

SEKEM *Insight*

SEKEM's Journal for Culture, Economy,
Society and Ecology in Egypt

Editorial

Dear Readers,

even before the establishment of the Heliopolis University, the SEKEM initiative set out to develop its capacity for research and development. It did so to actively support lasting change in Egypt in practical, problem-oriented ways. In other words, it strived to make a tangible change through research. As part of the establishment of the new institution of higher education, SEKEM has intensified these activities.

Even before the Heliopolis University, SEKEM had carried out several so-called "Tempus projects" with partners that were mainly concerned with the development of study programs and teaching content. Now SEKEM is again engaged in a partnership with seven European and Egyptian universities to create better curricula for teaching sustainable resource management in Egypt.

The centrepiece of the three-year project is however the development of an Egyptian national strategy and accompanying methods for the dissemination of know-how on sustainability in Egypt. Bianca Fliss, who manages the project for the Heliopolis University, will tell you more in this issue.

Your Team of Editors

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Research

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SEKEM's
Sustainability Report

Solar Energy

Education and
Project started

SEKEM Participates in New Research Project on Water, Energy and Nutrition

The Heliopolis University participates in new project addressing the Water-Energy-Food Nexus.



Through an intelligent, environmentally friendly management of natural resources such as water and energy, SEKEM's agriculture already makes do with significantly fewer resources than its conventional counterpart.

Sustainable Development is aiming to find integrated solutions for the economic, environmental, social and cultural spheres of life. This holistic approach is gaining more and more relevance in the scientific community as many sustainable development challenges are closely interconnected and need integrated approaches. Water, energy and food for example form a thematic nexus (WEF Nexus)

that requires integrated planning in all three fields.

Water Insecurity in Egypt

The Nile River supplies around 95 per cent of the Egypt's total water usage. Only 5-30mm of rain fall on Egyptian soil every year on average. Thus, Egypt is fully dependent on the Nile being able to continue to provide it with usable water for

the foreseeable future. That, in turn, makes Egypt dependent on the resupply of the river through rain falling on other, upstream countries. It will be only through this indirect water supply that Egypt will remain able to support its own rapidly growing population and development. These other countries, however, have to cope with their own challenges of rising populations and strong economic development putting a further, increasing strain on their own water supplies. Currently, the countries around the Nile Basin have an impact on the quantities of available fresh water to Egypt that is becoming more and more pronounced. Today, there already is acute water scarcity in Egypt. The per capita share of water available to its own citizens is expected to decline from a current level of 900m³ to about 670m³ by 2017.

Energy Insecurity in Egypt

Moreover, Egypt is also facing a looming energy crisis. Originally an exporter of oil and gas, Egypt has today difficulties to meet the domestic energy demand. Gas consumption has doubled over the last decades and total fossil fuel consumption has risen by about one-third. In 2010 over 95% of the primary energy supply in Egypt was covered through oil. Over the course of the past years strong increases in electricity demand have caused brownouts and other supply issues. This resulted in severe concerns specifically over the past six months if Egypt would still be able to

keep up with its growth in demand in the long run.

Food Insecurity in Egypt

Food security in Egypt is threatened by limited water resources and shrinking arable land. Desertification is taking place on either side of the Nile River, as the Eastern and Western Deserts move inward. These grounds, however, constitute the country's major agricultural zone. Around 15 million Egyptians are considered vulnerable to food insecurity, particularly if the government subsidies on staple food are removed. These subsidies already constitute a significant portion of the country's annual GDP thus increasing pressure on the government to cut them to save costs.

Innovative Research for Innovative Solutions

Research is specifically needed to better understand the interrelations among the different types of resources: energy productivity, sustainable agricultural practices, and the use of solar energy towards improvements in water resource productivity (e.g. through seawater desalination) are among the research topics requiring further attention. Integration of existing experiences and know-how in the three aforementioned disciplines is needed to improve such research and result in practical innovation.

Together with three Egyptian and four European Universities, the Heliopolis University will now begin to build capacity in research, education, and innovation on the WEF Nexus in the framework of the new project named "TriNex" (Knowledge-Triangle Platform for the Water-Energy-Food Nexus). The project is co-funded by the European Commission under the TEMPUS scheme aimed at academic institutions and will run for three years from December 2013 to November 2016.



SEKEM strives to replicate its successes also through the production of organic seedlings.

In the project, the partners set out to develop a national strategy for WEF Nexus research as well as a WEF training programme that will help young researchers to better understand the interrelationships within the nexus and to facilitate innovation. The partner universities will furthermore establish coordination bodies for the promotion of activities among education, research, and innovation actors dealing with the WEF Nexus. This platform will be a meeting point for researchers from Egypt and Europe coming together to enable Egypt to achieve water, energy and food security as an integrated asset.

The Heliopolis University is a key partner in the project due to its expertise in promoting interdisciplinarity and because of its practice-oriented style of doing research focused at the needs of the society and essential industries. It will thus be responsible for the establishment of the coordination bodies as well as for the dissemination and management of the project activities.

Bianca Fliss

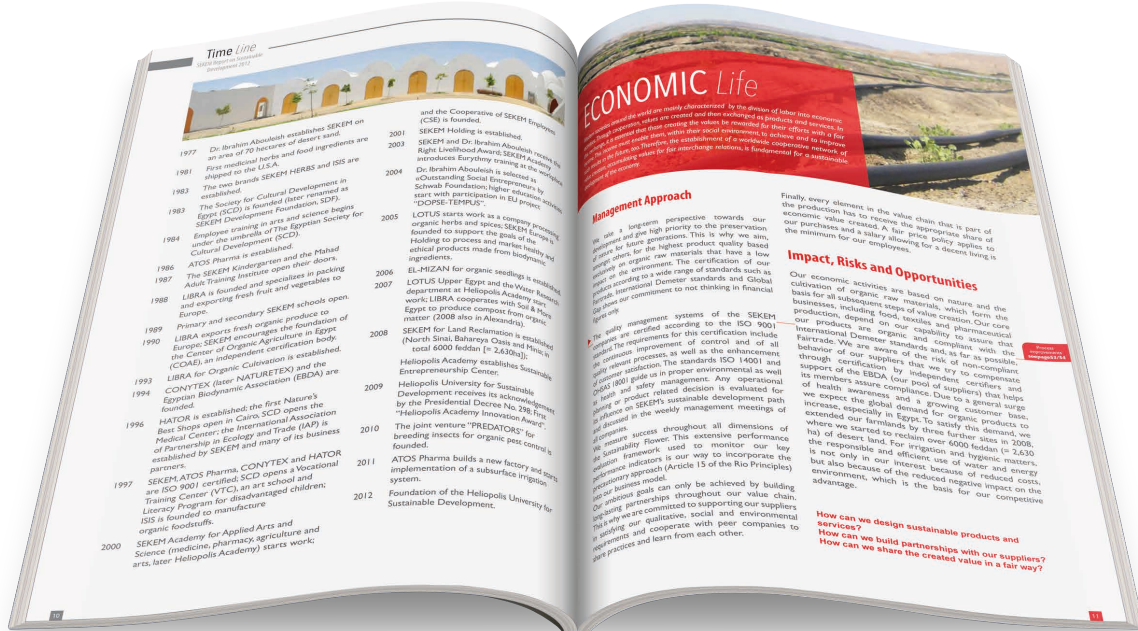


SEKEM together with its partners makes substantial investments into renewable energies.



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WWW.SEKEM-REISEN.DE
WWW.AVENTERRA.DE

Impressions from SEKEM



SEKEM recently published the latest issue of its annual reports on sustainable development. The report documents substantial developments at the SEKEM companies and the initiative in general. SEKEM's overall performance has been improved mainly in the areas of "energy" and "air". Room for improvement remains particularly in the implementation of long-term strategies and plans as well as in the further reduction of the environmental impact of its commercial ventures.

In the economic sphere SEKEM's strengths are mostly in the areas of eco-friendly and socially conscious products, a continuous and seamless management of waste, control systems for quality, environmental impact, health and safety, and long-term commitments to the business and wellbeing and suppliers. In the social sphere, the report focuses specifically on successes in social work, the implementation of the objectives of the ILO and the UN Global Compact, Fairtrade product certification, support of the personal development of co-workers, the provision of health services to the community, and the promotion of tolerance among its partners. The report also documents SEKEM's substantial involvement in lobbying activities for sustainable development in general.

In the cultural field, SEKEM's strengths include the integrity of its social and cultural community, broad research objectives and dedication to the fulfilment of the spiritual needs of all co-workers. In the environmental sector, SEKEM's strong sides encompass a comprehensive risk assessment, the rejection of non-organic pesticides or fertilizers, participation in the preservation of seeds, and a strict „anti-GMO" policy. Plus, the document notes SEKEM's positive contribution to the conservation of biological diversity, animal welfare, the promotion of the Demeter standard and the creation of new habitats for endangered species. SEKEM's commitment to energy conservation and the promotion of renewable energies is also mentioned.

The new report for 2012 can be downloaded here: <http://issuu.com/SEKEM/docs/rsd2012>

SEKEM Austria Supports Education of Professional Welders

The Austrian support association of SEKEM under the leadership of its Advisory Board Member Mrs. Birgit Birnstingl and her company SEKEM Energy have now managed to pledge substantial support to introducing a new apprenticeship training to the Vocational Training Centre at SEKEM.



The main burden of financing the new initiative is born by the Austrian company Fronius International and the German Society for International Cooperation (GIZ). The project specifically aims at the training of future SEKEM professionals for managing solar energy systems. As such professionals remain unavailable in the country, their training has to begin early to provide future industries with capable staff. The long term goal is to offer welder training also as part of apprenticeships which will focus on agricultural technology and renewable energy. In addition, adult education courses in this field are also to be offered.

The Austrian SEKEM friends also support carpenter apprenticeships in cooperation with the Swiss friends. Through the mediation of the expert carpenter Alfred Hofer, who visited SEKEM last year, a carpenter from Salzburg currently stays at SEKEM to support training at the VTC.

Source: SEKEM Austria

! More information:
<http://www.fronius.com/>
<http://www.giz.de/>
<http://www.SEKEMenergy.com/>

World Food Prize Promotes Discussion on GMO's



In a much-publicized statement 81 recipients of the Right Livelihood Award and members of the World Future Council protested in June this year against the announcement that this year's World Food Prize 2013 would go to three scientists and executives of companies that manufacture and sell GM seeds. SEKEM had published its own press release on the matter and Dr. Ibrahim Abouleish had signed the joint statement.

In response to the protest, councillor Frances Moore-Lappé was subsequently invited to the renowned Borlaugh Dialogue Symposium in Des Moines, Iowa (United States), the event in the framework of which the World Food Prize is usually awarded, to participate in a panel discussion on "Sustainability, Agro-ecology and Food Justice", on 18 October. At the event, she pointed to the negative effects of the business practices of Monsanto & Co.

The discussion was moderated by the Swiss agricultural scientist and ecologist Hans Herren. This December in Stockholm, Sweden, Herren will himself receive the Right Livelihood Award of 2013.

Source: World Future Council.

! More information:
<https://www.worldfoodprize.org>

SEKEM Energy Strengthens Solar Thermal Energy in SEKEM

Under the leadership of SEKEM Austria's member Birgit Birnstingl, the Austrian company SEKEM Energy has now managed to secure funding for a new project on solar thermal energy generation in Egypt and particularly SEKEM. The project is co-financed by the Austrian organization for development cooperation (ADA).

The focus is on the adaptation of solar heating systems to Egyptian environmental conditions. „Sandstorms and the high salinity of the air have a very negative effect on solar collectors in the desert. It is therefore very important to have trained professionals taking continuous care of them“, comments Birnstingl. The existing pilot (SEKEM Insight reported) is already producing warm water, which is used in the processing of fresh food-stuffs and dairies.

SEKEM Energy was also involved in a conference on energy strategies for Africa. Mrs. Birnstingl there presented the particular development approach of SEKEM Energy in Egypt.

Quelle: SEKEM-Energy

! More information:
<http://www.SEKEMenergy.com>



SEKEM

Masthead:
 The editors of SEKEM Insight wish to thank all contributors to this issue.

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