

## **Simon Njuguna (Kenya)**

### **Personal details**

Profession: Geologist and Urban and Regional Planner within GIS environs

Date of birth: March 1970

Languages: English, Kiswahili (written and spoken)

### **Summary of key abilities**

Has a background that blends well with undertakings that are prescribed in United Nations Convention on the Law of the Sea (UNCLOS) by virtue of his training, current and previous undertakings. He is trained both in physical and developmental sciences, a basis upon which he is able to undertake assignments that may require multi-disciplinary approach but with special interest and ability to map and analyze spatially manifested phenomena. Among the current duties is being one of the technical lead persons in implementation of article 76 of UNCLOS and has been involved in all the undertakings in the process of delineation of Kenya's Continental shelf serving as a geologist and GIS specialist. The played roles include being a lead a person in planning, execution and analysis of data used in putting up the Continental shelf Claim for Kenya. Attendance in a number of trainings and participation in seminars where matters of implementation of UNCLOS have been the main subject, further hasten the ability in handling an assignment in the field. An addition to the list of abilities is strength in making technical presentations to an audience. This is coupled with a high level of interactive type communication backed up by good writing skills.

### **Educational background**

#### **Professional Training**

Date: September 2000-September 2001

Institution: International Institute of Aero-surveys and Geosciences (the Netherlands)

Award: Professional Master (PMSc) Geoinformation science and Earth observation

The study was an earth resource and environmental studies based with special emphasis on use of Geographical Information systems (GIS) by application of remotely obtained data

#### **University Level**

Date: October 1996-November 1999

Institution: University of Nairobi

Award: Masters of Arts degree in Planning

This is a strategic-management-based type of a course with major focus towards better built up environment and human settlement (physical developments)

Date: November 1990 to July 1995

Institution: University of Nairobi  
 Award: First class honours Bachelor of Science degree in Geology

### **Implementation of Article 76 of UNCLOS-Kenya**

#### (a) Data collection

Has been on board two different data collection sea vessels, Bathymetric and Geophysical Data (mainly seismics but with gravity and magnetic) both of which were directed towards Continental shelf delineation process for Kenya.

Bathymetric survey- Within the Kenyan EEZ area, multibeam-full coverage and individual swaths in depths ranging from 100m to 3500m- Nov to Dec 2007

Seismic survey- The Kenya offshore area ranging from 200m isobath through to beyond 350 M April-June 2008

#### (b) Training

- In-house Training , Kenya- Induction course to UNCLOS and Article 76- year 2006
- United Nations offices In Nairobi Parts 1 & 2 UNEP Shelf Programme, Desktop Preparation workshop for East African region
- UNEP Shelf Programme-Arendal, Norway Technical Aspects of the interpretation of marine geophysical data utilizing the shelf delineation software Geocap Technical data requirements and the documentation that needs to accompany the data used in submission (Jan-Feb 2008)
- Geocap Software Training , Kenya Geocap Software main functionalities and the Shelf Module Sept 2007

#### (c) Seminars, workshops and meetings

- Buenos Aires Argentina: Law of the Sea, Resources of the sea bed, Aspects of economics and conservation (March 2006)
- Kingston, Jamaica: International Sea bed authority meeting (June 2006)-contributed towards drafting regulations for prospecting and exploration of Polymetallic nodules
- Geocap Offices, Oslo, Norway Geocap training recap and feedback session (May 2007)
- Maputo, Mozambique Commonwealth Seminar for Coastal Landlocked States of Africa on the Implementation of the 1982 UNCLOS (May 2007)

- New York, USA                      A member of the Kenyan delegation to State Parties Meetings on UNCLOS for the 18th, 19th and 20th meetings
- New York, USA                      Made the technical part of oral presentation for Kenya's Continental shelf Claim (September 2009)

### **Employment record**

(a) February 2006 to date:

Employer:

Presidency and Cabinet Affairs office, Taskforce on Delineation of Kenya's Continental Shelf

Designation

Geologist and GIS Specialist

Responsibilities

- A member of the core team in advising the government on actions and strategy to be taken to settle a maritime boundary between Kenya and Somalia
- Ensure Kenya puts up a technically and scientifically provable Continental Shelf beyond 200 nm claim acceptable to the Commission on the Limits of the Continental Shelf as stipulated in UNCLOS through:
  - Identification of data sources, collection, treatment and analysis of data and
  - Planning and execution of new data acquisition exercises
  - Resolve GIS and geological related issues
- Advise the Government of Kenya on relevant undertakings towards realization of the above objectives.

(b) May 2006 to date

Employer

- Ministry of Higher Education Science and Technology
- Directorate of Research Development and Management

Designation

Senior Assistant Director

Responsibilities

- Conduct research in Geoscientific fields
- Setting, running and maintaining an electronic database on information on research organisation in Kenya
- Evaluating general climate change information in relation to its impacts, vulnerability, adaptation and mitigation
- Guiding and supervising junior research officers

(c) March 1997 to February 2006

Employer

Ministry of Environment and Natural Resources, Mines and Geological Department

Designation

Geologist

Responsibilities

- Running departmental projects in the Environmental and Geo-hazard section which included Landslide Zonation project in Central Kenya Highlands and Mercury Pollution by Artisanal Gold Miners Project in the gold mining areas of Western and Nyanza provinces of Kenya
- Reviewing environmental impact assessment, environmental audits and project reports submitted to the Department by National Environment Management Authority (NEMA)
- Field research preparation studies, geological field surveys and geo-hazardous sites investigation
- Rock, soil sampling and other materials sampling and observation in the course of the above as well as sample analysis and interpretation of data
- Mineral identification and verification using various laboratory methods and machines
- Compilation of the respective reports and write-ups as well as other official and general responsibilities

(d) September 2002 to September 2003

Employer

Kenyatta University

Department of Environmental Planning and Management

Designation

Part-time Lecturer

Responsibilities

- Holding and organizing for lectures in the following fields:
- Planning and Management of urban slums and squatter settlements
- Rural area planning (District focus planning)
- Population dynamics and environmental planning
- Evaluating the level of accomplishment of the objective by Setting and marking examination

(e) 1 December 1995 to 30 June 1996

Employer

Groundwater Survey (K) Limited

**Designation**

Geologist, Assistant hydro-geologist

**Supervisor's**

Senior hydro-geologist, Consultant-cum-director of the company

**Responsibilities**

- Desk study in terms of geological and hydro-geological characteristics of proposed sites,
- Field reconnaissance surveys of proposed sites,
- Detailed geological, hydro-geological and geophysical investigations of these sites,
- Analysis of data collected from the field and compilation of reports and
- Assisting in supervision of borehole/water well drilling

**Membership in professional societies**

- Geological society of Kenya  
Professional member,
- Geologists Registration Board of Kenya  
Registered Geologist,
- National Environmental Management Authority of Kenya  
Registered Lead expert in Environmental Impact Assessment and Environmental Audit

**Awards and honours**

Accorded, on 12th Dec 2008, the honour and style of The Order of Grand Warrior of Kenya (OGW) by the Head of State for devotion and Commitment to service of the Nation

**Compiled reports (unpublished)**

- Under the Continental Shelf of Kenya Programme:  
Submission on the Continental shelf of Kenya beyond 200nm to the Commission on the Limits of Continental Shelf of the United Nations  
Delineation of Kenya's Outer Continental Shelf Beyond 200nm; Data acquisition report  
Delineation of Kenya's Outer Continental Shelf Beyond 200nm; the Desktop study  
Delineation of Kenya's Outer Continental Shelf Beyond 200nm; Test of Appurtenance
- Geological feasibility Study for a proposed ballast Quarry in Mlolongo, Mavoko Municipality, Machakos District Kenya, June 2006

- Slope failures in Muranga District Kenya, Jan 2006
- Mines and Geological Department, Ministry of Environment and Natural Resources, Kenya brochure, December 2005
- Progress reports on Landslide Investigation in Kabawa Village Keiyo District Kenya, The environmental implication of mercury use in gold recovery in Western and Nyanza Provinces, Kajiado-Isinya-Taita Taveta gypsum and gemstones mining development and verification
- Environmental project report for Wamba Replacement Borehole in Samburu District, June 2005 (supervising)
- Environmental project report for a Proposed Borehole Drilling in, Maralal Township, Samburu District Kenya, May 2005 (supervising)
- Initial environmental audit report for Jaswinder and Skyline gypsum mines in Isinya Kajiado district Kenya, February 2005
- Environmental audit report for Duse Sapphire Mine in Kinna Isiolo district Kenya, October 2004
- Environmental Project report For River Bank Protection and River bed Modification in Lavington Nairobi Kenya, July 2004
- Preliminary Landslide reports for Muranga, Sasumua and Ndunyu Chege Kenya, August 2003
- Geology of Southern de Los Filabres (S.E. Spain) with Emphasis on Seamless Map Compilation, September 2001
- Environmental Impact Assessment report, Twente Conurbation province of Overijssel, the Netherlands May 2001
- Bibliography of the reports on geochemistry in Kenya, November 1999