ENIRONMENTAL EDUCATION AT THE ARABIAN GULF UNIVERSITY

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The Arabian Gulf University (AGU) is a regional institute based in the Kingdom of Bahrain. Established in 1980 by the six GCC countries, the mandate of the university is to orient its programs and curricula to the cultural, scientific, and occupational needs of the member states. The university fulfills this mandate by educating and training scholars and specialists, as well as by conducting research in the different fields of development and contributing to the emergence of appropriate applied scientific solutions.

In line with the university’s mission, the Desert and Arid Zones Sciences Program was established in 1985 within the College of Graduate Studies to educate students in scientific research and management of soil, water and plant resources in the desert environment. The unprecedented rate of socio-economic development and urban sprawl in the GCC countries prompted the need for further development of the program to accommodate the management of environmental resources and their protection from the consequences of this intensified development. Moreover, multilateral agreements such as the Rio Conventions of 1992 accelerated the university’s transition in dealing with multi-dimensional environmental issues from a disciplinary to a trans- and interdisciplinary approach.

Realizing the importance of the AGU mission and its programs, Sultan Qaboos Bin Said of Oman sponsored an Academic Chair in Desert Agriculture in 1994. This had been followed by the establishment of the Emir of Qatar Shaikh Hamad Al Thani Academic Chair in Geographic Information Systems and Remote Sensing in 1997, which are considered the most critical tools in environmental and natural resources research and management. In the same year, the Sheikh Zayed Academic Chair for Environmental Sciences was created, adding another dimension to the environmental education programs at AGU. These Chairs enabled the administrators of the programs to further develop the curricula, expand research and intensify the program’s extension work. Furthermore, under the umbrella of these academic chairs, the AGU established a network of collaborators from national universities, local and regional research institutes inside and outside of the GCC to address pressing environmental issues facing the region.

Currently, the backbone of environmental education in AGU is offering innovative solutions to the most pressing environmental issues of the region, promoting interdisciplinary learning, and collaborating with environmental policymaking organizations at the regional and global level. This type of learning is reflected in the expansion of the desert program into several more specialized programs in the Environmental and Natural Resources Department to address the needs of the GCC countries. These programs include Environmental Sciences, Environmental Management, Water Resources Management, Desert Farming Techniques and Soiless Agriculture.

One of the most important contributions in the field of environmental education and research is the cooperation with the UN Environment Program (UNEP) since 1995. AGU faculty and students have been involved in the preparation of the Global Environment Outlook reports and the related Integrated Environmental Assessment (IEA) training programs. This significantly contributed to the development of the curricula and the emergence of a new paradigm of environmental education and thinking at AGU. In this regard, several courses have been introduced at the Master and Doctorate levels to strengthen the interdisciplinary approach of the learning process. These courses cover topics such as environmental education and awareness, disasters and risk management, water security, and environmental policymaking.

Training programs and research topics have also changed to cope with the needs of Gulf countries in dealing with the environmental impact of industrialization and urban development. Currently, the core focus of applied research topics is sustainability issues in the region. This includes a focus on the water-energy-food nexus, green energy, vulnerability to climate change and mitigation and adaptation issues, and the implementation of environmental conventions within the context of local socio-economic development. To date, more than 200 Masters and
PhD theses have been produced by the Department of Natural Resources and Environment, the majority of which have been published in peer-reviewed journals.

The educational process of AGU involves training programs and public outreach, which have a significant outcome on the development of the environmental domain in GCC countries. Several AGU graduates have assumed leading positions in environmental institutes in the region, and have prominent roles in both the public and private sectors. In this regard, AGU has contributed considerably to strengthening the role of the environmental institutes and revisiting laws and policies in several countries in the region.

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