

**AREAS FOR POSSIBLE COLLABORATION IN FISHERIES
TRAINING AND EDUCATION:**

THE PIN PERSPECTIVE

BY

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The Pacific Island Nations Perspective:

1.0 Background

This paper covers the fisheries activities of the South Pacific Island Nations. Many of these States have only recently achieved their independence while some do not as yet have full status as independent States. Almost all are still heavily dependent on external economic and technical assistance for maintenance of their material standards of living and for further economic progress. The countries are determined to reduce their dependency on such outside assistance; the stated national objectives of almost all the States emphasise the achievement of economic self-reliance (mainly through the development of local industries) as a major goal. The provision of meaningful income earning employment for those people wishing to participate in the cash economy is a complementary objective of most States. At the same time, most governments have placed high priority on maintaining traditional ways of life. Thus, they aspire to achieve economic progress in a manner consistent with existing cultural values. The achievement of the dualistic goals of substantial economic progress and maintenance of traditional values represents a very difficult challenge. Economic development most commonly involves the creation of income-earning work forces, westernised working routines, and often, movements of population to industrial work sites, activities that are usually incompatible with the maintenance of traditional village life. The challenge is to find the best balance between the somewhat opposing objectives. Most governments are searching for ways to create small-scale income-earning opportunities in the villages to provide an economic base for continued village life and to meet the needs of villagers who wish to earn money without having to move to urban centres. Such village level activities, however, cannot ever make economic contributions at the levels required to decrease substantially the dependence of island nations on external assistance; industrial-scale ventures are therefore a necessity.

Fisheries is one of the few fields that can contribute to both the development of income earning opportunities at the village level consistent with traditional cultural values, and to development of large-scale industrial enterprises required for major economic progress.

1.1 Near-shore Fisheries

Approximately 5.0 million people inhabit the Island States of the South Pacific. Over three million of these live in Papua New Guinea and another 1.0 million live in the next two most populous countries, Fiji and Solomon Islands. These three nations possess substantial land masses and expanding urban centres. Their traditions lie mainly with the land and except in coastal areas, agriculture has always supplied the basic subsistence needs for food. The remaining 1.0 million island people of the South Pacific live in 12 small States or territories consisting mainly of chains of scattered islands, many of them barren atolls. For most of the people in these small States and also for the coastal populations of the three larger nations (altogether totalling close to a million people) marine products from the reefs, lagoons and near-shore areas of the open ocean have always been, and in most cases remain the chief source of protein and, fishing forms an important part of the cultural life in most of these small nations.

Although there have always been periodic shortages of marine product supplies in some areas, in most, customary conservation practices have maintained near-shore resources at levels sufficient to meet the local subsistence needs of the relatively small populations. Today, with rapid population growth, the development of cash economies, and urbanisation which has created commercial market demand, inshore fishing pressure has increased and there is concern in many places that the sensitive resources of the reefs and lagoons are being over-exploited. These resources therefore offer only modest opportunities for economic expansion. Indeed, in order to maintain village life in coastal areas in a traditional manner, many island States are now attempting to discourage increased commercial harvest of reef and lagoon creatures.

Nevertheless, on those islands with reefs sloping more gradually into the offshore deep where deep-bottom fishes and crustacea can be found, and in areas where large pelagic fish such as tuna, mahi mahi and wahoo migrate close to shore, opportunities exist for village fishermen (using modern small-scale fishing techniques) to catch fish surplus to village needs, which can be sold on commercial markets in urban centres and even overseas. Fishing is one of the few alternatives for creating new cash income in the villages in a manner consistent with traditional life styles. At the same time, the harvests of village fishermen meet the food requirements of urban dwellers, reducing the latter's need for expensive imports, thereby contributing to national economic self-sufficiency.

1.2 Offshore Fisheries

Because near-shore resources are limited, the small-scale fisheries can never make a major contribution to economic development of island countries. Fortunately, the waters off the shores of most island States are inhabited by abundant populations of tuna and other pelagic fishes which migrate broadly throughout the Region. The pelagic resource is now fished mainly by the industrial fleets of Japan, the United States, Taiwan and Korea, but in the past 15 years, a number of local island countries have developed their own medium-scale industrial tuna fisheries. Annual commercial catches of tuna in South Pacific waters currently total around 450,000-550,000 mt. Most tuna is sold on world markets for canning (mainly in the United States) but substantial amounts are sold as frozen or smoke-dried products (mainly in Japan). Most of the catch is composed of skipjack although higher priced tuna species are caught as well. The South Pacific currently provides about one-quarter of the world tuna catch in terms of weight and over one-half of the world catch of skipjack.

The landed value of tuna taken in the South Pacific (including high seas areas) now approximates US\$900 million per annum, a value almost as great as that of combined exports of all other renewable natural resource products from all South Pacific island countries.

Recent scientific assessments indicate that present levels of skipjack catch are far less than could be harvested on a sustainable basis without endangering the stocks. Thus, the total economic returns from the fishery could be substantially higher. Clearly, tuna represent the Region's most valuable renewable resource, and, in the long term, probably its most valuable asset overall.

At present, the very substantial benefits flowing from the resource accrue mainly to distant water fishing nations. The harnessing of this resource for the benefit of the island countries represents perhaps their greatest opportunity to achieve economic self-sufficiency. For some, it may represent the only hope of ever approaching this goal. The recent changes in the Law of the Sea, granting coastal States sovereign rights for the exploitation of the resources within 200-mile zones, and the fact that the interlocking zones of the island nations cover the great majority of the South Pacific ocean's surface provide excellent opportunities for island States to gain substantial increased benefits from the tuna resources off their shores in the future.

1.3 Future Development Strategies

Thus, when considering the future of fisheries development in the South Pacific, there would seem to be three imperatives:

- 1.3.1 preservation of the fragile resources of the reefs and lagoons on which traditional life styles of most island nations depend;
- 1.3.2 modest development of small-scale near-shore fisheries to create employment opportunities at the village level and to supply local urban and export markets;
- 1.3.3 development of industrial fisheries (either local or foreign) to increase the benefits accruing to island States from offshore tuna resources.

2.0 Introduction

2.1 Fisheries Education and Training

Marine resources remain, for most of our Pacific Island countries, the major potential for economic development. The rational management of these for maximum benefits to the countries themselves, hinges largely on the availability in-country of a cadre of appropriately trained people. To date, the countries sadly lack the trained manpower to effectively manage their resources.

While the onus rests with the countries on the development of their human resources, the capacity to effectively carry these out in-country is often not fully utilised. To this end, the regional training institutions and the donors could play a leading role. However, these roles must be well coordinated to ensure that training offered are appropriate and support given is conducive to the coordinated development of regional fisheries administrations.

With a few notable exceptions, fisheries administrations of Pacific Island Nations are very small and lack of qualified manpower is a major constraint to accelerated fisheries development. Deficiencies vary from country to country in both quantitative and qualitative terms but generally, shortfalls exist at almost all levels in government fisheries services. Only a few of the island countries have well developed phased ~~developmental~~ ^{developmental} assistance needs can be based beyond the next year or two. This deficiency creates difficulties in generating technical and

financial support on a consistent basis. In some cases, it leads to donor-supported programmes being the major forces directing fisheries development; preoccupation with managing such programmes and meeting donor requirements leaves scant time for small staffs to develop broader, longer range view points regarding future fisheries development activities. To a considerable extent these deficiencies are due to lack of skilled managers and planners.

Lacking local staff, administrations of most island countries have leaned heavily on expatriates. Indeed, until very recently, the Chief Fisheries officers and senior experts of virtually every island country came from outside. In many countries, foreign volunteers have participated at the field level. Expatriates at all levels have contributed importantly towards the shaping of national fisheries policies and programmes of the islands at a time when the fisheries of the Region have been developing with stunning rapidity.

Considering the sophistication of modern fisheries development, especially in the tuna field expert expatriate advice will undoubtedly be required for some time. Unfortunately, this dependence, especially in key administrative and policy positions, slows progress toward development of local capability on which the long term success of fisheries development in island countries will depend. Most island governments have therefore embarked upon policies to develop national capabilities in the fisheries field and are attempting to accelerate the process of "localisation". A few countries are well advanced with the majority of their staffs at both the professional and technical levels being local citizens while some others have recruited nationals to key senior positions within the past year, and that in several other countries, nationals occupied second level positions and were designated for promotion to Chief Fisheries Officer posts in the near future. Nevertheless, the Fisheries Divisions of most countries are woefully short of local technical and professional staff. In particular, there are very few nationals qualified to fill middle level and technical positions. Even at lower levels (e.g., extension officers), where training requirements are not as extensive as those for more senior positions, there is an acute lack of qualified personnel.

2.2 Reasons for lack of qualified personnel include

- 2.1.1 Lack of educated candidates - In a number of countries only a small proportion of the population receives education to the school leaving level (a normal pre-requisite for

further professional training). Those that do acquire education to University qualifying level are much in demand for positions in a wide variety of government ministries and in the private sector. Fisheries, long considered merely a subsistence-level activity, is not viewed as highly as many other fields (e.g., finance or law) and fails to attract suitable candidates for administrative, technical or professional positions;

- 2.1.2 Lack of incentives to enter the public service
- In some island countries, pay scales and other incentives to enter the government service are unattractive compared to other employment alternatives. As outlined in the foregoing paragraph, fisheries is not considered a prestigious field in many South Pacific countries and qualified people who do enter the government service therefore tend to seek positions in other divisions;
- 2.1.3 Staff ceilings - Budgetary restraints in several island countries sharply limit the numbers of people that can be employed in Fisheries Divisions. Under these circumstances, staff classification levels tend to be low. In some cases such restraints apply broadly throughout the government service but in others, fisheries work is given relatively less emphasis. With very small staffs and salary levels too low to attract professionals, great difficulties are faced in organizing effective fisheries development programmes;
- 2.1.4 Lack of training - Even where employment conditions and manpower ceilings provide sufficient flexibility to develop adequately staffed fisheries divisions, all but a few countries lack sufficient trained personnel to fill available positions. This is not surprising considering the relative newness of development programmes in most countries and the fact that it takes several years to identify, recruit and train future technical personnel.

3.0 Training Opportunities In the PIN Region

3.1 There is a considerable range of fisheries training opportunities available to South Pacific islanders including:

- 3.1.1 The Nelson Polytechnic Institute, sponsored by SPC and New Zealand, which offers a 5-month practical course, mainly for fisheries extension officers of island countries. The course accommodates 10 to 15 students a year and has a waiting list
- 3.1.2 The Diplomat course in Tropical Fisheries given by the Institute of Marine Resources of the University of the South Pacific, which offers two to three years of instruction in fisheries (depending on the qualifications of applicants). Since its inception in 1975, the course has graduated almost 200 students, most of whom have found employment in island fisheries divisions as extension workers. Over two-thirds of the students have been Fijians. Demand for the course has dropped off recently (mainly because Fiji has filled most of its civil service fisheries extension positions) but renewed interest is being shown by governments of States of the former Trust Territories which have urgent training demands.
- 3.1.3 National training courses. A number of countries offer training in navigation, seamanship and marine engineering or technology (e.g., in Honiara, Solomon Islands; in Suva, Fiji; and in Lae, Papua New Guinea) which are relevant to fisheries.
- 3.1.4 Overseas practical fisheries training courses, including those offered by Japan, the United Kingdom (Grimsby-Hull) and the Republic of Korea, have accommodated trainees from island countries from time to time. The University of the South Pacific offers a B.Sc. degree including some courses in marine biology. Several professional fisheries staff of island governments are USP graduates. Other professional staff of island fisheries divisions are graduates of universities in New Zealand, Australia, Japan, the United Kingdom and the United States.

3.1.5 Workshops, sponsored by SPC and FFA (with financial support from agencies such as UNDP/FAO) offer opportunities for technical exchange and training within the Region. In connection with its annual Technical Meeting on Fisheries, the FFA and SPC regularly select a topic of wide interest for discussion among fisheries officers of island countries; the FFA 1991 meeting featured Fisheries Education and Training - the fore-runner of the current workshop. FFA has sponsored workshops on EEZ management and on access arrangements for foreign fisheries.

3.1.6 Short-term training. There have been few short-term training courses on specialist subjects held in the Region.

3.1.7 On-site training. A number of assistance projects involve demonstration trials and training of small-scale fishermen in modern fishing techniques on the grounds in individual island countries. The most active continuing programme is SPC's Deep Sea Fisheries Project which involves country visits by three masterfishermen. Since its conception in 1978, the Project has completed well over 100 assignments in 15 countries offering training to over 2,000 fishermen and government personnel in fishing techniques, boat handling, safety at sea, maintenance of boats and equipment and fish handling and

3.2 Fisheries administrations in island countries regard the available training opportunities highly but there are concerns that present efforts are too fragmented and do not offer a sufficiently comprehensive range of courses to cover existing needs. On the other hand, there seem to be "booms and busts" in demand for training of different types, at different levels of complexity. For example, the USP Diplomate Course was popular for a number of years but demand declined when Fiji's active recruitment programme for fisheries officers tapered off. It can be anticipated that needs for specific types of training will fluctuate significantly as island fisheries administrations mature. It might be anticipated that after demands for fisheries extension officers (needed now in most countries) are met, training in other fields (e.g., processing, marketing and resource management) may increase. In the long term, there would seem to be a need to be able to project future requirements for trained personnel in various

skills and at various levels in order to anticipate and plan future training activities.

- 3.3 Training is obviously a field in which external development assistance, both financial and technical, plays an important role. As outlined above, to ensure that training facilities will be appropriate and adequate in the future, it would seem most desirable for island countries to generate indicative manpower development plans (in terms of numbers, skills and level of proficiency); to collectively monitor the results of staff development and training programmes; and to provide such information to training institutions and assistance agencies interested in supporting training activities. In turn, it would be desirable for consultations to be held between representatives of island governments and such institutions and agencies to ensure that the development of training programmes was meshed in scale, time and subject matter with the merging needs of local governments.

4.0 Arrears of Possible Collaboration

- 4.1 Any attempt at collaborative approaches in fisheries education and training must take account of the future fisheries development strategies of PINs (Section 1.3) as well as the available range of training opportunities in the Region (Section 3.0).
- 4.2 For such collaboration to be effective, there would need to be a coordinating mechanism within the PIN region to ensure that efforts are well tailored for maximum benefits to accrue to the targetted clientele. Otherwise the adhoc nature of development assistance for training currently in existence will continue.
- 4.3 It would be easy to produce a shopping list for the various areas where possible collaboration could be effected. However, the major areas of training needs in the region are well documented in the report by the ICOD funded and SPC coordinated Fisheries Human Resources Development Survey Mission that went around the region in 1991.
- 4.4 The paper on "Programmes for Information/Student/faculty exchange between the two region" will clearly set out collaborative approaches and their implementation mechanisms.

4.5 However, from a PIN perspective, such collaborative approaches can only be effective if a body, whether it be from within an existing regional organisation or institution is tasked the responsibility for coordinating these efforts. Without the clear mandate for this coordination unit to a specific body, the adhoc approaches to inter-regional collaboration will continue.
