

Annual Report

Research Center for Environment and Development

2016-2017

Reflection

2016-2017 has been a year of participatory research activities and intensive community outreach activities that aimed at tackling environment problems, and contributing to the integrated management of natural resources and delivering a targeted capacity-building training to local community. The current report is intended to highlight the progress RCED has made during 2016-2017 through which the center fulfilled its role in several collaborative projects targeting groundwater governance in Bekaa, water conservation in agriculture and groundwater quality monitoring. RCED has also continued its on-going research activities on plant conservation, medicinal plants, and flora biodiversity assessment and importance of plants for the benefit of rural communities. Additionally, RCED organized and hosted a breadth of capacity building activities to strengthen the knowledge base and contribute to local socioeconomic growth. The following highlights will summarize the main achievements and activities of 2016-2017.

Highlights

Training Workshop on “*Municipality Management*” - May 25, 2017

Aiming at developing management and leadership capacities of municipality leaders in Bekaa, the Continuing Education Center in collaboration with RCED organized a workshop on “Municipality Management”, on the 25th of May 2017.

During the interactive sessions of the workshop, experts in governance and economics from the Faculty of Business Administration at BAU; Prof. Nehal Mostapha and Dr. Abdalla Nassereddine and experts in legal and financial affairs; Lawyer Antonie Karam and Dr. Rajaa Sharif exchanged with municipality leaders and managers from 40 municipalities across Bekaa information of leadership and management skills of municipal work. Aspects covering accountability, financial management systems, communication and information, organizational and human resources were also discussed. At the closing session participants expressed their sincere appreciation for the efforts and agreed on their need for further to ensure continuity in deepening their capacities towards better community service and livelihood development. Training certificates were distributed by the organizers who wished to continue this successful initiative with new workshop in the very soon future.



Prof. Nehal Mostapha



Dr. Abdalla Nassereddine



Dr. Rajaa Sharif



Lawyer Antonie Karam



Municipality Council Members of Bekaa Region

Orientation Session on “*Women’s Studies Diploma*”, Faculty of Human Sciences, BAU – May 20, 2017

Recognizing the important role of women in society and their contributions to socioeconomic development of Bekaa, RCED hosted an interactive orientation session on “Women’s Studies” postgraduate program offered by the Faculty of Human Sciences. Professor Mayasa Al Nayal, Dean of faculty, provided a prominent audience of 120 plus with information on the interdisciplinary aspects of the program. Employing a wide range of perspectives from disciplines such as history, literature, philosophy, sociology, psychology, business management, anthropology and biology, students of Women’s Studies Diploma can explore their potential and role contribute to the cultural and sociological and economic development. Information on the admission and graduation requirements and tuition were introduced. Being part of the course study of the diploma, the importance of research and field work that tackle women issues and challenges was heightened as a very important instrument to create connections between classroom and real life experience and to explore possible career interests.



Prof. Mayasa Al Nayal, Dean of Faculty of Human Sciences





Participant community members

Farmer Filed Training on “*Growing Potatoes Using New Irrigation Technology in Bekaa Valley, Lebanon*” - May 19, 2017

On the occasion of “Fascination of Plants Day 2017” (www.plantday.org/lebanon-fr.htm), RCED organized a farmer filed training day on 19th of May 2017 that aimed at improving potato crop productivity and economic return of small hold farmers in rural community while simultaneously conserving natural resources in Lebanon.

During the event a group of local farmers and potato producers enjoyed sharing the findings of a research project on “*Growing Potatoes Using New Irrigation Technology in Bekaa Valley*” jointly conducted by Beirut Arab University and the Remote Sensing Center (RSC), National Council for Scientific Research (CNRS), Lebanon. During the field visit, farmers explored the use of new timely fertigation technology, i.e. fertilization through trickle irrigation, and discussed the benefits of using such technology in terms of productivity, crop quality and impact on natural resources. The day presented an excellent opportunity for knowledge and experience exchange between farmers and scientists from RCED and RSC.



Dr. Talal Darwich; CNRS and Dr. Amin Shaaban; RSC



Introducing fertigation technique during field visit



The experimental plot, RCED, Taanayel, Bekaa

Beekeeping Training Workshops within the framework of the USAID funded “*Lebanese Industry Value Chain Development (LIVCD) for beekeeping and honey production in Bekaa area*” – April 26, 2017; December 8, 2016; July 12, 2016

In cooperation with the USAID funded project “*Lebanese Industry Value Chain Development (LIVCD)*”, RCED hosted several capacity building training workshops on July 12, 2016, December 8, 2016 and April 26, 2017 for bee keepers in Bekaa aiming at fostering the beekeeping and honey production sector in Lebanon with focus on raising the productive capacity of beekeeper cooperatives in Bekaa area.

In the opening sessions Dr. Safaa Baydoun, director of RCED, and Dr. Fadi Karam, Lebanese Industry Value Chain Development (LIVCD), addressed the audience with welcoming words and highlighted the importance of the beekeeping sector in Lebanon being one of the strategic value chain products and the potential role it plays in economic growth, agricultural activity and flora biodiversity conservation. In each of the interactive workshops, experts Dr. Shady Al Hosari and Mr. Afif Abu Shdid provided 60 plus beekeeping participants with technical assistance, best practices and means to deal with the increasing environmental and climate changes challenges facing the sector. Information and success stories on the important potential of beekeeping and honey production for economic growth and sustainable development were exchanged.



Dr. Safaa Baydoun, director of RCED, and Dr. Fadi Karam, Lebanese Industry Value Chain Development (LIVCD)



Dr. Shady Al Hosari; Faculty of Agriculture, Lebanese University



Beekeeping participants – Workshops “*Lebanese Industry Value Chain Development (LIVCD) for beekeeping and honey production in Bekaa area*”

Scientific field visit by senior students of BAU Faculty of Sciences to Bekaa - February 28, 2017

RCED facilitated a sampling campaign for the senior students of the BAU Faculty of Sciences in Bekaa region under the supervision of Dr. Hoda Youssef and Dr. Salwa Abed Rahman on 28th of February 2017. An overview of the importance of natural resources and major environmental challenges of Bekaa region was introduced to students by Dr. Safaa Baydoun, director of RCED. Information on the interests and research activities of RCED were also shared. This was followed by a field visit guided and assisted by RCED team during which students observed the extent of environmental degradation of natural resources caused by urbanization in Bekaa and collected water, soil and agricultural crop samples from various sites.



BAU students, Faculty of Sciences, water sampling from Litani River at site of Rawda guided by RCED team



Collecting agricultural crop samples (potatoes)

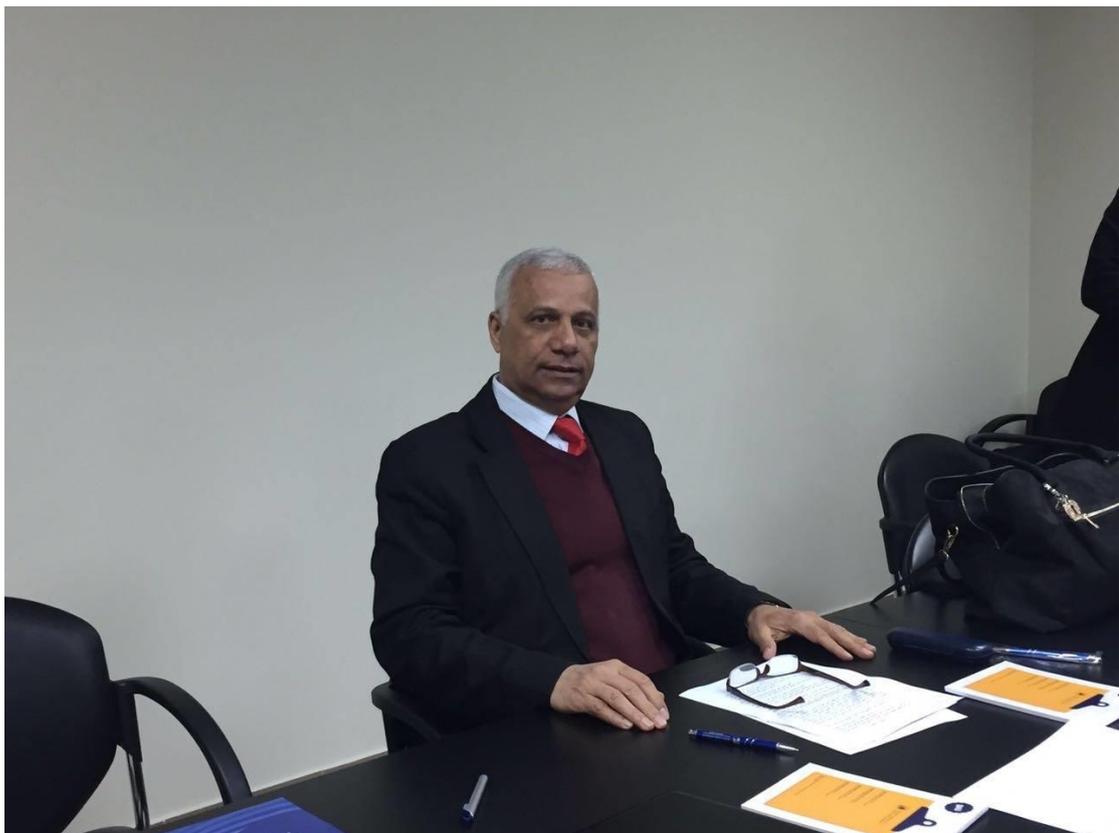
National workshops on “Groundwater Governance in the Arab World: Taking Stock and Addressing the Challenges” – February 21 and 22, 2017; Beirut and Bekaa

As the National Facilitator of the USAID funded project “*Groundwater Governance in the Arab World: Taking Stock and Addressing the Challenges*” (<https://wle.cgiar.org/project/groundwater-governance-arab-world-taking-stock-and-addressing-challenges>), RCED organized two workshops during February 21-22, 2017 in Beirut and Bekaa to present and discuss with stockholders and decision makers the findings and the proposed policy white paper generated by the project for groundwater governance in Lebanon. Workshop I, Beirut, Feb. 21st 2017, targeted officials and decision makers from the Ministry of Energy and Water, Bekaa Water Establishment and the Litani River Authority. Whereas workshop II, Bekaa, Feb. 22nd 2017, was oriented towards local stakeholders including municipality members, Water User Associations and farming communities.

During both interactive workshops I and II, the research team of the project led by the International Water Management Institute (IWMI) presented and discussed the “*Case of Central Bekaa, A Policy White Paper*” (<http://gw-mena.iwmi.org/wp-content/uploads/sites/3/2017/04/Policy-White-Paper-Lebanon.pdf>). On the behalf of the BAU President, Prof. Amer Galal Adawi, and BAU family, Prof. Adel El Kordi, Dean of Faculty of Engineering, addressed the participants and research team with a warm welcome and acknowledgment for the efforts and importance of project’s findings for the management of one of the most national pressing challenges of Lebanon. He emphasized that BAU has followed a dedicated path to provide quality educational outcomes that contribute to water management and governance in Lebanon through qualified civil and environmental engineers. Dr. Safaa, Director of RCED, added that this project which is part of the regional project that includes Tunisia, Lebanon, Jordan, UAE and Oman aims to identify the required actions to achieve good ground governance in Bekaa which is suffering from excessive pumping illegal pumping and that the workshop maybe viewed as a platform for dialogue and knowledge exchange in the field of groundwater governance at the national level. The valuable participation of managers and donors of international water projects in Bekaa including USAID Lebanon Water Project, Swiss Agency for Development and Cooperation (SDC), Solidarite – Eau, France, International Orthodox Christian Charities (IOCC), German Organization for Technical Cooperation (GTZ) allowed and facilitated knowledge sharing and building links for potential future collaboration. Through his intervention Prof. Jamal Al Khatib, Faculty of Engineering, BAU, stressed on the urgency of developing and implementing integrated water management plans to combat the severe challenges water sector is facing due to climate change and pressures of Syrian refugees.



Prof. Francois Molle; Institute of Research for Development (IRD), Marseille, France



Prof. Adel El Kordi; Dean of Faculty of Engineering, BAU



Dean of Faculty of Engineering; BAU, representatives of Ministry of Energy and Water, Bekaa Water Establishment, research team from IWMI and RCED and participants – Workshop I, BAU, Beirut



Managers of USAID Lebanon Water Project, Swiss Agency for Development and Cooperation (SDC), Solidarite – Eau, France, International Orthodox Christian Charities (IOCC), German Organization for Technical Cooperation (GTZ), research team from IWMI and RCED and participants – Workshop II, BAU, Bekaa

Training workshop on “Women Empowerment for SMEs Management” - December 8-10, 2016

Based on a collaborative initiative with the Center for Entrepreneurship (CFE) and the Faculty of Business Administration at Beirut Arab University (BAU), and the Lebanese League for Women in Business (LLWB) and RCED, a workshop on “Women Empowerment for SME Management” was organized at RCED-Bekaa during December 8-10, 2016. During the interactive sessions of the workshop, experts and mentors from BAU and successful business women from LLWB provided more than 35 women of all across Bekaa with knowledge and skills needed for business start-up and survival and good practice for building confidence and for resolving real-life business problems.

After a welcoming speech by RCED director, Dr. Safaa Baydoun, and CFE director, Dr. Wassim Itani, experts from the Faculty of Business Administration at BAU; Prof. Nehal Mostapha, Prof. Wagdi Higazi, Dr. Abdalla Nasreddine, Dr. Ekrami Mokhtar, Prof. Ahmad Slim and Dr. Alaa Abbas, exchanged with participants information and experience on challenges and important aspects necessary for successful management of women owned start-up businesses and SMEs. The experts also shared knowledge on the importance of the role of women’s entrepreneurs in economic growth and various aspects of successful business planning, management skills, finance and human resources management and marketing. Moderated by the engineer Mrs. Najah Jaroush, the LLWB inspirational panel introduced the success stories of several women entrepreneurs; Ms. Yusr Sabra, Mrs. Haya el Kassem, Mrs. Lina Idriss, Mrs. Kinana Rahhal and Mrs. Chantal Rbay. Manager Mrs. Sabine Rbeiz Kassis from BLOM Bank, the sponsor of the event introduced the various funding products and explained the terms and conditions of each product wishing women entrepreneurs all the success through the different steps of their business development.

At closing ceremony, certificates were distributed while women participants expressed their sincere appreciation for the efforts of the organizers and their wishes to attend for further training.



Dr. Wassim Itani, CFE director, and Prof. Nehal Mostapha, Faculty of Business Administration, BAU



Dr. Safaa Baydoun, RCED director, Dr. Asmahan Al Zain; LLWB President, and Eng. Najah Jaroush; LLWB Bekaa chapter coordinator



Dr. Abdalla Nassereddine, Faculty of Business Administration, BAU and Dr. Safaa Baydoun, RCED director



Manager Sabine Rbeiz Kassis, BLOM Bank



Prof. Ahmad Slim distributing certificates for participants



Dr. Ekrami Mokhtar



Participants – “Women Empowerment for SMEs Management” workshop

USAID Water Project in Lebanon (LWP) meeting municipality council members in Central Bekaa - October 19, 2016

RCED hosted in 19 October 2016, a meeting of the USAID funded project “*Water Project in Lebanon (LWP)*” with the municipalities in Central Bekaa including the Union of the Municipalities, and the municipalities of Bwarej, Majdl Anjar, Anjar, Marj, Kab Elias, and Meksse. LWP is a five-year program funded by USAID with the objective to increase access to clean, reliable and sustainable sources of drinking water for Lebanese citizens (info@lebanonwater.net).

During the interactive meeting, LWP managers and consultants Drs. George Akl, Nabil Amasha, and Marwan Rizkalla introduced to participants the objectives and framework of LWP. This was followed by an open discussion on the needs of every municipality through which technical and capital assistance to enhance capacities and upgrade the infrastructure for better services and protection of natural resources were emphasized. The role of civil society and women as important stakeholders in water management and decision making is stressed. At the end of the meeting participants expressed the need to foster synergies and coordination between the Lebanese government, local authorities, private sector and NGOs towards a more efficient implementation of integrated actions.



Action plan for combating pollution of Litani River Basin, LWP consultant



Municipality Council members of Central Bekaa

“Litany River from its Source to its Estuary: “Vision and Solutions” - September 24, 2016

Under the patronage and in the presence of the former Minister of the Environment His Excellency Mr. Mohamed Mashnoug, Beirut Arab University organized a workshop entitled *“Litany River from its Source to its Estuary: Vision and Solutions”* on 24 September 2016.

Participants included parliament members of Bekaa, universities, governmental and research institutions, NGOs, municipalities and a breadth of community members. Prof. Amr Galal El Adawi, BAU President, addressed participants with a welcoming presentation highlighting the major challenges facing the water sector in Lebanon and stressing the need for urgent implementation of actions to combat these challenges. In her presentation, Prof. Hania Nakkash, Dean of Research and Graduate Studies, emphasized the role of higher education and scientific research in developing plans and implement actions to efficiently contribute to the integrated management and conservation of the integrity of the precious of water resources in the country. Projects covering various aspects of the challenges facing Litany River and government plans and projects to tackle them were presented by Ministry of the Environment (MoE) and Litany River Authority (Eng. Mohamad Younis). Parliament members Dr. Assem Araji and Mr. Jamal Jarah, Litany River Authority, members of municipality expressed their high concerns for the degraded environmental status of the river and its impact on economy, public health and society and sluggish performance of government. Prof. Hussein Amiri, University of Colorado, presented an overview of some global best practices in the integrated management of river basins in USA and emphasized the need for coordination between ministries, governmental institutions and public for the successful management of the Litany River Basin.

In the closing session a briefing on BAU contribution to the assessment of the ecological status of the river and management of its environmental degradation was presented by Dr. Safaa Baydoun, Director of BAU, followed by an open discussion and development of a set recommendation.



MP Mr. Jamal Jarah, Prof. Amr El Adawi, His Excellency Mr. Mohamed Mashnoug and Mr. Adel Kortas



His Excellency Mr. Mohamad Mashnouk, Prof. Amr Galal el Adawi and group of BAU professors and MoE consultants

“Advanced Teaching Methodologies” Workshop - January 12 and 13, 2016

In collaboration with the Bekaa Youth Association, RCED held two training workshops on January 12 and 13, 2016 on “Advanced Teaching Methodologies” targeting school teachers in Bekaa region as a preparatory means for Civil Service Council (مجلس الخدمة المدنية) contest 2016. Experts in education enlightened 70 plus participating teachers with updates of teaching methodologies and shared expertise, knowledge, skills and techniques of using interactive teaching and learning approach.



Experts in education at “*Advanced Teaching Methodologies*” workshop



Participating teachers
