DIRECTIONS IN DEVELOPMENT

Africa's International Rivers

An Economic Perspective

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Foreword

More than 60 international rivers traverse the continent of Africa. As populations and economies grow, these essential resources need to be developed and managed to meet the needs and fulfill the aspirations of the people. Doing so, however, requires great skill, robust institutions, significant investment, and strong cross-border cooperation. Africa's limited human, institutional, and investment capacity, together with regional instability, make this a formidable challenge. Yet meeting it has become more important than ever as the rivers are being increasingly exploited. The overarching challenge in developing these shared waters will be to do so equitably and in an environmentally, socially, and economically sustainable manner.

Accepted principles of integrated water resources management dictate that rivers are best managed as hydrologic units at the basin level, to optimize environmental sustainability and economic productivity. In all river basins, national as well as international, different groups of users will have different priorities and preferences. Yet without cooperation among users, the full potential of shared resources will be compromised.

Central not only to improving management but also to motivating cooperation are identifying and understanding the potential gains of cooperative river basin management. The most obvious are the direct ones from enhanced environmental sustainability and increased economic productivity, in areas such as food and energy production. In addition, cooperation on international rivers may also generate benefits by catalyzing greater regional development and integration, promoting, for instance, transport and trade connections to market surplus production. This broader integration of regional development in turn strengthens the relationships between the countries sharing international rivers, which further reinforces cooperation.

Yet even when clear gains can be identified, cooperation will be pursued only if all parties benefit in a way they perceive as fair, under an agreement they see as practical. A prerequisite for the cooperative management of international rivers is therefore the sharing of benefits, and

this requires a broad understanding of the principles by which, and mechanisms through which, the benefits of cooperation can be achieved and distributed.

Much has been written in recent years about the technical and legal aspects of the cooperative management and development of international rivers. This paper adds to the literature by presenting economic tools that can be used to identify, assess, attain, and redistribute the benefits of cooperation. This economic perspective provides an objective framework that can promote constructive discussion and inform serious dialogue on the key issue of the gains to be derived from cooperation and the sharing of those gains. Ultimately, decisions regarding the cooperative management of international rivers will be political. But these decisions can be much better informed by substantive technical, legal, and economic discourse.

This paper focuses on Africa's challenges, which are great. It is nevertheless hoped that the insights and practical tools offered here will be of use in shared river basins in other regions of the world.

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Abstract

Cooperative management and development of Africa's international rivers holds real promise for greater sustainability and productivity of the continent's increasingly scarce water resources and fragile environment. Moreover, the potential benefits of cooperative water resources management can serve as catalysts for broader regional cooperation, economic integration and development—and even conflict prevention. But riparians will pursue joint action only when they expect to receive greater benefits through cooperation than through unilateral action.

Economic analysis can be used to make the case for cooperation on international rivers, using tools that will help identify and measure the potential incremental benefits of cooperation, determine the distribution of benefits among riparians, and assess the feasibility and fairness of alternative management and investment scenarios. Investment and management schemes can be designed to maximize the aggregate economic benefits of a river system. Where such schemes yield benefit distributions not perceived as equitable among riparians, economic tools could also be used to calculate, design, and implement arrangements for redistribution. In all of these ways, economics can play an important role in enabling the management of international rivers, helping to motivate, design, and implement cooperative water resources management.

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