PROF. RAPHAEL J. ACHOLA KAPIYO

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P.O. Box 333-40105, Maseno, Kenya

EDUCATION

University of Leeds, UK 1983-1986 PhD. (Science and Technology

Development and Education)

Kenyatta University 1979 – 1981 MEd. (Measurement and Evaluation)

Kenyatta University 1976 – 1979 B.Ed. (Mathematics & Physics)

(First Class-Honours)

RESEARCH EXPERIENCE

POSTGRADUATE

MASTERS THESIS

1) Rono Kipng'etich Keith (2011) An Assessment of Electricity Wastage and Conservation Strategies Adopted by Selected Manufacturing Industries within Eldoret Municipality. *Master of Science in Urban Environmental Planning and Management. School of Environment and Earth Sciences, Maseno University.*

(Co-Supervisor: Prof Josephine Ngaira)

2) Omondi Joyce Aluoch (2012) Assessing Impacts of Nitrogen and Phosphorus in River Kisat and Quantities Discharged into Lake Victoria; Kisumu Municipality, Kenya. . *Master of Science in Urban Environmental Planning and Management. School of Environment and Earth Sciences, Maseno University.*

(Co-Supervisor: Prof Jondiko Ogoche)

PHD THESIS

- 3) Otieno Alphonse Charles (2012) Compliance and Enforcement of Environmental Policies on Natural Resources in Uganda: A Case of South Busoga Forest Reserve. *PhD in Environmental Science. School of Environment and Earth Sciences, Maseno University. (Co-Supervisor: Dr Boniface Oindo)*
- 4) Matano Ally-Said (2013) Effects of Land Use and Land Degradation on Water Quality and Aquatic Biota in the Mara River in Kenya and Tanzania. *PhD in Environmental Science. School of Environment and Earth Sciences, Maseno University.* (Co-Supervisor: Prof Ayub V. O. Ofulla) – Thesis submitted awaiting Defence.

RESEARCH PROJECT GRANT

5) USD 11,453 from The Inter-University Council for East Africa for The Lake Victoria Research Initiative. Study title "Water Quality and its Impact on Fish Abundance and Socio-economic Wellbeing of the Riparian Communities of Lake Victoria", 2007

6) USD 15,333 from The Inter-University Council for East Africa for The Lake Victoria Research Initiative. Study title "Water Quality and its Impact on Fish Abundance and Socio-economic Wellbeing of the Riparian Communities of Lake Victoria", 2011

OTHER RESEARCHES

- Investigation into the Environmental Impacts of the Sondu Miriu Hydropower Project on the Local Communities and the General Eco System.
- Development of the Resettlement Action Plan for the Magwagwa Multipurpose Dam Project for SMEC International/ Lake Basin Development Authority
- Development of a Community driven two Rural Water Supply Project for the communities in the Left and Right banks of River Sondu Miriu by Ken Gen.
- Development and Testing of Saw Dust Carbonization Kiln and Briquetting Hand Press and to Train Users, Swiss Contact, Uganda.
- Cross-Sectoral Socio-Economic, and Ecological Study on Wood-Based Energy Dynamics In Sanaag, Bari, Benadir (North Mogadishu) and Middle Shabelle Region of Somalia (Support from IUCN via ETC – EA)
- Proposals for Measures to Investigate the Impact of Refugees on The Environment and Settlement That Contribute to Sustainable Development in Kagera Region, Tanzania – UNDP / Habitat Task Force On The Continuum from Relief to Development.
- Impact/Needs Assessment of Local Communities, Urban Households Local and International agencies and Government Departments as Regards Development Issues of Northern Kenya, MSF – Spain, KENGO and Crescent of Hope.
- Needs Assessment of the Energy and Environmental Impact of Drought Displaced Persons in Garissa District, North Eastern Province, MSF Spain.
- Impact / Needs Assessment of Households and Small Scale Industries and the Energy Supply Situation Of Refugees Within Dadaab Complex of Refugee Camps (15,000 Refugees), Garissa District Kenya, UNHCR/GTZ.
- Technical Review Committee of the Environmental Assessment Study for Power Development Projects, North East Olkaria and Eburru Geothermal Resources, The Kenya Power Company Limited.
- Cost-impact Analysis as a Tool in the Evaluation of Socio-Economic and Technological Impact of Rural Development Programmes on Local Communities. Development of a Criterion for Transplanting Economic and Technical Impact of Projects Into Measurable Quantitative Items for Sound Comparison and Accountability.

- Self-training Methodology for Community Motivation and Needs Assessment among Pottery Women Groups In Nyanza and Western Provinces Of Kenya, ITDG.
- Field Testing of Four Improved Stove Designs In Five Districts of Kenya to Evaluate the Social, Economic, Cultural and Technical Factors that Influence Adoption of Technologies among the Communities, Intermediate Technology and KENGO.
- The Socio-Economic and Cultural Factors In Technology Development Among a Selection Of Kenyan Communities, KENGO, Kenya.
- The Impact of Science and Technology on Women in Kenya 1975 1985, Bureau of Educational research, Kenyatta University.
- Evaluation of five Organizations (E.G. Turkana Rehabilitation Project) to be Sssisted by the Organization of the Netherlands Volunteers (ONV): the Social, Environmental and Technological Dimensions, CDP, Nairobi.
- A Field Test Study to Evaluate The Socio-Economic and Technology Impact of The Kenyan Improved Stove among Urban and Peri-Urban Communities In Nairobi and Mombasa, Ministry Of Energy, Kenya.
- An Inventory of Kenyan Organizations involved with Charcoal, Wood and Sawdust Stoves, CDP, Nairobi.
- An Evaluation of the Social, Economic and Technical aspects of Wood Stove Dissemination among four Grassroots Organizations in Four Districts in Kenya, CDP, Nairobi.
- An Illustrative Study of the Socio-Economic Impact of Wood Fuel Utilization In Kakamega District, Kenya, Beijer Institute, Sweden
- National Environmental Management Authority (NEMA) on Education for Sustainable Development and the Kenyan School Curriculum.
- Appointed by Permanent Secretary, Ministry of Environment as a member of the Task Force on Lake Victoria Vision and Strategy Development. The next 15 Years
- Nyakach Cultural and Development Day Targeting Community Responsibility for Natural Resource Management, Katito, Kenya.
- Community mobilization for Environmental Management in Lumbwa Village, Nyando District.
- Participatory Environmental Resource Assessment With Indigenous Experts Within Sondu Miriu (Nyakach) Sub-region of the Lake Victoria Basin.
- Establishment of Western Kenya NGOs network on Natural and Environmental Resource Management, Kisumu, Kenya.

- Participation of Male Gender in the Promotion of Gender Equity in Agriculture and Environment, Winrock International, Nairobi.
- Framework for the Lake Victoria Environmental Management Programme, (LVEMP), Kisumu.
- Preparation of the festival of living traditions, ELCI, Nairobi
- Environmental and land policy and law in Kenya, KENGO, Nairobi.
- Consultative committee for the environmental impact assessment of Geothermal Stations in Kenya. IPS/RPS, Kenya Power & Lighting Co. Limited.
- Asian Conference in Appropriate Technology and Sustainable Development; New Delhi, India.
- The Second International Fair on People's Creativity, Alternative Technologies and Environment, Santiago, Chile.
- African NGOs strategic reflection, Bulawayo, Zimbabwe.
- Marketing of the management and planning group of the energy network, Dakar, Senegal.
- Consultation Workshop in NGO self financing in third world countries; Addis Ababa, Ethiopia.
- Advisor / Training on Production and Dissemination Of Improves Stoves in Zaire, CATEB, Kinshasa, Zaire.
- The National Technician Training Programme; UNESCO, Nairobi.
- Science and technology Education in Kenya; Consultative meeting; The British Council / World Bank, Nairobi, Kenya.
- Technological Education in Africa; Ministry of International Affairs, The Hague, The Netherlands.
- The Expansion of Village Polytechnics to Incorporate Wood Energy Technologies, KENGO, Kenya.
- Technology Education in Kenya; The British Council, London
- Cost-Impact Analysis as a Tool in The Evaluation of Socio-Economic and Technical Impact of Rural Development Programme On Local Communities. Developing Criteria for Translating Economic and Technical Impact Of Projects Into Measurable Quantitative Item For Sound Comparison and Accountability.
- Self-Training Methodology for Community Motivation and Needs Assessment among Pottery Women Group in Nyanza and Western Provinces in Kenya, ITDG.

• Field Testing of Four Improved Stove Designs in Five Districts of Kenya To Evaluate The Social, Economic, Cultural And Technical Factors that Influence Adoption Of Technologies among the Community, Intermediate Technology And KENGO.

TEACHING EXPERIENCE

2013 TO DATE

ASSOCIATE PROFESSOR, SCHOOL OF ENVIRONMENT AND EARTH SCIENCES, MASENO UNIVERSTY

2005 TO 2013

SENIOR LECTURER, SCHOOL OF ENVIRONMENT AND EARTH SCIENCES, MASENO UNIVERSITY.

2000 - 2005

SENIOR LECTURER, DEPARTMENT OF ENVIRONMENTAL STUDIES, MASENO UNIVERSITY

1999 - 2000

SENIOR LECTURER, DEPARTMENT OF ENVIRONMENTAL STUDIES, MASENO UNIVERSITY

<u>1987 – 1991</u>

LECTURER, APPROPRIATE TECHNOLOGY CENTRE, KENYATTA UNIVERSITY

1982 - 1987

TUTORIAL FELLOW, APPROPRIATE TECHNOLOGY CENTRE, KENYATTA UNIVERSITY

1979 - 1982

SCHOOL TEACHER IN LENANA HIGH SCHOOL, LIMURU GIRLS HIGH SCHOOL AND ALLIANCE HIGH SCHOOL

HONORS AND AWARDS

2009	Environmental Leadership Award of the Eastern Africa Environmental Network in in recognition and appreciation of outstanding contributions to Environmental in conservation in Eastern Africa
2008	KenGen Certificate of Service for Active Participation as a Member of the Technical Committee for the Sondu Miriu HydroPower Project from the Year 2001 to 2008 and Contributing to the Successful Completion of the Project.
1993	PATT (Pupil Attitude Towards Technology 1993 Award (The Netherlands) for contribution Internationally to technology Education.
1990	Chairman Award for Creativity and Innovation in Environmental Technology (KENGO), Nairobi.

PROFESSIONAL MEMBERSHIP

2004 - To date Chairman, Sustainable Aid in Africa International (SANA)
 1993 National Advisory Committee AWLAE – Winrock International.

SKILLS AND TRAINING

<u>LEAD EXPERT</u> – ENVIRONMENTAL IMPACT ASSESSMENT/AUDIT- NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY (NEMA) –LICENCE NO. 2294

California State Polytechnic 1999 Computer Multimedia
University, Pomona, USA Presentations / Education

LEADERSHIP EXPERIENCE

2013 TO DATE

ASSOCIATE DEAN, SCHOOL OF ENVIRONMENT AND EARTH SCIENCES, MASENO UNIVERSTY

2005 TO 2013

ASSOCIATE DEAN, SCHOOL OF ENVIRONMENT AND EARTH SCIENCES, MASENO UNIVERSITY.

2000 - 2005

Chairman, Department of Environmental studies, Maseno University 1991 – 1999

DEPUTY DIRECTOR, KENYA ENERGY AND ENVIRONMENT ORGANIZATION

CONFERENCES AND WORKSHOPS

- Technology Education; Meaning, Nature and Relevance To Development; International Conference Held In Nairobi, Kenya.
- Nyakach Cultural and Development Day "Working Towards Support For Orphanhood", Nyakach Elders, Kusa, Kenya.
- Lake Victoria Day 2002, "Livelihood At Risk; My Actions My Responsibility, Marenga Beach, Port Victoria Kenya.
- Lake Victoria Day 2001 Koginga Beach Homabay Livelihood At Risk; Be The Solution, UHAI Lake Forum, Kisumu.
- Lake Victoria Day 2000 Dunga Beach Livelihood At Risk; What Are You Doing? UHAI Lake Forum, Kisumu.
- UHAI Lake Forum 1999; Environmental Resources and Livelihood Security Around Lake Victoria Basin, Action Aid Kenya, Kiboswa, Kenya.
- Mobilization To Workshops For Eco-Cultural Forum Formation for The Nyika and Lake Victoria Religions, KENGO, Kenya.
- Forum for The Lake Victoria Region Meeting Theme: "Save Lake Victoria" For the Tenth Anniversary Celebration Of KENGO. This Led To The Creation Of OSIENALA (Friends Of Lake Victoria).
- Curriculum and Social Cultural Issue in Appropriate Technology Education. The Africa Regional Workshop on Technology Education, Nairobi, Kenya.

- Income Generation Techniques and Strategies for Small Scale Enterprises Through Locally Available Skills And Materials. Nairobi, Kenya.
- Techniques of Needs Assessment and the Identification Of Community Development Problems, Nairobi, Kenya.
- Training of Informal Sector Artisans to Introduce Marketable Biomass Energy Technologies; Nairobi, Kenya.

PUBLICATIONS

Matano, Ally-Said, Anyona, D. N., Owuor, P. O., Abuom, P. O., Dida, G. O., **Kapiyo, R.**, And Ofulla, A. V. O. (2013) Effects of Land Use Types on the Levels of Microbial Contamination Based on Total Coliform and *Escherischia coli* counts on the Mara River, East Africa. *African Journal of Tropical Hydrobiology and Fisheries* 13: 5-11

Owiti, D. O., **Kapiyo**, **R. A.** And Bosire, E. K. (2013) Status of the Sondu-Miriu River Fish Species Diversity and Fisheries: Sondu-Miriu Hydro-Power Project (SMHPP) Operations. *Journal of Ecology and the Natural Environment*. August 2013, Vol 5 No 8: 81-88

Otieno, A.C., **Kapiyo**, **R.A**., Oindo, B.O. and Buyinza, M. (2012), Local communities and compliance with the forestry policy: Perspective from South Busoga Central Forest Reserve, Muyage District, Eastern Uganda. *Research Journal of Applied Sciences*, *7(8):* 397–408.

Otieno, C. A., **Kapiyo**, **R. A**., Oindo, B. O. And Buyinza, M. (2012 Government Regulatory System and Compliance with Forestry Policy in South Busoga Forest Reserve, Mayuge District, Uganda. *Environmental Research Journal*, *6(4):* 293-303, 2012.

Otieno, C. A., **Kapiyo**, **R. A**., Oindo, B. O. And Buyinza, M. (2012 Politician and the Enforcement of the Uganda Forestry Policy 2001: Lessons from South Busoga Central Forest Reserve, Mayuge District, Eastern Uganda. *Environmental Research Journal*, *6*(3): 217-227, 2012.

Muyodi, F. J. and **Kapiyo**, **R**. (2012) Beach Community-Designed System To Ameliorate Water Quality Deterioration in Catchments of Lake Victoria. *The Open Environmental Engineering Journal*, *5*, *84*-95,2012

Otieno, C. A., **Kapiyo**, **R. A.**, Oindo, B. O. And Buyinza, M. (2012) Uganda National Forestry Authority and Enforcement of Forestry Policy 2011: A Case of South Busoga Forest Reserve, Mayuge District, Eastern Uganda. *Environmental Research Journal*, *6*(3): 206-216, 2012.

Otieno, C. A., **Kapiyo**, **R. A**., Oindo, B. O. And Buyinza, M. (2012) Compliance and Enforcement of Environmental Policies on Natural Resources in Uganda: Perspectives from South Busoga Forest Reserve. *Environmental Research Journal*, *6*(2): 81-93, 2012.

Muyodi, F. J., Mwanuzi, F. L. and **Kapiyo**, **R. J. A.** (2011) Environmental Quality and Fish Communities in Selected Catchments of Lake Victoria. *The Open Environmental Engineering Journal*, *4*, 54 – 65, 2011

- Kapiyo, R. J. A.; Abuom, P. O. And Onyango, L. (2011) Development of the Magwagwa Multipurpose Dam Project Resettlement Action Plan. *SMEC International/ Lake Basin Development Authority*. Nyanza province.
- Kapiyo, R. J. A. (2010) Vulnerability of the populations in the Lake Victoria Basin to Climate Change and viability of their coping strategies. *Lake Victoria Basin Commission*. Kisumu
- Kapiyo, R. J. A. (2010) Development of a Metadatabase of Existing Documentation relevant to the Water Sector Development and Management in Gucha-Migori River Basin. Nile Equatorial Lakes Subsidiary Action Program (NELSAP), Nile Basin Innitiative.
- Owiti, D. O., Kapiyo, R. J. A. and Bosire, E. K. (2010) Assessment of Fish Species Varieties, Stock and Habitat Preference in the Sondu-Miriu River by 2010. *KenGen Publications*, Kenya
- Kapiyo, R. J. A., Bosire, E. K. and Owiti, D. O. (2010) The Status of River Sondu-Miriu Fisheries and Fishing Activities in 2010. *KenGen Publications*, Kenya
- Muyodi, F. J., Mwanuzi, F. L., Keizire, B., Kapiyo, R. J. A., Mbabazi, D. and Mpaata, E. (2009) Influence of Water Quality on fish species composition, abundance and distribution in Lake Victoria. In Noble, B., Isabirye, P., Onywere, S., Nampala, P. and Tenywa, J. P.(Eds) (2009) Integrated Risk Assessment and Management of Pollutants in Lake Victoria Basin. *Lake Victoria Research Innitiative Proceedings*, pp 251-264. Vicres, Kampala.
- Kapiyo, R. J. A. (2009). An Assessment of the Viability and Potential for the Production of Furniture, Paper and Cosmetic Accessories from Water Hyacinth around the Shore of Lake Victoria. *WIFIP*, Kenya.
- Kapiyo, R. J. A. (2009). A Study of the Socio-economic and Technical Impacts of electric power Transmission Line of the Sondu-Miriu Hydropower Project. *KenGen*, Kenya.
- Kapiyo, R. J. A. and Kibwage, J. K., (2009). An analysis of the Socio-Cultural Issues of Tobacco and Bamboo among the Luo and Kuria communities of Southern Nyanza, Kenya.
- Mwanuzi, F. L.; Kapiyo, R. J. A.; Muyodi, F. J. and Keizire, B. B. (2008). Water Quality and its impact on fish abundance and socio-economic well being of the riparian communities of Lake Victoria. (Three year research project funded by Vicres, Inter University Council of East Africa)
- Kapiyo, R. J. A. (2008). The Impact of the Technical Committee of the Sondu Miriu Hydropower Project in Community Project Relationship during Project Implementation, *KenGen*, Kenya.
- Kibwage, J. K., Netondo, G., and Kapiyo, R. J. A., (2008). Diversification of Household Livelihood Strategies for Tobacco Small-holder Farmers: A Case Study of Introducing Bamboo in South Nyanza Region, Kenya. *IDRC, Ottawa, Canada*.
- Kapiyo, R. J. A. and Ong'or, D. O (2008) Community based adaptation and mitigation of flooding and the effects of climate change in the Nyando River basin. Uhai Lake Forum and JICA.

- Kapiyo, R. J. A. (2007). Community Roles in the Management of the River Yala Wetlands, Reconcile, Nakuru, Kenya.
- Kapiyo, R. J. A. (2007). A Study of the Impact of traffic flow and density along Nairobi road between Kisumu town and Ahero on flooding in the Nyando river basin. *Jica*, Nairobi
- Kapiyo, R. J. A., Omondi, A., Oloko, M. and Oswago, R. O., (2006). The Potential for Sustainability of a Rural Water Supply Scheme and their implementation in the Left and Right Banks of River Sondu Miriu In The Depleted Area, *Nippon Koei Co. Ltd.*, Kenya
- Kapiyo, R. J. A., (2005). Environmental and Socio-Economic Monitoring of the Transmission Line of the Sondu Miriu Hydropower Project. *Nippon Koei Co. Ltd*, Kenya
- Kapiyo, R. J. A., (2005). The Challenge of Environmental Management in the Lake Victoria Basin: The Role of the Eco-Cultural Model In Restoring Wealth and Livelihood Security. *Jaramogi Oginga Odinga Foundation Symposium, Kisumu, Kenya*
- Kapiyo, R. J. A, Abila R.O., and Asila, J., (2004). From Tobacco to Fish: A Socioeconomic Assessment of the Potential for Diversification from Tobacco to Production of Wood Fuel for Fish Processing in Western Kenya. IDRC, *RITC Canadian Tobacco Control Research Initiative Publications*, Ottawa, Canada.
- Kapiyo, R. J. A., (2004). UHAI Philosophy and Principles for Natural Resource Management Relevance for Education for Sustainable Development. Presented in a Conference on Education for Sustainable Development. Kungalv Sweden (13 –19 October, 2004)
- Kapiyo, R. J. A., (2004). "Environmental Studies Programme at Maseno University: Perspectives for Education for Sustainable Development". Global Conference on education for Sustainable development held at Chalmers/Gothenborg University Sweden in May 2004
- Kapiyo, R. J. A., (2004), "Existing Treaties on the Nile". Consultative Workshop on the Nile Water Resources 10-20 May 2004, Nile Basin Initiative, Kenya School of Monetary Studies.
- Willoughby, N. **Kapiyo R**., Mugo, J. Owiti, D. (2003). The Implications of the Sondu Miriu Hydropower Project (Kenya) for Fisheries and Fishing Communities *The Land 7.1* p3-20
- Kapiyo R. J. A., and Asila, J. (2003). Power Relations In Tobacco Production In Nyanza Province (Kuria, Migori And Rangwe) With Particular Reference To The Impact On Women. *Women Health Programme*, University of Witwatersrand, S. A.
- Kapiyo R. J. A., Kibwage, J. K and Abila, R.O (2003). The Status of Fishing and Fisheries of the Sondu-Miriu River, *KenGen*, Kenya.
- Kapiyo R. J. A. (2002). "Economic Transformation of Nile Riparian Communities: Responsibility Taking and Benefit Sharing in the Nile River Basin." A Keynote Paper Presented to the 9th Nile 2002 Conference, Kenya College for Communications Technology (KCCT) 7th to 9th October, 2002, Nairobi. Available at http://www.nbi.org

Kapiyo R. J. A. (2002). "Lake Victoria Day: Livelihoods at Risk; My Action My Responsibility". UHAI Lake Forum, Kisumu.

Ong'or D. O., Ongwae T. A., Omondi M. O., and Kapiyo, R. J. A. (2001). <u>Community Conservation Initiatives Towards Livelihood Security In The Lake Victoria Basin: Issues, Problems And Opportunities.</u> *UHAI Lake Forum*, Kisumu, Kenya.

Kapiyo, R. J. A. (2001) Educating for the Environment: Implication for Curriculum Design and Development. Environmental Action Learning / ECO Schools Capacity Development Seminar, Mombasa, Kenya.

Kapiyo, R. J. A. (2001). "Lake Victoria Day, Livelihood at Risk: Be the solution, UHAI Lake Forum

Kapiyo, R. J. A. (2000). "Lake Victoria Day, Livelihood at Risk: What are you doing?", UHAI Lake Forum.

Kapiyo, R. J. A. (1998). "Community Participation in Environmental Impact Assessment", Machakos Kenya.

Kapiyo, R. J. A. (1998). Carbonization of Saw Dust and Briquetting Of The Resulting Coal Dust, Swiss Contact Kampala, Uganda.

Kapiyo, R. J. A. (1997). An Investigation Into Factors That Influence Ownership Of Land By Women in Awendo Sugar belt African Centre of Women, Ethiopia.

Awori A. J., Kapiyo, R. J. A. and Karinge P. G. (1996). **UHAI:** <u>The Eco-Cultural Model for Sustainable Livelihoods and Natural resource Management in Africa.</u> *KENGO*, Nairobi.

Kapiyo, R. J. A. (1996). "Principles of UHAI Model", Friends of the Earth International, Leeds, United Kingdom.

Kapiyo, R. J. A. (1996). African Women Leaders in Agriculture and Environment (AWLAE), Five Year Action Plan presented at Pan-African Conference on Women Leadership in Agriculture and Environment, Addis Ababa, Ethiopia.

Kapiyo, R. J. A. (1996). "Technology Education and Sustainable Livelihoods: A Critical Growth Path in Africa". *PATT Sweden*, Linkoping University.

Kapiyo, R. J. A. (1996). Indigenous Sports, Games and Sayings. Festivals of Living Traditions, Nairobi.

Kapiyo, R. J. A. (1995). "KENGO's New Framework "UHAI" for Participation and Empowerment", Nangbeto, Togo.

Kapiyo, R. J. A. (1995). "Participatory Research Methodology" – Africa Development Fund (ADF), Mrewa, Zimbabwe.

Kapiyo, R. J. A. (1994). Research, Innovation and Quality Control: A Case of Energy Technologies within the Jua Kali Sector, Jua Kali Symposium and Exhibition, Nakuru, Kenya.

Kapiyo, R. J. A. (1994). African 'Science' and 'Technologies', *Resources Journal*, Vol. 5 No. 1 p34-36.

Kapiyo, R. J. A. (1994). "Linking Science to Problems of Target Groups by African non-Governmental Organizations", Presented at the Traditional Techniques of Micro-climate Improvement, ICRAF, headquarters, Nairobi.

Kapiyo, R. J. A. (1994). "The Fusion of Traditional Wisdom and Modern Technology in Natural Resources Use and Management", CODEL Consultation Workshop, Action Aid Centre Kiboswa, Kisumu, Kenya.

Kapiyo R. J. A. (1994). Promoting the Indigenous Knowledge: Practices and Appropriate Technologies used in Fresh Water Resources. In Aggriwaly N and Sendama, A. (Ed) (1994) *African Fresh Water Resources: Challenges For The 90s And Beyond*. Regional Workshop, Africa Water Network and UNEP, Nairobi. P 46-49

Kapiyo, R. J. A. (1993). "Kitchen Pollution; What Household Owners Say". Clean Air Challenges for South Africa.

Kapiyo R. J. A. (1993). Combating Environmental Degradation through Technology Education: Case Experience of the Kenya Energy and Environment Organization. In Mottier I, Raat, J and De Vries, M (1993) *Technology Education and the Environment*. Pedagogical Technical College, The Netherlands. P 370-379.

Kapiyo R. J. A. (1992). Technology Education in Democratic Kenya: Approaches to Popularize, Implement and Strengthen Technology Education in Schools and within Communities. In Blandow, D and Dyvenfurth, M (1992), *Technological Literacy, Competence and Innovation in Human Resource Development*. International Conference on Technology Education, Weimer Germany.

Kapiyo, R. J. A. (1992). "Energy, Environment and Poverty in Developing Countries", Madrid, Spain

Kapiyo, R. J. A. (1992). "Poverty, Technology and Environment: Reflections and Experiences from Grassroots / Community Level activities" New Delhi, India.

Kapiyo, R. J. A. (1992). "Bio-energy Issues for future Development and Possibilities with Improved Institutional Stoves." The Kenya Forestry Master Plan, Nairobi.

Kapiyo, R. J. A. (1992). "Kenya Ethnic Communities: How They Lived In Balance With Nature The Changes Of Today And Factors To Consider In Development Work". The Kenya Forestry Master Plan, Nairobi.

Kapiyo R. J. A. (1991). Appropriate Technology and Home Economics. In. Van der Vynckt and Sachs – Israel, M (1991): *Curriculum Reorientation in Rural Development: Implications for Home Economics*. UNESCO Paris. P 123-134.

Kapiyo, R. J. A. (1991). Energy: Identifying African Priorities: Resources Journal Vol. 2 No. 2, 1991

Kapiyo, R. J. A. (1991). Indigenous Technologies in a Modern World, *Resources Journal* Vol. No. 1, 1991. p 4-6

Kapiyo, R. J. A. (1989). "The Concept of Technology of Students at Teacher Training Institutions in Kenya", Eindhoven, The Netherlands.

Kapiyo, R. J. A. (1990). "Appropriate Technology and Home Economics", UNESCO, Kenya.

Kapiyo, R. J. A. (1990). "The Use of Computer for R & D Management for Developing Countries", Mombasa, Kenya.

Kapiyo, R. J. A. (1990). "Development of Kenya Technology Policy to Aid Small Scale Industrial Development in Kenya", Kericho, Kenya.

Kapiyo, R. J. A. (1989). "Diffusion of Technology in the Jua Kali Sector (Small Scale Business/Informal Sector"), Eldoret, Kenya.

Kapiyo, R. J. A. (1989). "Urban Stove Development and Dissemination", Negombo, Sri-Lanka.

Kapiyo, R. J. A. (1989). "An Evaluation of the Role of KENGO in National Energy Development and Implication for National Energy Planning"; Lusaka, Zambia.

Kapiyo R. J. A. (1989). Technology at the Teacher Training Institutions in Kenya: Is it there? In Wolters, D. Mottier, I, Raat, J. and De Vries, M. (1989). *Teacher Education for School Technology*. Pedagogical Technological College, Eindhoven The Netherlands. P 433-448.

Othieno, H. and Kapiyo R. J. A. (1989). Processes of Technology Transfer: Some Critical Issues in Developing Countries. *Energy Exploration and Exploitation*. Vol.7 Number 2 p 93-102.

Othieno, H and Kapiyo, R. J. A. (1988). Processes of Technology Transfer: Some Critical Issues in Developing Countries. In *Technological Innovation*, World Association of Industrial and Technological Research Organizations (WAITRO) International Conference, Trinidad and Tobago.

Kapiyo, R. J. A. (1988). Science Education is the Essence of Technological Development of a Nation. In Staff Development Seminar (1988). *Science Teacher Education for National Development*, Kenya Science Teachers College, Nairobi

Kapiyo, R. J. A. (1988) "The Kenya Ceramic Jiko (KCJ) and Lessons Learnt from it: A review Document". Appropriate Technology Centre, Kenyatta University, Nairobi.

Kapiyo R. J. A. (1988). PATT Research and Relevance of PATT: Perspectives from Developing Countries especially from Africa. In De Vries, M; Raat, J, Van Den Bergh, and Wolters, D (1988) *Basic Principles of School Technology*_ Eindhoven University of Technology. P 272-284.

Kapiyo, R. J. A. (1988). The Role of Science in the Technological Advancement of a Nation. Kenya Science Teachers College, Nairobi, Kenya.

Kapiyo, R. J. A. (1987). "Stove for People", Antigua, Guatemala.

Kapiyo R. J. A. (1987). 14/15 Year Old Pupil's Concept of Technology in Rural and Urban Kenya. In Den Bergh, R.C. (Ed) (1987) *Pupils Attitude Towards Technology (PATT*), Eindhoven University of Technology, The Netherlands. P 89-94.

Kapiyo, R. J. A. and Otieno, F (1986). Some factors in the Measurement of Pupil's Attitude to Technology in a Third World Content: Highlights from Kenya. In Raat, Jan and DeVries, M(Eds) (1986). What do Girls and Boys Think of Technology. Eindhoven University of Technology, Netherlands p 82-89.

Kapiyo, R. J. A. (1986). Technology in the School Curriculum in Kenya. Unpublished PhD Thesis, Leeds University, UK

Kapiyo, R. J. A. (1986). "Prospects of Technology Education in Kenya", The British Council, London, United Kingdom.

Kapiyo, R. J. A. (1986). "The Changing face of Physics Education in Kenyan Secondary Schools", Sophia University, Tokyo, Japan.

Kapiyo, R. J. A. (1985). Women Science and Technology, Kengo News, Vol.1, No.3 P 28

Kapiyo, R. J. A. (1985). Stove Design and Dissemination"; Eindhoven University of Technology, The Netherlands.

Kapiyo, R. J. A. (1985). Science and Technology Education and Future Human Needs: Perspectives from Kenya": 7-14 August, 1985 Bangalore, India.

Kapiyo, R. J. A. (1984). "The Social and Political Impact of New Technologies and Technology Development among Rural Communities". University of Leeds, United Kingdom.

Kapiyo, R. J. A. (1984). "Education Evaluation in Developing Countries", University of Leeds, United Kingdom.

Kapiyo, R. J. A. (1984). Energy and Rural Communities: How They Understand Its Impact", University of Leeds, United Kingdom.

