

Sharing the Nile

UNC faculty help countries find ways that work

BY EMILY J. SMITH

All along the Nile River in northern Africa, the lives and livelihood of many nations rest on its life-giving waters. Throughout much of history, countries on the Nile have worked largely in isolation to develop and implement their plans for the use,

conservation and development of the Nile Basin's resources. Yet, if they work together, they can be much more successful and efficient. Now, in the early 21st century, countries are finding that cooperation can open new opportunities for trade and development.

"This is already happening," says Dr. Dale Whittington, UNC School of Public Health professor of environmental sciences and engineering. "Ethiopia has started to export beef to Egypt. This is in part due to the new atmosphere of friendship and trust in the Nile basin. In the future, one can imagine Ethiopia exporting hydroelectric power to both Egypt and Sudan, and Egypt, bringing capital and technical expertise to irrigation projects in Ethiopia."

Whittington is a consultant to the World Bank and a member of a panel of international experts studying the main water resource issues facing the Eastern Nile countries of Ethiopia, Sudan and Egypt.

The panel is examining the pros and cons of different opportunities for joint, multipurpose investments for these countries. This work is part of the Nile Basin Initiative, a regional partnership to promote economic development and fight poverty throughout the Nile Basin.

The Nile—one of the longest rivers in the world—flows north through Sudan and Egypt. Its two tributaries, the White Nile and the Blue Nile, begin in Uganda and Ethiopia respectively. Nile countries face two major water resource challenges, Whittington says: climate change and a limited quantity of surface water in a region with extreme poverty.

"Since completion of the Aswan High Dam (on the Nile), Egypt has enjoyed a secure, reliable supply of water. However, the challenge for Egypt now is how its current water security will be

affected by future upstream water withdrawals," Whittington says.

"Meanwhile, Sudan faces three difficulties that Egypt confronted before the completion of the Aswan High Dam: lack of sufficient water storage to supply its irrigation schemes in drought years, damage from floods, and the sedimentation of its reservoirs and irrigation systems." Whittington says that in Ethiopia, the main hurdles are food security and the need to improve the livelihoods of poor rural households. "Like Egypt and Sudan, Ethiopia wants to expand its irrigated agriculture sector," he says, "but the country faces many difficulties, including soil erosion, land degradation and the high cost of infrastructure development."

We hope Egypt, Sudan, and Ethiopia continue to work cooperatively to address the water resources and development challenges of the Eastern Nile Basin, Whittington says. ■

UNC researchers are helping the Eastern Nile Council of Ministers assess cooperative water resources management for the Nile River (right). This work is part of the Nile Basin Initiative, a regional partnership to promote economic development and fight poverty throughout the Nile Basin.

