



Annual Report

Research Center for Environment and Development

Beirut Arab University
2015-2016

Introduction:

During academic year 2015-2016, the efforts Research Center of Environment and Development (RCED) have been mainly focused on completing some projects and developing its agricultural and scientific research activities. This report presents a summary of the major progress that have been achieved during this year.

Scientific Research:

- Completion of the USAID- Cairo funded “**Groundwater Governance in the Arab World: Taking Stock and Addressing the Challenges**” led by the “International Water Management Institute” (IWMI) and facilitated at upper Litani Basin, Bekaa by RCED. During this year, RCED the field work planned for the last stage of the project and organized several workshops with local farming communities, municipality members, officials and decision makers to discuss and disseminate the findings of the project.
- Jointly with the Faculty of Pharmacy, completion and submission of final report of the UNESCO funded project “**Mapping Economically Important East Mediterranean Plant Species in Jabal Moussa Reserve**”. In spite of the short duration of the study, RCED managed to successfully execute all activities of the project that includes: i) gathering ethnobotanical knowledge and practices of the local communities regarding plant benefits and use, study of vegetation and voucher specimen collection ii) Mapping of priority economic plant species.
- Participation in several studies on the chemical composition and biological activity of some native Lebanese plant species (*Prangos asperula*, *Achillea kotschyi* and *Hypericum libanoticum*) being led by the Faculty of Pharmacy at BAU and Faculty of Agriculture and Food Sciences at Holy Spirit University of Kaslik (USEK).
- Participation in the WB, GEF, NASA, USAID and CNRS- Lebanon funded project “**Assessment of the evapotranspiration, growth and yield of potato crop in Central Bekaa**” that aims at water conservation and improving potato crop quality using new crop management tools of fertigation while enhancing quality, productivity and reducing input cost of water, energy and agrochemicals.
- Developing RCED herbal garden with new species such as *Origanum ehrenbergi*, *Salvia sclarea*, *Thymbra spicata*, *Satureja thymbra* & *lavandula stoechas*.

Development Activities

- Cultivation of all field crop management activities of the demonstration project ***“Origanum syriacum Cultivation in Central Bekaa”*** to ensure good crop productivity and resource use efficiency. The project has already completed two years of age and has been able to cover its start-up cost and is beginning to be profitable.
- Extension of the pilot project ***“Beekeeping & Honey Production”*** which was launched with 10 beehives grown in between Bekaa and Debbieh campuses. At this stage the number of hives has reached 29 beehives producing high quality honey.

Education Activities

- ***“The Annual Academic Orientation Forum for the Association of Universities of Lebanon, for Bekaa Region, 2015 -2016”*** on November 17th, 2015 with participation of around 700 students from different secondary schools across Bekaa region. The representatives of several Lebanese universities provided students with all the necessary information about the educational programs admission requirements and tuitions.
- ***Visit of Postgraduate Students of the Faculty of Sciences*** on March 12th, 2016. The visit was aimed at enhancing students interests and engagement in environmental issues of natural Bekaa resources. Dr. Safaa Baydoun presented a briefing on RCED research activities and invited the group for a tour in the herbal garden and other agricultural projects.

Awareness and Community Activities

- Organizing a round table discussion on ***“Solid Waste Crisis and Solutions”*** on March 19th, 2016 presented by *Eng. Bassam Sabbagh*, Ministry of Environment, who explained to participants all technical details on the present status of solid waste management and solutions proposed by various parties and NGOs, private sector in the country. In addition to RCED staff, the discussion group was participated by *Dr. Hania Nakkash*, Dean of Graduate Studies and Research; *Dr. Fadi Karam*, Technical Agricultural Director of Industrial Value Chain in Lebanon (LIVCD-USAID), *Eng. Maan Omairi*, President of Alumni Bekaa and several community key members.
- Hosting three school teachers training workshops organized by Bekaa *Youth Organization for Education and Development* with the aim to update teachers

applying on new teaching strategies and methodologies and enable them to perform well in the contest of *Civil Services Board Lebanon*.

Conferences and Capacity Building

- Participation of *Ms. Helena Dalleh* in the of the training workshop **“Use of Geospatial Information in Local Governance”** organized by Local Sats, ENPI CBCMED Project on November 24-27 2015, for stakeholders from Lebanese municipalities and Unions of municipalities, ministries, research institutes and universities.
- **“Water Management and Security in Lebanon and Region Countries”**, April 26th 2016, Lebanese University, oral presentation by *Safaa Baydoun* and *Marie-Helen Nassif* on ground water governance.
- **“22th International Conference of the Lebanese Association for the Advancement of Science (LAAS)”**, April 14-15 2016, Holy Spirit University of Kaslik (USEK), two oral presentations by *Safaa Baydoun* and colleagues on trophic status of Litani River and wild poisonous plants.
- **“XV Optima Meeting”**, June 11th, 2016, Montpellier, Poster by *Safaa Baydoun* and *Nelly Arnold* on Wild Edible Plants of Lebanon.
- **“Coping with Water Scarcity”**, December 15th 2015, organized by *Rafik Hariri Foundation Conference* and *UNESCO- Beirut*, Reporting and proceedings editing by *Safaa Baydoun* conference.
