

Book Review

The Nile Basin: National Determinants of Collective Action

John Waterbury

New Haven, Yale University Press, 2000

Walking across any one of the bridges that span the Nile River in Cairo, one is impressed by the size of the river and its apparently slow, but deliberate movement from southern Egypt to the Nile Delta. Most observers have too little appreciation for the remarkable history that has been written in the cities, fields, and political chambers of the ten riparian nations through which the River flows on its way from Lake Victoria to the Mediterranean Sea. Most also are unaware of the complex perspectives, strategies and negotiations that have created the current regime in which the Nile River is shared among those nations. We also lack insight regarding how such a diverse set of independent nations might someday be persuaded to voluntarily craft a new basin-wide regime or several sub-basin agreements to enhance the net benefits obtained from the Nile River.

This outstanding new book by John Waterbury goes a remarkable distance toward filling these gaps in our knowledge and understanding of Nile River issues, with particular emphasis on perspectives, opportunities and constraints regarding cooperation. The title of the book reveals the focus on collective action, but the content is much broader and deeper than the title suggests. The book contains substantial historical information, in addition to considerable discussion of collective action theory, public goods, institutions, incentives, and legal doctrines pertaining to water resources. There is even a little game theory, as suggested by the title of chapter 3 (The Three-Level Game in the Nile Basin). The first-level players, historically, have been the extra-basin powers of Great Britain, France, Italy, America and the Soviet Union. The second-level players have been the national entities, while third-level players have included various subnational interests and groups. Taken together, chapters 1, 2 and 3 provide a helpful overview of strategic interactions in the Nile Basin, the potential obstacles to cooperation, and the importance of key principles, such as the Harmon Doctrine, appreciable harm, acquired rights and equitable use. Waterbury also describes domestic policies that should be implemented by all riparians, even if sub-basin or basin-wide agreements are not forthcoming.

Chapters 4 and 5 describe the importance of enhancing national food security in Ethiopia, where the human costs of cyclical droughts are increasing with population growth, and where many residents are too poor to achieve household food security. Expanding irrigation will increase agricultural output in Ethiopia, but there are few good sites for developing typical, large-scale irrigation projects. The best sites are in the western lowlands, but most Ethiopians live in the more hospitable highlands. Ethiopia needs also to increase its supply of hydroelectricity, but the best sites for power generation are located far from the major centres of demand in Addis Ababa and Dire Dawa. The detailed

discussion of tradeoffs involving large and small projects, and potential developments in the highlands and lowlands is an important contribution for readers seeking to understand how Ethiopia might develop its water resources to enhance social welfare.

Many authors have described Sudan's potential to be a major agricultural producer. The nation has substantial land and water resources, including rainfall and the Nile River, which it can employ to increase its production and export of agricultural products. Waterbury suggests that agricultural development will be an essential component of economic growth in Sudan. He offers the perspective that Sudan could potentially increase its need for Nile River water by 25 billion cubic meters (bcm). That increment would be larger than Sudan's current allocation of 18.5 bcm, defined in its 1959 agreement with Egypt. It also would be much larger than the 4 to 5 bcm that Ethiopia might need to develop its agricultural and hydropower potential. Prof. Waterbury suggests that while Sudan appears to be in harmony with Egypt's desire to maintain the *status quo* regime on the Nile River, Sudan may someday cooperate with Ethiopia to develop new water storage projects on the Blue Nile. Agricultural and economic development in Sudan have been slowed by a long-running civil war and the lack of funds to invest in new infrastructure. An end to the war would enable Sudan to resume its progress toward economic development. It might also produce a new entity in discussions regarding the Nile River, if the residents of southern Sudan gain political autonomy as part of a negotiated settlement to the civil war.

Four riparians belong to the Kagera Basin Organization, which was formed in 1978, to address issues regarding water resources and economic development: Tanzania, Burundi, Rwanda, and Uganda. Of these, only Uganda has a major stake in Nile River issues. Uganda is described as Egypt's unwilling ally in Chapter 7, which contains more information about the Kagera Basin countries than is found in most other books on Nile River issues. Uganda's interest in the Nile River is in power generation, and it cooperates with Egypt in operating the Owen Falls Dam that regulates the flow of water from Lake Victoria into the White Nile. Waterbury suggests that both Uganda and Egypt are in favour of maintaining the *status quo* regime on the Nile River, while Sudan and Ethiopia would prefer a new regime that provides Sudan with a larger water allocation and establishes water rights for Ethiopia.

The book concludes with the assessment that a cooperative regime will not be developed quickly or easily in the Nile Basin. Egypt, by far the strongest riparian, is content with the *status quo*, and is unilaterally expanding its irrigated area. Ethiopia and Sudan also need to increase agricultural production, and they would welcome a new agreement that supports greater use of water from the Nile River. Egypt would not support such an agreement without substantial compensation or the development of new water supplies that enable it to continue diverting 55.5 bcm per year. Given these and other challenges, Waterbury proposes two intermediate steps that might be taken to provide the foundation for a cooperative regime in future: (1) all riparians should implement policies that promote efficient water use within their borders; and (2) sub-basin agreements involving two or more riparians may enhance social welfare and provide a useful starting point for basin-wide agreements.

Most readers of this book will gain new information and insight regarding the strategic interactions that determine how the Nile River is shared among the 10

riparian nations. The book reflects Waterbury's long experience and remarkable scholarship with respect to political and economic issues in the region. Two issues that might be given greater attention include the role of government policies in limiting the productivity of land and water resources, and the urgent need to provide gainful employment for the large and increasing numbers of urban and rural residents. Waterbury notes that flawed governance and economic mismanagement have had substantial impacts on social welfare in the Nile Basin. Implementing policies that provide residents with opportunities to enhance their livelihoods, while motivating them to use resources efficiently, will generate the higher income levels needed to achieve food security.

The right mix of domestic policies will motivate better management of land and water resources, and may generate new interest in regional cooperation. New policies and new enthusiasm will brighten the outlook for livelihoods throughout the Nile Basin, just as the cool evening breezes refresh and energize those who gather on the Nile River bridges on warm summer nights in Cairo.

*Dennis Wichelns
California Water Institute and
Department of Agricultural Economics
California State University, Fresno*

