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## SOUTH PACIFIC COMMISSION

TWENTY-FOURTH REGIONAL TECHNICAL MEETING ON FISHERIES (Noumea, New Caledonia, 3–7 August 1992)

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STATEMENT

## OUTER ISLAND FISHERIES PROJECT

## KIRIBATI

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The Outer Island Fisheries Project, OIFP (formerly called the Outer Island Commercial Fisheries Trial) was conceived in 1986 as an extension of the national fishing company's Te Mautari Ltd (TML) tuna pole and line fishing operations. Financially independent of TML, since mid-1988 OIFP centres have been operational on the islands of Butaritari and Abemama. Each centre comprises the following:

2 x 12.5 tonne fish cold-stores 1 x 10.0 tonne ice-store 1 x 1.5 tonne/24 hour blast freezer 2 x 750 kg/24 hour ice-makers 1 x 72 KVA generator 1 x 12.5 KVA generator Office, gear-store, fuel-store, and house

Each centre is staffed by a manager, foreman and 3 dayworkers with support from a head office staff of four. Fish landings are provided from a variety of artisanal canoes, motorised planing-hull skiffs and FAO designed canoes. The centres were designed for an original target throughput (catch) of 250 tonnes per centre per year, with a financial breakeven point of 15 tonnes/month/centre (180 tonnes/year). Total landings of tuna and other oceanic fish species (mahi-mahi, sail-fish, marlin, rainbow runner and wahoo) at each centre during the past four years are as follows:

	Abemama (tonne)	Butaritari (tonne)
1988 (June–December)	8.40	32.37
1989	120.53	106,84
1990	56.55	34.21
1991	25.83	36.64
1992 (January–May)	5.15	2.34

Only on two occasions (months) has the tuna catch ever exceeded the breakeven point for either centre. This illustrates the highly variable nature of oceanic fisheries.

During the past year the OIFP has diversified its operations to include the processing and marketing of reef-fish (primarily *Lethrinus* spp., *Lutjanus gibbus*, bonefish and seapike) and spiny lobsters (*Panulirus* spp.) from the outer islands. As a consequence landings of reef-fish have increased, particularly at the centre on Abemama.

	Abemama (tonne)	Butaritari (tonne)
1988 (June-December)	0.47	0.75
1989	3.62	4.67
1990	3.38	0.95
1991	19.58	5.68
1992 (January–May)	9.76	0.27

The poor landings on Butaritari during 1992 are due to the centre being non-operational for four months as a result of generator breakdown.

As part of the diversification process, the project refurbished a previously disused fish market on Betio, Tarawa, during 1991, and now has available a retail outlet for local sales plus a fish processing facility complete with filleting line, vacuum packer, processing and packaging equipment. Local retail and institutional sales during the period October '91 to March '92 totalled 13.3 tonnes, worth A\$18,400.

The OIFP has access at the fish market to a sea-water flake-ice maker and a 1.5 tonne capacity chiller. The bulk of the project's fish, once transshipped from the outer island centres to Betio, is stored at the 250 tonne capacity TML cold-store. The project currently markets a limited volume of frozen reef-fish and lobsters by airfreight to Nauru (total 1.5 tonnes between August '91 to March '92), and dependent on catches tuna in bulk to canneries in Japan and Fiji. A limited volume of frozen fish, particularly snapper (*Etelis* and *Pristipomoides* spp.) and several species of emperor (*Lethrinus* spp.) are defrosted (in air), filleted and vacuum packed for sale locally. Because of the logistical difficulties of shipping fish from Abemama and Butaritari to Tarawa, all fish is blast frozen prior to coldstorage.

During late 1992, the OIFP will construct a third centre on the outer island of Abaiang, only 20 miles from Tarawa. This centre will operated solely based on the processing and marketing of fresh fish, stored on ice, rather than blast frozen. The centre will essentially be run as a marketing trial with fish transported on a weekly basis to the urban market (i.e. South Tarawa). The target throughput for this centre is only 250 kg per week.

The only traditional method of preservation used in Kiribati is the salting and drying of fish surplus to daily requirement. This is particularly for reef-fish species on islands with lagoons and tuna on islands without. These fish are either stored for consumption during lean fishing times or for a change of diet. The concept of freezing and long-term cold-storage of fish is therefore a recent idea on the outer islands. During 1992, small-scale chill storage facilities were built on two more islands (in the southern Gilberts), under Japanese aid. The OIFP is assisting these centres in marketing fish 'off island', exported to Tarawa, in order to generate enough income to cover operating costs.

The OIFP has recently initiated tuna jerky processing and marketing trials, at present for local consumption only, but eventually with a view to export. Test marketing is currently under way in Nauru, the Marshall Islands and through the South Pacific Trade Commission in Australia. The technology used, i.e. marinating and solar drying, is appropriate to existing techniques used on the outer islands, does not require sophisticated equipment and ensures that increased value is added to the processing of tuna (only big yellowfin tuna above 10 kg are used).

During the next 12 months the OIFP intends to restructure and reorganise the existing two centres to reduce operating costs in an attempt to become financially sustainable. A system of fishermen's organisations (or cooperatives) is to be tried and tested on these islands in an attempt to maximise the benefits that can be achieved by the project on each island and amongst all participants. This approach will also seek to adopt, wherever possible, traditional fisheries management techniques in order to provide a sustainable fishery. A post-harvest training workshop is to be run by the OIFP in conjunction with the Fisheries Division and assisted by the SPC later this year aimed at improving the handling of chilled fish by both fishermen, processors and exporters. Additional fisheries development by the OIFP during 1993 will include developing value-added export markets (especially for tuna jerky) and strengthening of the existing small-scale deep-water snapper and spiny lobster fisheries.