

**JOINT SEMINAR:
TRANSBOUNDARY WATER ISSUES IN SOUTH CAUCASUS
Report
December 2002**

WORKSHOP SUMMARY

In November of 2002, representatives from Armenia, Azerbaijan, and Georgia gathered in Tbilisi, Georgia to participate in a joint seminar. The objectives of the seminar were to learn about and move toward improved coordination of transboundary water projects within the Kura-Araks system, and to build skills in selected topic areas necessary for coordination and cooperation. These objectives were set out in a previous meeting held in July 2002 in Tbilisi, where participants from the three nations gathered to map out how they might move forward in the co-management of the Kura-Araks.

Approximately 60 participants from the three nations participated in the joint seminar, which was coordinated by the OSCE, Development Alternatives, Inc., the Pacific Institute, and Oregon State University. We feel that the joint seminar was a success in that it was a well-organized and productive endeavor, allowing the participants not only to interact on a formal basis, but also to network informally and learn from one another.

DAY 2: 7 NOVEMBER 2002

The activities of day two of the joint seminar were developed by Dr. Peter Gleick of the Pacific Institute for Studies in Development, Environment, and Security and by Dr. Aaron Wolf of Oregon State University with support by the Carnegie Corporation of New York. Drs. Gleick and Wolf gathered a group of international experts from Argentina, Israel, and the United States to conduct skill-building sessions on topics requested from the previous meeting. These topics included: an introduction to hydro politics; the economic and social value of water; and international water law. The topics were supplemented by a panel presentation of case studies.

Each session was one hour and fifteen minutes to one and a half hours long. A bit of time was reserved at the end of each session for discussion. Below are more detailed accounts of the activities of the day.

Introduction to Hydro politics

The introduction to hydro politics primarily pertained to conflict prevention and resolution, and capacity-building and institutional issues. Dr. Aaron Wolf's presentation highlighted the history of water conflict and cooperation, the necessity for institutional resilience, and water as a tool for regional cooperation. In the discussions, participants also expressed the desire to have further discussions about what is occurring in each of their countries – including the current state of events, and hydrological and geological characteristics – and how these might impact cooperation.

Dr. Wolf is an associate professor of geography in the Department of Geosciences at Oregon State University. His research focus is on the interaction between water science and water policy, particularly as related to conflict prevention and resolution. He has acted as consultant to the US Department of State, the US Agency for International Development, and the World Bank on various aspects of transboundary water resources and dispute resolution.

Economics and Social Value of Water

In this session on the economics and social value of water Dr. Peter Gleick focused on economic and social concepts as they relate to water and instruments for pricing rates. Dr. Gleick highlighted various examples to illustrate different models and tools used in valuing water. A 20-minute discussion followed his presentation and stimulated a number of questions regarding the use of recycled water, quality rates, the addressing of the conjunctive use of groundwater and surface water in policy and management, and privatization.

Dr. Gleick is co-founder and President of the Pacific Institute for Studies in Development, Environment, and Security in Oakland, California. The Institute is one of the world's leading non-partisan policy research groups addressing global environment and development problems, especially in the area of freshwater resources. Dr. Gleick is an internationally recognized water expert. His research and writing address the hydrologic impacts of climate change, sustainable water use, privatization and globalization, and international conflicts over water resources.

International Water Law

Mr. Jitchak Alster's session focused on many aspects of international water law and international codes of conduct, including general principles of international behavior and law, and specific bilateral and multilateral treaties. During the discussion, participants expressed a great interest in the differences and similarities in bi-national and multi-national agreements, how such agreements are derived, and asked to be provided a written example of the Jordan Basin agreements that were highlighted in the presentation.

Advocate Alster is an attorney and a consultant to the Israeli Water Commissioner and as such serves as the Legal Advisor of the Israeli Delegation to the Jordan-Israel Joint Water Committee constituted by the Treaty of Peace between the countries. He is the author of the Israeli chapters on Water Laws, Water Institutions and Water Economics prepared under the auspices of the Multilateral Working Group on Water Resources of the Multilateral Peace Process in the Middle East as well as of other articles on water law issues in the Middle East

Panel of Transboundary Waters

The panel of experts presented case studies on the Gurani Aquifer in South America (Dr. Ofelia Tuchneider), the Jordan Basin in the Middle East (Mr. Jitzchak Alster), and shared waters between the U.S. and Mexico (Dr. Michael Campana). Dr. Tuchneider emphasized that within the Gurani Aquifer – shared by Argentina, Brazil, Paraguay, and Uruguay – the cooperation between the involved nations started and developed based on their sharing of technical information. She also discussed how the cooperating countries negotiated shared terminology and designed joint methodology for understanding and studying the Gurani. Dr. Campana's discussion highlighted the sharing of the Colorado and the Rio Grande rivers between Mexico and the United States, and the prevailing issues that each country, jointly and separately, works through in the management of these rivers. Mr. Alster's presentation went more into depth regarding the bilateral and multilateral agreements of the Jordan River Basin. Overall the case studies provided a breadth of examples regarding the management of transboundary waters.

Dr. Tuchneider is a doctor in geology, a researcher for the National Research and Technology Council of Argentina, and a professor of groundwater management and hydrogeology in the Department of Hydrology and Environment at the Faculty of Engineering and Hydrological Sciences, National University of El Litoral. She was one of the coordinators of the Project Regional Aquifers in Latin America - Guarani Aquifer System supported by the Canadian International Research Centre for the Development, focal point of the Transboundary Aquifer Systems Inventory of the International Hydrological Programme.

Dr. Campana is Professor and Director of the Water Resources Program at the University of New Mexico, where he is also Albert and Mary Jane Black Professor of Hydrogeology. Selected current work involves the establishment of a Central American Water Resources Development Center (USAID-funded) and a joint Masters program with Escuela Agricola Panamericana in Honduras; the NATO/OSCE South Caucasus River Monitoring project; and hydrological-economic-water rights modeling of the Rio Grande/Rio Bravo stream system of the USA and Mexico.

DAY 3: 8 NOVEMBER 2002

Day three's session was a 3-hour workshop regarding the hydrogeology and management of transboundary aquifers. This morning session was headed by Dr. Shammy Puri, who focused on the data needs of transboundary aquifers. The participants were engaged in an interactive, problem-solving activity to illustrate the technical needs for desired cooperative management of aquifers.

Dr. Puri is Chairman, IAH Commission on Transboundary Aquifer Resource Management.