Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: <u>dmusetsho@naledzi.co.za</u> or <u>musetkd@unisa.ac.za</u>

#### **PERSONAL DETAILS**

Title : Prof

Surname : Musetsho

First Names : Khangwelo Desmond ID number : 8005245359089

Postal Address : Postnet Suite 320, P/Bag X9307, Polokwane, 0700

Physical Address : 160 Marshall Street, Polokwane, 0700

Date of Birth : 24 May 1980

Gender : Male

Marital Status : Married, two children

Nationality : South African

Language proficiency : English (Excellent), Luvenda (Excellent), Tsonga and Pedi (Good)

Driver's License : C1

### **EDUCATIONAL QUALIFICATIONS**

Degree : PhD Environmental Management

Institution : University of South Africa
Year : January 2018 to May 2021

Thesis Title : Development of a sustainable land and ecosystem services decision support

framework for the Mphaphuli Traditional Authority, South Africa

Degree : Master of Business Leadership

**Institution** : University of South Africa, Graduate School of Business Leadership

Year : January 2012 to December 2014

Degree : Master of Environmental Management

**Institution** : University of Venda

Year : January 2008 to December 2009

Degree : Bachelor of Environmental Management

**Institution** : University of Venda

Year : 1998 to 2001

Certificate : One Year Certificate Programme in Law (NQf Level 5

Institution : University of South Africa

**Year** 2009

Certificate : Conduct Outcomes-based Assessment (Level 5, ID 115753)

**Institution** : Assessment College of South Africa

**Year** 2009

Certificate : Conduct Moderation of Outcomes-based Assessment (Level 6, ID 115759)

**Institution** : Assessment College of South Africa

**Year** 2009

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

Certificate : Project Management Institution : Project Link (Pty) Ltd

**Year** : 2007

Senior Certificate : Matriculation

**Institution** : Tshivhase High School

**Year** 1997

### Other Qualifications and Trainings

- One month experiential training on agricultural water use management at the National Department of Agriculture (Agricultural Research Council, Silverton, 2001). Wetlands conservation, soil erosion and groundwater for irrigation,
- One month Soil Erosion and Resource Management Practical Training at Nwanedi Nature Reserve under the Limpopo Regional Department of Environment, Finance, Economic Affairs and Tourism (2000/2001) – veld evaluation, soil erosion, fire, resource management, plant invaders and interpretative trail.
- One month Soil Erosion and Resource Management Practical Training at Cycad Nature Reserve under the Limpopo Regional Department of Environmental Affairs and Tourism (1999/2000) – Erosion control, law enforcement and data collection.
- Experiential training on wetland rehabilitation, soil erosion, groundwater conservation, National Department of Agriculture, ARC, 2001
- IEMA Approved Foundation Course in Environmental Auditing South Africa, Aspects International, 2007
- Eskom Environmental Law Course, Eskom Distribution, 2008
- Bringing data into ArcGIS, GIMS/ESRI, TRN06-137, 2006
- Introduction to ArcGIS 1, GIMS/ESRI, TRN06-137, 2006
- Writing and Reviewing Mining EIAs and EMPS, Oryx Environmental, 2006
- Planet GIS Training Course, TGIS, 2008
- The One Environmental Authorisation System, Imbewu and DEA, 2015
- Certificate in Integrated Management Systems (Occupational Health & Safety, Quality and Environmental Management) obtained from DQS
- Attended a SAFARI 2000 workshop at the University of Virginia, USA, 07-11 October 2002.

### **ACADEMIC ACHIEVEMENTS AND AWARDS**

**Award**: Master's Equity Scholarship

**Institution**: National Research Foundation (NRF)

**Year** 2002

**Award**: School Silver Medallion (Best Graduand in the School of Environmental Sciences)

**Institution** : University of Venda

**Year** 2001

Award : Dr Zahida Ahmed Award (Best Graduand in the School of Environmental Sciences)

**Institution**: University of Venda

**Year** 2001

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

Award : School and Departmental Award (Best Student Award in Environmental Management Class,

School of Environmental Sciences, Department of Ecology and Resource Management)

**Institution**: University of Venda

**Year** 2001

Award : Vice Chancellor Merit Award

**Institution**: University of Venda

**Year** : 2000

#### **PROFESSIONAL SKILLS**

Computer Skills (Windows and Microsoft Office)

GIS Software: ArcView 8x, ArcGIS 10.8x (ArcView/ArcMap)

Personal Skills

Good analytical skills

Good Communication skills

Team player

· Good time management

Hard worker

Interpersonal

Prioritization

### **EMPLOYMENT HISTORY**

Current employer : University of Venda

Current Position : Associate Professor of Practice

Year : July 2022 to date

Responsibilities : Conduct research, supervise postgraduate students proposals development/attract

funding, project management.

Current employer : University of South Africa
Current Position : Postdoctoral Fellow
Year : October 2021 to date

**Responsibilities**: Conduct research, supervise postgraduate students proposals development/attract

funding, project management.

Current employer: Naledzi Environmental Consultants (Pty) LtdCurrent Position: Director and Principal Environmental Scientist

Year : October 2003 to date

**Responsibilities**: Day to day running of the company, inclusive of proposals development/attract funding, project management, undertaking environmental consulting services, leading staff members, financial management, strategy implementation, liaison with stakeholders such as financiers, bankers, SARS amongst others.

Previous employer : University of Venda School of Environmental Sciences

Position : Junior Part-Time Lecturer (2002) and a Replacement Lecturer (2013/14/17)

**Department**: Ecology and Resource Management

**Year** : 2002, 2013, 2014 and 2017

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

Responsibilities : This role involved teaching the following modules, i.e. (a) Environmental Impact Assessment (EIA) (b) Photogrammetry and Environmental Mapping and (c) Evaluation and Conservation of Biodiversity and (d) Community Ecology for Environmental Management. The role also included leading student excursions, demonstrations, examination setting, marking and general administration.

**Previous employer**: University of Limpopo – Faculty of Science and Agriculture

Position : Lecturer

**Department**: Geography and Environmental Studies

**Year** : 2018

**Responsibilities**: This role involved teaching the following modules, i.e. (a) Environmental Studies (Environmental Impact Assessment (EIA), and (b) Tourism Studies. The role also included leading student excursions, demonstrations, examination setting, marking and general administration.

#### PROFESSIONAL REGISTRATION AND MEMBERSHIPS

- Registered as a Professional Natural Scientist (400287/16) in the field of Environmental Sciences with the South African Council for Natural Scientific Professions (SACNASP), 2016-to date.
- Registered as an Environmental Scientist with the Southern African Institute for Ecologists and Environmental Scientists (SAIEES), 2007-to date.
- Registered as a Environmental Assessment Practitioner with the Environmental Assessment Practitioners Association of South Africa (EAPASA), 2019-to date.

### Memberships

- International Association for Impact Assessment (IAIAsa) (2004 to date)
- South African Wetland Society (2019 to date)
- Institute of Waste Management in Southern Africa (2010 to date)
- Institute of Environmental Management and Assessment (Britain, 2016 to 2019, 0065648)

### **EXTRA-MURAL AND COMMUNITY OUTREACH ACTIVITIES**

- Community outreach and awareness
  - Environmental awareness programs for the Mphaphuli Development Trust, from 2011 to date.
- Media or TV appearances: Advocating Environmental Science and Management
  - 2022: Capricorn FM What does being an Environmental Scientist entail
  - 2022: SABC News Channel 404 EAPASA and the IAIA Award
  - 2022: Newzroom Afrika Environmental Assessent Professions
  - 2022: SAFM The formation of an Environmental Professional Body for SA
  - 2022: SABC Phalaphala FM The Environmental Sciences Profession in SA
  - 2019: SABC Phalaphala FM Environmental Awareness Programmes Civic Education.
  - o 2019: SABC Phalaphala FM Awareness Programme on National Wetland Indaba
  - 2019: SABC TV Zwamaramani Wetlands Awareness Programme
  - o 2019: Vhembe FM Communty innovation and environmental awareness
  - 2012: SABC TV Its for Life Programme Day on the job with a graduate, December 2012

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Reading newspapers and scientific journals, watching TV, playing leisure football and jogging.

#### PROJECT INVOLVEMENTS AND FUNDING MOBILIZATION

- 1. Mukhase Environmental Education Centre I was responsible for the development of proposals, submission and eventual monitoring of the funds, R12.5m funded by the National Department of Forestry, Fisheries and the Environment (DFFE) on behalf of the Mphaphuli Development Trust
- 2. Nandoni Dam Eco Park I was responsible for the development of proposals, submission and eventual monitoring of the funds, R15m funded by the National Department of Forestry, Fisheries and the Environment (DFFE) on behalf of the Mphaphuli Development Trust.
- 3. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Transnet SOC Limited to carry out an Environmental Impact Assessment, Water Use License and Borrow Pit Application for the proposed expansion of the Lephalale Railway Yard from a 100 to a 200 wagon train yard. This is a Strategic Infrastructure Project (SIP) as part of the National Development Plan.
- 4. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Vanchem Vanadium Products to prepare a Water Use License and Waste Management License Ground and Surface Water Quality Monitoring Requirements Report for Vanchem's new Slimes and Calcine Disposal Facility situated in Ferrobank, Emalahleni in the Mpumalanga Province.
- 5. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Samin Group Pty Ltd to carry out an Environmental Impact Assessment in support of a Prospecting Right Application with Bulk Sampling. The prospecting right area is located on state-owned land west of the Kruger National Park at Gumbu (also known as Madimbo Corridor), approximately 100km east of Musina in the Limpopo Province.
- 6. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Rakhoma Mining Resources (aka Vanchem Vanadium Products) to conduct an integrated Environmental Impact Assessment Study for an Environmental Authorisation and Waste Management License including an Integrated Water Use License Application in support of a Mining Right Application for the proposed 'Geluk Mine', Limpopo Province.
- 7. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to prepare the Atmospheric Impact Reports, manage technical studies and conduct the public participation process for Eskom's application for postponement from the Minimum Emission Standards compliance time frames for ten (10) coal-fired power stations located in the Vaal and Mpumalanga Highveld Region.
- 8. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to prepare the Atmospheric Impact Report and conduct the public participation process for an application for postponement from the Minimum Emission Standards compliance time frames for

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Eskom's Tutuka power station situated at Standerton in the Mpumalanga Province.

- 9. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by iPDSA on behalf of the Gauteng Department of Infrastructure Development (GDID) to carry out a Basic Assessment Process and integrated Water Use License Application for the proposed development of the new 500 bed Dr Yusuf Dadoo Hospital at Monument Ext 1 in Krugersdorp East in the West Rand District of Gauteng Province.
- 10. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Tholoana Sustainable Development and Environmental Consultants to conduct an Ecological Sensitivity Scan for the proposed Pam Brink Water Connection Feeder Pipe from Pam Brink Reservoir to Geduld water reticulation network in Springs within Ekurhuleni Metropolitan Municipality of Gauteng Province.
- 11. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to conduct the public participation process in support of an application for renewal of the Atmospheric Emission License for Gourikwa power station located 13km west of Mossel Bay in the Western Cape Province.
- 12. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to conduct a public participation process in support of an Atmospheric Emission License variation request for Medupi power station south-west of Lephalale town in the Limpopo Province.
- 13. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to conduct a public participation process in support of an Atmospheric Emission License variation request for Ankerlig power station situated in Atlantis Industrial, Cape Town in the Western Cape Province.
- 14. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited to conduct a public participation process in support of applications for renewal of the Atmospheric Emission Licenses for several of Eskom's power stations, namely Acacia (Cape Town), Port Rex (East London), Ankerlig (Atlantis), Camden (Ermelo), Grootvlei (Balfour), Majuba (Amersfoort) and Tutuka (Standerton).
- 15. Senior Environmental Scientist responsible for planning, research and report writing when Naledzi Environmental Consultants was appointed by Eskom SOC Limited (Distribution: Northern Region) to amend the Environmental Authorization for the Lethaba-Resinga 66kV power line. The study site is situated at Nkowankowa village in Greater Tzaneen Municipality, Mopani District of Limpopo Province.
- 16. Senior Environmental Scientist responsible for planning, research, and report writing when Mogale City Local Municipality appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment (Basic Assessment Process) for the construction of a cemetery and waste transfer station. The project site is located on Portion 22 Rietspruit

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: <u>dmusetsho@naledzi.co.za</u> or <u>musetkd@unisa.ac.za</u>

395JQ 11km west of Magaliesburg in Mogale City Local Municipality, West Rand District Municipality in Gauteng Province.

- 17. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Holdings SOC to carry out an Environmental Impact Assessment for the Soweto Integration Project on behalf of Eskom Transmission. The project entailed the construction of a 30km, 400kV power line from Etna Substation (Lenasia south) to Quattro Substation (a new proposed substation in proximity to the Soweto Cooling Towers) in Gauteng Province.
- 18. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 15km, 132kV power line from Erasmus (Bronkhorstpruit) substation to Bonamanzi (Bronkhorstpruit Dam) substation in the Bronkhorspruit area, Gauteng Province.
- 19. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 12km, 132kV power line from Rayton substation to Bynes substation in the Rayton area, east of Pretoria, Gauteng Province.
- 20. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 40km, 132kV power line from Spitskop (Northam) substation to Mamba (Koedoeskop) substation in the Northam/Koedoeskop area, Waterberg District, Limpopo Province.
- 21. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Distribution to carry out an Environmental Impact Assessment for the construction of a 20km, 132kV power line from Moedwil (Moedwil farming area, outside Rustenburg) substation to Swartruggens substation.
- 22. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by the Limpopo Department of Roads and Transport to carry out an Environmental Impact Assessment for the upgrade/resurfacing of the Madikwe Game Reserve/Derdepoort Border Post gravel road, South Africa and Botswana periphery, Limpopo Province.
- 23. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 30km, 132kV power line from the existing Merensky Substation to the proposed two (2) new substations at Kennedy's Vale and Kalkfontein, Between the Steelpoort and Roossenekal area, Limpopo Province.
- 24. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Cape Malting House (FABCOS) to carry out an Environmental Impact Assessment for a state of the art Commercial Malt Production Plant in Ritchie, Frances Baard District, Northern Cape Province.

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: <u>dmusetsho@naledzi.co.za</u> or <u>musetkd@unisa.ac.za</u>

- 25. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Bakwena Ba Phalane Traditional Community and Mantra Mineral Development to undertake a public consultation process and develop a prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of iron ore and several other ore bodies in the Koedoeskop / Nooitgedacht area, Thabazimbi Local Municipality, Limpopo Province.
- 26. Senior Environmental Scientist responsible for planning, research, and report writing when Tshanduko Minerals Pty Ltd appointed Naledzi Environmental Consultants to conduct a public consultation process and development of the prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of **Coal** north of Louis Trichardt and also north of the Soutpansberge just east of the N1 National Toll Road in the magisterial district of Makhado in the Limpopo Province.
- 27. Senior Environmental Scientist responsible for planning, research, and report writing when Tshanduko Minerals Pty Ltd appointed Naledzi Environmental Consultants to undertake the public consultation process and development of the prospecting Environmental Management Plan (EMP) with regard to a Prospecting Right Application for the prospecting of Limestone in the Kalkbank area located halfway between Dendron and Polokwane in the magisterial district of Aganang in the Limpopo Province.
- 28. Senior Environmental Scientist responsible for planning, research, and report writing when Mogale City Local Municipality appointed Naledzi Environmental Consultants to conduct a Waste License Audit for the Luipaardsvlei Landfill Site, 2013 and 2014
- 29. Senior Environmental Scientist responsible for planning, research, and report writing when the Thulamela Local Municipality appointed Naledzi Environmental Consultants to conduct a Waste License Audit for the Muledane Landfill Site, 2013.
- 30. Senior Environmental Scientist responsible for planning, research and report writing when the NCPC appointed Naledzi Environmental Consultants to participate on the NCPC Demonstration Cleaner Production Programme for Gauteng. The companies assessed included Hudson and Knights in Boksburg, Astral Foods in Olifantsfontein and Premier Foods in Pretoria
- 31. Senior Environmental Scientist responsible for planning, research, and report writing when the National Cleaner Production Centre appointed Naledzi Environmental Consultants to conduct In-plant assessments at the following companies; Chloorchem, Xertech, VHV, Illovo & Lacsa Plant
- 32. Senior Environmental Scientist responsible for planning, research, and report writing when the Royal Bafokeng Administration appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment study for the Royal Bafokeng Sports Palace (Stadium) in preparation for the 2010 World Cup Soccer Tournament, Rustenburg.
- 33. Senior Environmental Scientist responsible for planning, research, and report writing when Moses Kotane Local Municipality appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the establishment of Pella Sports Park (which included the establishment of the spectator stands, track fields, tennis courts, parking

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areas, etc) in the Bojanala District of the North West Province.

- 34. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Transmission to carry out an Environmental Impact Assessment for the construction of 30km 2x400kV Power Lines from Glockner (near Vaal Triangle) substation to Etna (near Soweto) substation in the Gauteng Province.
- 35. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by Eskom Transmission to carry out an Environmental Impact Assessment for the construction of 7km 2x275kV Power Lines from Etna substation to a proposed new substation in Mondeaur area of the Gauteng Province.
- 36. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a combination of infrastructure development (16km 132kV power line, substation and feeder bays) in the Khutala, Kendal and Argent areas of the Mpumalanga Province.
- 37. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a combination of infrastructure (100mx100m substation, 88kV Chickadee lines, 132kV Feeder Bay and a telecommunication tower) in the Ermelo area of the Mpumalanga Province
- 38. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 100mx100m proposed Botlokwa Substation and associated 14km 132kV Power line from the existing Tabor Substation to Botlokwa in the Limpopo Province
- 39. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 2.5km 132kV Power Line from the existing Jane Furse
- 40. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 50km 132kV Power Line from Venulu Substation to Makonde Substation in the Vhembe District of the Limpopo Province.
- 41. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 21km 132kV Power Line from Tabor Substation to Flurian Tee station in the Vhembe District of the Limpopo Province.
- 42. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 19km 132kV Power Line from Mapoch Substation to Simplon Substation in the Roosenekal area of the Mpumalanga Province.
- 43. Senior Environmental Scientist responsible for planning, research, and report writing when Eskom Distribution appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the construction of a 9km 132kV Power Line from Goedgevonden Substation to a proposed Grootpan Substation in the Ogies area of the

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Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

Mpumalanga Province.

- 44. Senior Environmental Scientist responsible for planning, research, and report writing when the Royal Bafokeng Administration appointed Naledzi Environmental Consultants to carry out an Environmental Impact Assessment for the establishment of Lebone II College of the Royal Bafokeng in Rustenburg
- 45. Senior Environmental Scientist responsible for planning, research and report writing when Naledzi Environmental Consultants was appointed by the Department of Economic Development, Environment and Tourism to develop a Phase II State of Environment Report for the Limpopo Province. The Phase II State of Environment Report was launched in November 2006.
- 46. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by the Department of Environmental Affairs and Tourism to implement a Soil Conservation Project (construction of gabion structures and planting of indigenous plant species) in the Batlhabine area of the Greater Tzaneen Local Municipality, Mopani District of the Limpopo Province.
- 47. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by the Department of Environmental Affairs and Tourism to implement an Alien Plant Species eradication programme on top of the Soutpansberg Mountains, as part of the Soutpansberg Biosphere Reserve Initiative, Makhado Local Municipality of the Vhembe District.
- 48. Senior Environmental Scientist responsible for planning, research, and report writing when Naledzi Environmental Consultants was appointed by the Department of Water Affairs and Forestry to carry out an Environmental Impact Assessment for the construction of water pipelines and related infrastructure along the Great Letaba Dam, Limpopo Province.
- 49. Senior Environmental Scientist responsible for planning, research, and report writing when the Ekurhuleni Metropolitan Municipality appointed Naledzi Environmental Consultants to conduct an Environmental Impact Assessment for the Apex Sewer Reticulation Network in Benoni, Gauteng Province.
- 50. Senior Environmental Scientist responsible for planning, research and report writing when Madibeng Local Municipality appointed Naledzi Environmental Consultants to conduct an Environmental Impact Assessment for the upgrading of Klipgat Cemetery. The EIA was completed and the reports approved by the Department of Agriculture, Conservation, Environment and Tourism
- 51. Senior Environmental Scientist responsible for planning, research and report writing when Madibeng Local Municipality appointed Naledzi Environmental Consultants to conduct an Environmental Impact Assessment for the upgrading of Segwaelane Cemetery. The EIA was completed and the reports approved by the Department of Agriculture, Conservation, Environment and Tourism
- 52. Senior Environmental Scientist responsible for planning, research and report writing when Madibeng Local Municipality appointed Naledzi Environmental Consultants to conduct an Environmental Impact Assessment for the upgrading of Wonderkop Cemetery. The EIA was completed and the reports approved by the Department of Agriculture, Conservation, Environment and Tourism
- 53. Senior Environmental Scientist responsible for planning, research and report writing when Madibeng Local Municipality appointed Naledzi Environmental Consultants to conduct an Environmental Impact Assessment for the upgrading of Mothutlong Cemetery. The EIA was

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completed and the reports approved by the Department of Agriculture, Conservation, Environment and Tourism

54. Senior Environmental Scientist responsible for planning, research, and report writing when BKS Consulting Engineers appointed Naledzi Environmental Consultants on behalf of the Department of Water Affairs and Forestry to conduct an Environmental Impact Assessment for the Lebalelo Water Supply Scheme, Sekhukhune District of Limpopo Province

#### SCIENTIFIC AND OTHER OUTPUT

#### **Peer-reviewed Publications**

55. Musetsho, K.D.; Chitakira, M.; Nel, W. Mapping Land-Use/ Land-Cover Change in a Critical Biodiversity Area of South Africa. Int. J. Environ. Res. Public Health 2021, 18, 10164. https://doi.org/ 10.3390/ijerph181910164

#### **Books**

None

#### **Conference Proceedings Accepted**

- 56. Musetsho, K.D.\*, Chitakira, M. & Nel, W. Land use land cover change science and community perceptions, a case of the Mphaphuli community. Society of South African Geographers & Southern African Association of Geomorphologists 2021 Joint Biennial Conference (6-8 September)
- 57. Musetsho, K.D.\*, Chitakira, M. & Nel, W. 2021. Flagging ecosystem services as a trading commodity for Africa's development, a case of the Mphaphuli community, South Africa. Virtual online international conference: African Continental Free Trade Area [ACFTA] and Transformation in Southern and the Sub Saharan Africa in Covid-19, Agenda 2030, African Agenda 2063 and fourth industrial revolution phase, 27-29 october 2021.

### Oral presentations (no proceedings, Abstract and presentation only)

- 58. Musetsho KD and Chitakira M. 2022. Community participation and the assessment of land-use land-cover change drivers, a case of the Mphaphuli Community in South Africa. 41<sup>st</sup> Annual Conference of the International Association for Impact Assessment (IAIA), 4-7 May 2022, Vancouver, Canada
- 59. Musetsho K.D, Chitakira M and Nel W. 2021. The link between rural and urban ecosystem services, a case of the Mphaphuli community. IERM Virtual Convention, 2-3 September 2021.
- 60. Musetsho K.D, Chitakira M and Nel W. 2021. Mapping land use land cover changes and implications for rural communities, a case of the Mphaphuli community. IAIAsa 2021 virtual conference Re-Thinking IEM in pursuit of the Sustainable Development Goals on all three days 17, 18 & 19 August 2021
- 61. Musetsho K.D, Chitakira M and Nel W. 2021. Valuing ecosystem services associated with a strategic water source area, a case of the Mphaphuli community, south africa. IAIAsa

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2021 virtual conference Re-Thinking IEM in pursuit of the Sustainable Development Goals on all three days 17, 18 & 19 August 2021

62. Musetsho K.D, Chitakira M and Nel W. 2021. Implications of land use land cover changes on wetlands, a case of the Mphaphuli Traditional Authority, South Africa. National Wetlands Indaba Virtual Conference, 20-21 october 2021.

### Seminar, Invited speaker, Guest lectures and other invitations

- 63. **Musetsho K.D, Nephawe K.A, Marshall T and Mokgatle O. 2020**. Advancing careers in the natural science profession through lifelong learning, Science Forum South Africa, Protea Hotel Fire and Ice, 09-11 December, Pretoria, South Africa (*Invited Panelist*).
- 64. **Musetsho KD. 2019**. Next generation change makers: Scaling out for impact (SOFI), A co-venture between Innovate UK, Newton Fund and the Technology Innovation Agency of South Africa, 19 October, South Africa/UK (Invited Panelist)

### Workshop or other scientific meeting attendance (without presentation)

YEAR	RESPONSIBILITY	
2006 IAIAsa Conference, North West, Kwa Maritane	Conference attendee	
2007 IAIAsa Conference, Western Cape, Somerset West	Conference organizer, attendee	
2008 IAIAsa Conference, Limpopo, Bela Bela	Conference Organiser, Session Chair	
2009 IAIAsa Conference, Wilderness, Southern Cape	Conference attendee	
2010 IAIAsa Conference, Gauteng	Conference attendee	
2011 IAIAsa Conference, KZN, Wild Coast	Conference attendee, paper presentation adjudication panel,	
2012 IAIAsa Conference, Somerset West	Conference attendee, conference session chair	
2013 IAIAsa Conference, Free State, Thaba Nchu	Conference attendee, conference session chair	
2014 IAIAsa Conference, Gauteng, Midrand	Conference attendee	
2015 IAIAsa Conference, KZN, Drakensburg	Conference attendee	
2019 National Wetlands Indaba, SAWS Conference, Tzaneen, Limpopo	Conference attendee	
2020 National Wetlands Indaba,	Conference attendee, presenter	

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

SAWS Conference, Johannesburg, GP	
2022 International Association for	Conference attendee, presenter
Impact Assessment Conference,	
Vancouver, Canada	

#### STUDENT SUPERVISION RECORD

### **Graduated or accepted**

#### **Doctoral**

None

#### **MSc**

**Mulaudzi T. (MSc) -** Investigating post-environmental authorization compliance of road development projects in Limpopo Province, South Africa". Ms Mulaudzi graduated in 2017, University of Free State, (*Graduated*, December 2017)

### In progress

#### MSc

Mphaphuli P – Assessing sustainable water, energy and food (WEF) nexus smart innovations and practices in Luvuvhu and Nzhelele River Catchments, South Africa, University of Venda.

#### **Doctoral**

**Feleke Alye Asrat (PhD) - R**emote sensing on agricultural production from climate change and human induced activities in Amhara Region, Ethiopia

### FUNDING AGENCY REVIEW, THESIS EXTERNAL EXAMINER AND TEACHING

### Funding proposal and Thesis (MSc/PhD) reviewer

None.

### External examiner and Module Moderation (Undergraduate and Postgraduate modules)

### Third-year

- ERM3541 Resource Evaluation and Information System, University of Venda, 2013
- ERM3641 Environmental Impact Assessment and Modelling, University of Venda, 2013
- Environmental Sciences BSc Qualification Design, University of South Africa, 2018
- SENB031 Tourism Studies, University of Limpopo, 2018
- SENB032 Impact Studies, University of Limpopo, 2018

### Fourth-year or Honours modules

• None

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: dmusetsho@naledzi.co.za or musetkd@unisa.ac.za

### **Teaching and Learning experience**

Years	Module	Qualification	University and role
2002-2002	ERM 212 - Photogrammetry and Environmental Mapping	B.EnvM	Venda, Junior Lecturer, curriculum reviewand development
	ERM 222 - Evaluation and Conservation of Biodiversity		
	ERM 102 - Ecology and Resource Management	B.EnvM	Venda, Junior Lecturer, curriculum reviewand development
2013-2013	ERM 3641 – Environmental Impact Assessment and Modelling	B.EnvSc	Venda, Replacement Lecturer
2018-2019	SENB 031 – Tourism Studies SENB 032 – Impact Studies	BSc BSc	Limpopo, Replacement Lecturer

### STEERING/TECHNICAL COMMITTEE, REVIEW PANEL, EDITORIAL, WORKING GROUP AND BOARD MEMBERSHIP

- Reference Group Member for the Water Research Commission: MapWAPS Mapping woody invasive alien plant species and their implications in strategic water source areas, April 2022 to March 2025
- Reference Group Member for the Water Research Commission; A framework for designing viable mechanisms for securing hydrological ecosystem services in South Africa, April 2021 to March 2023.
- A member of the South African Affiliate to the International Association for Impact Assessment (IAIAsa), since 2004.
- Board Member: Environmental Assessment Practitioners Association of South Africa (EAPASA): 2012 to current.
- Chairperson of the Limpopo Branch of the International Association for Impact Assessment, South Africa. This led to being part of the National Executive Committee of IAIAsa for a period of 4 years (2005-2008)
- National Executive Member and Deputy Chairman of the IAIAsa, 2005-2008
- Council Member: South African Council for Natural Scientific Professions, 2015 to 2021
- Council Member (New): South African Council for Natural Scientific Professions, 2021 to 2025

Cell No: +27 83 410 1477 Tel No: +27 15 296 3988

Email: <u>dmusetsho@naledzi.co.za</u> or <u>musetkd@unisa.ac.za</u>

- Council Member: Limpopo Heritage Resources Agency, 2014 to 2017
- Member: Institute of Directors in Southern Africa (IoDSA), 2012 to current
- Executive member, Land Care District Committee for the Vhembe District, 2002
- Tribunal Member: Capricorn District Municipality's Spatial Planning Tribunal, 2017 to 2020
- Tribunal Member: Capricorn District Municipality's Spatial Planning Tribunal, 2020 to 2022

### SCIENTIFIC JOURNAL REVIEWER AND REFERENCE GROUPS

Geo: Geography and Environment, an open access journal published by the Royal Geographical Society (with IBG) and Wiley

MDPI: Land

Water Research Commisson, South Africa

#### **REFEREES**

Prof. Munyaradzi Chitakira
PhD Professor or promoter
The University of South Africa,
Environmental Sciences Department

Florida, 1710

Tel No: +27 011 471 3220 Cell No: +27 073 909 2999 Email: chitam1@unisa.ac.za

Dr Jacobus N Steyn Senior Lecturer, Ecology and Resource Management University of Venda School of Environmental Sciences P/Bag X 5050 Thohoyandou 0950

Tel: +27 015 962 8594 Fax: +27 015 962 8597 Cell: +27 0824498027 Email: eunit@univen.ac.za

Dr Fhatuwani Lastborn Mutuvhi Colleague Chief Director – Department of Communication 5173/1 Arundo Estate 66 Rietspruit Avenue The Reeeds Ext 45, Centurion Tel: +27 012 421 8090

Fax: +27 086 656 6785 Cell: +27 082 464 9626 Email: fmutuvhi@dtps.gov.za



### herewith certifies that Khangwelo Desmond Musetsho

Registration Number: 400287/16

is a registered scientist

in terms of section 20(3) of the Natural Scientific Professions Act, 2003
(Act 27 of 2003)
in the following fields(s) of practice (Schedule 1 of the Act)

Environmental Science (Professional Natural Scientist)

Effective 9 November 2016

Expires 31 March 2023



Chairperson

Chief Executive Officer

