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OPERATION PHAKISA: AQUACULTURE, SMALL HARBOURS, MARINE PROTECTION SERVICES, AND OCEAN GOVERNANCE

1 BACKGROUND

The oceans surrounding the South African landmass are rich in marine resources and some areas remain relatively pristine. The ocean represents a significant asset for current and future generations of South Africans. The use of various marine resources in the ocean space has increased over time and there remains significant potential for the unlocking of further economic development opportunities. As such, South Africa needs to continuously balance the economic opportunities, which the ocean space avails while maintaining its environmental biodiversity, security and integrity.^{1, 2} The challenge for South Africa is how best to encourage research, investment and use of the ocean resources to contribute to job creation and economic upliftment while at the same time protecting the ocean asset for present and future generations. This responsibility is made difficult because there is a partial understanding of the marine ecosystem, responsibilities and capacity under South Africa's jurisdiction. Over the years, the understanding of maritime issues has diversified along with opportunities, complications and challenges. South Africa is not immune to this global challenge as many criminal activities such as pollution and illegal fishing are increasingly threatening the governance of the maritime environment and its associated activities.^{3, 4}

Former President Jacob Zuma, together with other delegates, embarked on a State visit during August 2013 to Malaysia. The Malaysian Government briefed the South African delegation on their programme, the Big Fast Results Methodology, used as a vehicle to achieve significant government and economic transformation within a very short time. The programme addressed Government challenges such as poverty, crime and unemployment. The South African delegation was impressed and sought to domesticate the programme in the South African setting. The Malaysian Government assisted the South African Government to adapt the programme to address South African challenges. The South African version was named Operation Phakisa. Operation Phakisa was officially launched in July 2014 as a vehicle to achieve the ideals articulated in the National Development Plan (NDP) such as boosting **economic growth, job creation and reducing inequality**.⁵⁻⁷ Operation Phakisa entails first conducting a detailed problem analysis, followed by setting priorities, the required intervention, planning, delivery, and ongoing monitoring of progress towards the set goals. South Africa was targeting the oceans economy as it is one of the key drivers in



the Nine-Point Plan to grow the economy, create jobs, transform the economy and attract investment.^{6, 8}

This document highlights selected marine components that directly applies to the mandate of the Department of Environment, Forestry and Fisheries (DEFF or the Department) under Operation Phakisa.

2 AQUACULTURE

The Aquaculture Lab, the group responsible for the aquaculture focus area of Operation Phakisa, undertook the task of unlocking the potential of the aquaculture sector in South Africa. The goal is to grow Aquaculture to play a major role in the supply of fish products, and an enhanced role in job creation and contribution to national income. South Africa's aquaculture sector has high growth potential due to increasing global demand for fish in the face of declining fish stocks in the ocean. South Africa's magnificent potential to increase fish production from the marine and freshwater environments. The sector also offers significant potential for rural development, especially for the marginalised coastal communities. **The Aquaculture Lab aims to grow sector revenue from R0.67 billion in 2014 to R3 billion; production from 6 000 to 20 000 tonnes; jobs from 2 227 to 15 000 and to ensure increased participation to support transformation in the sector by 2019.**⁹ The April 2018 report from the Department of Environmental Affairs (Oceans Economy Secretariat) seem to suggest that the targets have been revised upwards. For example, the target economic contribution from the aquaculture and fisheries sector is now set at R10-16 billion, while jobs at between 170 000 and 250 000.¹⁰

The aquaculture sector is still small and faces many challenges as was presented by the industry leaders in recent weeks. Production is focused on a few high-value species, such as abalone, oysters, mussels, finfish and trout – driven mainly by the high cost of production. Other challenges include regulatory barriers, difficulty in accessing funding, poor access to markets, limited pool of skills, poor access to quality inputs, fragmented research and development, limited infrastructure in rural areas and inclusivity in the sector.^{5, 9}

The Aquaculture Lab identified eight key initiatives, which are expected to spur the growth of the sector. One such initiative will address the selection and implementation of 24 projects, improving both the number and productivity of the new farms. Three initiatives relate to the creation of an enabling regulatory environment, and others focus on funding support, increasing skills pool and awareness and improving access to markets. To deliver on these initiatives, they created detailed implementation plans and accompanying budgets, a proposed governance system to take responsibility for initiatives and key performance indicators to help monitor delivery. The



implementation is already underway as some projects were already ongoing in response to other policies. The Department has been actively approaching all regulatory bodies involved in aquaculture to develop a sole and standardised process of governing aquaculture activities. To this end, the Aquaculture Development Bill [B22-2018] was developed, widely consulted on, and finally tabled in Parliament in June 2018 as a Section 76 (Ordinary Bill affecting the provinces). The Bill lapsed at the end of the fifth parliament, was revived early on 5 March 2020, then withdrawn on 19 March 2020 for further consultations.

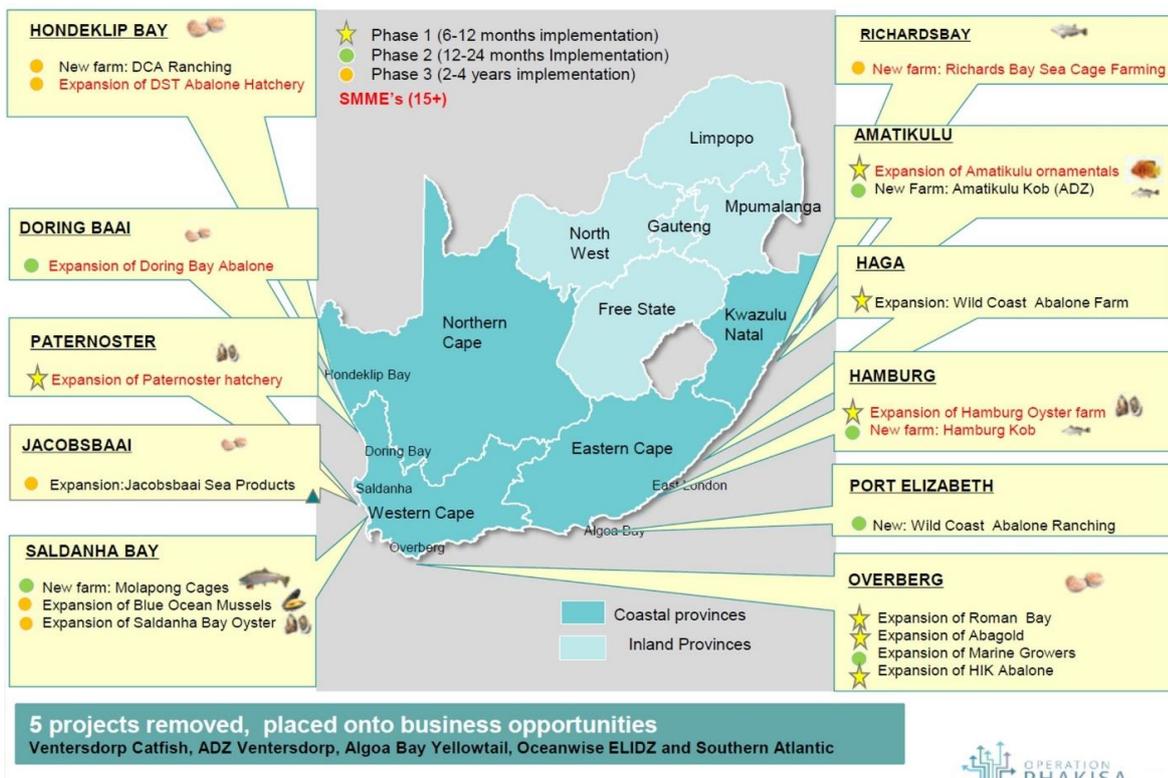


Figure 1. Location of the original 24 aquaculture projects under Operation Phakisa (Aquaculture).¹⁰

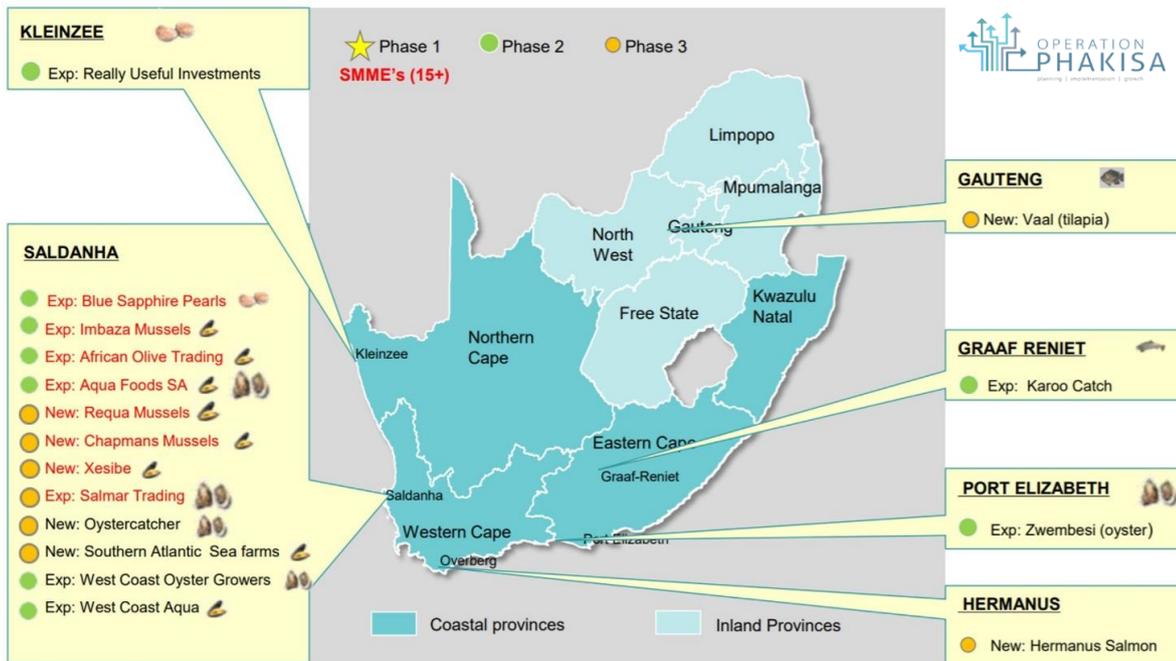


Figure 2. Location of the new 17 aquaculture projects under operation Phakisa (Aquaculture)¹⁰

The DTI reported that it is contributing towards Ocean Phakisa through its flagship funding mechanism - the Aquaculture Development and Enhancement Programme (ADEP). The ADEP is an incentive programme available to South African registered entities engaged in primary, secondary and ancillary aquaculture activities in both marine and freshwater classified under SIC 132 (fish hatcheries and fish farms) and SIC 301 and 3012 (production, processing and preserving of aquaculture fish). The grant is provided directly to approved applications for new, upgrading or expansion projects. The Aquaculture Development Enhancement Programme was designed to encourage the geographic spread of aquaculture development beyond the established Western Cape region. The DTI has partnered with National Metrology Institute of South Africa (NMISA) to develop standards for aquaculture and fisheries food and food products, some of which include abalone, fish oil, frozen rock lobster and frozen lobster products, canned fisheries products, and raw fisheries products.

- Funds were initially pooled from various government departments and agencies to form a central fund, Aquaculture Development Fund. An update should be sought on the value of the collated funds, administration of the funds and the capacity to handle such funds. This update should also include the standing of the ADEP in relation to the pooled funds.
- The Department should inform the Committee on their role, if any, in the development of standards of fish and fish products for the local market. In



general, fish that is supplied and consumed locally is of inferior quality compared to exports to the EU and Americas.

- Other national departments have been consulted and some consensus relating to aquaculture species and environmental impact assessments seem to be reached to ease and shorten the permitting process. The Department should explain the details on the turnaround time and the reported improvements in processing aquaculture applications under the inter-departmental authorisations committee.
- Aquaculture may be considered a more technical form of farming when compared to terrestrial farming and require scarce skills. What is the targeted annual output from the agreement with Sterling University, the placements, the costs and from which year? What are the skills demand vs the output from universities to the production of such scarce skill?
- The Department estimated that 26 000 jobs would have been created by the end of 2016, then 77 100 jobs by 2019 and 1 million jobs by 2033. However, 3 250 jobs were created in 2020 – 22% of the 15 000 jobs target. What kind of jobs are the 3 250 – are they seasonal, EPWP, etc? The Department should further explain how they arrived at the used employment multiplier. For example, 15 000 jobs translate to 26 000 jobs when factoring in the job multiplier.
- The Department needs to present revised and more realistic targets for the aquaculture and fisheries sector by 2033.
- The Department mentioned that it seeks to transform the aquaculture industry in the country and its transformation indicator is “inclusive growth”. In the recent past, economic growth widened inequality gap in the country.
 - How will “inclusive growth” be qualified and quantified?
 - What are the targets of inclusive growth?
 - How will the “inclusive growth” contribute to the reduction of inequality and who will finance it?
- In terms of time, the Department exceeded its 2014-2019 targets of delivering 24 aquaculture projects by implementing just above 40 projects. However, these projects did not translate to R3 billion revenue and production of 20 000 tonnes of fish. How much money was invested, fish volume was harvested, and jobs created from the implemented projects?
- The Department plans to transform the aquaculture sector through youth involvement, application of BEE codes and community aquaculture projects. The Department should explain the progress of these activities towards the 26% transformation by 2019, then 50% by 2033.
- There is a notion that under Operation Phakisa, the focus is on developing already existing big commercial operations as opposed to supporting new entrants. For example, the Department reported in 2018 that only one cooperative project has been supported out of the 26 operational projects. An explanation and update should be sought in this regard.



3 SMALL HARBOURS^{5, 11, 12}

The South African coastline has 13 proclaimed fishing harbours, with 12 located in the Western Cape and one in the Eastern Cape. There are also approximately 50 potential and existing unproclaimed harbours in the Eastern Cape, KwaZulu-Natal, Northern Cape and Western Cape. The small harbours (proclaimed and unproclaimed) have a significant role to play in the socio-economic development of the communities where they are located and could contribute to growing the bigger maritime economy. Despite their socio-economic significance small harbours are also critical in maintaining security and territorial integrity of the country, as these harbours constitute part of the borders of the Republic. Harbours have been identified as candidates of the Strategic Infrastructure Projects (SIP) under the Presidential Infrastructure Coordinating Commission. Most of the proclaimed harbours were in a state of disrepair, lacked maintenance, safety, security measures and almost non-existent management. For example, some small harbours have become a hive of all sorts of crimes, such as the landing of poached fisheries resources, drug trade and prostitution. The lack of investment and cohesive legislative and regulatory framework creates a conducive environment for criminal elements to thrive. The absence of a dedicated small harbour management authority impairs plans for small harbour development.

- The Department with other national, provincial and municipal stakeholders was involved in a process turning around the state of harbours to be a conducive place for various harbour activities that include fish landings. An update should be sought in this regard on the progress made to turn around the state of all the harbours through the detailed implementation plan.
- During October 2019 oversight visit to Hout Bay harbour, the Department of Public Works and DEFF, reported of repairs, upgrades, dredging of harbour basins and removal of sunken boats. While short-term jobs were created during the infrastructure upgrades, how much progress has been made on creating long-term jobs such as harbour services, the manning of entrances and jobs in the offices of the harbour and dock masters.

4 MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE^{11, 13}

Marine environmental governance in South Africa is currently undertaken in a sectoral fashion. The Department is generally responsible for overarching environmental governance, while the responsibility for sectoral environmental governance is devolved to the economic departments, notably the Mineral Resources and Energy, Tourism and Transport. An integrated approach to ocean governance is possible if a single regulatory agency is tasked with all decision-making over human use activity in South Africa's oceans. Various maritime nations have attempted such an approach, but it has generally proved impossible to implement, largely because it is difficult to persuade state organs to cede their regulatory powers to a new structure.



The current arrangements complicate the maritime governance and result in uncertainty of roles and responsibilities. The absence of a single institutional framework fails the good intentions among some departments, as manifested by poor coordination and weak enforcement. The lack of human and financial resources put the maritime territory at risk of being exploited without control. Furthermore, there is minimal compliance monitoring and surveys in the oceans. There are research and knowledge gaps, mainly as a result of working in silos among departments and not sharing information.¹³ The Department should explain how these listed challenges are being addressed.

The socio-economic costs of illegal, unregulated and unreported fishing are vast, although they cannot be accurately quantified because perpetrators apply complex, dynamic and evolving strategies to evade detection or being dismantled. A 2009¹⁴ study that tried to quantify the value of fish that is illegally caught and exported from South Africa's major commercial fisheries estimated the catches to be worth R6 billion (US\$790 million), of which R4.4 billion was contributed by the abalone and Patagonian toothfish. This value is equivalent to the value of the legally caught fish from the 17 commercial fisheries. South Africa is considered to be a source, transit, and destination country for men, women, and children subjected to forced labour and sex trafficking. While the majority of trafficking victims in South Africa are labour trafficking victims, through land and air borders, there are reports of human trafficking from marine fishing and transport operations.

- There are challenges, such as shortage of functional patrol vessels, less flying hours for available choppers, weak security at various storage facilities, poor regional cooperation, and outdated technology. Corruption among officials remains one of the disabling factors in all the efforts of combating maritime crimes. The Department should update the Committee on how these challenges are being addressed.

It is envisaged that Operation Phakisa and the ongoing development of the National Maritime Security Strategy by the Department of Transport will go a long way in harmonising and fostering effective and efficient maritime security. Furthermore, the Border Management Agency Act 2 of 2020, signed during July 2020 will change the maritime governance landscape. The Act is expected to usher in a new season where the process of seeking approval will be rid of bureaucracy, as better command and control systems will be introduced. Furthermore, it will also ease the flow of information when requests for joint operations are put forward, instead of the current arrangement where intelligence is shared at the time of implementation. The currently outdated databases will likely be an issue of the past when all maritime databases are upgraded and integrated to ensure that all parties have real-time access to authorised fishing vessels, fishing rights and permits.



The South African Department of Defence had, through Armscor, placed an order for three Inshore Patrol Vessels (IPV), as part of Operation Phakisa from the Damen Shipyards Cape Town (Damen). The vessels form part of the South African Navy's Project Biro, with the first vessel scheduled for delivery in 2021.¹⁵ The project aims to develop South Africa's maritime security, ensuring that the country can respond effectively, rapidly and cost-efficiently to maritime threats such as illegal trafficking and fishing.¹⁶ This move by the Navy may already be seen as usurping the Department's mandate of tackling illegal fishing. This move could also be seen as a welcome resource injection at the time when the only three fisheries patrol vessels are unable to patrol the 3000 km coast. In recent years, there were few incidences of illegal fishing within the South African EEZ where the Department only managed to apprehend a fraction of illegal fishing vessels from foreign countries.

- The Department should update the Committee on legislated roles that will be transferred to the Department of Home Affairs as part of the implementation of the Border Management Agency Act. When is the transitions period planned to be initiated? What are the resource management plan – human, financial and infrastructure such as fisheries patrol vessels?

5 MARINE PROTECTED AREAS

The South African government added 20 new marine protected areas (MPAs) within South Africa's Exclusive Economic Zone (EEZ) through the rollout of Operation Phakisa. These proposed MPAs have been designed to protect important marine ecosystems and habitats that are necessary to ensure the sustainability of South Africa's marine living resources. Each MPA has set management objectives, and collectively they have increased South Africa's formally protected ocean space from 0.5% to 5%.

It is also worth mentioning that some of the Operation Phakisa plans seem to be clashing in areas of overlap and remains unresolved, at least to the Committee. For example, there are plans for mining and exploration of oil and gas reserves in the oceans on or near fishing grounds. Beyond exploration, before any commercial mining can take place the International SeaBed Authority has to produce a mining code to regulate all aspects of deep-sea mining activities. The code allocation for South Africa was to be finalised by July 2020. It is worth mentioning that some of the produced sediment plumes and noise can travel beyond the mining area, disturbing any marine life forms on its way.

- The scraping of the ocean floor by machines during mining, and oil and gas exploration can permanently alter or destroy deep-sea habitats, leading to the loss of species and fragmentation or loss of ecosystem structure and function. How much role or influence does or will the Department have in the "one-stop-



shop" within the Department of Mineral Resources to streamline and regulate the licensing process for offshore oil and gas exploration and production?

6 CONCLUDING REMARKS

The desired outcomes under Operation Phakisa's ocean economy seem to be gradually met, notwithstanding some challenges such as the limited resources. The jobs and increased economic contribution from the targeted sectors seem sustainable. One of the biggest achievement so far has been an initiative to address the challenge of disjointed planning and working in silos, particularly, the establishment of intergovernmental platforms to streamline work in a systematic and cost-efficient manner. There is still a lot of work to be done to achieve the set goals, particularly, those that are targeted for 2019. These targets would either need downward revision or be achieved by the end of the 2024 financial year. Besides the outstanding work, the future of South Africa's ocean economy looks brighter, provided the current momentum is carried forward. The Department may need to be clear on where it sees itself with so many changes both in legislation and operational environment wherein its role seems to be shrinking or taken over by other departments.



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