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## **OPERATION PHAKISA INITIATIVES THAT ARE CENTRAL TO THE MANDATE OF THE DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT**

### **1 BACKGROUND**

The oceans surrounding South African and the landmass of the country are rich in marine and terrestrial resources and some areas remain relatively pristine. The oceans and terrestrial environment represent a significant asset for current and future generations of South Africans. The use of various natural and biological resources 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 marine and terrestrial ecosystems avail while maintaining its environmental biodiversity, security and integrity.<sup>1, 2</sup> The challenge for South Africa is how best to encourage research, investment and use of the resources to contribute to job creation and economic upliftment while at the same time protecting the ecosystem assets, value and services for present and future generations. This responsibility is made difficult because there is a partial understanding of the ecosystem dynamics, responsibilities and capacity under South Africa's jurisdiction. Over the years, the understanding of ecosystem 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 harvesting/hunting are increasingly threatening the governance and balance of the environment and its associated activities and benefits.<sup>3, 4</sup>

Operation Phakisa is a derivative of Malaysia's *Big Fast Results Methodology*, used as a vehicle to achieve significant government and economic transformation within a very short time. The South African version named 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**.<sup>5-7</sup> 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.<sup>6, 8</sup> The Operations Phakisa approach has since been expanded to include other economic sectors.

This document highlights the output areas related to the central mandate of the Department of Forestry, Fisheries and the Environment (DEFF or the Department) under Operation Phakisa such as Aquaculture, Marine Protection Services and Ocean Governance, Chemical and Waste Economy, and Biodiversity Economy.



## 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.**<sup>9</sup> 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.<sup>10</sup>

The aquaculture sector is still small and faces many challenges as was presented by the industry leaders in November 2020. 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.<sup>5, 9</sup>

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 (One Stop Shop). 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. The re-introduction to Parliament



of the Aquaculture Development Bill is in the 2021/22 Annual Performance Plan of the Department.

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<sup>a</sup>. 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.
- There is an increase in the supply of illegally/legally imported freshwater and marine fish from Asia and African countries that are generally sold at transport nodes such as taxi ranks, bus terminus and train stations. What is the Department doing to cushion the local market from cheap fish imports? For example, Australian snoek is prioritised for sale in local retailers such as the Food Lovers Market over the locally caught snoek.
- 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

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costs and from which year? What are the skills demand vs the output from universities to the production of such scarce skill?

- The Department had estimated that under Ocean Economy, 26 000 jobs would have been created by the end of 2016/17, then 77 100 jobs by 2019/20 and 1 million jobs by 2033. What was the actual job contribution under Oceans Economy at the end of the 2014-2019 period and how many of those jobs still exist?
- Aquaculture jobs increased from 3 250 in 2018 to 6 500 in 2020, which is 22% of the 15 000 jobs target set for 2033. The 6 500 is made up of seasonal, EPWP and permanent jobs. The Department should explain how many of the 6 500 jobs are seasonal, permanent and EPWP. Are the 2033 targets still realistic or require downward revision?
- 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 the inequality gap in the country, including the COVID-19 recovery.
  - 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?
- The Department exceeded its 2014-2019 targets of delivering 24 aquaculture projects by cumulatively implementing 47 projects by 2020. However, these projects did not translate to R3 billion revenue but R1 billion farmgate value, and only produced 6 365 tonnes against the target of 20 000 tonnes. Which of the implemented projects are underperforming and what is being done to fast-track improvements to catch up with the 2033 targets of revenue and production volumes?
- 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 should be further clarity on whether 'community projects' are EPWP projects?
- 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<sup>5, 11, 12</sup>

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 the 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 of 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 2020, the Department and the Department of Public Works and Infrastructure reported harbour repairs, upgrades, dredging of 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?
- How much progress towards proclaiming the approximately 50 potential and existing unproclaimed harbours in the Eastern Cape, KwaZulu-Natal, Northern Cape and Western Cape?
- The Department reports that R500 million was invested in small harbour development and created 719 jobs. How many of these jobs are still in existence?

#### 4 MARINE PROTECTION SERVICES AND OCEAN GOVERNANCE<sup>11, 13</sup>

Marine environmental governance in South Africa is currently undertaken in a sectoral fashion. 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 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 2009<sup>14</sup> 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.

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.<sup>15</sup> 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.<sup>16</sup> 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?
- The Department should clarify its role in the *National Maritime Security Strategy* of the Department of Transport. The strategy aims to show how South Africa can secure its waters, where particular actors have jurisdiction and over what, and current gaps in capacity and legislation. The Strategy also plans to integrate



dispersed resources such as patrol vessels and operational budgets, to improve surveillance of the country's coastline and waters.

- The ongoing and frequent confiscations of poached fisheries resources are an indication that the still significant gaps in the Integrated and Coordinated Enforcement Programme. Poaching reports indicate that poaching only reduced due to COVID-19 lockdowns but spiked again as restrictions were relaxed. What are the major limiting factors in the enforcement programme and when will they be addressed?
- How far have these challenges been addressed? For example, the shortage of functional patrol vessels, fewer flying hours for available choppers from the Air Force, weak security at various storage facilities, poor regional cooperation, and outdated technology.

## 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 to have a total of 42 MPAs. These MPAs have been designed to protect 87% of 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 their 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.<sup>17</sup> 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?
- Offshore oil and gas exploration uses deafening seismic surveys that generate the loudest human sounds in the ocean, short of those made by explosives. In marine mammals, the blasts, which reach more than 250 decibels and be heard for miles, can cause hearing loss, disturb essential behaviours like feeding and breeding, and mask communications between individual whales and dolphins.<sup>18</sup> The blasts also reduce the catch rates of commercial fish.



- Were these noise pollution impacts considered before issuing the Wild Coast seismic blasting survey permit to Shell?
- What evidence was presented that the tourism, fisheries and other marine ecosystem services will not be affected by the noise pollution from the seismic surveys?

## 6 THE BIODIVERSITY ECONOMY

South Africa has a demonstrable record of endorsing and practising biodiversity conservation and has a suite of policies toward biodiversity management. These have enabled the growth of substantial and innovative bioprospecting, wildlife industry, tours and lodging. The key drivers are living and dead indigenous species, game or wildlife farming and ranching, and the regulatory environment. These activities should contribute to both biodiversity conservation, social and economic development. The targets were that by 2020/21, there will be R1.915 billion revenue generated from the sector that will create 24 800 jobs. The wildlife businesses or operations will have 30% PDI ownership.

- The target of 24 800 jobs and R1.9 billion revenue are most definitely impacted by the COVID-19 lockdowns and the bans of international travel. Since the contribution from wildlife is easy to be understood, what is the progress from the bioprospecting sector towards the 2020/21 revenue and employment target?
- The hectare target was 2 million ha of wildlife under PDI ownership of use rights. How many hectares of land has the Department achieved so far?
- Another important target that the Department had set was supporting 1 000 SMMEs to engage in the wildlife economy. How many SMMEs could be supported so far and where are they located or operating?

## 7 CHEMICALS AND WASTE ECONOMY<sup>19</sup>

South Africa has a responsibility of putting measures in place to transform its waste into goods and services for social, economic and environmental development. There are economic opportunities in the chemicals and waste sectors that are yet to be fully exploited. The Chemicals and Waste Economy Lab has noble aspirations of reducing the negative environmental and health impact of waste and risks posed by chemicals through the commercialisation of circular economy and fostering inclusive growth. South Africa generates 111 megatonnes of waste per annum, of which 75% ends up in landfills.

- The medium-term goals are to implement 20 initiatives that will increase GDP contribution, number of SMMEs and jobs when measured against the 2016 baseline. The contribution to GDP will increase from 24.3 billion R35.8 bn, and increase jobs from 116 000 to 243 000 (+127 000 jobs). These targets are to be





achieved by 2023 or 2023 **(in the next 2-3 years)**. As of December 2021, what are the latest statistics towards the 2023/24 GDP and jobs contribution?

- To implement the 20 identified initiatives, public investment of R1.81 billion between 2017 and 2023 was required to unlock R7.9 billion of private investment. How much have the public and private investments been able to contribute to date, and what did that investment translate to?
- Separation of waste at source has been one of the areas of weaknesses among households and the plan is to have at least 50% of households separating at source by 2023/24. Where are the areas of progress and where is the country when weighed against the 50% target?
- High impact initiatives for ash, gypsum, slag and biomass will divert 15.5 million tonnes of waste from landfills and create ~28 000 direct jobs. How has each diversion initiative performed towards the 15.5 million tonnes and 28 000 jobs?
- The e-waste economy has the potential to contribute R341 million to the GDP and the Department planned to facilitate its growth through the introduction of an e-waste levy to increase collection rate and unlock government ICT legacy volumes. How much stock volume has been identified from Government's ICT and how will it be coordinated to reach the e-waste centres or sites?
- South Africa has more than 14 million people who go to bed hungry, yet the country wastes (losses) 33% of total food production during the pre-distribution stages. How much progress has the Department made to conduct focused capacity development amongst agro-stakeholders to minimise food loss? Are there initiatives to help channel the 'imperfect' food to deserving institutions such as orphanage homes or old age homes?
- It takes 500<sup>b</sup> years for a diaper to decompose and 92% of disposable diapers will end up in landfills. South Africa sells 1.4 billion diapers per year. Is there progress towards the production of diapers that are biodegradable or compostable?
- Asbestos and mercury are dangerous chemicals that a lot of South Africans are exposed to them daily. Following the promulgation of the Asbestos Abatement Regulations on 10 November 2020, there is hope that South Africa is moving towards an asbestos-free environment. There is no national policy currently with a cut-off date when all buildings must be asbestos-free, employers are encouraged to self-develop policy and procedure as to how they are going to be phasing out asbestos in their buildings. Has the Department of Public works indicated when they will begin replacing the asbestos products in government buildings?

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<sup>b</sup> <https://bit.ly/3rK7bAS>



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