December 2011

Middle East and North Africa ESTH Hub Activities Report

Happy New Year!!

Photo courtesy of Embassy Amman showing bird routes

Raptor Observation Station Eilat: I accompanied the U.S. Forest Service (USFS) bird habitat and wetlands expert to visit bird estuaries in Eilat, Israel and Aqaba, Jordan from Dec. 3-5. This migratory bird flyway and nesting area that straddles the Israel/Jordan border hosts more migratory birds than any bird corridor except for Panama! The wetlands have been compromised by development, agriculture, surface water diversion, climate change, and over extraction of water. Israel has rehabilitated some wetland areas by pumping treated sewage water into a dried pond which had been used as a garbage dump. Jordan has sewage holding ponds and the Aqaba municipality has created an artificial reed island where the birds stop to rest in transit. We look forward to supporting the NGOs on both sides of the border and the USFS as they undertake this important project.

SESAME Meeting in Ankara: The Synchrotron Light for Experimental Science and Applications in the Middle East (SESAME) Council met in Turkey on December 7 and 8 to discuss progress on the region's first light beam accelerator, located in Amman, Jordan. There are only 70 of these particle accelerator complexes worldwide, and a light beam accelerator donated by Germany was the first light beam acquired by SESAME. The light beams are magnetically accelerated in a huge cement centrifuge and can be used to conduct experiments in chemistry, materials science, physics, biology, archeology, medicine, and energy. The Germans' decommissioned this beam in the 1990s, so it was a triumph to report at the meeting that SESAME scientists were able to activate it in the Amman facility in 2011. I always enjoy the cooperative atmosphere of these meetings that draw in the following member countries: Cyprus, Egypt, Bahrain, Iran, Israel, Jordan, Pakistan, the Palestinian Authority, and Turkey. The Turkish physicist quipped, "To be a contributing member of SESAME, your government has to have problems with at least one other member government." The scientists get along fine, though…they just want their equipment to be fully financed and to work by the 2015 target date!

Highlights of Trip to Tunisia Dec. 12-14:

Civic Action and Young Environmental Activists at the American Corner: Going to Tunisia was an inspiring trip for me. I was scheduled to travel to Tunis in February 2011: everyone can guess what happened to that trip! As the first domino of the Arab Spring, Tunisia has been moving constructively forward, and Tunisians are enjoying their newfound freedom of speech. I was especially bedazzled by an environmental action group that met me at the American Corner. These teens and twenty-somethings have printed t-shirts that they wear during regularly-scheduled outings to pick up trash. People ask these volunteers what they are doing, and often join in! We had a great hour-long discussion on environment activism, which the American Corner streamed live on Facebook. If you'd like to see what the volunteers of this active American Corner are accomplishing, "friend" them on their Facebook page! https://www.facebook.com/#!/groups/45694023394/

Sidi Thabet Technopole: This extensive technology park has over one million square meters of space in which to conduct research, training, and development in diverse areas such as nuclear science, biotechnology, nuclear research, and pharmaceuticals. Graduate researchers conduct experiments in five laboratories and are working in life sciences, biodiversity, and the health of humans and animals. The complex can incubate up to 15 businesses at one time, and has 11 international partnerships with companies from France, Algeria, and Morocco. In 1993, Sidi started a nuclear research and safety program, which has grown to over 100 employees. In 1999, it installed an irradiation facility for radiation processing, isotope measurements, and sterilizing insect. The sterilization technique is particularly interesting, as a way to eventually eradicate pests without using pesticides. Scientists breed or trap male flies and sterilize them. When the sterile male meets a normal female fly, they "mate", but don't have offspring. Other radiological services generate 10% of the center's budget through such activities as package inspections. The former Tunisian government had been interested in building a nuclear power plant since 2008 and had a target date of 2023 to begin generation: Sidi is unsure of the new government's peaceful nuclear aspirations.

Photo courtesy of Embassy Amman

Ministry of Public Health: Director General Hichem Abdesselem, M.D. commented the Tunis has one of the best health systems in the region, and health care is free for everyone. About 30% of the population uses the free system, and 70% have health insurance and go to private doctors and hospitals. Indicators are good in the areas of maternal and child mortality and life expectancies. However, according to the Director General, Tunisia doesn't have a good health system in rural areas: it needs better roads, and more doctors,

hospitals, ambulances, and investments in preventative health care. The rural public doctors and nurses are underpaid, and only make $800 and $300 per month, respectively: many resign to work in the private sector in the larger coastal cities. There are four medical schools, one pharmaceutical school, and one dental school. Because of low salaries in Tunisia for medical professionals and the fact that these French-system institutions teach in French, there is "brain drain" of graduates to go to France. Tunisian specialists were also attracted to Libya by higher salaries before the Libyan revolution. Dr. Abdesselem is forward-thinking and believes that the new government needs to develop better policies that recognize that Tunisia's health care system needs more investments, particularly in the area of health services. He also believes the country would be better served by looking to the United States rather than France for education and exchanges, but admitted the language barrier impedes this.

CITET: I won't even attempt the long French name for this acronym: CITET is a dynamic regional training center for environment technologies and also provides environmental services. We met Dr. Amel Jrad, CITET's Scientific Director. We were so impressed that Dr. Jrad is now U.S. Embassy Tunisia's Woman in Science Hall of Fame honoree for 2012! She leads CITET in its varied services including projects using wind and solar energy; promoting the use of organic waste and producing biogas; business to business match-making; organizing networking events; capacity building; training private consultants; conducting environmental impact assessment; consulting the government on national sanitation and solid waste management; conducting chemical lab analysis; and sampling water to measure bioproducts and micro substances. CITET established national eco-label for hotels and agricultural products. As a regional training center, CITET has conducted sessions on clean technology, water and energy conservation, and establishing national laboratories for universities, GIZ, and JICA (the aid agencies for Germany and Japan, respectively.) Small companies have paid CITET to conduct sessions on hazardous waste management, environmental evaluations, and sustainable development.

USAID's Green Gingerbread House: The Energy and Water and Environment Offices at the USAID Mission in Jordan constructed a gingerbread house with all sorts of "green building" features. The edible house contained: solar water heaters on the roof; insulation; photovoltaic cells and wind power generation connected to a grid; a water catchment system; a southern orientation to take advantage of radiant heat; grey water systems with household re-use; a settlement pond; CFL Christmas lights; and a reindeer biogas facility! Of course, USAID prominently displayed its brand on the house. USAID invited embassy personnel to take a look at the house to get people to think green in a light-hearted manner.

Global Competitiveness Report of the World Economic Forum Released: The 2011-2012 Global Competitiveness Report from the World Economic Forum is out. The report ranks 142 major and emerging economies based on the Global Completive Index. In the Middle East, Qatar (14th) solidifies its place in the top 20 while Saudi Arabia (17th) enters the top tier for the first time, followed by Israel (22nd), the United Arab Emirates (27th), Kuwait (34th), Bahrain (37th), Tunisia (40th), Iran (62nd), Jordan (71st), Morocco (73rd), Algeria (87th), Lebanon (89th), Egypt (94th) and Yemen (138th). Most Gulf States continue their upward trend of recent years. Rankings: http://www3.weforum.org/docs/WEF_GCR_CompetitivenessIndexRanking_2011-12.pdf. Report: http://www3.weforum.org/docs/WEF_GCR_Report_2011-12.pdf. [Source: NEA/RMA Regional Economic Digest, December 13, 2011]

Other News:

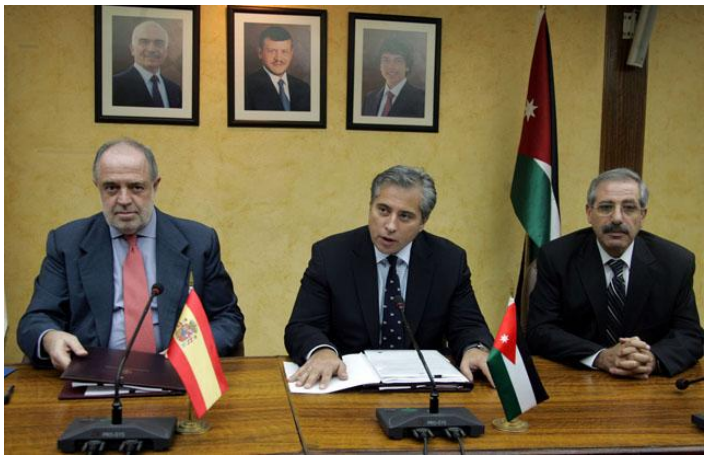
Disclaimer: The following news articles do not represent the point of view of the ESTH Hub or any USG representative and are merely a collection of articles gathered from local and online media.

GIST Announces Winner Of 2011 Competition! From a battery that uses kinetic energy to recharge, to a process designed to extend the shelf life of milk using sliver nanoparticles, the State Department-funded Global Innovation through Science & Technology (GIST) Competition featured many brilliant and creative ideas from all over the Middle East! The winners were Najwa Sahmarani and Zyad Sankari, two entrepreneurs from Lebanon. The women won $20,000 for Cardio Diagnostics, a health device that monitors a patient's heart continuously to alert the patient and family members to potential predictors of a heart attack. For more on the competition and winners go to: http://gist.crdfglobal.org/about-gist/news/2011/12/08/11-gistech-i-winners-announced-at-2011-entrepreneurship-summit

Photo courtesy of GIST

MENA - TechWomen 2012: The 2012 TechWomen program will take applications until February 15. The TechWomen initiative will identify approximately 42 women who are emerging leaders in technology sectors for a five-week program, including project-based mentorships at leading companies in California, workshops, networking events, a conference, and meetings in Washington, D.C. This link leads to the eligibility criteria and more information: http://www.techwomen.org/how-to-apply/

JORDAN - Spain Lends Country 12 Million Euros to Enhance Water Supply: The Government of Spain agreed to provide Jordan with 12 million euros in soft loans to help develop the water sector in the northern region of the country. The loan agreement, signed by Minister of Planning and International Cooperation Jafar Hassan and Spanish Ambassador in Amman Javier Sangro de Liniers, seeks to improve water pumping systems in the north by electronically linking pumping stations, wells, and dams. The Kingdom is also in negotiations with Japan and France to obtain other loans, he said.
For more: http://jordantimes.com/spain-lends-jordan-12-million-euros-to-enhance-water-supply. [Source: The Jordan Times]


Spanish Ambassador in Amman *Javier Sangro de Liniers*, Minister of Planning and International Cooperation *Jafar Hassan* and Minister of Water and Irrigation *Mousa Jamani* attend a signing ceremony on Thursday (Photo courtesy of Planning Ministry)

JORDAN - Impact of Extracting Seawater from Red Sea Will Be Negligible: The impact of extracting millions of cubic meters of seawater from the Red Sea will be negligible, according to the results of the Red Sea Modeling Study. The study assessed

effects of the proposed Red Sea-Dead Sea Water Conveyance Project on the environment of the Gulf of Aqaba and Eilat, especially since the mega scheme seeks to pump a maximum of two billion cubic meters of water annually from the Red Sea into the rapidly shrinking Dead Sea. http://www.jordantimes.com/?news=44381. [Source: The Jordan Times] The Jerusalem Institute for Israel Studies on pumping water into the Dead Sea: http://jiis.org/index.php?cmd=publication.8&act=read&id=626. [Source: The Independent]

ISRAEL – Government to Pump Water into the Jordan River: Israel has announced plans to begin restoring the Jordan River by pumping about 30 million cubic meters of water into the parched valley. For more: http://www.independent.co.uk/news/world/middle-east/israel-to-pump-life-back-into-sacred-river-6280293.html.

Egypt – Researchers Strike Gold with Nanoparticle Virus Test: An Egyptian research team has won a prize for developing a hepatitis C test using gold nanoparticles that could become a cheap and rapid way to screen people and blood banks for the virus! http://www.scidev.net/en/new-technologies/nanotechnology/news/researchers-strike-gold-with-nanoparticle-virus-test.html. [Source: SciDev.net]

MOROCCO - Interview with DESERTEC's CEO, Mr. Paul van Son: DESERTEC is an initiative to develop a sustainable energy supply in the desert regions in the Middle East and North Africa. In October 2009, Dii was formed as a limited liability corporation to advance the DESERTEC vision, and Paul van Son was appointed CEO of that corporation. Here is an interview conducted by Andreas Breyer from Solar Novus: http://genesismorocco.blogspot.com/2011/12/focus-on-morocco-interview-with.html. [Source: Genesis Morocco]

Green Tip of the month

There are so many things you can do at home to save energy and reduce waste. Here is a great link with useful tips you can do at home! http://www.squidoo.com/agreenlife