



S A I M I

SOUTH AFRICAN INTERNATIONAL
MARITIME INSTITUTE





CONTENTS.

Foreword: Prof Malek Pourzanjani	1
Introduction	2
Vision	2
Objectives	2
Growing the Blue Economy	3
SAIMI and Operation Phakisa	4
- Six critical focus areas	4
- Marine transport and manufacturing	4
• Plans for unlocking this economic potential	4
- Offshore oil and gas exploration	4
- Aquaculture	5
- Marine Protection Services and Ocean Governance	5
- Small harbour development	5
- Coastal and marine tourism	6
National Cadet Programme	6
Education & Training	6
Partnerships & Research	7
Industry	8
SAIMI Steering Committee	8-11
Multi-stakeholder governance	12



FOREWORD:

PROF MALEK POURZANJANI

SAIMI Chief Executive Officer



Economic conditions in global shipping markets are ever-challenging, with environmental impacts and sustainability taking centre-stage now more than ever before. Technology is evolving rapidly in our increasingly digital world, and is demanding that the maritime industry adapt its approaches to both training and research.

We need to be asking whether we are adequately training our people for the maritime economy of tomorrow. The South African government's response to the challenge was to establish the South African International Maritime Institute, whose primary purpose is to facilitate linkages and collaboration amongst role players in maritime research, education and training in South Africa, as well as with similar institutes in Africa, in order to develop the skills base needed to grow the country's participation in the maritime economy.

For SAIMI the definition of "maritime" goes beyond shipping, into mineral and energy resources, sustainable fisheries, aquaculture, environmental protection and ocean governance, tourism opportunities and coastal infrastructure development.

Established in 2014, the successes of SAIMI to date include:

- The management of the National Cadet Programme, which is supporting over 200 aspirant professional mariners
- Forging new partnerships to expand the training of sea-faring cadets, as well as new programmes in other areas of the maritime sector
- Coordinating the Operation Phakisa Skills Working Groups whose work will lead to a national maritime skills framework
- Facilitating the development of the Research, Innovation and Knowledge Management Roadmap for the maritime sector
- Securing a three-year grant from the National Skills Fund to establish SAIMI, to ensure the continuity of the National Cadet Programme, and develop new programmes

INTRODUCTION

The South African International Maritime Institute (SAIMI) is facilitating the development of the skills and knowledge base required to ensure the success of "Blue Economy" maritime development initiatives such as Operation Phakisa and the African Union's African Integrated Maritime Strategy.

It is a multi-disciplinary, multi-stakeholder institute active in all aspects of the maritime field, including shipping, harbours, manufacturing and construction, sustainability, environment, law, and marine tourism. SAIMI also links with industry and academia in marine and coastal sciences.

SAIMI works closely with existing education institutions offering post-school maritime courses. The Institute facilitates input from the industry to ensure that the necessary job-related skills and training are being offered.

+ VISION

To be an apex maritime institute that will enable development and the contribution of the maritime sector to the economy of South Africa and Africa through the effective coordination of quality education and research by partner institutions.

+ OBJECTIVES

- Co-ordinate, promote and support the education, skills and research needs of the maritime sector
- Improve the quality of teaching, learning and research in the maritime sector
- Support professional development in the maritime sector
- Facilitate continental and international co-operation
- Broaden the range of education options to meet industry needs



GROWING THE BLUE ECONOMY

It is estimated that the oceans lapping the 3 900 kilometre South African coastline (including the Prince Edward Islands) have the potential to contribute up to R177-billion to the South African GDP and between 800 and 1-million direct jobs. These growth levers reflect at least 4% annual growth in both GDP contribution and job creation.

Based in Nelson Mandela Bay – the only city in South Africa with two commercial ports – SAIMI is uniquely positioned to stimulate and coordinate the research, education and skills development needed to position South Africa as a global leader in the sustainable utilisation of maritime resources.

The Institute fills a much-needed linking role between industry, education and training institutions and government.

SAIMI is a multi-disciplinary, multi-stakeholder institute focused on skills development to support growth across all aspects of the maritime economy. This includes shipping, fishing, aquaculture, harbours, manufacturing and construction, oil and gas exploration, environmental protection, law, and marine tourism, as well as marine and coastal sciences.

It helps to identify industry needs and opportunities, and facilitates the development of education and training programmes to provide the skills required by the maritime industry for technological innovation and global competitiveness.



SAIMI & OPERATION PHAKISA

SAIMI is a direct outcome of Operation Phakisa, the South African government's initiative to unlock the potential of the oceans to generate socio-economic value and employment – estimated at up to R177-billion added to Gross Domestic Product (GDP) and 1-million jobs by 2033.

Successes reported by the government by the first quarter of 2017 include the unlocking of R7,323-billion in investments into the Oceans Economy and the creation of over 6 900 jobs.

Operation Phakisa and its forerunners – a maritime skills study, summit and feasibility study commissioned by SAMSA and government partners between 2011 and 2013 – identified the need for a dedicated institute to coordinate and improve the provision of maritime education, training and skills development.

Plans to grow the maritime economy depend on the availability of skilled people to implement them, along with the generation of knowledge and technological innovation that looks to the future. SAIMI is the outcome of that identified need, and is facilitating a number of skills development initiatives to support the realisation of Operation Phakisa objectives.

The six critical focus areas of Operation Phakisa are:

Marine transport and manufacturing

South Africa is ideally positioned to serve the east-west cargo traffic and African offshore oil and gas industry, through marine manufacturing, which includes ship and rig repair, refurbishment and boat building, as well as marine transport. The marine transport work stream has developed 18 initiatives across three categories, infrastructure and operations, skills and capacity building as well as market growth to accelerate sector growth.

Plans for unlocking this economic potential include:

- Oil and gas port infrastructure
- Maintaining and refurbishing existing port and ship repair facilities
- Fast tracking decisions on the issuing of licences
- Reforming port tariff structure
- Port facilities for boat, ship repair and rig repair
- Establishing a supporting funding model for infrastructure development in ports
- Skills and capacity building.

Offshore oil and gas exploration

Offshore oil and gas exploration has identified deposits of natural gas equivalent to nine billion barrels off South Africa's coast and adjoining waters. The aim is to create a more enabling environment in order to drill 30 exploration wells over the next 10 years while simultaneously maximising the benefits for South Africa.

It is estimated that the sector has the potential to support more than 130 000 jobs, and can add 1% to the growth of the gross domestic product of South Africa. A number of downstream industries will also be created.

A skills strategy roadmap and implementation plan for the sector has been completed. SAIMI is coordinating the establishment of a number of research chairs for this sector as a lack of adequate local skills and technical capability to support exploration and production has been identified as a barrier to success.

Aquaculture

The need to employ sustainable fishing methods has become more important due to dwindling stocks of a number of key species around the world.

Consumer demand for sustainably-produced fish is rising, and aquaculture is ranked as South Africa's third-largest fishery sub-sector. Aquaculture offers significant potential for food security and economic development, especially for marginalised coastal communities.

The target for aquaculture is to increase production to 20 000 tons a year by 2019, creating 2 500 new direct jobs through addressing the enabling legislative environment and supporting both expansion and new operations. SAIMI has commissioned a skills audit for the sector as the first step towards assisting to develop the skills base needed to support the envisaged growth.

Marine protection services and ocean governance

Focused on the need to continuously balance the economic exploitation of the oceans with the maintenance of their environmental integrity, marine protection services and ocean governance is considered a critical enabler of growth. The objective for this area is to implement an overarching, integrated ocean governance framework for sustainable growth of the ocean economy to maximise socio-economic benefits whilst ensuring adequate ocean environmental protection.

By involving all stakeholders this focus area will ensure that conservation targets are met while allowing key industrial sectors like oil and gas, aquaculture and maritime industries to grow. Ocean governance is a key topic for South Africa, which controls an exclusive economic zone larger than its land-mass. Initiatives in this area include legislation on marine spatial planning, establishment of new Marine Protected Areas (MPAs), extending observation and monitoring capacity, and coordinating enforcement activity.

The Operation Phakisa Skills Working Group has identified about 240 occupations relevant for the industry. This includes a proposed list of qualifications and institutions.

Small harbour development

Many of South Africa's small harbours have a significant role to play in the socio-economic development of the communities in which they are located. Small harbours are also critical in maintaining security and territorial integrity of the country as they constitute part of the borders of the Republic and are candidates for new Strategic Infrastructure Projects (SIPs) under the Presidential Infrastructure Coordinating Commission. The Department of Public Works has established a Small Harbours Development Unit to facilitate the development and modernisation of small harbours.

It is estimated that the upgrading of the country's small harbours will support 12 000 jobs and add R6 billion a year to the gross domestic product.

Coastal and marine tourism

South Africa's long coastline, pristine coastal environment, diverse ecosystems and heritage sites present opportunities for further marine and coastal tourism development.

The objective is to deliver by 2030 a uniquely South African, world class coastal and marine experience where South Africa is ranked within the top 20 tourism destinations. The goal is an annual growth rate of 4% in this tourism segment, which will contribute to an inclusive and sustainable tourism economy.

NATIONAL CADET PROGRAMME

SAIMI is responsible for managing South Africa's flagship maritime training initiative, the National Cadet Programme.

The programme was launched in response to the global need for qualified professional mariners, and to increase the participation of South Africans working as professional mariners on both foreign and locally-owned vessels.

The programme offers practical training and training berths enabling students to obtain an internationally-recognised Certificate of Competency (CoC) as either a Deck Officer or Marine Engineering Officer in accordance with the International Maritime Organisation (IMO) Convention on the Standards, Training and Certification of Watch-keepers (STCW).

More than a dozen shipping lines are working in partnership with the National Cadet Programme to offer training berths to South African seafaring cadets.

In addition SAIMI is able to make use of the SA Agulhas I, the country's only dedicated training vessel, and in late 2016 sent 30 cadets to gain practical experience aboard the vessel on a chartered scientific expedition to Antarctica.

More than 200 cadets are currently in training in the programme, and more than 130 have qualified since its inception in 2012, enabling young South Africans to enter global seafaring careers.

EDUCATION & TRAINING

SAIMI's primary role is to assist the education sector to respond to the skills and technological development needs of the maritime industry through the sharing of information and facilitation of collaboration – both within the education sector and between education institutions and industry. Through skills working groups aligned to the Operation Phakisa delivery areas, SAIMI is executing a mandate from the DHET to develop the national maritime skills framework, along with a plan to address resource, capacity and infrastructure needs.

SAIMI is also actively involved in developing the capacity of South African public education institutions to deliver maritime training and support the growth of the maritime sector – from the introduction of maritime subjects in high schools and supporting technical vocational education and training (TVET) colleges in becoming centres of maritime artisan training, through to development of degree qualifications at university level and postgraduate research programmes.

PARTNERSHIPS & RESEARCH

SAIMI is actively working to forge mutually beneficial partnerships with local and international maritime clusters, industry associations and academic and research institutions.

In partnership with the International Ocean Institute - Southern Africa (IOI-SA), SAIMI seeks to contribute to maritime skills development at continental level in support of the 2050 Africa Integrated Maritime Strategy (AIMS). The first step is SAIMI's support for the annual Ocean Governance for Africa course run by IOI-SA for public officials, educators, researchers and professionals.

High-level research and technology development is essential to fostering innovation, sustainability and global competitiveness for the maritime sector. In partnership with the CSIR, SAIMI facilitated the development of the Maritime Research, Innovation and Knowledge Roadmap for the maritime sector. The implementation phase is underway, with the aim to create industry and academic collaboration opportunities, postgraduate study opportunities, and funding and action plans to enable the creation of research teams in the eight identified priority areas.

INDUSTRY

SAIMI works closely with government and its agencies, state-owned enterprises such as Transnet, maritime industry organisations, leading shipping companies and other role-players in the diverse Blue Economy to identify their skills needs, as well as opportunities for economic growth and technological innovation which will contribute to South Africa establishing unique niches in the global maritime economy.

An Industry-Education Skills Partnership initiative is serving as a pilot in the marine manufacturing (ship- and boat-building, and repair) sector. Research commissioned by SAIMI identified ways in which employers can collaborate with relevant educational institutions and government to address current skills constraints affecting this sub-sector. The partnership model will be introduced in other sectors as it is refined.

SAIMI STEERING COMMITTEE



SAIMI STEERING COMMITTEE



Prof Derrick Swartz
(Chair)
NMMU



Prof Malek Pourzanjani
SAIMI CEO



Maphefo Anno-Frempong
Transport Education & Training
Authority



Clement
Manyungwana
Department of Transport



Jeremy Marillier
FishSA



Lesego Mashishi
SA Maritime Safety Authority



Prof Oswald Franks
NMMU



Prof Andrew Leitch
NMMU



Meriam Malebo
National Skills Fund



Siphokazi Ndudane
Department of Agriculture,
Forestry & Fisheries



Prof Heather Nel
NMMU



Thami Ngqungwana
Department of Trade &
Industry



Dr Yonah Seleti
Department of Science & Technology



Nonkululeko Sishi
Transnet Group



Adrian Strydom
SA Oil & Gas Alliance



Sobantu Tilayi
South African Maritime Safety Authority



Dr Engela van Staden
Department of Higher Education and Training



Prof Patrick Vrancken
NMMU



Sam Zungu
uMfolozi TVET College

Eddie Majadibodu
Department of Higher Education and Training

Multi-stakeholder governance

SAIMI is governed by a multi-stakeholder Steering Committee that reflects the diversity of the maritime sector and the Institute's role in linking industry, education and government.

The Steering Committee includes representatives of FishSA, the Oil & Gas Alliance (SAOGA), Transnet, the Maritime Safety Authority (SAMS), the Transport Education & Training Authority (TETA), Umfolozi College, Nelson Mandela Metropolitan University (NMMU), the National Skills Fund (NSF), and national departments of Higher Education & Training (DHET), Science & Technology (DST), Trade & Industry (the dti), Transport (DOT), and Agriculture, Forestry and Fisheries.



Contact Us

Tel: +27 41 504 4038

Email: info@saimi.co.za

www.saimi.co.za