



**RESEARCHER ID : 7168**

**SCOPUS ID :**

**ORCHID: 0000-0002-8129-6602**

**Position:** *Research Scientist-Forest Ecology (Disturbances, Biodiversity and ecosystem functioning)*

## **1. PERSONAL INFORMATION**

- |                           |  |
|---------------------------|--|
| <b>1.1. NAME</b>          | Neroh Chelimo Leley  |
| <b>1.2. ADDRESS</b>       | P. O Box 382-20203, Londiani   |
| <b>1.3. PHONE</b>         | +254729205877  |
| <b>1.4. EMAIL ADDRESS</b> | <a href="mailto:lnereoh@kefri.org">lnereoh@kefri.org</a> or <a href="mailto:nereoh24@gmail.com">nereoh24@gmail.com</a> |
| <b>1.5. NATIONALITY</b>   | Kenyan   |
| <b>1.6. GENDER</b>        | Female   |

## **2. QUALIFICATIONS**

### **2.1. Academic Qualifications**

**2019 to date:** PhD. Natural Resources Management, Egerton University

**2012 to 2016:** MSc. Biology of Conservation, the University of Nairobi

**2008 to 2012:** BSc. Environmental Conservation and Natural Resources Management, University of Nairobi

### **2.2. Key Competencies**

1. Restoration ecology
2. Biological invasions
3. Forest resources appraisal
4. Forest grazing ecology

### **2.3. Other Courses**

**15<sup>th</sup> -21<sup>st</sup> February 2017-** Forest practitioner's training course organized by Forest Society of Kenya held at Kenya Forestry Research Institute (KEFRI) headquarters.

**5<sup>th</sup>- 11<sup>th</sup> July 2015:** Training course on Participatory Integrated Community Development (PICD) organized by Kenya Coastal Development Project.

**17<sup>th</sup>-18<sup>th</sup> December 2011:** Transformational leadership training by Resource empowerment limited organized by the University of Nairobi.

### **3. EMPLOYMENT HISTORY**

**01/12/2020 to date: Research Scientist II**-Forest Ecology- Kenya Forestry Research Institute.

**18/04/2016-31/07/2018: Project Assistant**- Water Towers Protection and Climate Change Mitigation and Adaptation Programme- Kenya Forestry Research Institut.

**01/07/2014-17/04/2016: Assistant Research Officer**- Smallholder Innovation for Resilience (SIFOR): Strengthening Innovation Systems for Food Security in the Face of Climate Change project- Kenya Forestry Research Institute.

**01/08/2013 -01/08/2014: Research Associate**- National Museums of Kenya.

**01/08/2011-31/10/2011: Intern**- Kenya Wildlife Service.

### **4. ADMINISTRATIVE RESPONSIBILITY**

Management and coordination of three donor funded projects:

- a) Water Towers Protection and Climate Change Mitigation and Adaptation Programme (2016 to 2018)-Funded by EU.
- b) Smallholder Innovation for Resilience (SIFOR): Strengthening Innovation Systems for Food Security in the Face of Climate Change (2014-2016). Funded by IIED.
- c) Kenya Coastal Development Project (2015-2016)-Funded by World Bank.

### **5. PUBLICATIONS**

#### **5.1. Journal papers**

1) Musingo, T. E., Kungu, J. B., Gachathi, F. N., Wekesa, C., **Leley, N.C.** and Muthini, J. M. (2019). Annotated checklist of plant species of Loita Forest (Entim e Naimina Enkiyo Forest or the forest of the lost child), Narok County, Kenya. *Int. J. Adv. Res. 2 Biol. Sci.* 6(3): 54-110.

2) Wekesa, C., **Leley, N.**, Maranga, E., Kirui, B., Muturi, G., Mbuvi, M., and Chikamai, B. (2016). Effects of forest disturbance on vegetation structure and above-ground carbon in three isolated forest patches of Taita Hills. *Open Journal of Forestry*, 6(02), 142.

#### **5.2. Books**

- 1) Kagombe J., Kiprop J., Langat D., Cheboiwo J., Wekesa L., Ongugo P., Mbuvi M.T. and **Leley N.,C.** (2020). Socio-economic Impact of Forest Harvesting Moratorium in Kenya, KEFRI publication. <https://www.researchgate.net/publication/351984708>.
- 2) Langat, D. K., **Leley, N.C.** and Kosgey, C. (2019). Ndoinet Forest Livestock Management Plan. A Netherlands Development Organisation (SNV)- Livestock Intensification Project publication. DOI: 10.13140/RG.2.2.20178.07362.
- 3) Musingo, T.E., Wekesa, L., Wekesa, C., **Leley, N.C.**, Ntabo, M., Eshitera, A., Karangi; M., Cheruiyot, L., Manyala, P., Okeyo, M., Sheikh, M., Kimani, K., Mbae, M., Ongugo, P., Kala, A. and Owuor, B (2016). Capability map for growing High value tree species in the Coast region of Kenya: A guide for Farmers, Forest Managers, Extension Agents and Investors. Kenya Forestry Research Institute (KEFRI) and Ministry of Land, Housing and Urban Development Departments of Physical Planning publication. <https://www.researchgate.net/publication/320258297>
- 4) Gachathi, F.N., Musingo, T.E., Wekesa, L., Wekesa, C. and **Leley, N.C** (2016). A field guide to valuable trees and Shrubs of Kaya Mudzi Muvya forest in Kilifi County, Kenya. <https://www.researchgate.net/publication/305307729>.
- 5) **Leley, N.C.** (2016).The role of Sykes monkeys (*Cercopithecus mitis albogularis*) in seed dispersal and natural forest regeneration. Msc. Thesis, University of Nairobi. <http://erepository.uonbi.ac.ke/handle/11295/99059>.

### 5.3. Book Chapter

- 1) Wekesa; C., Ngugi, J., Mulwa, D.M. and **Leley, N.C.** (2019). Floristic composition and structure of Buda forest in Biodiversity status of Buda forest, Kenya in Kamondo B., Muturi, G., Mbuvi M.T.E. Ochieng D, Wekesa C and Akinyi L., Malonza, P. K., Ogwaka B., Mulwa R. K and Marahaba D. M. (2020). Biodiversity status of Buda forest Kenya. A KEFRI and Base Titanium Publication. Nairobi Kenya. <https://www.researchgate.net/publication/345815909>.

### 5.4. Technical Notes /Protocols/Guidelines

- 1) Langat, D.K., Okoth. S., Owango, K., **Leley, N. C.**, Kiprop, J., Kisiwa, A. and Ayaga, G. (2020). Ecosystem Services Valuation of Kakamega, Nandi North and Nandi South and Kibiri Forest Ecosystems. Scaling up sustainable land management and agro-biodiversity conservation to reduce environmental degradation in small scale agriculture in Western Kenya project.
- 2) Langat, D. K., **Leley, N.C.** and Kosgey, C. (2019). Permissible grazing thresholds for sustainable grazing management in South West Mau forest block. A Netherlands Development Organisation (SNV)- Livestock Intensification Project publication. DOI: 10.13140/RG.2.2.24057.80488.

- 3) Kisiwa, A.K., Amwatta, J.M., **Leley, N.C.**, and Mohammed, A. (2018). Promoting the use of improved biomass technologies in Mt. Elgon and Cherangany hills ecosystems. <https://www.kefri.org/WaterTowers/reports.php>
- 4) Wekesa, C., **Leley, N.C.** Ndalilo, L., Amur, A., Uchi, M. and Swiderska, K. (2015). Partners' progress review and international policy dialogue workshop proceedings report. ISBN: 978-1-78431-338-8.
- 5) Kenya's Water Towers Protection and Climate Change Mitigation and Adaptation (WaTER) Programme (2020). Component four project closure technical interim narrative report.
- 6) Socio-economic status of households and utilization of public areas: baseline survey of Cherangany Hills ecosystems (2018). <https://www.kefri.org/WaterTowers/reports.php>
- 7) Kenya's Water Towers Protection and Climate Change Mitigation and Adaptation (WaTER) Programme (2017). Component four second technical interim narrative report. <https://www.kefri.org/WaterTowers/reports.php>
- 8) Kenya's Water Towers Protection and Climate Change Mitigation and Adaptation (WaTER) Programme (2016). Component four first technical interim narrative report. <https://www.kefri.org/WaterTowers/reports.php>
- 9) Wekesa, C., **Leley, N.C.**, Muthini, J. and Manya, C. (2015): a guideline for rehabilitation of mangrove forests using *Rhizophora mucronata*
- 10) Wekesa, C., **Leley, N.C.**, Mwadalu, R., Manya, C. and Muthini, J (2017). Mangrove ecosystems site characterization of degradation indicators in degraded mangrove ecosystems.

## 5.5. Policy Briefs

- 1) Langat, D.K., **Leley, N.C.** and Kosgey, (2021). Implications of forest grazing: is it ecologically viable? Case of Ndoinet Forest, South West Mau.
- 2) Kagombe J., Kiprop J., Langat D., Cheboiwo J., Wekesa L., Ongugo P., Mbuvi M.T. and **Leley N.** (2020). Impacts of Forest harvesting ban in Kenya: Is it feasible in sustainable forest management? (2020). <https://www.researchgate.net/publication/352978934>.

## 5.6 Extension materials

- 1) Bamboo Products Catalogue. Compiled by J. Amwatta, A. Mwirigi, A. Kisiwa, **N. Leley** and S. Gitonga. (2017) <http://kefriwatertowers.org/manuals.php>.

2) Kenya's Water Towers Protection and Climate Change Mitigation and Adaptation (WaTER) Programme. Component 4 brochure

## **6. RESEARCH**

### **6.1. Completed**

1. Assessment of factors that hinder or promote forest recovery in Taita Hills
2. Development of allometric equations to estimate carbon stock for Coastal on-farm tree species
3. Ecological process of seed dispersal and natural forest regeneration
4. Socio-economic effects of forest harvesting ban
5. Effects of forest harvesting ban on farm forestry
6. Valuation of ecosystem services in Mukogodo, Nandi and Kakamega forests

### **6.2. Ongoing research**

1. Sustainable utilization of forest ecosystems as grazing grounds
2. Potential role of forestry on landslides prone areas of Cherangany escarpment
3. Documenting the history of forest management in Kenya: Assessing the effects of forest dwellers (indigenization) on conservation efforts in Mau, Cherangany and Mt Elgon forest ecosystems.
4. Natural forest recovery process

### **6.3. Mentorship and supervision**

Supervised 3 project staff under the water towers project

Supervised over 3 students on attachment

## **7. INNOVATIONS AND PATENTS (Intellectual Property)**

## **8. CONFERENCES/SEMINARS/WORKSHOPS**

### 8.1. Presentation of Papers at Academic and Professional Conferences

- 1) Langat D.K., Kisiwa A.K., Ojung'a S.O., Kiprop J.K., **Leley N.C.**, Ongugo P.O., Cheboiwo J.K., Kagombe J.K. 2020. Analysis of organizations capacity to undertake PES schemes: A case study of Cherangany and Mt. Elgon ecosystems. *Paper presented during University of Eldoret National wetland conference held on 12<sup>th</sup> to 14<sup>th</sup> May, 2021.*
- 2) **Leley, N.C.**, Chira,R., Wahungu, G. and Wekesa, C. 2020. The Role of Sykes Monkeys (*Cercopithecus mitis albogularis*) in Natural Forest Regeneration in Gede, Coastal Dry Forest of Kenya. Paper presented during the 13th Egerton University virtual international conference -24<sup>th</sup>-26th November 2020
- 3) **Leley, N.C.**, Amwatta, J.M., Macharia, M., Ngonga, B. and Atieno, J. (2018). Characterization of plant species diversity and abundance to inform effective rehabilitation of Cherangany Hills Forest. Conference proceeding at the Kibabii University 3<sup>rd</sup> international conference.
- 4) Riziki Mwadalu, Chemuku Wekesa, **Nereoh Leley**, Gabriel Muturi, and Mary Gathara. 2017. Understanding Mangrove Ecosystem Soils for Effective Management: A Case of Manda Island, Lamu County, Kenya. XIII International May conference on strategic management IMKSM 2017, held from 19<sup>th</sup> to 21<sup>st</sup> May 2017, University of Belgrade, Serbia.
- 5) Musingo, T.E., Wekesa, L., Wekesa, C., and **Leley, N.C.** (2016). Maximizing Investments in Tree Growing through Capability Mapping: The case of Coast Region of Kenya. Conference proceeding during the 1st Kenya Coastal Development Project (KCDP) Conference on Coastal Resources and People held in Voi, Taita-Taveta County.
- 6) Wekesa, C., Ongugo, P., Musingo, T.E., Muthini, J. and **Leley, N.C.** (2016). *Forest structure characterization and carbon storage potential of Eastern Arc Mountain forest fragments of Taita Hills, Kenya.* Conference proceeding during the 1st Kenya Coastal Development Project (KCDP) Conference on Coastal Resources and People held in Voi, Taita-Taveta County.
- 7) Wekesa, C., Ndalilo, L.; **Leley, N.C.**, Musingo, T.E., and Muthini, J. (2016). *Rehabilitation of Degraded Critical Ecosystems in the Coast Region: Approaches, Opportunities and Challenges.* Conference proceeding during the 1st Kenya Coastal Development Project (KCDP) Conference on Coastal Resources and People held at Voi, Taita-Taveta County.

8) Wekesa, C., Ndalilo, L., Ongugo, P., **Leley, N.C.** and Swiderska, K. (2016). *Traditional knowledge based innovations for adaptation and resilience to climate change: the case of coastal Kenya*. XIV World Forestry Congress, Durban, South Africa, 7-11 September 2015.

9) Langat, D.K., **Leley, N.C.**, Kosgey, C.C., and Kisiwa, A.K. (2020). *Implications of Forest Grazing on Sustainable Management of South West Mau Ecosystem, Kenya*. Accepted as paper presentation at the XV World Forestry Congress.

10) Langat, D., **Leley, N.**, Kisiwa, A., M. Muga, and E. Mboko (2020). "Assessment and value of ecosystems services of Mukogodo landscape, Kenya". Accepted as paper presentation at the XV World Forestry Congress.

## 8.2. Participation in Workshops/Conferences

**Keynote speaker** on "The Role of selected animal species in regeneration of natural forests"  
The 13<sup>th</sup> Egerton University virtual international conference (2020) -24<sup>th</sup>-26<sup>th</sup> November 2020

## 8.3. Convening/Coordinating Conferences

# 9. PROFESSIONAL ENGAGEMENT

## 9.1. Training

Engaged to develop forest grazing management plan for Ndoinet forest and build capacity of the CFA to implement the management plan

Capacity building of forest adjacent communities on forest grazing

Capacity building of stakeholders on management of woody invasive species

Capacity building and awareness creation on forest rehabilitation and restoration approaches

## 9.2. Consultancies

- 1) Langat, D., **Leley, N.** and Kosgey, C. (2020). Permissible grazing thresholds in South West Mau forest ecosystem. Client- Netherlands Development Organisation (SNV)
- 2) David Langat, D., **Leley, N.**, Kisiwa, A., and Kosgey, C. (2020). Ndoinet Forest Livestock Management Plan. Client- Netherlands Development Organisation (SNV)

- 3) Langat, D., Kisiwa, A., **Leley, N.**, and Mboko, E. 2020. 'Community Dependence and total Ecosystem Services value of Mukogodo forest landscape'. Client-FAO.
- 4) Ecosystem Services Valuation for the Kakamega, Nandi North and Nandi South and Kibiri Forest Ecosystems. Client: GEF, UNEP, KALRO

### **9.3. Collaboration with external organizations**

Collaborated with Sokoine University of Agriculture (SUA), Tanzania to support a student from Copenhagen University working on the Miombo woodlands. My work was to provide expertise in forest resource assessment to ascertain the sustainability of community managed forests.

## **10. EXTERNAL AND INTERNAL RESEARCH GRANTS**

Include research grants won

## **11. LOCAL, REGIONAL & INTERNATIONAL APPOINTMENTS**

- 11.1.** Local
- 11.2.** Regional
- 11.3.** International

## **12. AWARDS AND RECOGNITION**

1. Gandhi Smarak Nidhi Trust fund prize for being the best final year student in the school of physical sciences, University of Nairobi in the year 2011/2012
2. Masters' degree scholarship from the University of Nairobi

## **13. CONTRIBUTION TO KEFRI's ADVANCEMENT**

## **14. MEMBERSHIP TO PROFESSIONAL BODIES**

African Forest Forum

## **15. REFEREES**

### **1. Dr. David Langat**

Regional Director/ Chief Research Scientist,



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## **2. Dr. Bernard Kirui**

Senior Lecturer,

Department of Natural Resources,

Faculty of Environment and Natural Resources Development,

Egerton University,

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Egerton, Kenya

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## **3. Dr. James Kanya**

Senior Lecturer,

University of Nairobi, School of Biological Sciences.

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