<table>
<thead>
<tr>
<th><strong>Title</strong></th>
<th>Fodder Production for Enhanced Pastoral and Agro-Pastoral Resilience in the Drylands of Southern Kenya (PREPARED)</th>
</tr>
</thead>
</table>
| **PI** | Dr. Oliver Vivian Wasonga  
Lecturer Department of Land Resource Management and Agricultural Technology, College of Agriculture and Veterinary Sciences, University of Nairobi  
P.O Box 29053- 00625, Kangemi-Nairobi  
Email: oliverwasonga@uonbi.ac.ke or oliverwasonga@gmail.com  
Phone: +254 722 258 765 |
| **Co-researchers** | Dr. William Ngoyawu Mnene  
Senior Researcher and Director Kenya Agricultural and Livestock Research Organization, Arid Land Research Institute (KALRO/ARLRI)  
P.O. Box 12, 90138, Makindu  
Email: director.arlri@kalro.org or william.mnene@kalro.org or williammnene@gmail.com  
Phone: +254 724 468 207 |
|  | Dr. Yazan Ahmed Mohamed Elhadi  
Lecturer Department of Land Resource Management and Agricultural Technology, and Agricultural Economics, College of Agriculture and Veterinary Sciences, University of Nairobi  
P.O Box 29053- 00625, Kangemi-Nairobi  
Email: yazan.a.m.elhadi@gmail.com  
Phone: +254 737 776 276 |
| **Purpose** | The proposed project will, in partnership with farmers, conduct analysis of fodder value chain in the drylands of southern Kenya to inform its development and out-scaling in areas with similar conditions. |
| **Project Summary/Abstract** | Fodder production is increasingly being adopted as a way of building resilience of livestock-based pastoral and agro-pastoral livelihoods in the drylands of Kenya. It is not only becoming popular as a source of feed for livestock during periods of scarcity, but also as a means of rehabilitating the degraded drylands, as well as a complementary source of income. Whereas understanding the entire value chain from production to marketing is a prerequisite for developing and out-scaling of... |
the practice in the drylands, there is paucity of information about the value chain since the previous studies have mainly focused on understanding productivity and morphometric characteristics of various grass species. This study will therefore: i) determine the performance of the existing on-farm fodder production practices in the southern drylands of Kenya; ii) assess local knowledge on the indigenous grass species, their spatial distribution and long-term trends in relation to rainfall and land use and land cover changes over the last 40 years; iii) analyze the fodder value chain to determine actors, market linkages, profitability, functionality and efficiency of the value chain in the southern drylands of Kenya; iv) determine the factors that influence households’ participation in fodder production in the study area. The project will support two MSc students registered at Faculty of Agriculture, University of Nairobi.

<table>
<thead>
<tr>
<th>Country and Specific Location(s)</th>
<th>Drylands of southern Kenya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participating Institutions</td>
<td>University of Nairobi, Department of Land Resource Management and Agricultural Technology. Kenya Agricultural and Livestock Research Organization, Arid Land Research Institute (KALRO/ARLRI), Arid and Rangelands Research Institute, Kiboko.</td>
</tr>
<tr>
<td>Start Date</td>
<td>1st July, 2015</td>
</tr>
<tr>
<td>End date</td>
<td>30th July, 2017</td>
</tr>
<tr>
<td>Budget</td>
<td>USD 60,000</td>
</tr>
</tbody>
</table>
Oliver Vivian Wasonga (PhD)
Department of Land Resource Management and Agricultural Technology,
College of Agriculture and Veterinary Sciences,
University of Nairobi
P.O. Box 29053-00625, Nairobi, Kenya
Home address: P.O. Box 34615-00100, Nairobi, Kenya
Telephone: +254-722-258765 or +254-734-258765
E-mail: oliverwasonga@uonbi.ac.ke
Skype: oliver-wasonga
Profile: https://profiles.uonbi.ac.ke/oliverwasonga
Blog: Drylandresilience.blogspot.com

Dr. Wasonga is a Socio-Ecologist specialising in Dryland Ecology and Pastoral Livelihoods with over a 14 years’ work experience in natural resource management; range management and pastoral production systems. He has been teaching in the Range Management Section, Department of Land Resource Management and Agricultural Technology (LARMAT) at the University of Nairobi since 2006 (https://profiles.uonbi.ac.ke/oliverwasonga). Since 2011, he has been a Post-Doctoral Research Fellow at the German Institute for Tropical and Sub-Tropical Agriculture (DITSL) at the University of Kassel in Witzenhausen, Germany (http://www.ditsl.org/index.php?option=com_content&view=article&id). He teaches Range Ecology; Methods of Rangeland Analysis; Range Plant Resources and Utilization; Range Management in Pastoral Societies; Agro-Silvo-Pastoral Systems; Agroforestry Biodiversity and Utilization; Dryland Agroforestry; and Environmental and Social Impact Assessment. In addition to teaching, he has supervised to completion two (2) PhD and five (5) MSc students, and currently supervising ten (10) PhD and ten (10) MSc. students. He represents the Department of LARMAT in the Faculty of Agriculture committees for postgraduate studies, industrial attachment, and chairs the timetabling committee. He is currently leading two (2) research projects funded by the German Federal Ministry of Education and Research (www.ditsl.org): i) Assessing the Role of Stratified Livestock Production in Reduction of Post-Harvest Losses in Pastoral meat Value Chain in Kenya; and, ii) Assessing the potential of Livestock Marketing Associations in Reduction of Losses in Pastoral Meat value chain. He also coordinates “The Total Economic Valuation of Pastoralism Project in Isiolo County”, which is co-funded by the Department for International Development (DFID) and Catholic Organization for Relief and Development Aid (CORDAID) (www.lamart.uonbi.ac.ke). Dr. Wasonga is widely published in areas of ecology, range resource economics, pastoral livelihoods and indigenous knowledge. Dr. Wasonga has delivered on several contributions to community and development through a
range of consultancies with several international organizations such as World Bank, UNDP, ILRI, IUCN, IIED, FAO, AMREF, ACF, MS-TCDC-Action Aid, CORDAID-Netherlands, IFAW, CARE-Tanzania, Regional Land Management Unit (RELMA/sida), VSF-Belgium, among others.

Selected Publications


Books and Book Chapters:


On-going Funded Research Projects

- **2014-2015:** Enhancing resilience of livestock-based livelihoods in Northern Kenya. Joint research project led by the Center for Sustainable Dryland Ecosystems and Societies (CSDES) in the Department of Land Resource Management and Agricultural Technology (LARMAT), University of Nairobi. The project is funded by the Intergovernmental Authority on Development (IGAD) Drought Resilience Platform under the Applied Research in Drylands Grant Facility (ARDGF). **Amount of funding:** $220,000. Co-investigator for the pasture production and marketing.

- **2013-2018:** RELOAD; Reduction of Post-Harvest Losses and Value Addition in East African Food Value Chains. RELOAD is a 5-year collaborative trans-disciplinary project funded by the German Federal Ministry of Education and Research (BMBF). In Kenya, one focus of RELOAD is on pastoral meat value chains. **Amount of funding:** €215,000. **Principal investigator** for sub-project 6, work packages 4 (Stratified livestock production systems) & work package 5 (Livestock marketing associations).

- **2014-2015:** Assessing the Total Economic Value of Pastoralism in Isiolo County, Kenya. A 2-year collaborative research co-funded by CORDAID and DFID and led by the Institute for Environment and Development (IIED). **Amount of funding:** £43,500. Principal investigator.