

Curriculum Vitae

Dr Sindila MWIYA (*PhD, MPhil/PG Cert, BEng (Hons), Pr. Eng*)

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Professional Profile

Dr Sindila Mwiya has more than twenty-Five (25) years of practical field-based technical industry experience covering strategic and technical permitting and de-risking advisory support in Environmental Assessments (SEA, EIA, EMP, EMS), Energy (Renewable and Non-renewable energy sources), onshore and offshore resources (minerals, oil, gas and water) exploration / prospecting, feasibility / appraisal, operation and sustainable utilisation, Geophysical Surveys such as 2D, 3D and 4D Seismic, Gravity and Electromagnetic Surveys for mining, energy and petroleum (oil and gas), through to feasibility / appraisal, engineering planning, layout, designing, logistical support, recovery, production / operations, compliance monitoring, rehabilitation, closure and aftercare projects lifecycles. He continues to work internationally in onshore and offshore resources (minerals, oil, gas, and water) and energy sectors, offering strategic and technical permitting and de-risking advisory support services through to exploration, feasibility/ appraisal and production / operational stages. From Namibia's red hot offshore Orange Basin Play with multiple light sweet oil and gas discoveries by Shell Namibia B.V, TotalEnergies and Galp Energia, to the newly discovered onshore Rift Basin Plays of the Kavango Sedimentary Basin and the prolific oil and gas fields of the Middle East, Angola and the West African Gulf of Guinea, Dr Mwiya has been directly involved in providing strategic technical permitting and de-risking advisory support services, field-based aerial, ground and marine geophysical (gravity, magnetics and seismic) surveys, been onboard exploration drilling rigs, onboard production platforms, conducted public and stakeholder consultations and engagements. He is fully aware of all the competing national interests, and priorities as well as the niche donation-based business environmental advocacy opportunism that exists in the resources sectors from the local, regional, and international perspectives. He continues to work with highly technical and well organised and committed clients, various stakeholders, and third-party teams from emerging and well-established global resources and energy companies from various parts of the World such as the UK, France, USA, Russia, Canada, Australia, Germany, Finland, Latvia, Croatia, Norway, the Netherlands, Spain, Brazil, China, South Africa, Botswana, Zambia, Equatorial Guinea, Angola and Nigeria.

Through his companies, Risk-Based Solutions (RBS) and Foresight Group Namibia (FGN) which he founded, he has undertaken more than 250 projects for Local (Namibian), Continental (Africa) and International (Global) based clients. He has worked and continues to work for Global, Continental and Namibian based reputable resources (petroleum and mining / minerals) and energy companies such as Shell Namibia B. V. Limited (Namibia/ UK), Chevron (USA), Reconnaissance Energy Africa Ltd (REN/ReconAfrica) (UK/Canada/Namibia), PGS UK Exploration (UK), TGS-Nowpec (UK), Searcher (UK / Australia), CGG Services UK Limited (UK/ France/Namibia), Debmarmar (DBMN) (Namibia), Osino Resource Corporation (Canada/USA/Namibia), Broadmind Mining (Pty) Ltd (Namibia), Lepidico (Australia / UK), Maurel & Prom (France/ Namibia), BW Offshore (Norway/Singapore /Namibia), Tullow Oil (UK/Namibia), Petrobras Oil and Gas (Brazil) / BP (UK)/ Namibia, REPSOL (Spain/ Namibia), , MEL (UK, Namibia), Dundee Precious Metals (Namibia / Canada), Headspring Investment (Namibia/ Russia), EMGS (UK/ Norway), Best Sheer / Bohale (Namibia / China), ACREP (Namibia/Angola), Preview Energy Resources (UK), HRT Africa (Brazil / USA/ Namibia), Chariot Oil and Gas Exploration (UK/ Namibia), NABIRM (USA/ Namibia), Serica Energy (UK/ Namibia), Eco (Atlantic) Oil and Gas (Canada / USA/ Namibia), ION GeoVentures (USA), GeoPartners (UK), PetroSA Equatorial Guinea (South Africa / Equatorial Guinea/ Namibia), Preview Energy Resources (Namibia / UK), Sintezneftegaz Namibia Ltd (Russia/ Namibia), INA Namibia (INA INDUSTRIJA NAFTE d.d) (Croatia/ Namibia), Namibia Underwater Technologies (NUTAM) (South Africa/Namibia), InnoSun Holdings (Pty) Ltd and all its subsidiary renewable energy companies and projects in Namibia (Namibia / France), HopSol (Namibia/Switzerland), Momentous Solar One (Pty) Ltd (Namibia / Canada), OLC Northern Sun Energy (Pty) Ltd (Namibia) and more than 100 local companies. Dr Sindila Mwiya is highly qualified with extensive practical field-based experience in petroleum, mining, renewable energy (Solar, Wind, Biomass, Geothermal and Hydropower), Non-Renewable energy (Coal, Petroleum, and Natural Gas), applied environmental assessment, management, and monitoring (Scoping, EIA, EMP, EMP, EMS) and overall industry specific HSE, cleaner production programmes, Geoenvironmental, geological and geotechnical engineering specialist fields.

Dr Sindila Mwiya has undertaken and continues to undertake and manage high value projects on behalf of global and local resources and energy companies. Currently, (2023-2026) Dr Sindila Mwiya is responsible for strategic and technical permitting and de-risking advisory support, planning through to operational and completion compliance monitoring, HSE and engineering technical support for multiple major upstream onshore and offshore petroleum, minerals, and mining projects, Solar, Wind and Green Hydrogen projects, manufacturing and environmentally

sustainable, automated / smart and Climate Change resilient homes developments in different parts of the World, including Namibia. He continues to work as an International and National Technical Permitting and De-Risking Advisor in Resources (Mining, Oil, Gas, Water and Energy), International Resources Consultant, National Environmental Assessment Practitioner (EAP) / Environmentally Sustainable, Automated / Smart and Climate Change resilient homes developer, Public Officer / Engineering / Technical Consultant for RBS / Foresight Group Namibia, Project Manager, Programme Advisor and a member of the Programme Advisory Committee (PAC) for PhD Programme in Natural and Applied Sciences for the Department of Natural and Applied Sciences, Namibia University of Science and Technology (NUST) and has worked as a Lecturer, University of Namibia (UNAM), External Examiner/ Moderator, NUST, National (Namibia), National (Namibia) Technical Advisor (Directorate of Environmental Affairs, Ministry of Environment, Forestry and Tourism / DANIDA – Cleaner Production Component) and Chief Geologist for Engineering and Environment Division, Geological Survey of Namibia, Ministry of Mines and Energy and a Field-Based Geotechnician (Specialised in Magnetism, Seismic, Gravity and Electromagnetics Exploration and Survey Methods) under the Federal Institute for Geoscience and Natural Resources (BGR) German Mineral Exploration Promotion Project to Namibia, Geophysics Division, Geological Survey of Namibia, Ministry of Mines and Energy.

He has supervised and continues to support several MScs and PhDs research programmes / projects and has been a reviewer on international, national and regional researches, plans, programmes and projects with the objective to ensure substantial local skills development, pivotal to the national socioeconomic development through the promotion of sustainable natural resources coexistence, management, development, recovery, utilisation and for development policies, plans, programmes and projects financed by governments, private investors, and Namibian development partners. Since 2006 until 2017, he has provided extensive technical support to the Department of Environmental Affairs (DEA), Ministry of Environment, Forestry and Tourism (MEFT) through GIZ in the preparation and amendments of the Namibian Environmental Management Act, 2007, (Act No. 7 of 2007), Strategic Environmental Assessment (SEA) Regulations, Environmental Impact Assessment (EIA) Regulations as well as the SEA and EIA Guidelines and Procedures all aimed at promoting effective environmental assessment and management practices in Namibia. Among his academic achievements, Dr Sindila Mwiya is a holder of a PhD within the broader fields of Engineering Geology/Geotechnical / Geoenvironmental / Environmental Engineering, Knowledge-Based Systems (KBS) and Artificial Intelligence (AI) with a research thesis titled Development of a Knowledge-Based System Methodology (KBSM) for the Design of Solid Waste Disposal Sites in Arid and Semiarid Environments, MPhil/PG Cert and BEng (Hons) (Engineering Geology and Geotechnics) qualifications from the University of Portsmouth, School of Earth and Environmental Sciences, United Kingdom.

During the 2004 Namibia National Science Awards, organised by the Namibian Ministry of Education, and held in Windhoek, Dr Sindila Mwiya was awarded the Geologist of the Year for 2004, in the professional category. Furthermore, as part of his professional career recognition, Dr Sindila Mwiya is a life member of the Geological Society of Namibia, Consulting member of the Hydrogeological Society of Namibia and a Professional Engineer registered with the Engineering Council of Namibia.

Skills and Experiences with more than 250 Consulting Projects undertaken 2004-To Date

Multidisciplinary Experienced PhD Degree-Qualified Professional Registered Engineer with the Engineering Council of Namibia specialised in the following:

- ❖ Onshore and Offshore Mineral (Exploration and Mining)
- ❖ Onshore and Offshore Petroleum (Oil and gas Exploration and Production)
- ❖ Onshore and Offshore Energy (Fossil Fuels and Renewables)
- ❖ Water Resources Exploration, Recovery and Sustainable Utilisation
- ❖ Development of Environmentally Sustainable, Automated / Smart and Climate Change resilient homes, offices, housing schemes, settlements, towns, and cities
- ❖ Specialist skills in Environmental policy formulation, development and technical support
- ❖ Pollution Prevention (P2) and Cleaner Production (CP) Programmes, from Development to Management, Evaluation and Monitoring
- ❖ Municipal and Mine Waste Streams and Systems Analysis, Waste 3Rs (Reduce, Reuse and Recycling), Landfill / Waste Disposal Sites Development and Management
- ❖ Land Use Planning for Rural and Urban Regional and Local Government Developmental Plans, Projects, Programmes and Strategies
- ❖ Geological Technical Support Services to Large and Small Scale, Exploration, Mining and Oil Companies
- ❖ Ground Engineering Site Investigation [Geo-Engineering] for various Local, Regional and National Infrastructure Development Projects
- ❖ Water and Construction Materials Investigation, Evaluations, Development, Management and Monitoring
- ❖ Programmes and Strategies Management and Technical Support Services to Line Ministries, Regional Councils and Local Authorities
- ❖ Strategic Environmental Assessments (SEAs), Environmental Impact Assessments (EIAs), Environmental Management Plans (EMPs), Environmental Management Systems (EMSs) and Environmental, Social Governance (ESG).
- ❖ Specialist training and industry research.

Educational Background

2000 - 2003	University of Portsmouth, UK: Doctor of Philosophy (PhD) in Engineering Geology /Geotechnical / Environmental Engineering (Geoenvironmental Engineering and Artificial Intelligence) - Research Title: "Development of a Knowledge-Based System Model Methodology (KBSMM) for Design of Solid Waste Disposal Sites in Arid and Semiarid Environments" with test sites covering all the Regions of Namibia
1999 - 2000	University of Portsmouth, UK: MPhil /Postgraduate Certificate in Scientific Research Methods (PG Cert)
1996 - 1999	University of Portsmouth, UK: BEng (Hons) Engineering Geology and Geotechnics (2/1, Upper Class) and Neil Duncan Special Award for best final year research project on Design of Kupferberg landfill site investigation (environment, geology, geophysics, and engineering) and design, Windhoek, Namibia
1995 - 1996	University of Portsmouth, UK: Advanced Certificate in Extended BEng (Hons)/ MEng Foundation year. Subjects studied are Mathematics (A+), Design (B), Electrical Science (A+), Engineering Science (A), Engineering Material (A+) and Communication Skills (A).
1991	Sesheke Secondary School: O-Level Certificate - Subjects studied: English language (B), Mathematics (A) Science (B) Geography (B), Biology (B), Silozi Language (B), Commerce (C) and Religious Education (C).

Employment / Consulting Contracts

2004- Present	Risk-Based Solutions (RBS) CC Founder, Technical Permitting & De-Risking Advisor in Natural Resources covering: Minerals Exploration & Mining / Petroleum Exploration & Production / Energy / Water / Environmental Assessments & Management (ESG, SEA, EIA, EMP, EMS) / Automated Property Developer / Programmes and Projects Management / Training / Research
2023-Present	Member of the Programme Advisory Committee (PAC) for PhD Programme in Natural and Applied Sciences for the Department of Natural and Applied Sciences, Namibia University of Science and Technology (NUST)
2019-Present	Programme Advisor for the Department of Natural and Applied Sciences a-Namibia University of Science and Technology-NUST.
2000-2014	Part-time Lecturer, Faculty of Science, University of Namibia (UNAM) worked with Prof A. F. Kamona and External Examiner/Moderator-Namibia University of Science and Technology-NUST and worked with Prof. Mutjinde Katjiua.
2001- 2004	Chief (4A L1) Professional Deputy Director Level: Division Engineering and Environment, Directorate of Geological Survey, Ministry of Mines and Energy, Namibia.
1999-2001	Senior Engineering and Environmental Geologist, Applied Geosciences, Directorate of Geological Survey, Ministry of Mines and Energy, Namibia.
1992-1995	Geophysics Geotechnician - Field-Based Geotechnician (Specialised in Magnetism, Seismic, Gravity and Electromagnetics Exploration and Survey Methods) under the Federal Institute for Geoscience and Natural Resources (BGR) German Mineral Exploration Promotion Project to Namibia, Geophysics Division, Geological Survey of Namibia, Ministry of Mines and Energy.

Professional membership

- Registered Professional Engineers with the Engineering Council of Namibia (PE24016).
- Member of the Geological Society of Namibia
- Consulting member of the Hydrogeological Society of Namibia

Languages

- English –Excellent (Read, write, and speak)
- Silozi and Subiya – mother tongue (Read, write, and speak)

Selected Publications and Conference Papers

1. Onjefu S, Johannes N, Abah J, Onjefu L, Mwiya S., 2022. Natural radioactivity levels and evaluation of radiological hazards in Usakos marble, Erongo region, Namibia. International Journal of Radiation Research, 20 (2): 403-409.
2. Onjefu, S. A., Iyambo, M. L., Abah, J., and Mwiya, S., 2021. Radiological analysis of the suitability of Erongo granite for building material. Geomatics, Natural Hazards and Risk, 12(1), 181-197.

3. Mwiya, S., 2020. Facts on the Law and Petroleum (Oil and Gas) Exploration in Namibia, New Era Publication Corporation, Windhoek, 9th October 2020.
4. Mwiya, S (ed.), 2006. Cleaner Production in Namibia – Cleaner Production Training Booklet: A Foresight to Economic, Social and Environmental Benefits of Adopting Cleaner Production. Prepared for the Directorate of Environmental Affairs, Ministry of Environment, Namibia, 34 pp.
5. Mwiya, S (ed.), 2005. Cleaner Production in Namibia – Cleaner Production Implementation Strategy (Manufacturing and Services Sectors). Prepared for the Directorate of Environmental Affairs, Ministry of Environment, Namibia, Vol. 1, 44 pp.
6. Mwiya, S (ed.), 2005. Cleaner Production in Namibia – Cleaner Production Context Analysis (Manufacturing and Services Sectors). Prepared for the Directorate of Environmental Affairs, Ministry of Environment, Namibia, Vol. 2, 92 pp.
7. Mwiya, S., Hughes, D. J., and Giles, D. P., 2005. Decision Support Tool (DTS) for municipal solid waste disposal site development cycle for arid and semiarid environments. *Quarterly Journal of Engineering Geology and Hydrogeology*, Geological Society, London,
8. Mwiya, S., Hughes, D., J., and Giles, D., P., 2005. Strategies for identifying and designing safe, economic municipal solid waste disposal sites in the arid zones of Southern Africa, *Integrated Waste Management and Pollution Control: Policy and Practice, Research and Solutions*, Waste 2004, 28-30, Sep, Warwickshire, England, 253-264.
9. Mwiya, S., 2005. Waste Management in Namibia-*In: Integrated State of the Environment Report*, Directorate of Environmental Affairs, Ministry of Environment and Tourism, Windhoek, pp 29.
10. Mwiya, S., 2005. Decline of Water Availability in Namibia-*In: Integrated State of the Environment Report*, Directorate of Environmental Affairs, Ministry of Environment and Tourism, Windhoek pp 19.
11. Mwiya, S., 2005. Pollution and Toxics in Namibia-*In: Integrated State of the Environment Report*, Directorate of Environmental Affairs, Ministry of Environment and Tourism, Windhoek, pp 18.
12. Mwiya, S., 2004. Thematic Mapping in Engineering Geology: Towards a Decision Support Tool (DST) in Urban Land Use Planning and Infrastructure Development in Developing Countries, *Geosciences Africa 2004*, University of Witwatersrand, Johannesburg, South Africa, Abstract Volume, pp 487.
13. Mwiya, S., 2004. A Knowledge-Based System Model Methodology (KBSMM) for Development and Management of Mine Waste sites in Arid and Semiarid Environments of Southern Africa, *Geosciences Africa 2004*, University of Witwatersrand, Johannesburg, South Africa, Abstract Volume, pp 486.
14. Mwiya, S., 2003. An Overview of Semi-Quantitative, Qualitative and Knowledge-Based System (KBS) Methodologies Relevant to Solid Waste Disposal Site Design in Arid and Semiarid Environments. Geological Survey of Namibia, Windhoek, *Communication 13*, 1 -8.
15. Mwiya, S., 2003. A Knowledge-Based Approach to Municipal Solid Waste Disposal Site Development in the Karstified Dolomitic Terrain around the Town of Tsumeb in North-Central Namibia, Geological Survey of Namibia, Windhoek, *Communication 13*, 9-21.
16. Hahn, L., Solesbury, F., and Mwiya, S., 2004. Assessment of Potential environmental Impacts and Rehabilitation of Abandoned Mine sites in Namibia, Geological Survey of Namibia, Windhoek, *Communication 13*, 85-91.
17. Mwiya, S., 2003. Development of a Knowledge-Based System (KBS) Methodology for Design of Solid Waste Disposal Sites in Arid and Semiarid Environments. PhD thesis, University of Portsmouth, UK, 348 pp.
18. Mwiya, S., 2002. Ground Characterisation and Risk Evaluation of Windhoek Class three Municipal Solid Waste Disposal sites. In: J. L., Van Rooy and C. A. Jermy (eds), *Engineering Geology for developing countries*, IAEG, Durban, 1,1236-1246.
19. Hahn, L, Mwiya, S., and L. Kawali, 2002. Small-scale mining and environmental impacts in the Erongo Region: Conclusion and future directions. Geological Survey of Namibia / BGR Hannover, 14 pp.
20. Dill, H. G., Pöllmann, B., Bosecker, K., Hahn, L., and Mwiya, S., 2002. Supergene mineralization in mining residues of the matchless cupreous pyrite deposits (Namibia) – A clue to the origin of modern and fossil duricrusts in semiarid climates. *Journal of Geochemical Exploration*, Elsevier, 75, 43-70.
21. Mwiya, S., 2001. Groundwater and waste disposal. In: *Groundwater in Namibia, An explanation to the hydrological map*, Department of Water Affairs, MAWRD, Windhoek, 1, 40-41.

22. Hahn, L., Solesbury, F., and Mwiya, S., 2001a. Rehabilitation of abandoned mine sites. Geological Survey of Namibia / BGR, Hannover, 1, 44 pp.
23. Hahn, L., Solesbury, F., and Mwiya, S., 2001b. Rehabilitation of abandoned mine sites. Geological Survey of Namibia / BGR, Hannover, 2, 21 pp.
24. Mwiya, S., 2000. Ground Characterisation of class three Windhoek municipal solid waste disposal sites. Engineering and Environmental Geology Series, Geological Survey of Namibia, Windhoek, 74 pp.

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