



The Multilateral Research Activity along the Dead Sea – Jordan Rift Valley

Prof. Abdallah Al-Zoubi (1), Prof. Z. Ben-Avraham(2)

(1) Al-Balqa' Applied University, Salt, Jordan

(2) Dead Sea Research Center, Tel-Aviv University

The Northwestern Arabian Plate (Jordan, Israel and Palestinian Authority) comprise a single geographical and geological feature of the Jordan Rift Valley (Dead Sea Rift). Different factors affected the history of the Rift Valley such as geomorphic, geologic and climate, regardless of the political boundaries. For instance: (1) the Jordan Rift Valley is the most seismically active elements in the area, (2) the ancient Lake Lisan, flooded the rift valley during part of glacial period and covered part of the three countries, (3) the subsurface aquifers along the rift valley are shared by both countries such as Wadi Araba (Jordan-Israel) and Dead Sea basin and Lower Jordan Valley (Jordan, Israel, and Palestine), (4) The recharge of the Jordan Rift Valley flowing from the Land of the surrounding countries. Consequently, the above mentioned factors indicate that it is impossible to study the physical environment of one country without having the full cooperation of others.

During the last decades the researchers seeking to cooperate in solving water, environmental and economical problems. Therefore, several joint projects were completed or still under preparation. These projects include (1) Integrated Geophysical Study of the Dead Sea Rift for Hazard Assessment and Mineral Resources, (2) High Resolution Marine Geophysical Imaging of Active Faults in the Aqaba-Elat Region, (3) The Salinity Curse of the Middle East Fossil Groundwater, (4) New Geophysical Approach to Prediction of Sinkhole Hazards related to drop of the Dead Sea level and human activity, (5) German-Israeli-Jordanian-Palestinian multilateral Project: Sustainable Utilization of Aquifer Systems in the Jordan Rift, (6) Integrated water resources manage-

ment of the lower Jordan Valley and others.