

Book Review

Water Resources Management in Ethiopia: Implications for the Nile Basin.

**Edited by: Helmut Kloos and Worku Legesse
(With 17 contributors)**

**Cambria Press: Amherst: New York; 2010
Hard Cover, 415 pages (with 14 chapters and Index)**

Reviewed by: Abera Kumie

The 14 chapter book deals with water resources management in a comprehensive manner encompassing all issues that relate to development to pollution and impact. The presentation style of the book goes from general to specific issues within the Ethiopian context. The linkages to the evidence base are properly made with regard to water source, development and health impact. Such focus and inventory using various data sources strengthens the validity of the information contained within the book. The book is also well illustrated with maps, tables and figures. The references cited on each chapter of the book are detailed and almost exhaustive. The effort and hard work put behind in identifying all these reference sources is admirable.

The first chapter of the book provides a global as well as regional overview on water resources development and management with special emphasis on Sub-Saharan Africa. The second chapter deals with water resources management in the Nile Basin countries that include nearly the total population of Egypt, Sudan, and Uganda, and variable proportions of those of Tanzania, Kenya, Burundi, Rwanda, the Democratic Republic of Congo, Ethiopia, and Eritrea.

Chapter three focuses on large scale hydro-power and irrigation development in Ethiopia, which is considered as the "water tower of Africa" in view of the fact that it possesses considerable water resources potential. Chapter four further looks at the expansion of small scale irrigation and micro-dams and their contributions to creating new opportunities and better income, reducing risk, and improving livelihoods and food security in Ethiopia.

Chapter five outlines the role of rainwater harvesting as an approach to improving water

security and the livelihood of Ethiopian populations facing inadequate and diminishing surface water resources, moisture stress, frequent crop failures, and difficulties of accessing domestic water sources in rural areas.

Chapter six reviews aspects of coverage, access, and use of water supply and sanitation services in Ethiopia as well as sector plans, performance, and priorities; with discussion of associated health aspects and efforts and programs to increase the coverage and sustainability of facilities.

Chapter seven examines the history, causes, impacts, and possible remediation of deforestation and woodland degradation on water resources in Ethiopia, with an emphasis on the highlands. Chapter eight discusses land degradation and water problems in the highlands of Ethiopia with their causes, impacts, and interventions; while chapter nine deals with the problems for pastoralists in the lowlands with particular focus on river basin development in the Awash and Omo valleys. Chapter ten briefly traces the recent history of flooding in Ethiopia and examines the distribution, main causes, and consequences the 2006 floods in Ethiopia, with a focus on spatial and temporal patterns in rainfall and flooding and possible interventions. Chapter eleven further examines the causes and impacts of the 2006 floods in Dire Dawa Town and prospects of flood prevention.

Chapter twelve reviews the occurrence of water pollution by chemicals and heavy metals from industrial and agricultural sources in Ethiopia within a development policy context and examines some treatment and mitigation options. Chapter thirteen attempts to outline the direct health implications of water

resources development in regard to water-related, water-borne, and geochemical diseases in Ethiopia.

The last chapter concludes by highlighting the contribution of the book in revealing the wide range of water resources uses, management practices, and conservation methods employed in Ethiopia and the wider Nile Basin that must be considered by planners and managers in community, national, and trans-boundary water resources management.

Overall, the book provides a comprehensive and well-organized review of the issues on water resource management in Ethiopia with implications for the Nile Basin. It is written in a language that can be easily understood by a generalist audience.

The book is an important resource for teaching and research within academic institutions as well as for someone who need to update themselves on water resources and their impact in Ethiopia. It is particularly useful for instructors who are engaged in the field of environment. It should be compulsory reading for all those in the area of water resources management, public health and environmental health. In addition to the need for wider circulation, it is strongly suggested that it should be available within all libraries of teaching universities in Ethiopia.

The Editors, Helmut Kloos and Worku Legesse, are known scholars in the health field in Ethiopia. In addition to their work in other areas, this is a highly valuable contribution that has addressed the issue of water which is one of the scarce environmental resources with multiple implications in terms of policy, socio-economics and health.