

Fishing Line



NEWSLETTER OF THE NATIONAL FISHERIES AUTHORITY

ISSUE No. 1

JANUARY – FEBRUARY, 2003

Inside this Issue

- Tuna Loining Plant for Lae
- Frozen Smoked Tuna Project
- Editorial
- Staff Profile
- 2003 Access Negotiation
- New Project Staff
- PNG Shark Longline Fishery
- GPA Sponsors Netball
- Deputy Observer Boss Gets Training
- Work Starts on Wewak Tuna Plant
- Advisory Committee for Aquaculture Fishery

Key Contacts at NFA

Main Switchboard – Ph: 309 0444 Fax: 320 2061
11th Floor, Deloitte Tower
P.O. Box 2016, Port Moresby, N.C.D.

Dr Antony Lewis – Acting Managing Director
Ph: 309 0431 Fax: 320 3024

Mr Ronald Kuk – Projects Manager

Mr Tatek Buraik – Corporate Services Manager

Mr Sylvester Pokajam – Financial Controller

Mr Kema Mailu – Board Administration Officer

Mr Bob Densley – Provincial & Industry Liaison Advisor

Mr Norman Barnabas – Provincial & Industry Liaison Manager

Mr Augustine Mobiha – Fisheries Management Advisor

Mr Ludwig Kumoru – Fisheries Manager – Tuna

Mr Jacob Wani – Fisheries Manager – Inland & Aquaculture

Mr Barre Kare – Fisheries Manager – Lobster/Prawn

Mr Leban Gisawa – Fisheries Manager – Inshore (Live Fish)

Mr Philip Polon – Fisheries Manager – Sedentary

Mr Lamiller Pawut – Monitoring & Enforcement Manager

Ms Joyce Agaru – Enforcement Team Leader

Mr Noan Pakop – Observer Manager

Ms Aquina Kango – Audit & Certification Team Leader

Ms Valonna Baker – Licensing & Information Manager

Ms Margaret Kaheu – Licensing Officer
Ph: 309 0470 Fax: 320 2069

Mr John Kasu – Principal, National Fisheries College, Kavieng, NIP
Ph: 984 2187 Fax: 984 2343

Mr Rainol Gibson – Property Manager

Mr Garry Preston – Proj. Management Specialist/Team Leader

Mr Peter Cusack – Proj. Management Specialist/Deputy Team Leader

Lae to Have Tuna Loining Plant

A second tuna loining plant will be built in Lae, Morobe Province. It is a Frabelle (PNG) Limited project to be built at a cost of K5 million.

A groundbreaking ceremony to mark the commencement of construction work on the site was held on 4th February 2003. The Minister for Fisheries, Hon. Andrew Baing, Acting Managing Director of NFA, Dr. Antony Lewis, senior managers of NFA and senior officials of Morobe Province witnessed the ceremony on 4th February 2003.

The plant will initially process 50 tonnes of tuna per day into loins, but may increase this in the future and even progress to full scale canning operations. This onshore processing of tuna will encourage the establishment of other related industries, including can making, transport, food supply and retailing, sale of household goods, banking and others. It will also attract other forms of processing, like smoked tuna, which is frozen and exported to US, Europe and Asia.

The Lae tuna loining plant is the second, the first in



• Groundbreaking Ceremony at Frabelle Premises Lae. Minister for Fisheries Hon. A. Baing taking the pick during the ceremony.

Wewak by South Seas Tuna is in its first stage of construction, and a third one is being planned for Madang.

With the three loining plants at full production, Papua New Guinea is expected to generate over K500 million worth of additional processed tuna exports in the near future.

Frozen Smoked Tuna Project to Go Ahead

Following the approval of the January meeting of the National Fisheries Board, a project involving a form of value-added tuna processing new to PNG is ready to get underway.

The process involves treating fresh tuna loins prepared as blocks with a patented filtered wood smoke, based on carbon monoxide. It is tasteless, and results in improved colour of the meat and has some preservative qualities.

The blocks are vacuum packed and quick frozen for export. There is a growing international market for this high-quality product in the USA and Europe, and it does not directly compete with the more traditional fresh chilled sashimi markets.

The proponents of the proposal, Japan Foods (PNG), intend to eventually establish processing

plants in Lae, Madang and Port Moresby, utilizing both large yellowfin and bigeye tuna caught by purse seine vessels, and second grade longline or handline-caught tuna.

The plants would require three tonnes of tuna per day initially, and ten tonnes at full production. Export revenues of over K30 million per year are projected, with other benefits in terms of employment (up to 250), technology transfer, and other by-products.

The company is likely to commence operations in Lae in May, where necessary infrastructure and fish supply are likely to be available. The project may well offer an incentive for a local handline fishery to develop, as well as providing an attractive alternative option for longline operators.

From the *Managing Director's Desk*

In the year's end issue, we undertook to outline expectations and plans for the fishery sector in 2003 and what role NFA would usefully play in this. 2003 is already shaping as the year that onshore tuna processing truly took off. Several major developments have already occurred during the first two months- real commencement of the large Wewak and smaller Lae loining plants, with the latter now likely to become a medium-sized cannery; the completion of the Kavieng wharf and ground-breaking for the associated seafood processing facility (opening scheduled for early March), and continuing progress with the Manus wharf.

With other major onshore processing proposals in the pipeline, and onshore investment required as a condition of access to PNG's tuna resources, it seems that this part of the sector is poised to expand dramatically by the end of the year, with major positives for export earnings. PNG's proximity to the resource is increasingly seen as critical, and there is growing expectation of PNG emerging as a major processing location in the region, with exports of one billion Kina per year no longer out of the question. And even if all of these ambitious plans come to fruition, they will likely process only half of the sustainable harvest of tunas in the PNG DFZ. This still leaves room for well regulated foreign access to PNG's waters, for mutual benefit and for further growth.

We may therefore be getting the big things right, but what of things at the grass roots level? The large onshore projects will doubtless have many spin off benefits for service industries locally, but will meaningful coastal fisheries development result? The two forthcoming coastal development projects, once operational, will hopefully provide new marketing opportunities, infrastructure and a sound community-based resource management framework, but not all provinces or communities can realistically expect to directly benefit.

There may be no better example than the nation's capital and the adjacent Central Province, where despite large, growing and lucrative markets and a

sound resource base, there is currently, for example, no reliable ice supply, so fundamental to fishery development, at a reasonable price and quality; additionally, supporting infrastructure (roads, water and power) continues to deteriorate. This mirrors the decline in fishery opportunities at provincial level in most coastal areas of PNG. It is surely time to turn this around.

After restructuring and two years of operation as a statutory authority, it is also time to take stock and ask what is NFA'S role in the sector and in addressing this need. By general consensus, NFA has developed into a robust credible organization, which commands respect from industry for its standards and accountability, and plays a key regulatory and facilitating role in the development of the sector. Its commitment to good governance is now recognized, but perhaps we need to ask what hasn't NFA done well, or what it still needs to do.

Supporting provincial fisheries development is a primary NFA responsibility and is now the main task confronting the Authority. The onshore development and the EU/ADB projects fortunately provide a good platform from which to address these challenges. This is recognized within NFA but it is equally recognized that this will not be easy. There is no question of a return to the provincial-based approach whereby NFA undertook ill-managed and sometimes duplicative activities at provincial level. How to catalyze and support sustainable provincial fisheries development with a small Port Moresby-based Authority, no matter how efficient, remains the major challenge for the future. Capacity-building at the provincial level, coupled with MOUs between NFA and provincial institutions, seems to offer the most promising avenue to pursue. At least it looks likely to have the benefit of solid institutional and infrastructural support as the major onshore developments and projects come onstream.

Dr Antony D. Lewis
Acting Managing Director

2003 Access Negotiation Fruitful

An intensive round of fishery access negotiations with foreign fishing entities was completed at the end of February, following coordinated preparations and review of performance under previous arrangements.

The agreements, which will bring close to K32 million in access fees to PNG during 2003, allow access under agreed conditions to PNG's rich EEZ, recognising that the domestic fleet is unable at present to take the sustainable tuna catch available.

The agreements involve the Taiwan Deep Sea Tuna Boatowners and Exporters Association, the Korean Deep Sea Fisheries Association, the China Fisheries Association, and two Philippines

companies (TransPacific Journey and Frabelle Fishing Corporation) and 78 purse seine vessels in total. They are for one year, and are based on a formula which includes a 6% rate of return on an agreed catch level and a fish price for the preceding 12 months which takes account of the species composition of the catch.

The agreements increasingly incorporate broader cooperation components (crewing levels, landing of tuna and by-catch and transshipment in PNG ports). In most cases, future access will be tied to requirements for onshore investment, preferably processing (loining or canning).

Access fees are also payable by locally-based foreign vessels at concessionary rates, by a third Philippine company whose agreement commenced late in 2002, and under the US Multilateral Treaty on Fisheries. The total access fees may approach a record K50 million this year.

Staff Profile



Name : Joyce Agaru
Age : 30
Marital Status : Single with one child
Qualification : Law Degree (LLB,UPNG)
Current Position : Team Leader, Enforcement Unit

Ms Joyce Agaru hails from Gaire village, Central Province. She joined the Authority (NFA) as Team Leader of the Enforcement Unit on 2 June 2002.

Her duty as Enforcement Team Leader involves mostly investigation work, inspection, documentary review and prosecution of illegal fisheries activities, especially in relation to the overall enforcement of the provisions of the 1998 Fisheries Management Act. She leads a team of four fulltime officers and one casual officer.

As the team leader, she maintains a close working relationship with provincial fisheries administrations, providing advice, assistance and training of provincial fisheries personnel in enforcement work.

Prior to joining NFA, Ms Agaru held various senior positions with the Internal Revenue Commission and worked with several law firms and the National Court of Papua New Guinea.

"This year June 3rd will be the end of my first year with NFA and I find my work to be very challenging. I have learnt a lot of new things because the kind of work I am doing here is totally different from what I was doing before. My previous jobs were pure lawyer's work. Here, I am doing a bit of legal work but most of it is enforcement work.

When asked what she thinks of NFA, she has this to say, "NFA is an organisation that has changed completely from a government department to a private sector office situation, where people's work attitude is totally different from the public service. I was with the Taxation office before and now that I am here, I can see and feel a lot of difference. Comparing NFA to other corporatized government entities, NFA is doing very well."

Ame Joins Project Group



The Projects Group has recruited a Project Officer, Ms Margaret Ame to join the team of two.

Ms Ame holds a Bachelor of Arts Degree from the University of Papua New Guinea. She was last employed as a Senior Planner with the Development Planning and Programming Division, Department of National Planning and Rural development for the last five years.

She brings with her a wealth of experience in the area of development programming & planning, and project monitoring and evaluation. She will be working closely with the Projects Coordinator in the administration and management of the implementation of the European Union Funded Rural Coastal Fisheries Development Programme and the INFOFISH Project.

Papua New Guinea Shark Longline Fishery

Introduction

Shark fishing has a long history in Papua New Guinea, and in some areas, sharks are also of cultural significance. In more recent times, artisanal and community fishers have contributed to the trade in dried fins, whilst various larger scale fisheries for shark have operated in the past - a gillnet fishery in the Gulf of Papua during the 1980s, which ceased as catch rates declined and international sanctions were applied, and a trial fishery for liver oil from deep water sharks in the early 1990s. As the domestic tuna longline developed in the mid-1990s, some freezer longline vessels, initially licensed as tuna longline vessels but attracted by the higher prices for shark products, especially fins but with ready markets available for shark meat, increasingly targetted sharks. The shark longline fishery has accordingly now been recognized as a fishery in its own right.

The fishery

The fishery is comprised of nine freezer longline vessels, mostly 20m to 30m LOA, and between 70 to 160 GRT. The longline gear is set nearer the surface than is the case with tuna longline vessels, employing this and other techniques to target the various shark species. The fleet operates over most parts of PNG waters, outside 6 miles of land and associated reefs, using tuna or other fish, imported and local, as bait. Shark makes up more than 80% of their catch by weight, with tuna and billfish comprising the balance of the catch. The main shark species taken are oceanic in habitat. They are silky shark (*C. falciformis*), oceanic white tip (*C. longimanus*) - but some more coastal species, such as grey reef shark (*C. amblyrhynchus*) and silvertip (*C. albimarginatus*), are also taken in significant numbers, along with a range of other species such as blacktip, hammerhead, blue, thresher, mako, tiger, and crocodile sharks plus some pelagic rays. The fins and meat of most species are marketable, but some species are of low value, e.g. blue shark and may not be retained. The sharks are dressed on board, then frozen, and head and guts are removed and the carcass trimmed, typically leaving 60% of the original whole weight; fins are removed for freezing or drying, and make up around 6% of the whole weight; tunas and billfish are similarly headed and gutted then frozen.

The catch has steadily increased since 1996 with 2002 catches probably exceeding 1,300t dressed weight, or around 2,300t whole shark equivalent.

Marketing

Until recently, most of the meat and fins were exported primarily to Taiwan, with frozen fins commanding a much higher price, and this varying considerably by species. An increasing amount of the shark meat is now processed locally, for domestic consumption. The value of exports was around K8 million in 2001, but less in 2002, with increasing meat retention for local sale. 2002 exports (still incomplete) are currently valued at K2 million, 3.2 million and 1.3 million for frozen meat, frozen fins and dried fins respectively, or K6.5 million total.

Management plan

With the recognition that a well regulated shark longline fishery can be sustainable fishery, a Management Plan for the fishery was developed during 2002, with the assistance of an FAO study, and adopted after detailed consideration by the National Fishery Board in January 2003. The Plan combines input controls, with a limit of 9 vessels in the fishery, and a maximum of 1,200 hooks to be set per vessel per day, and output controls, with a total allowable catch (TAC) for the fishery of 2,000t of dressed weight of shark.

Participation in the fishery is restricted to citizen companies only, with licences exclusive to the shark longline fishery and not transferable. Observer coverage of the fishery is required, and a National Advisory Committee will be formed to advise NFA on the management of the fishery. There is a strong commitment to monitoring and assessment of this potentially controversial fishery as more is learned of its dynamics.

Other shark catches

Incidental shark catches by other fisheries will eventually need to be covered by the Plan. In the expanding tuna longline fishery, for example, possibly 10% by weight is incidental catch of shark; there are also catches in coastal artisanal fisheries and the large tuna purse seine fishery which will also need to be accounted for in any overall management of PNG tuna shark populations.

The PNG shark longline fishery, one of the few in the region, is now an established and relatively stable component of the fishery sector, making a significant contribution to local food security and exports on a sustainable basis.

For more information, contact Mr Ludwig Kumoru, Manager Tuna Fishery

Common Sharks Caught by Longline in PNG

Name: **SILKY SHARK** Scientific Name: *Carcharhinus falciformis*



Second dorsal fin with elongated tips

First dorsal fin origin behind pectoral rear tips

Name: **BLACKTIP SHARK** Scientific Name: *Carcharhinus limbatus*



Snout moderately long and moderately pointed

Eyes circular and moderately large

Usually blacktips on most fins juveniles to adults

Name: **SILVERTIP SHARK** Scientific Name: *Carcharhinus albimarginatus*



All fins with conspicuous white tips on the posterior margins

Snout moderately long and broadly rounded

Eyes circular and moderately large

Name: **HAMMERHEAD SHARK** Scientific Name: (Family: *Sphyrnidae*)



Name: **OCEANIC WHITETIP SHARK** Scientific Name: *Carcharhinus longimanus*



High, rounded, white-tipped first dorsal fin

Snout short and blunt

Long, broad, paddled-shape pectoral fins

Note: White mottling usually present on fins, particularly pectoral, first dorsal, pelvic and caudal tips.

Name: **BLACKTIP REEF SHARK** Scientific Name: *Carcharhinus melanopterus*

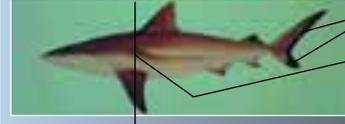


Brilliant black blotches on the first dorsal apex, lower caudal lobe and black tips on other fins

Horizontally oval eyes

Snout short and bluntly rounded

Name: **GREY REEF SHARK** Scientific Name: *Carcharhinus amblyrhynchus*



Broad black band

First dorsal fin origin near margin of pectoral rear tips

Note: Pectorals, second dorsal and anal fins with blackish tips.

Name: **BLUE SHARK** Scientific Name: *Prionace glauca*



Dorsal coloration dark blue, bright blue on sides and abruptly white on the underside

Long narrow snout

Long narrow, pointed pectoral fins

Note: Slender body shape.

Name: **TIGER SHARK** Scientific Name: *Carcharhinus cuvier*



Characteristic dark, vertical tiger-stripe markings, faded or obsolete in adults

Large mouth with distinctive curved serrated teeth

Large head, snout short and blunt

Note: Posterior half of body slender.

Name: **GALAPAGOS SHARK** Scientific Name: *Carcharhinus galapagensis*



Moderately large first dorsal fin; origin in front of pectoral rear tips

Note: Has large pectoral fins.

Shark photographs taken from a publication by Queensland Department of Primary Industry.

GPA Sponsors NFA Netballers

The Fisheries Consultancy Group, Gillett Preston & Associates Inc. (GPA) have sponsored another NFA sporting team for the Public Service Sports season.

This time it is the female netballers, which resulted in the team being named NFA-GPA Netball team. GPA sponsored the team with a full set of uniforms for which the team members would like to express their gratitude. GPA is the fisheries consultancy organisation which is executing the Asian Development Bank Fisheries Development Project in the country.

This team is a formidable one, taking their training seriously, and will prove to be a team to be reckoned with this season.



• Dr Lewis (left) and Garry Preston of GPA Inc (right) at each end of the netballers with their new uniforms.

Work Starts on Wewak Tuna Loining Plant

A concrete pouring ceremony on January 15th 2003 marked the long-awaited commencement of first stage of construction work on the tuna loining factory in Wewak.

The factory is an onshore project by the South Seas Tuna Corporation to be built at a cost of K80 million.

Prefabricated construction materials have arrived on site in Wewak from Australia and New Zealand. Construction Company, Robert Stone of New Zealand is the main contractor for the project, which is expected to be completed by the end of this year.

During this construction stage, it will employ about 300 local people to work as drivers, bricklayers, carpenters and welders, and once the factory is ready to process tuna loins, the number of workers will increase to about 1,250. It will be ready to start processing tuna loins in January 2004.

The factory will initially process 100 tonnes per day and will gradually move to a full operational capacity of 200 tonnes. It will be producing 24,000 tonnes of processed tuna loins for export annually.

Deputy Observer Boss Gets Training at SPC

The Deputy Observer Manager, William Kewo has spent three weeks at the Secretariat of the Pacific Community (SPC) in Noumea, New Caledonia, undergoing training on Observer Data Quality.

Mr Kewo's training was directly under the SPC's Fisheries Monitoring Supervisor, Ms Deirdre Brogan. The training was arranged by SPC and the International Waters of the Pacific island, and funded under the Global Environment Fund.

He was taught how to enter data, what data to collect, which will be considered as quality useful data, and what forms to be used to enter data. The skills learnt at SPC will be passed onto senior

observers at each port in the country.

Ms Brogan, also a specialist in observer data collection said the first two weeks of Mr Kewo's training was identifying common errors in data collection and to improve on them, using some practical data sent to SPC from National Fisheries Authority, PNG.

Mr Kewo's job as the Deputy Observer Manager is specifically to do with data quality, therefore he must be taught the skills on how to collect and enter quality data because he will be the first person to say whether a specific data can be used for scientific researches and to draw up fisheries management plans.



• Mr Kewo being supervised by Ms Brogan at SPC.

National Aquaculture Advisory Committee to be Formed

A National Committee on Aquaculture in Papua New Guinea will be formed soon.

It will be called the National Aquaculture Development and Management Advisory Committee (NADMAC). Its role is to provide ongoing advise to the National Fisheries Authority on the development and management of the aquaculture industry in the country.

The NADMAC will consist of representatives from all major stakeholder groups/organizations with major interest in the development and management of the aquaculture fishery in PNG.

The Committee will have eleven committee members comprised

of the following; two representatives from NFA, one of which will be the Managing Director of NFA who will also be the Chairman; three representatives from the aquaculture sector, one from the artisanal/subsistence aquaculture and two from the commercial sector; two representatives from the Department of Environment and Conservation and Department of Agriculture and Livestock Food Security Branch; two from provincial governments, which will be one maritime and one highlands province; one from the University of Papua New Guinea and one from the Non-Government Organisations involved in aquaculture.

It is hoped that the Committee will meet for the first time in May.