Confronting Drought in Africa's Drylands

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Opportunities for Enhancing Resilience

Raffaello Cervigni and Michael Morris,
Editors

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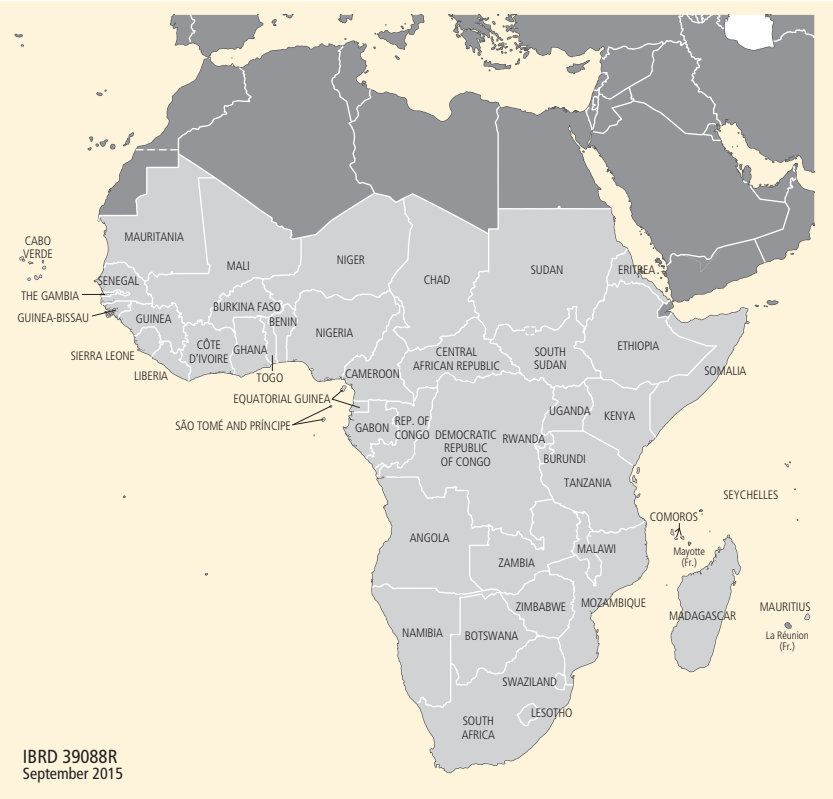

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Foreword

Drylands—defined here to include arid, semi-arid, and dry subhumid zones—are at the core of Africa's development challenge. Drylands make up about 43 percent of the continent's land surface, account for about 75 percent of the area used for agriculture, and are home to about 50 percent of the population, including a disproportionate share of the poor. Due to complex interactions among many different factors, vulnerability in drylands is high and is rising, jeopardizing the long-term livelihood prospects for hundreds of millions of people. Climate change, which is expected to increase the frequency and severity of extreme weather events, will exacerbate this challenge.

Most of the people living in the drylands depend on natural resource-based livelihood activities, such as herding and farming, but the capability of these activities to provide stable and adequate incomes is eroding. Rapid population growth is putting pressure on a deteriorating resource base and creating conditions under which extreme weather events, unexpected spikes in global food and fuel prices, or other exogenous shocks can easily precipitate full-blown humanitarian crises and fuel violent social conflicts. Forced to address urgent short-term needs, many households have resorted to unsustainable practices, resulting in severe land degradation, water scarcity, and biodiversity loss.

African governments and their partners in the international development community stand ready to tackle the challenges confronting drylands, but important questions remain unanswered about how the task should be undertaken. Do dryland environments contain enough resources to generate the food, jobs, and income needed to support sustainable livelihoods for a fast-growing population? If not, can injections of external resources make up the deficit? Or is the carrying capacity of drylands so limited that out-migration should be encouraged?

To answer these questions, the World Bank teamed with a large coalition of partners to prepare this book, which is designed to contribute to the ongoing dialogue about measures to reduce the vulnerability and enhance the resilience

of populations living in drylands. Based on analysis of current and projected future drivers of vulnerability and resilience, the book identifies promising interventions, quantifies their likely costs and benefits, and describes the policy trade-offs that will need to be addressed when drylands development strategies are devised.

Sustainably developing the drylands and conferring resilience to their inhabitants will require addressing a complex web of economic, social, political, and environmental vulnerabilities. Good adaptive responses have the potential to generate new and better opportunities for many people, cushion the losses for others, and smooth the transition for all. Implementation of these responses will require effective and visionary leadership at all levels, from households to local organizations, national governments, and a coalition of development partners. This work, along with an accompanying series of background books, is intended to contribute to that effort.

Makhtar Diop
Vice President, Africa Region
The World Bank

Acknowledgments

This volume is part of the African Regional Studies Program, an initiative of the Africa Region Vice Presidency at the World Bank. This series of studies aims to combine high levels of analytical rigor and policy relevance, and to apply them to various topics important for the social and economic development of Sub-Saharan Africa. Quality control and oversight are provided by the Office of the Chief Economist of the Africa Region.

This book reports the main findings and recommendations emerging from the study "The Economics of Resilience in the Drylands of Africa" (referred to henceforth as the Africa Drylands Study). The study was carried out as part of the World Bank's Africa Regional Studies Program under the direction of Shantaynan Devarajan, Francisco H.G. Ferreira, and Punam Puhan-Chole, with strong backing from Makhtar Diop.

The Africa Drylands Study was carried out as a collaborative effort and involved contributors from many partner organizations, working under the guidance of a team from the World Bank Group (WBG), the United Nations Food and Agriculture Organization (FAO), and the Consultative Group for International Agricultural Research Program on Policies, Institutions, and Markets (CGIAR-PIM) hosted by the International Food Policy Research Institute (IFPRI). WBG staff who participated in the coordination of the study included Raffaello Cervigni and Michael Morris (team leaders), with assistance from Paola Agostini and working under the direction of Magda Lovei. FAO staff who contributed to the coordination of the study included Mohamed Manssouri, Julia Seevinck, Pierre Gerber, and Anne Mottet. IFPRI and CGIAR-PIM staff who participated in the coordination of the study included Siwa Msangi and Karen Brooks.

This book draws on a series of thematic background papers prepared by the following authors:

Drylands classification: Guo Zhe and Jawoo Koo (IFPRI-PIM).

Livestock: Cornelis de Haan (World Bank consultant); Tim Robinson and Polly Ericksen (ILRI); Abdrahmane Wane, Ibra Toure, Alexandre Ickowicz, and Matthieu Lesnoff (CIRAD); Frederic Ham and Erwann Filliol (Accion Contre la Faim); Siwa Msangi (IFPRI); Pierre Gerber, Giulia Conchedda, and Anne Mottet (FAO); and Raffaello Cervigni and Michael Morris (World Bank).

Agriculture Water Management: Christopher Ward with Rafael Torquebiau (World Bank consultants) and Hua Xie (IFPRI).

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Landscape Approaches: Erin Gray, Norbert Henninger, Chris Reij, and Robert Winterbottom (WRI) and Paola Agostini (World Bank).

Vulnerability and Resilience: Pasquale Scandizzo, Sara Savastano, and Adriana Paolantonio (University of Rome); and Alberto Zezza and Marco D'Errico (World Bank).

Social Protection: Carlo del Ninno, Sarah Coll-Black, and Pierre Fallavier (World Bank).

Human, Social, and Political Dimensions of Resilience: Carol Kerven and Roy Behnke (Odessa Centre); Mohamed Manssouri, Julia Seevinck, AnnaLisa Noack, and Ahmed Sidahmed (FAO); Abdrahmane Wane, Ibra Toure, and Alexandre Ickowicz (CIRAD); Roger Blench (Mallam Dendo, Ltd.); Hamath Amadou Dia (Assane Seck Ziguinchor University); Katherine Homewood (University College London); Peter Little (Emory University); John McPeak (Syracuse University); Mark Moritz (Ohio State University); Michael Mortimore (Bayero University); and John Morton (Natural Resources Institute).

Markets and Trade: John Nash, Paul Brenton, and Alvaro Federico Barra (World Bank).

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Land Degradation: Riccardo Biancalani, Monica Petri, and Sally Bunning (FAO).

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Preparation of this book was coordinated by a small team led by Raffaello Cervigni and Michael Morris (World Bank) and including Elizabeth Minchew, Valerie Ziobro, Luis Liceaga, Vanthana Jayaraj, and Amy Gautam (World Bank Consultants). The publication process was managed by Stephen McGroarty, Abdia Mohamed, Aziz Gökdemir, and Andrés Meneses (World Bank). Michael Alwan (World Bank Consultant) proofread the book and revised the interior and the cover.

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Africa Re-Greening Initiatives

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