# AQUACULTURE AS A VEHICLE FOR SOCIO-ECONOMIC DEVELOPMENT IN NAMIBIA



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### WE MUST REMEMBER THAT

- Nature is the foundation of any economy,
- The profits from farmed fish must cater for future generations and sustainable development by maintaining the sound and healthy foundation – otherwise productivity & profits will drop,
- In this regard, Wealth from aquaculture can be sustained by careful regulation



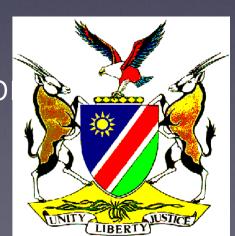
### Introduction

- Namibia Fisheries sector contributes 4.5% to GDP,
- Employment in the fisheries sector is estimated at 13 350, inclusive of aquaculture (683),
- The capture sector is foreign export oriented and therefore, generate more foreign earning,
- The fisheries sector is divided into 3 sub-sectors (marine capture, inland capture and aquaculture)



## Aquaculture sector overview:

- Aquaculture sector commenced in 2003 with the theme of enhancing food & nutritional security, livelihoods, employment & income generation,
- Aquaculture is divided into two sub sectors, namely marine culture & freshwater aquaculture, (marine culture focus is clear due to its current economic significance, whileas freshwater culture is limited and impact unknown,
- Freshwater aquaculture national demand is "estimated" at 1 100 14 000 tones, at USD 2.42/kg, gate price of 2.8 33 USD mill/ year,
- Current production is estimated at less 100 mt from freshwater, and 550 mt from mariculture.
- Thus new approach to recognize freshwater fish farming as a p economic activity, if to reach the demand by production.



### **Aquaculture Legislation & Regulatory Framework**

**2001** Aquaculture Policy: Towards the Responsible Development of Aquaculture,

2002 Aquaculture Act (Act no. 18 of 2002), promulgated in 2003,

This comprehensive Act prescribes, inter alia,

- procedure for obtaining aquaculture licenses
- monitoring and regulation of all activities
- environmental sustainability (EIA procedures)
- imports,
- this Act regulates responsible aquaculture best practices.

2004 Namibia Aquaculture Strategic Plan

Regulations under the act: licensing regulations

2010 Imports - Exports regulations

2012 shellfish sanitation monitoring programme

2012 Aquaculture Master Plan



# Aquaculture production & forecast

Sub-sector	Species	Volume (mt), 2011	Value (USD), 2011	Forecast 2023(mt)
Fresh water	Tilapia Catfish	100	1.5	4000
Marine	Oysters Abalone	525	4.2	5500

### Government Aquaculture development-:

(Government investment in infrastructure amounts to 15.2 mill USD (2003-2011), however a need to evaluate the gains and accelerate development,

#### **MARINE**

- Intensive systems, significant capital investment
- Production of high value species
- Export market

#### FRESH WATER

- Extensive system, community based
- Production for local market
- with focus on food security,







### Socio economic impact

- Infrastructure set up,
- Capacity building,
- Significant participation of women,
- Integrated aquaculture-agriculture (Diversification of income sources (fish vs livestock))











The Challenge is? (Challenge to promote aquaculture in Namibia are chiefly associated with economy of scale – large scale that will meet the economy of scale for real benefit

- How to sustain aquaculture wealth?
- How to reconcile society's development goals within the environmental limits over the long term:
- Produce more protein;
- Provide thereby jobs and income,
- Policies and regulations need to align to ....
- Economic profitability not being demonstrated,
- Capabilities of farmers, skills & technology,
- There is limitation to available data on inland small scale/artisanal fisheries, leading to direct fisheries income benefits,
- The response of farmers toward aquaculture development is not promising, and is linked to level of education, access to inputs by end user, etc...

### Needs

Access to finance is limited,

Awareness campaign of aquaculture must be designed & be operational, targeting the financial institutions, private sector & commercialized farmers,

Fish farming must be regenerated on a commercial footing, which requires planning and resources (investment)

The Government to redefine the strategy of how it envisions the future of the sector (fast tracking the formation of the Aquaculture Masterplan),

### Conclusion

Namibia has in place excellent necessary policies and legislation to ensure sustainable aquaculture,

Government Initiatives has contributed in some way towards encouraging the development of aquaculture in Namibia, however the strategic plan has not translated significantly to new aquaculture investment & growth,

The potential of marine water exceeds that for freshwater - more in its infancy stage & requires appropriate attention to kick-start the sector & accelerate production- if to meaningfully contribute to food and nutritional security & rural economic development,

Need for greater access to finance for strategic needs driven research & financial services for small scale producers, ("High Input Interventionist Approach")

# Possible Policy review:

Due to the fact that the current management has not fully oriented toward socio-economic objective, Some of the key intervention needed to change the efforts, could possibly be-:

Develop guiding principles on quarantine measures, introduction of exotic species, (regionally)

Policy framework on breeding programs, aquatic animal health and standardization regionally,

Conducive business environment to allow private sector to develop (feed & seeds - inputs)

Harmonise Policy on management of land and water use,



# THANK YOU

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