

SOUTH PACIFIC COMMISSIONELEVENTH REGIONAL TECHNICAL MEETING ON FISHERIES  
(Noumea, New Caledonia, 5-10 December 1979)PAPUA NEW GUINEA - COUNTRY STATEMENTSUMMARY

The Papua New Guinea Tuna Fishery experienced the highest catches since the Papua New Guinea-based fishery was established in 1970. 48,933 tonnes of surface-schooling tunas were landed, realising an F.O.B. export value of about 19 million Kina (US\$27,150,000). However, economically 1978 was not a good year since the average F.O.B. price of skipjack dropped to about K 430.00 a tonne. A record of 762,800 buckets of baitfish were caught. The Gulf of Papua fisheries produced 1,120 tonnes and 86.0 tonnes of prawns and crayfish tails respectively.

Attempts to evaluate commercial exploitation of the freshwater crayfish (Cherax albertisii) had been hampered by the apparent reduction in stocks in 1977 and 1978. Production from the 1977/78 spawning season saw 115 tonnes of barramundi (Lates calcarifer) which was the lowest figure for the eight years that reliable data have been collected.

The estuarine and inland fisheries research programmes gave priority to village development projects which require little capital input and are based on simple technology. Smoking, salting, drying and live holding and handling were adopted to avoid the use of refrigeration in villages. The Sepik SOLPIS project continued to take precedence over the eel and catfish projects. A production of 22.5 tonnes of salted fish fillets were sold to various provinces in 1978. The water fern Salvinia molesta continued to spread during the year, disrupting village transport and fishing in the Sepik river. The spread was monitored, and experiments conducted on the use of booms to keep waterways open. The mangrove crab project which commenced in 1978 has demonstrated the usefulness of live holding and handling techniques. Some 11 tonnes of crabs were landed and successfully marketed during this time.

In November, permission was granted for two computer terminals for the Fisheries Research Statistics Center and hopefully a system should be installed and operational by 1980.

A fishing project has been established in West New Britain based on a freezer barge buying fish from various coastal villages for subsequent delivery to Lae and Rabaul. Problems in supplying fish to the New Zealand aid freezer barge has been the major factor restricting progress.

A network of shore-based freezing and storage facilities for the development of Papua New Guinea coastal fisheries is being planned and funds to support the proposal were allocated during 1979. The proposal calls for a collecting freezer vessel to pick up the products from fisheries stations for subsequent sale to other provinces and major urban centres.

Three Provincial Fisheries Councils and a National Fisheries Advisory Board were established in 1979. Their purpose is to serve as a forum for discussion and to promote closer involvement by Provincial Governments in national fisheries development.

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SOUTH PACIFIC COMMISSION

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COUNTRY STATEMENT - PAPUA NEW GUINEA

1. Papua New Guinea is vitally concerned with the development and management of the fisheries resources in our 200-mile fisheries zone.
2. These renewable resources offer a unique opportunity for us and our Pacific neighbours to gain sizeable economic benefits from a resource not yet fully exploited.
3. In 1978, the Papua New Guinea Tuna Fishery experienced the highest catches since the PNG-based fishery was established in 1970. 48,933 tonnes of surface-schooling tunas were landed, realising an F.O.B. export value of about 19 million Kina (US\$27,150,000). However, economically 1978 was not a good year since the average F.O.B. price of skipjack dropped to about K 430.00 a tonne. A record 762,800 buckets of baitfish (equivalent to about 1,900 tonnes) were caught.
4. As in previous years three companies (four up to 1975) operated separate fleets of 10, 20 and 17 pole and line catcher boats, operating out of 1, 2 and 2 motherships respectively. In 1979 two of the fleets amalgamated and the number of catcher boats was reduced to 41. The major baitfishing effort, and consequently tuna fishing effort continued to be directed towards the Ysabel Passage and Cape Lambert areas, and the adjacent tuna grounds in the eastern Bismarck Sea and north of New Ireland.
5. During 1978 it was agreed with the Japanese Government that all vessels based in Japanese ports which were granted licences to fish in Papua New Guinea's 200-mile DFZ and leaving port on or after September 1st would report all catches.
6. A framework for the compilation and analysis of catch information from the Japanese purse-seine, long distance pole-and-line, and longline fisheries has been established but must await the arrival of the Fisheries Research Statistics Centre computer terminals before it can be implemented.
7. Under the 1978 Interim Fisheries Agreement between Papua New Guinea and Japan, Japanese purse-seine and longline vessels continued to operate in the 200-mile DFZ until 31st January 1979.

8. In 1978, 308 Japanese fishing vessels were granted licences to fish within Papua New Guinea's 200-mile DFZ. Of these 11 were purse-seiners, 274 longliners and 23 long-range pole-and-line vessels. One U.S. purse-seiner applied for and was granted a licence. Estimated catches for Japanese purse-seiners and longliners were 3,500 and 9,000 tonnes respectively.

9. Orientation/evaluation trips were undertaken by Fisheries Research staff on purse-seiners and one longliner in order to collect more information on these fisheries.

10. Distant water fishing nations and large tuna processing companies are looking to the underdeveloped, rich fishing areas in the Western Pacific as a new sources of tuna to meet the world's growing demand for tuna.

11. Clearly, an industry which uses foreign-owned and manned vessels with no shore side support facilities contributes little to the developing economy. However, there is no way that we Pacific Islanders can take over these vital functions at this stage, therefore, we must work towards a realistic localisation schedule for the entire industry.

12. While our efforts to gain full benefits have yet to bear real fruit, we do know what we want and to achieve our objectives we have established a set of guiding principles.

13. Our first and most basic principle is that our fisheries resources will be developed for the optimal benefit of people of Papua New Guinea. Papua New Guinea will not enter into any long-term agreement which does not adhere to this basic concept. To achieve it, however, we will grant favoured status to those who help us.

14. Management of the resources is a basic problem encountered by most countries. Papua New Guinea, a member of the South Pacific Forum also holds strongly to the concept that coastal states have the sovereign right to manage the stocks which occur within their fisheries zones. Coastal states with established fisheries of their own should also have the right to restrict certain types of fishing in their zones in order to prevent excessive competition to their own fisheries by larger more effective vessels belonging to distant-water fishing nations.

15. Having control over our fisheries zone is, therefore, a non-negotiable subject. Recognition of this basic fact should cause those nations and large tuna processing companies which want long-term access to fish in our zones to intensify their efforts to contribute to real development within the area and thereby bring to developing coastal states the type of industrial development they can only achieve with the full cooperation of the distant-water fishing nations.

16. Recognising that tunas are a highly migratory species that know no political boundaries and move from one nation's zone to another, Papua New Guinea recognises the need for nations sharing stocks of tuna or other species to cooperate in their conservation and management.

17. A distant-water fishing nation that does not share stocks with another nation or nations, should have no right to make decisions about the management of such stocks. They could however be invited to participate in recommending conservation and management measures for such stocks.

18. Papua New Guinea is of the opinion that it will be some ten years before regulation of the tuna stocks in the Western Pacific is required, if at all. What will more likely ensure conservation of the tuna stocks is the economics of the fishery. The rising cost of fuel and its growing scarcity will limit the activities of all but the most successful long range vessels thus reducing effort.

19. However, this will probably be offset to some degree by the establishment of joint venture fleets in those coastal states with tuna stocks, thus achieving in part some benefits for the countries in the region. There is of course a need for control of fisheries now in order to ensure licence fees are paid and fishing regulations observed.

20. With the assistance of the United States, Papua New Guinea is examining the feasibility of establishing a satellite surveillance system in the south western Pacific. The hardware for such a system is now available and can tell us where a vessel is located, its name, and even its daily catch provided such vessels carry transponders and key in their daily catches .

21. Carrying the transponders can be a condition of licencing and keying in the catch should not matter to the vessel if the same fee is paid wherever it fishes.

22. The growing demand for tuna during the next ten years will give the Pacific nations a much stronger negotiating position with the large fishing nations than they ever enjoyed before.

23. The control by coastal states over all fisheries stocks, including tunas, will bring drastic changes to the world tuna industry which will surely benefit those developing nations which cooperate on the conservation, management, utilization and marketing of the stocks shared between them.

24. A report on the other fisheries resources of Papua New Guinea during 1978 is as follows.

25. Within the Gulf of Papua there are a number of proven fishery resources. The trawl fishery, which at present consists of 13 freezer trawlers is supported by stocks of penaeid prawns (mainly Penaeus merguensis, P. monodon and Metapenaeus ensis), by the annual migration of the tropical spiny lobster Panulirus ornatus and by an **increased** commercial utilisation of some of the associated trashfish catch. During 1978, 1,120 tonnes of prawns were landed which contrasted with a bad year for spiny lobster. Production from the three Papua lobster fisheries in 1978 were 15.4, 70.2 and 0.4 tonnes for the Daru reef fishery, Gulf of Papua trawl fishery and Yule Island reef fishery respectively. A total of 86.0 tonnes during 1978 was the lowest catch since the establishment of lobster fisheries in 1973.

26. In January 1978 work got underway investigating the feasibility of recovering a proportion of the considerable trawl fishery trashfish waste, estimated to have been about 9,000 tonnes in 1978.

27. In the freshwater environment of the river deltas, attempts to evaluate commercial exploitation of the freshwater crayfish (*Cherax albertisii*) are in progress. The arrival in 1978 of the freezer vessel purchased by FAO and a Project Manager did not result in increased production as expected. This was attributed to drastic reduction in stock abundance both in 1977 and 1978. Production figures for these two seasons were negligible. The barra-mundi (*Lates calcarifer*) resource is exploited by an inland fishery and a seasonal coastal fishery that is dependent on a migration from inland areas. Production from the 1977/78 spawning season was 115 tonnes which was the lowest ever recorded for the eight years that reliable data have been collected.

28. The water fern *Salvinia molesta* continued to spread in the Sepik river during the year, disrupting village transport and fishing. The spread was monitored, and experiments conducted on the use of booms to keep waterways open.

29. Aquaculture development has been attempted over a period of twenty years in the Highlands but has proved to be impractical, except for one private commercial trout farm. No expansion of the present limited aquaculture programme is envisaged.

30. A fishing project has been established in West New Britain. This is based on a freezer barge buying fish from various coastal villages for subsequent delivery to Lae and Rabaul. The barge donated by New Zealand arrived in 1978 and work on the project has got off to a good start. Problems in supplying fish to the freezer barge have been the major factor in preventing the project becoming economically self-sufficient.

31. A network of shore-based freezing units is planned for the development of Papua New Guinea's coastal fisheries and approval for funds to support the proposal was received in 1979. Papua New Guinea is establishing fisheries stations based on freezing units and taking in fish from local fishermen. Large collecting freezer boats will call into these stations for the pick up of fishery products. The government intends to establish fisheries stations in Samarai (Milne Bay Province), Kupiano (Central Province) and in Lorengau (Morab Province) as a step forward into getting the provinces involved in this nationwide venture.

32. Monitoring of stocks of juvenile prawns in the mangrove and estuarine regions, the monitoring of the density of lobsters on the reefs around Daru prior to migration and, by the use of surface and bottom drift markers, the patterns of movement of water masses in the Gulf of Papua continued to be closely studied. Research continues to monitor the size of the migration and the relative strengths of year classes from which some fishery predictions can be made.

33. Both the estuarine and inland research programmes gave priority to village development projects which require little capital input and are based on simple technology. In particular, simple techniques for holding and preserving fish have been developed to avoid the use of refrigeration in villages. Smoking, salting, drying and live holding and handling proved successful in various fisheries.
34. The main concern of the inland programme continued to be the Sepik SOLPIS project. Work on basic tilapia biology continued and preliminary work on other Sepik species such as eels and catfish was initiated.
35. Rough estimates have indicated the Sepik river to produce about 900 to 1200 tonnes of eels annually.
36. A limited amount of work was carried out in the Highlands and which was mostly aimed at publicising SOLPIS and demonstrating ways to cook it. As a result of this work the demand for SOLPIS now exceeds supply.
37. The estuarine programme concentrated on the mangrove crab project which commenced in 1978. This project has demonstrated the usefulness of live holding and handling techniques under Papua New Guinea conditions although there are still transport problems to be sorted out. Some 11.0 tonnes of crabs (Scylla serrata) were landed during 1978.
38. Pelagic fisheries research continued to monitor stocks of tuna baitfish, with a view to determining the population dynamics of the three main species, and investigate the sub-population structure of skipjack (Katsuwonus pelamis) and yellowfin (Thunnus albacares) stocks in Papua New Guinea waters. The latter is being accomplished through a major length frequency programme, analysis of genetic differences in blood proteins, and limited tagging.
39. Three Provincial Fisheries Councils and a National Fisheries Advisory Board were established in 1979. The National Fisheries Advisory Board functions to liaise and coordinate fishery development, research and management programmes with Provincial Governments, Industry and recommend National Fisheries Policy. The Provincial Fisheries Councils recommend development projects and management plans for each fishery. They comment on the issuing of fishing licences and recommend management regulations along with their law enforcement needs to the National Advisory Board.
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