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PROFILE

Prof. George Okoye Krhoda, CBS, is Associate Professor of Geography and Environmental Studies and Vice Chairman of the Daystar University Council. He is a Hydrologist/Water Resources Management specialist and has B.Ed.(Hons), M.A and Ph.D on River Hydraulics And Water Resources Planning. Krhoda is also the Managing Director of Research on Environment and Development Planning (REDPLAN) Consultants Ltd. Until December 2006, he was the Permanent Secretary, Ministry of Environment and Natural Resources and Chairman of the Negotiation Committee on the Nile Basin Cooperative Framework, and earlier Permanent Secretary in the Ministry of Water and Irrigation where most of the water sector reforms were carried under his watch. Currently finalizing ***“Environmental and social impact assessment (ESIA) for Akiira One Geothermal Power Energy in Rift Valley, having completed ESIA for Mount Suswa Geothermal Energy, Formulation of Kenya’s national Groundwater Policy; National Transboundary Water Resources Policy, and Outcome Evaluation of UNDP Rwanda Environment Programme”***. Recently, Prof. Krhoda has been involved in ***“Development of the Mau Forest Complex Investment Programme”, “Lake Naivasha Conservation and Integrated Water Resources Management (IWRM) Programme”*** in developing, managing and evaluating ***“Mara River Basin Policy, Legal and Institutional Cooperative Framework”, “Environmental Audit for Arid Lands Resource Management Project, Climate Change and Development Study”***, humanitarian programmes in South Darfur in Kass, reviewed the status of IWRM in countries of the South, member of GWP Review Group on IWRM planning and has consulted in various capacities for the World Bank, UNDP, UNICEF, UNEP, the Royal Netherlands Embassy in Nairobi, and WWF, African Centre for Technology Studies (ACTS), IGAD, COMESA, and OSS; co-organized with UNO/UNEP international conferences on UN Desertification Convention, UN Climate Change Convention, Basel Convention and ILEC/World Lakes Conferences. Krhoda was appointed Rapportuer for the GA/UNEP, in February 2006 in Dubai, The Emirates. His current consultancy assignment concentrates on ***Policy Dialogue and Conflict over use and access to natural resources, institutional reforms, strategic planning, floods and environmental management.***

PERSONAL DETAILS

Date of birth : November 26, 1952
Place of birth : Rachuonyo District, Nyanza Province
Nationality : Kenyan
Gender : Male
Marital Status : Married with four children

ACADEMIC QUALIFICATION

UNIVERSITY TRAINING

- (i) **Simon Fraser University 1980 – 1985 - Ph.D. Geography;**
Specialization: River Hydraulics, Water Resources Planning and Development and

Geomorphology; "Flow Behavior in Model Open-Channel Bends and Implications for Lateral Migration in Rivers", thesis submitted in partial fulfillment for Ph.D., Simon Fraser University, BC, Canada 408p

- (ii) **Wilfrid Laurier University, Waterloo, Ontario, Canada, 1978 – 1980; Master of Arts – Geography;**
Specialization: Water Resources Planning and Development, River Hydraulics and Geomorphology. "Channel Patterns of the Grand River in Southern Ontario: An Example in Post-Glaciated Landscape", thesis submitted in partial fulfillment for M.A, Wilfrid Laurier University, Waterloo, Ontario, Canada, 1989, 157p
- (iii) **University of Nairobi, 1972 – 1975; Bachelor of Education (Hons.), Geography;**
Specialization: Geomorphology, Hydrology, Climatology and Statistics; "The Geomorphology of Homa Hills Region of South Nyanza, Kenya" Unpublished dissertation, University of Nairobi, 1975

OTHER POST - UNIVERSITY TRAINING

- (i) Seminar on Computer Simulation of precipitation, runoff and soil erosion. Department of Agricultural Engineering, University of Nairobi
Duration: April 1988
- (ii) Seminar on Mathematical modeling of groundwater resources. Commonwealth Science Council/National Council for Science and Technology, Nairobi, Kenya February 1992.
- (iii) Computer Application in Hydrometeorology, WMO/UNDP Training Course for Hydrologists. East African Meteorological Department, Nairobi. Duration: June - Aug. 1977
- (iv) Gender and Development Training, Nairobi.
- (v) Computer Training. Price-Waterhouse-Coopers Consultants
- (vi) Certificate Training of Corporate Governance, Zanzibar. Duration: August, 16 -19, 2005

MEMBERSHIP IN PROFESSIONAL SOCIETIES/ASSOCIATIONS

Commissioner, Africa Groundwater Commission
Founder Member, African Mountain Association
Hydrological Society of Kenya, Patron
International Water Resources Association
Kenya National Academy of Sciences
Founder Member and Patron, Hydrological Society of Kenya
Member of Strategic Orientation Committee of Sahara and Sahel Observatory (OSS), Tunis
American Water Resources Association
International Association of Hydrological Sciences
Nature Kenya, Member No. 5743
Agricultural Sector Coordination Unit, Member of Sustainable Land and Natural Resources Management Committee, Government of Kenya
National Environment Action Planning Committee, Government of Kenya

OTHER SKILLS

Mathematical modeling of surface and groundwater resources
Expert on Policy Dialogue and Conflict over use and access to natural resources

GRADUATE STUDENTS SUPERVISION

Doctoral Candidates:

- (i) The Public Delivery Challenge: A Public-Private Sector Partnership in Water Service provision in the Lake Victoria Basin, Kenya, by Okeyo Joseph Obosi.
- (ii) Socio-institutional Analysis of Water Governance in Kenya: A Case Study of Lake Naivasha Basin, by Ogada Job Ochieng.
- (iii) Managing Water Sector Reforms among the Urban Poor: A Case Study of Mathare Slums in Nairobi, Kenya, Godfrey M. Otenyo.
- (iv) Households' Vulnerability and Adaptation to Water Scarcity in Rural Areas of Katsina State, Nigeria, by Amina Ibrahim Inkani.
- (v) Geomorphologic Processes associated with Opencast Mining and Mitigation Measures: Case Study of Gitumba Mining District in the Western Highlands of Rwanda, by Byizigiro Rutazuyaza Vaillant, Kigali Institute of Education, Rwanda.

Masters:

- (i) Assessment of Soil Erosion factors in Bungoma and Mount Kenya District in Bungoma County, by Levi Situma Chepkania, M.A. in Geomorphology (completed).
- (ii) Water Governance in Nairobi's Huruma Informal Settlement, by Otieno Stephen Odhiambo, Master of Arts in Environmental Planning and Management.
- (iii) Erosional Features and Environmental Restoration of River Kalikuvu Catchment, Kenya by Winfred Kambua William, M.A. Geomorphology.
- (iii) Factors Affecting Availability of Water Supply Options: A Case Study of Kisauni, Mombasa Kenya, by Mwamburi K. Everlyne, M.Sc. Hydrology.
- (iv) Causes and Effects of Landslides in Gathaiti Location of Muranga District, Kenya, by Jane Njoki Ng'anga, M.A. Geomorphology.
- (v) Assessment of Effects of Land Use Change on Stream flow and Geomorphological Dynamics, by Alice Kwamboka Monene, M.A. Geomorphology.

COUNTRIES OF WORK EXPERIENCE

Country	Assignment
Tanzania	<i>Tourism and Wildlife Management Strategy in the Serengeti-Maasai Mara Ecosystem in the Mara River Basin</i> , Lake Victoria Basin Commission Secretariat, Kisumu, Kenya. <i>Establishing Mara River Basin Policy, Legal and Institutional Cooperative Framework</i> , Lake Victoria Basin Commission, East African Community, Kisumu.

- Rwanda ***Outcome Evaluation of the UNDP Rwanda Environment Programme***, UNDP, Kigali
- Niger ***Endterm external evaluation of the USAID-supported Malnutrition Programme in Kollo District, Republic of Niger, West Africa***. Humedica e.v International, Kaufbeuren, Germany
- Midterm external evaluation of the USAID-supported Malnutrition Programme in Kollo District, Republic of Niger, West Africa***. Humedica e.v International, Kaufbeuren, Germany
- South Sudan ***National Policy for Disaster Management and Early Warning for South Sudan***, Ministry of Humanitarian Affairs and Disaster management, Government of South Sudan, September 2009
- Mauritius ***Mainstreaming of Climate Change Adaptation Policies into the Institutional Framework and Into Core Development Policy, Strategies and Plans***, Republic of Mauritius, Port Louis, June 22 to Ongoing
- Madagascar ***Terminal Evaluation of Eastern and Southern Africa Partnership Programme Phase III***, Centre for Development and Environment/Swiss Development Cooperation, Bern, Switzerland, April/May 2010
- Eritrea ***Review assessment of the Integrated Water Resources Management for State of Eritrea***, Global Water Partnership Reference Group/Ministry of Lands, Water and Environment, Eritrea, July 18th – 21st, 2009
- Sudan ***USAID Kass Primary Health Care and Environmental Sanitation Project, South Darfur, Sudan***, Implemented by *humedica*, Germany, External Terminal Project Evaluation, November, 2008
- Final end of project evaluation of the Community Health and Environmental Management Project, Kass South Darfur, Sudan***, Humedica e.V Germany, December, 2008
- Zimbabwe ***Zimbabwe Environmental Assessment following Land Reforms in 2001***, UNDP/Zimbabwe Government, Harare.

SELECTED RELEVANT CONSULTING EXPERIENCES

2013

Flood Management Module in Water Development Cycle (WDC) Toolkit for the Project on Capacity Development for Effective Flood Management in Flood Prone Areas in the Republic of Kenya, Government of Kenya/NEWJEC Inc. Osaka, 531-0074, Japan

Capacity Development for Effective Flood Management in Flood Prone Areas Republic of Kenya, Proceedings of Workshop Report on Effective Flood Management in Kenya, Nairobi, August 7, 2012

- Midterm external evaluation of the USAID-supported Phase II Malnutrition Programme in Kollo District, Republic of Niger, West Africa.** Humedica e.v International, Kaufbeuren, Germany.
- 2012 **Joint Transboundary Management of Lakes Chala - Jipe and Umba River Ecosystem Program,** Lake Victoria Basin Commission, Kisumu, LVBC/JIPE-CHALA/2011/1, 24th September 2012
- Mainstreaming of Climate Change Adaptation Policies into the Institutional Framework and Into Core Development Policy, Strategies and Plans,** Republic of Mauritius, Port Louis, June 22, 2012
- Outcome evaluation of KEN Outcome 52- Integration of Climate Change Dimensions into National Development Frameworks and Programmes,** UNDP, Nairobi
- Environmental and Social Impact Assessment for the Akiira One Geothermal Power Development at Mount Margaret/Mlima Panya in the Rift Valley, Kenya,** Akiira One Geothermal Company Ltd, Nairobi, Kenya . Ongoing.
- Integrated Rehabilitation of Degraded Sites on Lake Naivasha Water Catchment,** Ministry of Environment and Mineral Resources implementing Africa Adaptation Programme (AAP), Japan/UNDP/GoK.
- National Disaster Risk Management Strategic Plan,** Ministry of State for Special Programmes, supported by UNDP, Nairobi.
- Midterm external evaluation of the USAID-supported Phase I Malnutrition Programme in Kollo District, Republic of Niger, West Africa.** Humedica e.v International, Kaufbeuren, Germany.
- 2011 **National Challenges in Policy Formulation in the Water Sector in Kenya: Drought, Climate Change and Adaptation: Is Our Research Effective and Response Adequate,** CETRAD/University of Nairobi/German development Institute, October 31-November 1, 2011.
- Tourism and Wildlife Management Strategy in the Serengeti-Maasai Mara Ecosystem in the Mara River Basin,** Lake Victoria Basin Commission Secretariat, Kisumu, Kenya
- Review of the National Transboundary Water Policy of Republic of Kenya,** Ministry of Water and Irrigation/GIZ Kenya. Ongoing
- Environmental and Social Impact Assessment for the Mount Suswa Geothermal Power Development in the Rift Valley, Kenya,** WalAm Geopower Inc, Calgary, Alberta, Canada.
- Policy and Regulations for Emergency Water Trucking System in Arid Semi Arid Areas of Kenya,** FAO Nairobi.
- Assessment of Degraded Lands (LADA) and Development of Recommendation on Reclamation in the Tana and Ewaso Ngiro Rivers Basins,** Ministry of Water and Irrigation, Department of Land Reclamation, Nairobi, Kenya.
- 2010 **Outcome Evaluation of the UNDP Rwanda Environment Programme,** UNDP, Kigali

Capacity building for more sustainable water resources management in the larger Mount Kenya region: Water Sector Legislation and Policy Implementers Meeting, Utali College, 15-16th December 2010, Nairobi.

National Transboundary Water Policy Implementation Strategy, Ministry of Water and Irrigation, Nairobi, Kenya.

Establishing Mara River Basin Policy, Legal and Institutional Cooperative Framework, Lake Victoria Basin Commission, East African Community, Kisumu.

Review of the National Water Policy of Republic of Rwanda, GTZ Uganda

End of Programme Independent Evaluation of the Kass Primary Health Care Emergency Project, South Darfur, Sudan, implemented by *humedica* Germany supported by USAID, May/June 2010.

Annual Environmental Audit for Arid Lands Resource Management Project II, Office of the Prime Minister, Ministry of State for the Development of Northern Kenya and Other Arid Lands, World Bank/ALRMP II, Government of Kenya, May 2010.

Terminal Evaluation of Eastern and Southern Africa Partnership Programme Phase III, Centre for Development and Environment/Swiss Development Cooperation, Bern, Switzerland, April/May 2010.

Climate Change and Development Study: Agricultural Extension Services and Adaptation to Climate Change in Kenya. Centre for Training and Integrated Research in ASAL Development (CETRAD), Laikipia, Kenya, December/January 2010.

2009

Consultant and Lead Facilitator: Sensitisation Workshop for Cluster Groups of Civil Society Organisations on Climate Change in Preparation to COP 15, Copenhagen, October 2009, UNDP/GOK, Nairobi

National Policy for Disaster Management and Early Warning for South Sudan, Ministry of Humanitarian Affairs and Disaster management, Government of South Sudan, September 2009

Mau Forest Complex Development Programme, Interim Coordinating Secretariat on Mau Forest Complex/GOK/UNEP, November/December 2009

Consultant and Lead Facilitator: Kenya Parliamentary Sensitisation Workshop on Climate Change in Preparation to COP 15, Copenhagen, October 2009, GOK/UNEP/ATPS/ICPAC, Nairobi.

Mapping assessment and Management of water resources in the IGAD sub-region project, Sahel and Sahara Observatory (OSS)/Inter-Governmental Agency for Development (IGAD), Djibouti, January 2009

Climate Change Vulnerability and Infrastructure investment Assessment and Analysis for Small Scale Water Utilities in the Lake Victoria Basin, UN Habitat/Alliance to Save Energy (USA)/Re Solve (RSA)/Climate XL Africa, June 2009.

Review assessment of the Integrated Water Resources Management for State of Eritrea, Global Water Partnership Reference Group/Ministry of Lands, Water and Environment, Eritrea, July 21, 2009

Water Sector Strategic Plan for Kenya, Water Resources Sustainability, KWSSP, Ministry of Water and Irrigation/GTZ, August, 2009.

Strategies for strengthening the capacity of East African Ministry to coordinate the activities of the East African Community, Ministry of East African Community/UNDP, Kenya, Nairobi Kenya, January 2009.

WSUP Naivasha/WWF Freshwater Conservation and integrated Water Resources Management (IWRM) Programme Development, Worldwide Fund for Nature (WWF), January 2009

Regional water programme for the Inter-Governmental Authority on Development (IGAD) Region, IGAD/COMESA Secretariat, Djibouti and European Commission, JAM II.

2008 ***Water Supply to the Urban Poor (WSUP), WWF Freshwater Conservation and Integrated Water Resources Management***, WWF EARPO, Nairobi, Kenya December, 2008.

USAID Kass Primary Health Care and Environmental Sanitation Project, South Darfur, Sudan, Implemented by *humedica*, Germany, External Terminal Project Evaluation, November, 2008.

Strategic Action Programme for the Protection of the West Indian Ocean Coastal and Marine Environment from Land-based Sources and Activities – Contribution of the River-Ocean Interactions, October 2008

Capacity development for mainstreaming environmental aspects in national water policy and strategy in developing countries within the UNEP Water Policy and Strategy using the South-South mechanisms, UNEP, Nairobi, July 2008.

Final end of project evaluation of the Community Health and Environmental Management Project, Kass South Darfur, Sudan, Humedica e.V Germany, December, 2008

Review and finalization of strategy for accelerating access to sanitation in the Lake Victoria Water and Sanitation Programme towns, UN Habitat, Water and Sanitation Programme, UN Habitat, PO. Box 30030, 00100, Nairobi, Kenya

Shared water resources: governance and governability, The Zaragoza Water Tribune, International Symposium on sustainable water management, Zaragoza, Spain, July, 2008.

Integrated Water Resources Management Plan of Kenya, Republic of Kenya, Nairobi Kenya, Editorial Consultancy, March 2008

2007 ***Mid-Term Review of the Shared Vision Programme of the Nile Basin Initiative***, NBI/World Bank/UNDP/GTZ - Funded Programme; Nile Basin Initiative, Entebbe, Uganda.

- Building Broad Coalitions for Pro-Change Influentials, Reforms Under Real World Conditions: A Dialogue on Communication Challenges.*** Chapter 13, World Bank, Washington D.C
- Capacity Development for poverty reduction, water management and food security: Water Resources Management Strategies and Food Production in Kenya,*** Department of Geography and Environmental Studies, University of Nairobi.
- 2002 ***Zimbabwe Environmental Assessment following Land Reforms in 2001,*** UNDP/Zimbabwe Government, Harare.
- Nairobi River Basin Project Phase II: Pollution Monitoring Network – Design, establishment and field monitoring of Ngong/Motoine River up to the confluence of Nairobi/Athi Rivers.*** UNEP/NETWAS, Nairobi.
- 2001 ***Lake Nakuru Conservation and Development Project,*** End of project External Evaluation, Worldwide Fund for Nature (WWF) – Eastern Africa regional Programme Office (EARPO)
- Clarification of Natural resources Management Mandates and Improvement of Co-operation among relevant agencies,*** East African Cross-Border Biodiversity Project, United Nations Development Programme (UNDP)/Government of Kenya, Nairobi
- Mara River Catchment Basin Initiative: Preliminary Phase- Project Development and Stakeholder analysis,*** Worldwide Fund For Nature (WWF) – Eastern Africa Regional Programme Office (EARPO).
- Semi-Arid Rural Development Programme (SARDEP) for Laikipia district;*** Internal Evaluation, SNV-Dutch Development Agency, Nairobi Kenya
- The nature of conflict in natural resources in the Kerio Valley, Kenya;*** SNV-NCCK Project Formulation Project
- Semi-Arid Rural Development Programme (SARDEP) for Kajiado district;*** Internal Evaluation, SNV-Dutch Development Agency, Nairobi Kenya
- 2000 ***Semi-arid Rural Development Programme (SARDEP) for Keiyo/Marakwet districts;*** Internal Evaluation, SNV-Dutch Development Agency, Nairobi Kenya.
- 1999 ***UNEP/GEF Initiative on Land and Water for Africa,*** United Nations System-wide Special Initiative on Africa, UNEP, Nairobi, September-October 1999.
- 1995 ***Lake Naivasha Environmental Management Plan.*** Lake Naivasha Riparian Owners' Association, Naivasha. Duration: 6 months.
- 1994 ***Initial Environmental Impact Assessment of the Grandfalls/Mutonga Dam - The hydrology of Tana River Basin.*** Research Planning Services, Nairobi. Duration: 1 month.

Rural Domestic Water Supply and Sanitation Programme Phase II, Nyanza Province, Government of Kenya, Ministry of Water Development/Royal Netherlands Embassy, Nairobi. Duration: 2 weeks.

The main sources of strain, their social and environmental consequences and their present and prospective management in the most stressed water resources systems in Africa, International Development Research Centre (IDRC), Nairobi. Duration: 2 months.

Training and Capacity Building for Drought Management in Arid and Semi-Arid Lands of Kenya. UNDP/UNSO/Government of Kenya, Nairobi. Duration: 25 days.

1992 ***Environmental Action Plan for Arid/Semi Arid Lands of Kenya.*** Government of Kenya, Ministry of Land Reclamation, Regional and Water Development/World Bank, Regional Office, Nairobi. Duration: 18 months

1991 ***Surface Water Resources for Tana River District in Kenya.*** Government of Kenya, Ministry of Reclamation and Development of Arid and Semi-Arid Lands and Wastelands/International Fund for Agricultural Development (IFAD), Rome, Italy. Duration: 2 months.

The impacts of forest cover on the hydrology of river basins in Kenya, Government of Kenya, Department of Forestry/Kenya Forestry Master Plan/Kenya Indigenous Forest Conservation/ Overseas Development Agency (ODA), Nairobi. Duration: 3 months.

A review of the hydrology and possible impact of drainage of wetland in Kenya. Government of Kenya, Ministry of Agriculture and Livestock Development/Department of Agricultural Engineering, University of Nairobi, September 1991. Duration: 9 days.

1990 ***Assessment of groundwater resources in sedimentary basins, Eastern Kenya.*** Government of Kenya/Ministry of Research, Science and Technology/Nairobi, National Council for Science and Technology. Duration: 2 years.

1988 ***Situation Analysis of Basic Needs in Kenya.*** UNICEF Regional Office, Nairobi/Government of Kenya. Duration: 3 weeks.

1987 ***Kakamega Forest: A Study for Determining the Scientific Basis for Planning and Development of Tropical Forests in Western Kenya.*** UNESCO, Regional Office for Science and Technology (Africa) and Kenya National Committee on Man and Biosphere, Nairobi, Kenya. Duration: 2 months.

The environmental impact of Kamburu, Gitari, Kiambere, Kindaruma and Musinga Reservoirs, Government of Kenya, Ministry of Planning and Economic Development, Nairobi. Duration: 2 weeks.

SELECTED PUBLICATIONS

Advance Geomorphology, University of Nairobi Press, Forthcoming.

Water Resources, Chapter 23 in Kenya's Coast Handbook: Culture, Resources and Development in the East African Littoral, (eds.) Jan Hoorweg, Dick Foeken and R.A. Obudho, African Studies Centre, Leiden, The Netherlands, pp. 345-359.

National policy studies of domestic water supply and environmental health in post-colonial Kenya, African Centre for Technology Studies (ACTS) Discussion Paper, 1999.

Taking Over: Community Water Management in Kenya, African Centre for Technology Studies, African Centre for Technology Studies (ACTS), Discussion Monograph, 1999

Changing patterns in water resource tenure in Kenya and mechanisms for resolving emerging conflicts; East African Regional Seminar for Journalists, African Centre for Technology Studies (ACTS), March 1999.

Policies, programmes and institutions of water sector management in sub-Saharan Africa, In: Environment and Development in Kenya, Kenya National Academy of Sciences, Nairobi, 1998.

Water resources in Africa: Issues for Policy Makers, Whydah, Information and Policy Magazine, vol. 6, no. 1&2, pp. 1-6, June 1997, African Academy of Sciences, Nairobi.

The hydrology and flood management strategies for the city of Nairobi, African Urban Quarterly, no. 1&2, pp.38-48, 1992.

Economic planning through drainage basins in Kenya; Impact of water resources utilization in semi-arid and arid environment; Geographical Journal of Eastern and Southern Africa; vol. 5 no. 1, 1995.

Hydrology and water supply in Kenya, African Urban Quarterly, no. 1&2, 1990; no. 3&4, 1988; Kenya's Population Growth and Development, 1988, S.H. Ominde (ed.)

The impact of resources development on the hydrology of Mau forest of Kenya, Mountain Research and Development, Vol. 8, No. 2. 1988

Rationale for the establishment of drainage basin organizations, Reflections on management and drainage basins in Africa: Development and Environment in the Management of International Drainage Basins in Africa, C.O. Okidi (ed.), 1987.

The hydrology and functions of wetlands, Wetlands of Kenya, S.A. Crafter, S.G. Njuguna and G.W. Howard, (eds.), International Union of Conservation of Nature (IUCN), 1991.

EMPLOYMENT AND ADMINISTRATIVE ASSIGNMENTS

- (i) Mar. 2007 Professor of Geography and Environmental Studies, University of Nairobi, Kenya.
- (ii) Member of the Committee for the establishment of the School of Geography and Environmental Studies (SGES).
- (iii) Managing Director, Research on Environment and Development Planning (REDPLAN) Consultants Limited, Nairobi.

- (iv) Aug. 2005 - Dec. 2006 Permanent Secretary, Ministry of Environment and Natural Resources.
- Chairman, the Nile River Basin Cooperative Framework Negotiations Committee, Nile Basin Initiative Secretariat, Entebbe
- Chairman of Steering Committee on Nairobi River Basin Project, GoK/UNEP Funded Programme
- (v) Jan. 2003 - Aug. 2005 Permanent Secretary, Ministry of Water and Irrigation
- Chairman, the Nile River Basin Cooperative Framework Negotiations Committee, Nile Basin Initiative Secretariat, Entebbe
- Chairman of Nairobi River Basin Project, Steering Committee, GoK/UNEP Funded Programme
- (vi) Aug. 2002 - Dec. 2002 Dean, Faculty of Social Sciences
- Chairman, Strategic Planning, Faculty Post-graduate Committee, College of Education and External Studies University of Nairobi, Kenya
- (vii) May 2001 - Aug. 2002 Chairman, Department of Geography,
Chairman, Faculty Post-graduate Committee, College of Education and External Studies, University of Nairobi, Kenya
- (viii) Oct. 1997 - Associate Professor, Geography Department,
College of Education and External Studies, University of Nairobi, Kenya
- (ix) Apr. 1996 - Feb. 2003: Managing Director, REDPLAN Consultants Limited,
Pan African Insurance Building, Hurlingham Centre, Argwings Kodhek Road, Nairobi
- (x) Nov. 1988 - 1997: Senior Lecturer, Department of Geography,
College of Education and External Studies, University of Nairobi
- (xi) Jan. 1985 - Aug. 1988: Lecturer, University of Nairobi, Department of Geography
- (xii) Feb. 1990 - Jan. 1992: Part-time Lecturer, School of Environmental Studies,
Water Resource Planning and Development, Moi University, Eldoret, Kenya
- (xiii) Jan. 1987 - Dec. 1991: Part-time Lecturer, Department of Agricultural Engineering,
postgraduate course on "Land and Water Conservation"
- (xiv) Jan. 1981 - Dec. 1985: Instructor, Drainage Basin Hydrology, Department of
Geography, Simon Fraser University, Burnaby, BC. Canada
- (xv) Sept. 1978 - June 1980: Teaching Assistant - Geomorphology, Department of
Geography, Wilfrid Laurier University, Waterloo, Canada.

- (xvi) Aug. 1975 - Ministry of Water Development, Government of Kenya
 Mar 1978: Hydrologist in-charge of River Ewaso Ngiro Catchment of Kenya.
- Seconded to Hydrometeorological Investigation of Lakes
 Victoria, Kyoga, Edward and Kivu - Kisumu Station, Government of Kenya (GoK)

LONG-TERM CONSULTING EXPERIENCES

- (i) Dec. 1998 - Programme Director, Environmental Governance,
 June 1999: African Centre for Technology Studies (ACTS), P.O. Box 45917, Nairobi
- (ii) Mar. 1994 - Environmental Adviser, Royal Netherlands Embassy,
 Sept. 1998: Uchumi House, P.O. Box 41537, Nairobi
- (iii) Oct. 1993 - Consultant on Project Formulation, Office of Project
 Feb. 1994: Services, UNDP, P.O. Box 30218, Nairobi
- (vi) Mar. 1992 - Natural Resources Specialist, The World Bank ASAL
 Sept. 1993: Team, P.O. Box 30577, Nairobi.

OTHER PROFESSIONAL ACTIVITIES

- (i) Editor, Mountain Research and Development Journal, Colorado
- (ii) Editor, Report on the Geography and Development of the Coast Region, Fieldwork Guide, Department of Geography and Environmental Studies, Faculty of Arts, University of Nairobi, 2013
- (iii) Chair and Head of Kenyan Delegation to the Negotiation Committee, Nile River Basin Cooperative Framework, 2003 to 2006.
- (iv) Founder Member of the African Mountain Association
- (v) Chair of the National Organising Committee of the preparations on the UN Convention on Climate Change Conference, Nairobi, 2005-2006.
- (vi) Chair of the National Organising Committee of the preparations on the UN Convention to Combat Desertification, 2005.
- (vii) Chair of the National Organising Committee of the preparations on the UN Convention on Transboundary Movement of Hazardous Waste (Basel Convention), Nairobi, Conference, Nairobi, 2005-2006.
- (viii) Chair of the National Organising Committee of the preparations on the World Lakes Conference, Nairobi, 2004-2005.
- (ix) Team Leader and Consultant, Nairobi River Basin Project (NRBP), Pollution Monitoring Network, UNEP/Government of Kenya, 2001
- (x) Editor, The Report on the Geography and Development of Lake Victoria Basin, Fieldwork Guide, Department of Geography, Faculty of Social Sciences, University of Nairobi, 2000
- (xi) Secretary and Chief Scientist of Working Group on Regional Groundwater Resources Potential Assessment (Research, Monitoring and Quality). Seminar on Geo-hydrology of Drought-Prone Areas in Africa, Commonwealth Science Secretary, November 7 - 15, 1985
- (ii) Secretary of Working Group on Research Strategies for African Mountains and Highlands, African Mountain Workshop/Commission on Mountain Geo-ecology, International Geographical Union, October, 19 - 27, 1986, Addis Ababa, Ethiopia.

- (iii) National Project Co-ordinator of the Geo-hydrology of Semi-Arid and Arid Lands (ASAL) of Africa, National Council for Science and Technology, Nairobi, 1986-1990.
- (iv) Chairman, National Organising Committee on the International Workshop on Mathematical Modelling of Groundwater Resources, Commonwealth Science Council/National Council for Science and Technology, Nairobi, February 1992.
- (v) Ad hoc Consultant on UNEP/DESPAC/KENYA Desertification Assessment and MAPPINT Project. Ministry of Planning and National Development, Government of Kenya
- (vi) Ad hoc Consultant for Inter-governmental Authority on Drought and Development on water resources (IGAAD), Djibouti.
- (vii) Member of the International Advisory Editorial Board, African Urban Quarterly.
- (viii) Member of the International Hydrological Programme (IHP), Kenya National Committee.
- (ix) Editor/Consultant for East African Educational Publishers Ltd., Nairobi
- (x) Member of the Committee for the International Soil Conservation Organisation, 6th Conference - Kenya-Ethiopia, 1989.
- (xi) Member of International Union of Conservation of Nature (IUCN) Commission on Environmental Strategy and Planning, Working Group on Strategies for Sustainability.
- (xii) Secretary, Organising Committee on the Third International Workshop on "Planning for Sustainable Use of African Mountain Resources", African Mountain Association, Nairobi 4 - 14 March 1993.
- (xiii) Member of the National Wetland Standing Committee, International Union of Conservation of Nature (IUCN), Nairobi.