

Curriculum Vitae
Associate Professor Makoala V. Marake
Department of Soil Science and Resource Conservation
Faculty of Agriculture – National University of Lesotho

1.0 Biodata

- 1.1 Family Name:** Marake
1.2 First Name: Makoala V.
1.3 Date of Birth: April 20th 1957
1.4 Nationality: Lesotho.
1.5 Civil Status: Married

2.0 Education:

Institution [Date from - Date to]	Qualification obtained:
University of Nebraska – Lincoln. USA. 1990 – 1993	Ph.D Soil and Water
University of Nebraska – Lincoln. USA. 1987 – 1989	MSc. Soil and Water
Colorado State University – Fort Collins. USA. 1982 – 1985	BSc. Agronomy – Soil Science

3.0 Language Skills: (Competence on a scale of 1 to 5 (1 – excellent; 5 – basic))

Language	Reading	Speaking	Writing
Sesotho	1	1	1
English	1	1	1

4.0 Professional Employment Experience:

Dates	Location	Company	Position	Description
1993 to-date	Lesotho	National University of Lesotho – Faculty of Agriculture	Assoc. Prof.	Teaching and student supervision, Research, outreach and consultancy
1985 – 1993	Lesotho	Ministry of Agriculture	Conservation Soil Scientist	Soil survey and mapping soils and land uses with emphasis on agriculture;
1977 – 1985	Lesotho	Ministry of Agriculture	Soil & Water Conservation Assistant	Conducting extension and training in soil and water conservation, farming practices and erosion control measures.

5.0 Professional Profile

I am an Associate Professor in the Faculty of Agriculture of the National University of Lesotho with over 20 years of experience as a teacher and trainer in both academic and community development initiatives. My qualifications and skills span the areas of agriculture and environmental development in both research and extension/outreach. I have researched and consulted broadly in soil fertility/plant nutrition, conservation agriculture systems, land evaluation and environmental impacts of land use and participatory approaches to resource conservation, environmental management, rural Development, biophysical and ecosystems interactions in relation to people's livelihoods, agro-biodiversity for sustainable agriculture and adaptation to climate change.

I have coordinated and conducted several multidisciplinary projects with local, regional and international links including the Initiative for Development & Equity in African Agriculture; Global Change and Subsistence Rangelands; Impact and Organizational Assessment in the PTC II (Production Through Conservation) Programme in Lesotho; Transfrontier Development Project Between Lesotho and South Africa: A Social Assessment; National Capacity Self-Assessment for Implementing Multilateral Environmental Conventions in Lesotho; Climate Change Adaptation in Lesotho; I have developed Climate Change Adaptation proposals for among other clients Lesotho Metereological Services, FAO and IFAD for funding by GEF in Lesotho; I have served as a chairperson of the Environment, Natural Resources and Climate change cluster for development of National Strategic Plan on Environment and Climate Change; I have served in the various panels on climate change in Lesotho including the development of the NAPA 2007 and National Communications on Climate Change. I have experience as an Expert Evaluator of Research Proposals on Agriculture & Land Use for the European Community Research Frame Work in Brussels, Belgium in 2001; Inter alia serving as a member of an International Review Panel for the 5th Research Framework of the European Community in Brussels, Belgium for the period November 2002 to April 2003.

6.0 Strategic Experience experience in the water, natural resources, rural development, agricultural sector:

- 6.1** Marake M.V. and Associates. 2020. Early Warning Systems Manual. WFP-DMA. Lesotho.
- 6.2** Marake M.V. and Associates. 2020. National Early Warning System Strategic Plan. WFP-DMA. Lesotho.
- 6.3** Marake M.V. and Associates. 2020. Disaster Risk Management Bill 2020. WFP-DMA. Lesotho
- 6.4** Marake M.V. and Associates. 2019. Promoting conservation, sustainable utilization and fair and equitable benefit-sharing from Lesotho's Medicinal Plants for improved livelihoods. UNDP – UNEP-GEF.
- 6.5** Marake M.V. 2017. Lesotho National Resilience Strategic Framework and Theory of Change: Building a Resilient and Prosperous Nation. UNDP and Disaster Management Authority. Government of Lesotho.
- 6.6** Marake M.V. and Q.K. Chakela. 2017. Typology of Climate Change and Climate Smart Agriculture Practices: A Compilation of International Best Practices. FAO. Lesotho.
- 6.7** Marake M.V. and Associates. 2017. Zero Hunger Strategic Review Report. FAO-Government of Lesotho.
- 6.8** Development of the Inventory of the Disaster Risk Reduction and Management (DRR/M) Status: Resources and Services, and Implementation of DRR/M Programs in Lesotho. SADC.
- 6.9** Marake M.V. and M. Raselimo. March 2014. Integrating Climate Change into the National Education Curricula in Lesotho Basic and Secondary Education and Higher Education Institutions. Lesotho Meteorological Services.
- 6.10** Marake M.V. July 2013. Strengthening capacity for climate change adaptation through support to Integrated Watershed Management Programme in Lesotho: A Project Preparation Grant Proposal for funding by GEF. FAO.
- 6.11** Joana Talafré (Team Leader); Makoala V. Marake (Senior National Consultant); Erum Hasan (Social and Gender Expert); Stephen Twomlow (IFAD Regional Climate and

Environmental Specialist). 2013. Lesotho Adaptation of Small-Scale Agricultural Production (LASAP) – A climate change adaptation project for funding by GEF in 2013 in the Ministry of Agriculture and Food Security.

- 6.12** Integrating Climate Change into Educational Curricula in Lesotho: Tool Kit for Teachers. 2013. National Curriculum Development Centre (NCDC). Maseru. Lesotho.
- 6.13** Marake M.V. 2012. Review of Curricula, Development and Integration of Conservation Agriculture into the Curricula of Tertiary Institutions in Lesotho: Lesotho Agricultural College and Lesotho College of Education. FAO. Lesotho.
- 6.14** Marake M.V. 2012. Climate Action Intelligence: Exploratory Research and Piloting in Major Economic Sectors in Lesotho: Agriculture and Food Security, Energy, Environment, Natural Resources and Water. Africa Adaptation Project: Ministry of Energy, Metereology and Water Affairs. December 2012.
- 6.15** Marake M.V., R. Lethola, R. Montši and L. Maqutu. 2012. Summative Evaluation of a Farmer-Centred Community Based Natural Resource Management Project. World Vision International – Lesotho. November 2012.
- 6.16** Marake M.V. 2012. Review of Curricula, Development and Integration of Conservation Agriculture into the Curricula of Tertiary Institutions in Lesotho: Lesotho Agricultural College and Lesotho College of Education. September 2012.
- 6.17** Marake M.V. 2012. Development of Conservation Agriculture and Home Gardening/Food Use Training Materials for Smallholder Farmers. Food and Agriculture Organization of the United Nations – Lesotho. July 2012.
- 6.18** Marake M.V. 2012. Development of a Strategic Plan for Conservation Agriculture in Lesotho. Food and Agriculture Organization of the United Nations – Lesotho. March 2012.
- 6.19** Marake M.V. 2012. Evergreen Agriculture: Baseline Study for Integration of Trees into Conservation Agriculture. IFAD /ICRAF. Nairobi. November 2012.

7.0 Published Books and Chapters in Books

- 7.1** Dejene A., S. Midgley, M.V. Marake and S. Ramasamy. 2011. Strengthening Capacity for Climate Change Adaptation in Agriculture: Experience and Lessons from Lesotho. Food and Agriculture Organization of the United Nations. Blue Book Series.
- 7.2** Marake M.V. and M. M. Ranthamane. 2008. Sustainable Strategies and Tactics for Dryland Agriculture. In Mapiki, A. and S. Makgatlaneng (Eds.). Land and Management in Southern Africa: Towards Better Water Use in Semi-arid and Arid Areas. The African Institute of South Africa.
- 7.3** Marake, M.V. 1997. Arable Agriculture in Lesotho. In Chakela, Q.K. (Ed.). State of the Environment in Lesotho. Ministry of the Environment, Gender and Youth Affairs.
- 7.4** Marake, M.V, and Molumeli, P.A. 1999. Environmental Management in Lesotho: The Limitations of Legal Instruments. In Salih, M. and Tedla, S. (Eds.), Environmental Planning, Policies and Politics in Eastern and Southern Africa. Macmillan Press Limited. London, UK.
- 7.5** Segerros, M., Prasad, G. and M.V Marake. 1996. Let the Farmers Speak. In Successful Natural Resource Management in Southern Africa. Vrije Universiteit Amsterdam. Gamsberg Macmillan Publishers. Namibia.
- 7.6** Marake, M.V, G. Shone, J.E. Carlsson, Y. Khatiwada, and M. Segerros. 1998. The Production through Conservation Program, 1981-1996: A Historical Document. Morija Printing Works.

8.0 Journal Publications

- 8.1** Ntlele M.H., M.V. Marake, F.T. Mugabe, S.F. Molete, B.E. Mapeshoane, T. Nkheloane, J.P. Mensah and T.A. Sekhobe. 2019. Community Perceptions on the Effect of Land Degradation to Water Resources at Bolahla-Mphosong in Leribe District. IJRMR 6 (12): 5400-5411.
- 8.2** Ntlele M.H., M.V. Marake, S.F. Molete, F.T. Mugabe, B.E. Mapeshoane, T. Nkheloane, J.P. Mensah and T.A. Sekhobe. 2019. Biophysical Assessment of water quality at Mphosong-Bolahla catchment. IJCR 11 (8): 7073-7083.

- 8.3** Mensah J.P., M.V. Marake, F.T. Mugabe, B. E. Mapeshoane, T. Nkheloane, S.F. Molete, M.H. Ntlele, and T.A. Sekhobe. 2019. Land Degradation Assessment Using the LADA Local Tools and Methods in Lesotho: Assessment of Soil Physical Properties. *IJRMR* 5 (01): *****- *****.
- 8.4** Mensah J.P., M.V. Marake, J.T. Mugabe, B.E. Mapeshoane, T. Nkheloane and S.F. Molete. 2019. Assessment of the Soil Chemical Properties Using the LADA Methodologies in Lesotho: The Case of Mphosong-Bolahla Watershed in the Foothills of the Leribe District. *IJCR* Vol. 11(3):2318 - 2323.
- 8.5** Marake M.V., M.J. Mohapelo, T. Ntoampe, K.J. Thoahlane, T.A. Tlailai and S.B. Mekbib. 2017. Evaluation of Physicochemical and Vegetative Properties of Soils under Different Exotic and Indigenous Tree Species Cover Compare to Adjacent Rangelands. *IJDS* Vol. 9: 1096-1105.
- 8.6** Lambert D.M., E. Bisangwa, N.S. Eash and M.V. Marake. 2016. Minimal Tillage and Crop Residue Retention Adoption, Input Demand and Maize Production: A Household Survey Analysis of Smallholder Producers in Lesotho. *JSWC* 71 (2):118-128.
- 8.7** Cuva, I.D., D. Lambert, F. Walker, M.V. Marake and N. Eash. 2015. Economically Optimal N Fertilizer Rates for Maize Production on Vertisol and Inceptisol Soils Under No-Till Management: A Case Study in Maphutseng, Lesotho. *IJPSS* 8 (2):1-12.
- 8.8** O'Dell, D., T.J. Sauer, B.B. Hicks, D.M. Lambet, D.R. Smith, W. Bruns, A. Basson, M.V. Marake, F.W Walker, M.D. Wilcox Jr. and N.S. Eash. 2014. Bowen Ratio energy Balance Measurement of Carbon Dioxide (CO₂) Fluxes of No-Till and Conventional Tillage Agriculture in Lesotho. *OJSS* 4 (3).
- 8.9** Olaleye, A.O., G.E. Akinbola, M.V. Marake, S.F. Molete and B.E. Mapeshoane. 2008. Soil in Suitability Evaluation for Irrigated Lowland Rice Culture in Southern Nigeria: Management Implications for Sustainability. *Communications in Soil Science and Plant Analysis*.39: 2920 – 2938.
- 8.10** Molete S.F., C.C. du Preez and M.V. Marake. 2008. Relations between Phosphorus Retention Parameters and Some other Properties of the Benchmark Soils in Lesotho. *South African J. Plant Soil*. Vol. 25: 99 – 104.

- 8.11** Molete, S.F., C.C. du Preez and M.V. Marake. 2005. Retention of applied Phosphorus by the Benchmark Soils of Lesotho and Quantification of their Phosphorus Retention Indices. South African J, Plant Soil, Vol. 22 (4): 214-221

9.0 Certification:

I, the undersigned, certify that, to the best of my knowledge and belief, this CV correctly describes my qualifications and experience.

Date: 

27th March 2020

Full name of staff member: Assoc. Prof. Makoala V. Marake