

# CURRICULUM VITAE



## BIODATA

- |                                    |                                                                                                                                                                                                                                           |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Full Name                       | <b>Siamba Donald Namasaka</b>                                                                                                                                                                                                             |
| b) Marital status                  | <b>Married</b>                                                                                                                                                                                                                            |
| c) Current Position                | <b>Associate Professor of Microbiology and Biotechnology</b>                                                                                                                                                                              |
| d) Current administrative Position | Director, Technical and Vocational Education and Training (TVET), KIBU                                                                                                                                                                    |
| e) Address:                        | <b>KIBABII UNIVERSITY</b><br><b>P.O Box 1699-50100, BUNGOMA.</b><br><b>Tel. 0722-238039</b><br><b>E. Mail: <a href="mailto:dnsiamba@gmail.com">dnsiamba@gmail.com</a>,<br/><a href="mailto:dsiamba@kibu.ac.ke">dsiamba@kibu.ac.ke</a></b> |
| f) Language                        | <b>English and Kiswahili and Luhya</b>                                                                                                                                                                                                    |
| g) Citizenship                     | <b>Kenyan</b>                                                                                                                                                                                                                             |
| h) Gender                          | <b>Male</b>                                                                                                                                                                                                                               |
| i) County of Birth                 | <b>Bungoma</b>                                                                                                                                                                                                                            |

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## PERSONAL STATEMENT

I am an Associate Professor of Microbiology and Biotechnology with over 30 years' experience in research, teaching and administration. My research efforts have been fruitfully rewarded in form of the KARI Indigenous Chicken and Dairy Goats conspicuously contributing to food security and poverty reduction in Kenya. I have shared my results at different fora where severally, I have been recognized and awarded certificates of excellence. I have made significant technological contributions to science with notable examples being bacterial and fungal endophytes whose metabolites have anthelmintic and antibiotic potential and pen-side pH indicator impregnated Mastitis kit among others. At community level, I have spearheaded several development projects such as drilling of water borehole at Maeni girls Secondary School with the support of donor funding. I also serve as an investments officer for LAKARINAPWA Enterprise Limited, accompany of professional group in the Western Region of Kenya.

Administratively, I am hands and results oriented transformative leader with a special focus on interpersonal relations and team works. This team spirit and orientation towards small, often forgotten issues that have direct impacts on mankind has resulted in many achievements at institutional, community and personal levels, details of which are presented hereunder.

## EDUCATION AND TRAINING

| Institution                        | Main discipline                | Certificate attained                                                                                                                                         | From | To   |
|------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|------|------|
| Moi University                     | Zoology<br>(Parasitology)      | <b>Doctor of Philosophy (D.Phil)</b><br>Thesis Title: Mechanisms of hypobiosis in <i>Haemonchus contortus</i> of goats in semi-arid lands (SAL) of Kenya.    | 2005 | 2008 |
| Freie Universitat, Berlin, Germany | Animal health management       | Post graduate certificate                                                                                                                                    | 1997 | 1997 |
| University of Nairobi              | Vet. Pathology & Microbiology. | <b>Master of Science (MSc)</b><br>Thesis Title: Evaluation of the integral membrane proteins of <i>Fasciola gigantica</i> for control of ovine fascioliasis. | 1991 | 1994 |
| University of Nairobi              | Veterinary Medicine            | <b>Bachelor of Veterinary Medicine (BVM)</b>                                                                                                                 | 1984 | 1988 |

|                            |                                    |                                                |      |      |
|----------------------------|------------------------------------|------------------------------------------------|------|------|
| Kapsabet Boy's High School | Advanced Level Secondary Education | Kenya Advanced Certificate of Education (KACE) | 1981 | 1982 |
| Kitale Day Sec. School     | Ordinary Level Secondary Education | Kenya Certificate of Education (KCE)           | 1977 | 1980 |

## RELEVANT MANAGEMENT AND PROFESSIONAL TRAINING

- 1) Pedagogical Skills Training 2015, Kibabii University College
- 2) Confidentiality and Security of information, 20<sup>th</sup> -22<sup>nd</sup> May 2015
- 3) Effective Management Techniques, 26<sup>th</sup> September -1<sup>st</sup> October 1999
- 4) Gender in Agricultural Research and Extension 18<sup>th</sup> 22<sup>nd</sup> May 1998, KARI Naivasha
- 5) Small Ruminant Production Techniques 14<sup>th</sup> 25<sup>th</sup> May 1990, ILCA Bulawayo, Zimbabwe
- 6) National Youth Service, Pre-University Training Programme, 4<sup>th</sup> May – 13<sup>th</sup> August 1984

## EMPLOYMENT HISTORY (WORK EXPERIENCE)

| Year                                    | Organisation                                        | Role                                                                                       |
|-----------------------------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------|
| <b>30<sup>th</sup> May 2019</b>         | Kibabii University                                  | Ag. Deputy Vice Chancellor (Administration, Finance and Development)                       |
| 21 <sup>st</sup> September 2018 to date | Commission for University Education                 | Peer Reviewer                                                                              |
| <b>October 2017</b>                     | Kibabii University                                  | Director TVET                                                                              |
| <b>November 2016</b>                    | Kibabii University                                  | <b>Associate Professor</b> of Microbiology and Biotechnology                               |
| <b>March 2016</b>                       | Kibabii University                                  | Committee member to develop institutional profile for Bungoma County Investment Conference |
| <b>January 2016</b>                     | Kibabii University                                  | Chairperson of the Technical subcommittee of the international conference                  |
| <b>December 2015</b>                    | Kibabii University                                  | Member of Senate Committee to draft policy on Women in STEM                                |
| <b>September 2015</b>                   | Kibabii University                                  | <b>Senior Lecturer</b>                                                                     |
| <b>2015</b>                             | Masinde Muliro University of Science and Technology | <b>Member</b> of the Research Extension Committee                                          |

|                     |                                                     |                                                                                                                                                                                                        |
|---------------------|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2014</b>         | Masinde Muliro University of Science and Technology | <b>Faculty representative</b> to Senate AD-HOC COMMITTEE to investigate examination irregularities during the 2013/2014 Academic year                                                                  |
|                     |                                                     | <b>Member</b> of EXAMINATION RULES AND REGULATIONS REVIEW COMMITTEE                                                                                                                                    |
|                     |                                                     | <b>Co-opted member</b> to KITALE/ELDORET UNIVERSITY COLLEGE TASK FORCE (Animal Science and Biotechnology)                                                                                              |
| <b>2013 – 2015</b>  | Masinde Muliro University of Science and Technology | <b>Examination/Timetable co-ordinator, Faculty of Science</b> (Processed the 2013/2014 academic Year Results efficiently and timely)                                                                   |
| <b>2013- 2014</b>   | Masinde Muliro University of Science and Technology | <b>Chairperson, Departmental Graduate Committee</b> , Biological Sciences (Effectively steered the Committee for the department to graduate a record 13 MSc students in 2013)                          |
| <b>2013</b>         | Department of Biological Sciences-MMUST             | <b>Programme Coordinator BSc Biotechnology</b> (Steered biotechnology students to win the first NCST Kenyan Universities biotechnology contest held at KICC Nairobi. Awarded a trophy and Cash awards) |
| <b>2011 to date</b> | International Atomic Energy Agency, Vienna, Austria | Expert/Consultant in animal production and Health                                                                                                                                                      |
| <b>2011 – 2015</b>  | Masinde Muliro University of Science and Technology | <b>Senior Lecturer</b> , Masinde Muliro University of Science and Technology                                                                                                                           |
| <b>2010 -2015</b>   | Faculty of Science - MMUST                          | <b>Chairman of the Curriculum Review and Development Committee</b> (Facilitated the review and development of over 70 existing and new programmes in accordance with                                   |

|                    |                                                     |                                                                                                                                                                                                                                                                                                       |
|--------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                                     | Commission for University Education guidelines)                                                                                                                                                                                                                                                       |
| <b>2010 – 2015</b> | Masinde Muliro University of Science and Technology | <b>Member</b> of the steering committee of MMUST – KARI MOU (Established linkages that enabled industrial attachment and graduate students access research facilities at KARI, Collaboratively developed grant winning proposals)                                                                     |
| <b>2010 - 2011</b> | Masinde Muliro University of Science and Technology | <b>Lecturer</b> , Masinde Muliro University of Science and Technology                                                                                                                                                                                                                                 |
| <b>2009- 2009</b>  | Kenya Agricultural Research Institute (KARI)        | <b>ISO9001:2008 champion</b> National Animal Husbandry Research Centre, Naivasha<br><b>Head of laboratory services and coordinator, seminars and Workshops</b> , National Animal Husbandry Research Centre, Naivasha                                                                                  |
| <b>2005 – 2009</b> | Masinde Muliro University of Science and Technology | <b>Lecturer</b> , Part time, Masinde Muliro University of Science and Technology                                                                                                                                                                                                                      |
| <b>2008 – 2009</b> | Kenya Agricultural Research Institute (KARI)        | <b>Principal Research officer</b> , Kenya Agricultural Research Institute (KARI)                                                                                                                                                                                                                      |
| <b>2001 – 2005</b> | Kenya Agricultural Research Institute (KARI)        | <b>National Coordinator</b> , Small Ruminant Research Programme, KARI. Oversaw the integration of the dairy goat into the National dairy Research project                                                                                                                                             |
| <b>2001 – 2005</b> | Kenya Agricultural Research Institute (KARI)        | <b>Deputy Centre Director</b> , National Animal Husbandry Research Centre, Naivasha. As a Deputy Centre Director of a National Animal Husbandry Research Centre within KARI, I was the principal assistant of the Centre Director in administrative matters such as workplans and budget formulation, |

|                    |                                                                                                      |                                                                                                                                                                      |
|--------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                                                                                                      | implementation and reporting                                                                                                                                         |
| <b>2000 – 2005</b> | Kenya Agricultural Research Institute (KARI)                                                         | <b>Head of Small ruminant Research</b><br>KARI, Naivasha. Revived the Dual purpose Goat development project and integrated it in the National dairy Research project |
| <b>1996 – 2000</b> | Kenya Agricultural Research Institute (KARI)                                                         | <b>Head of poultry Research</b> , KARI Naivasha. Collaboratively developed the Kenya Indigenous Chicken as AI expert                                                 |
| <b>1993 – 2008</b> | Kenya Agricultural Research Institute (KARI)                                                         | <b>Research officer</b> , Kenya Agricultural Research Institution (KARI).                                                                                            |
| <b>1988 – 1993</b> | Kenya Agricultural Research Institute (KARI)/Small Ruminant Collaborative Research Support Programme | <b>Collaborating Scientist</b> , SR- CRSP Maseno                                                                                                                     |
| <b>1988-1993</b>   | Kenya Agricultural Research Institute (KARI)                                                         | <b>Assistant Research Officer</b> , Kenya Agricultural Research Institution (KARI).                                                                                  |

## RESEARCH INTERESTS

Applied microbiology and biotechnology, Molecular Epidemiology of parasites, Epidemiology and control of livestock diseases, emerging and re-emerging zoonotic diseases, Immunoparasitology, Natural therapeutic products research, feed/food safety, Parasite-nutrition interaction, Waste management, ecosystem health and animal production.

## PATENTS AND PRODUCT REGISTRATION

1. Forage silage block (Siloblock) (Patent and Trade Name registration initiated)
2. Microbial Fuel Cell (Electrogenic waste pin) (**Patent application initiated**)
3. Bacterial and Fungal endophyte derived anthelmintics and antibiotics (**Patent application in progress**)
4. Pen-side pH indicator impregnated mastitis test strip (**Patent application in progress**)

## CONSULTANCY IN RESEARCH AND DEVELOPMENT

I have consulted and successfully undertaken tasks in research and development with various international and national organisations.

| SNo | Task                                                                                                                                                        | Nature of task                | Organisation                                                                | Year undertaken |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|-----------------------------------------------------------------------------|-----------------|
| 1   | Characterization of the Livestock Production systems and potential for enhancing Dairy Productivity through improved Feeding in the Sub Humid Western Kenya | Research in feeds and feeding | <b>ILRI</b> -Research programme on integrated systems for the humid tropics | 2014-2015       |
| 2   | Establishment of agricultural technology incubation Centres                                                                                                 | Research and Development      | <b>County Government of Bungoma</b>                                         | 2014            |
| 3   | Strategic Plan for dairy value Chain in Bungoma County                                                                                                      | Research and Development      | <b>County Government of Bungoma</b>                                         | 2014            |
| 4   | Poultry Research and Development strategic plan                                                                                                             | Research and Development      | <b>County Government of Bungoma</b>                                         | 2015            |
| 5   | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>KALRO</b> Naivasha                                                       | 2015            |
| 6   | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>International atomic Energy agency</b> at University of Zambia           | 2013 and 2014   |
| 7   | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>KALRO</b> (Previously KARI) Lanet                                        | 2006            |
| 8   | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>KALRO</b> Embu                                                           | 2006            |
| 9   | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>KALRO</b> Kitale                                                         | 2006            |
| 10  | Fistulation of experimental animals                                                                                                                         | Research in animal nutrition  | <b>KALRO</b> Naivasha                                                       | 2005            |



## NOTABLE CAREER ACHIEVEMENTS IN RESEARCH, TEACHING AND DEVELOPMENT

During my career as a research scientist and lecturer and member of community, I have been able to achieve the following:

1. **Donated a Research Equipment** (ECOSCAN) for sub-clinical Mastitis investigations and management. The equipment can be adapted for other parameters such as pH
2. **Conceptualized, designed and described the Forage silage block** (Siloblock) making process (Patent and Trade Name registration initiated)
3. **Designed Microbial Fuel Cell** (Electrogenic waste pin) (**Patent application initiated**)
4. **Conceptualized, established** and serving as the founder chairman of Board of Management of **Jude Gates Lurare Premier Academy** for Underprivileged with the support of Christian Relief Fund (CRF).
5. **Won a water supply development grant** from Christian Relief Fund (CRF) for Maeni Girls Secondary School and local community
6. **Isolated and characterized bacterial and fungal** strains with industrial potential as source of anthelmintics and antibiotics (**patent application in progress**)
7. Significantly contributed to the success of the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> Kibabii University Annual International Conference as Member of Organizing Committee and Chair of the Technical Sub Committee.
8. Contributed over **2000 titles of e-books** to Kibabii University Library
9. Through funded research projects and direct negotiations with donors, I have been able to procure state of the art **equipment, glassware** and **reagents** for Biotechnology and Microbiology laboratories at Masinde Muliro University of Science and Technology. Some key items are presented below.

| Item                                        | Number   | Mode of Procurement and current state       |
|---------------------------------------------|----------|---------------------------------------------|
| Rotary evaporator                           | 1        | Research Project/excellent state            |
| Soxlet Extractor Unit                       | 1        | Negotiated/excellent state                  |
| PCR Units                                   | 1        | Negotiated/serviceable                      |
| Electrophoresis unit                        | 1        | Negotiated/Excellent state                  |
| Milk Scan                                   | 1        | Research project/Excellent state            |
| MacMaster Parasitology Unit                 | 3        | Negotiated/Excellent state                  |
| pH metre                                    | 3        | Research project/negotiated/Excellent state |
| Portable GPS reader                         | 1        | Research project/negotiated/Excellent state |
| High precision weigh balance                | 2        | Research project/negotiated/Excellent state |
| High precision Micropipettes                | 8        | Research project/negotiated/Excellent state |
| Glass ware                                  | Assorted | Research Project                            |
| Molecular biology reagents (kits) and media | Assorted | Research Project/Consumable                 |

10. **Developed a pen-side pH indicator** impregnated Mastitis test (**patent application in progress**)
11. Established a state of the art **animal health and biotechnology laboratory** at the Dairy Centre of Excellence, KALRO Naivasha.
12. Contributed and effectively steered the **Kenya Indigenous Chicken development** programme that resulted in the **KARI Indigenous Chicken**
13. Contributed and effectively steered the development of the **Kenya Dual Purpose Goat** (KDPG) foundation stock for the Kenya Dairy Goat industry

## TEACHING EXPERIENCE

I have over 12 years of teaching experience at university level. During this period, I have been an instructor for the following courses at undergraduate level:

Introduction to genetics, Cell biology and genetics, General microbiology, Environmental microbiology, Industrial microbiology, Medical microbiology, General pathology, Animal genetics and evolution, Animal Nutrition, Animal physiology, Biochemistry of biofuels, Bioreactors, Biophysics, Introduction to Bioinformatics, Biopharmaceuticals, Discovery strategies in biotechnology, Introduction to Biotechnology, Introduction to Molecular biology, Principles of genetics and cytogenetics and Biological waste management.

At graduate level, I have effectively handled the following courses:

Molecular Biology of enzymes, Advanced Population genetics, Techniques in parasitology, Advanced Bacteriology, Advanced Microbial genetics, Bioinformatics, Entrepreneurship in Biotechnology and Molecular Genetics.

## ACADEMIC PROGRAMMES DEVELOPED

- |                                                   |         |
|---------------------------------------------------|---------|
| 1. Diploma in Dairy farming and entrepreneurship  | - KIBU  |
| 2. Diploma in Livestock feeds and feeding systems | - KIBU  |
| 3. BSc biotechnology                              | - MMUST |
| 4. MSc microbiology                               | - MMUST |
| 5. MSc Bioinformatics                             | - MMUST |
| 6. PhD in Microbiology                            | - MUST  |
| 7. PhD in Bioinformatics                          | - MMUST |

## PUBLICATIONS

Published **over 120 articles** – including 34 papers in internationally refereed journals, 3 books and thirteen (13) book chapters, numerous quality papers in local and international conference/workshop proceedings, Agricultural extension materials and author and co-author of several research and consultancy reports.

## Thesis

### 1. Doctor of Philosophy (D.Phil) 2008

Thesis Title: Mechanisms of hypobiosis in *Haemonchus contortus* of goats in semi-arid lands (SAL) of Kenya

### 2. Master of Science (MSc) 1994

Thesis Title: Evaluation of the integral membrane proteins of *Fasciola gigantica* for control of ovine fascioliasis

## Books

1. Lanyasunya, T. P. Ouda, J. O. ;Otieno, K ;**Siamba, D. N.** ;Kibitok, N. ;Mutunga, T. K. **2012.** Feed and Milk Hazard Control Handbook for Dairy Stakeholders. KARI Publication Unit. . **ISBN: 978-9966-30-015-7**
2. Chrispinus Mulambalah and **Donald Siamba. 2012.** Malaria in the Western Highlands of Kenya. Transmission patterns and intervention strategies, LAB Lampard Academic Publishing, **GmbH & Co.KG. ISBN: 978-8484-8007-4**
3. **Siamba. D.N.**, Lanyasunya T.P. and Kariuki J.N. (*Ed*) **2016.** Dairy Cattle Farming in Kenya. A Practical Training Manual for Extension Workers. Manuscript ready for publication.

## Book chapters

1. Muyekho, F.N., **Siamba, D.**, Agevi, H. and Okotsi, S. (**2014**). Characterizing the livestock production system and potential to enhance productivity through improved feeding in Matayos in Busia County, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014.* Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 4-18. **Internet URL:** <https://cgspace.cgiar.org/handle/10568/64946>

2. Muyekho, F.N., **Siamba, D.**, Agevi, H. and Etiang, S.A. (2014). Characterization of the livestock production system and potential to enhance productivity through improved feeding in Sabatia, Vihiga County, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014. Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 19-34. Internet URL: <https://cgspace.cgiar.org/handle/10568/64946>*
3. Muyekho, F.N., **Siamba, D.**, Agevi, H., Tennesi, G. and Koronge, E.M. (2014). Assessing the dairy value chain and potential to enhance productivity through improved feeding in Marani Sub-County, Kisii, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014. Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 35-49. Internet URL: <https://cgspace.cgiar.org/handle/10568/64946>*
4. Muyekho Francis N. **Donald Siamba**, Humphrey Agevi, Dickens Nyagol and Dosa Karugara (2014). Characterization of the livestock production system and potential to enhance productivity through improved feeding in Kisumu West, Kisumu, Kenya. IN: *Muyekho F.N., Lukuyu, B. and Duncan, A.J. 2014. Characterization of the livestock production systems and potential to enhance dairy productivity through improved feeding in sub-humid western Kenya. Nairobi, Kenya: ILRI: 50-67. Internet URL: <https://cgspace.cgiar.org/handle/10568/64946>*
5. Lanyasunya T.P., I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Implications of Mycotoxin contamination of dairy feeds and products. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
6. **Siamba D.N.**, T.P Lanyasunya., I.K. Lokwaleput, N.K Kiptok, T.K. Mutunga, J.O. Ondiek and J.M. Bwire. (2014). Risks of heavy metal contamination of dairy feeds and products. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
7. Lanyasunya T.P., I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Rapid and conventional testing methods for microorganisms in milk. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*

8. Ondiek J.O., T.P. Lanyasunya, I.K. Lokwaleput, T.K. Mutunga, **D.N. Siamba**, and J.M. Bwire. (2014). Agriculture chemicals' related hazards control. IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire. ;. 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
  
9. Lokwaleput I.K., B.S. Msangi, Lanyasunya T.P., T.K. Mutunga, **D.N. Siamba**, J.O. Ondiek and J.M. Bwire. (2014). Traceability: A step towards food safety in Eastern and central Africa countries and compliance with international food safety standards. . IN: *Lanyasunya, T. P., I.K. Lokwaleput, T. K Mutunga, D. N Siamba, J.O Ondiek and J.M. Bwire 2014. Feed and Milk Hazard Control: A handbook for Dairy Stakeholders. KARI Publication Unit. . ISBN: 978-9966-30-015-7*
  
10. **Siamba, D.N.**, Mukisira, E.A., de Jong, R., Lokwaleput, I. and Nampaso, J. (2000). Ticks and tick-borne diseases on smallholder dairy farms in Bahati Division, Nakuru District: Epidemiology and assessment of control strategies in different management systems. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT,Nairobi, pp 57-74 ISBN 9966-879-34-X*
  
11. **Siamba, D.N.**, Ndegwa, J. M., Kimani, C. W., Nampaso, J., Ole Sinkeet, S.N., Mukisira, E.A. and de Jong, R. (2000). Rural poultry production: efforts to improve production and contribution to household economy. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT,Nairobi,pp 141-156 ISBN 9966-879-34-X*
  
12. **Siamba, D.N.**, Waweru, D.N., Lanyasunya, T.P.,de Jong, R., Mukisira, E.A., Nyakira, B.S. and Lokwaleput, I (2000). On-farm management of ticks and tick-borne diseases: Current use and potential role of plants in integrated control strategies on smallholder dairy farms in Nakuru District. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT,Nairobi, pp 75-84 ISBN 9966-879-34-X*

13. Lokwaleput, I., **Siamba, D.N.** and de Jong, R. (2000). Improved cow fertility through appropriate management practices on-farm in Koibatek and Nakuru District. In de Jong and Mukisira (ed). *Testing of livestock technologies on smallholder mixed farms in Kenya. Research-Extension-Farmer experiences in the National Dairy Cattle and Poultry Research Programme (1995-1999). KARI/KIT, Nairobi, pp 85-104 ISBN 9966-879-34-X*

## Refereed Journal Publications

- 1) David Gikungu, Jacob Wakhungu, **Donald Siamba**, Edward Neyole, Richard Muita, Benard Bett and Pietro Ceccato. **2019**. Differences between satellite and observed climate data as predictors of Rift Valley Fever in Kenya. **Submitted. Journal of Meteorology and Related Sciences**
- 2) Muranditsi A, **Siamba D.**, Wakhungu J. and Lisouza F. **2019**. Bacteriological analysis of dairy cattle feeds and the influence on milk quality in Kakamega County, Kenya. **Accepted International Advanced Research Journal in Science, Engineering and Technology.**
- 3) Agripina Muranditsi Khalembi, **Donald Siamba**, Jacob Wakhungu, Pirishon Lanyasunya. **2019**. Chemical and Biological quality of water used by dairy cattle farmers in Kakamega County, Kenya. **Accepted Journal of Animal Production Advances**
- 4) Khatiebi Sandra, **Siamba Donald Namasaka**, Konje Martha Muthoni and Mulambalah Chrispinus Siteti **2019**. Physicochemical Characteristics and Biodegradability of Organic Fraction of Solid Wastes Generated in Eldoret Municipality, Kenya. **Research Journal of Environmental and Earth Sciences. In press**
- 5) Wanyama Milton Mario Kollenberg, **N. Siamba Donald** and Nyongesa Peter **2019**. Bacterial Counts of Unprocessed Bovine Milk Produced by Small Scale Farmers in Ndivisi Ward, Bungoma County, Kenya. *Journal of Advances in Microbiology, 14(1): 1-11, 2019; Article no.JAMB.45570 ISSN: 2456-7116*
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56. Semenye P.P, **Siamba D.N**, Shisya M. and Getz W. 1992. Can fodder diets increase goat production by a quantum leap? Paper presented at the annual symposium of the animal production society of Kenya, 1992, Egerton University, Njoro, Kenya.

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## **Livestock Extension Materials**

Assorted extension message booklets on feed/food safety and disease control

1. Protect your milk and dairy products from pathogenic microbial contamination and save life (2013)
2. Be aware! Heavy metal contamination in livestock products can have serious health implications in both humans and animals (2013)
3. How to control mycotoxins in milk and dairy feeds (2013)
4. Learn how to rear your dairy goats (2013)
5. Learn how to rear your dairy goat kid (2013)
6. Use a simple wooden box to make high quality hay for sustainable milk production throughout the year (2013)
7. Appropriate stover handling techniques for dairy cattle feeding (2013)
8. Learn how to make high quality maize silage for year round milk production (2013)
9. Learn how to grow and utilize Napier grass for sustained milk production (2013)
10. Control ticks and reduce cattle losses (1999)

## Recent Project Technical Reports

1. Muyekho F.N., **Siamba D.N.**, Lukuyu B and Duncan A (**2015**). Characterization of the Livestock Production systems and potential for enhancing Dairy Productivity through improved Feeding in the Sub Humid Western Kenya
2. **Siamba D.N.** 2015. The Bungoma County poultry value chain strategic plan (2014 - 2017)
3. **Siamba D.N.** (**2014**) End of mission Report on animal fastulation at the University of Zambia, Lusaka Zambia (2014)
4. **Siamba D.N.** (**2013**) End of mission Report on animal fastulation at the university of Zambia, Lusaka Zambia (2013)
5. **Siamba D. N.**, H.M. Tsingalia, D.M. Kuria, A. Osogo, P. Nyongesa. (**2013**). Isolation, characterization and evaluation of endophytes from selected medicinal plants for anthelmintic metabolites. **Final project (NCST/5/003/call2/48) Technical Report**
6. K. Otieno, I. K. Lokwaleput, T. P. Lanyasunya, T.K Mutunga, **D.N. Siamba.** (**2013**). Enhancing appropriate policies and safety standards of feeds and milk for improved livelihoods in the ECA countries. (Project REF: EAAPP/RDCoE/RP/04/2011)

## GRANTS FOR COMPLETED AND ONGOING RESEARCH PROJECTS

1. **Grant No EAAPP/2010/AH/01:** Development of a pH based pen-side test for mastitis control and improvement of milk quality. (Associate Researcher). **Ongoing.**
2. Grant No **REF: EAAPP/RDCoE/RP/04/2011:** Enhancing appropriate policies and safety standards of feeds and milk for improved livelihoods in the ECA countries (Associate Researcher). **Concluded phase 1**
3. **Grant No NCST/5/003/CALL2/48.** Isolation, characterization and evaluation of endophytes from selected medicinal plants for anthelmintic metabolites. (Principal Researcher). **Concluded.**
4. **ARF/LSKP/RC-IDA/6007001/1 of 2001** Smallholder dairy feeding practices. (Associate Researcher). **Completed**
5. **ARF/LSK/2017001/1 of 1999** On-farm performance of Kenya Sahiwal, its crosses and other breed types in dairy production systems in medium and semi-arid areas of Kenya (Associate Researcher). **Completed.**

6. **ARF/LSKP/1001097/1 of 1999** Dual Purpose Goat production: Nutritive value of leguminous shrubs as supplementary feed in dual purpose goat production (Associate Researcher). **Completed.**
7. **ARF/LSKP/RC-IDA/1004017/1 of 1997.** Studies on the nutrition of indigenous chicken of Kenya. (Associate Researcher). **Completed**

## **POST GRADUATE STUDENT SUPERVISION**

The list of the Master and Doctorate (PhD) degree students that I have supervised to completion and those that I am currently supervising is given below:

### **PhD**

1. **Lily Khendo Simasi (SBB/H/01/14)** Doctor of Philosophy (Molecular Biology), MMUST. **Ongoing**
2. **Nanyende David Wanyonyi.** Doctor of Philosophy, Disaster Management and Humanitarian Assistance. (MMUST). **Submitted.**
3. **Martim Noah Kipkoech.** Doctor of Philosophy (Parasitology) University of Eldoret. **Completed, to graduate in December 2018**
4. **Patrick Nabiswa Koyi.** Doctor of Philosophy in Disaster Management and Sustainable Development (MMUST). **Completed and graduated in 2017**
5. **Olunga Ibrahim Barasa.** Doctor of Philosophy, Disaster Management and Humanitarian Assistance. (MMUST). **Completed and graduated in 2017**
6. **David Gikungu Irungu 2015.** Doctor of Philosophy, Disaster management and Sustainable Development. **Completed and graduated in 2015.**
7. **Olunga Mouren Stella-**Doctor of philosophy (Zoology-Parasitology) Moi University (2011). **Completed and graduated in 2011**

### **MSc**

1. **Redempta Bulinda (SCH/G/08/2015).** Master of Science (Applied Chemistry) MMUST. **Student is writing thesis**
2. **Philip Wamalwa Makhuwa (SCH/G/09/15).** Master of Science (Applied Chemistry) MMUST. **Student is writing thesis**
3. **Zenalle Emma Adhiambo.** Master of Science in Crop protection (applied microbiology). **Student is writing thesis.**

4. **Milton Wanyama.** Master of Science in Microbiology (MMUST). **Submitted**
5. **Sarah Kindiki.** Master of Science in microbiology (MMUST). **Graduated 2018**
6. **Nyongesa P. Kuloba.** Master of Science in Medical Biotechnology (Maseno). Graduated in **2016.**
7. **Agripina Khalembi** Master of Science in Disaster Management and Humanitarian Assistance. (MMUST). Graduate in **2016**
8. **Sandra Khatiebi. .** Master of Science in Environmental biology (MMUST). Completed and graduated in **2015**
9. **Ogotu James Ochieng.** Master of Science in Disaster Management and Humanitarian Assistance. (MMUST). Completed and graduated in **2015**
10. **Mwongula W. Albert.** Master of Science in Microbiology (Moi University). (2013) Completed and graduated in **2013**

#### **POST GRADUATE STUDENT THESIS EXAMINATION**

I have examined graduate student theses listed below:

1. Edwin Kipyegon Mutai ,. DPHIL Moi University (2018)
2. Irene Chepkoech. MSc, University of Eldoret, (2015)
3. Joan C. Koech. MSc, University of Eldoret, (2015)
4. Benard Ngoitsi Jumba. MSc, University of Eldoret, (2014)
5. Beatrice Muzame Aleyo, MSc University of Eldoret (2014)
6. Samwel Morris Lifumo Symekher. Master of Public Health “Maseno University (2013)
7. Edwin Kipyegon Mutai ,. MPHIL Moi University (2013)
8. Claris Nyongesa Omuse MSc MMUST (2013)
9. Leonard Okumu Obiet. MSc MMUST (2013)
10. Omemo Peter, Master of Public Health, Maseno University (2012)
11. Mary Wambui Kamau, Master of Public Health, Maseno University (2012)
12. Peter Lokomar Nyanga.. Master of Public Health “Maseno University (2012)

## AWARDS AND COMMENDATIONS

- (i) **World Bank Scholarship award for PhD studies at Moi University**
- (ii) Certificate of excellence in recognition of outstanding performance at 6<sup>th</sup> KARI scientific conference (**Best scientific presentation**)
- (iii) Certificate of excellence in recognition of outstanding performance at 6<sup>th</sup> KARI scientific conference (**Best presentation in animal health**)
- (iv) Certificate of excellence in recognition of outstanding performance at 6<sup>th</sup> KARI scientific conference (**Second best overall presentation**)
- (v) Certificate of excellence in recognition of outstanding performance at 6<sup>th</sup> KARI scientific conference (**Second best presentation in livestock**)
- (vi) **Third best KARI project** (Improvement of indigenous chicken production by Ndegwa, J.M., Kimani, C.W., **Siamba, D.N.** and Mburu, B.M.) awarded at 6<sup>th</sup> KARI scientific conference.
- (vii) **USAID scholarship award for Master of Science Studies at University of Nairobi**

## SPECIAL SKILLS

- (i) Excellent expertise in **rumen and Ileal canulation** for animal experimentation. Canulated 108 ruminants for nutritional experiments in Kenya, Tanzania and Zambia as a consultant for the International Atomic Energy Agency, Vienna, Austria.
- (ii) Excellent expertise in **Artificial Insemination in Chicken** (used as a tool for breeding and multiplication of the Kenya Indigenous Chicken at KARI Naivasha)
- (iii) **Computer literate.** Competent in the use of ICT in research and teaching

## PROFESSIONAL AFFILIATION

- i) Member of the Kenya National Academy of Sciences (KNAS)
- ii) Registered Veterinary Surgeon with Kenya Veterinary Board
- iii) Member of Kenya Veterinary Association (KVA)
- iv) Member of Animal production Society of Kenya (APSK)
- v) Member No 1001600 to American Association for Science and Technology (AASCIT)

## **UNIVERSITY AND COMMUNITY SERVICES**

1. Member of County Government of Bungoma task force on Mt- Elgon and Chetambe Eco-system Conservation and Management
2. Member of County Government of Bungoma Dairy and Poultry value Chain steering Committee
3. Motivational Speaker and career advisor in Secondary Schools
4. Member of planning committee in Maeni Monthly Meeting of Quaker Church
5. Chairperson of the school management Board, Maeni Girls Secondary School
6. Chairperson of the school management Board, Bilibili Secondary School
7. Founding member and Chairman of the school Management Committee Lurare, Premier Academy