

# Regional Water Data Banks Project

## Multilateral Working Group on Water Resources

An implementation plan for the Regional Water Data Banks Project was approved by the Multilateral Working Group on Water Resources in November 1994. In January 1995, Israeli, Jordanian, and Palestinian (Core Parties) representatives met with representatives from the United States, European Union, Canada, and France (Donor Parties) to form a committee to manage, coordinate, and promote project implementation. Since that time representatives from the Netherlands have joined the project. The committee formed during the meeting is known as the Executive Action Team (EXACT) and is composed of two representatives from each of the Core Parties and the Donor Parties. The United States is the Gavelholder of EXACT, and Multilateral Water Resources Working Group decision-making procedures apply to EXACT. Representatives from additional and potential donor countries are welcome to participate in EXACT meetings. Since its inception, EXACT has met twice each year to plan, coordinate, and direct project implementation. A copy of the Terms of Reference that was adopted by the EXACT representatives is available from the U.S. Gavelholder upon request.

The Regional Water Data Banks Project was initiated and organized to improve the availability and applicability of water data and information. The project consists of a list of recommended activities that were prepared, discussed, and agreed upon by the Core Parties. An important component of the plan was to establish a Palestinian water data bank while upgrading the existing Israeli and Jordanian data banks in order to assure that all three systems function effectively in a regional setting. The project goal is to enable the exchange of consistent, compatible, and reliable water data and information to support decision making at both local and regional scales. The basic approach adopted for the project is that water data collection and dissemination programs will meet the specific needs of the Core Parties. Through this process and approach, regional sharing and exchange of relevant water information will be promoted and enhanced.

After continuous collaborative work since January 1995, the Regional Water Data Banks Project has achieved some remarkable successes, a few of which are described below.

- Hundreds of hours of training for both water managers and field technicians have been provided. Topics have included on-the-job training on: database development, interpretation of water quality network data, interpretation of surface-water network data, and installation and operation of hydro-meteorological and stream gauging stations. Classroom training has included statistical analysis for water resources, laboratory review procedures, preparation of laboratory quality assurance plans, water-quality field measurements and use of a mobile laboratory, how to improve laboratory analytical results, fundamentals of relational database design, rainfall intensity data analysis, use of digitizing rainfall intensity strip chart software, and use of RAINPLOT software.
  - Donors have assisted the Core Parties to improve their groundwater, surface water, water quality, and meteorological monitoring networks and field data-collection techniques.
  - A pilot real-time monitoring system for hydro-meteorological data measurements, transmission, processing, storage, and interpretation is being implemented.
  - Mobile laboratories were designed by the Parties, constructed, stocked with water quality-oriented field equipment, and donated to each of the Core Parties. The Parties agreed to adopt a regional standard analytical methods manual. Representatives from the major Core Party laboratories were trained in laboratory review procedures and implemented a program of joint technical reviews of the major laboratories in the region. About 25 regional laboratories participate in the analysis of a semi-annual standard reference sample.
  - Local and Wide Area Networks have been established in the Core Party offices.
  - The Parties have developed a joint database to store, process, and analyze rainfall intensity data.
  - An inventory of wastewater-related concerns has been completed, which includes overviews on quantities of wastewater produced, collected, treated and reused, existing major treatment plants, existing water-quality standards, and institutions responsible for wastewater management. Two Decision Support Systems have been prepared, one on water reuse and one on wastewater treatment technologies for small communities.
- The management concept and standards of collaborative work established by EXACT have become a standard by which other projects are measured.

Perhaps the greatest single success is the effective and continuing communication channels that have been established among colleagues from the Core Party participating agencies. These communication channels have been of immense value in helping people understand each other and their programs of common interest.

### **On-Going Activities**

The EXACT donor countries are continuing to work in the region, including more training, rehabilitation or construction of flow measurement and climate stations, purchase and installation of measuring and transmission equipment, ancillary equipment, and laboratory equipment, training in the operation and maintenance of the above, database enhancement, extension of decision support systems for wastewater, extension of a base-line survey of wastewater, improvement of measurement networks in pilot areas, implementation of a suitable data transmission system, development of a real-time monitoring system, processing and use of data in real-time and transfer to data banks, a small-scale water treatment and artificial recharge project, and a project focused on helping the Core Parties to store, analyze, and exchange geologic information related to groundwater resources of the region.

### **The Future**

The project has been very successful, bringing many benefits to the Core Party participants and their constituents. The project also has proven to be successful in terms of confidence building. This is shown by the fact that the WDBP has been able to continue functioning during the fluctuations of the political negotiations of the bilateral track. The participating regional parties, in addition to implementing on-going activities, have come together on their own to discuss and agree on additional activities for the project. Today, the WDBP represents a focal point to which additional projects can be directed and from which they can be effectively implemented. Both Core Parties and Donor Parties intend to build on this positive experience.

In terms of vision, people depend on and share a finite number of tangible items. One of those items, without which life will cease to exist, is water. Both rain and drought are shared by all, not by choice, but by act of a power greater than mankind. Our water is a finite resource, limited in quantity, and essential to life. We must work together to collect and analyze data that will enable us to better under-

stand the quantity and quality of our water resources. We must plan together to manage and protect our limited resource. We must inform our political leaders and educate our citizens so they can make wise and informed choices. We must offer alternatives to shortages, pollution, and mismanagement. We begin this process by working together to gather and share our existing water data, collecting data in those areas where there are none, working together to share analyses, and developing plans to manage our water in an informed, intelligent manner. Our vision is a future in which we work together cooperatively.

### **Potential New Activities**

The project goal has not yet been fully achieved. The Core Parties continue to dedicate both human and financial resources to establish compatible water data collection and dissemination programs and to adhere to agreed-upon regional standards for equipment, accuracy, and operations. There are, however, a wide variety of additional technical activities that can be undertaken in the region to materially improve the life of the people who live there, and the WDBP offers a mechanism to support some of these activities. The scope of the potential activities ranges from small- to large-scale projects. Some ideas (not in priority order) include: regional water-quality assessment, well-head protection project, digitization of large amounts of raw data, monitoring of resources, conservation projects, pollution prevention, sewage management, public health issues, regional estimation of groundwater recharge, development of brackish groundwater, regional water resources model, water use, water demand analysis, and alternative water sources, including desalination.

Regardless of the outcome, the WDBP is a tried and proven model and a process for effective regional cooperation in water issues that can be applied both within the Middle East and in other areas of the world. The combination of commitment towards the common objective of fostering regional awareness, directed project definition and planning, the inclusion of confidence building measures as an integral part of the group's *raison d'être*, effective teamwork, and proactive facilitation and support from the international donor community has proven to be a positive dynamic that facilitates capacity building on a regional scale. The success of the WDBP, as reflected in the period of the project's existence, should serve as a beacon to the rest of the world as to what CAN be accomplished by working cooperatively on a regional level.