

PROFESSOR M.H. KHALIL TIMAMY

P.O. Box 195-8010, Kilifi, Kenya- Pwani University

Personal Address

P.O. Box 42822-80100, Mombasa, Kenya

Tel: +254 715 681 068 or +254 774 995 544

E-mail: aces.timamy@gmail.com or m.h.k.tim@gmail.com

Website: www.pu.ac.ke

CAREER SUMMARY

I am a seasoned expert with appreciable experience in teaching, research, and the creation and management of policy-influencing institutions that address the wider concerns of sustainable development. These entailed exercising key dimensions such as leading, organizing, planning, staffing, monitoring, budgeting and control. I have also excelled in facilitating and coordinating science and technology policy programs and activities, in addition to reviewing numerous research papers for publication in Africa.

Over my 35 years of experience, I have lectured and taught Undergraduate and Master's students on Development and Environment; Energy Policies for Sustainable Development; Technology, Development and Environment; Development Strategies; Environmental Policy; Environmental Economics; and Science and Technology Policy, both as an Adjunct Professor of Sustainable Development, and currently as an Associate Professor. I have also reviewed over 50 research proposals on science and technology policies when working for the African Technology Policy Studies Network.

Other significant highlights of my experience include monitoring and facilitating the implementation of policy programmes and activities on Climate Change, Desertification, and the Great Green Wall, Disaster Risk Reduction, Multilateral Environmental Agreements (MEAs), and the African Monitoring of Environment for Sustainable (AMESD, now succeeded by MESA). I have also provided overall coordination in overseeing programmes and activities while working with the AU on these areas.

Aside from this, I have over 30 years experience in science and technology policy work as well as extensive exposure both regionally and internationally. I have worked in Nigeria, Ethiopia and Kenya. I have interrogated and analysed the neo-classical paradigm in the context of Africa's development experience, in addition to analysing the implications of the structural adjustment program on African countries. I continue to be fascinated by the influence of this economic model, as well as the conceptual and paradigmatic basis of this framework, on development strategies and environmental sustainability.

My passion lies in lecturing and carrying out research on sustainable development strategies in relation to science and technology policies, especially in light of efforts that seek to integrate political, economic, environmental, and social imperatives. In addition to this, I am also keen on facilitating the integration of scientific and technological imperatives in development planning and processes. The areas of enquiry that particularly draw my attention are endeavours to comprehend the movement of economic systems through time, and how the concept of entropy sheds light on the whole question of sustainability.

EDUCATION BACKGROUND

- **D.Phil. in Science and Technology Policy Studies, Environment and Renewable Energy, Science Policy Research Unit (SPRU), University of Sussex, United Kingdom; 1993**
(Research Thesis: Acquisition of Technological Capabilities in the Power Sector: the Case of the Geothermal Power Plant in Kenya)
- **M.A. in Economics, University of Nairobi, 1987**
(Research Paper: Waste Products Utilization—Furfural Production and Waste Oil in Kenya)
- **B.Phil. in Economics, University of Nairobi, Kenya; 1985**
- **B.Sc. (Hons.) in Chemistry and Geology, University of Nairobi, Kenya; 1980**
(Research Paper: X-Ray Crystallography of Tungsten)

KEY SKILLS AND COMPETENCIES

- Economic Development
- Environmental Management
- Disaster Management and Risk Reduction
- Sustainable Development
- Science and Technology Frameworks
- Teaching and Lecturing
- Staff Management and Oversight
- Performance Evaluation
- Program Planning and Management
- Monitoring and Evaluation
- Strategy Development
- Organizational Coordination and Development
- Research and Analysis
- Report Writing
- Planning and Organizational Skills
- Writing Policy and Proposal Documents
- Editing and Reviewing
- Presentation Skills
- Computer applications, Word processing, SPSS Package.

WORK EXPERIENCE

Pwani University, Kilifi, Kenya:

Associate Professor of Sustainable Development; July 2016 to date

Duties and Responsibilities

My teaching focuses on sustainable development studies with particular reference to issues of entropy, conceptual revolutions, and the complex science-technology relationships on policy formulation and implementation.

I also teach Technology Development and Environment as a course unit. This unit focuses on the impact of a wide range of innovations on economic growth and environmental degradation, and how non-organic technological systems risk undermining the biophysical foundations of Nature and the attendant disruptions on the life support functions of the environment.

Courses I teach: Development and Environment (Masters Students); Energy Policies for Sustainable Development (Masters Students); Technology, Development and Environment (Undergraduate students); Environmental Policy Formulation and Implementation (Undergraduate students); and Energy Resources and Management.

Courses I can also teach: Economic Development; Development Strategies; Science and Technology Policy; Economics of the Developing World.

Adjunct Professor in Sustainable Development Studies; 2014 to June 2016

Duties and Responsibilities

- Courses I teach: Development and Environment (Masters Students); Energy Policies for Sustainable Development (Masters Students); Technology, Development and Environment (Undergraduate students)
- Courses I can also teach: Economic Development; Development Strategies; Science and Technology Policy; Economics of the Developing World.

Consultant

African Union; 2017

Examining and interrogating the role of NEPAD in Africa's Development

I was recently commissioned by the African Union to undertake a study on duplication and overlaps between NEPAD's mandates, programmes, and activities, on the one hand, and the mandates, programmes and activities of the Departments at the African Union Commission, on the other. My research revealed that NEPAD was undertaking activities that were contrary to the mandates assigned to it.

Senior Program Coordinator

NEPAD Coordination Unit; June 2014 to October 2015

Duties and Achievements

- Prepared terms of reference for the NEPAD Coordination Unit that led to the recruitment of two staff members.
- Wrote a major section for UNEP's Regional Office for Africa while in DREA that formed part of the strategic plan.
- Prepared a Concept Note on furthering integration of NEPAD into AU structures and processes, as well as removing duplications and overlaps between AUC departments and NEPAD divisions, and how to enhance complementarities.
- Wrote two briefs on how to integrate NEPAD into AUC, and how to surgically overhaul NEPAD to remove overlaps and duplications with AUC programmes, in line with the letter and spirit of Agenda 2063.

Head of Environment Division

The Department of Rural Economy and Agriculture, African Union Commission, Addis Ababa, Ethiopia; October 2009 to 2014

Duties and Achievements

In charge of coordinating programs and activities on Climate Change, Water, and Land Management

- Coordinator of the African Monitoring of the Environment for Sustainable Development (AMESD)
- Oversaw the program on Multilateral Environmental Agreements (MEAs)- The main concern was the lack of progress in implementation of the provisions of the program, and how this could be facilitated in member states.
- Part of the experience in organizational development was spearheading the preparation of terms of reference and recruitment of several new staff for the Environment Division in the Department of Rural Economy and Agriculture (DREA, African Union Commission).
- Introduced new programmes such as Natural Resource Accounting, important in organizational development.
- Oversaw the program on Disaster Risk Reduction where the Commission worked closely with UNISDR
- Overall in charge of the Great Green Wall Program of the African Union for the Sahara and the Sahel.
- Participated in several Conferences of the Parties (CoPs) on Climate Change.
- Facilitated the creation of the African Working Group on Combating Desertification.

Head of the STRC as Acting Executive Director

Scientific, Technical and Research Commission of the African Union (STRC), the Regional Office of the African Union, Lagos, Nigeria; 2005 to 2009

Duties and Achievements

- Coordinated activities on the protection of intellectual property and advancement of farmers rights and breeders rights in connection with indigenous biodiversity resources
- Facilitating preparation of an Africa-wide framework to harmonize intellectual property, the framework being the Pan African Intellectual Property Organization (PAIPO).
- Promoting the valorisation of ethno-botanical resources for the appropriate commercialization and benefit sharing from indigenous medicinal plants
- Facilitated the ground work of the establishment of the Science and Technology Policy Observatory in Equatorial Guinea

- Organized several policy meetings whose outputs served agenda items in meetings of African Ministerial Conferences on Science and Technology (AMCOST), on the one hand, and the African Ministerial Conference on Environment (AMCEN, on the other.

OTHER PAST EXPERIENCES

Senior Lecturer- University of Nairobi; Taught economic development, S&T policy, development strategies, environmental economics and economic policy analysis; 1987-2005

Senior Policy Research Associate- African Technology Policy Studies Network, Nairobi, Reviewed over 50 research papers; 2001 to 2004

Executive Director at the African Centre for Environmental Studies (ACES), Nairobi, Kenya; 1994 to 2003. Responsible for setting up the African Centre for Environmental Studies, an NGO that was headquartered in Nairobi.

Chemist II at the chemical laboratory for two years- Ministry of Water, Nairobi, Kenya, analyzing water samples for commercial and industrial users; 1983-1984

Analyst I at the Government Chemist Department- Office of the President, Mombasa, Kenya, analyzing water and food samples; 1980-1982

RELEVANT PUBLICATIONS

Book

The Political Economy of Technological Underdevelopment in Africa: Renaissance Prospects, Global Tyranny, and Organized Spoliation, CBAAC/DPMF, Lagos, Nigeria; (2007)

Published Monographs

Khalil, M. H., W. Reid, and C. Juma (1992); Biotechnology, Genetic Resources, and Intellectual Property Rights, Biopolicy International, ACTS, African Centre for Technology, Nairobi, Kenya;

Khalil, M. H. (1996); Neoclassical Economics as Sorcery: Science, Economism, and Environmental Decay, published by ACES Press in the EcoAfrica Policy Digest Series, 1996; now in reprint as Science, Economics, and Environmental Decay.

Khalil, M.H. (1996); Indigenous Disenfranchisement and Long-Term De-Conservation: the Impact of Property Rights and Bioprospecting Contractual Arrangements on Genetic Resources and Indigenous Cultures, published by ACES Press in BioAfrica Policy Digest Series, 1996.

Articles

(2005) “Africa Leaders as Corruption Freaks: Towards a Political Theory of Economic Embezzlement” in Review of African Political Economy, Vol.32, No. 104/5.

(2005) “Africa’s Technological Opportunities for Faster Growth: Perspectives, Challenges, and Prospects” Occasional Paper Series, No. 15, Development Policy Management Forum, Addis Ababa, Ethiopia.

(2005) “Control Freakery and the Moral Hazard Problem in Africa” in Alternatives, Vol. 4, Nos. 1&2.

(2004) "Africa in the Age of Globalization: Organized Spoliation in Context" paper presented at the CODESRIA/Ethiopian Economic Association Conference held in May, 2004.

(2004) "Is the Private Sector All it is Cracked Up to Be?: Myths, Reality, and Developmental Lessons for Africa", Alternatives, Vol. 3, No. 2&3, Summer and Fall.

(2003) "Globalization, Corruption and the Political Entrenchment of Rent-Seeking States in Africa" in African Journal of Sociology, Nairobi, Kenya.

(2002) Pursuing Technology Policy Research in Africa: Reflections on the Dimensions, Applications and Implications of Methodological Framework, ATPS Special Paper No.7, African Technology Policy Studies Network, Nairobi, Kenya.

(2002) State of Science and Technology Capacity in Sub Saharan Africa, ATPS Special Paper No.12, African Technology Policy Studies Network, Nairobi, Kenya.

(1994) "Literature Review on Growth Theory" in Eastern Africa Economic Review, Vol.10, No.1, June, pp.51-59.

(1994) "Biotechnologies in Developing Countries: Present and Future" book review, by Albert Sasson, **Biotechnologies in Developing Countries: Present and Future (1993)**, UNESCO, Paris, appearing in EcoNews, Vol.4, No.9, May.

(1994) "Maldevelopment in ASALs: the Impact of Un-Holistic Policies" in Sustainable Development for North East Kenya, by Umar, A. (ed.) Signal Press, Nairobi, Kenya.

(1993) "Developing Countries and the Future of World Trade: The Environmental Agenda", paper serialized in two parts in **ECONEWS AFRICA**, Vol.3 No.5 and Vol.3 No.9, May 1994;

(1992) "Economic Policy Reforms and Environmental Education", a paper presented at the **Regional Workshop on Environmental Education, Nyeri, Kenya, 5th 10th,1992**; published in Environmental Education, Experiences and Suggestions: Report from a Regional Workshop by V. Lindhe, M. Goldstick, S.N. Muturi and P. Rimmerfors(eds.), Nairobi, Kenya.

(1991) "Galileo Acquitted at Last", **The Weekend Mail**, November 26th, pp. 25 26, Nairobi, Kenya.

Book Chapters

(1995) "Biodiversity and the Conservation of Medicinal Plants: Issues from the Perspective of the Developing World" in Intellectual Property Rights and Biodiversity Conservation, by Timothy Swanson (ed.) Cambridge University Press. Cambridge, England.

Conference papers

(2003) Technology Transfer in a Globalizing World: Many Promises, Lack of Responsibility and Challenges for Africa, paper presented at the Annual Conference on Science and Technology, Abuja, Nigeria, November.

(2005) "Is NEPAD Really Capable of Delivering Africa?" in **Proceedings of the CODESRIA/DPMF Conference on The New Development Strategies of the African Union** held in January, 2004, Addis Ababa, Ethiopia.

(2004) "Is the Economic Recovery Strategy Capable of Delivering Kenya?" paper presented at the **Special Seminar on Kenya's Economic Recovery Strategy** held in Nairobi, 12th February, 2004, African Technology Policy Studies Network, Nairobi, Kenya.

(1997) “Biodiplomacy, Biopiracy, and the BioConvention: An African Response” in Proceedings of the 1st OAU/STRC/DEPA/KIPO Workshop on Medicinal Plants and Herbal Medicine in Africa: Policy Issues on Ownership, Access, and Utilization, OAU/STRC. Lagos, Nigeria.

(2005) “Africa in the Age of Globalization: Organized Spoliation in Context” in Proceedings of the 2nd International Conference on the Ethiopian Economy, Vol. 1, Ethiopian Economic Association, Addis Ababa, Ethiopia.

Working Papers:

Human Nature, Entropy, and Tendencies Towards Socio-Economic Disorder: An Economic Theory of Government

Pan Africanism and its Enemies: the Ethnic Bogey in Africa’s Governance Experience,

Ungoverned Markets as Boa Constrictors: Revisiting the Asian Crisis in the Context of Africa’s Renaissance Ambitions

The African Slave Trade in Retrospect: Resistance, Defensive Capabilities, and the Tragedy of Techno-Military Inertia.

Agriculture, Environmental Change, and the African Renaissance Dream

Africa and the Energy Challenge: A Review of Issues

Africa and the Challenge of GMOs: Bio-innovations, Property Rights, and Agriculture in a Historical Perspective

Africa in the Age of Genetic Engineering: A Review of Issues

When Limited Knowledge is Dangerous: GMOs, Intellectual Property, and Agricultural Change

Series Editor

Sasson, A. (1992) Biotechnology and Natural Products: Prospects for Commercial Production, by Juma, C., N. Clark, and M.H. Khalil (series editors), ACTS Technology Policy Series, No.4, African Centre for Technology Studies, Nairobi, Kenya.

Ojwang, J.B.(1992) Environmental Law and Political Change in Kenya by Ojwang, J.B., C. Juma, and M.H. Khalil (series editors), ACTS Ecopolicy Series, No.1, African Centre for Technology Studies, Nairobi, Kenya.

Served as the Head of the Team for the African Union Journal ECOLOGUE: A Policy Journal on Environment and Development, Two Issues have been published so far, Vol. 1 and Vol. 2. 2013.

Served as the Series Editor for the Technology Policy Series, Scientific, Technical, and Research Commission (STRC), African Union, and produced 5 issues on various subjects, 2007-2009.

KEY ACCOMPLISHMENT

I am the first African to do a Doctorate on the first geothermal plant established in Africa. Between 1989 and 1992, the investigation focussed on issues related to technology transfer, formulation of local content ratios, how, where, and by whom the terms of reference were designed, and how the process of technology acquisition

impacted on the evolution of domestic technological capabilities. The whole investigation was geared towards generating systematic knowledge on energy technology policy and institutional change in Kenya.

The investigation revealed that, while the geothermal program was characterized by an increase in scientific capabilities, it also showed a marked decline in technological capabilities. The inference was that there was a conceptual failure, one predicated by a kind of cognitive orientation that hindered the holistic appreciation of the science-technology relationship.

REFEREES

Professor Abdalla Bujra

Former Executive Director
Development Policy Management Forum
Nairobi, Kenya
Telephone number: +254 722 764 951
Email: abdallab@gmail.com

Professor Mohamed Bakari

Vice Chancellor
RAF International University, Kenya
Email: profmohamedsaggaf@gmail.com