POLICY

A Force for Peace in the Middle East

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ne characteristic of the Middle East region, and especially the area occupied by Israel, Jordan, and the Palestine Authority, is the small geographic area and the high degree of interdependence among the populations in matters of resources and the environment. A major toxic spill or natural disaster in any of the territories could affect them all almost simultaneously and would require close coordination of remedial action. Yet, direct communication is limited essentially to government officials and members of a few professions. Because of the international nature of science, the scientific, engineering, and medical communities have the necessary international channels, technical capability, and, in a sense, the political dispensation to meet and communicate with their counterparts throughout the region. However, this type of communication is routine only among a few institutions in and around Jerusalem.

At a meeting of the science academies of Israel, Jordan, Palestine, and the United States in Washington in 2002, convened in part in response to the events of 9/11/2001, Hani Mulki, at that time secretary general of the Jordan Higher Council for Science and Technology and, subsequently, foreign minister and Jordanian ambassador to Egypt, offered a resolution for discussion. He argued that scientific cooperation should not be a by-product of the peace process; it should be a driving force for peace. When the situation is most critical, scientists and engineers must make the greatest efforts to work together. His resolution was adopted by acclamation (1).

During the activities surrounding the Oslo Peace Process, scientists were easily recruited to participate in committees to discuss such topics as water and the environment. The question is how, in the absence of a formal peace process, regional scientific cooperation might be encouraged and lead to general progress toward peace.

There are grant programs active in the region, such as the MERC program sponsored by USAID (2), which supports research collaboration among Israelis and Moslem neighbors, and IPSO, the Israeli-Palestinian

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Science Organization, which makes research grants available to collaborating Israelis and Palestinians (3). There is no doubt that they have helped to increase scientific cooperation. But such programs do not necessarily make a lasting contribution to overall peace in the region. Cooperation tends to end when grant funds are exhausted, and individual successes often lead to overseas employment and a loss to the region.

I believe that the most effective approach for the donor community is the creation and support of scientific associations and institutions that are based within the region, like IPSO, and are specifically focused on regional cooperation. There are many programs currently operating, some well-established and some new, and the following examples are intended mainly to define the genre. During the Cold War, the Soviet and U.S. National Academies of Sciences held joint meetings without direct government participation on arms control issues (4). Today the Association of Middle East and United States National Academies of Science has been formed to further scientific cooperation (5). The individual national academies of Israel, Jordan, and Palestine in the Association are independent organizations, but the Association brings them together in joint projects dealing with common problems.

This Association has recently proposed the creation of a Middle East Food and Nutrition Board. Regional conferences on common nutrition and health problems are not infrequent in the region, but the concerted actions needed to eliminate disease and malnutrition are rare. In the United States, the Food and Nutrition Board of the Institute of Medicine has the stature and experience to identify such problems and propose solutions to the government and the country. It produces the report on Dietary Reference Intakes that is used as a standard reference for food labeling, fortification of foods, government nutrition assistance programs, and guidance to individuals. A similar body under the Middle East Association could propose standards for foods that are traded commercially in the region and help to combat micronutrient deficiencies and anemia.

Another model that could be effective in the Middle East is the dedicated technical

Support of regional scientific institutions or associations may make a difference.

institution in which regional governments participate. A prototype is IIASA, the International Institute for Applied Systems Analysis, which was supported during the Cold War by both the USSR and the United States as a place where scientists could confer. SESAME, the synchrotron radiation source for regional physics experiments being established in Jordan, could offer similar venues, as could the King Hussein Cancer Center, in which several countries participate.

Examples of possible regional efforts include: a Middle East Association for the Advancement of Science; a Web portal for students and researchers to exchange information on local problems, such as nutrition, renewable energy, agriculture, and water resources; a network of excellent technical universities such as those created in Africa and Latin America by the "Millennium Science Initiative" supported by the World Bank and others (6); multinational research centers for focused study on issues like the Dead Sea or the desert environment; and an industrial incubator that would attract Israeli-Arab partnerships.

An advantage of such models is that the organization or institution is permanently dedicated to continuing the cooperation among the participating countries. If and when the original donors withdraw, there likely will be a concerted effort to find support from other sources, which ultimately might be the governments of the region. Short of the facility earning a profit, joint support of the governments is the closest we can come to peaceful cooperation and sustainability.

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