**PERSONAL DETAILS**

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| Surname  First name  Gender  Birth date  Nationality  Contact number  E-mail  Home address  Work address | Managa  Lavhelesani Rodney  Male  13 September 1989  South Africa  +27 78 764 7419  [lavhe.managa@gmail.com](mailto:lavhe.managa@gmail.com); [RManaga@hsrc.ac.za](mailto:RManaga@hsrc.ac.za)  16 Orange River Drive, Unit 291 Terenure Estate, Kempton Park, 1619  134 Pretorius Street, Pretoria, 0002, South Africa |

**SKILLS SUMMARY**

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| * Applied and Basic Research * Quantitative and qualitative data analysis * Scientific writing, presentation and analytical skills * Research ethics * Plant chemical analysis * Smart-Agriculture and 4IR | * Organizational, communication and supervision skills * Project coordination * Technology transfer and knowledge dissemination * Systems of innovation * Agri-business and agricultural development |

**ACADEMIC QUALIFICATIONS**

* PhD. Horticultural Science, University of Pretoria (2017-present)
* MSc. Agriculture (Crop Science/Plant Breeding), (*Cum Laude*), UNISA, 2014-2015
* Honours Bachelor of Agriculture (Crop Sciences/Plant Breeding), University of Venda, 2011
* Bachelor of Agriculture (Crop Sciences/Agronomy), University of Venda, 2008-2010

**EMPLOYMENT HISTORY**

**Company: Human Sciences Research Council, Africa Institute of South Africa- Science & Technology Research Programme**

Job Title: Researcher; June 2015- Current

Duties & Key Responsibilities:

* Working with a research team on all aspects of conducting research, surveys and the analysis of resultant data and other relevant data sources;
* Write up research results for conference presentations, research reports and manuscripts for publication;
* Participate in clear research trainee mentoring and capacity development activities
* Working with clients and stakeholders to collaborate research and development projects
* Developing personal academic competencies through formal and informal training activities
* Coordination of short term research dissemination projects i.e. conference, seminars, and campus lecture series

Developed Skills & Competencies in:

* Produces policy-driven and evidence-based research
* Aligning the research objectives to the local, national and international developmental needs
* Advisory services to the strategic projects in local and national government
* Stakeholder engagement and consultation strategies
* Accountability for environment and socio-economic dynamics in setting research agenda
* Application of Multi-criteria decision analysis (MCDA)
* Agricultural development trends and value chain

**Company Agriculture Research Council, Vegetable & Ornamental Plant Institute, Plant Breeding**

Job Title Candidate Researcher (Professional Development Programme); February 2013- June 2015

Duties & Key Responsibilities:

* Assisted researchers of different disciplines to perform field and greenhouse trials, involving trial management and data collection
* Assisted in performing breeding and variety selections of new crop cultivars
* Liaison with farm workers on a regular basis and ensuring that task are carried out accurately
* Liaison with stakeholders such as McCain and Potato SA research officers visiting research demonstration sites and ensuring adequate information transferred to research team.
* Preparation of report on observations in research demonstration trials and providing it to senior researchers; assembling of research results for publications and reporting

Developed Skills & Strategies in:

* conventional and molecular plant breeding techniques
* potato seeds production and postharvest handling
* Field and greenhouse plant genotypes selection trials
* *In vitro* tissue culture production and seed quarantine practice
* Research project management

**Company Penn State University, Ukulima Roots Biology Center, RSA**

Job Title Research Assistant

Duration January 2012 – January 2013

Duties & Key Responsibilities:

* Performed the variety of crop experiments using field and laboratory techniques and instruments
* Assisting the senior researchers in planning and designing the research work plan
* Organize and supervise the workers, lead the intern’s team, facilitate the students’ workshop programme and farmer’s day.

Developed field and laboratory skills including

* Phenotyping maize, common bean and cowpea root crowns,
* Collecting samples for anatomical analysis,
* Soil coring for gravimetric water content,
* Monitoring plant growth and vigor through leaf area, leaf appearance rate, SPAD, plant height and phenology
* Soil N extraction
* Basic laboratory techniques including pipette and analytical balance use

**Company University of Venda, Department of Plant Production, RSA**

Job Title Research and Student Assistant (RPC & NRF funded projects)

Duration 2010 & 2011 (Part time basis)

Duties & Key Responsibilities:

* Assisted Researchers to perform field and greenhouse trials involving the preparation of land for Planting (cultivation)
* plot layout, setting up irrigation, seed preparation, planting and crop maintenance, harvesting and data recording facilitating student practical, invigilating the test and marking the scripts

**ROLES IN SELECTED RESEARCH PROJECTS**

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| **Project** | **Responsibilities** | **Period** |
| Integrated  Catchment management: from source to receptor [**Hydrosoft Institute]** | **Research consultant:** Conduct research, Report writing, deliver presentations & attend stakeholder meetings | 2019-2020 |
| Understanding Land and Water Sector Reforms in the Context of Smallholder Irrigation and Food Security in the Limpopo River Basin, South Africa [**AISA-HSRC**] | **Senior Researcher:** Field work team leader, Data analyst, Report writing, deliver presentations | 2018 |
| Water security in the municipalities of Polokwane and Mbombela, South Africa [**AISA-HSRC**] | **Researcher:** Field work team leader, Data analyst, Report writing, deliver presentations | 2019 |
| South African National Survey on Food and Nutrition Security [**HSRC, DAFF and SAVAC**] | **Research Project team member:** Involved inDeveloping proposal, Coordinating the fieldwork, Data analysis, Report writing, Findings dissemination, and Scientific publications | Ongoing |

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| **INTERNATIONAL TRAINING** |
| * **Agricultural Technology Innovation for Developing Countries**; organised by Chinese Foreign Economic Cooperation Center, Ministry of Agriculture, 4th – 28th September 2017, Beijing, China |
| **SHORT COURSES CERTIFICATION** |
| * Project Management Simplified * Nvivo statistical data analysis * Entrepreneurship in agribusiness * Food Irradiation - Technology, Applications and Good Practices * Experience Capitalization for Agricultural Development * Innovation systems |
| **YOUTH ENGAGEMENT INNITIATIVES** |
| * Awardee – 3rd BRICS Young Scientists Forum, Durban, 25-29 June * Awardee – Continental Youth Engagement Workshop: Strategic Engagement and Capacity Development of Youth in Agri-preneurship for Technology Adoption. Accra, 2nd -4th May 2019 |
| **MEMBERSHIP AND AFFLIATION** |
| * Member: International Society for Horticultural Science (ISHS). |

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| **SELECTED RESEARCH OUTPUTS** | | |
| **Book chapters** |  | |
| * Okorogbona AOM, Denner FD, **Managa LR,** Khosa TB, Adebola PO, Amoo SO, Ngobeni HM, Macevele S. (**2018**). Water quality and its impacts on agricultural productivity and environment. Sustainable Agriculture Reviews 27: 1-34. *Springer* * Okorogbona AOM, **Managa LR**, Adebola PO, Ngobeni HM & Khosa TB (**2015**) Salinity and Crop Productivity in Sustainable Agriculture. *Sustainable Agriculture Reviews 17*, Springer * **Managa LR** and Madise TL (**2019**) The Agricultural Sector in Realisation of the Objectives of the National Development Plan – Closing the Gap. *Economic Development: The Role of A Developmental State – South Africa and South Korea*. Africa Institute of South Africa (AISA). * **Managa L.R**. (**2020**). Achieving dietary adequacy for micronutrients through biofortification: progress and prospect review. In: Simelane, T., Managa, LR & Muchie, M. (eds). *Poverty alleviation pathways for achieving sustainable development goals in Africa*. Pretoria: Africa Institute of South Africa. 88-107 * Simelane, T., Muchie, M. & **Managa, L.R**. (2020) Interconnections between the sustainable development goals. In: Simelane, T., Managa, L.R. & Muchie, M. (eds). *Poverty alleviation pathways for achieving sustainable development goals in Africa*. Pretoria: Africa Institute of South Africa. 1-4. | | |
| **Journal articles** |  | |
| * **Managa LR** and Nkobole-Mhlongo N (**2016**). Towards climate-smart agricultural approach: Prospect for smallholder farmers in semi-arid regions. *Journal of Agriculture and Environmental Science*. Vol 5 (2):36-46 * **Managa, R** (2018). *Supporting black small-scale commercial farmers: Access to land is not an end in itself.* HSRC Review, 16(3): 6-8 * Chikozho, C., **Managa, LR.** & Dabata T (2020) Ensuring Access to Water for Agricultural Production by Emerging Farmers in South Africa: What are the missing ingredients? *Water-SA Journal* * **Managa, L.R**., du Toit, E.S. and Prinsloo G. (Accepted, 2020). NMR-based metabolomic analysis to identify changes in the metabolite profile of three *M. oleifera* genotypes grown in an open hydroponic system. *Acta Horticulture Journal* * Nkobole N, **Managa LR**, & Prinsloo G (Accepted, 2019) Nutritional and health benefits of commonly used African traditional vegetables in South Africa: A Review. *Food Security* | | |
| **Policy briefs** | |  |
| * Chikozho, C and **Managa, R** (2018). Can we Unlock Rural Socio-Economic Transformation through Land Reform? Revisiting the Land Redistribution Public Policy Imperatives in South Africa. *HSRC Policy briefs* | | |
| **Edited book volumes** | |  |
| * Thokozani Simelane, **Lavhelesani R. Managa** (2018). Belt and Road Initiative. Alternative development path for Africa. AISA Press. Pretoria. South Africa. * Thokozani Simelane, **Lavhelesani R. Managa** and Mammo Muchie (2020). Poverty Alleviation Pathways for Achieving Sustainable Development Goals in Africa. AISA Press. Pretoria. South Africa | | |
| **Presented research paper at the following conferences (selected)** | |  |
| * *2nd International Symposium on Moringa. CSIR Convention Center, Pretoria – South Africa, 10 – 13th November 2019* * 19th WaterNet/WARFSA/GWP-SA Symposium. Livingstone, Zambia, 30th October – 3rd November 2018 * 3rd BRICS Young Scientists Forum, Durban, 25-29 June. * 4th Global Climate Smart Agriculture conference , Johannesburg, South Africa, 28th – 30th November 2017 * Africa Young Graduates and Scholars Conference, 14 – 17 March 2016. University of Limpopo, South Africa. * 2016 Autumn International Scientific Conference on Food Safety and Security, 16th – 18th May 2016. University of Johannesburg, South Africa * Food & Agriculture 4th International Conference. International Scientific Events, 20th – 24th June 2016. Elenite Holiday Village, Bulgaria | | |
| **Journal Reviews** | |  |
| Reviewer for Accredited Journals:   * **Jamba:** *Journal of Disaster Risk Studies* * **Food Security:** *Springer International* | | |

**REFERENCES:**

Available upon request