

CALESTOUS JUMA

Resumé

Calestous Juma, a Kenyan national, is Professor of the Practice of International Development and Director of the Science, Technology, and Globalization Project at Harvard University's Kennedy School of Government. He is a former Executive Secretary of the United Nations Convention on Biological Diversity, Founding Director of the African Centre for Technology Studies in Nairobi, and served as Chancellor of the University of Guyana. Prof. Juma is co-chair of the African High-Level Panel on Modern Biotechnology of the African Union and the New Partnership for Africa's Development (NEPAD). He has been elected to several scientific academies including the Royal Society of London, the US National Academy of Sciences, the Academy of Sciences for the Developing World (TWAS), the Royal Academy of Engineering and the African Academy of Sciences. He holds a DPhil in science and technology policy studies. He has won several international awards and honorary degrees for his work on sustainable development. He is editor of *Going for Growth: Science, Technology and Innovation in Africa* and lead author of *Innovation: Applying Knowledge in Development* and *Freedom to Innovate: Biotechnology in Africa's Development*. He is editor of the peer-reviewed *International Journal of Technology and Globalisation* and the *International Journal of Biotechnology*. He contributes a weekly column on innovation and development in the Nairobi-based *Business Daily*.

Prof. Juma has made significant contributions to understanding the dynamic role of technological innovation in economic transformation in developing countries. He developed the concept of "evolutionary technological change" to explain how socio-economic environments shape the adoption and diffusion of new technologies acquired. This approach was initially developed in his doctoral dissertation and later elaborated in *Long-Run Economics* (Pinter, 1987) and *The Gene Hunters* (Princeton and Zed, 1989).

Prof. Juma's contributions to science and technology policy have focused on the role of technological innovation in sustainable development. In 1988 Prof. Juma founded the African Centre for Technology Studies (ACTS), Africa's first independent policy research institution designed to advance research on technology in development. In 1989 ACTS released a path-breaking study, *Innovation and Sovereignty* (ACTS, 1989), that led to the adoption of the Industrial Property Act in Kenya and the creation of the Kenya Industrial Property Office.

Prof. Juma established himself as a world leader in policy research on biotechnology and directed the International Diffusion of Biotechnology Programme of the International Federation of Institutes of Advanced Studies. He continues to provide international leadership in research, training and outreach through Harvard University's Kennedy School of Government. He is also advancing scholarship in this field through peer-reviewed journals such as the *International Journal of Technology and Globalization*, the *International Journal of Biotechnology* and the *International Journal of Technology Transfer and Commercialisation*.

Prof. Juma continues to provide high-level policy advice to governments, the United Nations and other international organizations on science, technology and innovation. He co-chairs the African Panel on Modern Biotechnology of the African Union (AU) and the New Partnership for Africa's Development (NEPAD) whose report, *Freedom to Innovate: Biotechnology in Africa's Development*, will be officially released in January 2008. Prof. Juma led international experts in outlining ways to apply science and technology to the implementation of the Millennium Development Goals arising from the UN Millennium Summit in the year 2000. *Innovation: Applying Knowledge in Development* (Earthscan, 2005), the report of the Task Force on Science, Technology and Innovation of the UN Millennium Project, was released in early 2005 and its recommendations have been adopted by development agencies and governments around the world. The report has become a standard reference against which governments assess their policies and programmes on the role of technological innovation in development.

Prof. Juma's work has contributed to biodiversity conservation in two ways. First, it has helped to shape global conservation programmes through international diplomacy. Second, the research has inspired the field of biodiplomacy that focuses on interactions between biosciences and international relations. Prof. Juma's research has helped to improve understanding on the role of property rights in conservation (under the rubric of "ecological jurisprudence" as outlined in the volume, *In Land We Trust* (Zed, 1996). His work guided international negotiations on the United Nations Convention on Biological Diversity as documented in *Biodiplomacy* (ACTS, 1994). He later became Executive Secretary of the Convention where he advanced the use of scientific knowledge in conservation policy and practice.

Prof. Juma serves or has served on the board on a number of institutions which include: One Laptop per Child Foundation, USA; Encyclopedia of Life, USA; National Science and Technology Development Agency, Thailand; EARTH University, Costa Rica; Presidential National Economic and Social Council, Kenya; the University of Guyana; Gulbenkian Commission on the Restructuring of the Social Sciences; World Resources Institute, USA; and United Nations University's Institute for New Technologies, The Netherlands.

In recognition of his original work, Prof. Juma has been elected to the Royal Society of London, the US National Academy of Sciences, the Academy of Sciences for the Developing World (TWAS), the UK Royal Academy of Engineering, the World Academy of Arts and Sciences, the African Academy of Sciences and the New York Academy of Sciences. He is a member of the Kenya National Academy of Sciences. He received the 1991 Pew Scholars Award in Conservation and the Environment (1991) for dedication in preserving global biodiversity; the 1992 Rweyemamu Prize for broadening Africa's knowledge base for development; the 1993 UN Global 500 Roll of Honour for Environmental Achievement for important contributions to Africa's quest for solutions to the complex issues of biotechnology, biodiversity and the transfer of technology; and the 2001 Henry Shaw Medal for significant contribution to botanical research, horticulture, conservation or the museum community. In 2007 Prof. Juma was named by the Nairobi-based *Standard* newspaper as one of Kenya's 100 most influential people. He has received several honorary Doctor of Science degrees for his work on the application of science and technology in developed and developing countries and awarded the honour of the Order of the Elder of the Burning Spear (EBS) in 2006 by the President of the Republic of Kenya in recognition of his work in assisting "governments to solve diplomatic problems."

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