



**REPUBLIC OF SOUTH AFRICA**

**OPERATION PHAKISA**

**UNLOCKING THE ECONOMIC POTENTIAL OF SOUTH  
AFRICA'S OCEANS**

**OCEANS ECONOMY  
REVIEW WORKSHOP  
AQUACULTURE**

**15 OCTOBER 2015**

# Aquaculture

More than 40 participants, spanning government, academia and the private sector, engaged in the session for aquaculture.

The discussion of the group covered the progress made to date by the sector, the challenges facing Aquaculture, and how the Delivery Unit can explore opportunities to further accelerate impact in the next 12 months.

## **SUMMARY OF PROGRESS FOR AQUACULTURE**

The Aquaculture Delivery Unit operations manager, Ms Andrea Bernatzeder, presented an update on the progress made by the Aquaculture sector.

In the past year, the aquaculture team has made substantial progress:

- Nine out of the 24 prioritised projects were supported resulting in their scale-up plans being fully underway
- Progress was made towards the scale-up of the sector in the coming years, with ~8.4 tons of abalone seeded for ranching, ~ 25,000 fingerlings stocked in dusky kob cage farm, and ~200 abalone broodstocked in abalone hatchery
- Eight leases were approved or advertised
- TNPA approved 85 ha of water for aquaculture
- R410 million in investment was committed by private sector and government
- 521 new jobs were either realised or committed, implying a 23% increase from the 2012 baseline
- Production increased by 124 tons, over 20% increase from the 2012 baseline

These outcomes are a consequence of the good progress achieved on the “3 foot” plans across the three horizons defined by the Lab participants in 2014. The progress made to date is summarised below.

### **Phase I**

Phase I focuses on quick wins that could be implemented in the initial 6 to 12 months:

- The nine projects selected for support are on schedule or ahead of schedule in terms of production, job creation, and impact on transformation. In

addition, eight new leases were approved by DPW, and three more advertised or approved by TNPA

- The establishment of an Inter-Departmental Authorisations Committee is delayed but underway. Individual engagements were held with TNPA and DPW to unblock issues related to access to land and water. An initial IAC meeting was held on the 8 September 2015. In addition, a decision to perform a detailed analysis of business processes was taken. This analysis will identify recommendations to streamline business processes
- A working group was set up for the establishment of the Aquaculture Fund. Despite this process not yet being finalised, several initiatives were taken to improve access to funding. Investment seminars in the UK and China were attended by the Delivery Unit. The team also achieved the prioritisation of new funds for aquaculture (e.g., from the Jobs Funds). A total of R410 million was committed for the sector by the public and private sector over the last 12 months
- Coordination of industry-wide marketing efforts is underway. Various industry bodies were engaged regarding the establishment of AquaSA (a statutory body under the Marketing of Agricultural Products Act). The AquaSA model was drafted and workshopped on 16 July 2015. Operation Phakisa farmers and industry were invited to participate in an outward investment mission to Chile (in November 2015). South Africa received various requests (including from Iran and Taiwan) for export of aquaculture production during the year

## **Phase II**

Phase II comprises actions to be implemented in a 12 to 24 month time frame. Despite this not being the core of the work during last year, progress has been made on different fronts:

- In order to select additional Phakisa projects, an advertisement was placed in City Press (30 August 2015) and Farmer's Weekly (18 September 2015) requesting new Aquaculture Phakisa proposals to be submitted. Twelve projects are in the process of submitting applications and seven of these have been formally incorporated. This includes an additional 2337 tons of mussels (443 tons import substitution), 500 tons of salmon, and 4143 tons of oysters which need access to export markets
- Several steps have been taken towards legislative reform to promote aquaculture development:

- Environmental Impact Assessment (EIA) – only basic assessment required (2 years to 8 months)
- Draft Alien Invasive Species (AIS) regulations (maps) were published for oyster and mussels (green zones)
- Terms of Reference for Strategic Environmental Assessments were finalised
- Criteria for general authorisation for aquaculture coastal effluent were refined
- First drafts of a Bill and a Socio Economic Impact Assessment for the Aquaculture Act were completed
- Work is underway on the establishment of a globally recognised monitoring and certification system. The National Regulator for Compulsory Specifications (NRCS) was requested to undertake sampling – with a MOU in place between DAFF and NRCS. A Working Group was established for food safety standards in the bivalve sector. In addition, the Shellfish Monitoring and Control Programme was implemented during the year
- To develop capacity building for support services, the Delivery Unit was appointed and a Skills Working Group established.
- Desktop research on preferential procurement was conducted in respect of aquaculture projects and products. Meetings are in the process of being set up with the DST and the DTI to request support for this initiative

## KEY CHALLENGES IDENTIFIED FOR AQUACULTURE

Three main challenges were identified by the Delivery Unit in conjunction with the working group, namely:

1. **Lack of sufficient investment.** Despite the efforts made by the Delivery Unit, funding for aquaculture projects is still a challenge, with insufficient attraction of public and private investments. Access to existing and potential funds will also require further work, especially for small scale farmers and entrepreneurs
2. **Transformation is under way but far from delivering on expected outcomes.** Compliance with new and existing regulations is a challenge for farmers, as well as the development of small scale aquaculture projects
3. **Skills require an additional effort moving forward.** A thorough assessment of future skills required is needed, as well as plans to accelerate development that can cope with the ambitious objectives for the sector

4. **Additional challenges were identified** including performance of support services, need to improve interdepartmental collaboration and further investment on research

The delivery effectiveness survey was completed by 10 participants. While the number of responses was limited, it revealed that the aquaculture delivery team is strong in the areas of delivery mindset, cross departmental collaboration and allocating implementation responsibilities. Areas for improvement were also highlighted in the identification of issues/blockages and the speed with which these blockages or issues are resolved (Exhibit 6).

**Exhibit 6:**

**Results from the delivery effectiveness survey of the Aquaculture focus area**



Macro theme	Survey question	Avg. Score
Plan for delivery	Are responsibilities for implementation always clearly allocated?	3.1
	How often are there road-blocks (blockages) due to different stakeholders not aligned on the plan?	1.8
	How would you assess the quality of the plans?	2.4
Delivery Unit	What role has the delivery unit played in supporting execution?	2.4
	How effective is the delivery unit in cross departmental/entity coordination?	2.6
Performance Management & Problem Solving	How often is progress monitored in terms of activity execution?	2.3
	How often is progress monitored in terms of KPI achievement?	2.3
	How quickly are implementing issues identified?	2.1
	How quickly are issues/roadblocks solved?	1.6
	Are issues/roadblocks solved without unnecessary escalations?	2.9
Delivery Mindset	Do people in your focus area think in terms of meeting deadlines and achieving KPIs targets?	3.6
	In general, which of these sentences best describes the culture of your focus area?	3.6

## **RECOMMENDATIONS AND COMMITMENTS OF THE AQUACULTURE FOCUS AREA**

The stakeholders came up with a number of possible solutions to accelerate the progress of the implementation of aquaculture initiatives.

### **Investment and funding:**

- Prioritise the setting up of the Aquaculture Development Fund
- Develop and facilitate access to feasibility studies by species (including lessons learnt from failures and successes to date)
- Create greater awareness in private sector financial institutions and government funding agencies to increase the inflow of resources into the aquaculture sector
- Work on upskilling of entrepreneurs to improve the use of existing funds and the success rates of the business ventures (clearly indicated various funding models available)

### **Transformation:**

- Understand existing community based models in other countries and pilot models appropriate for each area/region
- Develop a plan to involve the youth in the aquaculture sector
- Develop a framework and find mechanisms to engage and involve communities in the growth of the sector

### **Skills:**

- Introduce the subject of Aquaculture in the school curriculum as early as possible in rural areas
- Launch quick wins in skill development (i.e. international training while national vocational skills programmes are developed)

### **Communication and awareness:**

- Develop relevant communication strategy for each group of stakeholders
- Create awareness for funders, communities and consumers
- Strengthen information sharing with small scale farmers (e.g., through the development of an sms system)

**Capacity and other issues:**

- Resolve operations capacity within DAFF by filling operational positions left open by current Delivery Unit members
- Increase support capacity within government
- Marine protected areas (MPAs) need to be mapped out carefully so as not to affect other sectors
- Promote inter-lab syndications of proposed policies and plans for each sector

These recommendations will be taken forward by the Delivery Unit and included in the revised 3 foot plans (change management process) for the 2015/16 period.