



**DEPARTMENT OF PRIMARY INDUSTRIES**

**FISHERIES DIRECTORATE**

# **ABG REVENUE AND TAX SUMMIT**

**September 27 – 29, 2017**

**Presenters:** **Thomas Betitis** *(Secretary DPI)*  
**Mahara Auhi** *(Fisheries Director)*  
**Richard Mounsey** *(PGF Adviser)*



Department of Primary Industries

# A BRIEF OUTLINE OF BOUGAINVILLE'S REVENUE POTENTIAL FROM LIVING AQUATIC RESOURCES AND TASKS REQUIRED TO BE UNDERTAKEN





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## MAJOR SPECIES PRESENTLY BEING HARVESTED

Sea Cucumber



TUNA



MIXED SPECIES



# STRUCTURE OF PRESENTATION

## SECTION 1

### **Boundaries, Agreements and Tuna Resources**

*Presented by Richard Mounsey*

## SECTION 2

### **Sea Cucumbers (Beche-de-mer ) and other Living Aquatic Resources**

*Presented by Mahara Auhi*

## SECTION 3

### **Recommendations and steps to be taken for shared and non shared Living Aquatic Resources**

*Presented by Thomas Betitis*



## SECTION 1:

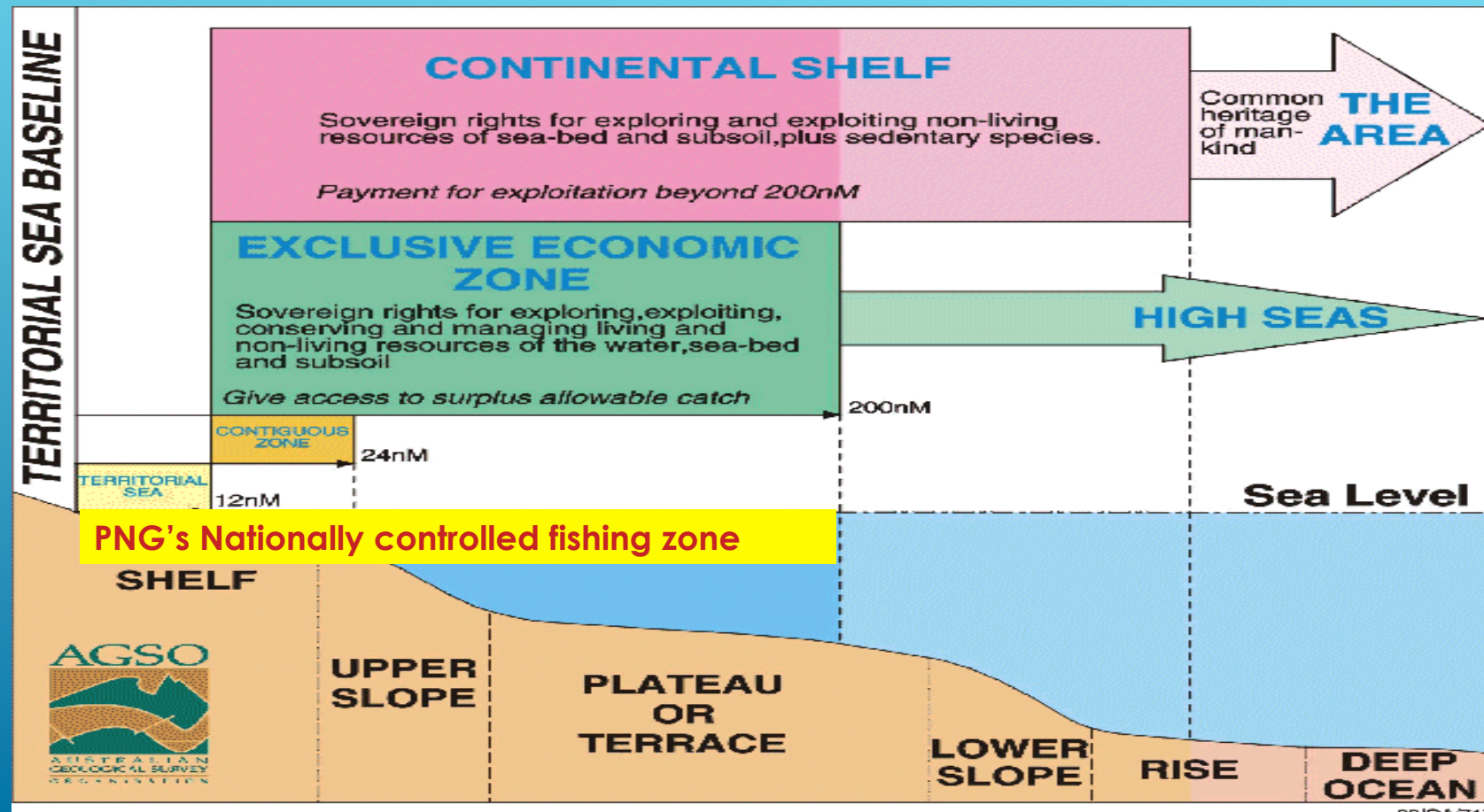
### WHAT CONSTITUTES BOUGAINVILLE ASSOCIATED WATERS



#### (e) FISHERIES

85. The National Government will provide for the autonomous Bougainville Government to be represented on:
- (a) delegations negotiating access and other fisheries agreements regarding Bougainville waters and waters beyond the guaranteed three nautical mile limit and within the Exclusive Economic Zone and the continental shelf associated with Bougainville territory; and
  - (b) bodies responsible for determining total allowable catches, licence numbers and reservation of licenses for domestic fishers in such waters.
86. An agreed formula (based on derivation less costs) will provide for National Government fishing revenues from fishing in those waters to be distributed to the autonomous Bougainville Government.

# VARIOUS SEA LEVEL AND THEIR JUDICIARY IMPLICATIONS



**Bougainville can derive revenue from fisheries within 3 Nautical Miles of the coast but where else ?????**

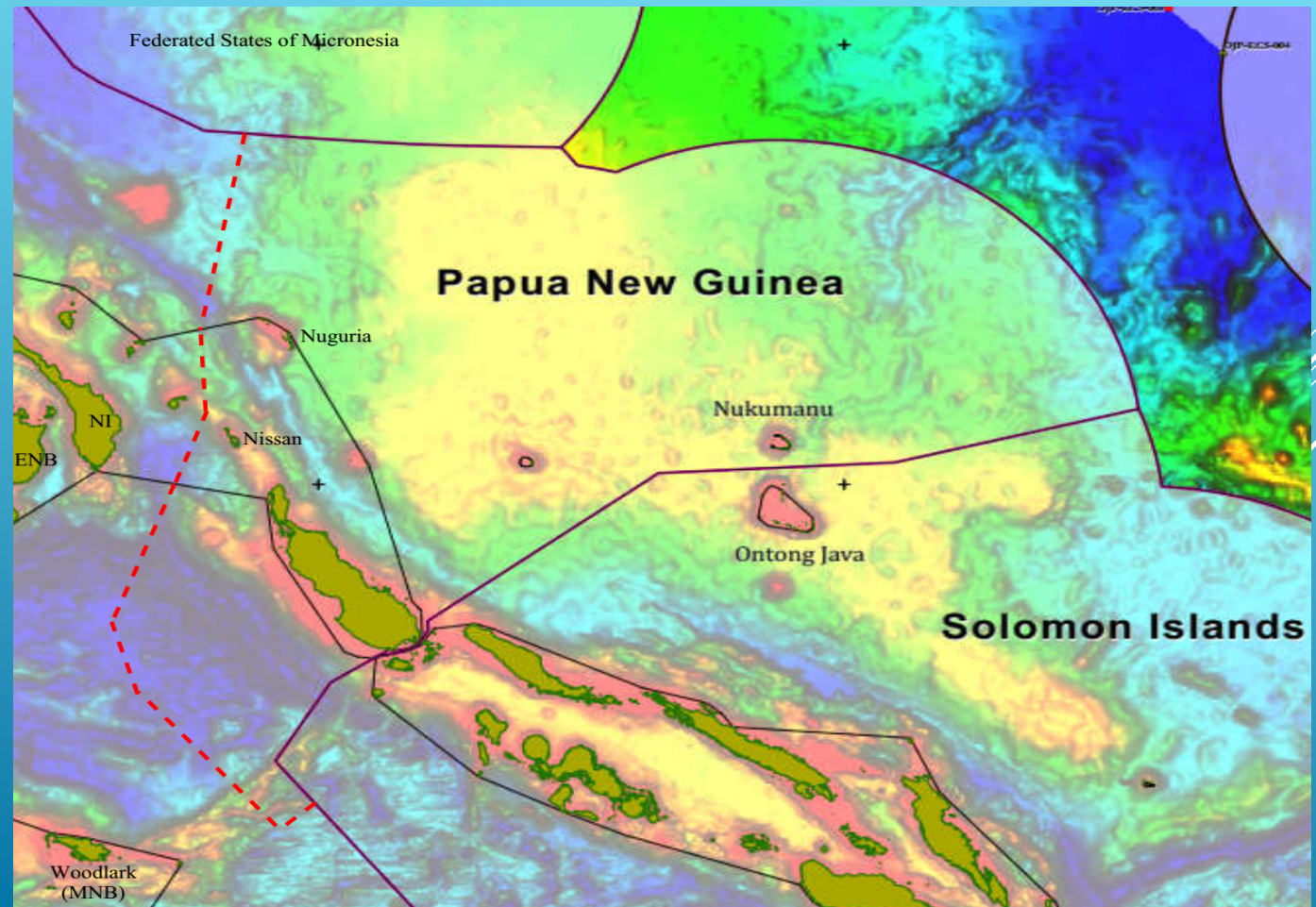




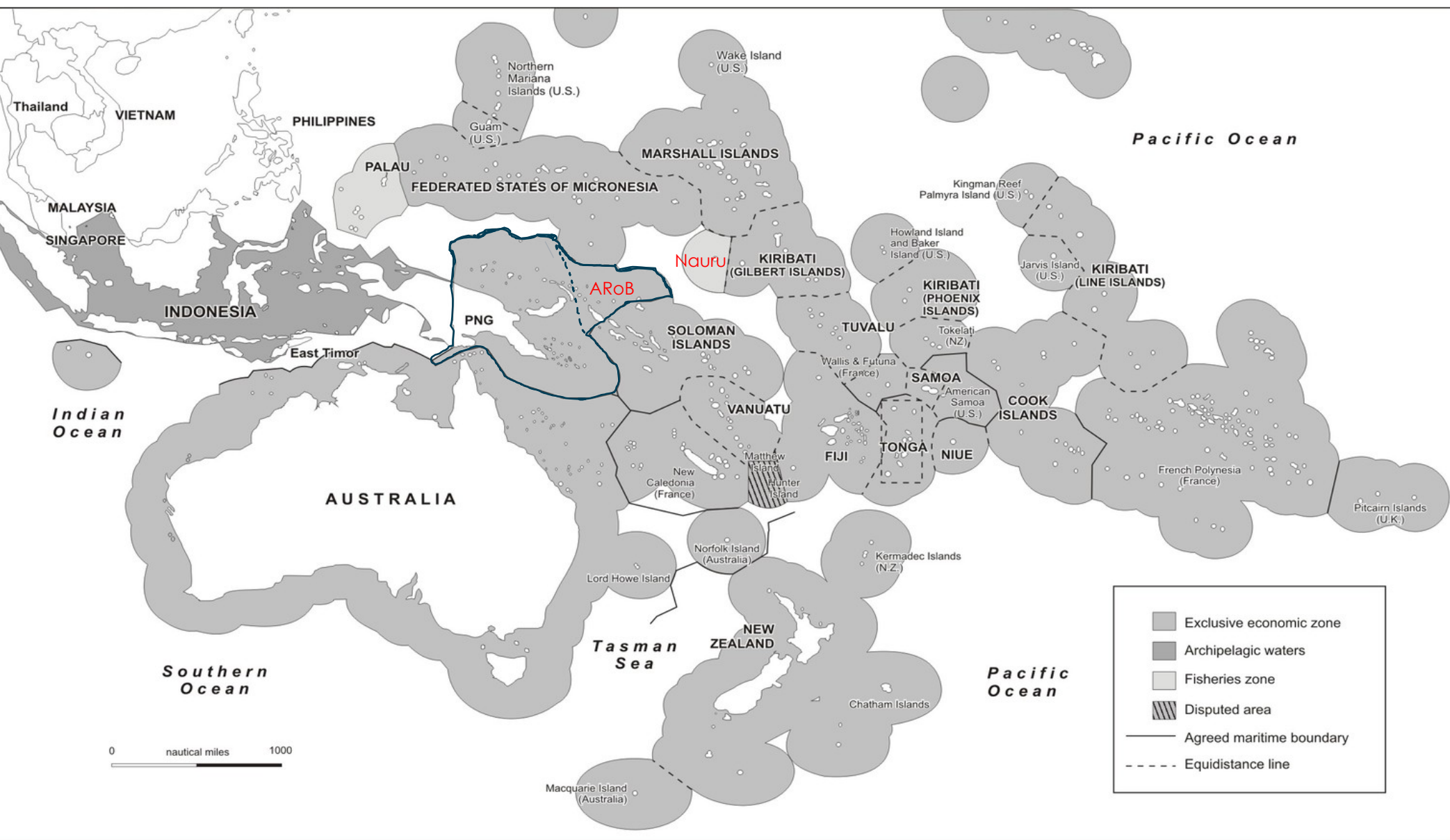
## Is the Peace Agreement referring to all the EEZ associated with Bougainville and is the red dotted line where it starts?

The concept of waters 'associated with Bougainville' (from paragraphs 8 and 85 of the Peace Agreement) is complicated, and is only relevant to the arrangements between the GoPNG and ABG for revenue-sharing from activities within those waters.

Presently Bougainville does not have any powers to manage, or legislate for management of activities in associated waters outside 3NM; Unless a new act of parliament changes the situation or Bougainville becomes an independent state



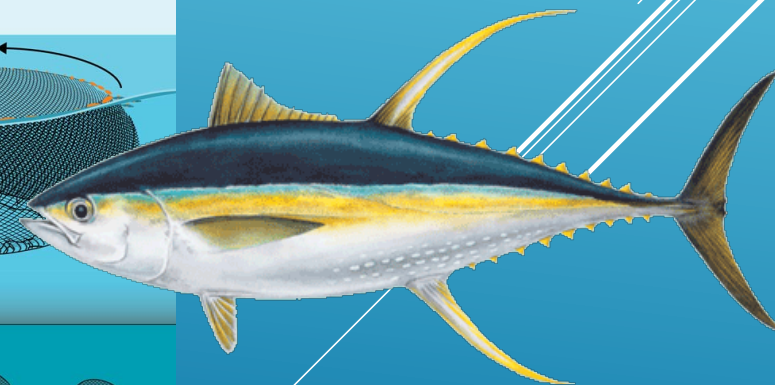
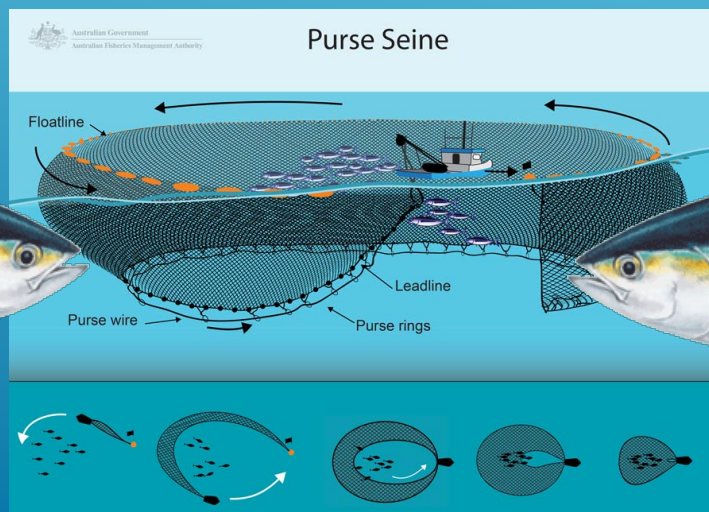
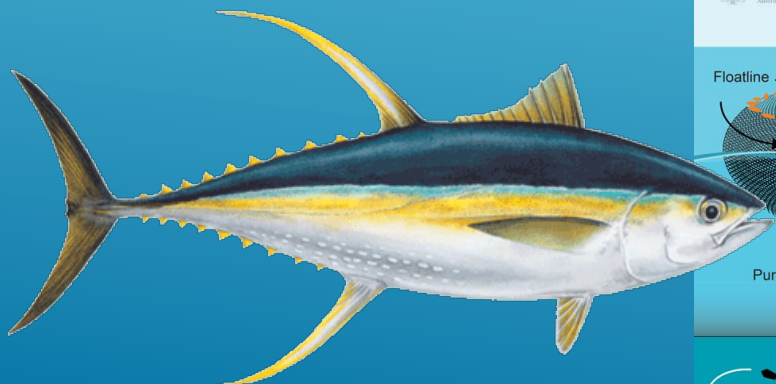






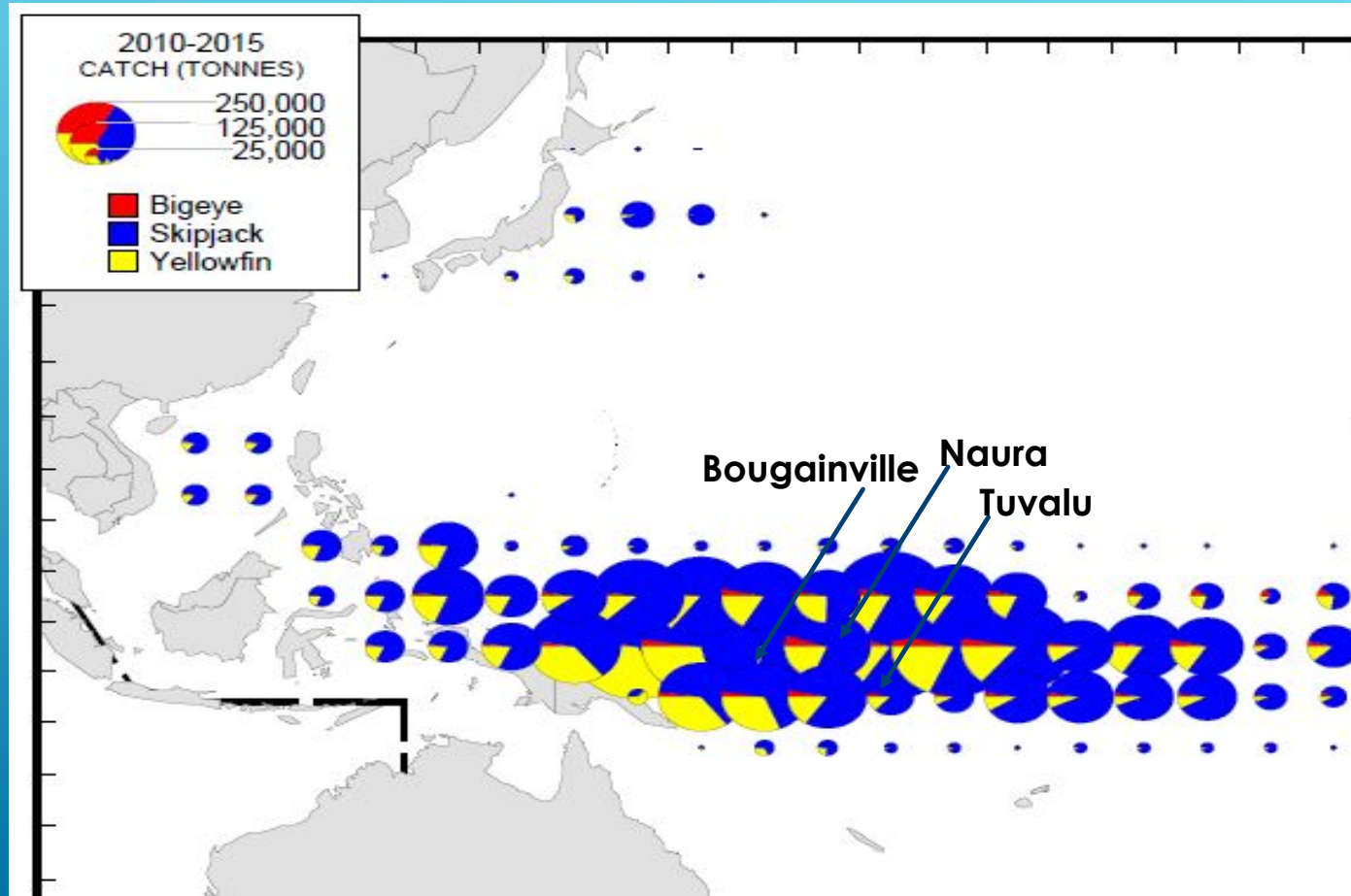
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## THE POTENTIAL REVENUE FROM TUNA IN BOUGAINVILLE ASSOCIATED WATERS



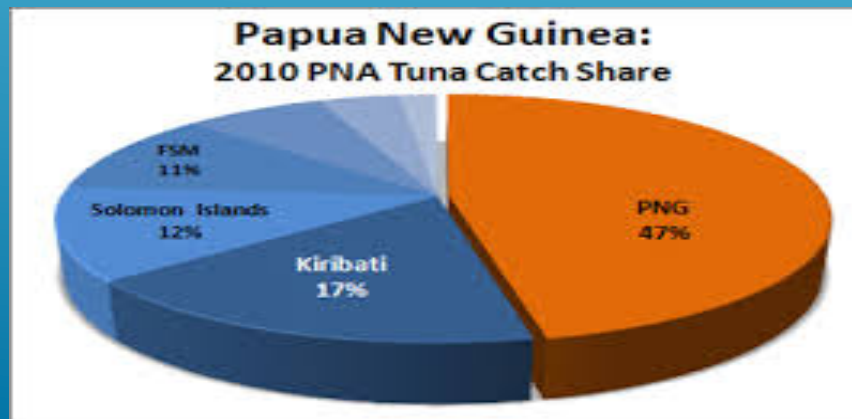
## WHERE ARE MOST OF THE WORLD'S TUNA BEING CAUGHT

WCPFC data (compilation of 5 years of data) SHOWING BOUGAINVILLE ASSOCIATED WATERS AS BEING SIGNIFICANT



## THE NAURU AGREEMENT

- The Parties to the Nauru Agreement (PNA) control the world's largest sustainable tuna purse seine fishery
- PNA Members are the Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, Solomon Islands and Tuvalu
- PNA continues to control around 50% of the global supply of skipjack tuna, the most commonly canned tuna
- Fishing days (VDS) are allocated by country and sold to the highest bidder. In this way, Pacific Islanders reap economic benefits from their sustainable management of tuna

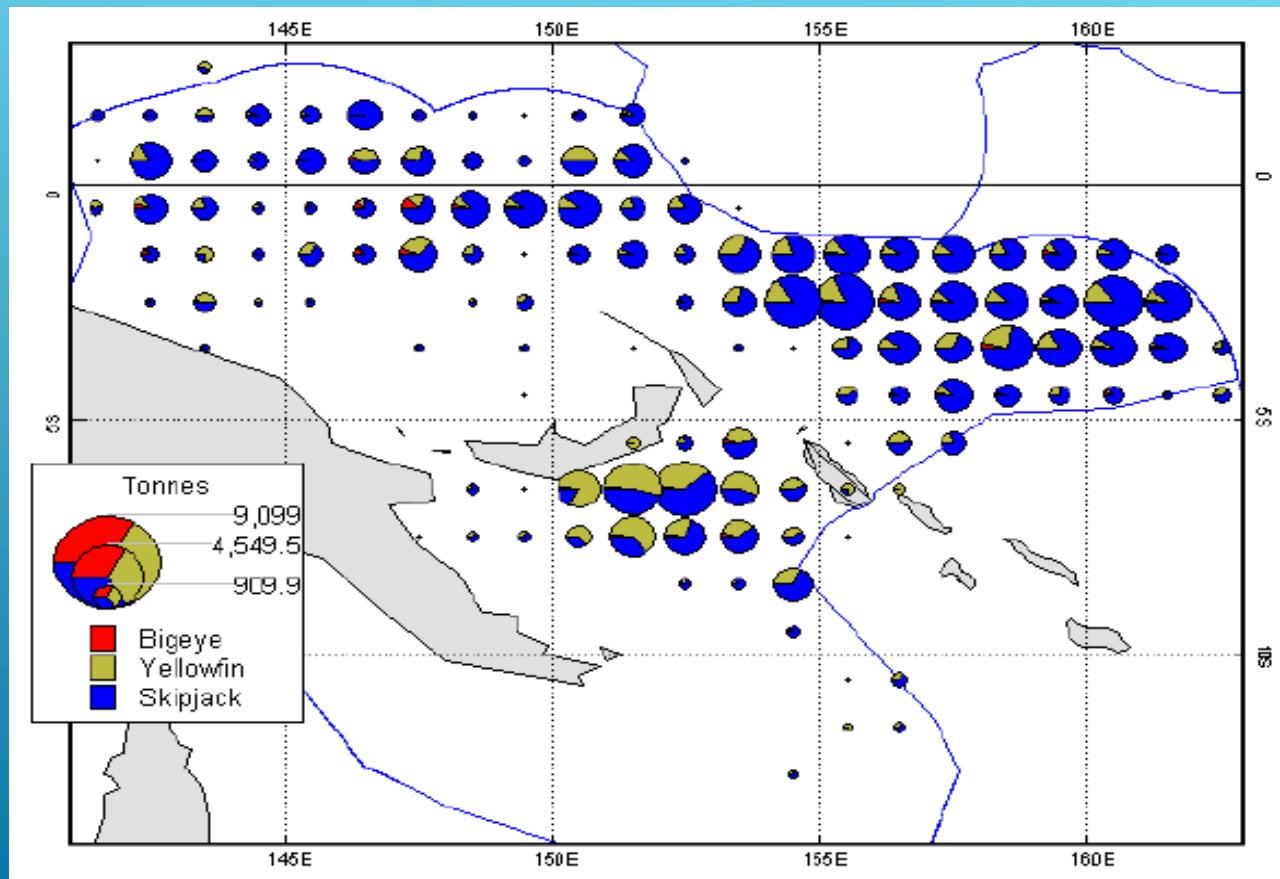




## TUNA FACTS

- Tuna is found throughout the PNG fisheries zone but especially to the north and east *(NFA 2003 data)*
- The fishery is primarily based on the skipjack and yellow fin tuna species with smaller quantities of bigeye and albacore *(NFA 2003)*
- The PNG catch in 2010 was 702,969 mt *(NFA report 2011)*
- A total of 258 vessels were active in the PNG waters in 2013 *(NFA report 2014)*
- SPC fisheries data indicates that 160 metric tons per day of skipjack plus an unspecified amount of yellow fin tuna were being harvested from waters associated with Bougainville in 2013
- Industry news is presently full of things like “Thailand skipjack prices have reached USD\$1,900 /MT at the end of June 2017, while it went to USD\$2,000/MT in Ecuador”
- Bulk yellow fin tuna are worth at least a third more than skipjack

**PNG FISHING ZONES** (*compilation of 3 years of data*) **SHOWING BOUGAINVILLE ASSOCIATED WATERS AS BEING SIGNIFICANT**



## ECONOMIC PICTURE

- **Trends indicate that at least 30% of the PNG catch is taken in waters associated with Bougainville** *(data: Fisheries consultant Norman Barnabas 2012)*
- **In 2015, the total world tuna catch was 4.8 million metric tonnes** *(data: International Seafood Sustainability Foundation (ISSF))*
- **58% of the world catch was skipjack / 28 % was yellow-fin** *(data: ISSF)*
- **The average global raw skipjack price was USD\$1,700 per MT over the last 5 years** *(range 1,000-2300 USD)* puts the value at **USD\$4.732 billion** *(data: Thai Union Group PCL)*
- **PNA share of the skipjack catch would have been USD\$2.366 billion** *(50% of world skipjack)*
- **PNG's share would have been USD\$1.112 billion** *(47% of the PNA catch which is mostly skipjack; other species are worth much more)*
- **Bougainville associated water component could have been significant but there is no reliable data yet available to indicate what was actually caught around Bougainville** *(we can only make assumptions based on 30% of PNG catch which would put the value at over USD 333 M or more than K 1 Billion and this only for skipjack / however it's only the value of the resource not the revenue back to ABG)*

## REVENUE SHARING WITH NFA

Nauru fisheries officials revealed the nation has raked in the following tuna access revenue:

- USD\$17,490,000 in 2014,
- USD\$24,000,000 in 2015
- USD\$26,140,000 in 2016

*(Tuna Market intelligence 2017) (Note: the Nauru zone is smaller than that associated with Bougainville)*

Tuvalu government's annual tuna revenue was:

- AUD\$18,000,000 in 2014
- AUD\$31,400,000 in 2015 *(43% of the national budget : spccfpstore1.blob.core.windows.net)*

VDS for PNG in 2012 were 11,197 from a total of 32,542 or about 30% of the total PNA days

PNA has now increased VDS to 46,000/year in their combined 200 mile zones

The price in 2014 was USD\$8 -12,000 / vessel day *(FFS data 2015)* PNG received over USD\$85 m in 2014 from VDS *(SPC data)* (30% of this would have been about USD 25.5 million or around K82 million)



- The number of VDS has increased significantly as has the price paid per day; now estimated to be around USD 14,000
- These increases are reflected in the recent jumps in tuna revenues to neighbouring countries
- PNG could be getting up to double what it received in 2014
- NFA needs to be open and transparent in regards to catches in waters associated with Bougainville as defined in the Bougainville Peace Agreement
- NFA needs to provide data on revenue raised from all tuna fishing activities, (not just VDS, or skipjack catches)

*(Note: There are other fishing activities outside of tuna happening)*

# ABG ACTIVITIES THAT SHOULD BE ADDRESSED ASAP

- Agreement on the details of the Peace Agreement boundary associated with Bougainville waters
- Appoint an ABG rep' to be represented on GoPNG bodies responsible for determining total allowable catches
- With the GoPNG develop a formula for sharing revenue derived by the GoPNG from the waters associated with Bougainville, and reflecting that arrangement in the required Organic Law

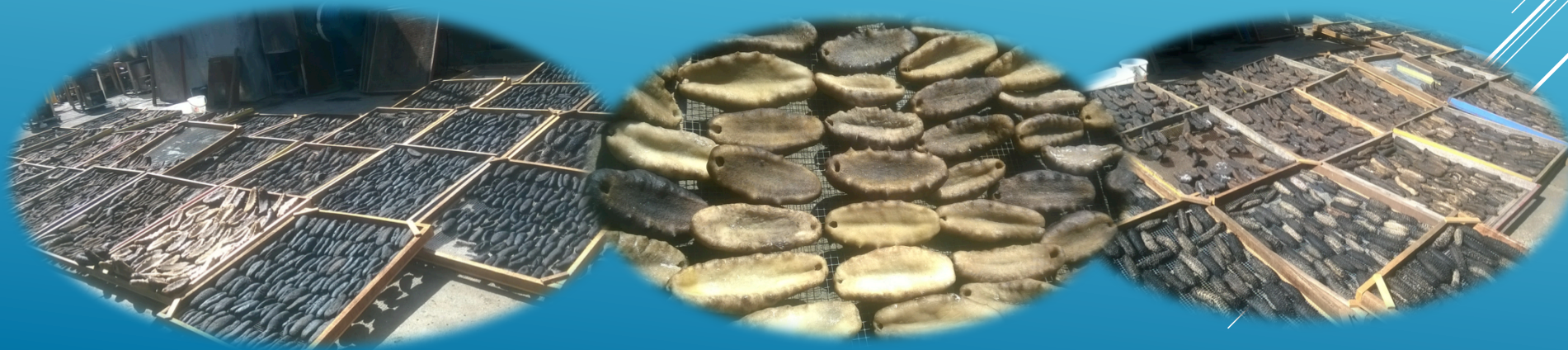


## SECTION 2:

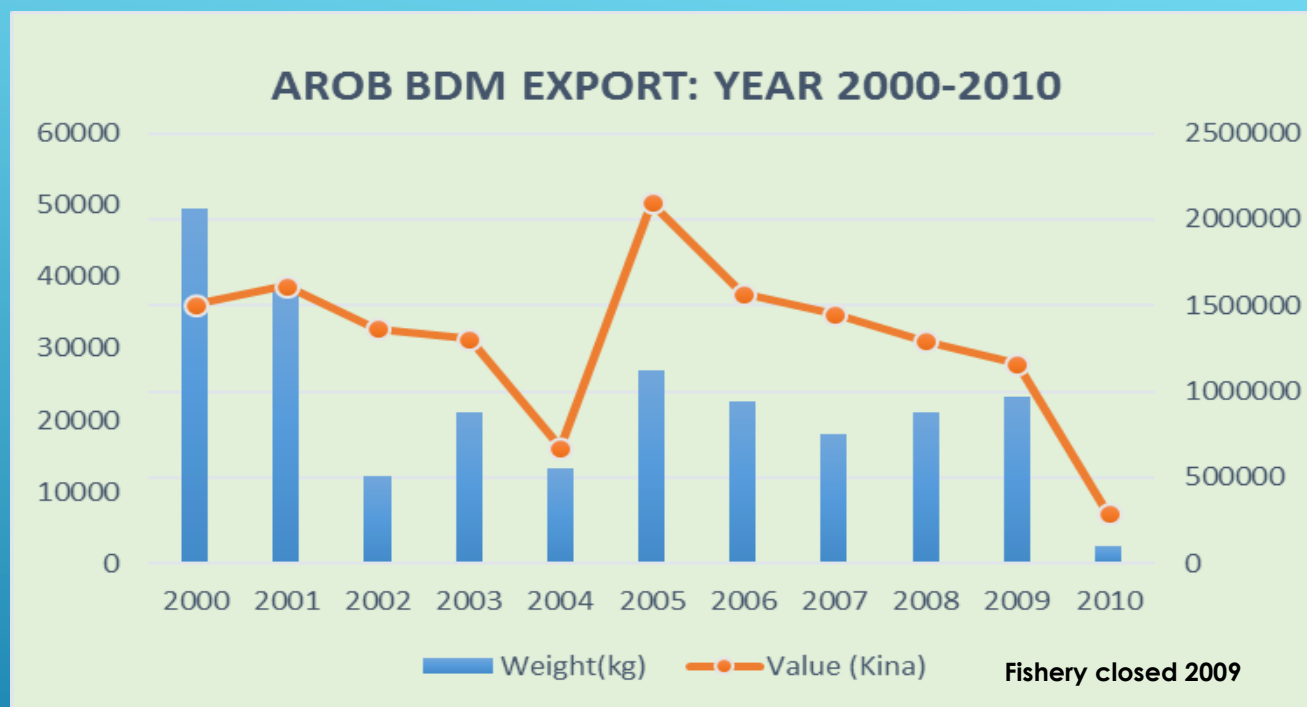


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# THE POTENTIAL REVENUE FROM SEA CUCUMBER IN BOUGAINVILLE WATERS



## BOUGAINVILLE BDM PRODUCTION 2000 -2010 (DERIVED FROM NATIONAL EXPORT DATA)



BOUGAINVILLE BDM Production 2000-2010. NFA-Records

- ❖ **Bougainville Produced 248.18 tons of Dried Sea Cucumber (Beche-De-Mer)**
- ❖ **Estimated Valued K14.3 millions** (average of 58 kina or 18 USD per kilogram)



# BOUGAINVILLE - BDM FISHERY 2017 DATA

**Based on BDM Daily Purchased Record Data provided by 6 licensed buyers / national exporters – Note: NFA TAC was only 28 MT for 2017**

**Total tonnage** – 95.78 MT, value to communities K3.92 millions  
(Average beach price was 41 kina or 12.8 USD per kilogram)

## **Regional tonnage**

- **North Bougainville - 64.11 tons, value K3.3 millions**  
(Average of 51.5 kina or 16 USD per kilogram)
- **Central Bougainville - 27.71 tons, value K440,848.11**  
(Average of 16 kina or 5 USD per kilogram)
- **South Bougainville - 1.88 tons , value K113, 787.53**  
(Insignificant amount due to possible trade with the Solomons)

*Note: The Atoll District where a small amount of assistance was provided the average beach price per kilogram was 70 kina or 22 USD*

## 2017 PRODUCT QUALITY

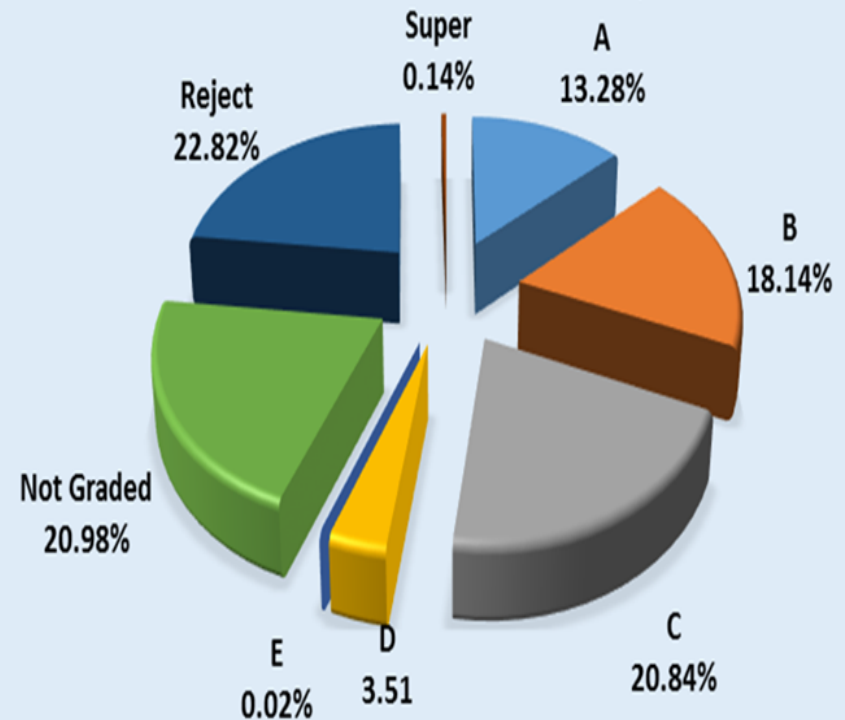
- Poor quality recorded 68.17% of 95.48 MT
- Good quality product account for only 31.56%
  - Top or Super grade 0.14%)
  - Grade A 13.28%
  - Grade B 18.14%

*(Note: there was no standardized grading process & things varied with individual companies)*

*The latest company export data that includes export price and internal transfer prices for Bougainville puts the value at K10.2 m and the amount at 107.5 MT*

Sum of Weight (kg)

### BDM PURCHASED BY PROCESSED QUALITY



# THINGS THAT NEED TO BE ADDRESSED

- The beach price of BDM for 2017 should have been 2 to 4 times higher if quality product was produced *(Note: the av' beach price in Fiji in 2015 was USD\$45 / kg while in Bougainville in 2017 it was USD\$12.8 / kg)*
- The NFA TAC of 28 MT needs to be better established considering the catch in 2009 prior to the ban was 20 MT and had been increasing for the past 3 years. Now with a 7 to 8 year closure the stocks have significantly improved *(although the large catch in 2017 needs to be taken into consideration)*
- The fishery should remain closed until the ABG introduces its own management plan backed up with community awareness, stock enhancement, harvesting, processing and marketing training
- If the TAC was set at a conservative 45 MT per year the beach value should be at least 8 million kina and the PNG export & internal transfer value at least 20 million kina
- A beach price tax should be imposed to pay for management
- Buyers, in addition to licensing payments, could possibly pay a Bougainville freight tax on products
- Illegal trade with the Solomons should be stopped



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## THE POTENTIAL REVENUE FROM OTHER LIVING AQUATIC RESOURCES



# WHAT ARE SOME OF THE POTENTIAL FORMS OF REVENUE

(SHARED OR NOT SHARED WITH THE NATIONAL GOVERNMENT)

1. Licence to fish (*commercial / recreational*)
2. Catch quotas
3. Licence to buy and sell fish products
4. Licence to process fish products
5. Licence to farm or sea ranch fish
6. Licence to operate fishing vessels
7. Port landing tax (*commercial sales*)
8. Export tax (*national level only*)
9. Company and wage earner income tax



## INSHORE

- Practical fisheries need to be developed
- For isolated communities there is a need to introduce salting, drying and other preservation methods for high price products, such as dried shark fins, octopus, clam meat, reef fish, lobster etc these could then be transhipped and taxed
- The PGF program is looking to explore opportunities on the atolls
- There are significant stocks of valuable fish within reach of community fishers, the challenge will be management, preservation and transport to markets
- Seaweed has potential. But the transport cost to Rabaul is holding the industry back. If transport costs can be lowered and the price to growers reaches 2 kina / kg then the industry will take-off
- Sea fish farming has potential but there are plenty of wild stock. Reseeding sea cucumbers via a hatchery is probably the most viable option at present



## OFFSHORE

- It is unlikely the National Parliament will enact the laws required to take control of fisheries outside 3 NM but it is quite common in other countries...and worth pursuing
- The offshore fish species NFA may consider releasing control of are; squid, shark, mackerel, swordfish, deep-water snapper, bait fish and possibly others.... But this is speculative at the moment and needs a well planned approach

## ONSHORE

- Wild mud crabs in mangrove areas or farming them could have limited potential
- Freshwater aquaculture may also be viable and consideration is being given to establishing a hatchery at Wakunai

## SECTION 3:

### RECOMMENDATIONS:

#### STEPS TO BE TAKEN FOR RESOURCES SHARED WITH GoPNG

- 1. Establish a Bougainville associated waters boundary agreement with the PNG Government**  
*(Justice department / Office of State Solicitor / Surveyor General etc / this is required as the basis of any revenue sharing agreement)*
- 2. Appoint an ABG rep' to be represented on GoPNG bodies responsible for determining total allowable catches, licence numbers and reservation of licences for domestic fishers in such waters** *(inline with the Peace Agreement requirements)*
- 3. Obtain data on catch and PNA VDS allotted by PNG annually;** *Note: the 2014 JSB resolved that the NFA would provide all relevant catch data to the ABG no later than 1 December 2014 - a commitment that has never been honoured*
- 4. Negotiate cost and revenue sharing from defined species taken within the agreed Bougainville associated boundary and from a share of the percentage of PNA allocated VDS to PNG**
- 5. Pursue political avenues to gain GoPNG support to transfer fisheries management responsibilities in waters associated to Bougainville that NFA are not presently managing**

## ***STEPS TO BE TAKEN FOR ALL OTHER LIVING AQUATIC RESOURCES***

- 1. Develop a proposal to establish an improved fisheries management directorate** (possibly similar to the Morobe Fisheries Management Authority) **to facilitate wild capture development, aquaculture and revenue sharing**
- 2. Work with local level governments to manage, license and generate revenue from inshore fish resources inline with ABG management plans** (as outlined in recommendations in the NFA BDM fisheries management plan)
- 3. Stop the illegal trade of Beche-de-mer and other products, going through the Solomon Islands**
- 4. Invest in areas that will contribute to tax revenue, such as a hatchery to restock sea cucumbers**
- 5. Encourage international investment to set-up fish processing, transport and freight facilities**

A large, sleek shark, possibly a Great White, is shown swimming horizontally across the frame in clear, deep blue water. The shark's body is a light greyish-white on the underside and a darker grey on top. Its fins are dark. The word "QUESTIONS" is written in large, white, bold, sans-serif capital letters across the middle of the shark's body. In the background, several smaller fish are visible, and a rocky outcrop is in the bottom right corner.

**QUESTIONS**

NOT PART OF PRESENTATION; Just some points that might be required....

August 2017 NFA provides national government another cash payment this time K60 million.

Currently 2,000mt of fish per day are processed on PNG shores / 40,000 jobs (~90%) females

Industry 4% of the Total GDP

In 2017 NFA licenced 129 vessels both domestic and foreign to harvest tuna within its waters.....at an average of 10,000 USD / day x 100 days each = USD\$129 million (K413 million)

Maritime Boundaries Delimitation Project was Headed by the Department of Justice and Attorney General under the office of the State Solicitor (*NFA 2008*).

**Office of the Surveyor General** / It takes charge of all surveys at the international borders (PNG Gov report)

Hydrographic Service was actively involved in the National Maritime Boundary project with its delimitation program. New base points have been identified.....

[ro.uow.edu.au/cgi/viewcontent.cgi?article=5085&context=theses](http://ro.uow.edu.au/cgi/viewcontent.cgi?article=5085&context=theses)



*Fishery revenues by Country go to [spccfstore1.blob.core.windows.net](https://spccfstore1.blob.core.windows.net)*

## 32 Government Revenue from Fisheries

### 32.1 Access Fees for Foreign Fishing

In the country and territory chapters, information is provided on access fees received for foreign fishing. Table 32-1 summarises the fees paid in 2014 (or most recent annual period for which data are available), and compares the fees to the total national government revenue. The access fees and their percentage contribution to total government revenue are shown in Figures 32-1 and 32-2, respectively (countries/territories are included where access fees and other revenue are collected and data is available, throughout this chapter).