

**RESEARCHER ID**

**SCOPUS ID**:

**ORCHID:** 0000-0001-8802-8355

**Position:** ***Senior Statistician***

# PERSONAL INFORMATION

NAME: Samson Okoth Ojunga

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NATIONALITY Kenyan

GENDER Male

# QUALIFICATIONS

## Academic Qualifications

[2014 – 2022:](https://www.linkedin.com/search/results/index/?keywords=Jaramogi%20Oginga%20Odinga%20University%20of%20Science%20and%20Technology) ***[Doctor of Philosophy (Ph.D.)](https://www.linkedin.com/search/results/index/?keywords=Jaramogi%20Oginga%20Odinga%20University%20of%20Science%20and%20Technology)*** [Applied Statistics -Jaramogi Oginga Odinga University of Science and Technology-Bondo](https://www.linkedin.com/search/results/index/?keywords=Jaramogi%20Oginga%20Odinga%20University%20of%20Science%20and%20Technology)

[2010 – 2012:](https://www.linkedin.com/school/14428/?legacySchoolId=14428) ***[MSC Applied Statistics](https://www.linkedin.com/school/14428/?legacySchoolId=14428)*** [-Maseno University](https://www.linkedin.com/school/14428/?legacySchoolId=14428)

[2010 – 2011:](https://www.linkedin.com/school/12659/?legacySchoolId=12659) ***[Post Graduate Certificate in Conflict and Development](https://www.linkedin.com/school/12659/?legacySchoolId=12659)***[-The Open University](https://www.linkedin.com/school/12659/?legacySchoolId=12659)

1999 – 2004: ***[B.Sc. Applied Statistics](https://www.linkedin.com/school/14428/?legacySchoolId=14428)*** [-Maseno University](https://www.linkedin.com/school/14428/?legacySchoolId=14428)

## Other Courses

12th -16th January 2015***:*** Nairobi. ***Strategic Planning and Contract Management*** - Kenyatta University,

30th September-23rd October 2013: ***Statistical Analysis Using SPSS*** - Maseno University, Kisumu

17th-21st February 2014: ***Social Accountability***- Kenyatta University, Nairobi

18th November -6th December 2013: ***Public Policy Management***- Kenyatta University, Nairobi

4th January -8th January 2013: ***Project Monitoring and Evaluation***- Kenyatta University, Nairobi

2nd March 2018-***Data Management and Analysis in R***-Laplacean Data Analytics, Nairobi

## Skills

* **Research-**Have participated in several research surveys in various field (health, education water and sanitation, economic surveys) and gained a lot of experience in conducting research.
* **Data Analysis -**Posses data analysis skills. I have adequate knowledge and experience in using SPSS, R and Genstat.
* **Project Management**- Have wide field experience in project planning and management
* **Public Policy**-Able to analyze and formulate policies.
* **M&E-**Have undergone several trainings in M & E by the Monitoring and Evaluation Directorate and well conversant with NIMES, UNDP M &E Models. I have field experience of four years in Participatory Monitoring and Evaluation. Experienced in designing M& E plans and log frame matrix

# EMPLOYMENT HISTORY

* Sept 2020 –Date: ***Senior Statistician***, Kenya Forestry Research Institute (KEFRI), P.O Box 20412 -00200 Nairobi, Kenya.

**Responsibilities**

* Lead in conceptualizing, planning and designing of experiments, field layout and social studies
* Data management, analysis, interpretation of results and reporting;
* Designing research tools for data collection and management;
* Identify biometrical and statistical needs of scientists and other staff and strategize how to address them;
* Organize and conduct relevant refresher courses for scientists and technical support staff to effectively integrate biometry in research;
* Oversee management of research protocols, database and applications
* Sept 2015-Sept 2020: ***Research Scientist II (Biometrician)*** Kenya Forestry Research Institute (KEFRI), P.O Box 20412 -00200 Nairobi, Kenya.

**Responsibilities**

* Assist Scientists in conceptualizing, planning and designing of experiments, field layout and social studies
* Assist scientists in data management, analysis, interpretation of results and reporting;
* Assist Scientists in designing research tools for data collection and management;
* Identify biometrical and statistical needs of scientists and other staff and strategize how to address them;
* Organize and conduct relevant refresher courses for scientists and technical support staff to effectively integrate biometry in research;
* Oversee management of research protocols, database and applications
* Jan 2010 – Aug 2015: ***District*** ***[Field Officer](https://www.linkedin.com/search/results/index/?keywords=Ministry%20of%20Devolution%20and%20Planning%20Kenya)***[-Ministry of Devolution and Planning](https://www.linkedin.com/search/results/index/?keywords=Ministry%20of%20Devolution%20and%20Planning%20Kenya)

[Ministry of Devolution and Planning Kenya, Kisumu, Kenya](https://www.linkedin.com/search/results/index/?keywords=Ministry%20of%20Devolution%20and%20Planning%20Kenya)

* **May 2008–** Jan 2010**: *Credit officer*/ *Relationship Officer Credit*- Equity Bank Ltd, Mbita Branch**

# PUBLICATIONS

## Journal papers

* **S.O. Ojung’a**, JO Nyakinda, E Okuto and JA Mullah Sensitivity analyses of population projection matrix of Cestrum aurantiacum , International Journal of Statistics and Applied Mathematics 2020; 5(6): 43-47 DOI: <https://doi.org/10.22271/maths.2020.v5.i6a.612>
* Bala, P., **Ojung’a, S.,** Okumu, J., Kisiwa, A., Langat, D. and Nyambati, R. (**2020**) “Tree-Based Conflict Management Mechanism among Small Landholders in Agroforestry Systems of Kenya”, *East African Journal of Forestry and Agroforestry*, 2(2), pp. 24-39. doi: 10.37284/eajfa.2.2.214
* **S.O.Ojung’a**, J.O Nyakinda, E.Okuto and J.A Mullah (2020) . Extensions of Lefkovitch matrix for modeling invasive *Cestrum aurantiacum* population *Dynamics.* Mathematical Theory and Modeling. ISSN 2224-5804 (Paper) ISSN 2225-0522 (Online).Vol.10, No.7, 2020
* Jesse Omondi Owino & Peter Murithi Angaine & Alice Adongo Onyango & **Samson Okoth Ojung’a** & John Otuoma, **2020**. "[Evaluating Variation in Seed Quality Attributes in Pinus Patula Clonal Orchards using Cone Cluster Analysis](https://ideas.repec.org/a/pkp/joufor/2020p1-8.html)," [Journal of Forests](https://ideas.repec.org/s/pkp/joufor.html), Conscientia Beam, vol. 7(1), pages 1-8
* **S. O. Ojung’a**, J. O. Nyakinda, E. Okuto, J. A. Mullah, Invasive Species Population Status Modeling Using Stage Based Matrix: Mount Elgon Ecosystem. Mathematical Theory and Modeling www.iiste.org ISSN 2224-5804 (Paper) ISSN 2225-0522 (Online) DOI: 10.7176/MTM Vol.9, No.2
* Jonah Kiprop, David Langat, Joshua Cheboiwo, Joram Kagombe, Abdala Kisiwa, Stella Gatama, **Samson Okoth**. Value of Pollination Services in Farmlands Adjacent to Mau, Cherangany and Mt. Elgon Forests. Journal of Natural Sciences Research. ISSN 2224-3186 (Paper) ISSN 2225-0921 (Online) DOI: 10.7176/JNSR Vol.9, No.10, **2019**
* **Thalma Khalwale, David Langat, Paul Abuom and Samson Okoth**, Factors Influencing Adoption of on-Farm Tree Planting in Shinyalu Sub-County, Kakamega, Kenya International Journal of Forestry and Horticulture **2018**, 4(2) : 38-48. [doi:http://dx.doi.org/10.20431/2454-9487.0402006](http://dx.doi.org/10.20431/2454-9487.0402006)
* **Ojung’a Okoth Samson**, Mose Nyandwaki, Peter Mutwiri, Otulo Wandera, Omollo Oriema and Edgar Otumba., **2014** . The Application of Logistic Regression in Modeling of Survival Chances of HIV-Positive Patients under Highly Active Antiretroviral Therapy (HAART): A Case of Nyakach District, Kenya. Journal of Medicine and Clinical Sciences. Vol. 3, No 3. pp. 14-20
* Otwande Andrea, **Ojung’a Okoth Samson**, Otulo Wandera Cyrilus, Fred Onyango. Analysis of Seasonal Time Series with Missing Observations of Fish Harvesting in Lake Victoria, Kenya. Mathematical Theory and Modeling [www.iiste.org](http://www.iiste.org) ISSN 2224-5804 (Paper) ISSN 2225-0522 (Online) Vol.4, No.14, **2014**
* *Cyrilus, Otulo Wandera,* ***Ojung’a Okoth Samson*** *and Otumba Edgar Ouko. “Screening of New strains of sugarcane using Augmented Block Designs.” Mathematical theory and modeling 4 (****2014****): 153-161*
* M’Mukiira Peter Mutwiri, **Ojung’a Samson Okoth**, Fredrick Onyango, Two-Factor Factorial Design Application in Analyzing Differential Performance Between Single-Sex Schools and Mixed Schools in Compulsory Subjects at KCSE:Case study in Homa Bay County, Kenya. Mathematical Theory and Modeling [www.iiste.org](http://www.iiste.org) ,ISSN 2224-5804 (Paper) ISSN 2225-0522 (Online),Vol.4, No.14, **2014**
* J. M. Nyandwaki, E. A. Odhiambo, **S. O. Ojung’a** and F. O. Onyango (2014),” Application of Markov Chain Model in Studying Progression of Secondary School Stu-dents by Sex During The Free Secondary Education: A case Study of Kisii Central District” Mathematical Theory and Modeling, The International Institute for Science, Technology and Education (IISTE), 4, 73-84., **2014**.

## Technical Notes /Protocols/Guidelines

* Jared Amwatta Mullah, Boaz Ngonga and **Samson Ojung’a: Management of cestrum aurantiacum in Kenya;** A guide for forest managers and stakeholders in rehabilitation of invaded areas in natural forest and agricultural landscapes-

## Policy Briefs

* Langat D., CheboiwoJ., **Okoth S.,** Kiprop J., Kisiwa A., Guzha A., Smith N., DeMeo T., Kagombe J., Gatama S.1, Kerkering J. and Doud : Economic Value of the Water Towers in Kenya,

# RESEARCH

## Completed

* Strengthening forest governance through integration of local institutional arrangements in forest management in Kenya

## Ongoing research

* Demonstrate suitable management techniques for wild quava trees on farm for higher fruit production in Homa Bay County (2019-2022)
* Extension of stage based projection matrices and its applications to population modeling of cestrum aurantiacum (2019-2022)

# CONFERENCES/SEMINARS/WORKSHOPS

## Presentation of Papers at Academic and Professional Conferences

**5th KEFRI Scientific Conference –**Theme of Contribution of Forestry Research to Sustainable Development 17-19 April, 2018

* **Ojung’a S.O.,** Mullah J.A., Nyakinda J.O. and Ongati O; Applying Stage-based Matrix to Model the Invasive Cestrum aurantiacum. Population in Mount Elgon Ecosystem
* Langat D., Cheboiwo J., **Okoth S.,** Kiprop J., Kisiwa A., Guzha A., Smith N., DeMeo T., Kagombe J., GatamaS.1, Kerkering J. and Doud-The Value of Forest Ecosystem Services of Mau Complex, Cherangany and Mt. Elgon, Kenya
* Kisiwa A., Langat K., Gatama S., **Okoth S.,** Kiprop J., Cheboiwo J. and Kagombe J -Local Community’s Perception of Forest Ecosystem Services in Mau, Cherengany and Mt. Elgon and Implications for Management

# PROFESSIONAL ENGAGMENT

## Consultancies

* Development of Nyakach Constituency CDF Strategic plan (2012-2017) –Nyakach June 2012
* Development Nyando Constituency CDF Strategic Plan (2012 – 2017) -Nyando CDF, March 2012
* Monitoring and Evaluation of Projects and formation and District Monitoring Secretariat-Suba District –May 2005
* Study of the Level of Care and Support for the People Living With Aids (PLWA) –Ministry of Health Suba District, January 2005
* Evaluation of Free Primary Education in Suba District with Concern Worldwide, NGO, 2004

## Collaboration with external organizations

* **KALRO,UNDP,AGRA,GEF and KEFRI Project (2018-2020):** Scaling-up Sustainable Land Management and Agro-biodiversity Conservation to Reduce Environmental Degradation in Small-scale Agriculture in Western Kenya
* **WORLD-VISION and KEFRI Project (2019-2022) -** Work with research institutions to set up demonstration sites to investigate impact of FMNR on biodiversity and develop scientific monitoring of bio-diversity.

# AWARDS AND RECOGNITION 2017:

* Commonwealth scholarship award toward attainment of Post graduate Certificate in development management

# MEMBERSHIP TO PROFESSIONAL BODIES

* International Biometric Society
* Commonwealth Alumni

# REFEREES

1. Dr. Edgar Ouko Otumba, Senior Lecturer, [Maseno University](https://scholar.google.com/citations?view_op=view_org&hl=en&org=14701204596297491215)

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P.O. Box 333 – 40105, Maseno.

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1. Mr. David Langat-Chief Research Scientist

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