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(Noumea, New Caledonia, 7-11 August 1989)

COUNTRY STATEMENT

PAPUA NEW GUINEA

INTRODUCTION

1. This statement summaries the activities of the Department of Fisheries and Marine Resources as well as performance of the fishing industry over the past 12 months.
2. The internal events of the past 7 months has had an effect on the activities of certain fisheries projects handled by the Department. These events have resulted in the curtailment of project funding activities in several areas of the fisheries sector. Further freeze on recruitment of personnel and purchases of equipment has obligated the Department to review its work programme for the remainder of this fiscal year.

FISHERIES SECTOR

Resources

3. Historically, most of Papua New Guinea's marine resources have been exploited by villagers for subsistence consumption. Only a small proportion (25%) of the large and diverse resource are exploited commercially where total domestic catch probably does not exceed 16,000 mt per annum. Consequently, there are no large domestic fishing industries existing in the country. Catches of tuna by distant water fishing vessels have amounted to about 100,000 mt in some years, although recent decline in catches to 12,000 mt has been inevitable due to unresolved access questions with distant water fishing fleets. Total catch records after the first year of the multilateral fishing arrangement with the US has been very encouraging news in terms of revenue into the country for its tuna resources.

Prawn, lobsters and the sedentary resources in some areas are being exploited at or near maximum sustainable yield, whilst the underutilization of the species provides a substantial basis for future expansion.

Fisheries Role in the Economy

4. Export earnings from fisheries amounted to over K9 million in 1988. The closure of domestic tuna fishery has caused fish exports to decline over the years. However, the steady increase in prawn exports has placed prawn products as the single most product representing 75% of all fish exports. Similar increase in exports of sedentary resources are also being experienced. Formal employment in the fisheries sector is provided by industrial fisheries (estimated current employment 450), national and provincial institutions (470), artisanal fisheries (3,000-4,000 fishermen) regularly earning cash income from the supply of fish.
5. Limited post-harvest activities occur in the country where the bulk of fish and marine products are destined for human consumption in the fresh, smoked, chilled or frozen state. Some filleting and packaging take place at the national and provincial government owned coastal fisheries stations. An exception here being company owned prawn vessels which process, freeze and store prawn products on board for export.
6. Consumption of fresh fish is greater in areas where other protein sources are scarce. Consumption of fresh and frozen fish is in the order of 10g/head/day (whole fish equivalent), whilst imported canned fish at 25g/head/day and of red meat and chicken approximately 31g/head/day.

FISHERIES PRODUCTION

Industrial Fisheries

7. High value species such as prawns and tuna are being exploited. Prawns are exploited close to the maximum sustainable yields of 1,200mt annually. In the new grounds of the Torres Strait, catches are expected to increase.

There is currently no large scale domestic tuna fishing although licenced foreign based fishing vessels harvest around 12,200mt of tuna each year. However, the total tuna catches made by US purse seiners following the first year of multilateral treaty has netted around 100,400 short tons which 75% of these have been reported caught from Papua New Guinea waters.

Artisanal

8. Fishing activities center around the catching of barramundi, lobster and a range of inshore, reef, coastal and freshwater species. Fish products landed through four coastal fisheries stations and processing plants were about 640mt during 1988-89 period, although production from some could have been much higher. Provincial fisheries production data have not been included in this report. Fish caught through artisanal operations are mainly supplied directly to urban markets and government supported fisheries stations and fishing authorities. Some are processed and marketed for export overseas.

Inland Fisheries

9. Inland rivers and waterways support relatively limited fish stocks despite the extensive flood plain systems noted for this country. A barramundi fishery operates along the Fly River whilst an assortment of primarily estuarine species support the fisheries of the Gulf rivers. The Sepik and Ramu rivers to the north of the country support limited tilapia fisheries where the fish population are being investigated for stock enhancement.

Aquaculture

10. Aquaculture has never been a traditional fishing practice in Papua New Guinea, although some island communities have been reported to maintain clam gardens in selected areas of the reef. Only through the activities of national and provincial government sponsored inland fisheries project has aquaculture gained impetus over the past decade. A carp hatchery exists in the highlands area which produces fingerlings for distribution to villages.

DEPARTMENT ACTIVITIES

Research and Surveys Branch

11. Current fisheries research activities include the following:-
- i. Prawn research and management - for establishing biology and population dynamics of adult and juvenile populations, and fishery dynamics through issue and collection of logsheets.
 - ii. Torres Strait Lobster Biology and Management - to provide information on the biology of tropical rock lobster (Panulirus ornatus) including reproductive biology of the Torres Strait fishery.
 - iii. Sedentary Resources Assessment - use of visual census and other collection techniques for basic biological data for stock estimates on trochus, green snail and mother of pearl shell; beche-de-mer and giant clams in PNG waters.
 - iv. Barramundi Research and Management - to conduct comprehensive net census in the coastal and inland waters, monitoring of 0+ year class in the Daru coastal areas, and determining the level of fishing mortality of spawners by tagging and recapture.
 - v. Investigation of the impact of introduced carp in the Sepik River - to assess the environmental effects of carp on the tilapia populations in the Sepik River.

Resource Development Branch

- 12 The following activities pertain to promotion of efficient utilization of fisheries resources in the inshore coastal waters in order to accrue optimum benefits to the people:-
- i. Coastal Fisheries Development Programme - to encourage local communities to participate fully in catching, handling, distribution and marketing of fisheries products. The programme is based in four provinces of the country.

- ii. IFAD Artisanal Fishery - with established freezer and processing plants in Baimuru and Samarai. Major species collected, processed, and marketed are barramundi, prawn and mixed reef species. Products from both plants are of export quality. Work is continuing on improvement and completion of the two plants. Fish collection and extension improvement with delivery of new collection vessels have been carried out. A production target of 10-20mt per month is expected from each plant.
- iii. Artisanal Fisheries Extension - to provide specialised extension and training needs for officers in coastal fisheries development and extension work, to be able to demonstrate development and extension skills appropriate to operate fishing projects at the village level. Fisheries extension and training centres have been involved in construction of red snapper crafts version now being demonstrated in villages of five provinces. Day to day advice is being provided in areas of fishing gear, craft development and processing techniques.
- iv. Local Coastal Fisheries - providing essential back up services and facilities to the provinces in order to catch, process and market their local fish products. The programme is being implemented in six provinces of the country.

Training and Workshops

- 13. The Department is actively involved in training staff and officers at their various technical backgrounds in an effort to improve skills and work performance. This year, several Department personnel have been engaged in undergoing training both locally and through the regional programmes. Also, during the coming months, several training programmes and workshops are anticipated to be held in the country.
 - i. 28/8 - 5/12/89 - Second refrigeration course to be held at the Kavieng Fisheries College, jointly organised by SPC and UNDP.
 - ii. December 1989 - Coastal fisheries development course for Pacific Island participants at the University of Papua New Guinea. Course to be sponsored by JICA.

- iii. July 1989 (Proposed) - Second phase of fish handling and processing workshop.
- iv. During 1990 (Proposed) - Third phase of Extension and Communications Skills Course - to be conducted in the provinces. Funding will be provided by the Department.
- v. September 1989 - Women in Fisheries Workshop for the Southern Region. ICOD funding.
- iv. May 1990 (Proposed) - Survey into Role of Women in Fisheries. Funding source to be identified.

Fisheries Sector Review

14. A major survey of the fishery sector in Papua New Guinea was completed in 1988 with a formal report produced in January, 1989 for consideration by the Government. The survey was required in order to assist the Government of Papua New Guinea to formulate a national fisheries policy which would subsequently form the basis for a fisheries development plan. The survey reviewed and reported their findings on fisheries potential needs and opportunities, and looked at future development steps and investment opportunities. In broad terms, the Review has identified the major opportunities for the development of the fisheries of Papua New Guinea as being; coastal fishing, tuna, and subsistence fishing in the Highlands. The Review suggested means whereby specific fisheries developments can be identified and those involved assisted to meet their objectives. Overall priorities that were identified and in accordance with Government objectives for fisheries are:

- Coastal Fisheries Development - since this affects the standard of living of much of the population.
- Industrial Fisheries Development - to generate economic benefit from under-utilized resources, primarily tuna but also other opportunities on more modest scale.
- Institutional Development - to strengthen Government capability in planning, monitoring and training to provide the technical and administrative support needed by provincial governments and industry.

Immediate action is required for the Department of Fisheries and Marine Resources to;

- i. institute a number of changes to its present methods of operation.
- ii. undertake a review of existing licencing arrangement.
- iii. initiate the design of a data collection and processing unit.

Following the recommendations of the Review, several major steps have been taken by the Department toward addressing fisheries development in Papua New Guinea.