

CURRICULUM VITAE

ENG. G.O. NYANGASI

Name : **George Oduwo Nyangasi**
Profession : **Mechanical Engineer**
Date of Birth : **November 17, 1945**
Nationality : **Kenyan**

Membership in professional societies

Member, Institution of Engineers, Kenya (MIEK)
Registered Engineer, Engineers Registration Board, Kenya

Education

B.Sc. (Hons), Mechanical Engineering, University of East Africa, 1969

EMPLOYMENT RECORD AND WORK EXPERIENCE

1990-2013 **Senior Lecturer, Engineering Design, Department of Mechanical and Manufacturing Engineering, University of Nairobi**

2003-09 **Chairman, Training Committee, Institution of Engineers of Kenya (IEK)**
Organizing Continuing Professional Development and training for practicing engineers

2003-09 **Member of Council, IEK**

2004-12 **Member, Mechanical Engineering Panel, Engineers Registration Board of Kenya (ERB)**
Interview Panel for graduate mechanical engineers seeking registration with the ERB
Member, Academic Qualifications Panel, Engineers Board of Kenya

1995-00 **Chairman, Mechanical Standards Committee, Kenya Bureau of Standards**

CONSULTANCY PROJECT EXPERIENCE

2012-Date **Team Leader, Hydropower Standards development, Kenya Bureau of Standards, in partnership with**

- 1) Department of Mechanical Engineering, University of Nairobi**
- 2) Kenya Bureau of Standards**
- 3) Ministry Of Energy**
- 4) United Nations Development Programme**

The project was initiated to develop and prepare standards for small hydropower stations, in the range below 10 MW. This was a policy instrument for renewable energy development.

It was realised that development of small hydro power stations in Kenya was being hampered by lack of technical capacity in the area of planning and design, construction and installation, as well as operation and maintenance.

The project was therefore intended to provide a practice or design manual, that would provide guidelines for essential stages of hydro power stations development, including:

- 1) Small hydropower site design code**
- 2) Electromechanical equipment guide for small hydro power installations**
- 3) Small scale hydro power systems design code: specific design requirements for micro hydropower systems**
- 4) Small scale hydropower systems design code-mechanical design**
- 5) Hydropower systems design code-specific requirements for Pico hydropower systems(<5kw)**
- 6) Hydropower systems design code-guidelines for public safety at hydropower sites**
- 7) Hydropower and the environment-effectiveness of mitigation measures**
- 8) Hydropower systems design code-environmental impact and mitigation guidelines**
- 9) Hydroelectric power plant engineering-electrical design**
- 10) Electrical maintenance schedule**
- 11) Hydropower systems design code-design, installation, operation and maintenance of a minigridd for remote area electric power supply**
- 12) Hydraulic turbines, storage pumps and pump-turbines-tendering documents**
 - 1. General and annexes**
 - 2. Guidelines for technical specifications for Francis turbines**
 - 3. Guidelines for technical specifications for Pelton turbines**
 - 4. Guidelines for technical specifications for Kaplan and propeller turbines**
 - 5. Guidelines for technical specifications for tubular turbines**
 - 6. Guidelines for technical specifications for pump-turbines**
 - 7. Guidelines for technical specifications for storage pumps**

2011-Date **E&M Engineer, Chemususu Dam Project, Instrumentation and pipework**
2011-Date **E&M Consultant, Kiserian Dam Project, Pumping station**
2012 **E&M Consultant, Kwale Water Supply rehabilitation project**
2007- **Mechanical Engineering Design, Kisumu Water Supply and Sanitation Project**
2008 **Lake Victoria South Water Services Board**
2003 **Ministry of Roads and Water Supply, Republic of Mozambique/World Bank-PROJECT**
 Consultant, Electrical/Mechanical Engineer for the design of small piped Water Supply schemes
2001 **Nairobi City Council and World Bank- PROJECT**
 Consultant, Operation and Maintenance Specialist. Study of Private and Public Water Tanker Services
1997-98 **Sanitation and Drainage Master Plan - Nairobi City Council- PROJECT**
 Consultant, Operation and Maintenance Specialist:
1998 **Kenya Tea Development Authority- PROJECT**
 Plant and Machinery Valuer of 44 Tea Factories in Kenya
 Kenya Tourist Development Authority- Project
 Plant and Machinery Valuation of Serena Hotels, African Tours & Hotels, Kenya
1995 **Kenya Airports Authority- PROJECT**
 • Plant and Machinery Valuation
1995 **Zambia Privatization Agency- PROJECT**
 Plant and Machinery Valuation
1988-95 **Third Nairobi Water Supply Project - Nairobi City Council/World Bank- PROJECT**
 Consultant, Training in Operation and Maintenance
1992 **United Nations Industrial Development Organization (UNIDO)- PROJECT**
 Consultant, Mechanical Engineering Design Centre (KIRDI)
1985 **Consultant-Kefinco PROJECT**
 Preparation of Operation and Maintenance Manuals for Water Supply Projects
1985 **Research Study- PROJECT**
 Practical training of Mechanical Engineers in Kenya: International Development Research Centre
1984 **Kenya Railways Corporation & Department of Overseas Development - PROJECT**
 Engineering Training Specialist; Engineering Training Study for Kenya railways Corporation;

Industrial Research and Consultancy Unit, School of Engineering, University of Nairobi,

1980-90 **Co-DIRECTOR, Industrial Research and Consultancy Unit, School of Engineering, University of Nairobi,**

EMPLOYMENT RECORD AND WORK EXPERIENCE

ENGINEER Employed by KENYA RAILWAYS CORPORATION

1978-80 **District Mechanical Engineer, Mombasa region**
1976-78 **District Mechanical Engineer, Nairobi District**
1976-77 **Carriage and Wagon Engineer**
 Kenya Railway Corporation H/Q, Nairobi; Kenya Railway Corporation - Maintenance Planning

ENGINEER, Employed by EAST AFRICAN RAILWAYS CORPORATION

1975 **District Mechanical Engineer, Nakuru Region, Kenya**
1974 **District Mechanical Engineer, Tanga Region, Tanzania**
1973 **Assistant Mechanical Engineer, Dar-es-salaam Region, Tanzania**
1972 **Assistant Mechanical Engineer, Tabora Region, Tanzania**
1972 **Assistant Mechanical Engineer, Traction Stock Maintenance Planning,**
 East African Railways H/Q, Nairobi; East African Railway Corporation
1969-71 **Assistant Mechanical Engineer in Training**
1966-69 **Student & Graduate Engineering Trainee, (East African Railways Corporation)**