherein Research, Education, and Innovation (the Knowledge Triangle) can be synthesized toward working on the WEF Nexus on the national level. The Prime Minister's Council is currently establishing a platform for desalination and renewable energy, and TriNex can contribute additional dimensions to this undertaking.

This will initially require a needs analyses, followed by the creation of three WEF National Strategic Committees, one each for capacity building and education, research, and innovation. The development of a WEF National Strategy, and ultimately pilot projects in Education, Research, and Innovation, will follow. The above will be completed halfway through the project's lifetime and is mainly the responsibility of the American University in Cairo with help from the Egyptian and European partners.

Project Outcomes:

- ✓ A National Strategy for the WEF-Nexus is identified and discussed with stakeholders
- ✓ A WEF-Nexus Coordination Body is established within each partner university
- ✓ Qualified Egyptian academics are trained to face WEF-Nexus multidisciplinary projects
- ✓ A Euro–Egyptian PhD Program on the WEF-Nexus is defined with a pilot implementation and an international conference
- ✓ A web-based Knowledge Sharing System is on line and training materials are shared


Tempus
Making the Water-Energy-Food Nexus
the next research frontier in Egypt
TriNex Best
Paper Award
www.trinex.eu
Making the
Water-Energy-Food Nexus
next research frontier
www.trinex.eu

6 Development of an Interdisciplinary Programme on Climate Change and Sustainability Policy

Funding Program: TEMPUS

Year: (2014-2017)

Project Reference Number: 543879-TEMPUS-1-2013-1-GR-TEMPUS-JPCR

Partners/Countries: Partners: University of Crete, Leuphana University Lueneburg, Heliopoilis University for Sustainable Development, Suez Canal University, Aswan University, Port Said University, Education for Employment Foundation Egypt, Egyptian Business Women Association, Hashemite University, University of Jordan, American University of Madaba, Jerash Private University, Jordan Environment Society, Notre Dame University -Louaize, Lebanese American University.

Total Budget: 1,248,635.60 Euros

Project Theme: Climate Change and ESD

Project Main Scope: 1. Education

Details:

The main issue that CLIMASP is trying to address is the issue of Climate Change (CC). CC is one of the greatest challenges facing the world and facing this challenge is essential for securing a sustainable future. As such, Education for Sustainable Development (ESD) is one of the most power tools for addressing this challenge. This project aims at developing a minor degree and a Diploma in Climate Change in order to face these problems and raise awareness through an interdisciplinary program that focuses on both sustainable development and CC

Specific Objectives:

- Develop and implement capacity-building workshops for building interdisciplinary and multi-stakeholder driven climate change curricula responsive to societal needs.
- Involve university staff and other key stakeholders (e.g. students, professionals) in the development of an undergraduate interdisciplinary program on **CLIMA**te change and **S**ustainability **P**olicy (CLIMASP) in each partner country university.
- Integrate, implement and assess the CLIMASP program as an integral part to existing undergraduate academic degrees in disciplines like education sciences, applied sciences, technical sciences, economics/ business sciences, humanities and social sciences.
- Contextualise the Europass supplement diploma in the partner countries' universities and the Arab region.

Heliopolis University
PLATFORM

7 Innovation Platform

Project Basic Data:

Applicant (Institution) Name: Heliopolis University

Project sector: Innovation Support

Total budget of the Project: 99 697 €

Grant awarded: (Scheme I – Scheme II – Cluster): RDI II-Scheme II

Project Description:

Heliopolis University is launching the Innovation Platform with the vision to create a mechanism that brings together key players from industry, academia and governmental bodies to address the challenges facing the Egyptian society through research and innovation.

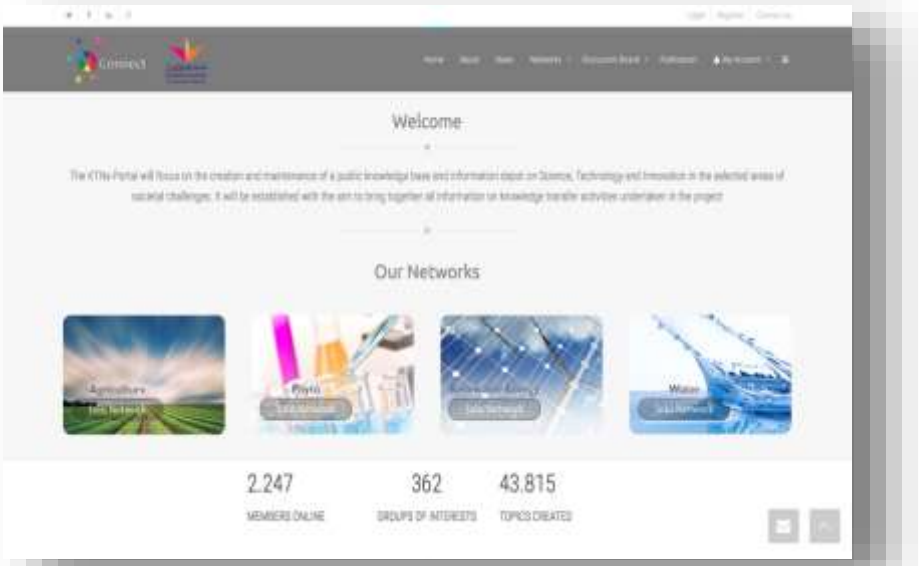
The Innovation Platform aims at linking research to industry and achieves successful R&D-Business collaboration as well as to promote entrepreneurship via supporting the establishment and growth of small businesses and start-ups.

The Innovation Platform includes the following pillars:

1) Establishment of **Knowledge Transfer Networks (KTNs)** that drive the flow of knowledge and experience from across research and business and involve members from Academia, Industry, NGOs, and policy makers. The networks cover the following areas: food and organic agriculture, water, renewable energy resources, phyto-pharmaceuticals and natural medicine.
2) Establishment of **Renewable Energy Business Incubation Program (BI)** to provide needed assistance and resources for Egyptian researchers/entrepreneurs in order to successfully create and sustain startup companies that bring their innovations to the market leading to the introduction of new products and services.

3) Establishment of upgraded **Grant Management Office** that involves a Special & Sponsored Programs Unit (SSP), Project Management Unit (PMU), Intellectual Property Unit (IPR), and Technology Development & Entrepreneurship Unit.

HU Innovation Platform Portal "Connect"



8 Heliopolis Innovation and Research Observatory

Project Basic Data:

Name of the Project: Heliopolis Innovation and Research Observatory
Applicant (Institution) Name: Heliopolis University
Partners (if applicable): N/A

Project sector: Innovation Support

Total budget of the Project: 700 000 EGP

Grant awarded: Academy of Scientific Research and Technology – TICO Call

Project Description:

Overall Goal (purpose): improve the competitiveness and effectiveness of the research and innovation cycle at Heliopolis University via its components synergy.

Specific Objectives:

1) Promote the excellence of research and innovation activities at HU;

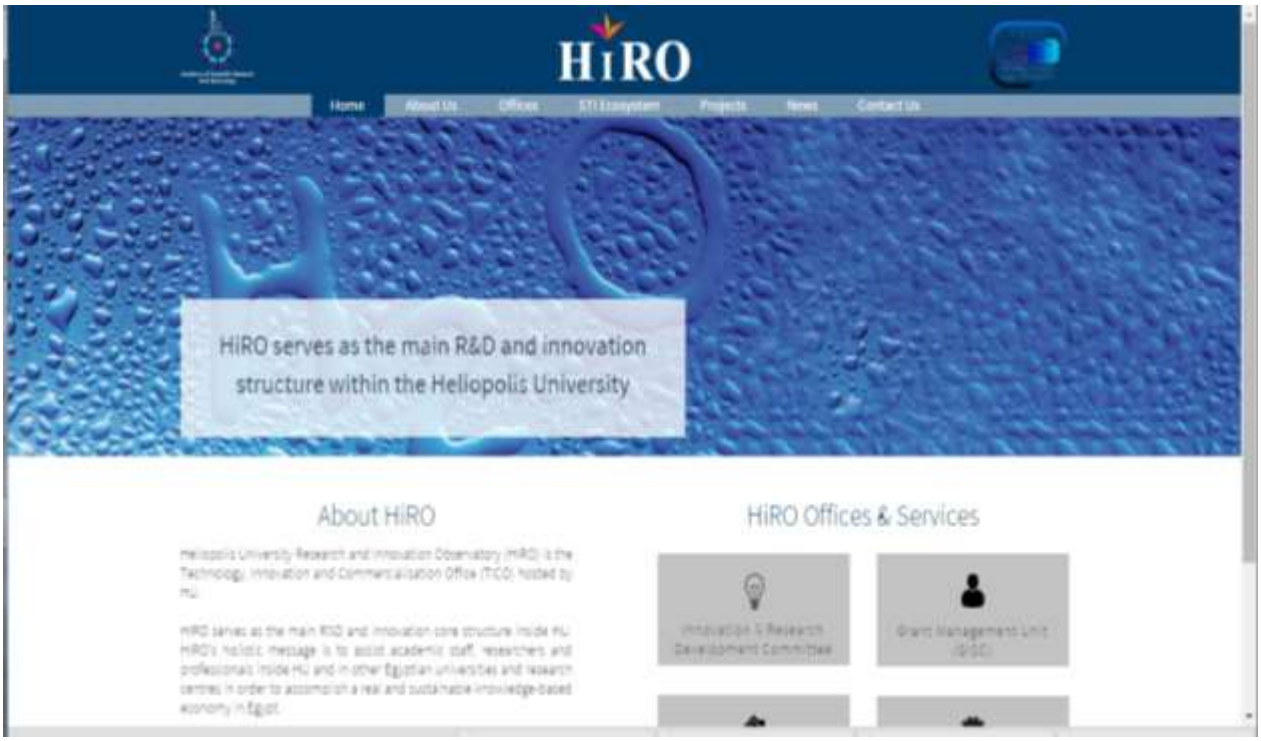
2) Improve HU role in different projects;

3) Proper promotion for the new R&I ecosystem structure and services; and

4) Provide professional services (IP, TT, KT) to HU staff and others;

HU-IR Ecosystem is supported through the following research services divisions:

- STI Strategic planning services – IRD
- licensing/ patenting services – IPR;
- Sponsored project services – GMO
- Commercialization services – TTO;
- Capacity building services – Training
- International Partnership Services – IR


HiRO
Home
About Us
Offices
STI Ecosystem
Projects
News
Contact Us
HiRO serves as the main R&D and innovation structure within the Heliopolis University
About HiRO
HiRO Offices & Services


HiRO
Home
About Us
Offices
STI Ecosystem
Projects
News
Contact Us
Intellectual Property & Development Office
copyright

PRIMER
Research & Innovation Management

9 Promoting the Research and Innovation Management through studying of Education and RDI capacity in developing countries (PRIMER) - Case Study: Egypt

دعم منظومة البحوث و الإبتكار في مجالي التعليم و الأبحاث التنموية من خلال دراسة القدرات المتوافرة في بالعربية:
المثال التطبيقي: جمهورية مصر العربية الدول .

Main Objective:

To foster Egypt economic growth, its international S&T competitiveness and the knowledge-based society via improvement of the Education, R&D and Innovation capacity, performance;

Specific Objectives: - Measurable

- To define and measure Education, Science, Technology and Innovation indicators for Sectors (Heliopolis Univ.) and for Domains (BMI);
- To develop Science, technology and Innovation (STI) Index/ Meter for an Egyptian University;
- To transfer innovation and research applied methodologies;
- To come across the future possible cooperation in Horizon 2020, TEMPUS-2014, others;
- To review/enhance the structure of Universities innovation and research management offices;

	EDUCATION	Science, Technology and Innovation	
Phase	Phase II.1	Phase II.2	Phase II.3
Level	Domain Level	Sector Level	
Country	Germany	Germany	United Kingdom
Institute	University of Braunschweig	The Institute for Research Information and QA (iFQ)	The University of Manchester
Main Outcomes	Accreditation standards/ requirements of Egyptian BMI education programs	STI Meter/Indictor STI Index	

Austrian Development Cooperation

10 Market structure and market penetration for high-quality solar thermal systems in Egypt and their integration in the tourism industry

Duration: Nov. 2013 – Nov.2016
Funding Agency: Austrian Development Agency
Budget: 50% € 500.000
Project Rationale:

Market and the availability of various components of solar thermal systems for hot water supply (2) Development and Implementation of large scale solar thermal demonstration plant located in tourism region on the Red Sea. for advertising and for further R&D projects (3) Trainings - the Egyptian "solar technician" with certification and Heliopolis University (HU) teachers assistants'

The aim of the strategic alliance is to offer solar thermal systems for the Egyptian tourism industry in the focus area on the Red Sea coastal region. In the medium term the greatest part of the added value in Egypt, is to be achieved through locally available solar thermal systems components and local experts.

The project activities include the establishment of an independent production of solar panels, as well as the establishment of solar thermal plants for sales purposes and research & development.
Together with the Heliopolis University, a nationally recognized training program for solar technicians - the Egyptian of "solar energy" – is created to attract the necessary skilled labor for the growing solar industry. For assessment and as an incentive for the development of financial models for solar thermal systems in Egypt, training will be conducted with local financial institutions.

The measures in the lobby and public relations are supplemented by the construction of an Egyptian solar platform in order to obtain beneficial legal framework for the use of solar thermal energy in the long run through dialogue with companies, universities, policy makers and strategic partners such as UNIDO.

Therefore , targets are widely different than each other through (1) presenting demonstration plants on HU with the support of Faculty of engineering trained TA's and students, (2) Regular

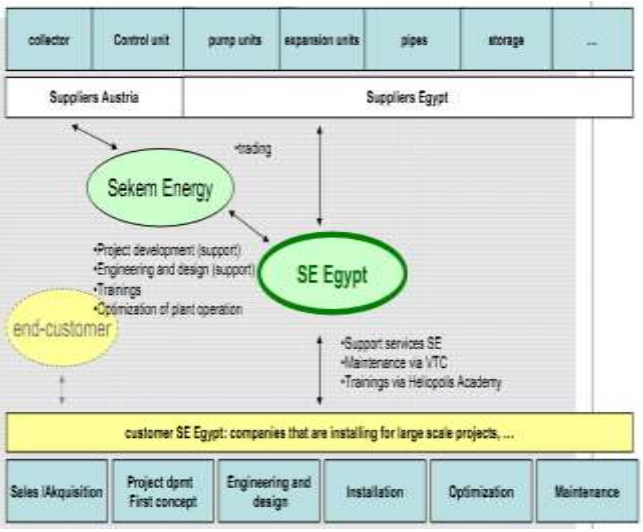
TOT in HU targets different categories TA's , interested persons of ministry of housing and environment for more repetition of the TOT again (3) HU -TA's will be able to develop Renewable energy department curricula in addition to practical life training on the sample plant in HU on installing, welding, system errors. (4) Establishment of an independent production of solar panels, together with the Heliopolis University, a nationally recognized training program for solar technicians - the Egyptian of "solar energy" – is created to attract the necessary skilled labor for the growing solar industry.

Partners

Austrian Partners: SEKEM Energy, GreenOneTech, Pink, Technical Engineering office Reischl, BFI Burgenland

Egyptian Partners: SEKEM Holding for Investment Company, SEKEM Development Foundation, Eco Energy, eGreen , Heliopolis University for Sustainable Development.

Strategic Partners: UNIDO, Housing & Building National Research Centre (Ministry of Housing, Cairo), American University in Cairo



11 Carbon Footprint Center

- Funding Program: the Academy of Scientific Research Technology, Year: (start 2014 –end 2016)
- Partners/Countries: Heliopolis University for Sustainable Development & Academic of Research and Technology &The Egyptian Biodynamic Association (EBDA)
- Total Budget: 466.000 EGP
- Website: (if applicable):WWW.CFC-EG.Com
- Project Theme: Agriculture and Food Technology
- Project Main Scope (choose one only): 1. Education; 2. Research & Innovation; 3.Strategic; 4. Social; 5.Awarness and Support Actions

Summary

- The goal is to identify sources of greenhouse gas emissions, and to calculate the amount of such gases emitted due to the operation of the assessed product over one determined year. The carbon footprint serves to identify the environmental performance of a specific product as to greenhouse gas emissions, thus assessing its impact on climate change.
- The calculation results can be used in strategic and operative planning, constructing a climate policy, and environmental reporting and planning of cost savings.
- We want to become a leading expert for carbon footprint assessment helping farmer to become environmentally friendly and increase their competitiveness.
- We did some site visit to identify more about farmer daily practices, activities and the most grown product in Egypt and also we try to raise the awareness of carbon emission.
- Some of Our goals are:
- To collect information needed in order to reduce greenhouse gas emissions
- Increasing the competitiveness of Egyptian products, especially for agricultural export products.
- Saving operational costs, especially related to energy.
- Boosting the image of our clients and their products.
- Responding to changing consumer expectations.
- Demonstrating leadership in the field of environmental and corporate social

Outcomes and Achievements

- Publications List, products/prototypes, curricula, centers, staff exchange/ training (use bullets)
- Photos and Print outs/ flyers/ brochures/ posters (if applicable)
- Launch Carbon footprint center, CFC, www.cfc-eg.com . Center help farmer and agriculture companies to do carbon footprint assessment with comprehensive report for assess product.
- Brochures , http://cfc.hu.edu.eg/assets/cfc-brochure-en.pdf
- Flyers , http://cfc.hu.edu.eg/assets/cfc-flyer.pdf
- Prepare carbon footprint questionnaire & cool farm tool questionnaire
- Getting carbon footprint assessment tool & cool farm tool
- Training on carbon footprint assessment tool & cool farm tool
- Prepare Site visit for some farms, to lunch the pilot project
- The pilot project will be carbon footprint assessment or cool farm tool with comprehensive report for the chosen product

12 "Social Innovation – Driving Force of Social Change"

SI-DRIVE is a research project aimed at extending knowledge about social innovation (SI) in three major directions:

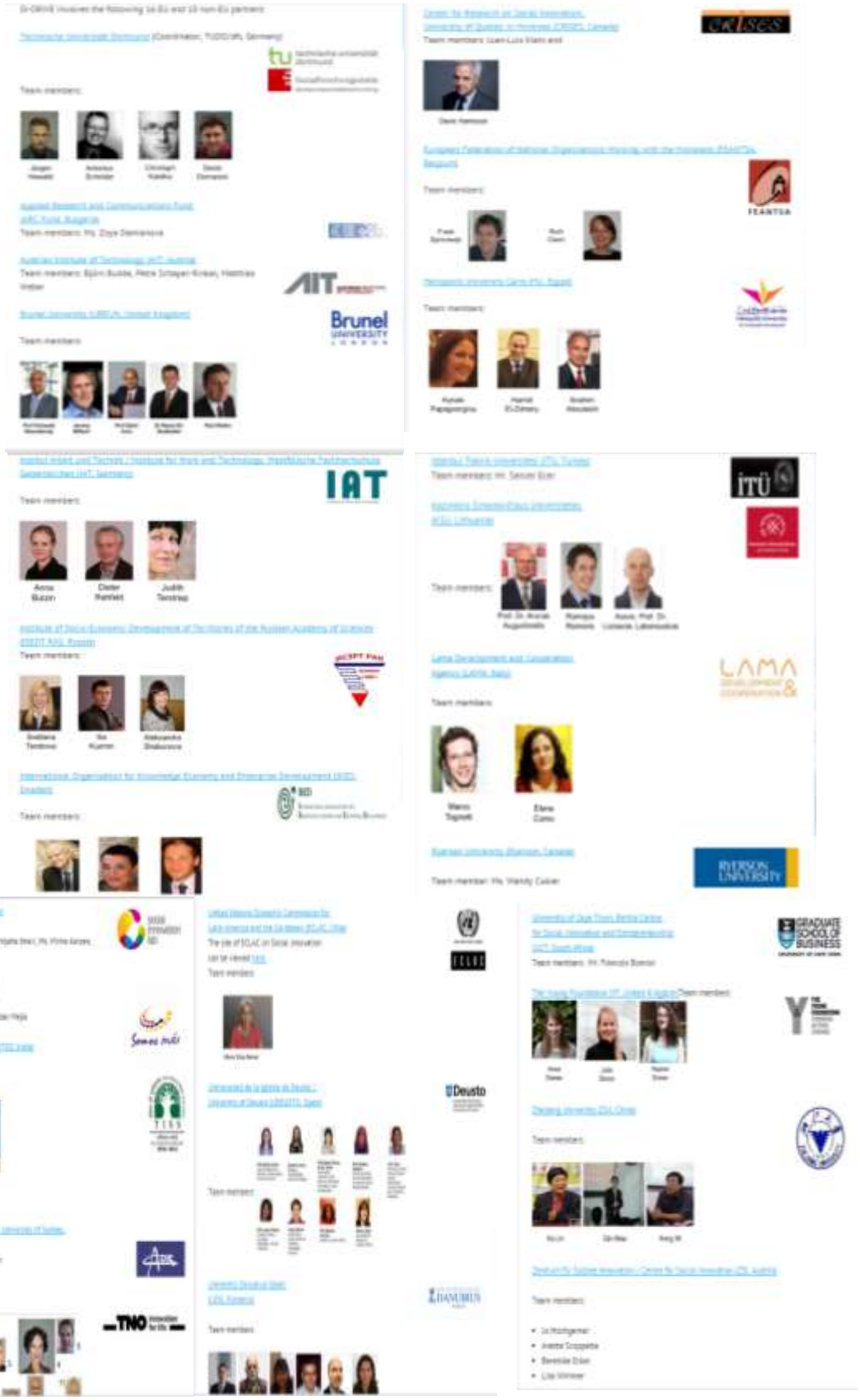
- Integrating theories and research methodologies to advance understanding of SI leading to a comprehensive new paradigm of innovation.
- Undertaking European and global mapping of SI, thereby addressing different social, economic, cultural, historical and religious contexts in eight major world regions.
- Ensuring relevance for policy makers and practitioners through in-depth analyses and case studies in seven policy fields, with cross European and world region comparisons, foresight and policy round tables.

SI-DRIVE involves 15 partners from 12 EU Member States and 10 from other parts of the world.

The approach adopted ensures cyclical iteration between theory development, methodological improvements, and policy recommendations. Two mapping exercises at the European and the global level will be carried out in the frame of SI-DRIVE: initial mapping will capture basic information about 1000+ actual social innovations from a wide variety of sources worldwide, leading to a typology of SI. This will be the basis to examine the global SI distribution. Subsequent mapping will use the typology to focus on well documented SI, leading to the selection of 10 cases each for in-depth analysis in the seven SI-DRIVE policy areas. These case studies will be further analysed, used in stakeholder dialogues in seven policy field platforms and in analysis of cross-cutting dimensions (e.g. gender, diversity, ICT), carefully taking into account cross-sector relevance (private, public, civil sectors), and future impact.

The outcomes of SI-DRIVE will cover a broad range of research dimensions, impacting particularly in terms of changing society and empowerment, and contributing to the objectives of the Europe 2020 Strategy.

Social



13 Rural Areas Development in Kafr El Sheikh Governorates

- Funding Program: Partnership with RWE Year: (4/2013- 11/2014)
- Partners/Countries: RWE – Germany , Lotus Organic Herbs and Spices-EG, Egyptian Biodynamic Association and Heliopolis University – Egypt
- Total Budget: 2,291,052.44EGP EGP
- Project Theme: Agriculture and Social Development
- Project Main Scope (Social): 1. Education; 2. Research & Innovation; 3.Strategic; 4. Social; 5.Awarness and Support Actions

Problem Statement

Organic farming bars the use of chemicals and pesticides in the cultivation Process. The aim of this agriculture system is the use of ecological processes and biodiversity to optimize health and productivity of interdependent communities of soil life, plants, animals and people. While organic agricultural methods are internationally regulated and subject to strict standards, they are not limited to certified organic farms and products but include all Productive agriculture systems that use natural processes rather than external inputs, to enhance agricultural productivity. Therefore, in market marginalized and resources –poor areas where farmers have no access to modern inputs and technologies organic agriculture can raise the productivity of traditional systems by optimizing the use of local resources and develop target area environmentally, socially , economically.

Farmers and their families don't get social development in their villages; hence they need health awareness, illiteracy classes for gender, pre-school education and development, new activities which enhance their entrepreneurial skills, connecting kids and adults with existing youth center

Economic Activities

1. The gradual conversion of the selected farms from conventional to organic farming, including supplies of compost bio-fertilizers and bio-control products
2. A range of training courses to be organized to train local farmers on techniques and the application of organic farming. In addition to technical support of all agri. process till marketing.
3. Land reclamation though different producers such as soil and water treatments after analysis
4. Assistance to the community for the marketing of products during the in-transition period, 2 years, before the produce becomes fully marketable as organically grown.
5. Farms in this project were registered In the Egyptian Biodynamic Association, EBDA, and on **COAE** organic certification body "Central of Organic Agriculture in Egypt.

Social Activities

1. Capacity building of the youth to include Computer Classes for both genders by continuous courses for different ages for beneficiaries each in his village in the governmental youth centers
2. Improving Health awareness targeting famers and their families by workshops on first aid and healthy nutrition.

3. Empowering women & men economically and raise their entrepreneurial skills by establishing sewing workshop to train people on production tailored clothes according to their villages needs to create their own business.
4. Strengthening education skills for adults by opening illiteracy classes to get governmental certificate in order to have a suitable job and to help those who were not able to join a school .
5. Strengthening education skills for pre-school kids by developing methods of education based on the model of SEKEM kindergarten, taking into consideration its adaption to Kafr El Sheikh environment and culture