AQUACULTURE AND INVESTMENT OPPORTUNITIES IN SOUTH AFRICA

BY

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14TH NOVEMBER 2016
PRESENTATION OUTLINE

- Operation Phakisa
- Global status of aquaculture
- Aquaculture Aspirations & Interventions in South Africa
- Aquaculture interventions
- Aquaculture projects
- Investment Opportunities in the aquaculture sector in South Africa
Operation Phakisa was first publicly mentioned in the State of the Nation Address response…

"The first implementation of Operation Phakisa will be led by the Department of Environmental Affairs. It will focus on unlocking the economic potential of South Africa’s oceans, which are estimated to have the potential to contribute up to one hundred and seventy seven billion rand (R170b) to GDP by 2033 compared to fifty four billion rand (R54b) in 2010.

H.E. President J.G. Zuma, July 2014"
Why Operation Phakisa

... BRINGING TOGETHER Government, State Owned Entities, Industry, Labour, Civil Society and Academia to collaborate in unlocking the economic potential of South Africa’s Oceans.

...UNLOCKING the economic potential of South Africa’s Oceans

...DELIVERING on the aspirations of the National Development Plan 2030
Operation Phakisa: Oceans Economy
Focus Areas

1. Marine Transport and Manufacturing
2. Offshore Oil and Gas Exploration
3. Aquaculture
4. Small Harbours Development
5. Marine Protection Services and Ocean Governance
6. Coastal and Marine Tourism

Skills Development and Capacity Building
Research, Technology and Innovation

Enablers

Focus Areas
Globally, Aquaculture contributes to almost half of total supply

Global total fish production – wild catch and farmed (reported)

- Aquaculture production has shown strong growth of 7.2% p.a. from 1970 to 2012.
- Of the 141 million tonnes of fish consumed, over 70 million tonnes come from aquaculture which about 50%
- An additional 50 million tonnes of fish is required to feed the world population by 2030 and this production will come mainly from aquaculture

Factors influencing supply

- The need to employ sustainable fishing methods has become more important due to dwindling stocks of certain species
- FAO has classified most wild fisheries as either fully exploited or over exploited
- Increasing demand for fish products

- New technologies and breeds e.g. RAS system and GIFT strain for tilapia has enabled better yields and lower long term input costs
- Higher stocking capacity for shrimps which allows for higher yield
- Investment in research and development

- Governments have a responsibility to ensure that everyone has enough to eat.
- Food needs to be available, accessible and affordable through a resilient and reliable supply system
- Fish is regarded as an essential part of a healthy and nutritious diet

SOURCE: FAO State of World Fisheries and Aquaculture 2014; FishStatJ
HEADLINES 2019: SA economy reaps the rewards of Operation Phakisa

“…to Aquaculture in South African has shown strong growth in 5 years, with production from 2014 up 5 fold to 20,000 tonnes…”

“…experts estimate the revenue contributed by Aquaculture to South Africa’s economy to be as much as R 3 Bn…”

“…exciting momentum built in Operation Phakisa evidenced by Aquaculture’s inclusive growth…”

“…The Aquaculture sector in South Africa now employs 15,000 people in direct and full time jobs…..“

“Jobs in Aquaculture sector seen as quality jobs, improving livelihoods in rural communities….”

AQUACULTURE SECTOR ASPIRATIONS

Abalone
Oyster
Mussels
Finfish
KEY INTERVENTIONS

1. Selection and Implementation of Catalyst Projects

2. Legislative reform

3. Inter-Departmental Authorisations Committee

4. Globally recognised monitoring and certification system

5. Aquaculture Development Fund

6. Capacity building for support services and skills development

7. Coordinated industry-wide marketing efforts

8. Preferential Procurement

SOURCE: Aquaculture Lab
1 Location and Species of 32 Aquaculture Projects

SMME’s
(12+)

Original 24 Projects

- Hatchery expansion- Paternoster- Oyster
- Expansion- ELIDZ Oceanwise- Kob
- Expansion- Hamburg cluster- Oyster
- Expansion - Roman Bay – Abalone
- Expansion - Abagold
- Expansion - HIK Abalone
- Expansion - Amatikulu - Ornamentals
- Expansion - Wild Coast Abalone - Abalone

New Projects

- New- Wild coast abalone ranching cluster - abalone
- New- Hamburg cluster - Kob
- New- Saldanha Molapong Cages - Trout and Salmon
- New - Amatikulu - Kob
- Expansion - Marine Growers - Abalone
- Expansion - Doring Bay Abalone - Abalone
- Expansion- Saldanha Blue Ocean Mussels - Mussel
- Expansion- Saldanha Bay Oyster Company - Oyster
- New- Richards Bay Sea Cage Farming - Dusky Kob
- New- Diamond Coast Abalone Ranching - Abalone
- Expansion - DST Abalone Hatchery
- Expansion - Jacobsbaai Sea Products - Abalone

Note: 4 Projects moved to business opportunities

- Ventersdorp catfish
- Adz Vantersdorp
- Algoa Bay Yellowtail
- Southern Atlantic

12 New Projects

- Really Useful Investment
- Aqua Food
- Blue Sapphire Pearls
- Southern Atlantic sea farms
- Imbaza Mussels
- West Coast Oyster Growers
- Hermanus Salmon
- Requa Mussels
- African Olive Trading
- Chapmans Mussels
- Oystercatcher Oysters
- Vaal fisheries Tilapia
INVESTMENT OPPORTUNITIES
Investment Opportunities

Aquaculture Development Zones

What is An Aquaculture Development Zone?

- An area or site either on land or at sea set aside exclusively for aquaculture use or development
- Aquaculture Development Zone (ADZ) may have bulk infrastructure (reservoir, water pump) to attract investors
- ADZ are supported by key government policies such as Industrial Policy Action Plan, draft Agricultural Policy Action Plan, Agriculture Policy Action Plan, National Aquaculture Policy Framework, etc.
- Department of Agriculture, Forestry and Fisheries identified suitable Aquaculture Development Zones based on:
  - Locational advantages of the site
  - Availability of quality water (freshwater or seawater)
  - Carrying capacity of the ecosystem
  - Accessibility to markets (Infrastructure and logistical)
  - Potential socio-economic impacts (job creation, rural development, etc.)
Investment Opportunities

Aquaculture Development Zones

Benefits of Aquaculture Development Zones

- Minimising the cost of obtaining Environmental Impact Assessments authorisation due to the economies of scale
- Minimising the costs of infrastructure development (e.g. access roads, electricity, water intake and discharge)
- Easily coordinated support systems such as Extension Services, Veterinary Services, Hatcheries, etc.
- Coordinated marketing
- Associated benefits of agricultural zone of the sites
- Investment attraction
- Job creation
**Location & Size**
- Situated approximately 20km east of Port Elizabeth
- Land based zone

**Targeted Species**
- Marine and Freshwater Finfish and Abalone

**Current Status**
- No fish farming is taking place at the moment
- Project driven by the Coega Industrial Development Zone
- Department of Agriculture, Forestry & Fisheries provides technical support

**Potential Production and Job Creation**
- Production of **20 000 tons** per annum
- Direct Jobs - **10 000** & Indirect Jobs **15 000**

**Progress**
- Feasibility study conducted.
- Process for an Environmental Impact Assessment is initiated.
Eastern Cape Province: Algoa Bay Aquaculture Development Zone

**Location & Size**
- Algoa Bay, Port Elizabeth
- Area is 285 hectares
- Sea based zone

**Targeted Species**
- Finfish (yellowtail)

**Current Status**
- No farming activities are taking place currently

**Potential Production and Job Creation**
- Production of **1 000 tons** per annum
- Direct Jobs **220**
- Indirect Jobs **780**

**Progress**
- Environmental Authorisation granted
- Environmental Authorisation has been advertised in the local newspapers as per requirements
- Appeals have been submitted to Department of Environmental Affairs
- Department of Agriculture, Forestry & Fisheries to respond to appeals to enable Environment Affairs’ Minister to make a decision in light of the submitted
Eastern Cape Province: East London Industrial Development Zone

**Location & Size**
- Situated in the west bank of East London adjacent to the East London Airport.
- Area is 32 hectares
- Land based zone

**Targeted Species**
- Marine and Freshwater Finfish (salmon), Abalone and Seaweed

**Current Status**
- Currently two farms in the zone
- Current production of 200 tons

**Potential Production and Job Creation**
- Production of **10,000 tons** per annum
- Direct Job Creation: **2 000 jobs**
- Indirect Job Creation: **3 000 jobs**

**Progress**
- Zone driven by the East London Industrial Development Zone
- EIA granted for finfish and abalone culture
- One farm identified under Operation Phakisa
- Continuous marketing of the zone and identification of potential investors
- Two new farms to be established
- Department of Agriculture, Forestry & Fisheries provides technical support
- Recently zoned for the culture of Barramundi, Rainbow trout and Atlantic salmon
Eastern Cape Province: Qolora Aquaculture Development Zone

**Location & Size**
- Situated 60km northeast of East London
- Area is 26.4 hectares
- Land based zone

**Targeted Species**
- Marine Finfish, Abalone and Seaweed

**Current Status**
- Facilitating funding for support of infrastructure development
- Department of Agriculture, Forestry & Fisheries initiated process of identifying potential investors

**Potential Production and Job Creation**
- Production of 2 000 tons per annum of Dusky kob or 700 tons per annum Abalone
- Direct Jobs (1000); Indirect Jobs (2000)

**Progress**
- Environmental Impact Assessment approved
- Waste Management permit issued
- Community resolution issued
- Department of Agriculture, Forestry & Fisheries has developing zone designs, architectural and management plans
- Progress on obtaining lease from Dep. Rural Development and Land Reform

**Challenges**
- Access to funding for infrastructure development.
Amatikulu Aquaculture Development Zone

**Location & Size**
- Situated approximately 130km from Durban and 7km from Amatikulu River
- Targeted area is 108 hectares
- Land Based Zone

**Targeted Species**
- Ornamentals, Prawns, marine and freshwater Finfish

**Current Status**
- Currently only 2 hectares are utilised for Ornamental fish farming
- 2 ornamental farms in operation

**Potential Production and Job Creation**
- Production of **15 000 tons** per annum
- Direct Job Creation: **6 000** jobs
- Indirect Job Creation: 10 000 jobs

**Current Status**
- Two projects identified under Operation Phakisa for the Amatikulu ADZ
- Department of Agriculture, Forestry & Fisheries are in negotiation with the Ingonyama Trust Board to obtain a letter of consent to utilise the identified site
- Department of Agriculture, Forestry & Fisheries initiated the process of obtaining Environmental Impact Assessment. The BID has been advertised.
- Department of Agriculture, Forestry & Fisheries, KwaZulu- Natal Wildlife & Trade Investment KwaZulu- Natal started engaging potential investors (one new investor for prawn farming)
Amatikulu Aquaculture Development Zone

Location & Size
• Situated approximately 130km from Durban and 7km from Amatikulu River
• Targeted area is 108 hectares
• Land Based Zone

Targeted Species
• Ornamentals, Prawns, marine and freshwater Finfish

Current Status
• Currently only 2 hectares are utilised for Ornamental fish farming
• 2 ornamental farms in operation

Potential Production and Job Creation
• Production of 15,000 tons per annum
• Direct Job Creation: 6,000 jobs
• Indirect Job Creation: 10,000 jobs

Current Status
• Two projects identified under Operation Phakisa for the Amatikulu ADZ

• Department of Agriculture, Forestry & Fisheries are in negotiation with the Ingonyama Trust Board to obtain a letter of consent to utilise the identified site

• Department of Agriculture, Forestry & Fisheries initiated the process of obtaining Environmental Impact Assessment.

• Department of Agriculture, Forestry & Fisheries, KwaZulu-Natal Wildlife & Trade Investment KwaZulu-Natal started engaging potential investors (one new investor for prawn farming)
Richard’s Bay

PROJECT PROGRESS

- Potential for 600 tons production
- Prioritised through Operation Phakisa to receive DST funding
- Deployment of first cages (four)
- Transfer of 25,000 fingerlings
- Rigorous environmental monitoring
**Saldanha Bay Aquaculture Development Zone**

**Location & Size**
- Saldanha Bay is situated on the west coast of South Africa, approximately 100km north of Cape Town

**Targeted Species**
- Mussels
- Oysters
- Finfish (Salmon/trout)

**Current Status**
- 10 aquaculture farms in operation in Saldanha Bay

**Progress**
- Currently working on conducting blanket EIA for new entrants into the industry
- Currently have 4 phakisa projects in Saldanha Bay
- 6 new projects situated in Saldanha Bay applying for phakisa status
## Vanderkloof Trout Aquaculture Development Zone

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<thead>
<tr>
<th>Location &amp; Size</th>
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<tbody>
<tr>
<td>• The Vanderkloof Dam is situated in the Northern Cape approximately 130 km downstream from Gariep Dam and is fed by the Orange River.</td>
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<tr>
<td>• Vanderkloof Dam is the second-largest dam in South Africa (in volume).</td>
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<table>
<thead>
<tr>
<th>Targeted Species</th>
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<tr>
<td>• Freshwater Finfish (trout).</td>
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<tr>
<th>Potential Production and Job Creation</th>
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<tr>
<td>• Production of <strong>11518 tons</strong> per annum</td>
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<tr>
<td>• Direct Jobs <strong>1000</strong></td>
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<tr>
<td>• Indirect Jobs 1000</td>
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<th>Progress</th>
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<tr>
<td>• Feasibility study complete</td>
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<td>• Environmental Impact Assessment Authorisation to be obtained</td>
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<tr>
<td>• Commencing trout pilot project</td>
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THANK YOU