

Military Academy, Faculty Military Science (FMS) Social Impact Projects for 2023

With the vision, mission, and values, which form the cornerstone of the Military Academy, Faculty Military Science (FMS), we are committed to further values of global social responsibility. Given our unique mandate, we play an active role in protecting our nation's safety and security and continuously strive towards good governance. Our social impact focus supports all SDG's that may contribute to our mandate. These activities are coordinated by the Faculty's Social Impact Committee.

Social Impact includes, but not limited to community interaction alone. Social Impact, by its nature, is integrated with teaching, learning, research, and engaged citizenship. Some of the Social Impact initiatives for 2023 were either ongoing projects (from previous years), new projects registered in 2023, or informal projects that are not yet registered, but the project holders aim to register them during 2024. The projects are listed below.

1) Faculty of Military Science (FMS) Bulk Services (will carry over to 2024) by Dr Ivan Henrico

Formally registered: Yes

What the project entails: The Department of Military Geography, Faculty of Military Science, under the lead of Dr Ivan Henrico, will provide geospatial services and expertise to the Military Academy Facilities section to capture, digitise and map bulk utilities within the Saldanha Military Area. The Faculty of Military Science, the Military Academy, the Saldanha Sick Bay (Area Military Health Unit Western Cape) and SAS SALDANHA are stakeholders making use of bulk services in the Saldanha Military Area. The Memorandum of Agreement dated 5 Oct 2017 provides for the Military Academy to maintain all bulk services that serve the faculty of Military Science. Geospatial products are needed to support the management and administration of utilities within the Military Area, specifically - but not limited to - the location of all water valves, pipelines, sewerage, fire hydrants and electrical substations and kiosks.

Target group reached: Government: National. In addition, these services will enhance the Military Academy's service delivery model to the Faculty as well as contribute to the immediate stakeholders in the Saldanha Military Area for information on bulk services.

The long-term impact and best practices:

- **Thorough Geospatial Data Management:** Ensuring accurate and up-to-date geospatial data is maintained for utilities, including regular updates as infrastructure changes over time.
- **Collaborative Approach:** Continued collaboration between the Department of Military Geography, the Military Academy Facilities section, and other stakeholders is essential for ongoing success and adaptability to changing needs.
- **Integration with Technology:** Leveraging modern geospatial technology and Geographic Information Systems (GIS) for data capture, digitization, mapping, and analysis to streamline utility management processes.

Lessons learned /tips for future project holders:

- **Clear Project Scope Definition:** Ensure a well-defined project scope from the outset to prevent scope creep and maintain focus on project objectives.
- **Risk Management:** Identify potential risks early and develop mitigation strategies to minimize project disruptions.

- Capacity Building: Invest in training and skill development for project staff to ensure they have the expertise needed for geospatial tasks, as well as working with the instruments.
- Environmental Considerations: Consider environmental impacts and sustainability factors in project planning and execution, particularly when managing utility infrastructure.
- Post-Project Evaluation: After project completion, conduct a thorough evaluation to assess the project's impact on service delivery, cost-effectiveness, and stakeholder satisfaction.

Linked to Social Development Goal/s (SDGs):

- Safety, security & good governance = 16. Peace and Justice
- Resources & infrastructure = 09. Innovation & infrastructure
- Environment & sustainability = 17. Partnership for goals

2) Name of project: Investigating the changes in bathymetry of Saldanha Bay over the past four decades (ends in 2023) by Dr Ivan Henrico

Formally registered: Yes

What the project entails: Bathymetry is the science of studying and measuring the depths of the ocean floor. The differences in water depth, underwater slope, and ocean floor structure with the use of a geographic information system (GIS) will be investigated to determine the changes to the hydrodynamic sedimentation processes in Saldanha Bay as a result of the harbour constructions that took place in the early 1970s. The construction of the harbour included massive dredging operations and the resultant relocation of 30 million m³ of soil. Initial investigations into this project highlighted the need for new and updated bathymetry data of the Saldanha Bay; and consequently, a meeting was scheduled with the Hydrographer of the SA Navy. Approval was provided to measure the whole of Saldanha Bay before the end of 2020. This project will therefore determine how the Saldanha Bay sedimentation process changed after the harbour construction in 1976 compared to the current situation. This will provide important information on current beach erosion and siltation challenges that exist within Saldanha Bay.

Target group reached: Civil Society Organisations / Communities / Government: Provincial and Municipal.

The long-term impact and best practices:

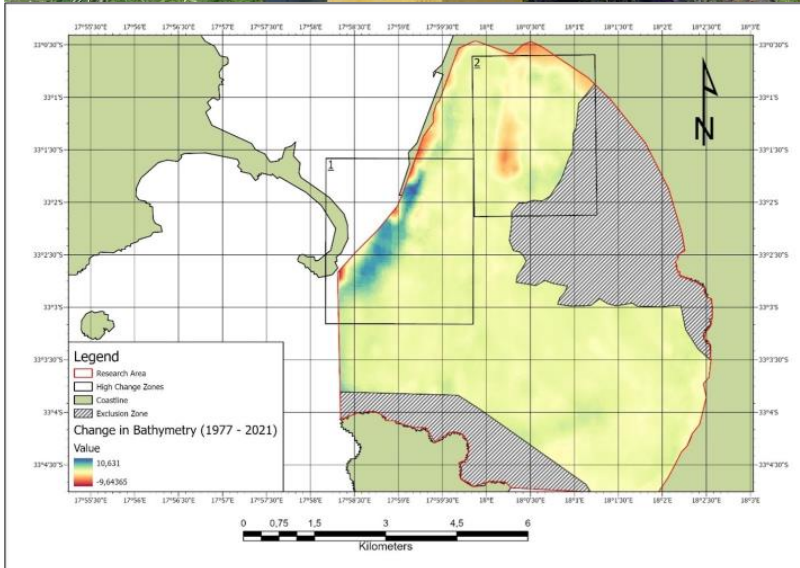
- Improved Coastal Management: The project can contribute to better coastal management and understanding of sedimentation processes in Saldanha Bay, which can lead to more effective erosion control and siltation mitigation measures in the future.
- Environmental Conservation: The data collected can help inform strategies for preserving the natural environment in and around Saldanha Bay.
- Scientific Research: The bathymetry data can be used for ongoing scientific research related to oceanography and coastal geology.
- Regular Updates: Implement a plan for periodic data updates to track changes in sedimentation processes over time.
- Collaboration: Collaborate with relevant stakeholders, such as the Hydrographer of the SA Navy & Saldanha Bay Harbour Master, to obtain necessary approvals and ensure a coordinated approach to data collection.
- Long-term Monitoring: Consider establishing a long-term monitoring program to track changes in sedimentation and hydrodynamics beyond the initial project period.

Lessons learned /tips for future project holders:

- Data Quality Assurance: Prioritize rigorous data quality control procedures to ensure the accuracy and reliability of bathymetric data, as data integrity is crucial for meaningful analysis.
- Interdisciplinary Collaboration: Encourage collaboration between experts from different fields, such as hydrography, oceanography, geology, and GIS, to ensure a holistic understanding of the data and its implications.
- Public Awareness and Education: Promote public awareness and education about the importance of coastal data and its relevance to local communities and stakeholders.
- Sustainability Considerations: Incorporate sustainability principles into coastal management plans to ensure long-term preservation of the bay's ecosystem and resources.
- Lessons Learned Repository: Create a repository of lessons learned from the project to inform future initiatives and ensure knowledge continuity within the organization.

SDG:

- Environment & sustainability = 14.
- Life below water & 11.
- Sustainable cities & communities.



3) Entrepreneurship Programme: Social Upliftment in the Western Cape (end 2023) by Dr Clive Coetzee

Summary: Teaching local community skills to become an entrepreneur such as the psychological make-up of an entrepreneur, what motivates and drive individuals, effective communication, business creativity, social media marketing, developing a successful Business Plan; learning about different business types, structures and support provided; how to conduct a comprehensive SWOT analysis and competitor analysis; planning business budget, cashflow, and basic business accounting

Target: Local business community in Velddrift

Impact:

- Increased level of personal responsibility
- Increased focus on self-reliance
- Increased start-ups
- Self-employment through business creation
- Establishment of own business
- Growth in the net value of local business
- Increase in business turnover,
- profitability and employment

Lessons Learned:

Keep the number of participants on each programme low (maximum 5 or 6 participants); engage early with local businesses in terms of mentorships; start the financial paperwork early; arrange transport services for individuals to attend the programme; include more site visits; secure continuous funding; find a business park for a central location where activities can continue to grow, allowing a sustainable, future orientated plan

SDG: Decent work & economic growth





4) Aquatic Ecological Assessments using biomonitors (Mediterranean Mussels) in Saldanha Bay to assess the environmental State of the Bay (registered during 2023) by Prof J. Bezuidenhout

Summary: Assess the impact and extent of industrial and domestic pollution in Saldanha Bay

Monitor and investigate the impact of this pollution on the ecologically sensitive Langebaan Lagoon

Target: Public of the West Coast municipality and government

Impact:

The governmental and industrial sector will be able to reduce their environmental footprint in the Bay and the Lagoon by implementing the recommendations of the project.

The project will act as guideline for pollution prevention methods for the ecologically sensitive Langebaan Lagoon

A baseline for Persistent Organic Pollutants (POPs) will be determined as reference for any future measurements.

SDG: Environment & sustainability; Life below water



5) HERO BOOTCAMP to build Psychological Capital with an emphasis on: Hope, self-Efficacy, Resilience, and Optimism (registered during 2023) by Dr Y-E Fontaine

Summary: Basic career guidance, resilience to deal with the hardships of daily life, optimism and hope to guide young men during uncertain times, and self-efficacy to instil the confidence they need in deciding on a career path and making the right choices in life

Target: Young boys / men (boys 16 – 18 years in foster care; young men 18 – 21 years who are unemployed and actively seeking work)

Impact: Developing future mentors by building a network of HEROs amongst young in the Saldanha Bay Municipality; creating hope for a better future; saying no to gangsters, gender-based violence and drugs; sharing the programme content with others

SDG: Youth development

Lessons Learned:

Writing the project plan and actual expenses are very different

New Oracle system is challenging – many expenses at own cost initially and then reclaim

Programme was too academic and long hours (although not reflected in the feedback)





6) Career Expo, Career Guidance, Subject Choices, CVs, Resume, Cover Letter, Inspirational Talks at Schools (2023) by Department Industrial Psychology

Summary: Assisting with self-awareness, career guidance, subject choices

Target: Schools, unemployed

Impact: Long-term impact for good career choices, finding jobs for those who are actively seeking to work

SDG: Providing quality education; Decent work and economic growth; Eradicating poverty.





7) MASC & Post-Graduate MA-Siza (during 2023)

Summary: Touching lives of the people in the community and interact with disabled, schools, daycare and helping disadvantages children

Target: Local community

Impact:

- Helping those in urgent need in the Saldanha Bay Municipality area
- School Shoe Project
- Cleaning
- Siyazama Day Care
- Albertina Sisulu Day Care
- Creating a culture of caring and sharing

SDG: Zero hunger, Good health, well-being, No poverty





28 pairs of school shoes were sponsored by FMS students / staff. The remaining pairs were bought with FMS funding. The aim was to buy 120 pairs of shoes. The donation will go to Diazville Primary School and Middlepos Primary School.




**BRINGING HOPE,
PRIDE &
DIGNITY**

SOLE-FULL DONATIONS FOR BRIGHT FUTURES

Donation Items:

- **School Shoes (any size)**
- **School socks (Grey, Black & White)**
- **Funds (From as little as R10.00)**

Drop off: Office No. 144

Closing date: 20 October 2023M

MAKE A SHOE-PER IMPACT!







8) Maths Matters by Maj Lucky Monaledi (ongoing)

Summary: Aims to improve learner's mathematical skills and change the mindset of "Maths is boring and difficult to maths is Fun"

Target: Grade 3 -12

Impact:

- Improvement in grades of the participating learners.
- With better results and a solid scholastic foundation, learner's chance of remaining in school will be enhanced

SDG: Providing quality education; Decent work and economic growth; Eradicating poverty





9) Breathing for Math Moms by Me Juanita Coetzee (ongoing but not formally registered)

Summary: Assisting Math Moms with breath regulation and exercises

Impact: Teaching math mentors, self-regulation, and breathing to control anxiety

SDG: Providing quality education



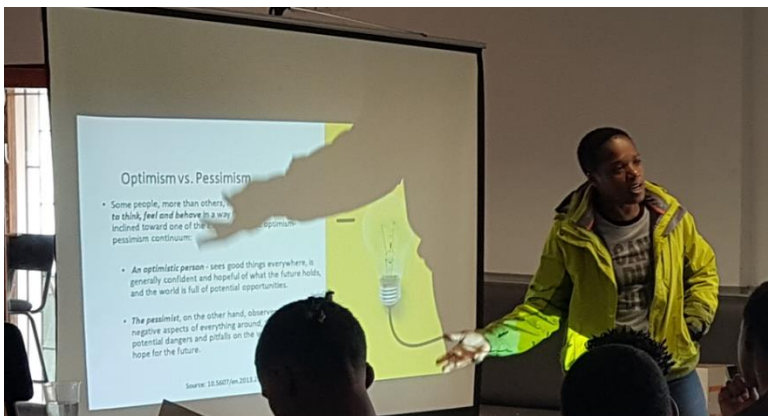


10) Connecting students with local businesses by Mrs Masole (Prospects for 2024)

Summary: Improve on the experiential learning of Weskus Special School students by placing them in local businesses which best fit their interests, personality, and values
Target: Weskus Special School

Impact: Placing students from Weskus School with businesses that best match their personality, interest and values and trade they are currently studying for (during experiential learning program)

SDG: Providing quality education; Decent work and economic growth; Eradicating poverty



11) Business Finance by Me Morake (prospects for 2024)

Summary: Facilitate business finance and entrepreneurial workshops. To assist in establishing effective business and writing business plans

Target:

West Coast Small Medium Enterprises and West Coast Youth

In partnership with Small Business Development Agency and West Coast College Centre for Entrepreneurship Rapid Incubator

Impact:

Pooling of resources,

Complimentary development, mentoring, critical mass, finance, and marketing

Joint planning and implementation

Building partnerships

Skill development

Opportunities, jobs and income, growth and development

SDG: Providing quality education; reducing poverty



12) A vegetable garden to feed my family and my community by Dr L. Khoza and Lt Col A. Pretorius (prospects for 2024)

Summary: This project will specialize in growing onions, lettuce, spinach and tomatoes, which are nutritious and commonly household grown vegetables.

Target: Department of Agriculture and the Military Academy, driven by the School for GeoSpatial Studies and Information Systems (GEOSYS). The School will take a lead in preparing the land, planting vegetables and looking after the garden

Impact:

To produce nutrient dense vegetables, make them accessible and affordable to the consumers and hospitality entities of the Department of Defence in the West Coast Middlepos Primary School will be supplied with vegetables until they move into the new school in 2024

To encourage the Military Academy and SAS community and Middlepos Primary School to start vegetable gardens

SDG: To end hunger, achieve food security and improved nutrition and promote sustainable agriculture by 2030