



Renewable Energy and Sustainable Development and Their Relation with Remote Sensing

Prof. Farouk El-Baz

It is with pleasure that I welcome this initiative of the Arab Academy of Science and Technology (AASTMT). I applaud the AASTMT for emphasis on the applications of renewable energy to sustainable development. This new journal will assist in popularizing the significance of this important effort.

Because the topic is rather new to many developing countries, emphasis is to be placed on communicating the significance of the endeavor. Thus, scientists and technologists should attempt to convey the expected benefits to the society at large. Articles and case studies in this new journal will be case studies in an easy to follow explanation of the proper procedures and their expected benefits.

There is no limitation to subjects that would have an impact on the topic. For example, my own field of studying the earth with data collected from space would have an impact. For example, the potential use of satellite image data to the selection of sites for the generation of solar energy. This would be based on the topography, measurements of the aridity index, and preferred locations near large cities, as well explained by Dr. Hany El-Nokrashi in this volume.

It is clear that in Egypt and throughout the Arab world there is a need to emphasize the use of solar energy. Our region includes some of the driest places on Earth. The impinging solar radiation during most of the year would be invaluable to the production of all energy needs. In addition, many regions are endowed with utilizable wind for the production of additional energy. The use of such research would go a long way in sustaining a clean environment for a vast number of citizens.

For these reasons, I congratulate all those who embarked on bringing this valuable effort to fruition. It is particularly significant that many participants in this effort represent younger generations of Egyptians. I applaud you all and wish you continued success.

About Prof. Farouk El-Baz

Egyptian American space scientist, Born on January 2, 1938 in the Nile Delta village of Touqh el aklaam, El Senbellawein city, Dakahlia Governorate. In 1958, at the age of 20, he received a Bachelor of Science in chemistry and geology from Ain Shams University. In 1961, he received a Master of Science in geology from the Missouri School of Mines and Metallurgy (now Missouri University of Science and Technology). In 1964, at the age of 26, he received a Doctor of Philosophy in geology from the Missouri University of Science and Technology after conducting research from 1962 to 1963 at the Massachusetts Institute of Technology.

In 1978, El-Baz was appointed Science Adviser to President Anwar Sadat of Egypt. He was charged with the selection of regions for land reclamation in the desert without detrimental effects on the environment. For his distinguished service, President Sadat awarded him Egypt's Order of Merit - First Class.

In recognition of his professional standing, he received the following honorary degrees: Doctor of Science from the New England College, Henniker, NH (1989); Professional Degree from the Missouri University of Science and Technology (2002); Doctor of Philosophy from Mansoura University, Mansoura, Egypt (2003); Doctor of Laws from the American University in Cairo (AUC), Egypt (2004); Doctor of Engineering from the Missouri University of Science and Technology, United States (2004).

Currently, El-Baz is Research Professor and Director of the Center for Remote Sensing at Boston University in Boston, Massachusetts. He is a Professor of Geology at the Faculty of Science, Ain Shams University, Cairo, Egypt.

He is also a member of the Board of Trustees of the Geological Society of America Foundation, Boulder, Colorado, a member of the Board of Directors of CRDF Global, and a member of the U.S. National Academy of Engineering, Washington, DC.