

SPC/Fisheries 19/WP.20

30 July 1987

ORIGINAL : ENGLISH

SOUTH PACIFIC COMMISSION

NINETEENTH REGIONAL TECHNICAL MEETING ON FISHERIES

(Noumea, New Caledonia, 3 - 7 August 1987)

COUNTRY STATEMENT - AUSTRALIA

## SOUTH PACIFIC COMMISSION

NINETEENTH REGIONAL TECHNICAL MEETING ON FISHERIES (NOUMEA, NEW CALEDONIA, 3-7 AUGUST 1987)

### COUNTRY STATEMENT - AUSTRALIA

#### 1. INTRODUCTION

To the present, the Australian fishing industry has been based largely on inshore and continental shelf fisheries resources. These resources, like those of many other nations, are considered to be nearing full exploitation and the decline in production foreshadowed by high exploitation rates has prompted the introduction or development of management plans for most of Australia's major fisheries. Most fisheries income has been derived from crustaceans. In the last year, however, greater interest has been shown in developing trawl fisheries on the continental slope, particularly in south eastern Australia but also in other regions including the east coast, west coast and Great Australian Bight and the north west shelf. If these developments prosper, they should cause an increase in the relative importance of finfish in the total Australian catch, both in value and quantity.

A major development in pelagic fisheries in the last 2 years has been the exploitation of jack mackerel on an industrial scale off eastern Tasmania. For 1986, the fishery landed 40,000 tonnes of catch, now making this the largest single species fishery in Australia. The catch was largely used to make fish meal for the Tasmanian Atlantic salmon farm.

The following sections of this Country Statement deal briefly with major features of commercial fisheries activities in Australia.

#### 2. PRODUCTION

##### (a) Fleet:

In 1986, approximately 9,100 commercial fishing boats were licensed, however, only 5888 were licensed to operate beyond three miles from the coast. Although boat numbers have not increased in recent years due to limits on numbers of fishing licences, fishing effort has risen significantly due to upgrading of vessels and to technological advances in fishing gear, fish finding gear and navigational equipment. In developing offshore fisheries, impetus for gear advances has come from the demands of locating and target fishing schools in the deep water environment.

(b) Landings:

The value of the Australian commercial fish catch continues to grow, being estimated to be increasing 50% faster than that in the remaining primary industry sector. Total landings by domestic vessels were estimated at 152,000 tonnes live weight in 1985/86, valued at \$592m. This is a decrease of 2% in volume and an increase of 13% in value compared with 1984/85. Production of shellfish fell by 10% while that of finfish increased by 4%.

The increase in value despite a drop in production is due to a combination of factors, namely the decline in the value of the Australian dollar, strong export markets for prawns, and the increasing exports of sashimi quality fish to the Japanese market. Prices on the domestic market also rose strongly in 1985/86 as a result of the dollar's depreciation and low supplies of some key species.

The added attention being given by the Australian fishing industry to the improvement of product quality, the regularity of supply and the relatively low value of the Australian dollar are enhancing Australia's market position.

During 1985/86, approximately 88% of commercial fisheries products was marketed in fresh and frozen form, 7% was canned, 2% cured and 3% reduced to meal.

(c) Imports and Exports:

The value of Australia's imports of marine produce in the year ending June 1986 was a record \$353m, an increase of 11% over the previous year. Exports were valued at \$513m, an increase of 22%.

Australia's main exports in 1985/86 were frozen prawns (13,000 tonnes, \$205m), frozen rock lobster (5,500 tonnes, \$146m), abalone (4,300 tonnes, \$87m) and scallops (1,500 tonnes, \$20m). Nearly all prawns and whole rock lobsters and 54% of the abalone exports went to Japan. The United States took 97% of the rock lobster tails; Hong Kong 23% of the abalone and France took approximately 40% of the scallops.

On 1 June 1987 Australia placed an embargo on the import of South African fisheries products. The imposition of the ban is likely to cause at least short term dislocation in the fish importing and perhaps more serious and longer term disruption to the market for smoked fish products in Australia.

### 3. MANAGEMENT OF DOMESTIC FISHERIES:

#### (a) General

Management plans for Australia's major fisheries are being developed, modified and implemented to conserve stocks and to promote orderly economic development within sectors of the fishing industry. Management policies are jointly developed by the Commonwealth and State governments and industry through the appropriate management advisory committees and ultimately the Australian Fisheries Council. Most management arrangements are based on limited entry supplemented by other input controls to effectively limit fishing effort to an acceptable level. The southern bluefin tuna fishery which is managed through a system of individual transferable quotas is the only significant exception. Gear restrictions, seasonal closures, buy-back of fishing rights and restrictions on upgrading of vessels are features of some management schemes.

Of recent interest is the continuing development of a comprehensive management programme for the east coast tuna fishery geared mainly to yellowfin and bigeye. Close consultation with the appropriate industry organisations, State Governments and recreational angling groups has been maintained.

A National Fisheries Adjustment Program has been introduced, funded by a \$6m grant from the Commonwealth Government. Funds are to be used to commence capacity reduction schemes in effectively managed fisheries with demonstrated over-capacity. The provision of assistance is conditional on fishermen agreeing to contribute to the continued funding of the Program.

#### (b) Torres Strait Treaty:

The Torres Strait Treaty which Australia and Papua New Guinea (PNG) signed on 18 December 1978, came into force on 15 February 1985. It represents a unique border agreement between independent sovereign nations in that it establishes a Protected Zone (PZ) within which both nations have rights and obligations, rather than a single border line. Within the PZ are lines dividing the areas of primary fisheries and seabed jurisdiction between the two nations.

Australia and PNG have entered into arrangements under Article 22 of the Treaty, setting out joint management arrangements for commercial fisheries for prawns, Spanish mackerel, pearl shell, dugong, turtles and rock lobster and for the commercial rock lobster fishery in the Gulf of Papua north of 9S. These are valid to 15 February 1990 except in the case of those for the rock lobster fishery, which expires on 15 February 1988 and are to be reviewed prior to that time with a view to renewal.

The Treaty also is unique in that it protects the rights of the traditional inhabitants of the PZ and adjacent areas by recognising and preserving the existing pattern of traditional fisheries activities. In practice, this means favouring management options which allow the greatest opportunity for traditional inhabitants eg diving rather than trawling for lobsters. A Commonwealth Government research programme has been developed to support management programmes in the PZ.

(c) The Great Barrier Reef Marine Park:

The Great Barrier Reef covers an area of almost 350,000 square kilometres off the north east coast of Australia. Of this area, 98.5% has now been declared Marine Park, under the auspices of the Great Barrier Reef Marine Park Act.

The area contains fishing grounds of major significance to the Queensland fishing industry and to recreational fishermen. Fisheries authorities are closely involved in developing management policies for the Marine Park to ensure the continued productivity of fish stocks and to ensure that commercial and recreational fishing interests are considered, along with conservation and tourism. As yet, the effects of different fishing techniques on fish stocks and the reef habitat are little understood and have been identified as priority areas for research.

(d) International Management of Southern Bluefin Tuna:

Since December 1982, officials and scientists from Australia, Japan and New Zealand have held regular meetings to consider international management arrangements for southern bluefin tuna (SBT). The need for management was recognised as a result of a unanimous scientific concern at the status of the spawning stock which, after heavy and increasing fishing effort by Japanese and Australian vessels, had been depleted to about 30% of its pre-exploitation level.

While no formal agreement has been concluded yet, there is a consensus that an international co-ordinated management approach is necessary for the conservation and rational utilisation of the global stocks of SBT. Currently, Australia and Japan have come to an arrangement which will effectively limit their catches to 11,500 tonnes and 19,500 tonnes, respectively. New Zealand has established a quota of 1,000 tonnes but its actual catch has been of the order of 100t in recent years.

#### 4. FOREIGN FISHING

The Australian-Japan Subsidiary Agreement on tuna longline fishing was renegotiated in August-September 1986 for the twelve months commencing 1 November 1986. A consideration in determining areas of access was an undertaking by Japanese industry to implement a 1987/88 global catch limit of 19,500 tonnes of SBT. That undertaking was in response to continued international scientific concern at the Japanese

industry's cooperation, Australian Fishing Zone (AFZ) waters adjacent to Tasmania remain open to Japanese longline operations. The longline fleet had been excluded under the 1984/85 access agreement from AFZ waters south of 34S in which, historically, virtually all the Japanese catch of SBT in the AFZ had been taken.

In April 1987, Australia became a signatory to a five year South Pacific regional fisheries treaty. The treaty, which was also signed by the United States and seven other Pacific island states, provides terms and conditions under which US tuna purse seiners may operate in the region. Several other island states are expected to sign the treaty in the near future.

In addition to providing access to a significant part of the productive fishing grounds of the south and south western Pacific, US boats will also be permitted to fish in a restricted area of the Australian Fishing Zone in the Coral Sea. Any fishing operations in this area will be subject to careful monitoring and review.

It is anticipated that access to the Coral Sea will provide Australia with valuable data on the commercial potential of fish resources in that area.

The current twelve months agreement with the Australian agents for the commercial fishing interests of Taiwan expires on 31 July 1987. Negotiations have been held for renewal of the agreement for the six months from 1 August 1987.

The Australian/South Korea Subsidiary Agreement on squid fishing is in the process of being re-negotiated for the twelve months from 1 October 1987. The agreement was subsequently amended to allow up to 10 Korean squid jiggers to take up to 4,000 tonnes of squid. Re-negotiation for the next twelve months is at present being finalised. Korean vessels took approximately 300 tonnes for 1986/87, which was at about the same level as in recent years.

Australia has one joint venture agreement with a company involving commercial fishermen of Thailand. This agreement grants access to demersal resources in northern waters.

Specific controls are placed on foreign fishing vessels which are required to report their position every day and their catch every 6 days as well as to complete comprehensive logbooks.

#### 5. COMMONWEALTH FINANCING OF FISHERIES RESEARCH AND DEVELOPMENT:

Grants totalling \$6.2m for 1987/88 were allocated from the Fishing Industry Research Trust Account (FIRTA) for a range of research projects, including biological research, gear technology, exploratory fishing, education and extension, and seafood handling and marketing. Research into tropical diseases and ciguatera received funding support. Nearly \$1m of

the total has been allocated to projects on orange roughy and other species caught in the developing southern slope fisheries. The Fisheries Development Trust Accounts is continuing to fund exploratory surveys into the size and extent of the orange roughy fishery and the level of fishing which can be sustained. Funds have also been provided for the provision of isothermic contour charts for the fishing industry and for the placement of an observer aboard a Soviet research vessel operating off Heard and McDonald Islands.

## 6. MARICULTURE

Mariculture production in Australia continues to be lead by the culture of oysters, chiefly Crassostrea commercialis and the Pacific oyster C. gigas. Public investment and interest in mariculture, however, is increasingly directed towards penaeid prawn and barramundi farming ventures, especially in northern New South Wales, Queensland and the Northern Territory. Many of the commercial ventures now underway are adapting technologies from Asia, particularly Taiwan. At this stage, actual production has been negligible and results over the next few years will need to be assessed to determine the short term viability of the industry in Australia.

## 7. INTERNATIONAL DEVELOPMENT ASSISTANCE:

### (a) Australian Development Assistance Bureau (ADAB)

Through its aid programme, Australia has provided over \$946,000 of support for the SPC Tuna and Billfish Assessment Programme since its inception 6 years ago, including \$146,000 in 1986/87. It similarly supported the earlier SPC Skipjack Survey and Assessment Programme. In 1986/87, Australia provided \$121,000 towards the SPC regional training project for fisheries.

Australia also provides the Forum Fisheries Agency with one third of its regular budgetary funds. For 1986/87, Australia's assistance to the FFA was \$664,000.

### (b) Australian Centre for International Agricultural Research (ACIAR)

ACIAR, established in 1982 by the Australian Government, commissions Australian research institutions to carry out high priority fisheries research on a partnership basis with individual South Pacific countries. Research projects with time frames usually of two or three years can be carried out in either the South Pacific country or Australia or a combination of the two. ACIAR may only support bilateral projects.

From 1984 to 1987, ACIAR has supported a major research programme on the culture of giant clams (Tridacnidae) for food and restocking of reefs. Fiji and Papua New Guinea have collaborated with James Cook University, the Australian partner in the research. Major advances have been in the methods for mass-culturing giant clams, especially the largest species Tridacna gigas. The project may be renewed to include a new phase of extension activities, where the culture technology will be transferred to potential farmers in the Pacific.

A second project concerns growth and recruitment processes in populations of the coconut crab Birgus latro. This large terrestrial crab is found on islands throughout the Indo-Pacific region, but stocks are threatened by overexploitation and habitat alienation. The project is being conducted jointly by the Queensland Department of Primary Industries (Fisheries Research Branch), the University of Queensland (Zoology Department), and the Vanuatu Fisheries Department. The ultimate aims of the research work are to assess the current status of coconut crab stocks in the Vanuatu archipelago, and on the basis of growth and recruitment data, advise on appropriate stock conservation measures.

A third fisheries project which has recently started involves research on the biology of baitfish species used in the pole and line tuna fisheries of the Solomon Islands, Maldives (Indian Ocean) and Papua New Guinea. Collaborators are the Ministry of Natural Resources of the Solomon Islands, Department of Primary Industry in PNG and the Ministry of Fisheries, Maldives, and in Australia the Fisheries Research Division of CSIRO. The project is assessing the impact of baitfishing on the populations of baitfish and hence the future viability of the pole and line fishery. By providing accurate data on the natural fish predators of baitfish, the project will also determine the indirect impact of baitfishing on traditional reef fisheries.

#### 8. TRAINING IN PRACTICAL FISHERIES

The Australian Maritime College provides maritime education and training in all aspects of a fisherman's job, at all levels, and is geared to provide that training at any location in the South Pacific region. The importance of Australia's tropical fisheries means that existing courses stress tropical aspects in training. Courses in gear technology include small scale fishing methods as well as larger scale industrial fishing.

Information on the courses offered are available in the College Prospectus. These courses have all been developed to meet the needs of the Australian industry. Students from the Pacific region as well as South East Asia are already enrolled in both the Diploma and Graduate Diploma courses. The College would welcome initiatives that would lead to the provision of courses, on or off campus, designed specifically for the needs of the South Pacific.



## FURTHER INFORMATION

This paper provides but a brief list of Australian fisheries activities. Further details on any aspect may readily be obtained from the Director, Australian Fisheries Service, Department of Primary Industry, Canberra, ACT, 2600.

0756x