

Fishing Line



NEWSLETTER OF THE NATIONAL FISHERIES AUTHORITY

ISSUE No. 4

JULY – AUGUST, 2003

Inside this Issue

- Prime Minister Commends FISCOL
- Editorial
- Staff Profile
- NFA/PNGDF Sign Agreement
- Board Member Leaves
- First Successful Pearl Oyster Spawning
- Increase in Observer Activities
- NFA Participates at Career Expo
- PNG/Aust Review Fishery Arrangements
- Seafood Processing & Training Facility nears Completion
- Awareness on Cooperative Societies Begins

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.

Mr Molean Chapau – 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 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 Agar – 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
Ph: 984 2187 Fax: 984 2343 New Ireland Province

Mr Rainold Gibson – Property Manager

Mr Garry Preston – ADB/GPA Project Management Specialist/Team Leader

Mr Sean Marriott – EU RCFDP Project Manager
Ph: 852 1995 Fax: 852 1861
E-mail: rcfdp@datec.net.pg

Prime Minister Commends New Look FISCOL

Prime Minister, Sir Michael Somare has commended the Management and Staff of the National Fisheries College for the excellent management of the College grounds and facilities.

Speaking during the official opening of the National Governors Conference held from 31st July to 1st August 2003, he said the Fisheries College is looking very clean and that the facilities in the Audio Visual theatre is of high standard.

The theatre was able to hold well over 150 participants, including the 19 governors, their deputies, provincial administrators, departmental heads, first secretaries and first assistant secretaries, both from the national and provincial levels. At the end of the Conference, they all had very high praises for the organisation and facilitation of the conference by the College Principal, Mr John Kasu and his staff.

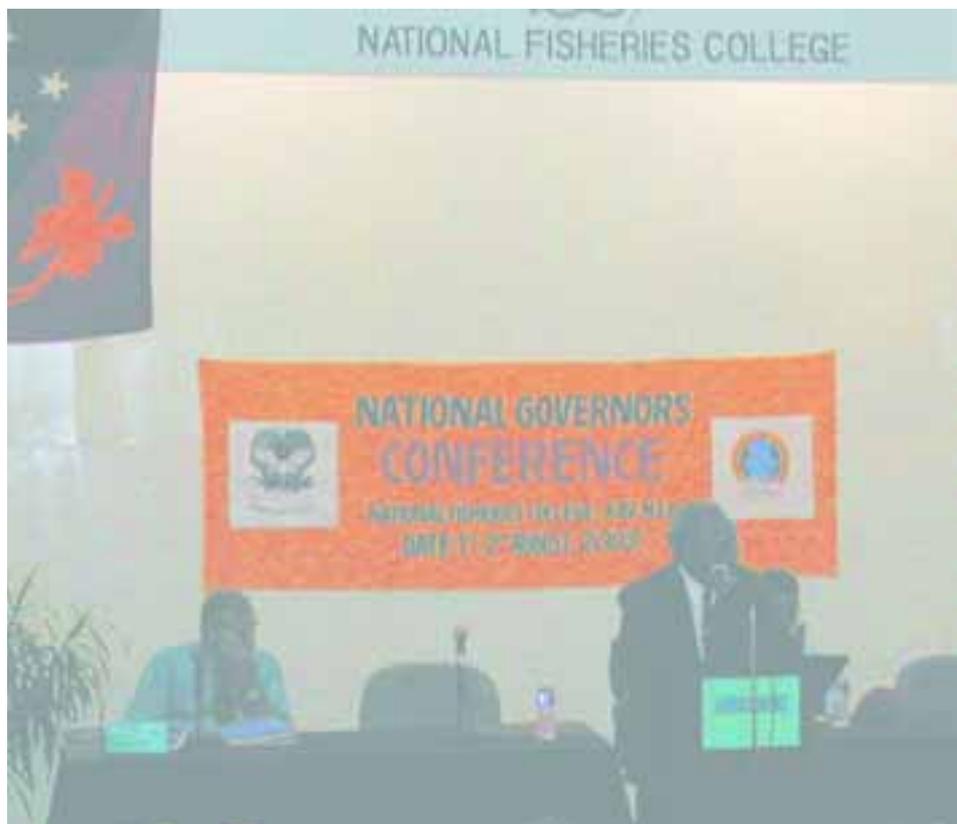
An information pack prepared for each of the governors comprised of past issues of the Fishing Line (NFA newsletter) and various

NFA/INFC brochures, pamphlets and posters.

The College is proving to be a popular venue for government conferences with its newly refurbished facilities and cleanliness of the College grounds.

College facilities from the administration block to the classrooms, student dormitories and lecture facilities were refurbished under an AusAID funded program, which commenced in October 1999. The Audio Visual room is fitted with the latest multimedia equipment, which accommodated well the presentations from various government institutions, such as the Bank of Papua New Guinea for viewing and information of the governors.

Any interested organisations wishing to use the conference facilities for their meetings and workshops are welcomed to contact Mr John Kasu, the College Principal or Mrs Brenda Sainol at the College on numbers listed on the front of this newsletter.



• Prime Minister, Sir Michael Somare speaking to Governors during the official opening of the conference.

From the Managing Director's Desk

We have just gone past the first half of year 2003 and I have been in office for five months. I was confirmed to the position of Managing Director by the National Executive Council on August 27, 2003.

The months of July and August were rather busy. We have recalled the services of Mr Bob Densley to complete some work on licensing fees and conditions for the domestic fishing industry. He was engaged for a month as recommended by the National Fisheries Board. The NFA is working towards introducing new licensing fees and conditions. This will however be made only after wide consultation with all stakeholders, particularly the industry operators. All NFA business groups have a representative on the Committee, which will reflect a wider view on various fishery sectors.

After having signed three MOA's with Morobe, Madang and Milne Bay Provinces, NFA has moved on with preparations on the operational guidelines for another set of MOAs to be signed with the provinces of Central, Western, New Ireland and Bougainville. Morobe, Madang and Alotau provinces have had their divisional structures approved by their respective provincial executive councils and the Department of Personnel Management. This is a step towards assisting provinces, especially a boost to morals of fisheries officers in achieving the desired fisheries roles and functions at the provincial level.

The Kavieng seafood processing plant built

under AusAID funding will be completed soon. This facility will be a major boost to the seafood industry in the New Ireland Province. The facility meets EU and US world standards and will further promote the development of the fisheries sector in New Ireland Province. The contribution by the Australian Government through AusAID in funding this first class facility is greatly appreciated. This facility will complement the recently constructed fisheries dedicated wharf. An opening date has been set for November 2003.

We have signed a sub-lease agreement with the Papua New Guinea Defence Force for further development of the Lombrum Wharf area. NFA leased land portion at Lombrum includes warehouses and office facilities. The leased land will be sub-leased to interested fisheries companies to base their operations while using the newly built fisheries wharf. The development is aimed at developing the fishing port that would serve not only the commercial tuna fishing but also coastal fisheries in which many of the local people would be involved.

The Kavieng and Lombrum Wharf facilities are the start of other such facilities to be built at selected sites around the country to improve the livelihood of our coastal people as assisting the growth of the fishing industry in Papua New Guinea.

Mr Molean Chapau
Managing Director

NFA/PNGDF Sign Lease Agreement

A Lease Agreement has been signed between the National Fisheries Authority and the Papua New Guinea Defence Force, which will allow NFA as the lessee to further develop the Lombrum wharf area.

NFA has ownership over the newly built Lombrum fisheries wharf, the small boat jetty, and the surrounding land area both on dry land and underwater in which the wharf sits. The whole idea behind the construction of the wharf facility is to encourage the growth of the fishing

industry in Manus Province. Through the lease agreement, additional portion of land will be available for private investment and development.

The Agreement signed is for a thirty years lease commencing 18 August 2003.

NFA and the PNGDF have been working collaboratively on other fisheries related areas, including surveillance exercises under a Memorandum of Agreement signed in 2002.



• NFA Board Chairman, Bamake Rumbam and Defence Secretary, Steven Raphael sign the agreement witnessed by the NFA Managing Director, Molean Chapau and PNGDF Commander, Commodore Peter Ilau.



• Mr. Toleasa,
Former Board
Member

Board Member Leaves After Term Expires

Mr Philip Toleasa has left the National Fisheries Board after serving for three years. He was appointed as a Board Member in August 2000 just when the NFA was evolving into a statutory authority.

During his term, he has served under four different managing directors and under two chairmen.

"I have seen the coastal fisheries projects in its initial stage of planning and wharves built in two provinces. As a Board Member, it gives me great pleasure to see some things materialised. Being on the Board, we try to be sensitive to the needs of the industry, but we cannot please everybody. I am proud that developments within the fisheries sector, especially, NFA are being envied by other government departments.

Credit must go to the staff members, previous managing directors and board members.

"I've been privileged to work with such an organisation, which has given me an insight into the fishing industry and I thank the National Government for giving me the opportunity to be part of this organisation." He concluded.

The NFA acknowledges his contribution and wish him well in his future endeavours.

Staff Profile



Name: **Sylvester B. Pokajam**

Age: **46**

Marital Status: **Married**

with four children

Qualification: **Bachelor of Technology in Accountancy (UNITECH LAE, PNG) & Post Graduate Diploma in Financial Management, University of New England, NSW**

Current Position: **Financial Controller**

The NFA's financial controller, Mr Sylvester Bartholomew Pokajam comes from Yuo Island in the East Sepik Province. He attended St Martins Primary School on Kairiru Island and completed Standard Six in 1971. He was selected to attend St Xavier's Marist Brothers College, Kairiru Island in 1972 and completed Form Four (IV) in 1975.

He passed out of High School with flying colours and was further accepted at the University of Technology in Lae to do a four-year Bachelor's Program in Accountancy. He graduated from UNITECH in 1979 and had his first job as an audit clerk with the PNG Auditor-General's Office. He assisted as a junior clerk in auditing statutory bodies, mainly on compliance and transaction test.

Mr Pokajam left the Auditor-General's office in June 1981 and joined the Copra Marketing Board of PNG as an accountant. He worked in this capacity for about 5 years in the areas of; creditors, debtors, fixed assets, payroll, banking, stock control and management.

Whilst with the Copra Marketing-Board, he took a year away from work and attended the University of New England, Armidale, New South Wales and acquired a Post Graduate Diploma in Financial Management.

In 1986, he had a short stint as an Acting Accounts Payable Manager with the Post and Telecommunication. He had initially applied for the position of Associate Chief Accountant, however he resigned in March 1987 due to job dissatisfaction.

Mr Pokajam joined the Chards Forwarding Services Company, a wholly owned subsidiary of Steamships Trading Company in April 1988 as the Financial Accountant, performing duties in all areas of accounting, particularly control of all data input into the General Ledger from books of primary entries.

He left Chards Forwarding Services in November 1989 and joined Rothmans of Pall Mall (PNG) Pty Limited as the Chief Accountant having the full responsibility of Financial and Cost Accounting. It was at this juncture that Mr Pokajam was fully exposed to the Accounting Software Program, ACCPAC, Lotus 123 and Excel spreadsheets. His duties here also included assisting with computer development projects and internal control policies and procedures. He was on secondment to the parent company, Rothmans of Pall Mall, Sydney, Australia for three months.

After having served Rothmans for almost 10 years, he left and joined Oil Palm Industry Corporation as the Financial Controller, shouldering all financial, management and treasury accounting work for the corporation.

Mr Pokajam joined the National Fisheries Authority in March 2002. A staff of three report directly to him. He has been taking on the acting managing director position from time to time. He is a pleasant guy to work with and has time for every NFA staff.

Mr Pokajam's ambition is to see some more canneries built onshore and have more tuna processed in PNG and exported. "That is the only way that export driven objective can be physically achieved. More onshore processing creates more employment with multiplier effect and is good for PNG economy. NFA has the important role to play in the fishing industry and is now well placed to make the export driven objective workable." He said.

Mr Pokajam is proud to be working for NFA and wish to make it public that insofar as accountability and reporting is concern, NFA is well on top.

First Successful Pearl Oyster Spawning on Samarai Island, Milne Bay, Papua New Guinea

A first for pearl oyster farming in PNG, Coral Sea Mari-culture (PNG) Ltd (CSMC) conducting pearling operations in Milne Bay waters has successfully spawned pearl oysters under hatchery conditions on Samarai Island, Milne Bay Province. Utilizing a total of 60 mature gold lip and black lip pearl oysters (40 females and 20 males) the company produced a total of 100 million fertilized eggs at the end of March 2003. Of these 4 million survived to the spat stage and were settled onto polyethylene fibers and placed out in the lagoonal area around Pearl Island in Samarai. According to the nursery manager, Mr. Colin Jarrik, spat placed out at sea are doing exceptionally well and mortality is negligible. Their growth rate has been found to be much faster than their siblings reared in the hatchery using artificially cultured life feed (micro algae). This is encouraging news for the PNG pearl culture industry as most often wild spat collection at potential sites is often limited and unpredictable. Already interested potential and existing farmers from other parts of PNG are understood to have approached CSMC about the possibility of obtaining spat for-culture purposes.

According to Mr. Brett Stevens of Aquatic Solutions Australia, one of the partners in the project and the partner responsible for establishing the hatchery and conducting the spawning, the current production of 4 million spat is more than sufficient for their operations, at least for the first



Brett Stevens, feeding oyster spat with live algal feed cultured in the hatchery, notice the black polyethylene ropes hanging on to the poles placed across the tank. These are spat collectors placed in the tank for the free floating larvae to settle.

production year when they are targeting a total of 35,000 oysters for seeding. Production targets may increase to around 100,000, depending on oyster grow-out conditions and the world market for pearls. If there are excess oysters CSMC is planning to either sell or assist landowner groups with oysters for fattening and latter seeding for pearl production.

CSMC is solely a PNG company registered in 1996 to conduct marine resource survey on the natural stock of pearl oysters around Milne Bay waters and depending on availability of pearl oysters establish experimental farms to assess the feasibility of culturing pearls. After obtaining necessary approvals from the National Fisheries Authority (NFA) and other line departments the company began fishing for pearl oysters for experimental culture beginning 1997. Results from the



Mr Stevens demonstrates how pearl spawning is conducted using a mother of pearl shell in a tray, whilst the hatchery technician looks on.

experimental farms have been fairly encouraging with production of round and half pearls for export. After 6 years of operation with a significant amount of investment, and proving the technical viability of producing pearls in Milne Bay waters, CSMC decided to establish a pearl hatchery in 2002. Construction was delayed due to difficulties in obtaining approval for the company's application to lease the harbors board's shed near the Samarai wharf. Following close negotiating communication and satisfying the stringent government procedures, the company finally secured the lease for the premises towards the end of 2002/early 2003.

Immediately after approval of the lease the company worked around the clock to convert the shed into a pearl hatchery as the pearl spawning season was coming to an end. In Milne Bay waters this is from September to March. Due to time limitations and the specialized nature of the facilities, most hatchery materials were prefabricated in Australia and brought into to establish the hatchery. Within four weeks the hatchery was

commissioned and the first pearl oyster spawning was conducted two weeks later. Pearl oysters cultured on the experimental farms around Pearl Island near Samarai were inspected and those found to have mature gonads and in good condition were transferred to the hatchery, cleaned with fresh sea water and held overnight in aerated tanks in air conditioned rooms before spawning. Spawning was conducted using temperature induction technique, where brood oysters were placed in racks and hung in tanks filled with fresh 1p filtered seawater and the water temperature was increased using electrical heaters. Following the initial trial spawnings, the staff managed to spawn the oysters, hence a first for pearl culture in PNG. Fertilized eggs were gently stirred using aeration and are incubated in spawning tank until they hatch after 24 hours. Larvae do not settle until after 24 days after hatching, during this period they are free floating and are cultured in tanks using 1u filtered seawater and fed algae diet (usually are fed, *Chaetoceros spp.*, *T Iso spp.* and other species). According to the hatchery technician, three algal species are cultured in the hatchery in Samarai for larval oyster feeding.

In nature, it is during the free floating stage that the spat are dispersed over long distances by prevailing water currents. Often natural spat availability within the vicinity of populations of oysters is limited or unreliable due to this phenomenon. This is probably the reason for the



The cool room where algae is culture for feeding the larvae. Notice the small flasks on the bench, these are prepared two weeks in advance for feeding. Extreme caution is taken to prevent contamination of the algae culture, if contaminated could kill all larval oysters as feed has to be prepared two weeks in advance.

unpredictable and limited availability of spat in around Samarai Island and other localities in PNG where mature pearl oyster populations are found.

After approximately 24 days, larvae develop to pediveliger stage and settlement collectors were introduced into larval culture tanks. Each collector comprised of a meshwork of polyethylene rope with an iron frame is suspended in the tank using horizontal stakes placed across the top of the tank. When the spat have settled, the collectors are removed and placed within enclosed cages of fine mesh size to prevent predation and transferred out to sea for grow out on long lines. CSMC have now placed the first batch of spat out at sea and initial indications are that they are doing exceptionally well. The rest of the spat will be placed out at sea



Internal view of the hatchery at Samarai. Notice the large tanks for rearing the oyster spat and larvae. All these were prefabricated and brought in from Australia given the limited time and the specialized nature of some of the equipment.

as soon as all long lines are prepared and logistics arranged.

After some time at sea the spat will be cleaned and graded to allow uniform growth. After nearly 18 months of culture the oysters will be seed for round pearl production using specialized technicians from overseas. Oyster found to be unsuitable for round pearl production are seed for half pearl production. After seeding, the oysters are cultured for a further 12 months before the pearl is harvested and the oyster prepared for another production run. It is expected that due to the high water quality and the technical knowledge of CSMC, the oysters will be able to produce 2-3 round pearls before being culled on the final half pearl production run. The pearls produced from the oysters will be marketed as high value exclusively Papua New Guinean product, unique in the world.

For more information, please contact Mr Jacob Wani.

Observers and Port Samplers Get Training to Meet Increases in Fishing Activities

The Observer Unit has conducted a series of training programmes and workshops to better prepare itself with the increase in fishing activities around PNG waters and as well as the increase in the number of port calls by foreign vessels into various ports around the country.

The need to properly monitor the level of fishing activity in PNG's EEZ has led NFA to determine different observer coverage level for specific fisheries considered based on their importance. In order to achieve these, several training programs have been conducted

since the beginning of this year.

Training activities conducted this year are very relevant, timely and responsive to the changing scenarios in PNG fisheries.

A Basic Observer Training was conducted this year, bringing the total observer number to 65. An additional training will be held in 2004 to fulfil the national target of 80 fisheries observers.

Training for new observers is based on the *National Standards for Training and Certification of Observers and Port Samplers*. This forms the basis to provide quality personnel to perform these important monitoring tasks.

Observer Activities to Increase in Wewak Port

Observer activities is expected to increase massively within the port of Wewak alone in 2004.

According to a report by the Observer Manager, since the beginning of 2003, there has been an increase in foreign purse seine transshipment activities in the Wewak port. Port calls into Wewak will increase sharply in the near future due to the construction of the tuna loining factory by South Seas Tuna Fishing Corporation. The factory has an expected production capacity of 260 tonnes per day.

This rise in fishing and transshipment activities in the ports of Wewak, Lae, Madang and Rabaul is putting a strain on the provincial resources to assist NFA effectively coordinate observer placement and movement in the provinces. NFA is addressing this

problem and has commenced a purse seine port sampling training for new and current samplers Wewak.

A Senior Observers and Port Coordinators workshop was also held to address issues affecting observer coordination in the provinces. An opportunity also for observers to exchange ideas and issues with relevant NFA business units as well as getting acquainted with the changing policies, management plans, licence conditions, access agreement etc.

The main ports of Port Moresby, Lae and Rabaul have a program of port sampling in place. They have a fairly consistent port sampling coverage of long liners in port.

For more information, please contact Mr Noan Pakop.

NFA Participates in 2003 Career Expo

The National Fisheries Authority has participated again in this year's Career Exposition. It was one of more than 20 organisations and institutions that participated in the exposition.

The exposition was held on the ground floor of the Deloitte Tower from 20th-22nd August 2003. Grades 10,11 and 12 Students from all schools within the National Capital District and the Central Province visited each stall to get information on their career of interest.

Mr Kinibo Ura, Information and Technology Officer of the National Fisheries College and the NFA Public

Relations Officer, Ms Priscilla Maigu prepared and presented materials on the courses offered at the College and the career path of each course. Information was also imparted on the role of marine biologists and the necessary educational requirements for that field of study.

"We are planning to make it even better next year by profiling each profession at NFA." Mr Ura and Ms Maigu said.

A big thankyou to all managers and officers who popped around to help at the NFA stall.

PNG-AUST Review T/Straits Fishery Arrangements

A PNG-Australia Bilateral Fisheries meeting was held on 26-27 August in Port Moresby to discuss amongst other issues, management arrangements on the Torres Strait Prawn Fishery.

A review of the Torres Strait Prawn Fishery was necessary to determine the limit reference point for the fishery in the Australian area of jurisdiction, which will have a direct impact on both PNG and Australia's allowable level of effort.

During the discussions, PNG accepted in principle Australia's proposal to review PNG's activities in the prawn fishery and others, with a view to allocating effort not taken up by PNG to its operators to give effect to Article 25 of the Torres Strait Treaty. PNG agreed to have more discussions out of session on this to sort out necessary administrative arrangements so that operational plans for 2004 prawn session are in place.

PNG also agreed to reviewing its licence arrangements to facilitate cross-endorsed licence process, ensuring PNG operators have full access to the fishery. Both parties agreed to continue working within

the 2002 arrangements until the 2004 arrangements are implemented.

Regarding Catch Sharing, PNG agreed on the reviewed catch sharing calculations, which excluded catches from the area outside, but near Australia. Under these arrangements, Australia agreed to endorse up to seven prawn trawlers to operate in the Australian area of jurisdiction for a full season (275 nights). PNG agreed also to a permanent trawling closure in its area west of Warrior Reef and to a seasonal closure for the whole area of PNG jurisdiction from 1st December to 1st March (this mirrors the Australian closure).

Australia has encourage PNG to introduce Turtle Exclusion Device at some time for its prawn trawling operations in the PNG area of jurisdiction.

The meeting also discussed the Tropical Rock Lobster Fishery, the Mackerel Fishery, the Pearl Fishery, the Dugong and Turtle Fishery, Surveillance and Enforcement Issues, Environment issues, etc.

The National Fisheries College Seafood Processing and Training Facility in Kavieng will be completed soon.

This facility built at a cost of K4.8 million at the Kavieng waterfront was funded by AusAID, as part of its Strengthening Project for the College. A small section of the 530²m building will be used by the Fisheries College as a training room in delivering courses on seafood processing for industry. It can take up to 20 students at a time. Most of the building will be leased out to an industry operator, who will operate it as a licensed seafood processing facility. This commercial opportunity has gone through the normal tender process, with the successful tenderer being Kavieng-based Island Seafood

Company. When it commences operation, the facility will also provide fish processing and



• The facility still under construction.

packing services to other fishing companies in New Ireland Province.

The facility has the capacity to process and freeze up to 5tonnes of tuna and other typical local species per day. It is built to the highest standards to meet regulatory requirements for export of fresh and frozen seafood to Australia, USA, and the European Union.

It is built adjacent to the recently constructed wharf for the National Fisheries Authority under the Asian Development Bank Fisheries Development Project, close to the site of a planned public fish market under EU funding.

For more information, please contact Mr Kasu at the College

Awareness on Cooperative Societies Starts in Highlands

An awareness campaign on the reintroduction of cooperative societies has been conducted in the highlands provinces from 7th to 15th July 2003.

NFA's officer, Ms Welete Wararu, participated on behalf of NFA, led by the Cooperative Societies Unit of the Department of Trade and Industry. The team visited some parts of Eastern Highlands, Simbu and the

Western Highlands provinces.

Ms Wararu said the awareness was necessary to see if there is support from bulk of the producers of agricultural, forestry and fishery products in the rural areas of the highlands for the formation of cooperative societies for each sector. She said it is a concept developed to drive the current government's export driven strategy.

"Cooperatives have failed in the past but we believe the new approach taken has put a new perspective that would make cooperatives successful mainly because people are now better educated and live in cash-orientated societies.

Discussions were held with farmers and provincial government representatives who indicated positive responses.