Inauguration of the ESCWA Funded Clean Technologies Innovation Center

Energy Efficient Poultry Production at AUB - The Agricultural Research and Education Center (AREC)

- ESCWA has since March 2011 been implementing a project on "Capacity Building on Climate Change Mitigation for Poverty Alleviation in Western Asia". This project aims at encouraging the use of Renewable Energy (RE) applications in poor rural areas in some ESCWA member countries (where most people mainly rely upon traditional biomass to meet their energy needs) through raising awareness and building the capacity of concerned stakeholders to benefit from RE technologies for the economic and social development of these areas.

- Numerous capacity building activities and meetings have so far been implemented under the umbrella of this project which ends by June 2014 in different ESCWA member countries. The last phase of this project includes the establishment of a center with operational models of appropriate RE technologies to be used as hands-on training tools and show cases in workshops and training activities at both national and regional levels.

- As such, ESCWA has selected a training/educational facility to be equipped with models of RE applications, from a number of training centers in ESCWA MCs, who have expressed an interest to host such a facility and are specialized in related technologies. The selection was based on a bidding process, which concluded with the selection of, AUB's farm (the Agricultural Research and Education Center, AREC) as the training center to be equipped with the required renewable energy technologies.

- ESCWA provided technical advice and financial support for equipping the center with renewable energy technologies’ operational models; for local services required for the adaptation to local conditions, installation and commissioning of the models; and for operating the training center and organizing a series of educational guided visits for students and representatives from local businesses serving the energy industry.

- AUB represented by the Faculty of Engineering and Architecture (FEA) and the Faculty of Agriculture and Food Sciences (FAFS) has also provided financial support to cover the cost of the rehabilitation of the poultry house, and to co-finance the equipment cost, and I seize this opportunity to thank Dr. Makram Sudian, Dean of the Faculty of Engineering and Architecture, and Dr. Nahla Hwalla, Dean of the Faculty of Agricultural and Food Sciences for their efforts and contribution to the center.

- Thanks to AUB as well, the necessary expertise for the determination of the different equipment specifications, design of the anaerobic digester, and construction of the
poultry house was provided. AUB namely initiated the renovation of one of its existing poultry houses to be converted and used as a model for sustainable and energy efficient building for poultry farming through producing auxiliary heating for the poultry house needed to support solar-based heating at certain times of the year. Extra biogas from the digester will be used at a later stage to produce heat for the other poultry houses and for the creamery.

- The construction work at the AREC poultry house included deconstruction, structural rehabilitation, interior renovation and exterior restoration, and it involved the construction of an anaerobic digester, a geothermal system, and the installation of the equipments.

- Given that the center’s main objective is to showcase operational models of appropriate RE technologies, dissemination of the center’s activities to the public and to ESCWA member countries is of crucial importance.

- As such, dissemination will be done through two avenues: via web dissemination, and via direct field visits to the center. As such, the project’s dissemination would include the creation of a website intended to provide information and updates on the project, and to facilitate communication between different stakeholders. Also, brochures are being prepared and the preparation of the training material will follow and will be achieved at a later stage.

- As agreed with AUB, the Center will be opened to visits from ESCWA member country representatives starting the summer of 2014, and participants from different ESCWA member countries will be invited to visit the training/educational center, and will be familiarized with the newly installed renewable energy equipment and their mode of operation to heat the poultry house, as well as the estimated energy saving using renewable energy application in the poultry production sector as demonstrated by the showcase at AREC.

- Again, I wish to thank AUB for its cooperation and endeavor in establishing the center, namely, Dr. Darine Salam, Assistant Professor, Department of Civil and Environmental Engineering, Faculty of Engineering and Architecture, Dr. Mohamad Abiad, Assistant Professor, Department of Nutrition and Food Science, Faculty of Agricultural and Food Sciences, Dr. Nesreene Ghaddar, Associate Provost, Endowed Qatar Chair in energy Studies and Professor, Department of Mechanical Engineering, Faculty of Engineering and Architecture, Dr. Kamel Aboughali, Professor and Chair, Department of Mechanical Engineering, Faculty of Engineering and Architecture, Dr. Ghassan Chehab, Associate
Professor, Department of Civil and Environmental Engineering, Faculty of Engineering and Architecture, and Mr. Hilal Dbouk, AREC’s Director.

- I also would like to mention that an ESCWA team already conducted a technical field visit to the center at AREC on June 8, during which an explanatory tour of AREC was done with thanks by Mr. Dbouk, and detailed technical explanations were provided by Mr. Ramzi Abou Said from ASACO, the contracting company charged with the civil works, and whom we thank for respecting the tight deadlines for setting-up the equipment and adjusting to the necessary required modifications.