



**AERC 20th Anniversary Conference on
NATURAL RESOURCE MANAGEMENT AND
CLIMATE CHANGE IN SUB-SAHARAN AFRICA**

15–17 September 2008

Nairobi, Kenya,

Brief Conference Report

Twenty years ago, in 1988, the African Economic Research Consortium (AERC) was established as a small project that had been the brainchild of a few visionary Africans and Africanists. The Consortium has since become a major producer in sub-Saharan Africa (SSA) of African central bank and ministry of finance officials, top economic advisers in government, private sector practitioners, and hundreds of academics. AERC's mission then and now is to strengthen local capacity for conducting independent, rigorous inquiry into problems facing the management of economies in SSA. There are two principal approaches to this: learning by doing research in thematic, collaborative and other modalities, and support for postgraduate training in economics. In its 20-year history AERC has supported over 500 Africa-oriented economic research projects conducted by nearly 2,500 African researchers. AERC has also helped more than 1,300 African economists to further their education through both master's and PhD programmes. One outcome of these efforts is an extensive body of research results that is directly relevant to African economic policy. A comprehensive communications and outreach strategy encourages the application of these results by policy makers.

AERC observed two decades of service to Africa's policy community by convening a conference on *Natural Resource Management and Climate Change in Africa: Issues, Opportunities and Challenges*. It is our belief that this theme communicated AERC's recognition of two of the most pressing issues in sub-Saharan Africa today, which if proactively addressed will ultimately see the gradual achievement of our vision – *sustained development in sub-Saharan Africa grounded in sound economic management, facilitated by well-trained, locally based professionals and a well informed policy making community*.

Conference Theme

The focus of the conference was immensely relevant to SSA policy makers, who confront a number of intertwined issues in their effort to achieve sustainable development in our changing world. For one, globalization with its worldwide resource demands and opportunities has much accelerated in the past 50 years, resulting in impressive growth for a number of countries, with a paradoxical decline in economic performance of some of the world's poorest, many of them in Africa. At the same time, the impact of climate change wrought by industrialization is recognized as one of the greatest threats to the continued development – some say existence – of our globalized world.

It is no longer possible for SSA to stay aloof from these processes. The threat globalization poses to African economies is the potential for marginalization, thus increasing the urgency of a more proactive stance towards policy interventions as a means of modifying the dynamics to better serve their interests. As for climate change, its impacts are seen across the continent and SSA faces the task of guaranteeing sustainable development under the constraints it imposes, coupled with effective management of natural resources in the context of huge global demand. AERC's view is that these multifaceted challenges can be effectively addressed by African policy makers only if adequate capacity is built and retained to conduct rigorous inquiry into the interactions among them.

The intention of the conference was to bring together a significant body of information to illuminate the physical, socioeconomic and global impacts of climate change and resource management, and related policy issues. This is particularly relevant for the poor in SSA, who constitute over 60% of the continent's population, because their livelihoods depend on agriculture. AERC's long-term ambition focuses on a paradigm shift at the national level, so that Africa's poor can become less vulnerable to drought-related food shortages and globalization on the whole. It is

anticipated that through AERC's broad research and policy network, the research papers and dissemination efforts will bring these issues to the fore so as to raise African policy makers' awareness and enable them to take a proactive stance on behalf of their countries and nationals.

And for AERC's own agenda, the economic policy aspects of natural resource management and climate change presented opportunities and challenges in each of the areas of focus of AERC research and, indeed, training programmes. Thus, apart from the policy relevance, one expected outcome of the conference was the mainstreaming of the two issues into our thematic research activities and collaborative research projects. Similarly, the universities participating in AERC training programmes will be encouraged to factor these issues into their training programmes as appropriate.

Conference Presentations

The three-day conference opened with a keynote address by Hon. John Michuki, Kenya's Minister for Environment and Natural Resources. Four papers on the conference theme by leading scholars were presented in two plenary sessions chaired by Harris Mule, Chancellor Kenyatta University and Prof. Njuguna Ndung'u, Governor Central Bank of Kenya. These four papers were presented in two plenary sessions by leading scholars in these areas. The first plenary session, on ***Natural Resource Management***, featured two presentations:

- ✓ **Prof. Paul Collier**, Centre for the Study of African Economies (CSAE), University of Oxford, presented a paper on *Managing the Exploitation of Natural Assets*.
- ✓ **Prof. Anthony Venables**, University of Oxford, focused on *Managing Resource Revenues*.

The second plenary session, devoted to ***Climate Change***, involved the following:

- ✓ **Prof. Richard Odingo**, Vice Chair of the United Nation's Intergovernmental Panel on Climate Change (IPCC) and faculty member at the University of Nairobi, presented a paper on *Climate Change and its Interactions with Economic Development in Sub-Saharan Africa*.
- ✓ **Prof Rashid Hassan**, Director of the Centre for Environmental Economics and Policy in Africa (CEEPA), University of Pretoria, South Africa, addressed *Effects of Climate Change and African Agriculture focusing on coping and adaptation mechanisms within sub-Saharan Africa*.

The conference also featured five parallel sessions featuring the presentation of a wide array of research papers on the two themes:

- Papers on climate change and economic development were in the following areas:
 - Climate change, poverty, income distribution and labour market issues
 - Climate change, macroeconomic policies, investment and growth
 - Climate change, finance and resource mobilization
 - Climate change, international trade and regional integration
 - Political economy and sectoral issues in climate change and economic development
- Papers on natural resource management and economic development covered:
 - Natural resource management, poverty, income distribution and labour market issues
 - Natural resource management, macroeconomic policies, investment and growth
 - Natural resource management, finance and resource mobilization
 - Natural resource management, international trade and regional integration
 - Political economy and sectoral issues in natural resource management and economic development

Lead presenters in these areas included the following:

- **Vivek Chaudri**: Natural resource management, income distribution and labour market issues
- **Shanta Devarajan**: Is climate change a threat or an opportunity for Africa?
- **John Page**: Rowing against the current: Diversification strategies for resource rich economies
- **Aline Chiabai**: Health impacts of climate change for developing countries
- **Arne Wiig**: Political economy issues in natural resource management and economic development
- **Mthuli Ncube**: Financial innovations and climatic risk

Speakers

Prof. Anthony Venables

Anthony Venables is the Chief Economist at the United Kingdom's Department for International Development and a Professor of Economics at the University of Oxford. He also directs Oxford's Centre for the Analysis of Resource Rich Economies and is a Fellow of the British Academy and of the Econometric Society. Previous experience includes work at the London School of Economics (LSE), as research manager of the trade research group in the World Bank, and as advisor to the UK Treasury.



Among other appointments and professional activities have been Ohlin Lecturer, Stockholm School of Economics; Member of the Greater London Authority Economics Research Advisory Board (2003); Director of the Globalization Programme, Centre for Economic Performance; Research Fellow at the Centre for Economic Policy Research (CEPR), London (1984); Co-Director of the CEPR International Trade Programme (1994–2003); Specialist Adviser at the House of Lords Select Committee on Economic Affairs; and associate editor of various academic journals.

Professor Venables has published extensively in the areas of international trade and spatial economics, including work on trade and imperfect competition, economic integration, multinational firms, and economic geography. Two of his major publications are *The Spatial Economy: Cities, Regions and International Trade*, with M. Fujita and P. Krugman (MIT Press, 1999), and *Multinationals in the World Economy*, with G. Barba Navaretti (Princeton, 2004). His research interests include areas such as resource economics, international economics, spatial economics and development economics.

The Professor's PhD in Economics was earned at Worcester College, Oxford, in 1984. He did his BA, Economics, at Clare College, Cambridge, in 1974 and proceeded to do a BPhil, Economics, at St. Antony's College, Oxford, in 1976.

Prof. Paul Collier

Paul Collier is the Director for the Centre for the Study of African Economies at the University of Oxford, UK, where he is a Professor of Economics. He is also a Professorial Fellow of St Antony's College. From 1998 to 2003 he was director of the Development Research Group of the World Bank.



A specialist in the political, economic and development predicaments of poor countries, Professor Collier holds a Distinction Award from Oxford. In 1988 he was awarded the Edgar Graham Book Prize for the co-written *Labour and Poverty in Rural Tanzania: Ujamaa and Rural Development in the United Republic of Tanzania*.

Among his wide-ranging research interests are governance in low-income countries, especially the political economy of democracy, economic growth in Africa, economics of civil war, aid, globalization and poverty. He researches the causes and consequences of civil war; the effects of aid; and the problems of democracy in low-income and natural-resource-rich societies. These interests have also provided a background for his long association with AERC, as a resource person, member of the Programme Committee and participant in collaborative research projects.

Professor Collier works on a wide range of macroeconomic, microeconomic and political economy topics concerned with Africa. Within macroeconomics he has focused on external shocks, exchange rate and trade policies. Within microeconomics he has focused on labour and financial markets, and on rural development, about which he has written three books and many articles. His

work in political economy includes the process of policy reform and a series of published articles on “restraining the state”.

His most recent book, *The Bottom Billion: Why the Poorest Countries Are Failing and What Can Be Done About It*, has been compared to Jeffrey Sachs’s *The End of Poverty* and William Easterly’s *The White Man’s Burden*. These two influential books, like Collier’s, discuss the pros and cons of development aid to developing countries.

In addition to the usual academic outputs, his work has had substantial policy impact. He has been the senior adviser to former Prime Minister Tony Blair’s Commission on Africa; addressed the UN General Assembly; given a seminar at 10 Downing St.; and by invitation met with US Secretary of State Condoleezza Rice on a recent UK visit. He led a four-person team that completed the first ever external review of the operations of the International Monetary Fund for the Board of the IMF.

Prof. Richard S. Odingo

Richard Odingo is Distinguished Professor of Hydrology, specializing in climatology and environmental studies, at the University of Nairobi, Kenya. He is also the Vice Chair of the UN Intergovernmental Panel on Climate Change (IPCC), with which he has been involved since its inception in 1988.

At IPCC Professor Odingo is responsible for supervising research and assessments on all aspects of climate change: the science of climate change, climate change impacts and adaptation, climate change mitigation on a global scale, application of climate information to all aspects of planning, global drought studies and regional drought studies, and the use of remote sensing as well as GIS in development sciences.

He has been involved in university teaching and research for many years, and also worked as a Senior Programme Officer at the United Nations University for two years, where he was for a time in charge of the Natural Resources Programme. He has also had visiting professorships at the Food Research Institute, Stanford University, USA, and at University College, London.

In addition, Professor Odingo has published widely (books and articles), worked as a consultant to many UN bodies, and contributed to the work of the IPCC. In December 2007 the IPCC, jointly with former US Vice President Al Gore, was awarded the Nobel Peace Prize for its work on Global Climate Change.

Professor Odingo studied at the then Makerere University College, in Kampala, Uganda, where he obtained a BA honours degree in Geography in 1960. He did postgraduate studies at Liverpool University, UK, where he was awarded the PhD degree in 1963.



Prof. Rashid Hassan

Rashid Hassan is a professor of economics and Director of the Centre for Environmental Economics and Policy in Africa (CEEPA) at the University of Pretoria, where he is on the Faculty of Natural and Agricultural Sciences, School of Agricultural and Food Sciences Department of Agricultural Economics, Extension and Rural Development. He is a natural resource and environmental economist and policy expert, focusing on optimized management and integrated modelling of natural and economic systems, environmental accounting and inclusive wealth. His experience is primarily with developing countries, mainly eastern, central and southern Africa.



A graduate of the University of Khartoum with BSc (Hons) and MSc in Agriculture and of Iowa State University with MSc and PhD, Hassan was previously regional economist with the International Maize and Wheat Improvement Centre (CIMMYT) in Nairobi. He was also environmental economist and principal researcher and leader of the

Economic Analysis and Policy Support Group of the Division of Water Environment and Forest Technology of the Council of Scientific and Industrial Research (CSIR). In academia, he has been Professor and Chair in environmental economics and policy at the University of Pretoria.

Professor Hassan designed and led a programme funded by the Swedish Agency for Development and Cooperation (Sida) to support institutional capacity in environmental economics and policy in the east, central and southern Africa region in which 18 economics and agricultural economics departments currently participate. In addition, in 2000 he established CEEPA, currently the only centre of its kind in Africa and one that receives very high international recognition as a centre of excellence in this field in the developing world. Other initiatives include the establishment and coordination of the Resource Accounting Network for Eastern and Southern Africa (RANESA), and designing the Africa-wide (11 countries) Global Environment Facility (GEF)–World Bank funded project on impacts of climate change on agriculture in Africa. He also designed the Sida–USAID funded environmental accounting in eastern and southern Africa project.

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Conference Funders

International Development Research Centre

The International Development Research Centre (IDRC) helps developing countries use science and technology to find practical, long-term solutions to the social, economic, and environmental problems they face. IDRC's support is directed towards creating a local research community whose work will build healthier, more equitable and more prosperous societies. The Centre funds applied research by researchers in developing countries on problems the researchers identify as crucial to their communities. Most supported projects result from direct exchanges between the Centre and developing-country institutions. IDRC also provides expert advice to researchers and builds local capacity to undertake research and innovate. The Centre supports research under four broad themes: environment and natural resource management; information and communication technologies for development; innovation, policy and science; and social and economic policy.

Rockefeller Foundation

The Rockefeller Foundation was established in 1913 by John D. Rockefeller, Sr., to “promote the well-being” of humanity by addressing the root causes of serious problems. The Foundation supports work around the world to expand opportunities for poor or vulnerable people and to help ensure that globalization’s benefits are more widely shared. It is one of the few institutions to conduct such work both within the United States and internationally. Rockefeller’s initiatives are largely focused in a small group of areas in which the Foundation may play a special role by virtue of its history and legacy: global health, agricultural productivity, innovation for development, economic resilience and urban life. These areas may change from time to time – while remaining consistent with core strengths and a global perspective – as work is completed and new, pressing opportunities arise.

The Department for International Development

The Department for International Development (DFID) is the part of the United Kingdom government that manages Britain’s aid to poor countries and works to get rid of extreme poverty. DFID is headed by a Cabinet minister, one of the senior ministers in the government, reflecting the importance the government places on reducing poverty around the world. It has two headquarters (in London and East Kilbride, near Glasgow) and 64 offices overseas, and over 2,500 staff, almost half of whom work abroad. For DFID, talking about international development refers to efforts, by developed and developing countries, to bring people out of poverty and so reduce their country’s reliance on overseas aid. Thus, many different things can contribute to development that reduces poverty, such as settling conflicts, increasing trade, tackling climate change, securing more and better aid, and improving health and education. DFID’s values define the way in which the Department intends to live up to the strategic aim of halving world poverty by the year 2015. They also provide a framework for improved performance. The values are: ambition and determination to eliminate poverty; diversity and the need to balance work and private life; ability to work effectively with others; desire to listen, learn and be creative; and professionalism and knowledge.

Swiss Agency for Development and Cooperation

For the past 40 years, Switzerland has been active in development cooperation and humanitarian assistance in the countries of the South and East. Besides the federal authorities, the cantons and municipalities as well as numerous private Swiss organizations support projects and programmes in developing countries. Two federal offices coordinate the international cooperation efforts of the Swiss Confederation: the Swiss Agency for Development and Cooperation (SDC) and the State Secretariat for Economic Affairs (SECO).

Africa Commission

The objective of the Africa Commission is to find more effective means of improving the job opportunities of young Africans by improving the impact of international development assistance and international cooperation with the African countries. The Commission was set up by the Government of Denmark and is headed by the Danish Prime Minister. Members of the Commission include the President of Tanzania, the Prime Minister of Mozambique, the Director of the World Bank, the President of the African Development Bank, high-level representatives from the UN, the African Union, the Economic Community of West African States (ECOWAS) and the European Union (EU), and leading academics. The Danish Foreign Service is a globally operating organization. It works for Denmark’s interests and values in relation to the surrounding world in a manner that furthers the freedom, security and welfare of Danes in a more peaceful and just world, with development and economic growth for all.

The Bill & Melinda Gates Foundation

Two simple values lie at the core of the Bill & Melinda Gates Foundation’s work: that all lives – no matter where they are being lived – have equal value and that to whom much is given, much is expected. The Foundation has guiding principles that reflect the Gates family’s beliefs about the role of philanthropy and the impact they want this Foundation to have. These principles guide what they do, why they do it and how they do it. Among the principles are the following:

- The Foundation is a family foundation driven by the interests and passions of the Gates family.
- Philanthropy plays an important but limited role.
- Science and technology have great potential to improve lives around the world.
- The Foundation acts as funders and shapers, relying on others to act and implement.
- The focus is clear – and limited – and prioritizes some of the most neglected issues.

The Foundation's Global Development Program works with motivated partners to create opportunities for people to lift themselves out of poverty and hunger. Because most of the world's poorest people rely directly on agriculture, the support is directed towards helping small farmers improve crop production and market access. Because loans, insurance and savings can help people weather setbacks and build assets, the programme facilitates access to financial services for the poor. And because information can change lives, it supports free public access to computers connected to the Internet. The programme also supports a range of learning opportunities, including potential new areas of long-term giving, and responds to emergencies through the Special Initiatives grant making.

The mission of the Global Health Program is to encourage the development of lifesaving medical advances and to help ensure they reach the people who are disproportionately affected. The focus of the funding is in two main areas: access to existing vaccines, drugs and other tools to fight diseases common in developing countries, and research to develop health solutions that are effective, affordable and practical.

Bank of Tanzania

The Bank of Tanzania's most significant contribution to achieving maximum growth for Tanzania's economic prosperity is a monetary policy geared towards the pursuit of price stability in the longer term. The primary objective of the Bank is to formulate and implement monetary policy, directed to the economic objective of maintaining price stability, conducive to a balanced and sustainable growth of the national economy of Tanzania. Empirical evidence throughout the world suggests that inflation is mainly caused by excessive creation of money. Thus, in order to achieve price stability, the Bank of Tanzania – by virtue of its ability to exert influence over the money supply process – has been given the task of regulating the quantity of money in circulation and of credit supplied to the economy, i.e., to conduct monetary policy. In other words, it is the primary responsibility of the Bank to establish monetary conditions conducive to price stability over time.

