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## OPTIONS FOR U.S. FISHERIES INVESTMENT IN THE PACIFIC ISLANDS REGION

by  
David J. Doulman



EAST-WEST CENTER

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## PREFACE

At its inaugural meeting in Pago Pago in 1981, the Pacific Islands Development Program was directed by the Standing Committee of the Pacific Islands Conference to evaluate the potential beneficial role of multinational corporations in the Pacific islands region. In 1984 the Standing Committee again addressed the question of multinational corporations and approved that this study be undertaken on a sectoral basis, with the tuna industry being the first sector to be examined.

The tuna industry was selected as the first sector for investigation by the Standing Committee because the tuna fishery and industry in the Pacific islands region affects all countries and territories. The broad objectives of the tuna sectoral study are (1) to analyze the current and future role of multinational corporations in the tuna industry in the Pacific islands region, and (2) to evaluate the potential contribution these corporations could make to industry development in the region. This is the first time that a comprehensive study of the tuna industry in the Pacific islands region will focus on regional and international issues affecting the industry from the perspective of all island countries.

A proposal outlining the tuna sectoral study was drawn up in 1984. This was done in consultation with the Forum Fisheries Agency, and research commenced in January 1985. The study will produce a range of technical reports that will address issues critical to the development, management, and expansion of tuna industries in the Pacific islands region.

The Pacific Islands Development Program's tuna study is financially supported by the East-West Center, the United Nations Development Programme, the Australian Development Assistance Bureau, and the United States Agency for International Development.

## **ABSTRACT**

As part of their development efforts, Pacific island countries seek to promote commercial fishing ventures. Because they lack domestic capital and expertise, island countries actively encourage foreign investment in their fisheries sectors. This publication addresses the lingering issue of how U.S. investors might participate in fisheries joint ventures or other investment arrangements.

Following the introduction, the paper reviews the fisheries resources and patterns of exploitation in the Pacific islands region in terms of inshore fisheries, oceanic fisheries, and aquaculture. Options for investment by U.S. investors are discussed, with particular emphasis on investment in the fleet- and shore-based components of the region's tuna industry. The attitude of Pacific island countries to foreign investment is briefly outlined, and a more aggressive role is suggested for the U.S. government in promoting U.S. fisheries investment in the region. Constraints on foreign investment are discussed and conclusions drawn.

## INTRODUCTION

All Pacific island countries have formally or informally expressed a desire to develop their fisheries resources. For many countries this expression is found in their national and sectoral development plans and other official documents. However, despite this desire and the existence of large, and in some cases underexploited, fisheries resources, many countries lack the domestic capabilities to develop these resources, as well as to establish viable commercial industries. Thus Pacific island countries acknowledge that foreign capital and expertise are generally required to realize their full potential and goals of fisheries development. Background information relating to countries and territories in the Pacific islands region is contained in the Appendix.

Several countries in the region already have commercial fishing and processing industries of varying sizes and types. The fish harvested and processed by these industries are sold on domestic and international markets. Existing industries range from the collecting and processing of shells and beche-de-mer to the harvesting, canning, and marketing of tuna. The former industries involve rudimentary hunting and gathering activities by Pacific islanders using traditional fishing methods and crafts while the latter industries utilize sophisticated and capital-intensive harvesting and processing techniques.

This publication takes a fresh look at two lingering issues: How might U.S. investors participate in the development of fisheries resources in the Pacific islands region and what form might this participation take? Logistically, the problem involves bringing together the resource-endowed Pacific island countries and the U.S. investors with the requisite capital and management/marketing capabilities in order to establish and manage commercially viable fishing industries. Of its own accord a union between these two groups is unlikely to eventuate, but with initiatives by U.S. investors and with support from the U.S. government, such a union appears feasible. All parties involved stand to gain from

this collaboration, and the U.S. government's fears concerning regional security and stability could be allayed.

To achieve a successful union between U.S. and Pacific island interests, positive and lateral thinking is required, particularly concerning the tuna industry. As a starting point, it must be accepted that the world tuna industry has undergone massive changes in the last six years and that the industry structure today has, and tomorrow will have, little resemblance to the structure of the industry prior to 1980.

Since 1980 the most pronounced changes in the international tuna industry have occurred in the United States. In 1986 only one Terminal Island cannery remains operational on the U.S. mainland as opposed to five in 1980. Moreover, the U.S. tuna purse seine fleet has been drastically reduced in size, and further reductions are expected.

This study reaffirms the commitment of Pacific island countries to seek foreign investment in their efforts to develop commercially viable fishing industries. The introduction is followed by an outline of the region's fisheries resources and their current patterns of exploitation. Options for U.S. investment in commercial fishing ventures are discussed in terms of inshore fisheries, oceanic fisheries, and aquaculture, with emphasis focusing on investment in tuna fleets and associated shore bases. The attitude of Pacific island countries to foreign investment is addressed along with possible U.S. government initiatives for the region's tuna industry. Constraints facing the development of tuna ventures in the Pacific islands are reviewed and some conclusions drawn.

## **FISHERIES RESOURCES AND EXPLOITATION**

Marine fisheries resources and industries in the Pacific islands region can be broadly classified as inshore and oceanic. Although commercial aquaculture is also practiced to a limited extent, it is still in its formative years.

### **Inshore fisheries**

Inshore fisheries resources consist of a multitude of fish and crustacean species. Many of these species are exploited by Pa-

cific islanders for subsistence purposes, and where domestic or overseas markets exist, commercial fishing is practiced. As a general rule, inshore fisheries resources tend to be fragile and not capable of withstanding heavy commercial exploitation. Estimates of the size of the region's inshore fisheries resources are not known, though estimates have been made for some countries. For example, the Papua New Guinea government estimates that its inshore fisheries currently yield about 20-25,000 tonnes per annum. If moderately exploited these fisheries are estimated to yield 140,000 tonnes per annum, and if heavily exploited 388,000 tonnes per annum (Murro 1975). Like Papua New Guinea, other Pacific island countries probably have underexploited inshore fisheries resources. Although near urban centers, resources tend to be heavily exploited if not overexploited.

Existing commercial inshore fishing operations in the Pacific islands generally range from the collection of miscellaneous marine products to the harvesting and processing of reef fish. After basic processing, miscellaneous resources are exported primarily to Asian markets, while reef fish are sold domestically and overseas.

Papua New Guinea has the region's only industrial-scale inshore fisheries: a prawn fishery and a barramundi (*Lates calcarifer*) fishery. Both fisheries are export oriented, and the prawn fishery has significant foreign investment.

The logistics associated with the development of inshore commercial fisheries pose difficult organizational and management problems because many of these fisheries (1) are based on artisanal production; (2) are located in isolated areas; and (3) depend on air and sea transportation, which can be erratic and often unreliable.

### **Oceanic fisheries**

Oceanic fisheries principally focus on the exploitation of tuna. The region's tuna resource is both large and proven. For example, the total world skipjack (*Katsuwonus pelamis*) tuna catches in 1985 were approximately 700,000 tonnes, of which about 64 percent was caught by purse seine fleets operating in the western Pacific Ocean (Forum Fisheries Agency 1986). In addition, large quantities of yellowfin (*Thunnus albacares*), albacore (*Thunnus*

*alalunga*), and other deep-sea pelagic species are harvested.

Tuna is caught by domestic and distant-water fleets operating in the Pacific islands region using purse seine, longline, and pole-and-line fishing methods. In 1985 domestic fleets were based in 12 countries (Table 1). These fleets consisted of 138 vessels: 26 purse seiners, 51 longliners, and 61 pole-and-line vessels. The combined capital value of the region's domestic fleets was estimated at US\$190 million. However, about 80-85 percent of the fleet's capital investment was owned by individuals and corporations resident outside the region.

Tuna harvested by the domestic fleets in the Pacific islands is either processed by the region's four canneries or exported to Asia, Puerto Rico, and Japan (for its sashimi market). Table 1 shows the destination and utilization of landings by fleets based in the region.

Canning plants are located in American Samoa, Fiji, and Solomon Islands (Table 2). The combined processing capacity of these plants is 175,000 tonnes of tuna per annum with the two American Samoan plants accounting for 89 percent of the total. The Fijian and Solomon Island canneries are joint ventures between island governments and Japanese corporations, though the Japanese partner in the Fijian cannery will withdraw from the venture in December 1986.

In addition to canning, *katsuobushi* is processed in the region for export to Japan (Table 3). Although four plants exist, only two are operational. The operational plants are located in the Marshall Islands and Solomon Islands, and their annual processing capacity is 2,300 tonnes of wet fish input.

Distant-water fishing fleets operating in the Pacific islands region come from more than ten countries, though at least 90 percent of the vessels are of Japanese, Korean, Taiwanese, and U.S. registrations. The fleets fish under license in many of the region's exclusive economic zones (EEZs).

The U.S. tuna purse seine fleet has actively fished in the Pacific islands since 1980. In 1984, 69 U.S. vessels operated in the region and for the first time the catches by the U.S. fleet in the central and western Pacific exceeded the catches made by the U.S. fleet in the eastern Pacific (Herrick and Koplín 1985:3-4). U.S. fleet catches in the central and western Pacific in 1984 accounted

Table 1. Approximate inventory of tuna fishing vessels based or registered in the Pacific islands region in 1985

Country/ territory	Vessel type	Base port	Num- ber	Destination of landings
American Samoa	Purse seine (single)	Pago Pago	10	Van Camp and Star- Kist canneries, Pago Pago
	Longline	Pago Pago	20	
Fiji	Pole-and-line	Lami	7	PAFCO cannery, Levuka
	Longline	Lami	11	
	Purse seine (single)	Lami	1	
Guam	Purse seine (single)	Agana	8	Star-Kist cannery, Pago Pago
Hawaii	Pole-and-line	Honolulu	9	Sashimi market throughout state of Hawaii
	Longline	Honolulu	45	
	Handline	All islands	112	
Kiribati	Pole-and-line	Betio	4	Star-Kist cannery, Pago Pago; PAFCO, Levuka
Marshall Islands	Pole-and-line	Majuro	4	<i>Katsuobushi</i> plant, Majuro
Nauru	Purse seine (single)	n.a.	2	n.a.
Papua New Guinea	Pole-and-line	Kavieng	9	Sales on open market and sales to PAFCO cannery, Levuka
	Purse seine (single)	Rabaul	1	
Solomon Islands	Pole-and-line	Tulagi	27	Solomon Taiyo can- nery, Tulagi, sales on an open market and Japanese sashimi market
	Longline	Tulagi	2	
	Purse seine (group)	Tulagi <sup>a</sup>	1	
Tonga	Longline	Lami	1	PAFCO cannery, Levuka
Tuvalu	Pole-and-line	Lami	1	PAFCO cannery, Levuka
Vanuatu	Purse seine (single)	Manta <sup>b</sup>	3	Star-Kist cannery, Pago Pago, and alba- core transshipped to Puerto Rico
	Longline	Palikula	17	

Source: Doulman and Kearney. 1986.

<sup>a</sup>Operates in Solomon Islands about three months per year.

<sup>b</sup>Operating in eastern Pacific and based in Ecuador.

Table 2. Tuna canning plants in the Pacific islands region in 1985

Country/ location/ company	Year estab- lished	Annual processing capacity (tonnes)	Freezer capacity (tonnes)	Storage capacity (cases)	Permanent employ- ment (persons)	Product canned	Ownership	Manage- ment
America Samoa Pago Pago (Star-Kist)	1963	80,000	n.a.	n.a.	n.a.	skipjack and yellowfin	Heinz Corp.	U.S.
American Samoa Pago Pago (Van Camp)	1954	75,000	n.a.	n.a.	n.a.	skipjack and yellowfin	Ralston Purina	U.S.
Fiji Levuka (PAFCO)	1964 (freezing) 1975 (canning)	15,000	2,000	150,000	350	skipjack, yellowfin, and albacore	Joint venture: 25% Fiji government, 71% C Itoh, and 4% private	Japanese till December 1986
Solomon Islands Tulagi (Solomon Taiyo)	1972	5,000	1,600	n.a.	270	skipjack and yellowfin	Joint venture: 50% Solomon Islands government and 50% Taiyo	Japanese

Source: Doulman and Kearney. 1986.

Table 3. *Katsuobushi* processing plants in the Pacific islands in 1985

Country/ location	Estab- lished	Daily process- ing (input wet tonnes)	Annual capacity (tonnes)	Perma- nent employ- ment	Ownership
Marshall Islands Majuro	1984	5	1,000	50	Joint venture between Marshallese and Okinawan interests.
Palau Koror <sup>a</sup>	1977	10	n.a.	n.a.	Caroline Fishing Co., a joint venture be- tween Palauan and Japanese interests (Nantaku Co. affiliate of Hassui Reizo)
Papua New Guinea Kavieng <sup>b</sup>	1971	15	2,000	50	Government of Papua New Guinea but for- merly Gollin Kyokuyo (1971-79) and Star-Kist (1980-82)
Solomon Islands Tulagi	1973	4	1,300	50	Solomon Taiyo

Source: Doulman and Kearney. 1986.

<sup>a</sup>Not operated since 1982.

<sup>b</sup>Not operated since 1979.

for 66 percent of the U.S. fleet's total catch. According to industry reports, the size of the U.S. fleet operating in the central and western Pacific in 1986 has been reduced to approximately 33 vessels. This reduction has been primarily due to two factors.

First, an overall reduction has occurred in the size of the U.S. purse seine fleet. The American Tunaboat Association reported in May 1986 that there were 87 U.S. seiners afloat, of which 67 were actively fishing (Felando 1986). These figures compare with an active fleet of approximately 130-135 vessels in 1980. The reduction in the size of the fleet has been caused by vessels being transferred to other fisheries or to other flags and by some vessels lying

idle due to bankruptcy. Second, fishing conditions in the eastern Pacific improved in 1986, and good catches of yellowfin were made. For this reason some U.S. vessels, which would normally operate in the central and western Pacific, opted to remain in the eastern Pacific to take advantage of the unusually good fishing conditions there.

### **Aquaculture**

A degree of aquaculture is practiced in some Pacific island countries where it has both experimental and commercial forms. The region's most notable aquaculture venture is in Kiribati where milk fish are raised either for human consumption or as live bait for the domestic pole-and-line tuna fleet.

## **U.S. FISHERIES INVESTMENT**

U.S. fisheries investment initiatives in the Pacific islands region could realistically take two forms. These are (1) individual or corporate investors assuming 100 percent equity in ventures, or (2) joint ventures with island governments or their nominees.

Many island countries are likely to favor the establishment of joint ventures. They believe that their direct participation in natural resource industries is necessary to regulate resource exploitation for reasons of reaping benefits from resource-based industries and of enhancing national pride.

Foreign investors often welcome direct government participation in resource ventures. Because of their initial high capital requirement cost, joint ventures can spread risk and help ensure that governments maintain an active interest in the ventures once they are established. Some island governments desiring a stake in commercial ventures have access to investment funds—sometimes at concessional rates—from international financial institutions such as the Asian Development Bank and the World Bank.

Some fisheries ventures proposed by investors for the Pacific islands could involve more than one country. This cooperative approach is generally consistent with the philosophy of island countries with respect to tuna development and management.

For example, if a fishing base is to be established in the region, it should be located where it has the greatest prospects for commercial success. Island countries acknowledge this requirement. However, to spread the venture's benefits among several countries, to give it broad political support, and to increase its operational flexibility, it should perhaps be established as a regional undertaking. A regional approach, particularly where small countries are involved, could also be attractive to financiers.

Limited scope exists for direct foreign investment in harvesting inshore fisheries, though opportunities are available in some Pacific island countries for investment in domestic and export marketing of inshore fisheries products. Island countries generally lack marketing expertise either to enhance and extend existing markets or to seek out and establish new ones. Market-related investment requires that investors work closely with government authorities to ensure that supplies of marine products are regular and reliable and that proper handling and internationally acceptable quality control measures are adopted and enforced.

Urban markets in the Pacific islands region are capable of absorbing large volumes of marine products, provided that efficient distribution networks exist. Domestic marketing networks are not well established in many countries, and urban distribution outlets need to be strengthened. Often fish markets consist simply of waterfront selling points where fishermen dock their craft and unload their catches. These outlets are frequently inaccessible to large sections of the population. Innovations—such as mobile fish markets—are necessary if the full market potential of urban areas is to be realized.

For some inshore fisheries products, a strong domestic market is considered necessary for successful penetration of export markets. This is because the progressive development of domestic and export outlets enables marketing agents to achieve economies of scale in their operations and to dispose locally of non-exportable species. Regularity of supply and the maintenance of stringent quality controls are required if exporters are selling on competitive international markets.

Investment related to the development and diversification of market outlets for inshore products does not usually require large capital outlays. Nonetheless, these investments can be financially

lucrative because of the existing and growing urban demand for fish in Pacific island countries and the high per-unit value of good quality fish on overseas markets.

A wide range of opportunities exists in the Pacific islands region for investment in the tuna industry. These opportunities are discussed in the next section of this paper.

Investment possibilities in the field of aquaculture are limited though several countries in the Pacific islands region—for example, Fiji and Kiribati—would welcome commercial proposals in this field. Prawn and pearl culture for domestic markets might be feasible in some countries, particularly those promoting tourism. Export prospects for most aquaculture products do not seem promising because of strong competition from centrally located and highly efficient Asian producers. A comprehensive study undertaken by the East-West Center in 1983–84 found aquaculture in the Pacific islands to be technically feasible but not generally commercially viable (Uwate 1984).

## TUNA INVESTMENT

The tuna fisheries and industry in the Pacific islands hold the most realistic prospects for U.S. investment initiatives in comparison with other commercial fisheries. Potential investment can be categorized into (1) fleets, and (2) shore bases and processing facilities. These activities are interrelated, and investment in one category requires consideration of the other.

### **Fleets**

Recent changes in the tuna industry have left many U.S. tuna seiner owners at or near bankruptcy. The close ties between the U.S. canners and the boatowners that existed prior to 1980 have been progressively severed, and for the first time many boatowners are being forced to be fishermen as well as entrepreneurs. A situation has developed where both the capital and the skilled workforce are unemployed or underemployed because boatowners are unable (1) to operate without trip advances from canners, and (2) to raise trip advances from commercial institutions due to their indebtedness and the refusal of canners to provide fish

price guarantees prior to the fishing trips. But even if trip advances are secured, boatowners are frequently subjected to costly port tie-up periods after fishing trips while waiting to unload and to reprovision for the subsequent trips. Furthermore, canners are imposing increasingly strict quality and size controls on catches. The imposition of these tight controls, coupled with other production cost increases such as insurance premium hikes, directly affects financial returns to boatowners and in turn determines whether or not they can continue to fish.

The difficulties facing the U.S. tuna fishing industry have been compounded by (1) the industry's slowness to appreciate the full impact and extent of the international changes in the tuna industry, and (2) its reluctance to adapt to them. As a result of the international restructuring of the tuna industry, all tuna fishermen regardless of nationality have been affected. Some governments have financially supported fleets to enable them to continue operating in much the same way as in the past. But in the absence of public support, other fleets have voluntarily modified their operations to improve viability.

The principal problem facing the U.S. tuna fishing industry is that the size of the U.S. tuna resource is insufficient to robustly support the country's current purse seine fleet. Thus a section of the U.S. fleet must operate overseas, primarily in the central and western Pacific. Since 1981 many U.S. vessels have been doing exactly this, but distant-water operations from U.S. mainland and American Samoan ports are expensive in terms of unproductive traveling time to and from the fishing grounds, fuel costs, and port tie-ups waiting to discharge catches. Costs related to these factors, combined with the decline of "sweet-heart" agreements with canners, have caused distant-water operations for U.S. seiner owners to be financially precarious.

The U.S. tuna fishing industry tends to blame its plight on the canners and changes in the industry over which they have no control. However, only in exceptional cases have U.S. vessel owners taken steps to improve their operational and financial positions by attempting to reduce or even maintain production costs and thereby sustain their competitive edge in the industry.

Inherent in the willingness of and the need for the U.S. purse seine fleet to operate in the central and western Pacific on a more

or less permanent basis is the implicit recognition by the tuna industry that the fleet is overcapitalized given the size of the U.S. tuna resource. Industry now must recognize that survival prospects for many boatowners are bleak if they continue to operate from U.S. ports on a distant-water basis. Vessel owners need to abandon their parochial operational instincts and to base their vessels at ports adjacent to the region's fishing grounds. This endeavor will require initiatives that individual vessel owners may be neither willing nor capable of making. Therefore, those U.S. financial institutions that have a real stake in the industry and that do not want to assume ownership of still more vessels by default should act to facilitate the basing of vessels in the islands region. This action by financial institutions should be taken in concert with current and proposed U.S. government initiatives to participate in the development of the region's tuna industries.

The advantages associated with basing U.S. tuna seiners in the Pacific islands region have been demonstrated by the U.S.-owned fleet based in Guam. This fleet, initially consisting of eight corporately owned vessels and now consisting of eleven vessels, moved to the western Pacific from the U.S. west coast in 1981. Vessels in the fleet have made consistently good catches, with one vessel taking a record 7,000 tonnes of tuna in 1984. As a result of the fleet's move to Guam, unproductive traveling and port tie-up times for the fleet have been minimized. Its operations are closely coordinated and controlled so that catches can be efficiently transshipped to reefer vessels for transportation to canneries in American Samoa and elsewhere if necessary. The fleet's size enables management to achieve economies of scale that would not be possible with operations involving individual or a small number of vessels.

The fleet owner's initiative in moving to Guam in 1981 was sound business. Individual U.S. vessel owners have not taken similar initiatives because (1) they failed to recognize and adapt to the changes occurring in the industry, (2) this type of operation requires at least five vessels and few vessel owners control this number of vessels, (3) vessel owners lack the capital and business acumen to logistically organize such an operation, and (4) fears are associated with moving permanently from the United States to a foreign port.

Five conditions seem necessary to successfully establish a viable fishing base in the Pacific islands: (1) the concurrence and support of the island government where the base is to be established, (2) a satisfactory port and ancillary facilities, (3) a fleet of more than five vessels, (4) willingness of vessel owners to move offshore and to cooperate with one another, and (5) central fleet management and control.

Genuine and well-documented proposals to base U.S. purse seine fleets in the Pacific islands region would receive favorable responses from island governments. Several countries in the region—including the Federated States of Micronesia and Papua New Guinea—are actively soliciting the development of purse seine fleets and transshipment facilities. Suitable port locations already exist. However, given individual vessel ownership, it will be difficult to package a viable fleet arrangement under central management and control.

Those U.S. financial institutions that already have either title to tied-up purse seine vessels or liens over operating vessels could facilitate the establishment of fleets, as well as provide central management. As a first step the institutions could incorporate an operating company and contribute to the vessels that they control. To broaden the corporation's expertise and to spread its risk, institutions could invite the tuna industry and other interests to join a consortium. The advantages of a consortium are that it would retain financial management and direction from the institutions and could avail itself of industry and operational expertise.

Subsequent to the formation of an operating company and possibly a consortium, approaches could be made to interested Pacific island countries for the establishment of a fishing base. Countries could then be invited to participate in the venture, possibly as equity partners.

### **Shore bases and processing**

Initially, transshipment facilities could involve vessel-to-vessel operations, but over the long term, island governments expect more permanent shore-based development. Governments could possibly utilize U.S. and other aid funds to construct bases. Un-

der these circumstances the bases would be owned by government, but they could be sold or leased to joint ventures or privately owned corporations. A range of lease/purchase arrangements for shore facilities exists, and island governments could flexibly accommodate investors in mutually advantageous arrangements.

Investment in new tuna processing facilities could then be considered after fleets and shore bases are well established.

## **ATTITUDE TO FOREIGN INVESTMENT**

Pacific island countries actively solicit quality foreign investment. They recognize the need to cooperate with foreign capital and management/marketing expertise to fully develop their fisheries resources and associated industries. However, most countries adopt a cautious approach with natural resource investment because (1) they must reasonably ensure that fair and lasting ventures are established with foreign partners for the exploitation and processing of their resources, (2) natural resource development in the Pacific islands tends to be a highly political and sensitive issue, and (3) modern-day carpetbaggers have been particularly active in the islands region.

With the exception of the U.S. territories and the Micronesian states, U.S. investment in the Pacific islands region has been limited. This situation probably has been caused by a lack of knowledge on the part of U.S. investors as to what opportunities are available in the region, combined with their general reluctance to make investments in countries where the United States traditionally has had a low official profile. The lack of U.S. investment in the region does not reflect a negative attitude on the part of Pacific island countries toward U.S. investors. Rather, countries in the region welcome all genuine investors so long as they demonstrate their capability, expertise, and knowledge of the industry, financial standing, and commitment to long-term involvement.

## **U.S. GOVERNMENT ROLE**

The image of the United States in the Pacific islands region has suffered in recent years because of the perceptions of some countries as general disinterest on the part of the U.S. government, as well as the continuing problems associated with the U.S. tuna position. A report prepared for the U.S. State Department by Kiste and Herr (1984) and a subsequent report by the Washington-based Heritage Foundation (1985) urged the U.S. government to reassess its position vis-à-vis the Pacific islands region. These recommendations were made because the United States was losing influence in the region and inadvertently facilitating the way for Soviet initiatives.

Out of self-interest (if not primarily to assist Pacific island countries in the development of their tuna industries), the U.S. government should actively facilitate U.S. investment in the Pacific islands region. Robust industries and benefits for island countries can help ensure their stability. In turn, regional stability and a western orientation will serve the long-term security interests of the United States and its ANZUS allies, in addition to minimizing the undesirable and costly effects of superpower rivalry.

The time is propitious for the U.S. government to act aggressively through agencies such as USAID to assist island countries in developing and expanding their commercial tuna industries. This assistance should be in addition to other U.S. government assistance that might be offered to island countries as a part of a multilateral tuna treaty package.

Assistance to Pacific island countries should involve initiatives within the United States as well as initiatives in the region. At home, the U.S. government should encourage and protect investors prepared to invest in tuna ventures in the islands region and provide incentives for them to move offshore.

Regarding Pacific island governments, the U.S. government might consider appropriating funds to permit island countries to participate as equity partners in U.S. joint venture projects. In particular, funds appropriated for this purpose by the U.S. government might be capitalized into joint ventures for island governments. For example, as part of its assistance program, the U.S. government might contribute purse seine vessels to joint ven-

ture arrangements on behalf of island countries. Such a scheme would have several advantages, particularly if idle U.S. vessels are mobilized. This arrangement would not involve capital outflows from the United States. In addition, U.S. citizens, the U.S. tuna industry, U.S. financial institutions, and Pacific island countries would all benefit.

Island countries are acutely aware of the problems facing the world tuna industry because in some way their industries have been affected since 1980. They know that the development of industries is futile unless they have reasonable guarantees that the output can be marketed competitively overseas. Excluding American Samoa, canned tuna production in the Pacific islands is miniscule relative to the size of the U.S. tuna market. In 1985 the Fijian and Solomon Island canneries processed approximately 15,000 tonnes (whole fish input) of canned tuna (Table 2). In an effort to assist Pacific island countries in developing their tuna industries, the U.S. government might consider assigning special trade status to industries in the islands region. This status could provide the region's tuna industries with unrestricted export access to the U.S. market. Such an initiative could be justified on the grounds that (1) the long-term security interests of the United States in the Pacific islands region is being served, and (2) unrestricted access to the U.S. market would not significantly affect the position of U.S. canners or the U.S. tuna fishing industry.

## **CONSTRAINTS ON INDUSTRY DEVELOPMENT**

Not all Pacific island countries are equally well located or endowed to develop tuna industries. Development in some countries is constrained by (1) the seasonal nature of surface tuna stocks, (2) the lack of natural endowments (for example, water and harbors) required to support fishing fleets and associated industries, and (3) the lack of physical infrastructure such as wharves and fuel storage facilities. These natural and infrastructural constraints are compounded by the relative isolation and smallness of some island countries, limited and irregular transportation networks, and poor communications. These factors make commercial tuna ventures less financially robust than they otherwise might be.

Thus Pacific island countries that are best located for purse seine-based industries boarder the equator. There the surface-swimming tuna stocks, particularly skipjack tuna, tend to be less seasonal in equatorial waters. For this reason the Nauru Group countries (Federated States of Micronesia, Kiribati, Marshall Islands, Nauru, Palau, Papua New Guinea, and Solomon Islands) hold the best prospects for purse seine industry development. Existing U.S. fleet operations concentrate on the EEZs of these countries and the surrounding high seas areas, while the Japanese purse seine fleet almost exclusively targets on the EEZs of Federated States of Micronesia and Papua New Guinea.

In addition to natural constraints, investors wanting to do business in the Pacific islands are likely to find that government approval processes are frustrating. The delays in obtaining approvals to proceed with ventures frequently dampen investment enthusiasm.

Countries are aware that their approval processes can cost them worthwhile investments, and for this reason some governments have tried to centralize decision making and to streamline the processing of investment applications. Kiribati, for example, has overhauled its approval process for foreign investment applications in an attempt to bolster investment in the country (Marshall Islands Journal 1985).

## CONCLUSION

Because Pacific island countries want fisheries sector investment, most governments will entertain well-documented proposals put forward by bona fide investors. Foreign investment is primarily sought to develop and expand tuna industries, though other fisheries investment options are available.

Tuna resources in the islands region are both large and proven. They are exploited by fleets based within the region and by the world's major distant-water fishing fleets. Tuna canneries in several countries, including those in the United States, are heavily dependent on tuna caught in the Pacific region to support their operations.

U.S. investors are well placed to participate in tuna ventures in the Pacific islands particularly because of the overcapitaliza-

tion of the U.S. fleet and the financial difficulties that it is experiencing. The fleet's financial position is exacerbated (1) by vessels operating on a distant-water basis from ports outside the region, and (2) by the erosion of financial and operational ties with U.S. canners.

U.S. financial institutions, which have either tied-up vessels in their possession or liens over operating vessels, could take a lead in establishing commercial tuna ventures in the Pacific islands. These ventures would enable financial institutions to gainfully deploy capital that they are unable to sell at a reasonable market price and possibly to improve the financial situation of indebted operating vessel owners. Support of private initiatives by the U.S. government not only would enhance their commercial prospects, but also would further U.S. security interests in the region. In addition, it would improve U.S. relations with island countries. U.S. government support would involve only modest financial outlays, but it would require a reorientation of thinking and policy in Washington.

The multilateral tuna treaty being negotiated with Pacific island countries is likely to strengthen fisheries relations and thus international relations provided that (1) competitive access fees are paid by U.S. industry, and (2) the U.S. government accepts responsibility for the actions of U.S. vessels while they are operating on a distant-water basis in the region. However, the tuna treaty should be complemented by other U.S. initiatives to increase benefits flowing to Pacific island countries and emanating from the exploitation of their tuna resources, given the interests of stable and long-term cooperation.

## APPENDIX: BACKGROUND INFORMATION RELATING TO PACIFIC ISLAND COUNTRIES

Despite many similarities, countries in the Pacific islands region are inherently different and diverse, particularly when viewed from a foreign investment perspective. Island countries are characterized by various levels of socioeconomic development and by differing potentials for development. However, all countries share common goals of wanting (1) to improve living standards, and (2) to achieve a progressively greater degree of economic independence.

The Pacific islands region covers a large tract of the central and western Pacific Ocean. It encompasses the geographic areas of Micronesia, Melanesia, and Polynesia and stretches from the Republic of Palau in the west to the dependent British territory, Pitcairn Island, in the east (Figure 1).<sup>1</sup> The region has 22 coun-

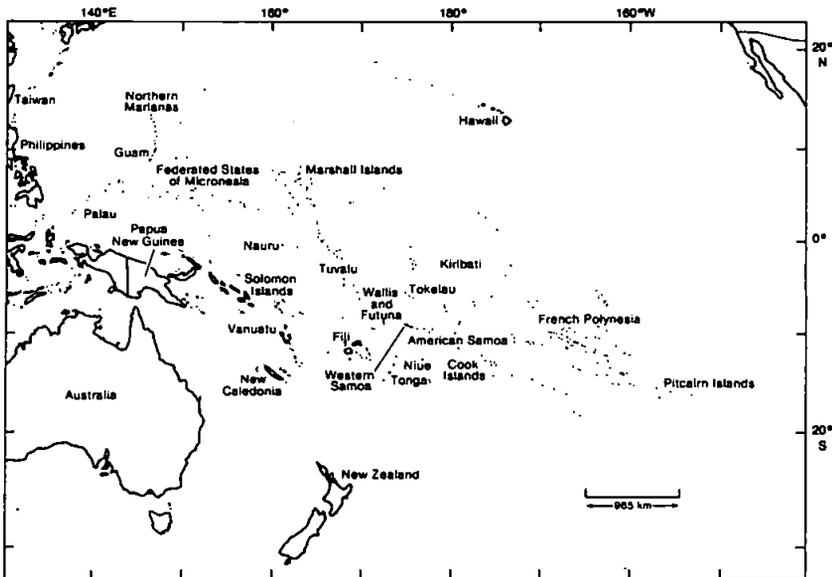


Figure 1. Pacific islands region

tries and territories of varying political status (Table 4). Eight countries are independent states and republics, one is an independent kingdom, nine are self-governing countries associated with New Zealand or the United States, and four are dependent territories of Britain and France. Five of the region's countries have United Nations membership (Table 4). Countries and territories in the Pacific islands region are characteristically politically stable and are strongly committed to democratic government.<sup>2</sup>

### **Population**

In mid-1981 the population of the Pacific islands region was estimated to be 5 million (Table 5). However, it was heavily skewed in favor of two countries—Papua New Guinea and Fiji—which together accounted for about 75 percent of the total. The least populated countries are self-governing Tokelau and Niue and the dependent territory of Pitcairn Island. Projected population figures for selected Pacific island countries for the year 2000 are shown in Table 2 (ESCAP 1984).

Rates of population increase in the Pacific islands region are generally between 1.5 and 3.0 percent per annum, though some countries such as Solomon Islands (3.77 percent) and Vanuatu (3.21 percent) are higher (ESCAP 1984).<sup>3</sup> This rate of increase—given the limited resource bases of many of the smaller countries—is high. While populations of Pacific island countries are growing at a relatively fast rate, urban centers are growing at an even faster rate. The unplanned and rapid growth of these centers taxes public services and social infrastructure.

Rapid urbanization in the Pacific islands region has profound economic and policy consequences for governments. Villagers remaining in rural areas offer surplus primary produce for sale in urban areas. However, this surplus is insufficient to meet urban demand, especially when supply is seasonal. Shortages result, domestic inflation is fueled, and countries are forced to import food. In turn, these problems further strain the already weak trade balances.

### **Land area**

The total land area of Pacific island countries is approximately 550,000 square kilometers (km<sup>2</sup>) (Table 5).<sup>4</sup> Papua New Guinea,

with an area of 462,243 km<sup>2</sup>, accounts for 84 percent of the region's total land area. Four countries and territories—Nauru, Pitcairn Island, Tokelau, and Tuvalu—have land areas of less than 30 km<sup>2</sup> while eleven countries and territories have land areas of less than 500 km<sup>2</sup>. Land availability limits agricultural development in most countries, particularly in atoll countries where shallow and poor soils act as an additional constraint. Partly for this reason, countries in the region are increasingly focusing on marine resources—principally tuna—as a means of promoting economic development.

Excluding Papua New Guinea the 1981 man:land ratio for the Pacific islands region was 22 persons per km<sup>2</sup>, and including Papua New Guinea the ratio was nine persons per km<sup>2</sup> (Table 5). However, this ratio ranged from 348 persons per km<sup>2</sup> in Nauru to seven persons per km<sup>2</sup> in New Caledonia. In 1981 eight Micronesian and Polynesian countries and territories had man:land ratios exceeding 100 persons per km<sup>2</sup> while all Melanesian countries had ratios equal to or less than 10 persons per km<sup>2</sup>. The largest and most resource rich countries in the Pacific islands, and those generally with the most diversified development potential, are the least subject to population pressure.

Pressure on land and other resources in the region has been relieved to some extent by outward migration, and in the extreme it has led to the depopulation of the Cook Islands and Niue.<sup>5</sup> Large numbers of Polynesians migrate from the Cook Islands, Niue, Tokelau, and Western Samoa to New Zealand and from the American and Western Samoas to the United States in search of employment.

As a domestic measure, Kiribati has started a resettlement program to move people from the Gilberts Group—where population densities are around 200 persons per km<sup>2</sup>—to the country's less populous outer islands (Connell 1983:3; *Islands Business*, April 1985:11). To assist Kiribati and Tuvalu, an Australian government report proposed that limited migration be permitted to Australia from these countries to relieve high population densities (Australia 1984:8).

Outward migration from Pacific island countries, while perhaps being beneficial in some respects, tends to deprive island countries of their better educated and more highly skilled

Table 4. Political status of Pacific island countries and membership of some international organizations

Country	Political status and year <sup>a</sup>	U.N. member <sup>b</sup>	Asian Development Bank member <sup>c</sup>	Bank member <sup>d</sup>	Lome Convention member <sup>e</sup>
American Samoa	Self-governing unincorporated U.S. territory (1960)	No	No	No	No
Cook Islands	Self-governing in free association with New Zealand (1965)	No	Yes	No	No
Federated States of Micronesia	Self-governing in free association with the U.S. (1979)	No	No	No	No
Fiji	Independent state (1970)	Yes	Yes	Yes	Yes
French Polynesia	Overseas French territory (1957)	No	No	No	No
Guam	Self-governing unincorporated U.S. territory	No	No	No	No
Kiribati	Independent republic (1979)	No	Yes	No	Yes
Marshall Islands	Self-governing in free association with the U.S. (1979)	No	No	No	No
Nauru	Independent republic (1968)	No	No	No	No
New Caledonia	Overseas French territory (1853)	No	No	No	No
Niue	Self-governing in free association with New Zealand (1974)	No	No	No	No
Northern Mariana Islands	U.S. commonwealth (1976)	No	No	No	No

Palau	Self-governing in free association with the U.S. (1979)	No	No	No	No
Papua New Guinea	Independent state (1975)	Yes	Yes	Yes	Yes
Pitcairn Island	Overseas British territory (1898)	No	No	No	No
Solomon Islands	Independent state (1978)	Yes	Yes	Yes	Yes
Tokelau	Self-governing in free association with New Zealand (1976)	No	No	No	No
Tonga	Independent kingdom (1970)	No	Yes	No	Yes
Tuvalu	Independent state (1978)	No	No	No	Yes
Vanuatu	Independent republic (1980)	Yes	Yes	Yes	Yes
Wallis and Futuna	Overseas French territory (1959)	No	No	No	No
Western Samoa	Independent state (1962)	Yes	Yes	Yes	Yes

<sup>a</sup>Carter. 1985.

<sup>b,c,d</sup>Australia. 1984.

<sup>e</sup>Stevens. 1984.

Table 5. Statistics and information relating to the Pacific island countries

Country/ capital	Estimated popu- lation (mid 1981) <sup>a</sup>	Projected popu- lation in year 2000 <sup>b</sup>	Land area (km <sup>2</sup> ) <sup>c</sup>	Man:land ratio	Status of 200 mile zone <sup>d</sup>	Year declared <sup>e</sup>	1980 EEZ area ( <sup>000 km<sup>2</sup>)<sup>f</sup></sup>	1984 Total GNP (US\$m) <sup>g</sup>	Aid inflows (US\$m) <sup>h</sup>
American Samoa Pago Pago	33,200	—	197	169	Economic	1977	390	—	—
Cook Islands Avarua	17,400	18,000	240	74	Economic	1977	1,830	20	8.1
Federated States of Micronesia <sup>i</sup>	79,500	—	701	113	Fishing	1979	2,978	—	—
Fiji Suva	646,500	821,000	18,272	35	Economic	1981	1,290	1,160	31.3
French Polynesia Papeete	149,800	—	3,265	46	Economic	1978	5,030	1,004	—
Guam Agana	107,000	133,000	541	197	Economic	1977	218	—	—
Kiribati Tarawa	59,900	75,000	690	85	Economic	1983	3,550	50	11.9
Marshall Islands Majuro	31,800	—	181	176	Fishing	1979	2,131	—	—
Nauru Yaren	8,100	9,000	21	348	Fishing	1978	320	70	0.0
New Caledonia Noumea	142,500	—	19,103	7	Economic	1978	1,740	1,100	—
Niue Alofi	3,200	3,000	259	13	Economic	1978	390	3	3.2

Northern Mariana Is. Saipan	17,600	—	471	37	Fishing/ Economic	1978/ 1983	1,823	—	—
Palau Koror	12,400	—	496	25	Fishing	1979	629	—	—
Papua New Guinea Port Moresby	3,060,600	5,292,000	462,243	7	Fishing/ Economic	1978	3,120	—	322.0
Pitcairn Island Adamstown	100	—	5	20	Fishing	1980	800	—	—
Solomon Islands Honiara	235,000	457,000	27,556	9	Fishing/ Economic	1978	1,340	110	19.4
Tokelau <sup>i</sup>	1,600	—	10	160	Economic	1977	290	1	—
Tonga Nuku'alofa	98,400	140,000	699	141	Economic	—	700	50	15.7
Tuvalu Funafuti	7,600	9,000	26	292	Economic	1984	900	4	5.5
Vanuatu Vila	119,900	223,000	11,880	10	Economic	1978	680	60	24.5
Wallis and Futuna Mata Utu	11,200	—	255	44	Economic	1978	300	—	—
Western Samoa Apia	156,000	182,000	2,935	54	—	1977	120	119	20.2
Pacific islands region	4,999,300		550,044	9			30,569		
Pacific islands region (excluding Papua New Guinea)	1,941,000		87,801	22			27,449		

<sup>a,c,f</sup>South Pacific Commission. 1984. <sup>b</sup>ESCAP. 1984. <sup>d,e</sup>Moore. 1985. <sup>g</sup>Australia. 1984. <sup>h</sup>Australia. 1984.

<sup>i</sup>Federated States of Micronesia consists of four states: Kosrae (Kosrae), Pohnpei (Kolonia), Truk (Moen), and Yap (Colonia).

<sup>j</sup>Administered from Apia, Western Samoa.

people. The permanent loss of this segment of the population creates a skill/management void that in turn exacerbates problems associated with industry diversification and development. If industries are to be developed, this void frequently must be filled by foreign expertise. A costly procedure at best, and one that further increases dependence on external sources.

### **Economy**

Apart from the large countries in the Pacific islands—notably Fiji, Papua New Guinea, Solomon Islands, and Vanuatu—all countries have narrow economic bases. In most instances, island countries supply a limited range of primary commodities (such as copra) for processing overseas. These export commodities are subject to volatile international markets that in turn have destabilizing economic effects. Additional difficulties are thus created for countries in their efforts to diversify their economies and to promote stable development and growth.

The 1980 gross national product (GNP) data show the relative sizes of the economies of Pacific island countries (Table 5). GNPs ranged from Tokelau's US\$1 million to Fiji's US\$1,160 million. In 1980 eight island countries had GNPs of less than US\$100 million.

Most Pacific island countries are dependent on overseas development assistance. In 1984 aid inflows to the Pacific islands region ranged from Papua New Guinea's US\$322 million to Niue's US\$3.2 million (Table 5). All countries and territories in the region are expected to remain reliant on development assistance in the medium term, and most of the small countries will be permanently dependent on aid. This prospect of continuing dependence has encouraged island governments to increase their efforts to diversify their economies, to establish industries in which they have some comparative advantage, to foster foreign investment, and in some cases to pursue import replacement policies.

### **Exclusive economic zones**

All countries and territories in the Pacific islands have declared 200-mile fishing or economic zones (Table 5). The total area of these zones exceeds 30 million km<sup>2</sup>. Three countries—French Polynesia, Kiribati, and Papua New Guinea—account for nearly 12

million km<sup>2</sup> of the total area of the region's zones. A diverse range of fisheries resources is found within these zones, with tuna being the most abundant and the most commercially important. It is also postulated that the EEZs of the region potentially harbor substantial reserves of nonrenewable resources such as cobalt-rich manganese crusts (Clark et al. 1985).

## NOTES

1. Micronesia consists of the Federated States of Micronesia, Guam, Kiribati, Marshall Islands, Nauru, Northern Mariana Islands, and Palau; Melanesia consists of New Caledonia, Papua New Guinea, Solomon Islands, and Vanuatu; while Polynesia consists of American Samoa, Cook Islands, Fiji, French Polynesia, Niue, Pitcairn Island, Tokelau, Tonga, Tuvalu, Wallis and Futuna, and Western Samoa.
2. The one exception is New Caledonia, which is currently experiencing political instability associated with domestic and international pressure for the French government to decolonize.
3. Comparative figures for East Asia are 1.28 percent per annum, Southeast Asia 1.99 percent, South Asia 2.16 percent, and the ESCAP area as a whole 1.73 percent (ESCAP 1984).
4. The total land area of the United States is 5.8 million km<sup>2</sup> (World Almanac p. 652).
5. The Cook Islands has a -0.41 percent average annual population growth rate and Niue -3.08 percent (ESCAP 1984).

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