

#### PAPUA NEW GUINEA NATIONAL FISHERIES AUTHORITY

#### OVERVIEW OF THE PAPUA NEW GUINEA TILAPIA INDUSTRY

#### 2015 TILAPIA CONFERENCE, KUALA LUMPUR

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# Overview

- History
- Constraints in Aquaculture
- Government Programs and Strategies
- Current Production Status
- Tilapia farming developments
- Way forward

# History of Aquaculture in PNG

- Aquaculture was introduced in PNG in the 1950s to alleviate high malnutrition levels in the inland areas of PNG
- Out of 100+ species introduced that time for both stocking and aquaculture purpose, Common Carp (1959), Tilapia (1954) and Rainbow Trout have succeeded in aquaculture at very extensive levels.
- There has been very little growth in the aquaculture industry ever since and is mostly regarded a hobby activity



# AQUACULTURE CONSTRAINTS

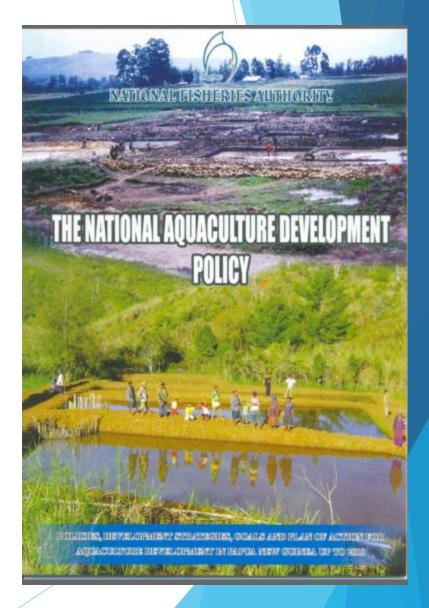
- Lack of farmer and extension officers technical capacity, research and development.
  - Limited skilled technical officers
  - High level of primitive extensive farming practices
- Access to quality, affordable and readily available feed.
- Access to good supply of fingerlings
- Economic potential not realized
  - Aquaculture economic and business capacity lacking
- OTHERS financial capacity, resource ownership, etc.





#### **Government Strategies & Programs**

- The National Fisheries Authority is responsible for all aquaculture developments and activities in PNG
- NFA also regulates and manages all fishery in PNG
- The National Aquaculture Development Policy - guides all aquaculture research, development and extension activities
- Closely collaborates with national and regional bodies for aquaculture development in PNG (ACIAR, SPC, etc.)
  - Limited technical officers
  - More research and extension needed



- Most funding for our aquaculture programs are derived from the tuna fishery and negotiations
- Aquaculture and fishery development programs that tilapia farmers benefit from include:
  - Provincial project grants infrastructure and capacity development (US\$13.5 Million)
  - Small scale fishing and fish farming grants (US\$4 Million)
  - Fishery credit facility for Small to Medium Enterprise (US\$1.5 Million)
- Other programs put in place to support tilapia farmers:
  - Fish for schools and prisons program
  - Farmer extension and support with feed and fingerlings
  - Establishment and support of Mini-feed mill and hatcheries for farmers
  - Farmers training and exposure
  - Technical information distribution (manuals & pamphlets)
  - Formation of Tilapia farmer Cooperatives
- Establishment of the National Aquaculture Advisory Committee to plan delivery of programs and strategies



## **CURRENT PRODUCTION STATUS**

- Most farms located inland PNG and are still at extensive levels
- There is a slow increase in number of people engaging in Tilapia production
- Survey was carried out in 2013 and estimated a total of 22,000 farmers with a total annual production of 15,000 MT for domestic marketing and consumption
- Increasing interest from people to engage in Tilapia Aquaculture





- Domestic market potential is great and farmers do generate income from tilapia sales at local market
- Farmers can make between \$4-\$7/kg on fresh or cooked tilapia
- The captured tilapia fishery by small-scale fisherman in lakes and rivers is small.
- Frozen wild captured tilapia is sold in local stores stores at \$6-8/Kg.





### DEVELOPMENTS IN TILAPIA FARMING

- Few farmers have realized the potential and have progressing into more semi-intensive farming cage farming of Tilapia.
- Recent advances in hatchery operations and allmale tilapia production has increased in a couple of semi-intensive cage culture establishments.
- Selected lead farmers have been exposed to international hatchery, farming and marketing trainings to increase their production.





- More research in affordable feed production has been made and a policy is being developed to retain some percentage of fishmeal from canneries back in PNG to develop fish feed.
- Plans of establishing feed mill in PNG
- Increased technical and financial support to farmers to increase tilapia production.



## WAY FORWARD

- Increased collaboration with regional and national partners in research and development
- Establishment of feed mill in PNG using local ingredients
- Establishment of satellite all-male production hatcheries with good tilapia strains.
- More training for farmers especially with the economics of aquaculture
- Easier access to credit facilities for farmers to gain access to funding
- More farmer exposure to the global trend of tilapia aquaculture
- Encourage fish farmer cooperatives to meet local market demands consistently



# THANK YOU!!

