

CURRICULUM VITAE



Name: **Eng. Dr. Onyango Ogembo, William.**

Date of Birth: **24th December, 1942**

Nationality: **Kenyan**

Position: - **HEAD OF HYDROLOGY, SURVEYING & CARTOGRAPHY PROGRAMMES**

Profession: **Hydrologist/Civil Engineer & Water Resources Expert**

Eng. Dr. Onyango Ogembo

Department of Geography & Environmental Studies University of Nairobi

EDUCATION

PROFESSIONAL TRAINING AND ACADEMIC QUALIFICATIONS

i) M.Sc. Civil Engineering Academic Training (1972-74)

Postgraduate experience of not less than **30** years in the design and the construction of Civil and Industrial projects, Domestic and Industrial water supply and Sanitation, Hydro structures (Power Stations and Irrigation Channels)

- 1.** Hydraulic structures, **2.** Hydraulic in Engineering Practice, **3.** Hydrology and Water Engineering, **4.** Technology in organisation and economics of hydraulic in hydro-structures engineering, **5.** Land Reclamation in Engineering practice and irrigation
- 6.** Hydropower station, **7.** Water and ports, **8.** Electrical equipments of Hydropower stations, **9.** Multi-purpose course work (Projects) of the following projects:
 - low storey industrial and civil buildings
 - low head hydropower projects for irrigation purposes
 - sea port
 - high head hydropower projects for power generation
- 10.** Engineering Geology and Hydrogeology, **11.** Geomorphology.

Field Practice

1. Academic practice in Geodesy and Survey, 2. Academic practice in building construction, 3. Academic technological and management in the construction of multi-purpose hydro-structures and hydropower stations (hydro-construction). 4. Industrial design training in hydro-construction. 5. Academic practice in mining and prospecting of minerals and groundwater exploration. 6. Design of water supply and irrigation projects 7. Hydrological data collection Ebnet River Basin – Freiburg West Germany

IV. POSTGRADUATE PROGRAMME: Ph.D. Geography (Hydrology) 1976-80.

Institute of Geography, Academy of Sciences of the USSR

Field work in Kenya - January, 1977

Consultancy Services: 1984 – 2004 (Hydrologist/Hydro-geologist, Water Engineer, Construction Engineer (Shallow wells, bore holes and all types of water tanks)

Surface and groundwater resources specialist)

Implemented various projects and offered consultancy services to various organizations including UNESCO Kenya Office, University of Nairobi, Bambamanzi Water Services – Durban South Africa, Migori Mining Complex for Mines and Geology Kenya, Water Supply for Food Production funded by Australian Freedom From Hunger and Kenya Freedom From Hunger Kenya. projects are: Rongo Nyagowa Women vegetable project, Kendu Bay Division, Green Valley vegetable project in Asembo – Raried Division, Aram Women group vegetable project in Uyoma - Rarieda Division etc) and the

i) Ph.D. Geography (Hydrology) Research Work:

Main Chapters:

1. Water problems in Kenya
2. Development of water resources of Kenya
3. Assessment of water resources and their rational utilization
4. Water supply for mines and wildlife
5. Hydrogeology and groundwater exploration

ii) a). FIELD WORK

1. Exploratory field studies of rivers, Tana, Turkwel, Nzoia, Ewaso-Nyiro, Sondu, Nyando and Kuja Ministry of Water Development Nairobi 1977-1978.
2. Ministry of Water Development - HYDROMET project Nairobi Kenya, 1977.
3. Specialization- For the Surface Hydrology and hydrogeology practical and field work I was posted at Rastov-on Don observatory field station in USSR, 1979 and Macalder Gold Mine in Kenya.
4. Exploratory field work at the Ebnet hydro-meteorological Experimental Basin through Freiburg University West Germany
5. Hydro-construction practical field work at Kanive Hydropower station in Kiev in the USSR 1975
6. Hydro-construction practical field work at Nurekskaya High Earth Dam Hydropower station in Tajikistan in the USSR 1976

II. Education and Key Qualifications: (to update)

University/College/School	Year	Degree/Diploma/Certificate
1. University of Nairobi Kenya	2006	Certificate of Participation in the Workshop on the Training of Chief Internal Examiners (13 th – 14 th July, 2006)
2. International Institute for Infrastructural, Hydraulic and Environmental Engineering IHE, Netherlands	1998	IHE DELFT Certificate in Training of Trainers Course: Didactics, Course Management and Curriculum Development in the field of Water Resources Management and Information Systems.
3. University of Bradford, UK	1989	Diploma In Water Projects (Surface / Ground); Planning, Appraisal, Implementation and Management.
4. University of North Carolina, U.S.A.	1983	Certificate in Water Quality, Supply and Pollution Control Programme-ETMA.
5. University of North Carolina, U.S.A.	1981	Certificate in Water Quality Supply and Pollution Control Programme-ETMA
6. University of North Carolina, U.S.A.	1981	Certificate in Water Quality Supply and Pollution Control Programme-ETMA
7. Institute of Geography, USSR Academy of Sciences, Moscow USSR	1980	Ph.D Geography (Hydrology- Surface and Groundwater)
8. Institute of Hydro-Project, People's Friendship University, Moscow USSR	1975	Graduate Engineer (Hydro geologist) in charge of ground water exploration at the Institute of Hydro project Moscow
9. People's Friendship University, Moscow USSR	1974	M.Sc. Civil Engineering (Hydrology and Hydrogeology).
10. Royal Agricultural College, Uppsala, Sweden Department of Soil Sciences	1974	Certificate in Soil Science
11. People's Friendship University, Moscow USSR	1972	B.Sc. Civil Engineering (Low-Head Hydro-Structures)
12. People's Friendship University, Moscow USSR	1970	Diploma In Translation (English/Russian)

(b) MEMBERSHIP OF ACADEMIC AND PROFESSIONAL INSTITUTIONS:

1. Member of the Institution of Civil Engineers of Kenya (I.E.K.).
2. Registered Licensed Professional, Hydrologist/Water Engineer. Min. of Water Development, Nairobi
3. International Association of Hydrological Sciences (I.A.H.S.), Wallingford, Oxfordshire, Great Britain.
4. International Rain Water Catchment Systems Associations (I.R.C.S.A.) USA.
5. Fellow: Hydrological Society of Kenya
6. American Water Works Association (A.W.W.A.) USA.
7. Wash and Sanitation for Health (WASH) Project Coordination and Information Center, Arlington Virginia, USA.
8. International Reference Center for Community Water Supply and Sanitation, The Hague, Netherlands.
9. Alumni: IHE THE NETHERLANDS 1998

ACADEMIC TASK ASSIGNMENTS:

I. (a) Departmental Task Assignments:

SENIOR LECTURER and Head of Hydrology, Surveying and Cartography Programmes, Practical Geography,

ACADEMIC SUPERVISION (CAPACITY BUILDING SUPERVISION RESPONSIBILITY

HEAD OF POSTGRADUATE HYDROLOGY PROGRAMMES AT THE DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES UNIVERSITY OF NAIROBI

a) Undergraduate Students

1. **Bwana, S.A. (COI/0733/89)** COI/0733/89) B.A. Dissertation entitled "Water Transportation in Kenya: A geographical appraisal of some aspects of transportation in Lake Victoria.

2. **M.Paul (COI/0871/89)**, Dissertation entitled "Influence of water supply on urbanization process in Machakos District: A case study of Machakos Town.

XI. INTERNAL EXAMINER: (UNDERGRADUATE B.A./B.Sc.)

1. Mwenje L.M. (C50/7596/91), B.A. Dissertation entitled "The influence of socio-economic practices on National Park".

2. **Adera B.A. (120/2425/88)** B.Sc. Dissertation entitled "Ecological and Socio Economic Factors affecting sorghum production in Nyando Division, Kisumu District.

3. **Ngugi, S.M. (COI/0614/88)** B.A. Dissertation entitled. Rural Informal Sector: Some Geographical aspects of Jua Kali activities in Nginda Location, Murang'a District.

4. **Omondi, B.A. (120/2450/88)**, B.Sc. Dissertation entitled "Cotton Production and ginning: A comparative study of Luanda and Nambale generic in Busia District.

5. **Kogo, K.J. (120/2395/89)**, B.Sc. Dissertation entitled "Periodic floods in the city of Nairobi.

6. **Thenya, P.T. (120/2947/90)**, B.Sc. Dissertation entitled "Problems of pollution in parts of Ruiru river catchment.

7. **Omondi, R.G. (COI/0444/90)**, B.A. Dissertation entitled Assessment of tropical wetland in Kenya: A case study of river Sondu flood plain wet lands in Kenya.

POST GRADUATE STUDENTS SUPERVISION:(M.Sc, MA and PhD Students)

M.Sc / M.A. Hydrology Students

3. **J.L. Njeru (156/7701/90)**: M.Sc. Dissertation entitled "Field determination of soil water and its role on the water balance in Ewaso Ngiro Basin". A case study of Naro Moru and Timau sub-catchments.

4. **Abwao, P. (156/7704/90)** M.Sc. Dissertation entitled "The determination of the quantity and quality of surface run-off from an urban area: A case study of Nairobi Central Business District".

5. **Anyona, G.O. (I/56/7164/91)**, dissertation entitled "An Investigation into Some Water Quality Problems of Lake Kanyaboli in the Lake Victoria Drainage Area

6. **Oyunge, L.M. (C50/7596/91)**, dissertation entitled" An assessment of ground water quality variations with Land use in Chirichiro Catchment, Area, Kisii District.

7. **Mwenje, A.K.G. (120/2474/88)** has not finish yet

8. **Mochiemo, G.O. (C/56/8324/90)**, M.Sc. Dissertation entitled "An investigation into the effects of changes in land use or run-off rates and sediment loads transport from the Turasha catchment, Kenya.

9. **Nyangaga, J.M. (I56/7455/89)**, M.Sc. Dissertation entitled "Effect of Agricultural practices on water quality in Riana river catchment in south western Kenya.

10. **Kitheka, J.U. (I56/7703/90)**, Dissertation entitled "Soil erosion and its impact on surface water reservoirs: A case study of Nguu Tatu catchment, North East of Mombasa District, Kenya.

11. **Shadrack, M.K. (I56/7720/89)**, Dissertation entitled "Effects of Industries and other land use systems on the water quality within the Nairobi sub-catchments, Kenya.

M.Sc. dissertations: Ongoing 2007

- ❖ M.Sc - Hydrogeology of Nairobi Area: Delineation of Aquifers and Estimation of Their Hydraulic Characteristics (KURIA J.N.) 2003
- ❖ M.Sc – Evaluation of *the* Performance of the USGS Stream Flow model for Shabelle Basin in Somalia (Muchiri Peris W **(I/56/7730/2004)**)
- ❖ Small Scale Solar Desalination: Reducing vulnerability of Communities to Freshwater Shortages: A Case study of Mombasa District Mwamburi K. Everlyne. (I56/8640/06).

Completed 2005

- ❖ M.Sc – Chemical and physical Characteristic of Water in the Noigameget Brook of the Upper Nzoia River Basin. (Denis Mutama Masika) 2002
- ❖ M.Sc – Domestic Water Consumption per Capita: A Case Study of selected households in Nairobi. (Otieno. A No. C/50/P/8313/2001) – 2001

Ph.D theses: Ongoing 2007

- ❖ Ph.D. – Isaiah A. Nyandega: Drought Frequency, Persistence and Impact in the Upper Catchment of Tana River – Kenya 2000
- ❖ Ph.D. – J.M. Nyangaga: The effect of Environmental Degradation on Stream flow and Water Quality Variation in Itare Catchment within the Lake Victoria Drainage Basin in Kenya - 2001

OTHER ASSIGNMENTS:

- Coordinator: Hydrology Programme at the Department - 2002
- Computer Laboratory Officer Geography Department - 2002 to 2005
- Researcher and Focal Person for the UNESCO FRIEND NILE project “Sediment Transport and Watershed Management” on River Sondu from 2001- 2005
- **Sub group coordinator:** “Nile Basin Capacity Building Network for River Engineering (NBCBN-RE) for Regional Research Cluster in Flood Management and River Engineering in Kenya from 2003 to date
- **Vice Chairman:** International Hydrological Programme (IHP) Kenya National Commission for UNESCO Ministry of Education, Science and Technology – Nairobi Kenya 2003 - 2007
- **Ambassador for Peace:** International Inter-religious Federation for World Peace (IIFP)–Washington DC USA – 2000
- **East Africa Regional Chairman:** World Association of Non- Governmental Organization (WANGO) - United Nations New York USA 2002
- **Head of the international team** from NIPON KOEI –Japan for the field survey for the feasibility of Sondu Miriu Hydro-power station on Sondu River–1983 - 84
- **Chairman, Building Africa Continental Office** Non-Governmental Organization 1998 to date
- **Managing Director,** Wopo Agency Consulting Engineers -2007

c). **Workshops and Seminars attended:**

Themes:

- **Integrated Water Resources Development, (paper)**
- **Sediment Transport and Water resources Management and Planning**
- **Nile Basin Capacity Building Network & River Engineering**
- **Catchment and Flood Management (paper)**
- **Religious Seminars**

FRIEND NILE PROJECT

- **As a Focal Person** - Kenya attended the Sediment Transport and Water resources Management workshop in Dar-es-Salaam – 2001
- Attended the Sediment Transport and Water resources Management in Khartoum Sudan June 2002
- Attended the Sediment Transport and Water resources Management in Cairo Egypt December 2002
- Attended the Sediment Transport and Water resources Management in Alexandria Egypt June 2003
- Attended the Friend /Nile Project 7th Steering Committee Workshop Travellers Beach Hotel Mombasa 12 – 13th February 2004
- Attended the Sediment Transport and Water resources Management in Alexandria Egypt June 2004
- Attended the Sediment Transport and Water resources Management in Nairobi Kenya 26 – 29th November 2004.
- Attended the Sediment Transport and Water resources Management in Sharm-El-Shake 8 – 12th November, 2005
- Attended University Distance Learning Writers Workshop Nyeri 22nd – 26th November 2004.
- Attended the Chief Internal Examinees course 2009

NILE BASIN CAPACITY BUILDING NETWORK FOR RIVER ENGINEERING Flood Management Sub- Coordinator (member)

- Attended the 3rd Regional Workshop on Flood Management 26th – 27th April 2005-06-24.
- Attended the Nile Basin Capacity Building Network for River Engineering Cairo 13th – 16th June 2004
- Attended the Nile Basin Capacity Building Network
- Attended the Nile Basin Capacity Building Network
- In my Capacity as the Node Sub-Group Coordinator:
Attended the Nile Basin Capacity Building Network and River Engineering workshop in Nairobi Kenya 2003
- Attended the Nile Basin Capacity Building Network and River Engineering in Cairo Egypt 2004

- Attended the Nile Basin Capacity Building Network and River Engineering in Nairobi Kenya 2004
- Attended the 2NDRegional Workshop on Flood Management of the Nile Basin Capacity Building Network and River Engineering Nairobi 2004
- Attended the Nile Basin Capacity Building Network and River Engineering Workshop in Nairobi 3rd June 2006
- Attended the Nile Basin Capacity Building Network and River Engineering Workshop in Nairobi 26 January 2007.

OTHER WORKSHOPS

- Attended the Inter-religious and International Federation For World Peace - Africa Leadership Seminar Nairobi 24th June 2005.
- Attended the International Leadership Seminar sponsored by the Interreligious and International Federation for World Peace and World Association of Non-Governmental Organization in Washington D.C. 2001 and 2002,
- Attended the Inter-religious and International Federation For World Peace Africa Leadership Convocation Nairobi 24th October 2004
- Attended the International Leadership Seminar sponsored by the Interreligious and International Federation for World Peace and World Association of Non-Governmental Organization in Nairobi Grand Regency 2004, 2005, 2006

KENYA NATIONAL ACADEMY OF SCIENCES(member)

- Attended the Kenya National Academy of Sciences workshop on Science and Technology Capacity in the Framework of the Millennium Development Goals Nairobi 30th June 2005 (paper)
- Attended the National Symposium on Science, Technology, Innovation and Society: African Perspectives and Experiences in commemoration of the Scientific Revival Day of Africa June 29th – 30th 2006 Nairobi

IX. PUBLICATIONS

TECHNICAL REPORTS

III. **SELECTED EXISTING ACADEMIC PUBLICATIONS:** (in learned journals)

a) ***Onyango, O.W.**, Hydro-project for Irrigation in Kano Plains: A multi-purpose project for the development of Kano Plains. **Unpublished M.Sc. Thesis**, Peoples' Friendship University Moscow, 1974. pp. 230

* **Onyango, O.W.**, Water Resources and their rational utilization. Unpublished Ph.D. thesis, The U.S.S.R, Academy of Sciences Moscow, 1980. pp. 519

* **Onyango, O.W.**, Problems of Water Development in Kenya, Inside Kenya Today Number - 37 page 10 - 14 Nairobi Kenya, 1977.

* **Onyango, O.W.**, Kenya's Water Problems, Water Resources Journal. No. 2 pages 171 - 176, The U.S.S.R, Academy of Sciences, Moscow, 1977.

* **Onyango, O.W.**, Kenya's River Run-off resources, Izvestiya Journal, Geographical series No.5 pages 88 - 96, The USSR. Academy of Sciences, Moscow, 1979.

* **Onyango, O.W.**, Water balance and the utilization of water resources of Kenya. Izvestiya journal, Geographical series No. 1 pages 90 - 105, U.S.S.R, Academy of

* **Master's thesis** (unpublished) on "The Multi- purpose hydro-structures for Irrigation of Kano plains. Peoples' Friendship University, Moscow - 1974. pp.320 Sciences, Moscow, 1980.

- * **Nyando Sondu Hydro-system** for the purpose of power generation from Miriu Dam and the Transfer of Water to Kano Plains for Irrigation purposes – Institute of Hydro-projects, Moscow, 1975, pp. 26
- * **Rural Domestic Water Supply and Sanitation Programme, Women's Educational Programme Component**, LBDA, Kisumu - 1985 pp. 29, Annexes I, II. LBDA, Archive
- * **Reconnaissance Report on OLUCH/KIMIRA VALLEY** Irrigation project. LBDA. Kisumu, 1985 pp. 11 LBDA, Archive
- * **Yala Swamp Reclamation and Development project** proposal LBDA, Kisumu, 1988, pp. 41 LBDA, Archive
- * **Feasibility Study on Kano Plains Irrigation Project** Inception Report, LBDA/JIKA, Kisumu Kenya, 1990, pp. 36 Annex.1- 10 LBDA, Archive
- * **Development Policy LBDA, Kisumu Kenya**, 1984 pp.22 LBDA, Archive
- * **Kano Plains Water Master Plan** project proposal Kisumu Kenya, 1981 pp. 50 Annex. 4 LBDA, Archive
- * **Maternal Child Health/Family Planning and Information**, Education Communication, Demonstration Project proposal, LBDA Kisumu Kenya, 1986 pp. 34 Annex. I, II, III LBDA, Archive
- * **Brief outline on Hydrology of Lake Victoria Catchment** area Kenya portion – Workshop on River Basin planning and development in Lake Victoria Basin Kisumu Kenya 1984, pp.17, Appendix. Fig.11, Tables 17 LBDA, Archive
- * **Lake Shore Irrigation - Kisumu Kenya, 1987**, pp. 22 LBDA, Archive

- * Lake Basin river catchment development jointly with the Chief Technical Advisor, United Nation Development Programme, New-York, 1987, pp.23
- * Nyando River flood protection project document - Inter-Ministerial Committee meeting on Nyando River Basin Flood Control Kisumu 1988, pp. 37 LBDA, Archive
- * River Profile Studies Summery Report, Kisumu 1986 pp. 58 LBDA, Archive
- * Rongo Nyagowa Irrigation and water supply project in Kendu Bay, Kisumu Kenya 1982, pp. 14 Funded by Australian Freedom from Hunger LBDA, Archive
- * The preliminary report on the Water Resources of the development of Nzoia River, Ewaso-Nyiro River, Loitoktok springs - The Ministry of Water Development, Nairobi October, 1977, pp. 23 LBDA, Archive
- * Lake Basin Shallow Wells Pilot project in Nyanza Province, Lake Basin Development Authority, 1981.pp. 16
- * Sondu Miriu Hydro-project - LBDA Kisumu Kenya, 1981, pp.30
- * The quality of water and its impact on the living resources (aquatic life) of Lake Victoria Basin, Workshop held at Tom Mboya Labour College July, 25th-7th August, 1987 Kisumu pp.23 LBDA, Archive
- * Webuye hydro-project - LBDA, Kisumu Kenya 1982, pp.14
- * Teremi Falls and Mau Forest mini-hydropower project LBDA, Kisumu Kenya 1982, pp. 16
- * Lake Basin Shallow Wells pilot project, Progress reports, LBDA Kisumu 1983, pp. 10
- * Flood problems in Kano Plains - Kisumu Kenya 1983,
- * Rehabilitation of Gogo Falls Hydro-power station and the fish ladder-LBDA Kisumu Kenya 1983, pp. 17
- * Aram Agricultural water supply project at the border of Asembo and Uyoma, Bondo Division Kisumu Kenya 1982, pp.15
- * Implementation of windmill demonstration projects in LBDA area-Kisumu Kenya 1983, LBDA, Archive 1984 pp. 18
- * Green Valley Agricultural and Community Water Supply project, Asembo Bondo Division Kisumu Kenya 1982, pp.12
- * Kaloka Water Supply project (wind power) commissioned in 1983-Kisumu Kenya 1983, pp.24
- * Technical Aspects of Shallow wells in LBDA area- Shallow Wells workshop COTU College Kisumu Kenya 1983, pp.8
- * Ndiru Community Water Supply project report-Kisumu Kenya, 1987, pp.10
- * Rain Harvest in the LBDA area - 3rd International Conference on Rain Water Cistern System at Khon-Kaen University - Thailand, 1987.
- * Land Reform and employment - 18th Congress of International Association of
- * Agricultural Students (I.A.A.S.) at the Royal Agricultural College of Sweden, Uppsala Sweden, August, 1974.pp. 16
- * Assessment of Water resources of Kenya with some aspects of their rational utilization, UNESCO/I.A.H.R. Seminar on Hydraulic Research and River
- * Basin Development, Nairobi- September 1980, pp.18 (I.A.H.S Wallingford Oxfordshire UK).

- * Limitation of Hydrodynamic Models with Limited Data Available - A case Study on: SONDU RIVER BASIN (KENYA)
- * From Conflict to Cooperation in International Water Resources: Management Challenges and opportunities. The Kenya National Academy of Sciences 2006

XI. PUBLICATIONS IN PREPARATION

i) PUBLICATIONS IN PRESS:

1. Brief outline on the hydrology of Lake Victoria Catchment area in Kenya, International Association of Hydrological Sciences Press Ltd, Wallingford Oxfordshire UK).
2. Sediment Transport and Watershed Management in River Sondu: Nile/friend project UNESCO **Cairo 2003**
3. Rain harvest and water quality improvement in the rural areas
4. The role of Tariff and subsidy in urban water supply system and its sustainability.
5. Rehabilitation and re-use of mining grounds
6. Research on Sediment Transport and Watershed Management in Sondu River Basin Kenya **Alexandria 2004**
7. Limitation of Hydrodynamic Models with Limited Data Available - A case Study on: SONDU RIVER BASIN (KENYA) **UNESCO Nairobi 2007**

XIII. RESEARCH: ON GOING:

- Living with the drought and Floods: A Challenge to the Socio-Technology of our days Arid Lands Resources Management Programme OP **2006**
- Rain Water Harvesting and the Future Development of Arid Lands in Kenya: A Pre-Investment Study of the Arid and Semi-Arid Lands: North Eastern Kenya (Turkana, Isiolo, Wajir and Marsabit) OP – **2006**
- River Morphology of Nyando River Systems Kenya: Nile Basin Capacity Building Network and River Engineering project Kenya Node. **2006**
- Flood and Catchment Management on rivers: Nyando and Nzoia - Nile Basin Capacity Building Network and River Engineering project Kenya Node. **2006**
- **River morphology for the Nile River Basin A case study: of Nyando River in Kenya (Coordinator)**
- Supervising a Ph.D research proposal on river Tana, Title: Drought Frequency, Persistence and Impact in the Upper Catchment of Tana River – Kenya (Isaiah A. Nyandega)-Department of Geography and Environmental Studies University of Nairobi **2006.**
- Supervising a Ph.D research proposal on river Sondu, Title: The effect of Environmental Degradation on Stream flow and Water Quality Variation in Itare Catchment within the Lake Victoria Drainage Basin in Kenya (John M. Nyangaga–Department of Geography and Environmental Studies University of Nairobi **2007.**

RESEARCH INTERESTS:

1. Eco-development and wastewater re-use.
2. Computation of the present and future trend of water resources utilization in Kenya using empirical interpolation of the water balance equation dependencies (Geographical zonal pattern).
- 3 Evolution of Hydrographic network in Kenya.
- 4 .Rain harvest and the water conservation (damming) improvement for rural community.
- 5 **Floods** and Catchment Management Sediment Transport and Watershed Management on River Sondu

Eng. Dr. Onyango Ogembo William.

B.Sc. Hydro structures (Hydrology)

M.Sc. Civil Engineer (Hydro structures)

M.Sc. Hydrology Programme Co-coordinator

Ph.D Geography (Hydrology)

**Sub-Group Coordinator: Floods and catchment Management
Of Nile Basin Capacity Building-RE**

Focal Person Kenya: Sediment Transport and Watershed Management

UNESCO NILE / FRIEND Project

**Focal Person Kenya: River Morphology of Nyando River Systems Kenya: Nile Basin
Capacity Building Network and River Engineering project Kenya Node. 2006**