

Abridged Curriculum Vitae

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Contact Information

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Professional Profile

A globally recognized and highly accomplished **Environmental Practitioner** with 15 years of experience in leading environmental impact assessments (EIAs), sustainability strategy, and climate change consulting across Southern and East Africa, including Namibia, South Africa, Zimbabwe, Zambia, Angola, Kenya, Malawi, and Tanzania. I am a true sustainability champion and partner for sustainable change, dedicated to solving complex environmental challenges and delivering sustainable solutions that protect the environment. Currently a PhD candidate at the University of Free State, my research focuses on transboundary adaptive capacity for food security, integrating indigenous knowledge and early warning systems to build resilience in climate-vulnerable regions like the Zambezi Basin.

With an extensive academic background, including an MSc in Environmental Ecology, an MSc in Development Studies, and an MBA, I provide a unique blend of deep scientific expertise and commercial acumen. I have successfully led over **200 EIA projects** across ten diverse sectors, from Energy and Water to Real Estate and Healthcare. As a Senior Environmental Practitioner, I delivered transformative projects such as the **Zero Carbon Namibia (ZCN) Net Zero Industrial Park**, a flagship initiative poised to create approximately 300 jobs and reduce **250,000 tCO₂e/year** in emissions. I am highly skilled at bridging the gap between scientific principles, policy requirements, and community needs, consistently delivering defensible solutions that are fully aligned with international standards (IFC Performance Standards, ISO 14001:2015) and local regulations.

Core Competencies & Key Achievements

- **Environmental Impact Assessments (EIAs) & Management:** Led over 200 EIAs, ensuring full compliance with national and international standards. This includes formulating comprehensive Environmental Management Plans (EMPs) and providing robust technical advisory throughout the project lifecycle, from initial concept to decommissioning.
- **Climate Resilience & Net Zero:** Developed and implemented climate-smart agriculture frameworks that have benefited over **10,000 farmers** in climate-vulnerable regions.

Expertise in turning climate challenges into opportunities by combining nature-based and state-of-the-art technologies to create powerful business cases.

- **Nature-Based Solutions & Biodiversity:** Deep expertise in applying nature-based solutions for ecological restoration and flood risk management. My work has resulted in a verifiable **95% survival rate for critical species** on project sites, including a **90% Welwitschia survival rate** during the development of a large solar facility.
 - **Multi-Sectoral Project Management:** Demonstrated ability to lead and deliver complex projects across diverse sectors, including Energy, Water, Transport, Real Estate, and Industrial. I provide certainty and manage complexity, inter-dependencies, risks, and conflicts by drawing on the right technical expertise to pre-empt and mitigate risk.
 - **Sustainability & ESG:** Skilled at transforming sustainability and ESG into measurable business value. This includes providing **sustainability assurance**, developing strategies for **responsible sourcing**, and offering advisory services in **sustainable finance**.
 - **Stakeholder & Community Engagement:** Expert at facilitating inclusive public participation processes, engaging over **1,500 Interested and Affected Parties (I&APs)**. I am skilled at conducting **economic impact assessments**, **cost-benefit analyses**, and **social value assessments** to ensure projects create tangible benefits and foster social cohesion.
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Technical Tools & Expertise

- **GIS Mapping & Spatial Analysis:** Proficient in **ArcGIS Pro** and **QGIS** for high-precision environmental assessments, including biodiversity and land-use mapping.
 - **Environmental Modeling & Risk Assessment:** Experienced in using industry-standard modeling software, including **HEC-RAS** for detailed flood risk assessments and **AERMOD** for air quality modeling. I am also skilled in **quantified risk analysis** and have expertise in developing risk assessment methods and frameworks.
 - **Project Management & Planning:** Skilled in utilizing **MS Project** and **Primavera P6** for comprehensive project, program, and portfolio management. I provide services that bridge policy and technical implementation to deliver desired outcomes.
 - **Advanced Monitoring & Surveys:** Experienced in deploying cutting-edge environmental monitoring tools, including **IoT sensors (LoRaWAN, 868 MHz)** for real-time data collection. I also conduct high-resolution site surveys using **UAVs (e.g., DJI Mavic 3)** for detailed site analysis and monitoring.
 - **Design & Assessment Software:** Proficient in **AutoCAD** for precise infrastructure layouts and designs, and experienced in conducting **Life Cycle Assessments (LCA)** and developing **Impact Dashboards**.
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Additional Areas of Expertise

- **Health, Safety, and Risk:** Expert in **human health and environmental risk assessment**, including industrial hygiene, toxicology, and epidemiology. I provide critical assistance in developing and implementing **EHS compliance & risk management systems** (e.g., ISO 14001, ISO 45001).

- **Circular Economy & Waste Management:** Expertise in developing strategies for a circular economy, resource recovery from wastewater, and contaminated site and facility solutions. I am a leader in waste and circular economy services.
- **Water & Natural Resource Management:** Skilled in **advanced drinking water treatment, water and wastewater networks**, and **water and natural resource management**. This includes expertise in hydro-geophysics and flood risk management.
- **Regulatory Expertise & Compliance:** Deep knowledge of local regulations and international standards, including **regulatory approvals** and litigation support. I work with clients to ensure their operations comply with current and emerging EHS regulations and standards.
- **Socio-Economic Advisory:** I provide strategic advice on societal impacts and policy, utilizing data-driven insights to help decision-makers unlock opportunities and drive sustainable change.

Education

- **PhD Candidate, Climate Change and Environmental Studies**
University of Free State, Bloemfontein, South Africa (2022 – Present)
Research Focus: "Building Transboundary Adaptive Capacity for Food Security: A Comparative Analysis of Climate-Smart Agriculture Practices Informed by Indigenous Knowledge Systems and Early Warning Systems (Case Study: Maung, South Africa, and Bulawayo, Zimbabwe)"

Research Fellow: In this role, I contribute to ongoing research and academic discourse, leveraging my practical experience to inform scientific inquiry and policy.

- **MSc Environmental Ecology**
 University of Pretoria, Pretoria, South Africa

 Achieved 80% revegetation in test sites through soil restoration strategies.
- **MSc Development Studies**
 National University of Science and Technology, Bulawayo

 Quantified US\$20M/year economic benefits from solar projects in Zambezi Valley / Basin.
- **MBA (Master of Business Administration)**
 National University of Science and Technology, Bulawayo

Focus: Strategic Management and Sustainability in Environmental Consulting / Management / Leadership

 Designed sustainability models adopted by select regional consulting firms.

- **Diploma in Project Management Foundations**

University of Cape Town, Cape Town, South Africa

Mastered project planning and risk mitigation for environmental projects.

Certifications and Training

- **ISO 14001:2015 Lead Auditor** (2020): Certified to audit environmental management systems, ensuring compliance for 20+ projects.
 - **ArcGIS Pro Advanced Certification** (2018): Enhanced biodiversity mapping for projects like the ZCN Solar Facility, Arandis, Namibia.
 - **Stakeholder Engagement and Conflict Resolution** (2016): Trained by the International Association for Public Participation (IAP2), applied in public consultations.
 - **Climate Resilience Planning** (2023): Completed at the African Climate Summit, Nairobi, Kenya, focusing on urban resilience strategies.
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Professional Experience

Associate Consultant (Senior Environmental Practitioner)

Erongo Consulting Group, Swakopmund, Namibia

2015 – Present (10 years)

- Led EIAs across Energy, Water, Transport, Real Estate, Industrial, Government, Finance, Technology, and Healthcare sectors in Southern and East Africa.
- Spearheading the Zero Carbon Namibia (ZCN) Net Zero Industrial Park, Arandis, Namibia (2024):
 - **Energy:** 150 MW Solar Facility (315 GWh/year) and 50 MW Wind Farm (110 GWh/year), reducing 250,000 tCO₂e/year.
 - **Industrial:** Green Hydrogen and Ammonia Facility (5,000 tonnes/year hydrogen, 10,000 tonnes/year ammonia).
 - **Transport:** Locomotive Workshop, transitioning to hydrogen trains by 2030.
 - Outcomes: to Create 300 jobs (60% local), contributing N\$60M/year to the economy
- Managed EIAs for mixed-use township developments in Henties Bay, Swakopmund, Windhoek, Tsumeb, Katima Mlilo, Johannesburg, Western Cape, Arandis, Karibib, Gobabis, Grootfontein, Okahandja, etc municipalities / town councils, integrating real estate, water management, and biodiversity protection.

- Developed EMPs for healthcare facilities, ensuring community health standards and construction impact mitigation.
- Provided strategic advice for government and quasi government institutions (e.g., Erongo RED, Namcol, Ministry of Education, Ministry of Justice, Erongo Regional Council, Ministry of Agriculture, Nampower, etc), focusing on sustainability, urban planning and resource management.
- Conducted compliance monitoring for industrial projects (e.g., Skorpion Zinc Mine), achieving air quality (PM10 <25 µg/m³) and water recycling (30%) targets.

Senior Environmental Scientist

Institute for Impact Sciences & Research Design, Namibia

2019 – date (6 years)

- Managed EIAs for energy, transport, and water projects, including power lines and effluent pipelines in South Africa and Zambia.
- Oversaw contaminated site remediation, achieving 85% soil recovery and 90% waste recycling rates for industrial clients.
- Provided litigation support in 3 environmental disputes, delivering defensible scientific evidence in Limpopo Province and Lilongwe, Malawi

Associate - Environmental Consultant

Magnus RSA (Pty) Ltd, Johannesburg, South Africa

2006 – 2010 (4 years)

- Conducted EIAs for mining permits and waste management projects (landfills) in South Africa and Angola.
 - Developed EMPs for public and private sector clients, including Municipalities, UN Agencies, Diplomatic Missions, etc
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Namibian Project Portfolio: Environmental & Social Impact Assessments

Sector	Project Description	Key Achievements/Roles
Energy	150 MW Solar Energy Facility, Arandis, Namibia	Led EIA, developed ESMP (PM10 <25 µg/m³, 90% Welwitschia survival), created 180 jobs.
Energy	50 MW Wind Energy Farm, Arandis, Namibia	Conducted EIA, implemented bird mitigation (<5 strikes/year), ensured noise compliance (<45 dB).
Industrial	Green Hydrogen and Ammonia Production & Storage Facility, Arandis, Namibia (2024)	Managed EIA, ensured zero-carbon production, achieved NH ₃ <50 ppm, created 40 jobs.
Transport	Locomotive Repair Workshop, Arandis, Namibia	Oversaw EIA, implemented noise control (<85 dB), facilitated hydrogen train transition plan by 2030.
Real Estate	Mixed-Use Township Development, Portion 115, Henties Bay Townland No. 133, Namibia	Led EIA, integrated sustainable land-use planning, ensured biodiversity protection in coastal dunes.
Real Estate	Mixed-Use Township Development, Portion 100, Henties Bay Townland No. 133, Namibia	Conducted EIA, managed water resource impacts, facilitated stakeholder engagement.
Healthcare	Healthcare Facility, Erf 6288, Kuisebmond, Walvis Bay, Namibia	Renewed EMP/ECC, ensured community health standards, mitigated construction impacts (dust, noise).
Water	Purified Effluent Pipeline, Erf 5748, Walvis Bay, Namibia	Developed EMP, optimized water use (20% recycling), ensured compliance with water quality standards.
Government/Public	Township Establishment, Tsumeb Extensions 14 & 15, Otjikoto Region, Namibia (2019)	Formulated EMP, ensured sustainable urban planning, integrated socio-economic benefits.
Industrial / Mining	De-watering & Disposal of Underground Water, Rosh Pinah, Namibia	Conducted impact assessment, achieved 30% water recycling, ensured no groundwater contamination.
Technology	Installation of Optic Fibre Network, Windhoek, Namibia	Team leader, minimized ecological disruption, managed permitting for urban infrastructure.
Resources/Waste	World-Class Recycling Plant, Khorixas, Namibia	Led EIA, achieved 80% waste recycling rate, implemented spill prevention measures.
Finance/Investment	Township Development, Erven Re/6 & Re/236, Klein Windhoek, Namibia	Provided due diligence, ensured compliance, supported investment case with environmental safeguards.
Government/Public	Recreational Facility with Conference Facilities, Dune 7, Walvis Bay, Namibia	Conducted EIA, ensured minimal ecological impact in Dorob National Park, facilitated stakeholder input.

Agriculture / Recreational	Decommissioning, Rehabilitation & Rezoning of a Landfill Site, Henties Bay	Managed environmental assessment, ensured proper site rehabilitation, facilitated rezoning for agriculture and recreation.
Education	Wastewater Treatment System for Epembe Secondary School, Ohangwena Region	Conducted ESIA, focused on public health and environmental protection for the school's new system.
Industrial	Seal Oil & Seal Products Processing Plant, Henties Bay, Namibia	Led EIA, assessed marine and coastal impacts, developed mitigation strategies for local biodiversity.
Real Estate	Subdivision and Rezoning for a Parking Area, Henties Bay	Conducted EIA, facilitated land-use change, managed environmental permitting for the new parking facility.
Mining/Exploration	Exclusive Prospecting Licence (EPL) 10173, Opuwo, Namibia	Conducted EIA for exploration activities, ensured minimal environmental and social disturbance in the Kunene region.
Real Estate	EMP Renewal - Fisherman's Village, Kuisebmond, Walvis Bay	Renewed ECC/EMP, ensured continued environmental compliance for the housing project.
Healthcare	ECC Renewal for Rezoning of Erf 6288, Kuisebmond, Walvis Bay	Renewed environmental clearance, verified compliance for the healthcare facility's rezoning.
Real Estate	Mixed-Use Township Development on Portion 114, Henties Bay	Conducted EIA, provided environmental guidance for the new township development.
Real Estate	Mixed-Use Township Development on Portion 117, Henties Bay	Led EIA, assessed environmental impacts and developed an EMP for the proposed township.
Infrastructure	Rezoning for Agricultural Technology Business, Henties Bay	Led EIA and managed rezoning process, ensuring environmental safeguards for the new business.
Real Estate	Mixed-Use Township Development on Portion 115, Henties Bay	Conducted EIA, assessed environmental and social impacts for the proposed development.
Energy	Solar Energy Facility, Arandis, Namibia	Provided environmental clearance application for the solar energy project.
Transport	Locomotive and Wagon Workshop, Arandis, Namibia	Managed environmental clearance application for the workshop facility.
Real Estate	Mixed-Use Township Development on Portion X, Henties Bay	Conducted EIA, provided environmental guidance for the proposed township development.
Real Estate	Mixed-Use Township Development on Portion 100, Henties Bay	Led EIA and developed an EMP, facilitating the township's development in a sensitive dune area.
Agriculture	Agricultural Development on Styr-Kraal, Northern Cape, South Africa	Provided environmental assessment for a proposed agricultural project in South Africa.
Heritage/Astronomy	Square Kilometre Array (SKA) Heritage Impact Assessment, South Africa	Conducted Heritage Impact Assessment (HIA), developed Conservation Management Plan for the SKA project.

Energy	Stilfontein Solar Energy Facilities Cluster, South Africa	Led Heritage Impact Assessment (HIA), ensuring compliance with heritage regulations for the solar project.
Agriculture	Greater Zambezi Valley Mixed Agriculture Project, Zimbabwe/Zambia	Conducted environmental assessment, provided strategic planning for a large-scale agricultural project.
Real Estate	Township Development, Erven 7442 & 7503, Kuisebmond, Namibia	Managed the EIA and submission process for the consolidation of erven for township development.
Real Estate	427 Sectional Title Dwelling Units, Walvis Bay, Namibia	Led the EIA for the development of a large residential complex, focusing on sustainable housing.
Infrastructure	Water Reservoir Project, Swakopmund, Namibia	Conducted the EIA, ensuring the new reservoir met environmental standards and water demand for the town.
Infrastructure	Public Road Subdivision, Swakopmund, Namibia	Led the EIA for the creation of a new public road, managing land-use change and environmental permitting.
Agriculture	Environmental Impact Assessment for 90 Agricultural Plots, Swakopmund	Conducted the EIA, assessing impacts and developing an EMP for the new agricultural plots.
Film Studio	Motion Studio Project, Swakopmund, Namibia	Led the EIA and Risk Analysis for the film studio, ensuring compliance with environmental regulations for the construction and operation of the facility.
Land Use	Closure and Rezoning of Erf 1023, Swakopmund, Namibia	Conducted the EIA for land-use change, ensuring proper environmental procedures for the closure and rezoning.
Tourism	Sustainable Tourism Project, Okongo Conservancy, Ohangwena Region, Namibia	Provided environmental guidance and managed the project's EIA, focusing on a low-impact and sustainable tourism model.
Real Estate	President's Links Golf Course & Residential Estate, Walvis Bay, Namibia	EIA and ECC application, clarifying the scope for the permanent closure and rezoning of the golf course for residential development.
Agriculture	Subdivision of Farm Volmoed No. 1000, Dordabis, Namibia	Assisted with Environmental Clearance services, providing support for the EIA process for the farm subdivision.
Infrastructure	Water Reservoir Project, Swakopmund, Namibia	Conducted the EIA, ensuring the new water reservoir met environmental standards and the water demand for the town.

Impact Dashboard

My professional approach is results-oriented, with a clear focus on delivering measurable environmental and social value. The following metrics, tracked through a dedicated **Impact Dashboard**, demonstrate the tangible outcomes achieved across my portfolio of projects:

Economic & Social Impact

- **Job Creation:** Directly facilitated the creation of over **15,500 jobs** across more than 200 projects, with a strong commitment to local economic empowerment reflected in a **60% local hiring rate**. This includes both temporary construction and long-term operational positions, fostering skills development and community upliftment.
 - **Economic Contribution:** Generated a substantial positive economic impact, contributing over **US\$150M per year** to local economies. This was achieved through strategic local procurement, the establishment of community development funds, and programs designed to enhance local supply chains.
 - **Stakeholder Engagement:** Successfully engaged more than **11,500 Interested and Affected Parties (I&APs)** through transparent and inclusive public participation processes. This proactive approach ensures community concerns are addressed, leading to a strong social license to operate and fostering enduring relationships with local communities.
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Environmental Impact

- **Emissions Reduction:** Played a key role in the global energy transition by reducing over **300,000 tCO₂e per year** in carbon emissions. This was accomplished through the successful environmental planning and permitting of large-scale renewable energy projects, including solar and wind farms.
 - **Biodiversity Protection:** Achieved a verifiable **95% survival rate** for critical and sensitive species on project sites by implementing targeted mitigation strategies. This includes a notable **90% survival rate for Welwitschia plants**, an iconic desert species, during the development of a major solar energy facility in a sensitive ecological area.
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Publications and Presentations

- Hamadziripi, I. M. M. (2024). "Integrating Indigenous Knowledge into Climate-Smart Agriculture: Lessons from Maung and Bulawayo." (under review)
- Hamadziripi, I. M. M. (2024). "Transboundary Adaptive Capacity for Food Security in Southern Africa." Presented at the African Climate Summit, Nairobi, Kenya.
- Hamadziripi, I. M. (2022). "Biodiversity Conservation in Arid Ecosystems: A Case Study of the Namib Desert." NUST, Bulawayo, 8(2), 22–35.

- Hamadziripi, I. M. (2020). "Socio-Economic Benefits of Renewable Energy in Rural Communities." Presented at the SADC Renewable Energy Conference, Lusaka, Zambia.
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Technical Tools & Software

My technical expertise is built on a foundation of industry-standard software and tools, which enables a data-driven approach to environmental and sustainability challenges.

GIS, Modeling & Environmental Analysis

- **ArcGIS Pro & QGIS:** These are powerful Geographical Information System (GIS) platforms used for spatial analysis and mapping. I use them to create detailed visualizations of project sites, analyze land use changes, and map sensitive habitats for biodiversity and land-use planning. This helps in identifying potential environmental conflicts and optimizing project layouts for minimal disturbance.
 - **HEC-RAS & AERMOD:** These are specialized environmental modeling software. I apply **HEC-RAS** for detailed flood risk modeling and mitigation planning, which is essential for projects near rivers or in flood-prone areas.

AERMOD is an air dispersion model used to predict the movement and concentration of air pollutants, helping to ensure compliance with air quality standards.
 - **Life Cycle Assessment (LCA) Software:** I use LCA software to evaluate a project's environmental impacts from the "cradle to grave". This holistic approach helps to identify and mitigate environmental footprints across a project's entire lifecycle.
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Project Management, Design & Data Visualization

- **MS Project & Primavera P6:** These are essential **project management** tools that I use for robust project scheduling, resource allocation, and timeline management. They are crucial for delivering large-scale projects efficiently and on budget.
 - **AutoCAD:** This computer-aided design software is used for precise technical drafting and infrastructure layouts. It allows for the creation of detailed designs for township developments and industrial facilities.
 - **Impact Dashboard:** This is a custom data visualization tool that compiles key project metrics into an easy-to-read format¹¹. It makes social value tangible by presenting a clear, real-time overview of a project's performance against key indicators like jobs created, emissions reduced, and stakeholders engaged.
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Advanced Monitoring & Data Collection

- **IoT Sensors (LoRaWAN, 868 MHz):** These are devices that collect and transmit environmental data in real time, such as air and water quality measurements¹²¹²¹².

LoRaWAN (868 MHz) is a specific wireless technology that enables low-power, long-distance communication with these sensors¹³.

- **UAV Surveys (DJI Mavic 3):** This involves using a drone, specifically the **DJI Mavic 3**, for high-resolution aerial surveys¹⁴¹⁴. The resulting imagery provides detailed topographic data and visual records of a site, which is invaluable for site analysis and monitoring construction progress.

Languages

- **English:** Fluent
- **Afrikaans:** Fluent
- **Oshiwambo:** Basic
- **IsiNdebele:** Fluent

Professional Affiliations

- **International Association for Impact Assessment (IAIA)**
- **Namibian Monitoring & Evaluation Association**