
The East-West Center and the Pacific



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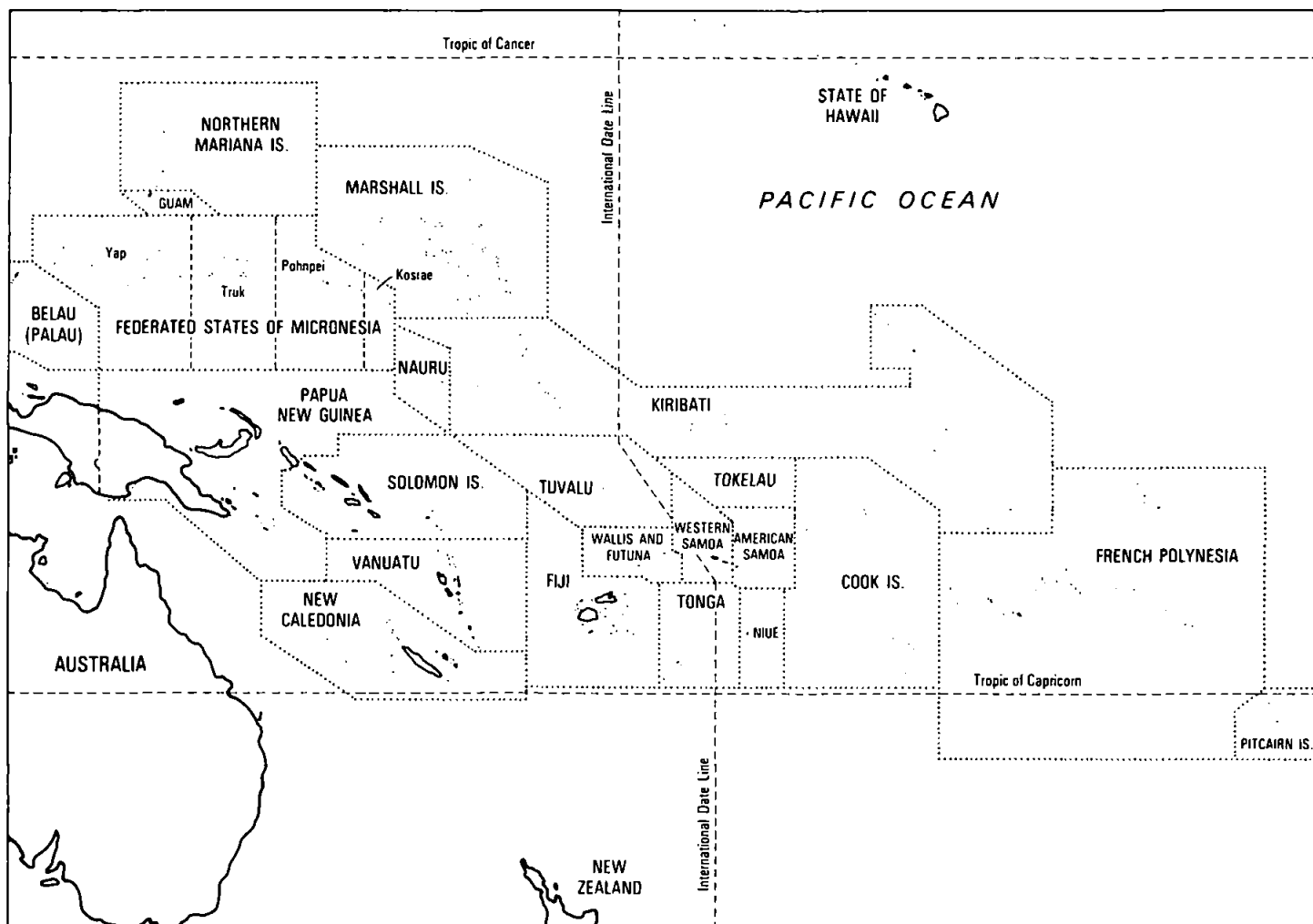
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East-West Center
Honolulu, Hawaii

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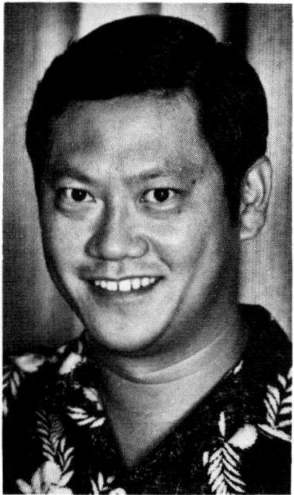
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*The Pacific islands region
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The Pacific Islands Perspective

1



Victor Hao Li

DEBORAH BOOKER

Hidden from outside view for centuries by the vastness of the Pacific Ocean, then claimed as colonies, and later fought over as stepping stones between East and West, the island nations and territories of the Pacific are now coming into their own in the world arena.

The transportation revolution has dramatically increased contacts and commerce between the islands and the continental countries that border the Pacific. The communications revolution has linked even the most remote villages to events throughout the world. The recent extension of exclusive economic zones to 200 nautical miles from the shores of islands and archipelagoes has greatly increased the economic significance of the Pacific island nations. The region's strategic position in regard to the Western alliance increases the Pacific's political significance on an international level.

In the era of the computer, no less than in that of Captain Cook, Pacific islanders face the challenge of absorbing the benefits of the new without losing the strengths of their traditional cultures. Today's Pacific leaders aspire to share in development, but develop the Pacific way.

This is a time of promise in the Pacific. Economies are expanding, tourism is growing rapidly, rich marine resources are being discovered, the private sector is emerging. Trade and regionalism are gaining in importance, and a climate of cooperation prevails. At the same time, Pacific island nations face many challenges. Threats to stability abound, and problems of great distances, small markets, and limited resource bases are not easily solved.

The East-West Center, itself located on a Pacific island remote from the continental land masses, has shared a Pacific perspective since its very beginning a quarter of a century ago. The Center's mission empha-

sizes its Pacific role — "to promote better relations and understanding among the nations of Asia, the Pacific, and the United States through cooperative study, training, and research."

To achieve this mission, the Center enjoys a partnership with Pacific island leaders, educators, and students. Since 1960, when seven Pacific islands students came to the University of Hawaii on East-West Center scholarships, Center research activities and student programs have involved the Pacific. In the Center's first twenty-five years, more than 7,700 participant awards — nearly a quarter of total awards — have gone to students, research fellows, and other participants from the Pacific region, including Australia and New Zealand. Institute programs have provided vocational and management training, undergraduate and graduate educations, policy-relevant research results, and avenues for greater cooperation among Pacific islanders, particularly since 1979 when the East-West Center embarked on a new programmatic thrust focusing on the Pacific community.

Since 1980, when Pacific leaders gathered at the East-West Center for the first Pacific Islands Conference, the Center's Pacific Islands Development Program has been the heart of our involvement with the Pacific. This unique program receives its priorities from a standing committee that meets twice a year. The committee includes island leaders from Fiji, Tonga, the Cook Islands, the Federated States of Micronesia, Guam, New Caledonia, Kiribati, and Papua New Guinea. PIDP's staff includes Pacific islanders and conducts research of practical significance to the development goals of the islands. A second Pacific Islands Conference in August 1985 was a forum to review PIDP's progress and outline new research priorities.

The Center has enjoyed cooperative working relationships with many Pacific

institutions. Including Australia and New Zealand, Pacific island countries and territories have contributed nearly \$2 million to the Center and its programs; other countries have given funds designated for research in the Pacific region. At the 1985 Pacific Islands Conference island leaders agreed to contribute to PIDP's program through a funding formula based on past and current participant numbers at the East-West Center.

This is a time of change and also a time of optimism. After viewing the Pacific only in its picturebook image, the world is now beginning to recognize the region from a new perspective. With its history of cooperative working relationships with Pacific island nations and territories and their leaders, the East-West Center looks forward to continuing its unique role as a catalyst and forum in the region. Through mutual education and research, the foundation is being laid for a future of understanding, peace, and prosperity.

Victor Hao Li
President
East-West Center
Honolulu, Hawaii

December 1985

The East-West Center and the Pacific islands enjoy a relationship that goes back to the earliest days of the Center. Both in its student programs and research activities, the East-West Center has long emphasized its ties with the Pacific.

In 1960, seven Pacific island students received University of Hawaii scholarships from the East-West Center's Office of Student Programs. They were the first of many to follow. This student program, which eventually became the Institute for Student Interchange (ISI), flourished throughout the 1960s, with increasing numbers of Pacific students coming to the United States for undergraduate study.

Many American students conducted field work in Australia, New Zealand, and the South Pacific as part of their graduate degree programs. By the 1970s, when Pacific island nations and territories had expanded their own undergraduate university programs, the Pacific island students coming to the Center in the Open Grants Program were pursuing graduate degrees to complement studies they had completed in their home countries.

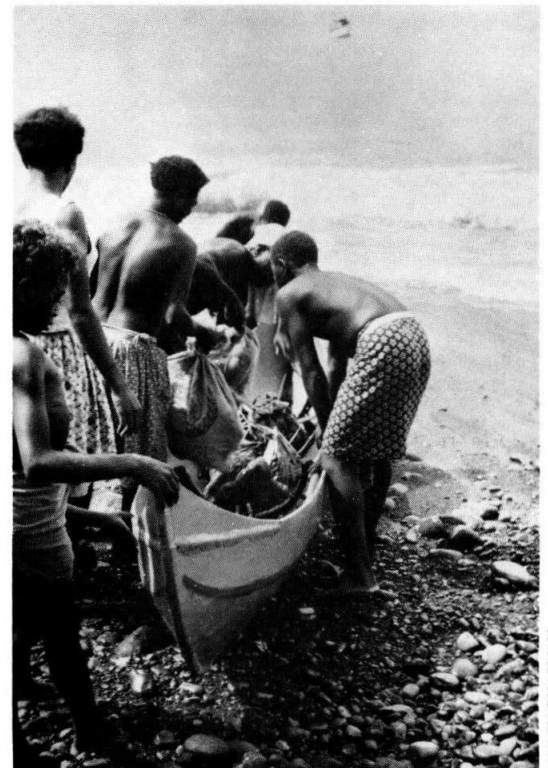
The Institute of Advanced Projects (IAP), developed in 1961, brought senior-level scholars to the Center from the United States and the Asia-Pacific region to participate in major conferences and to complete special studies. In the 1960s, scholars from Australia and New Zealand participated in conferences on the hydrodynamics of tsunamis (seismic seawaves), labor-management relations, and scholarly publishing; scholars from Fiji and New Zealand pursued studies in such fields as anthropology, Polynesian languages, and genetics. These topics were among the first to bring Pacific islanders to the East-West Center — and the East-West Center to the concerns of the Pacific. Also established in the early 1960s was the International Development Fellowship Program, similar to today's Joint Doctoral Research Internships. One of the first field studies in the program was of population movement in Solomon Islands as viewed from the village.

Among the first East-West Center participants were these students from the Trust Territories.

Population Institute researchers have studied short-term mobility in the Pacific. Teenagers from Guadalcanal's southern coast prepared for a trip to the northern coast, where they attended school eleven months of the year.



EWC PHOTO



LINLEY CHAPMAN

Pacific islanders also were major participants in the International Training Agency, a program formed in 1961 and later called the Institute for Technical Interchange (ITI). This program, which emphasized vocational, agricultural, and public health training, concentrated on projects for Pacific islands, with training sessions at the East-West Center and in the islands. In 1963, for example, two groups of medical officers and nurses from the Pacific completed 24-week refresher courses; Pacific island business teachers participated in a four-month business management program; people from several islands took six-

month commercial sewing training courses; and others took courses in legislative aid services, radio broadcasting and station management, and commercial fishing.

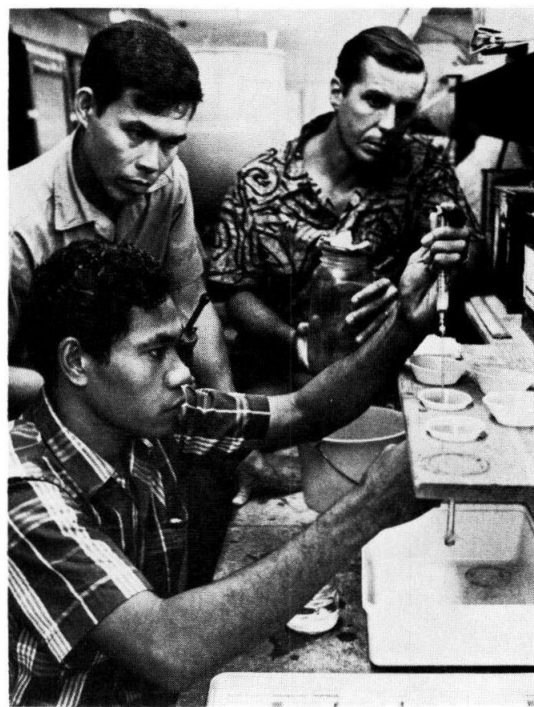
During the mid- to late 1960s, ITI programs trained thousands of Pacific islanders in health and medical technology and such fields as horticulture, printing, career development and management for women, and legislative procedures. In 1968 and 1969 alone, more than 900 Pacific islanders attended in-country training programs, and nearly 200 came to Hawaii for training.

Participants from the South Pacific gained practical rehabilitative therapy experience in an East-West Center program of the 1960s.



EWC PHOTO

Participants from Western Samoa and New Caledonia studied the biological control of insect pests in a Center program of the late 1960s.



EWC PHOTO

Solving Problems: The Institutes and the Pacific

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Toward the end of the 1960s, the Center's programs began to adopt a new focus on solving problems, leading to the current organization of Center programs into institutes. From the beginning of each institute, a major portion of its research has involved the Pacific islands. Institute projects — from chromite deposit studies to islanders' World War II recollections — are as diverse as the research interests of the institutes themselves. Yet, each institute in its own way has joined with Pacific island researchers and institutions in a collaborative effort to shed new light on problems of population, culture, communication, resources, and the environment that concern Pacific islanders.

Research and education for changing populations

From its beginning, Population Institute (PI) research has studied how changes in a country's population and its resource base affect each other. This population-resources research, first carried out in Western Samoa, later focused on the Weather (south) Coast of Guadalcanal, at the request of the British Solomon Islands Protectorate Administration. Agricultural officers within the government had expressed concern about the potential of population to outstrip food supplies and other resources. The two-year Guadalcanal study involved a multidisciplinary team of eight East-West Center graduate students, five professional assistants, and some sixty Weather Coast residents who served as interpreters, research assistants, and census enumerators. They assessed the extent to which the isolated village societies were functional and susceptible to change. The study showed that generally there was no population pressure on the environmental resources, although pockets of pressure existed. This comprehensive study was used in the country's first five-year development plan (1975–1979) to be written by Solomon Islanders. Study results included information on demography, the natural

environment, economics, agriculture, education, health, transport, and practices for limiting and spacing children.

Studies on the cultural and socioeconomic contexts of tribal mobility also date from the Population Institute's earliest years, with particular reference to short-term and repetitive forms of population movement, or circulation, in Melanesia. A book begun in 1979 and published in 1985 documents how island conceptions of mobility behavior are quite different from the conventional models used in population studies. From this research arose a second project aiming to stimulate dialogues between humanist and scientific thinkers on the links between the movements of people and their collective and personal identities. As part of this work, in 1985 the East-West Center co-published a book that described themes, experiences, and perspectives on mobility and identity in the island Pacific.

Also beginning in the early 1970s, the Population Institute's work in census demography, vital statistics, and labor force studies has continued through the mid-1980s. In 1974 in a comprehensive Population Institute project on Pacific island demography, researchers collected data about population growth, fertility, mortality, and migration for seventeen nations and territories in the Pacific. The goal was to develop and refine data analysis techniques. Statistics and planning offices in all groups provided data for the project. A report exercise, still ongoing, was begun in 1983.

The institute also organized and processed a special census of American Samoa in 1974 at the request of its administration and acted as a consultant to the U.S. Census Bureau on the nature of census taking in the Trust Territory of the Pacific Islands. Research also has included demographic situation reports completed in 1979 for American Samoa and in 1983 for

the Cook Islands, and a study begun in 1979 on the interactions among Pacific population, resources, and environments.

The early 1980s took institute researchers to Niue, Solomon Islands, and the Cook Islands to lead training sessions at workshops on vital statistics, educational planning, and census taking, sponsored jointly by the South Pacific Commission and the United Nations Fund for Population Activities. A PI research associate served as a member of the United Nations Fund for Population Activities review mission to the South Pacific, where he assessed the state of demographic data collection and analysis in the countries of the region. The institute's contract with the U.S. Agency for International Development, renewed in 1978, has been broadened in scope with funds to

support participants from the South Pacific in addition to those from Asian developing countries.

Communication and culture in Pacific islands

Since the Communication Institute (CI) and the Culture Learning Institute (CLI) were established in 1970, their programs have included studies to enhance and increase mass communication capabilities and studies of education and language development. The Institute of Culture and Communication (ICC), formed in 1984 by merging CI and CLI, has continued many projects focusing on Pacific island needs.

A 1971 CI seminar brought Pacific island radio broadcasters together to

A Population Institute research project assessed the extent to which isolated village societies are susceptible to change. A customs leader from Makaruka on Guadalcanal is flanked by key members of his entourage.



PETER PIRIE

exchange ideas and practices. A 1972 editorial workshop allowed Pacific news editors to discuss ways to improve journalism practices, and several journalism workshops and conferences in 1973 led to the formation in 1974 of the Pacific Islands News Association (PINA), bringing Pacific islanders together to work toward improving regional newsgathering and dissemination. In 1980, this association arranged for an on-the-job training manual for Pacific island journalists that was published in 1981 and revised in 1985. A 1985 meeting of PINA members updated the group on new developments to eliminate problems such as untrained personnel, outdated equipment, news access limitations, and small advertising bases. The Communication Institute also compiled a Pacific islands mass communication bibliography in the mid-1970s to provide basic resource information for Pacific island mass communication scholars.

Since the late 1970s, institute researchers have been active in the Pacific Telecommunications Conference (PTC), an annual event that provides a forum on telecommunications problems, promotes awareness about varied telecommunications requirements and needs, organizes seminars and conferences, and assists in solving short-term and long-range problems in the Pacific. In 1981, in conjunction with the Pacific Telecommunications Conference, CI held a workshop on telecommunication options for Pacific islands.

In 1981, the institute also sponsored a telecommunications and trade workshop so that Pacific business and trade officials could develop an agenda for research and educational activities. "Telecommunications in the Pacific: Past, Present, and Future," a 1982 workshop, was co-sponsored by CI and PTC. ICC also sponsored two sessions and a workshop as part of the 1983 PTC conference. In 1984 ICC co-sponsored a two-day post-PTC telecommunications

skills workshop attended by eighty-five PTC conferees.

Communication Institute researchers in the late 1970s also collected data on the communication patterns of transnational migrants, including Samoans who move to Hawaii. In addition, a Pacific communication project included a workshop that provided information on planning social-effects studies in communication ethnography. Case studies analyzed the communication systems of some Pacific islands. A 1980 project on Pacific ethnographies of communication produced several reports that emphasized the cultural and social structure factors that should be considered in assessing the social effects of communication.

Australia and New Zealand participated in a 1980 workshop to examine communication policy in developed countries, and chapters for a book were prepared based on the materials presented. The institute also co-sponsored the publication of the *Pacific Islands Communication Journal* from 1982 to 1985. Sponsorship of the journal now rests with the University of the South Pacific.

The Jefferson Fellows program for mid-career journalists emphasized the Pacific islands in 1980 and 1981. Pacific and American journalists were brought together to exchange professional experiences and to expand their knowledge of the other journalists' countries. In the program's seventeen-year history, Jefferson Fellowships have been awarded to nineteen Pacific area journalists.

In 1985 a senior editors seminar brought together leading media professionals from the Pacific region for presentations on their respective countries and what they felt were important, contemporary news issues. The institute planned a three-week program to respond to the professional development needs of Pacific islands print journalists, to be conducted

in 1986 in collaboration with the University of Hawaii Department of Journalism.

The Culture Learning Institute emphasized Pacific island language development beginning in 1971, when fifteen teacher-trainees from the Pacific came to the East-West Center to study for one year. Other programs focusing on the Pacific in the early 1970s included workshops on trans-cultural education and cross-cultural community development, library education development, and educational administration. Workshops and seminars on secondary school curriculums, national educational needs, "track" systems, and theoretical foundations of curriculum development and research were in a 1974 program on Oceania teacher development.

Beginning that year, a Pacific cultural centers program allowed for cultural exchange in seminars, lectures, and training in archiving, ethnomusicology, and museum management. In an effort to harmonize the preservation of cultural heritages

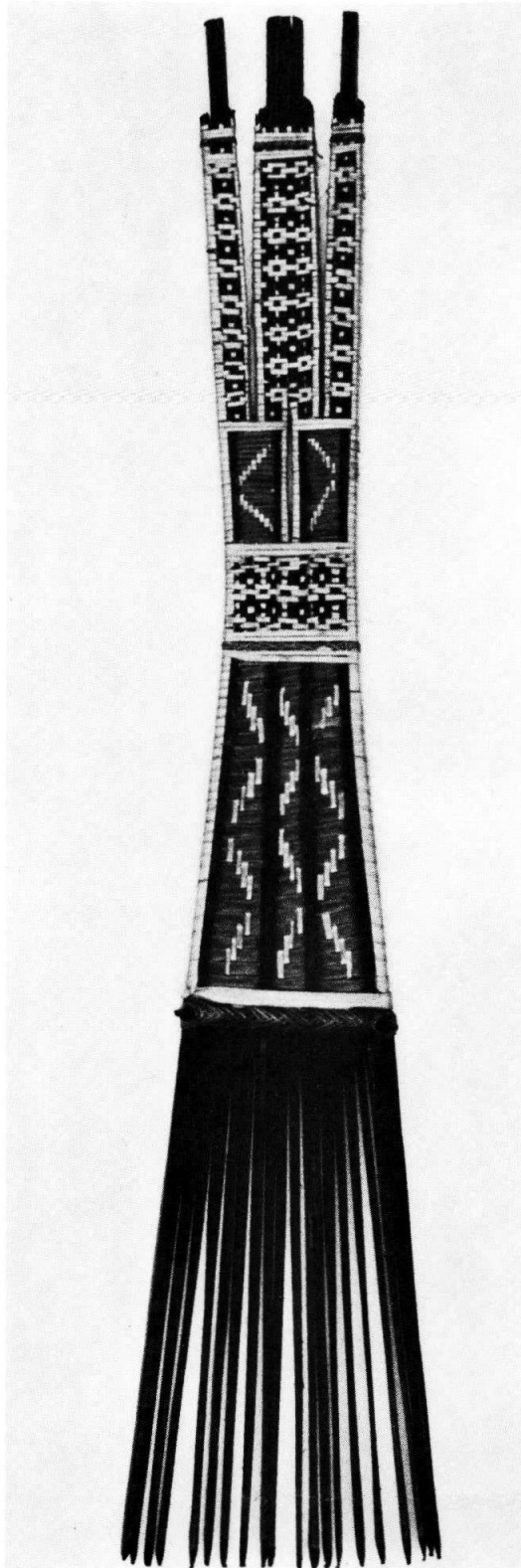
within sociological and economic development changes, a mid-1970s project on multicultural processes in cultural identity focused on culture conservation, tourism, and culture learning. At one seminar, participants drew up concrete proposals to establish a Pacific Tourism Studies Center. CLI researchers also studied the emerging national identity in Melanesia.

One project investigated social and cultural factors that affect personal adjustment and social relations in multicultural settings. A study was completed in 1980 on the Chinese in Papua New Guinea, and research on emotion in various cultures, including Samoa, was begun. From 1983 to 1985, a project in the Institute of Culture and Communication focused on the high rates of adolescent suicide in some Trukese and other Micronesian communities. The study showed that the suicides follow cultural patterns, and the islands now are implementing information programs to decrease the incidence of suicides.

An EWC participant from Belau helps local elementary school students construct an exhibit in the Culture Learning Institute's museum management program of the 1970s.



The Kwaio from Malaita, Solomon Islands, are reviving their traditional arts. This comb was among several handcrafted objects featured in a 1985 exhibit sponsored by the Institute of Culture and Communication.



DEBORAH BOOKER

ICC and the University of the South Pacific co-sponsored a 1984 conference on Pacific languages. Scholars and representatives of island governments discussed common language problems, including the use of indigenous languages as a way to assert indigenous values and identity and as an aid to local education and communication.

The cultural manifestations project that originated in the former Culture Learning Institute has continued to bring Pacific exhibitions and artists in music, dance, and theater to the Center to share Pacific culture with the Honolulu community and the East-West Center. The emphasis continues today, with the Institute of Culture and Communication regularly sponsoring art exhibitions and a performing arts series.

An ICC project begun in the mid-1980s brought World War II stories alive in an oral history. Focusing on the recollections of Pacific islanders who were in direct contact with Japanese and Allied invaders, the project is providing insights into how the islanders would subsequently rethink their attitudes toward Europeans, Americans, and the Japanese. It is hoped that the project will encourage Pacific islanders to produce Pacific cultural and historical literature. In the Melanesian countries such as Solomon Islands, the publication of bilingual texts of the histories should promote cultural awareness and provide an important resource on local history.

In a project on transnational knowledge utilization that began in 1984, ICC conducted intensive case studies of the agricultural research, extension, and producer-user systems in Fiji and Western Samoa in collaboration with the International Services for National Agricultural Research (ISNAR), The Hague, and the governments of Fiji and Western Samoa. Less intensive studies were carried out in Tonga, Papua New Guinea, and Solomon Islands. Reports and recommendations from this work

were used as a basis for discussion between project personnel and agricultural ministry administrators in the respective countries. Two follow-up consultancies were carried out in 1985. Plans now have been carried out to improve the effectiveness of the agricultural knowledge generation – dissemination systems in these countries. The findings and recommendations from these studies also were used in a ten-day workshop sponsored by the University of the South Pacific School of Agriculture (Alafua, Western Samoa), and the Food and Agriculture Organization in 1985 for high-level agricultural ministry administrators. Participants from fifteen South Pacific nations attended.

Pacific resource and environment challenges

The Resource Systems Institute (RSI) was created in 1977 building on early work in

food, technology, and development issues. Among the programs was a large project in the Technology and Development Institute in 1974 studied tourism impacts on the development of South Pacific islands.

The Resource Systems Institute raw materials systems program in 1981 focused on the unique mineral development problems of selected Pacific island nations and worked to isolate the primary reasons certain countries, such as Papua New Guinea, have been successful in sustaining rapid development of their mineral resources with sustained revenue and employment benefits to their nations. This study resulted in a 1984 book, *Ok Tedi: Evolution of a Third World Mining Project*, the story of a billion-dollar copper and gold mine development project in Papua New Guinea. Both the PNG government and the transnational mining companies involved in the project cooperated in

Early food and technology research laid the foundation for work later carried out in the Resource Systems Institute.



making available detailed information about the interaction of social, legal, technical, and political forces that are part of developing a modern mining project.

The raw materials program also initiated a South Pacific chromite study in 1982. Field research confirmed that the region's chromite deposits are both more numerous and larger than reported in published U.S. government studies and that the geologic potential is high for additional chromite discoveries in the region. Other strategic minerals studies in the Pacific revealed in 1983 that manganese crusts within the 200-nautical-mile exclusive economic zones (EEZs) of the islands have commercial potential. In 1985 RSI co-sponsored a marine minerals training course in which some participants went on a scientific cruise to explore an area southwest of the Big Island of Hawaii for manganese crusts and nodules.

In RSI's food systems program, a 1981 workshop on food commodity trade among Pacific Rim countries included participants from Australia and New Zealand. The workshop covered the economics of commodity market stability, analysis of consumer and producer response to commodity prices in the Philippines, the impact of Japanese policy on the stability of the world market for soybeans, and a study of trends in Japanese fish production and their relationship to fish prices.

In 1981, RSI's energy systems program began a joint project with the East-West Center's Pacific Islands Development Program to address the energy problems of small Pacific islands. The project conducted a preliminary energy assessment of ten Pacific islands. Then a field survey team visited the islands and prepared country energy surveys and proposals for renewable energy projects. The project focused chiefly on assessing energy needs and, when requested, policy issues.

The Environment and Policy Institute (EAPI) was established in 1977 to conduct study and training programs concerned with the natural environment and its ability to meet society's development needs. The institute's forestry program includes projects in agroforestry development, which is the intercropping of woody plants with food or forage crops, and mangrove area management, of major interest in Pacific islands where these salt-tolerant forest ecosystems abound. Foresters from Australia, New Zealand, Papua New Guinea, and Solomon Islands have participated.

In the agroforestry work, a major training and research project to measure productivity of widely used or promising South Pacific agroforestry systems began in 1985 with training sessions at the Center. In project work continuing into 1986, participants are conducting field research in their home countries of Papua New Guinea and

East-West Center research on mineral resource issues explored mineral development impacts in Papua New Guinea.



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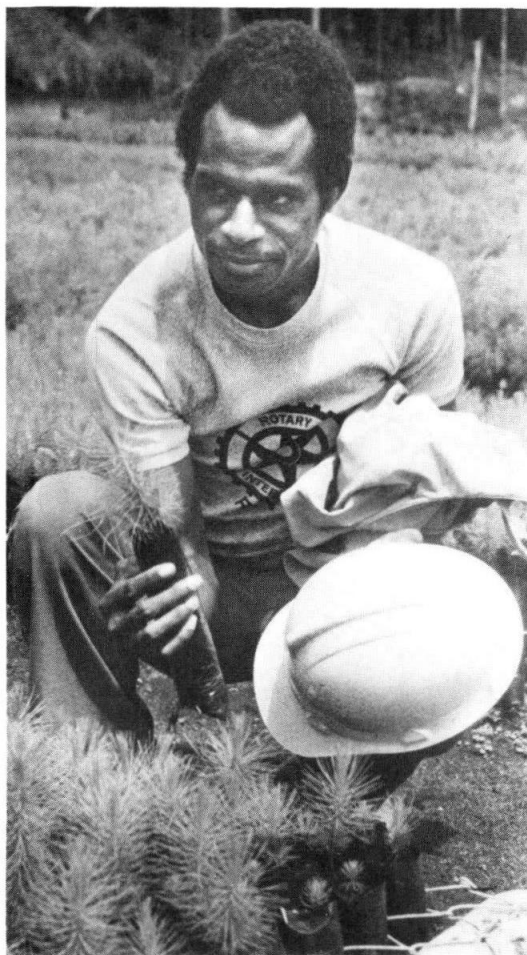
Solomon Islands. Research results will be used for agroforestry planning and development in those two countries and may be used as models for agroforestry research and development in other Pacific countries. In 1983, the mangrove area management work brought together twenty-two experts who wrote sections for a comprehensive manual published in 1984. Continuing in 1986, this project has had support from the International Union for the Conservation of Nature and Natural Resources, UNESCO, and the United Nations Environment Program.

A program on environmental guidelines for offshore oil and gas exploration, development, and production that began in 1980 and continued through 1985 brought

together experts from New Zealand, Australia, several Asian countries, and the United States. Researchers developed two sets of environmental guidelines — general guidelines for policymakers and technical guidelines for technicians and planners — and a training packet used in ongoing training workshops throughout the region.

In the early 1980s EAPI also began a project on the increased use of coal in the Asia-Pacific region. Australia's Department of Home Affairs and Environment and the Centre for Resource and Environmental Studies of the Australian National University co-sponsored a planning workshop that year. Research on the management of radioactive wastes, a major concern to Pacific islanders, was a joint project with the Pacific Islands Development Program.

The Environment and Policy Institute's work in the Pacific emphasizes practical training in agroforestry development.



NAPOLEON VERGARA

The genesis of a Pacific islands program

Pacific islands students have continued to come to the East-West Center through the 1970s and 1980s as part of the Open Grants Program. In addition, the Office of Student Affairs and Open Grants (SAOG) in recent years has researched global models and the policy process (G-MAPP) in which global models are used to assess development potentials and problems of Pacific island countries.

In 1979 SAOG provided the opportunity for the birth of the Pacific Islands Development Program when it began two special projects — the Pacific Islands Development Program, which organized the first Pacific Islands Conference in 1980, and the Pacific Community Lecture Series, which organized several community lectures about the Pacific. These projects became part of the East-West Center's twentieth anniversary celebration in 1980. In 1981 the Pacific Islands Development Program became a major program with an administration separate from Student Affairs and Open Grants.

A Special Concept: The Pacific Islands Development Program

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The Pacific Islands Development Program grew out of an unprecedented East-West Center Pacific Islands Conference (PIC) in 1980, where heads of government from eighteen Pacific island countries and territories provided the mandate for practical research on key issues that will shape the future of the Pacific. The East-West Center established PIDP as a research and training program in the spirit of the conference theme, "Development the Pacific Way."

Conference participants established a standing committee of island leaders headed by Ratu Sir Kamisese K. T. Mara, prime minister of Fiji. Other members were the prime ministers of the Cook Islands and Papua New Guinea, the president of Kiribati, a governor representing the Pacific Basin Development Council, and the vice president of the governing council of New Caledonia. This body was empowered to act on behalf of the Pacific Islands Conference and establish priorities to guide the East-West Center in planning and administering research programs. A

program planning committee also was appointed and included officials from American Samoa, the Cook Islands, Fiji, the U. S. Trust Territory of the Pacific Islands, Solomon Islands, Western Samoa, and the state of Hawaii.

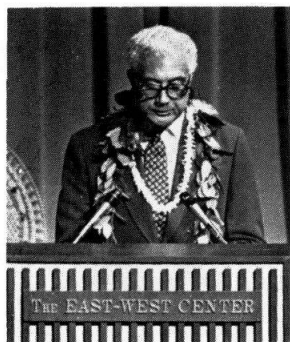
Operating under the EWC Office of Student Affairs and Open Grants, PIDP prepared a series of concept papers based on the priorities established by the program planning committee. The standing committee, meeting in late 1980, commissioned research in aquaculture development, disaster preparedness and rehabilitation, and energy. The two conference committees, meeting a few months later in American Samoa, identified four other information and research needs: nuclear waste disposal, potential beneficial roles for multinational corporations, problems of indigenous business development, and government and administration.

PIDP has grown steadily since 1981 when it became a program separate from Student Affairs and Open Grants. Its staff, funding,

Island leaders from eighteen Pacific island nations and territories gathered in 1980 for the first Pacific Islands Conference. Representatives included, from left, Peter Tali Coleman of American Samoa, Hammer DeRoburt of Nauru, Ratu Sir Kamisese K.T. Mara of Fiji, Sir Thomas Davis of the Cook Islands, and Ieremia Tabai of Kiribati.



EW C PHOTO



Ratu Sir Kamisese K.T. Mara, prime minister of Fiji, has served as chairman of the Pacific Islands Conference standing committee since its formation in 1980.

and scope of work have expanded to conduct the research and training commissioned by Pacific island leaders. At a 1985 meeting of the PIC standing committee, Fiji's Prime Minister Mara cited three issues that are critical to the future of the Pacific island nations: sovereignty, self-respect, and self-reliance.

But Ratu Mara, who then had headed the standing committee for five years, warned that these concepts will be harder to maintain as the world grows increasingly complex. "Interdependence, rather than independence, has become the watchword for survival," he said. Calling for a "sound understanding of other cultures, their resources and their technologies, and our own needs and aspirations," Ratu Mara explained, "Thus it is crucially important today that we not only have the information we need to make decisions, but also to train our own people to be able to analyze this information and to carry out the work required."

In its first five years of existence, Ratu Mara said, the PIC standing committee, together with the East-West Center, has been able "to forge, through the Pacific Islands Development Program, a sound basis for realistic and effective contributions to the development efforts of the Pacific island countries. I believe that together we have established a unique, formal working relationship unknown anywhere else in the world."

In 1985, the full complement of island leaders assembled in the Cook Islands for the second Pacific Islands Conference to review PIDP's work and establish additional research priorities.

Several areas were singled out for action. Since improving the quality of life is essential, these included education, jobs, health services, and nutrition. How will these improvements be funded? The role of the private sector in development was

given a hearing, and private enterprise was seen as, at least, a partial solution for development needs.

Companies invited to attend the 1985 conference are active in energy, logging, mining, hotels, airlines, banking, and canning. Since these firms represent widespread multinational interests, one PIDP background paper was careful to note a fear that "the international company will use its knowledge and weight to transform the local environment to its advantage." Already, Pacific island countries offer a variety of incentives, including tax holidays, investment allowances, and tariff concessions, which represent a two-edged sword.

"We are looking at the social impacts of changes," noted Filipe Bole, former director of PIDP, before leaving for the Rarotonga conference in July 1985. "What we really need, however, is an underlying philosophy. There is a lot of development occurring in the islands, and our leaders are a bit concerned by some of the impact."

Bole's words, in a real sense, echo those of Ratu Sir Kamisese K.T. Mara, chairman of the standing committee, said in 1985 before the second conference: "We are here because we all share a common purpose, which is for Pacific island leaders to share views on their aspirations for the development of their respective countries."

The East-West Center is proud to serve the development goals of the Pacific island leaders through the research projects of the Pacific Islands Development Program — carried out at the request of the standing committee. Projects in PIDP's first five years have examined aquaculture, natural disaster preparedness and rehabilitation, energy, nuclear waste disposal, multinational corporations in the Pacific, indigenous business development, government systems, and faculty development.

The PIDP structure is flexible, responsive to requests for assistance from island leaders and the changing priorities of the Pacific community. Some projects are broad in scope, covering the entire region, while others are specific to countries.

Aquaculture assessment for commercial feasibility

The development of commercial aquaculture projects in the Pacific is still an elusive dream, although the technical feasibility has been demonstrated many times. While the term aquaculture often has been presented as a mechanism to solve various social and economic problems faced by developing countries, it has never become the panacea that was anticipated.

Aquaculture has a broad variety of applications, ranging from culturing single-cell algae to raising giant sea turtles. The systems can vary in complexity from extensive ponds requiring little or no

maintenance to intensive raceways requiring substantial energy and labor inputs. Markets for aquaculture products are just as diverse. Products can be aimed at human subsistence or luxury consumption markets or a host of specialty markets such as bait fish or seed stock.

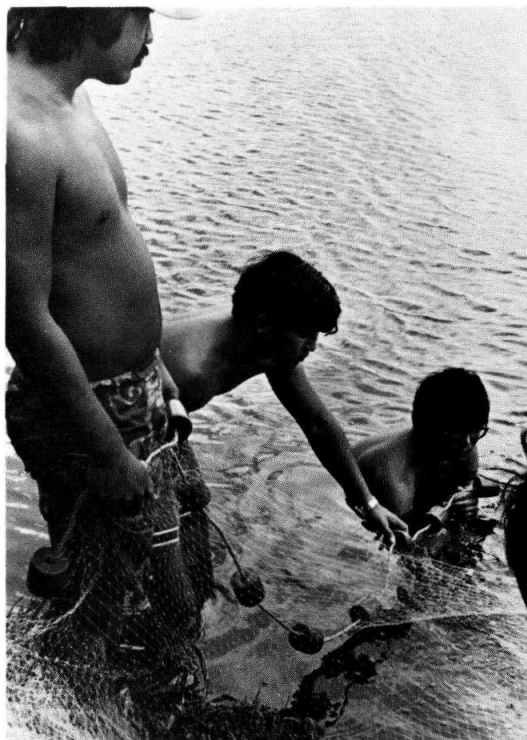
In the Pacific islands, population increases often have resulted in higher demands for marine resources than local waters can supply on a sustained basis. With the demise of traditional conservation methods, management of scarce marine resources has become difficult. Aquaculture therefore could supplement protein to people already accustomed to fish and shellfish as daily food sources.

Aquaculture is labor-intensive, providing employment opportunities in rural areas. The rationale for pursuing aquaculture development also considers that, as a commercial enterprise, it is an additional tax base for government revenues and generates export dollars when its products are sold internationally.

However, the Pacific islands have significant disadvantages for successful aquaculture development. Two major constraints are their small size and their isolation. Distances to export markets are often great, while inter- and intra-island transport is frequently expensive and unreliable. Deficiencies in marine nutrients and a lack of fresh water supplies may be a limiting factor on atolls, while on mountainous islands flat terrain may be unavailable due to its use for other forms of production.

According to Roger Uwate, who for several years coordinated PIDP's aquaculture project, "Most failures center on the overzealous biologist or uninformed bureaucrat who often pushes for aquaculture development when it is neither practical nor makes the best use of resources."

Pacific Islands Development Program researchers have assessed the feasibility of commercial aquaculture projects in the Pacific.



EWG PHOTO

The resulting venture cannot market its product at a profitable level, so it develops cash-flow problems and subsequently closes. Uwate noted in his final assessment report, published by PIDP in May 1984. An aquaculture project, he explained, is usually developed by experts who are brought in for a few years. When they leave, the project ends for lack of interest or lack of technical knowledge.

Nevertheless, a 1980 survey revealed that thirteen of fifteen Pacific countries had determined that aquaculture had a high priority for meeting local development needs. PIDP was chosen to assess aquaculture potential, and surveys were conducted in twenty-one countries and territories. The PIDP team concluded that if economically successful aquaculture projects are to develop in the Pacific islands, careful economic feasibility assessments must be conducted on each project before it is mounted.

PIDP also conducted case studies in Kiribati, Tonga, Fiji, and Papua New Guinea and distributed the findings to regional governments. Researchers produced general reports on coral markets, mullet culture, dolphin and porpoise interference in fisheries, and aquaculture consulting firms.

PIDP's aquaculture project provided opportunities for officials from the Pacific islands to gain research experience by participating in the studies conducted by the team. To ensure that any newly implemented aquaculture projects have a chance for success, PIDP is developing a handbook for conducting aquaculture feasibility assessments.

Dealing with disaster in the Pacific

The costs of natural disasters are increasing rapidly in Pacific island countries due to rising populations and the increased infrastructure that accompanies develop-

ment. While agriculture and housing have been identified as the most vulnerable sectors, the entire range of a modern economy, which includes ports, airfields, aircraft, ships, bridges, and communications facilities, is subject to devastation. Costly economic development can be set back by several years in one blow.

Hurricanes, or cyclones, are the worst of nature's destroyers of life and property in the Pacific, followed by earthquakes and flooding, and all of the islands are, in varying degrees, subject to hazards.

Most island nations that lie within the hurricane zone, which ranges in an arc from the Cook Islands to Fiji to the Northern Marianas, are affected by an average of two or more storms a year. Preventive measures for hurricanes consist of developing adequate warning and evacuation plans, locating populations in less vulnerable areas, building disaster-resistant structures for urban and rural areas, and arranging in advance for international assistance.

Earthquakes are frequent, especially along the Tonga trench and throughout Melanesia, and are sometimes accompanied by tsunamis, or seismic seawaves. Disaster preparedness for tsunamis includes building sea walls in coastal areas and locating agricultural plantations at safe distances inland. For all anticipated disasters, adequate warning systems and evacuation plans are essential.

Volcanic eruptions are prevalent in the Pacific, since many of the high islands have active or potentially active volcanoes. Eruptions in Papua New Guinea, Western Samoa, the Northern Marianas, and Vanuatu have caused considerable damage and have even resulted in the relocation of entire communities.

Most high islands in the Pacific also are subject to floods due to the heavy volume

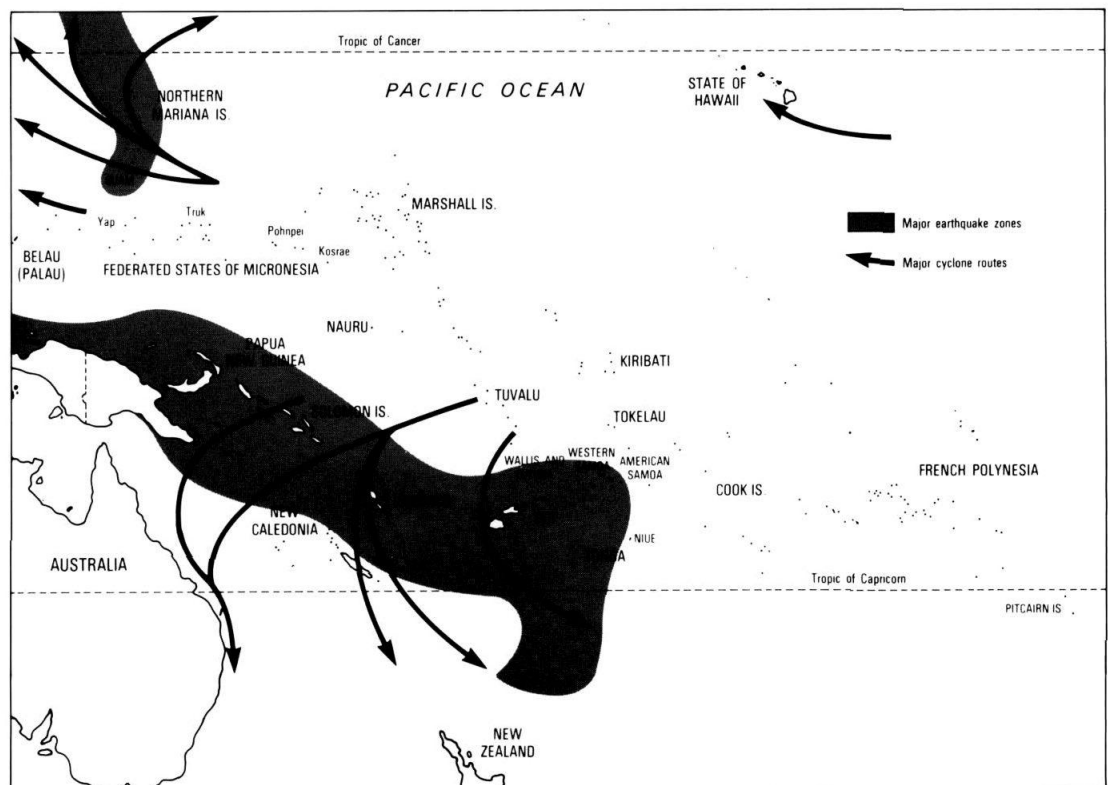
of rain at certain times of the year. On the other hand, low islands and atolls are subject to drought. Countries like Fiji, Kiribati, Niue, and especially Tuvalu, are vulnerable. Cash crops, forestry, and domestic animals all suffer in these times. One remedy is agricultural diversity; another is to develop water systems that can provide adequate supplies in dry periods. Landslides are becoming more common in the Pacific due to deforestation, a result of logging, cultivation, road building, and construction.

In 1972, Cyclone Bebe struck Fiji, leaving more than 60,000 people without shelter. This cyclone was perhaps a Pacific milestone in recent times because it spurred governments to plan scenarios for disaster relief in advance of a catastrophe. "The devastation wrought by Bebe was on such a large scale, and spread across such a wide area (of Fiji), that it was soon clear that the

restoration of normalcy from the chaotic conditions would be a lengthy process," according to PIDP's John R. Campbell in his book, *Dealing With Disaster: Hurricane Response in Fiji*.

At the 1980 PIC standing committee's request, the Pacific Islands Development Program mounted a regional study of disaster preparedness in the Pacific. PIDP's survey concluded that public awareness programs could reduce the cost of disasters significantly. A three-year program of research and training was initiated in PIDP to support preparedness and disaster mitigation policies of governments in the Pacific. Principal support came from the Office of Foreign Disaster Assistance (OFDA) of the U.S. Agency for International Development. The program provided governments with a general assessment of the impact of natural disasters and the relative state of preparedness in their countries.

Major hurricane and earthquake zones of the Pacific islands region (Source: After World Map of Natural Hazards, United Nations Conference on Trade and Development, 1983).



By the end of 1982, PIDP had produced a major work titled *Disaster Preparedness and Disaster Experience in the South Pacific*. Besides profiling each country and its state of disaster preparedness, it recounts the history of each major disaster, including case studies of major catastrophes up to Cyclone Isaac, which hit Tonga in March 1982. By October 1983, PIDP was preparing a model program to reduce housing vulnerability in Solomon Islands. A workshop was aimed at training officials.

In July 1984, PIDP conducted a disaster preparedness planning workshop for the Federated States of Micronesia, with support from the Trust Territory of the Pacific Islands, the U.S. Federal Emergency Management Agency, the Australian Development Assistance Bureau, the Marshall Islands, Belau (Palau), and Kiribati. This workshop resulted in a manual designed as a planning guide. *Procedures and Guidelines for Disaster Preparedness and Response* was written by British Air Vice-

Marshal W. Nick Carter as part of an ongoing series supported in part by the U.S. Agency for International Development.

Finally, with support from USAID, in 1984 PIDP initiated a two-year effort aimed at developing methods to assess disaster vulnerability and build community preparedness. Assessments were conducted during 1985 in the Cook Islands, Fiji, and Western Samoa. This was followed by a workshop in Honolulu to develop manuals for post-disaster impact assessment. The project will be completed in late 1986.

Energy in Pacific island development strategies

Urbanization and development in the Pacific inevitably have accelerated the demand for energy resources. The joint PIDP-RSI studies of the region's energy needs and alternatives have focused on three main areas: petroleum security, rural electrification, and energy planning.

PIDP's disaster preparedness project studies the effects of natural disasters such as hurricanes, tsunamis, drought, floods, and volcanoes.



In the Pacific, due to the great distances separating islands from land masses and from each other, transport fuels are of vital importance since the end of the era of sailing ships. Different paths of economic development have different implications for energy strategies. Energy-intensive manufacturing equipment, vehicles, and household appliances require much greater reliance, on importation, for example, than light industrial and household needs, which can be met from more varied types of energy rather than expensive imported fuels.

Hydro and biomass fuels sometimes can replace diesel and fuel oil. Under certain circumstances, small-scale industries can rely more on steam energy than electricity, especially where economies of scale do not favor oil, coal, or hydropower. Due to the rapid growth that may occur simultaneously in several sectors, Pacific island development strategies set priorities for limited funds. In some instances, however,

the pressure to develop rapidly exceeds both energy production and governmental financial capabilities. Because of their energy needs and their limited domestic resources, the Pacific islands are especially vulnerable to fluctuations in imported fuel prices and to foreign exchange problems.

Currently, a few large industrial complexes in Fiji, Papua New Guinea, and New Caledonia account for the majority of industrial energy used in the Pacific islands region. In Papua New Guinea in 1981, mining enterprises consumed 97 percent of the fuel oil and 14 percent of the diesel used in the country. The Bougainville mine alone annually accounts for 35 percent of PNG's total energy requirements.

In other Pacific nations, fishing is the primary industry, using diesel, petrol, kerosene, and electricity. In American Samoa, the tuna canning industry consumed virtually all petroleum products used in the fishing sector and contributed 97 percent

PIDP's researchers and island leaders are working together to analyze energy needs and to create locally developed energy planning capabilities.



NAPOLÉON VERGARA

to export earnings. In small Pacific island countries, the processing of food and beverages comprises a critical energy demand. Compared with industrial energy use, however, agriculture consumes a far higher proportion of traditional biomass fuels such as coconut shells and wood for drying crops.

The creation of a locally developed energy planning capability in the Pacific islands has now assumed a high priority with island leaders and therefore with PIDP. The Pacific region is still heavily dependent on regional organizations for technical support. Most energy planning positions in the islands are held by expatriates recruited under foreign aid programs. Local energy

officers need to be trained to take over so that Pacific governments can improve their own planning capabilities, with less reliance on foreign technical support.

The aim of PIDP's energy research has been to strengthen the institutional capacity of Pacific island governments and to provide the data requested by planners for analyzing domestic energy needs and problems. In 1985 PIDP and RSI published an energy planner's manual for renewable energy assessments to facilitate comparisons of energy alternatives and to suggest the directions of field investigations necessary for planning renewable energy projects. Later that year, the project published a computerized project analysis package for developing countries.

A major part of the Pacific's energy requirement is consumed in processing domestic beverages and foods, such as tuna.



DAVID DOULMAN

PIDP reports have examined energy demand in ten Pacific islands. A study made on the feasibility of a regional refinery found that one would be uneconomical for supplying the slate of refined products used within the region. Alternative petroleum options need to be considered.

Legal implications of nuclear waste disposal

Nuclear waste disposal — and its environmental effects — is a serious matter in the Pacific, causing anxiety among island peoples who now are aware of the devastating radiation effects resulting from atomic testing in some island groups. The growth of the Nuclear Free Pacific Movement reflects the fear that the United States, Japan, and European nations see the Pacific as a disposal ground for their nuclear waste material.

In 1980, when Pacific leaders requested more information on expected environmental damage from nuclear waste disposal, the Pacific Islands Development Program began a project that focused on the international legal aspects of the waste disposal issue. Researcher and lawyer Jon Van Dyke examined scientific opinion on environmental risks and the legal recourse options that governments in the region would have if a country should proceed with a nuclear waste disposal operation. He also investigated regional and international mechanisms for monitoring and controlling nuclear waste disposal in the ocean and reviewed international and domestic legal precedents to determine where liabilities could lie.

Van Dyke found present law unclear and not yet fully established. If a country's proposal to dump nuclear waste in the Mariana Trench in the northern Pacific were carried out, for example, he said a Pacific island nation might try to bring action against that country in the

International Court of Justice. Additionally, a fishing group in Guam, alleging that the radioactivity could affect its catch, livelihood, and health, might file an action against that same country in the U.S. District Court in Guam or the Northern Marianas. Each of these challenges would raise procedural difficulties that might make any court reluctant to reach the substantive issues, including sovereign immunity, the act of state doctrine, and acceptance of the court's jurisdiction, the report stated.

The PIDP report observed that if a nation proceeds with a disposal operation, then "serious consideration will be given to a judicial challenge in which the international law governing the marine environment and the standards of care owed to coastal residents could be enforced."

Those who will bear the risk of contamination by nuclear waste disposal are often different than those who impose it, the report said. There are cases where the two groups are identical, but in the Pacific, nuclear projects of any kind are seen as impositions from the outside. The justification that atomic testing and nuclear dumping are necessary for the security of the Pacific islanders is no longer well accepted. PIDP's report concluded that a strong case can be made in favor of continuing the present moratorium on ocean nuclear waste disposal while additional scientific research on its effects is undertaken.

Multinational corporations in the Pacific

In February 1981, the standing committee of the Pacific Islands Conference requested the Pacific Islands Development Program to study the role of multinational corporations in the Pacific and the conditions under which they succeed. As the first step in this project, an overview of multinational

enterprises in the South Pacific recommended that transfer pricing and related activities be carefully assessed and controlled, studies be conducted on possibilities for and benefits from coordinating incentives, policies relating to foreign investment be assessed, special policies for employment and skills formation be pursued, more research be devoted to monitoring activities of the multinationals, more skills be developed for negotiations with them, and a stronger effort be made to collect data on various aspects of multinational involvement, including pricing practices and contributions to the local economy. In addition to current tuna studies, the project will focus on minerals, timber, and agro-processing.

The tuna industry is of major importance to the Pacific islands to generate income for growth and development. Pacific tuna fishery is an important component of the

international tuna industry, accounting for approximately 35 percent of the total world tuna catch. But of the 630,000 tons of tuna taken in 1984 in the Pacific islands, about 30 percent was harvested by vessels permanently based at Pacific ports. About 60 percent of that latter amount was processed in the region.

At this time, however, the international tuna industry faces the growth of competitive Asian canning factories, higher fuel prices, depressed tuna prices, and the formalization of 200-nautical-mile exclusive economic zones.

The Pacific island countries are understandably demanding better financial returns from the distant-water fishing fleets operating in their EEZs. To gain more leverage on the industry in their waters, Pacific governments will probably have to make a major effort to attract and facilitate foreign investment in the sector.

The tuna industry has been a major focus of PIDP's assessment of multinational corporations in the Pacific.



The urgency has prompted PIDP to examine the role of multinational corporations in the Pacific tuna industry as the first in its series of studies. Since governments in the area attach considerable significance to tuna's development, and since the industry worldwide is at a crossroads, foreign investors may be reluctant to pump capital into the sector unless local governments participate as an indication of firm commitments.

The U.S. market for canned tuna is said to be the main engine of the world market, since more than 50 percent of the canned tuna in the world is sold in the United States. However, the U.S. tuna market is currently experiencing serious economic problems as a result of a growing flow of imports of low-priced tuna from foreign-owned canneries — particularly from Southeast Asian countries — to the U.S. market, according to an executive of Star-Kist Foods, Inc., who briefed the Pacific Islands Conference in Rarotonga in 1985.

PIDP's two-year tuna study, launched in January 1985, will compile information from American and Japanese fisheries associations, government documents, regional and international organizations, and from tuna companies directly. An extensive bibliography of publications concerned with tuna fisheries in the Pacific islands region already has been compiled.

The project, in its aim to inform island leaders of specific development sectors, reflects PIDP's role in providing regional governments with detailed, analytical information so that they can formulate strategies based on their national objectives. In the past, island governments may have found it difficult to formulate effective policies for involvement of multinational corporations in their fisheries development programs, thus placing them in a weak negotiating position with foreign investors and international tuna companies.

Indigenous business development in the Pacific

With narrow economic bases and disadvantages ranging from isolation to unstable world markets, Pacific island leaders are searching for ways to improve the viability of private sector development in the Pacific. Initiated in 1984, the Pacific Islands Development Program's indigenous business project has completed surveys on indigenous entrepreneurship for several island groups — Fiji, Tonga, Solomon Islands, Western Samoa, the Cook Islands, and the Marshall Islands — and has scheduled a review of Papua New Guinea. Trade stores, transport, manufacturing, agrobusiness, tourism, repair services, and handicrafts have been among the business sectors surveyed.

The Fiji report outlines major problems encountered by indigenous entrepreneurs. These include a poor understanding of market factors, a lack of management

PIDP's indigenous business development project analyzes various business sectors, such as this local market in Western Samoa.



GEORGE BEAL

experience, and an inability to raise sufficient operating capital. In Tonga a large number of agricultural ventures were surveyed. Undercapitalization, money management inexperience, unstable overseas markets, and an inadequate business service infrastructure were cited as factors that inhibit the private sector.

PIDP's Solomon Islands survey concluded that a strong, viable informal credit sector already exists and could support more indigenous business development. But government incentives for business development are not well understood in rural areas.

In the Marshall Islands, strains had developed between traditional family obligations and the demands of business management. As in Solomons, a certain apathy exists with regard to Western commercial objectives. External economic forces are trying to transform this apathy into profit-oriented initiatives when, in fact,

the traditional cultures are often more comfortable with a barter-type economy that permits ample free time for social expression.

Surveyors also observed this in Western Samoa, finding that government officials there have a relaxed attitude toward private entrepreneurship. The report includes forty policy and program recommendations to counteract this indifference.

Major funding for the project has come from the U.S. Agency for International Development and the New Zealand government, with Canadian international development agencies providing workshop funds. Funds are currently being sought for a policy review of taxation, financial incentives, protective tariffs, other regulatory and control measures, and new areas for encouraging private investment.

Meanwhile, PIDP has made some preliminary estimates on the Pacific's potential growth sectors during the next twenty years. On the international level, the region is expected to become especially active in gold, timber, tuna, tourism, and agro-industries. PIDP predicts that in these areas, investments will be made at levels that could severely strain the absorptive capacity of the island economies. The presence of multinational corporations will increase in far greater proportion than indigenous business and will represent far greater capital input, as the Ok Tedi mine in Papua New Guinea readily attests.

Surveyors of indigenous business throughout the Pacific found that strains often develop between traditional lifestyles and the commercial objectives of business.



DAVID DOULMAN

At the 1985 Pacific Islands Conference in Rarotonga, private sector transnationals sat down at the discussions for the first time. Mining, canning, airline, hotel, banking, and timber firms from the United States, Japan, Australia, and New Zealand were eager to examine further investment prospects in this lightly populated, remote, but essentially resource-rich ocean.

The future of private sector development looks bright, agree PIDP's researchers. "Governments are stable," noted one. "There is lack of corruption, and Pacific countries and territories welcome foreign investment. And people in the islands are increasingly recognizing that future development in the Pacific will be done by the private sector."

Other PIDP projects

In addition to undertaking the projects described previously, PIDP has studied government administration in several Pacific island nations. In 1980, the Pacific Islands Conference standing committee directed PIDP to evaluate the appropriateness of government systems in the Pacific and to recommend options for making these systems more effective. After an initial report in 1983, PIDP was asked to organize the project on a country-request basis.

In early 1984 PIDP received a request from the Fiji government to conduct a study of Fiji's Provincial Administration. In

response, PIDP conducted a review of changes in the Fijian administration going back to 1877 with a special emphasis on the system of administration that existed just prior to 1967. A draft set of recommendations was developed and discussed with traditional decision-making groups throughout the country. A report was reviewed by the Fijian Affairs Board, translated into Fijian, and presented to the Great Council of Chiefs in October 1984. An implementation team was formed by Fiji government in early 1985 and the new system of Provincial Administration is currently being implemented.

Also in 1984, PIDP was asked by the Papua New Guinea government to assist with a study of their national planning system by participating in a World Bank mission. An experienced researcher in the East-West Center's Resource Systems Institute participated in the work, and in December 1984 a review of the National Planning Office was completed as part of the broader World Bank study and a report was submitted to Papua New Guinea government in February 1985.

The Cook Islands hosted the 1985 meeting of the Pacific Islands Conference, where island leaders discussed the Pacific Islands Development Program's research agenda.



KENNETH H. WALTERS

PIDP also has assisted in developing the teaching and research capabilities of several Pacific educational institutions, including the University of the South Pacific, the Papua New Guinea University of Technology, and the University of Papua New Guinea.

Faculty members from participating institutions take courses at the University of Hawaii, participate in East-West Center research projects, and take part in seminars, depending on their individual needs. By the end of 1985, eight faculty from the three participating institutions have taken part in this program.

Pacific People and the East-West Center

27

The Pacific islands region has sent participants to the East-West Center from American Samoa, Australia, Belau, the Cook Islands, Easter Island, the Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, the Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Norfolk Island, the Northern Marianas, Papua New Guinea, Solomon Islands, Tonga, the Trust Territory of the Pacific, Tuvalu, Vanuatu, and Western Samoa.

East-West Center participants have ranged from undergraduate students to heads of state, from scientists to artists, from editors to actors. They have been legislators and government officials; university administrators and researchers; secondary school teachers and principals; business executives, managers, and employees; attorneys; representatives of the military, private corporations, hospitals, nonprofit institutions, and international assistance organizations; authors and journalists; and film producers.

After completing degree programs or fellowships or taking part in workshops and conferences, many participants from Polynesia, Melanesia, and Micronesia have returned to their home islands to assume positions of responsibility. Government roles especially have absorbed their talents.

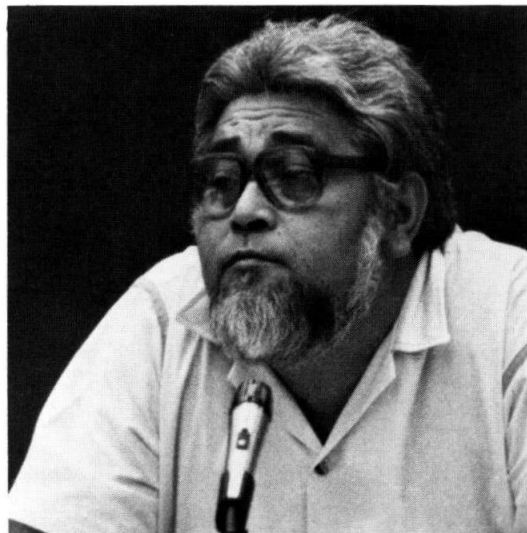
Dating back to the 1960s, presidents, governors, ministers, state secretaries, and department directors of Pacific island nations and territories are numbered among East-West Center graduates.

From Polynesia, **Sergio Rapu**, governor of Easter Island, was a doctoral candidate from 1975 through 1977 while attached to the Population Institute. He is the first non-Chilean to hold that post. **Ngahuiā Te Awēkotuku**, a highly regarded Maori writer from New Zealand, is with the Department of Maori Studies at Victoria University in Wellington. She was attached to the Technical and Development Institute in the mid-1970s and the Resource Systems Institute in 1980.

The former head of the School of Agriculture at the Alafua, Western Samoa, campus of the University of the South Pacific is **Felix Wendt**, who received a bachelor's degree through Open Grants in 1970. **Bradley Punu**, director of agriculture and fisheries in Niue, was with the Institute for Student Interchange in the late 1960s. **Sonatane Tu'a Taumoepeau**, who received his bachelor's degree with ISI in 1969, later became secretary for foreign affairs in Tonga.

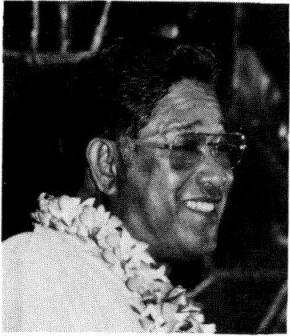
From Melanesia numerous former EWC participants have gone into government. **John Kaputin**, Papua New Guinea's former finance minister, was a bachelor's degree candidate in 1966 and 1967 while attached to ISI and returned in 1972 as a professional associate with the Technical and Development Institute.

James Makasiale of Fiji received his bachelor's in 1967 through the Institute for Student Interchange and later, in the 1980s, was the administrator of the Pacific Islands Development Program at the East-West Center. He is now permanent secretary for primary industries in Fiji's Ministry of Agriculture and Fisheries.



EWC PHOTO

James Makasiale



JAMES GILES

Tosiwo Nakayama



EWC PHOTO

Leo Falcam

Victor Hao Li, left,
and Robert J. Hawke

From Papua New Guinea, **Leo Joseph Hannett**, who from 1972 through 1974 studied for a master's degree through the Technology and Development Institute, became premier of the province of the Northern Solomons. He is now managing director of PNG's Investment Corporation.

Micronesia has seen its share of successful graduates of the Center. **Tosiwo Nakayama**, president of the Federated States of Micronesia, delivered a major address at the East-West Center's twenty-fifth anniversary celebration in 1985. Nakayama studied for a bachelor's degree in the early 1970s while attached to Open Grants.

Lazarus Salii, who came to the Center on four occasions between 1963 and 1980 through the Institute for Technical Interchange and the Pacific Islands Development Program, is now president of Belau. Also from Belau, Assistant Attorney General **Victorio Uherbelau** received a bachelor's degree in the mid-1960s while attached to the Institute for Student Inter-

change and returned to the Center twice as a professional associate, the last time in 1983.

Leo Falcam, an early participant who received his bachelor's degree while in ISI in 1963, became the governor of Pohnpei in the Federated States of Micronesia. **Kinja Andrike**, who received a bachelor's in 1968, was appointed secretary of education in the Marshall Islands.

In addition to degree-seeking students from the Pacific, the Center has invited numerous islanders to Honolulu as fellows or professional associates or as participants in workshops, seminars, and conferences. The East-West Center has served as a means for students and professionals alike, from the Pacific nations, Asia, and the United States, to exchange their expertise.

Some heads of government who have come to the Center include **Hammer deRoburt**, president of the Republic of Nauru, a professional associate in the Pacific Islands Development Program in 1980. **Peter Tali Coleman**, then governor of American Samoa, was also at the Center that year, as was Tonga's Prime Minister **Tui Pelehake Fatafehi**. Prime Minister of Australia **Robert J. Hawke** visited the East-West Center in June 1983 and gave a major policy address. In March 1984, New Zealand Prime Minister **Sir Robert Muldoon** addressed an East-West Center audience on the concept of a Pacific Basin community for continuing progress in the Pacific.

In 1971, **Mekere Morauta**, then Papua New Guinea's secretary for finance and now general manager of Papua New Guinea's Banking Corporation, was a professional associate with the Population Institute. From the Tongan Legislative Assembly, **Palavilala Tapueluelu** was a professional associate in 1978, attached to Centerwide Programs. **Lawrence Fo'ana'ota**, director of the Solomon



EWC PHOTO



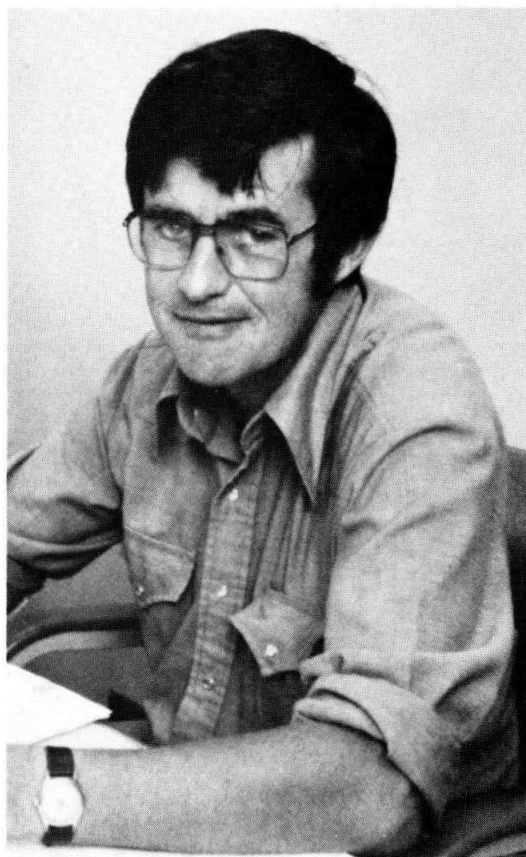
Sir Robert Muldoon

RAY TANAKA

Islands National Museum, received his first training in 1974 as a professional associate in museum management in the Culture Learning Institute.

Other Australians and New Zealanders concerned with Pacific island affairs have passed through the Center in large numbers through the years. **Margaret Valadian**, who received a master's in 1969 while at ISI, directs the Aboriginal Training and Cultural Institute in Balmain, New South Wales, Australia. **Leslie Norman Balaam** was a professional associate in the Food Institute in 1976. He is now dean of the agricultural faculty at the University of Sydney. **Susan Caroline Bambrick**, who was a fellow in the Resource Systems Institute in the late 1970s and early 1980s, is dean of students at Australian National University in Canberra.

Robert Graham Chittleborough, chief of the conservation and environment department in the Division of Resources Management in Perth, was a professional associate in the Environment and Policy Institute in 1981. **John T.E. Gilbert**, assistant commissioner for the New Zealand Commission for the Environment, has been a professional associate, research fellow, and adjunct research associate in the Environment and Policy Institute from the early 1980s when he coordinated a project to develop environmental guidelines for offshore oil and gas exploration and development. He has conducted training workshops using this material since 1983 and will continue this work through 1986. In 1978 and again in 1979, **Peter J. Cook**, chief scientist at the Bureau of Mineral Resources, Division of Continental Geology in Canberra, was at the Resource Systems Institute.



John T.E. Gilbert

EAPI PHOTO

Ian Malcolm Mac Phee, who received a master's degree in 1968 through the Institute for Student Interchange, has been a professional associate in the Pacific Islands Development Program. He has been minister for employment and industrial relations in Canberra. **George Seddon**, attached to the Environment and Policy Institute in 1979, is now dean of the faculty of architecture and planning at the University of Melbourne.

In New Zealand, **Tilly Te Koingo Reedy** is senior advisory officer with the training and development branch of the State Services Commission in Wellington. In 1977 she was a professional associate in the Culture Learning Institute. **Ian Frazer**, who was a professional associate with the Population Institute in 1978 and attended a regional symposium in 1983, is a senior lecturer in the anthropology department at the University of Otago in Dunedin. **James Mack** is director of the Dowse Art Museum in Lower Hutt. He was a fellow with the Institute for Technical Interchange



EWC PHOTO

Langi Kavaliku

from 1969 to 1970 and was with the Culture Learning Institute from 1976 to 1978 and again in 1982. **Ralph Heberley Ngatata Love**, a Resource Systems Institute fellow in the late 1970s, directs the Management and Development Center at Massey University in Palmerston North.

Langi Kavaliku, minister of education in Tonga, played an important role as a

research fellow in the late 1970s in Open Grants when he served on the committee to form the Pacific Islands Development Program. **Don McRae**, assistant secretary of the Department of Home Affairs and Environment in Australia, has been a research fellow in Open Grants and the Environment and Policy Institute and has recently worked on the SAOG G-MAPP program.

EWC Participant Awards, Pacific Islands Region, 1960 – 1985

Country	Professional/Research ^a	Students ^b	Total
American Samoa	1,148	18	1,166
Australia	998	73	1,071
Belau	228	14	242
Cook Islands	118	8	126
Easter Island	1	1	2
Federated Micronesia	552	34	586
Fiji	644	43	687
French Polynesia	35	0	35
Gilbert Islands	40	0	40
Guam	302	14	316
Kiribati	10	1	11
Marshall Islands	208	6	214
Nauru	8	0	8
New Caledonia	173	0	173
New Zealand	533	50	583
Niue	17	1	18
Norfolk Island	1	0	1
Northern Marianas	407	13	420
Papua New Guinea	204	24	228
Solomon Islands	127	1	128
Tonga	195	14	209
Trust Territory	690	0	690
Tuvalu	3	1	4
Vanuatu	191	0	191
Wallis & Futuna	3	0	3
Western Samoa	562	15	577
Total	7,398	331	7,729

Source: EWC Awards Services Office.

^aIncludes fellow, professional associate, and research intern awards.

^bIncludes all student awards.

To carry out its mission to promote better understanding among the nations of Asia and the Pacific, the East-West Center in the 1960s established ties with many Pacific islands, Australia, and New Zealand. From the time of its early emphasis on technical training, the Center has worked with island governments, educational institutions, and other organizations, with the number of Pacific island collaborators and contributors involved in Center programs growing every year.

Financial support from the Pacific has come from American Samoa, Australia, the Cook Islands, the Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, the Marshall Islands, Nauru, New Caledonia, New Zealand, Niue, Palau, Papua New Guinea, the Solomon Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa.

The **Cook Islands** government has collaborated through its Department of Survey and Physical Planning, Infrastructure Office, and the Department of Health.

In **American Samoa**, the East-West Center has worked through the Archives of American Samoa, the Community College, and the Museum of American Samoa.

The **Federated States of Micronesia** has collaborated through its Archives, the Education Department, the Pohnpei Agriculture and Trade School, and the Institute of Pacific Island Forestry.

In **Fiji**, collaborating institutions have included the University of the South Pacific and its Institute of Pacific Studies, South Pacific Bureau for Economic Cooperation, Business Organization Management Advisory Service, South Pacific Social Science Association, Pacific Regional Program of the European Economic Community, Department of Forests, Fiji Pine Commission, Koronivia Research Station, Ministry of Agriculture, Pacific

Islands News Association, and Ministry of Lands and Mineral Resources.

Assistance in **French Polynesia** has been through the Centre de formation et de recherche sur les langues et les civilisations océaniques, the Tahitian Academy, and the Group Énergies Renouvelables.

Guam has assisted through the government's Chamorro Language Commission and the University of Guam's College of Education.

The South Pacific Commission in **New Caledonia** has been active in many Center projects, as have the Regional Environment Program and the Pacific Arts Festival.

In **Belau**, assistance has been through the Museum and the Department of Education.

Working with the East-West Center in **Papua New Guinea** are the University of Papua New Guinea, University of Technology, Wau Ecology Institute, Office of Forests, Department of Primary Industries, Morobe Provincial Government, East Sepik Rural Development Project, Institute of Applied Social and Economic Research, and the Ministry for Minerals and Energy.

Collaboration in **Solomon Islands** has been through the Forum Fisheries Agency, Office of the Prime Minister, Ministry of Lands, Energy and Natural Resources in the Department of Forests, Resource Development Unit of the Western Province, Kwaio Cultural Center, Guadalcanal Cultural Center, National Museum, National Archives, College of Higher Education, and the Ministry of Natural Resources.

Vanuatu has cooperated through the ESCAP Pacific Operations Centre, Pacific Languages Unit of the University of the

South Pacific in Vila, and the Ministry of Lands.

Cooperation from **Wallis and Futuna** has come from the Association Culturelle des Iles Wallis et Futuna.

In **Western Samoa**, cooperating institutions have included the Department of Agriculture, the University of the South Pacific and its School of Agriculture in Apia.

In **Australia**, assistance has been through the Australian National University, its Development Studies Centre, and its Research School of Pacific Studies, University of Sydney, James Cook University, Australian Development Assistance Bureau, Geological Survey of Queensland, CSIRO's Division of Water and Land Resources, Commonwealth Department of Home Affairs and the Environment, Queensland Forestry Department, University of New England, Australian Institute of Energy, Commonwealth Regional Energy Resources Information System, La Trobe University, Warrnambool Institute of Advanced Education, University of Queensland, Administrative Staff College, Social Impacts, Inc., University of Wollongong, University of New South Wales, University of Adelaide, Murdoch University, Monash University, and Griffith University.

New Zealand has assisted the Center through its Commission for the Environment, Department of Education, Centre for Environmental Science, Forest Service, Soil Conservation Centre's Ministry of Works and Development, Council for Educational

Research, Department of Maori Affairs, University of Waikato, University of Auckland and its Department of Maori Studies, Massey University, and Victoria University.

One of the largest country contributions to the East-West Center for Pacific research comes from **Japan**, which has given more than \$420,000 during the past five years.

From the **United States**, assistance for Pacific-oriented research has come from the University of Hawaii at Manoa, Pacific Resource International, Inc., Pacific Basin Development Council in Honolulu, Pacific Telecommunications Council in Honolulu, Alu Like, Inc., in Honolulu, Bernice Pauahi Bishop Museum in Honolulu, Institute for Polynesian Studies at Brigham Young University in Hawaii, State of Hawaii's Office of Hawaiian Affairs, Kamehameha Schools, Kalihi-Palama Culture and Arts, Inc., USAID Office of Foreign Disaster Assistance, Pacific Fisheries Development, and the State of Hawaii Commission on Population and the Hawaiian Future.

Cooperation from the **United Nations** has come from the Development Program, Economic and Social Commission for Asia and the Pacific, Environment Program, Pacific Energy Development Program, Center on Transnational Corporations, Development Assistance Team, Disaster Relief Office, Habitat, and the Pacific Energy Project. The **World Health Organization** also has collaborated with the East-West Center on Pacific projects.

Publications for Pacific Development Needs

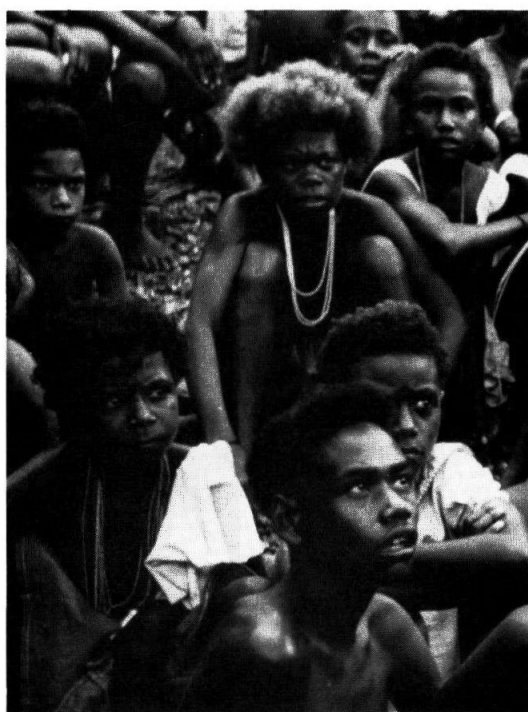
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Many East-West Center projects have resulted in publications specifically related to the Pacific islands region, while other publications that did not use the Pacific as their focus are applicable to many situations in the Pacific. The Center publishes books, newsletters, occasional publications, working papers, reprints of journal articles, and research, workshop, and program reports. Books also are published through other scholarly and commercial publishers.

Selected publications relating either directly or indirectly to the Pacific islands region are listed here, indicating both the breadth and depth of Center research since 1960. Entries without a listed publisher are East-West Center publications.

Early **Population Institute** publications focused on smaller islands, their population characteristics, future potential, and the link between local resources and demographic pressure on larger populations. PI's research also has resulted in several recent major publications.

The East-West Center has published research results on limiting and spacing children in the Pacific islands.



LINLEY CHAPMAN

Tasi Mauri: A Report on Population and Resources of the Guadalcanal Weather Coast, edited by Murray Chapman and Peter Pirie, 1974, Population Institute and the University of Hawaii, 550 pp.

Pacific Atoll Populations, edited by Vern Carroll, 1975, Association for Social Anthropology in Oceania monograph no. 3, University Press of Hawaii, 528 pp.

Population of American Samoa, by Chai Bin Park, 1979, ESCAP/SPC country monograph series 7.1, United Nations and South Pacific Commission, vi, 73 pp.

Population of the Cook Islands, by Geoffrey R. Hayes, 1983, ESCAP/SPC country monograph series 7.3, United Nations and South Pacific Commission, xvi, 222 pp.

Censuses of Asia and the Pacific: 1980 Round, edited by Lee-Jay Cho and Robert L. Hearn, 1985, xxiv, 380 pp.

Circulation in Population Movement: Substance and Concepts from the Melanesian Case, edited by Murray Chapman and R. Mansell Prothero, 1985, Routledge and Kegan Paul, London, xxiv, 483 pp.

Circulation in Third World Countries, edited by R. Mansell Prothero and Murray Chapman, 1985, Routledge and Kegan Paul, London, xviii, 473 pp.

Mobility and Identity in the Island Pacific, edited by Murray Chapman, 1985, Department of Geography and Victoria University Press, Wellington, New Zealand, x, 380 pp. (Published as a special issue of *Pacific Viewpoint*, Vol. 26, No. 1.)

Topics of field studies conducted in the 1980s by graduate scholarship holders include why people stay on resource-poor atolls of the Cook Islands, population movement in Fiji, the use of income from wage labor migration in Papua New Guinea villages, and how the perception of work by migrant Samoans in Hawaii defines adjustment to the urban labor market. This attention to Pacific topics reflects an increasing number of students drawn from the island countries themselves.

Other PI publications that include information about the Pacific are the *Asian and Pacific Census Forum*, which is a quarterly newsletter, the Population Institute Paper Series, and journal articles on topics such as Hawaii's elderly, population distribution policies, migration and unemployment in Hawaii, migration in developing countries, prevalence and demographic significance of contraceptive sterilization in Fiji, and ethnicity, birthplace, and achievement in changing Hawaii. Other topics are the industrial future of Pacific Basin, labor force and industrial development in Pacific Basin, policy implications of circulation, the effect of induced abortion on the incidence of Down's Syndrome in Hawaii, ethnic differentials in mortality in Hawaii, a Samoan example of demographic effects of local socioeconomic change on small populations, a Solomon Islands example of micro/macro linkages of tribal mobility as circulation, population geography and the Pacific islands, population policy and family planning programs in Pacific mobility in a nonliterate society, biological and demographic factors in aboriginal Australian

socioeconomic organization, and Samoa's two approaches to population and resource problems.

Research products from the **Institute of Culture and Communication** and the former **Communication Institute** and **Culture Learning Institute** include:

Micronesia: The Breadfruit Revolution, by Robert Wenkam and Byron Baker, 1972, reprinted 1973.

The Pacific Islands Press, by Jim Richstad and Michael McMillan, 1973, 94 pp.

Cross-Cultural Perspectives on Learning, edited by Richard W. Brislin et al., 1975, Halsted Press, 336 pp.

Cross-Cultural Research: The Role of Culture in Understanding Human Behavior, by Richard W. Brislin and Marshall H. Segall, 1975, Learning Resources in International Studies, New York, 95 pp.

A New Kind of Sugar: Tourism in the Pacific, edited by Ben R. Finney and Karen Ann Watson, 1977, Center for South Pacific Studies, University of California, Santa Cruz, 262 pp.

Adaptation and Symbolism: Essays on Social Organization, edited by Karen Ann Watson-Gegeo and S. Lee Seaton, 1978, University Press of Hawaii, 228 pp.

Mass Communication and Journalism in the Pacific Islands: A Bibliography, by Jim Richstad and Michael E. McMillan, 1978, University Press of Hawaii, 334 pp.

Planning Methods, Models, and Organization: A Review Study for Communication Policy Making and Planning, by Syed Rahim et al., 1978, vii, 260 pp.

American Schools for the Natives of Ponape: A Study of Education and Culture Change in Micronesia, by Nat J. Colletta, 1980, University Press of Hawaii, 181 pp.

Research in Culture Learning: Language and Conceptual Studies, edited by Michael P. Hamnett and Richard W. Brislin, 1980, University Press of Hawaii, 181 pp.

Transnational Enterprises: Their Impact on Third World Societies and Cultures, edited by Krishna Kumar, 1980, Westview Press, 337 pp.

Bold Experiment: The Story of Educational Television in American Samoa, by Wilbur Schramm et al., 1981, Stanford University Press.

Cross-Cultural Encounters: Face-to-Face Interactions, edited by Richard W. Brislin, 1981, Pergamon Press, 384 pp.

Cultural Relations in the Global Community: Problems and Prospects, by Verner C. Bickley and P.J. Philip, 1981, Abhinav Publications, New Delhi, 255 pp.

The Chinese in Papua New Guinea: 1880–1980, by David Y.H. Wu, 1982, Chinese University Press of Hong Kong, 200 pp. (Also published in Chinese by Cheng Chung Book Publishers, Taipei.)

Handbook of Intercultural Training, edited by Dan Landis and Richard W. Brislin, 1983, Pergamon Press, 308 pp.

Readings in English as an International Language, by Larry E. Smith, 1983, Pergamon Press, 190 pp.

Telecom Pacific, by Syed A. Rahim and Dan J. Wedemeyer, 1983, University of Hawaii Press, 190 pp.

Culture, Youth and Suicide in the Pacific: Papers from an East-West Center Conference, edited by Francis X. Hezel et al., 1984, University of Hawaii Pacific Islands Studies Program, 216 pp.

Poetry of the Pacific Region: Proceedings of the CRNLE Conference, edited by Paul Sharrad, 1984, Centre for Research in the New Literatures in English, Adelaide, 143 pp.

Publishing in the Pacific Islands: A Symposium, edited by Jim Richstad and Miles M. Jackson, 1984, Graduate School of Library Studies, University of Hawaii, 142 pp.

Development Communications: A Resource Manual for Teaching, by Clayton Vollen and Jim Simmons, 1985, Asian Mass Communication Research and Information Center, 115 pp.

Get It Write; Write It Tight: The Beginning Reporter's Handbook (revised), by Frederick T. C. Yu, et al., 1985, xii, 110 pp.

Ho'oponopono: Contemporary Uses of a Hawaiian Problem-Solving Process, by E. Victoria Shook, 1985, University of Hawaii Press, 141 pp.

Person, Self and Experience: Exploring Pacific Ethnopsychologies, edited by Geoffrey M. White and John Kirkpatrick, 1985, University of California Press, vii, 441 pp.

The Kamapua'a Literature: The Classical Traditions of the Hawaiian Pig God as a Body of Literature, by John Charlot, University of Hawaii Press, forthcoming 1986.

The Passing of Remoteness: The Information Revolution in the Pacific, by Meheroo Jussawalla et al., Institute of Southeast Asian Studies, Singapore, forthcoming 1986, xv, 300 pp.

Other publications have focused on transnational knowledge utilization, radio's impact on the Pacific, education for development communication, communications technology transfer, satellite systems, social images and social change, and linguistics research.

Pacific-related publications from the **Resource Systems Institute** and the former **Food Institute, Technology and Development Institute**, and **Institute for Technical Interchange** include:

Tsimamamis in the Pacific Ocean, edited by William Mansfield Adams, 1970, 528 pp.

Big-Men and Business: Entrepreneurship and Economic Growth in the New Guinea Highlands, by Ben R. Finney, 1973, 228 pp.

Polynesian Peasants and Proletarians, by Ben R. Finney, 1973, Schenkman Publishing Company.

Micronesia at the Crossroads: A Reappraisal of the Micronesian Political Dilemma, by Carl Heine, 1974, 226 pp.

The World's Worst Weeds: Distribution and Biology, by LeRoy G. Holm et al., 1977, 624 pp.

Fish Behavior and Its Use in the Capture and Culture of Fishes, by J.E. Bardach et al., 1980, International Center for Living Aquatic Resources Management, 512 pp.

Biomass Projects Products: Planning and Management, edited by Louis J. Goodman and Ralph N. Love, 1981, Pergamon Press, xiv, 184 pp.

Small Hydroelectric Projects for Rural Development: Planning and Management, edited by Louis J. Goodman et al., 1981, Pergamon Press, xiv, 200 pp.

Ok Tedi: Evolution of a Third World Mining Project, by William S. Pintz, 1984, Mining Journal Books Ltd., vii, 206 pp.

Plant Species Reportedly Possessing Pest-Control Properties – An EWC/UH Database, by M. Grainge et al., 1985, 240 pp.

Other RSI publications relating to the Pacific include topics such as case histories of rural development energy projects, energy for the people of the Pacific, a computer integrated manufacturing system with proposed application to the sugar cane industry, Big Island woodchips to energy revisited, a review of labor relations in Australia's black coal industry, nuclear waste disposal issues in the Asia-Pacific region, taxing mineral resource projects in Papua New Guinea, and the evolution of property rights in pre-missionary Hawaii. Also, the use of ocean resources, rural electrification in Papua New Guinea, a techno-economic analysis of the Pacific refinery concept, rural electrification in the Cook Islands, a Taveuni case study of wood-fired cogeneration for rural Pacific communities, and household income, expenditure, and the role of electricity in Pohnpei. Others are on environmental negotiations for the Ok Tedi Mine in Papua New Guinea, the financial structure of the Bougainville Copper Mine in Papua New Guinea, Papua New Guinea case studies of resource assessment in national planning, the potential of using selected plant species for pest control and rural development by limited-resource farmers, survey results of a comparative analysis of fertilizer marketing systems in some

developing countries, petroleum resources in the Asia-Pacific region, and energy conservation policies in the Asia-Pacific region.

Major Pacific-oriented publications of the **Environment and Policy Institute** include:

Renewable Energy Prospects, edited by Wilfrid Bach et al., 1980, Pergamon Press Ltd., xv, 310 pp.

Assessing Tropical Forest Lands: Their Suitability for Sustainable Uses, edited by Richard A. Carpenter, 1981, Tycooly International Publishing Ltd., xiv, 337 pp.

Environmental Law and Policy in the Pacific Basin Area, edited by Ichiro Kato et al., 1981, University of Tokyo Press, ix, 229 pp.

Economic Approaches to Natural Resource and Environmental Quality Analysis, edited by Maynard M. Hufschmidt and Eric L. Hyman, 1982, Tycooly International Publishing Ltd., x, 333 pp.

Environmental Planning Guidelines for Offshore Oil and Gas Development, edited by John T.E. Gilbert, 1982, University Press of Hawaii, 64 pp.

Environment, Natural Systems, and Development: An Economic Valuation Guide, by Maynard M. Hufschmidt et al., 1983, The Johns Hopkins University Press, x, 338 pp.

Forest and Watershed Development and Conservation in Asia and the Pacific, edited by Lawrence S. Hamilton, 1983, Westview Press, xxiv, 560 pp.

Natural Systems for Development: What Planners Need to Know, edited by Richard A. Carpenter, 1983, Macmillan Publishing Co., Inc., xxxii, 485 pp.

Technical Environmental Guidelines for Offshore Oil and Gas Development, edited by John T.E. Gilbert, 1983, PennWell Books, xii, 330 pp.

Tropical Forested Watersheds: Hydrologic and Soils Response to Major Uses or Conversions, by Lawrence S. Hamilton with Peter N. King, 1983, Westview Press, ix, 169 pp.

Water Management and Environmental Protection in Asia and the Pacific, edited by Ichiro Kato et al., 1983, University of Tokyo Press, x, 202 pp.

Handbook for Mangrove Area Management, edited by Lawrence S. Hamilton and Samuel C. Snedaker, 1984, Environment and Policy Institute, International Union for the Conservation of Nature and Natural Resources, U.N. Educational, Scientific and Cultural Organization, and U.N. Environment Programme, xii, 123 pp.

Source Book for Watershed Managers, by Peter N. King et al., 1984, Man and Biosphere, East-West Center, and University of Arizona, viii, 176 pp.

Coal Transportation in Asia and the Pacific: Infrastructure and Environmental Considerations, edited by Toufiq Siddiqi et al., 1985, Pasha Publications, iv, 275 pp.

Coastal Zone Management in Asia and the Pacific, edited by Ichiro Kato et al., 1985, University of Tokyo Press.

Consensus and Confrontation: The United States and the Law of the Sea Convention, edited by Jon M. Van Dyke, 1985, The Law of the Sea Institute and the University of Hawaii, x, 576 pp.

Economic Valuation Techniques for the Environment: A Case Study Workbook, edited by John A. Dixon and Maynard M. Hufschmidt, forthcoming 1986, The Johns Hopkins University Press.

Other EAPI publications include a study of government organization for natural systems management, a selected, annotated bibliography of watershed forest influences in the tropics and subtropics, an agroforestry primer, and a guide to sustainable development. Others address topics such as agroforestry systems, silvicultural biofuel development in Hawaii, forest land-use effects on erosion and slope stability, environmental considerations for biomass energy

development, environmental aspects of energy development, land-use issues in biomass energy planning, energy resources in developing countries and priority markets for the use of solar energy, relevant planning and management in natural resource economics, watersheds and rural development planning, integrated watershed management research for developing countries, and environmental standards and national energy policies. Other topics include industrial policy offshore, seabed mining technology, fish yields from various tropical ecosystems, the impact of uninhabited islands on the ownership of ocean resources, alternative tuna fishery arrangements, and ocean boundaries in the South Pacific.

Publications from the **Pacific Islands Development Program** include:

Country Profiles (Cook Islands, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Solomon Islands, Tonga, Tuvalu, Vanuatu, and Western Samoa), by Angela Barzelatto Franco et al., 1982, 126 pp.

Disaster Preparedness and Disaster Experience in the South Pacific, by Angela Barzelatto Franco et al., 1982, 380 pp.

Center publications include a guide to building disaster-resistant housing.



Energy Mission Reports (Cook Islands, ix, 87 pp.; Fiji, vi, 49 pp.; Kiribati, ix, 84 pp.; Niue, vi, 49 pp.; Ponape, vi, 57 pp.; Solomon Islands, ix, 177 pp.; Tonga, ix, 100 pp.; Tuvalu, viii, 71 pp.; Vanuatu, ix, 94 pp.; and Western Samoa, ix, 101 pp.), by Ken Newcombe et al., 1982, East-West Center, South Pacific Bureau for Economic Cooperation, Australian National University, U.N. Economic and Social Commission for Asia and the Pacific, European Economic Community, U.N. Development Programme, and U.N. Development Assistance Team.

Bibliography: Energy in the Pacific Region, by Lynne Freeman, 1984, ii, 280 pp.

Dealing with Disaster: Hurricane Response in Fiji, by John R. Campbell, 1984, xxvi, 209 pp.

A Melanesia Bibliography: Selected References for Fiji, Papua New Guinea, Solomon Islands, Vanuatu, New Caledonia, and Irian Jaya, by Terence A. Wesley-Smith and Michael P. Hamnett, 1984, 47 pp.

Procedures and Guidelines for Disaster Preparedness and Response, by Air Vice Marshal W. Carter, 1984, vii, 195 pp.

Reducing the Vulnerability of Housing to Natural Disasters: A Proto-type Program Developed in the Solomon Islands, by Michael P. Hamnett and Soane Hurrell, 1984, iv, 125 pp.

A Review of Aquaculture Activities in the Pacific Islands Region, by Roger K. Uwate et al., 1984, x, 482 pp.

COMPRAN: The Project Analyst – A Computerized Project Analysis Package for Developing Countries, by Michael McCullough et al., 1985, a joint project of the East-West Center's Pacific Islands Development Program and Resource Systems Institute, and Ohio State University's Department of Agricultural Economics and Rural Sociology, East-West Center, v, 249 pp.

Disaster Preparedness and Disaster Experience in French Polynesia, by Jean-Francois Dupon, 1985, 85 pp.

Island Economies: Studies from the South Pacific, by Te'o I.J. Fairbairn, 1985, Institute of Pacific Studies, University of the South Pacific, 444 pp.

Multinational Enterprises in the Developing South Pacific Region, by Te'o Fairbairn and Thomas G. Parry, 1985, Pacific Islands Development Program, 101 pp.

Preparation aux Desastres et Experience des Desastres en Nouvelle Calédonie, by Jean-Francois Dupon, 1985, 76 pp.

Preparation aux Desastres et Experience des Desastres a Wallis et Futuna, by Jean-Francois Dupon, 1985, 67 pp.

Renewable Energy Assessments: An Energy Planner's Manual, by Marcia M. Gowen, with the assistance of Herbert A. Wade, jointly published with the Resource Systems Institute, 1985, xviii, 227 pp.

Considerations for Preparing an Aquaculture Feasibility Study in the Pacific Islands Region, by Roger K. Uwate, forthcoming 1986.

In relation to its disaster project, PIDP has published reports on building economical island housing, structural standards for cyclone-resistant buildings, agricultural preparedness, public health preparedness, economic vulnerability reduction and recovery, training and preparedness strategies, future needs for the Pacific, and reducing housing vulnerability.

In the area of aquaculture, PIDP has published reports on aquaculture development in the Pacific islands region, porpoise/dolphin fishery interference in Kiribati, the stoney coral market in Hawaii, training opportunities in Hawaii, a review of aquaculture activities in the Pacific islands region, fish and animal protein markets in Kiribati and in Tonga, mullet, Temaiku milkfish, Temaiku baitfish, tidal area usage, and record-keeping.

Under its energy project, reports include rural electrification guidelines and assessments and issues, a techno-economic assessment of the Pacific refinery concept, household income, expenditure, and the role of electricity in Pohnpei, a Taveuni case study of wood-fired cogeneration for rural Pacific communities, abstracts of energy literature in the Pacific islands region, and a thesaurus for energy and rural development.

From its research on multinational corporations, PIDP has published a bibliography on tuna fisheries in the Pacific islands region, a bibliography of transnational corporations in insular Pacific, reports on opportunities for foreign investment in the tuna industry, import regulations in United States, with a focus on tuna commodities, multinational enterprises in the developing South Pacific region, financial center options in the South Pacific, role of financial centers in the Pacific's economic development, and resource use arrangements in the southwest Pacific fisheries.

Under its indigenous business development project, PIDP published surveys of indigenous businesses in Fiji and the Solomon Islands.

Other units, such as **Student Affairs and Open Grants, Centerwide Programs**, and the **Public Affairs Office**, have published works on Asia-Pacific regionalism, management training for public works projects, training seminar for management of public works projects, food security in the Asia-Pacific region, guidelines for writers of case histories, small-scale fisheries development, public irrigation programs, and livestock development.

For a complete list of publications available from the East-West Center, write East-West Center Distribution Office, 1777 East-West Road, Honolulu, Hawaii 96848 USA.

Program Representatives in the Pacific Islands

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The East-West Center has cooperative arrangements within many countries and territories in the Pacific islands region through which in-country program representatives assist the Center in recruiting, advising, and selecting participants. Applicants should identify a program representative on the basis of their legal permanent residence. Following are the addresses of program representatives in the Pacific islands:

AMERICAN SAMOA

Degree student awards only
Deputy Director Public Affairs,
Personnel and Liaison Services
Department of Education
American Samoa Government
Pago Pago, American Samoa 96799

All other awards
Chief Training Officer
Office of Manpower Resources
American Samoa Government
Pago Pago, American Samoa 96799

AUSTRALIA

Executive Officer
Australian-American
Educational Foundation
Churchill House
218 Northbourne Avenue
Canberra, A.C.T. 2601
Australia

COOK ISLANDS

Principal Training Officer
Manpower Training Unit
Public Service Commission
P.O. Box 24
Rarotonga, Cook Islands

FIJI ISLANDS

Cultural Affairs Assistant
American Embassy
31 Loftus Street
P.O. Box 218
Suva, Fiji

GUAM

Dean
Graduate School and Research
University of Guam
UOG Station
Mangilao, Guam 96923

MICRONESIA

Federated States of Micronesia
Office of the President
FSM National Government
Kolonja, Pohnpei 96941

Commonwealth of Northern Marianas

Student Services Counselor
Northern Marianas College
Box 1250
Saipan, Mariana Islands 96950

Republic of Belau (Palau)
Student Services Office
Department of Education
Koror, Republic of Belau 96940

Government of the Marshalls
Secretary of Education
P.O. Box 3
Majuro, Marshall Islands 96960

NEW ZEALAND

Degree student awards only
Award Services Officer, East-West Center

All other awards
East-West Center
Programme Representative
New Zealand Council for
Educational Research
Education House
178-182 Willis Street
Wellington 1, New Zealand

PAPUA NEW GUINEA

EWG Representative
U.S. Information Service
American Embassy
P.O. Box 1492
Port Moresby, Papua New Guinea

SOLOMON ISLANDS

Head, Overseas Training Unit
Permanent Secretary
Ministry of Education and Training
ATTN: Overseas Training Unit
P.O. Box 584
Honiara, Solomon Islands

TONGA*Degree student awards only*

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Ministry of Education
Nuku'Alofa, Tonga

All other awards

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Secretary to Government
Prime Minister's Office
Nuku'Alofa, Tonga

WESTERN SAMOA

The Secretary for Foreign Affairs
Foreign Affairs Department
P.O. Box 193
Apia, Western Samoa

*For other Pacific islands, potential participants
should contact the Award Services Officer at the
East-West Center.*

About the East-West Center

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The East-West Center brings people together from the United States, Asia, and the Pacific to study and seek solutions to problems of social, economic, and cultural change. Located in Honolulu, Hawaii, the Center supports students and conducts research programs in which people of many cultural, political, and professional backgrounds collaborate on the region's most critical issues.

Providing an institutional link among nations and peoples, the Center's interests extend from Iran eastward through Asia to Japan and from Australia across the Pacific to the United States. Each year, two-thirds of the nearly 2,000 Center participants come from Asia and the Pacific, and one-third come from the United States.

The Center is an educational, non-profit public institution with an international Board of Governors. The United States Congress established the Center in 1960, and principal funding comes from an annual appropriation by the Congress. Additional financial support comes from nearly twenty-five Asian and Pacific governments as well as private foundations, public agencies, corporations, and individuals.

East-West Center research is conducted in four institutes — Culture and Communication, Environment and Policy, Population, and Resource Systems — and one specialized program, the Pacific Islands Development Program. The institutes and programs conduct research on issues selected by Center staff and by Asian and Pacific nations after examination of regional needs.

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Development Program

Maynard M. Hufschmidt
Acting Director, Environment and Policy Institute

Sumi Y. Makey
Dean, Student Affairs and Open Grants

Seiji Naya
Director, Resource Systems Institute

Pacific Islands Conference Standing Committee

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The Rt. Honorable Ratu Sir Kamisese K. T. Mara
Chairman, Standing Committee, Pacific
Islands Conference
Prime Minister of Fiji
Suva, Fiji

The Honorable Dr. S. Langi Kavaliku
Secretary-General, Pacific Islands
Conference
Minister of Education, Works and Civil
Aviation
Kingdom of Tonga
Nuku'alofa, Tonga

The Honorable Mabe Tupouniua
Observer, Standing Committee, Pacific
Islands Conference
Director, South Pacific Bureau for
Economic Cooperation
Suva, Fiji

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Cook Islands
Rarotonga, Cook Islands

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Micronesia
Kolonja, Pohnpei
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Beretitenti of Kiribati
Republic of Kiribati
Bairiki, Tarawa, Kiribati

The Honorable Paias Wingti
Prime Minister
Government of Papua New Guinea
Port Moresby, Papua New Guinea



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1777 East-West Road
Honolulu, Hawaii 96848