SPC/Fisheries 17/WP.16 25 July 1985

ORIGINAL : ENGLISH

SOUTH PACIFIC COMMISSION

SEVENTEENTH REGIONAL TECHNICAL MEETING ON FISHERIES (Noumea, New Caledonia, 5 - 9 August 1985)

COUNTRY STATEMENT - AUSTRALIA

1. Total landings by the Australian fishing fleet during 1983/84 decreased by some 5 per cent in terms of quantity, but increased, in terms of value, by some 1 per cent. Slight falls in the value of prawns, scallops and tuna were offset by increases in the value landed of rock lobster, abalone and oyster.

2. The rate of increase in costs continued to slow in 1983/84 and markets for Australian fisheries products were generally good.

3. The introduction of new, and revision of existing, management arrangements for a number of Australian fisheries agreements were re-negotiated between the Australian government, the governments of Japan and Korea and with Taiwanese commercial fishing interests. A joint venture involving Australian and Thai fishing interest was approved and operates in the Northern pelagic and demersal fisheries. As in the previous year's country statement, aspects of particular interest to the Pacific are highlighted.

4. Inquiries on any aspect of Australian fisheries are welcome and should be directed to Australian Fisheries Service, Department of Primary Industry, Canberra, ACT 2600, Australia, Attention: Mr A.C. Byrne.

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When making an assessment of Australian fisheries, it is necessary to bear in mind the low productivity of our waters. Although the Australian fish fauna is very diverse (about 2,500 species) our fishery resource base is not extensive by world standards as the waters adjacent to Australia are relatively poor in nutrients, and thus do not support large populations of photosynthesizing organisms. Upwellings are sporadic and only occur in restricted areas around Australia so that coastal waters and adjacent oceanic waters are not particularly productive.

2. PRODUCTION

(a) Fleet

In 1984/85 approximately 13,000 boats were licensed to fish commercially, however, only about 4,800 were licensed to operate beyond three miles from the coast. Boat numbers have not increased markedly in recent years but fishing effort has risen significantly due to the upgrading of the fleet.

(b) Landings

Total landings by Australian vessels in 1983/84 were estimated at 160,000 tonnes liveweight, valued at \$446m. This is a decrease of 5% in volume (an increase of 1% in value) compared with 1982/83. Production of shellfish fell by 6% while finfish increased by 2%.

(c) Utilisation

During 1983/84 approximately 90% of edible marine produce caught by commercial fishermen was used in fresh and frozen form; 6% was canned, 2% was cured and 2% reduced to meal.

(d) Imports

The value of Australia's imports of marine produce in the year ending June 1984 was a record \$271m, an increase of 20% over the previous twelve months. Exports were valued at \$412m an increase of 12%.

(e) Exports

Australia's main exports in 1983/84 were frozen prawns (14,600 tonnes valued at \$162m), frozen rock lobsters (7,400 tonnes valued at \$131m), and scallops (3,000 tonnes valued at \$28m). Nearly all prawns and whole rock lobsters and 58% of the abalone exports went to Japan. The United States took 98% of the rock lobsters tails; Hong Kong took 28% of the abalone exports and France took approximately one fourth of the scallops exported.

A significant and recent development has been the preparation of southern bluefin tuna for the Japanese sashimi market. This has occurred because of the recent success of New Zealand fishermen. Pole fishing and purse seining techniques used in Australia have presented problems in achieving premium quality standards, however, Japanese buyers have maintained interest and an improvement of handling practices will be pursued. A small group of New South Wales fishermem using longlining gear have been able to maintain very high quality standards and fish is air freighted to the chilled sashimi market.

3. MANAGEMENT

(a) General

Management plans are being revised or developed for Australia's main fisheries, partly to conserve stocks and partly to reduce economic problems in the industry because of over capitalisation. The industry has taken a major role in the development of these management policies.

Over the past year long-term fisheries management regimes have been introduced for the Southern Bluefin Tuna Fishery, the Northern Prawn Fishery and South East Trawl Fishery while interim fisheries management regimes have been imposed in the East Coast Trawl Fishery and the Bass Strait Scallops Fishery. A range of mechanisms have been used in these management arrangements including limited entry provisions to contain and reduce catching capacity by such means as voluntary licence buy-back and individual transferable quotas.

(b) Torres Strait Treaty

The Torres Strait Treaty which Australia and Papua New Guinea 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. The Treaty also is unique in that it protects the rights of traditional inhabitants of the PZ and adjacent areas by recognising and preserving the existing pattern of traditional activities. In practice, this means favouring management options which allow the greatest opportunity for traditional inhabitants to participate in a fishery eg line fishing for mackeral over gillnetting, and diving for lobsters over trawling for lobsters. To fulfill Australia's obligations a research programme has been set up to support management programmes.

(c) Turtles and Dugongs

Turtles and dugongs are protected species in Australian waters, but their exploitation is allowed under certain conditions by aboriginals and Torres Strait islanders. The Commonwealth and Queensland fisheries authorities are working together to produce a joint plan for turtle and dugong conservation and management.

(d) Great Barrier Reef Marine Park

The Great Barrier Reef region covers an area of almost 350,000 square kilometres off the NE coast of Australia. 98.5% of this area has now been declared Marine Park, bringing it under the auspices of the Great Barrier Reef Marine Park Act. The Great Barrier Reef Marine Park Authority is responsible for administering the Act. The Act's stated goal is to provide for the "protection, wise use, appreciation and enjoyment of the Great Barrier Reef in perpetuity through the development of the Marine Park".

The region contains fishing grounds of major significance to the Queensland fishing industry. Fisheries authorities are closely involved in developing management policy for the Marine Park to ensure the continued productivity of fish stocks and that interests of the fishing industry are considered, along with conservation, tourism and other interests.

(e) International Management of Southern Bluefin Tuna

Since December 1982 officials and scientists from Australia, Japan and New Zealand have held three rounds of discussions on the need for and form of an international management arrangement for southern bluefin tuna. Further meetings will take place in Wellington in July and August 1985.

4. FOREIGN FISHING

The Australian/Japan Subsidiary Agreement on tuna longline fishing was re-negotiated and the new Agreement came into force on 1 Novemeber 1984 for a period of twelve months. The major variation in the 1984/85 Agreement was the exclusion of Japanese longliners from those waters of the Australian fishing zone in which they had previously taken significant quantitites of southern bluefin tuna (ie all waters south of 34°S). This action was taken because although Japan had acknowledged the urgent need to introduce management arrangements for this fishery it was not prepared to introduce catch controls which would complement those already in place for the Australian sector of the fishery.

The agreement with the Australian agents for commercial fishing interests in Taiwan to cover the operations of gillnetters and pair-trawlers in waters off the north and north-west coast of Australia, was re-negotiated to operate from 1 August 1985 for a further 12 month period. Quotas were set at 2,700 tonnes for the gillnetters and 27,500 tonnes for the pair-trawl fleet.

The Australian/Korean subsidiary agreement on squid fishing was also re-negotiated for the 12 months commencing 1 October 1985. Details have yet to be finalised, but it is expected that up to 12 Korean squid jiggers will operate in a designated area adjacent to Victoria, South Australia and Tasmania.

Australia has joint venture agreements with companies involving Thai and Taiwanese commercial interests. These agreements cover access to southern pelagic and demersal resources. A third joint venture agreement with Taiwanese commercial interests provides for access to the Bass Strait squid resource.

The CSIRO and Australian fisheries authorities are at present involved in an investigation of northern pelagic fish and shark stocks which are currently largely exploited by foreign vessels. It is expected by the completion of the programme that in excess of 8,000 sharks, tuna and mackeral will have been tagged. Black Tip sharks (<u>Carcharhinus limbatus</u> and <u>C sorrah</u>) dominate the fishery. Recent tag returns indicate that shark travel widely and quickly within the region.

Foreign vessels are required to report their position every 2 days and their catch every 6 days as well as to complete comprehensive logbooks.

5. COMMONWEALTH FINANCING OF FISHERIES RESEARCH

Grants totalling \$3.8m for 1984/85 were allocated from the Fishing Industry Research Trust Account (FIRTA) for a range of research projects, including biological and scientific research, gear technology, exploratory fishing, education and extension, and seafood handling and marketing. Research into the tropical disease ciguatera, received funding support.

Exploratory surveys, funded from the Fisheries Development Trust Account, were undertaken during the 1983/84 financial year. Major projects include continued exploratory deep water trawling for orange roughy and monitoring of the stocks of the South East Trawl Fishery. 6. ASPECTS OF PARTICULAR INTEREST TO THE PACIFIC

(a) Mariculture

Mariculture in Australia is led by the culture of oysters, <u>Crossostrea commercialis</u> (the Sydney rock oyster) and a recent addition the Pacific Oyster, <u>C</u> gigas. Total rock oyster production in 1983/84 was around 7200 tonnes (11.4 million dozen). Cultivators of Sydney rock oysters in New South Wales and Southern Queensland accounted for 95% of the total production; the remainder was Pacific oysters produced in Tasmania.

Current mariculture research funded by FIRTA in Australia covers the following:

SPECIES/SUBJECT

INSTITUTION

WA Department of Fisheries

Tasmanian Department of Sea

and Wildlife

Fisheries

NSW State Fisheries

NSW Department of Agriculture

- Prawns

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- Pearl Oysters
- Nutrition
- Abalone
- Oysters

Victorian Department of • Conservation, Forests and Lands

- Scallops Tasmanian Department of Sea Fisheries

- Crayfish

WA Institute of Technology

Shellfish in General

University of Tasmania

In addition, the States also fund research, particularly Tasmania, Victoria, Queensland and New South Wales. Queensland and the Great Barrier Reef Marine Park Authority are carrying out research on trochus, essentially for fisheries management purposes, but the research has some significance to mariculture.

(b) Use of Fish Aggregation Devices (FADs) in Australia

Most success with Fish Aggregation Devices has been achieved off the south-west coast of Western Australia where catches up to 30 tonnes of southern bluefin have been achieved in close proximity to FADs.

Two FADs set on a seamount about 90nm off Cairns, North Queensland, in approximately 45m of water have remained in position for three years. The design of these is similar to the early Western Australian type with plastic strands threaded through the lay of the synthetic mooring rope. Species taken

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ICLARM has a presence in the developing marine science centre in Townsville. ICLARM is an independent centre of scientific research and expertise which has built up an excellent reputation for the high quality of its output, both as a research body and as a centre for information dissemination.

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The Australian Maritime College was established to provide maritime, engineering and fisheries training for the whole of Australia. First students were enrolled in 1980.

The College is in a unique position to provide 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 of training. Courses in gear technology also extend into low technology fishing methods which are appropriate for isolated areas and developing countries.

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By means of Australia's aid programme, the facilities and expertise of the Australian Maritime College can be made available throughout the South Pacific region.

Further Information

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AMENDMENT

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> Page 6: 7.(a) Australian support for the Tuna and Billfish Assessment Programme was \$150,000 p.a. between 1981 and 1984, and \$210,000 in 1984/85.

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- Pearl Oysters
 WA Department of Fisheries
 and Wildlife
 - Nutrition NSW State Fisheries
 - Abalone Tasmanian Department of Sea Fisheries
- Oysters Victorian Department of Conservation, Forests and Lands
- Scallops Tasmanian Department of Sea Fisheries

- Crayfish WA Institute of Technology

- Shellfish in General University of Tasmania

In addition, the States also fund research, particularly Tasmania, Victoria, Queensland and New South Wales. Queensland and the Great Barrier Reef Marine Park Authority are carrying out research on trochus, essentially for fisheries management purposes, but the research has some significance to mariculture.

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Two FADs set on a seamount about 90nm off Cairns, North Queensland, in approximately 45m of water have remained in position for three years. The design of these is similar to the early Western Australian type with plastic strands threaded through the lay of the synthetic mooring rope. Species taken around these FADs include yellowfin, bigeye and skipjack tunas, dolphin fish and rainbow runner <u>Elegatis</u> <u>bipinnulatus</u>. Deteriortation of the plastic strands at the surface has been observed and is probably due to the action of ultraviolet light. These have now been replaced.

7. INTERNATIONAL DEVELOPMENT ASSISTANCE

(a) Australian Development Assistance Bureau (ADAB)

Through its aid program, Australia has provided \$150,000pa support for the SPC Tuna and Billfish Programme since its inception four years ago, and similarly supported the earlier SPC Skipjack Tagging and Survey Programme. Australia also provided funding for the SPC Fish Aggregation Devices Study. Assistance has also been provided to the UNDP Pacific Regional Programme for projects such as the FFA Workshop on National Tuna Fishing Operations and the SPC Artisanal Fishing Training Module.

Australia also provided the Forum Fisheries Agency with one-third of its regular budgetary funds and has supplemented these with project-linked extra-budgetary finance.

(b) <u>Australian Centre for International Agricultural Research</u> (ACIAR)

The Australian Centre for International Agricultural Research (ACIAR), a statutory authority established in 1982 by the Australian Government, commissions Australian research institutions to carry out high priority agricultural and fisheries research on a partnership basis with the 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 Currently, ACIAR supports research in the culture of two. giant clams belonging to Tridacna species in Fiji and Papua New Guinea with James Cook University as the Australian partner. ACIAR can only support bilateral projects, but, it encourages linkages to international research centres, such as ICLARM. Another project underway is that of establishing the life cycle and recruitment systems of the Cocont Crab, Birgis latro, again with the view of protecting and enriching the natural population of the crab in many islands of the South Pacific. The project is being conducted jointly by the Queensland Department of Primary Industries, University of Queensland, Queensland Institute of Technology and Fisheries Department, Vanuatu.

ACIAR is an organisation that looks forward to further involvement in fisheries research in the South Pacific.

(c) International Centre for Living Aquatic Resources Management (ICLARM)

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