

**HUMAN RESOURCE DEVELOPMENT AND PLANNING  
IN THE PACIFIC ISLANDS  
FISHERIES SECTOR**

**SUMMARY OF A CONSULTANCY REPORT**

**PREPARED**

for the

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## **EXECUTIVE SUMMARY**

Discussions among regional fisheries managers and planners between 1986 and 1990, concerning the education and training needs of fisheries organisations in developing Pacific island countries, determined that a study was necessary to:

- gather information on fisheries personnel in the region;
- on an individual country basis, determine the training and education necessary to meet fishery development objectives;
- provide advice on updating existing staff development plans;
- draw qualitative and quantitative conclusions on future training requirements, and;
- seek the view and contributions of national educational establishments on the above.

The four-member study team assembled to undertake this task visited 10 countries during December 1990 to March 1991. An additional five countries were visited by three of the team members in April-May, 1991. The logistics of the study were such that each country visit was limited to a three to five-day period.

For several reasons, this study has not met all of the established terms of reference. The study has, however, examined the existing impediments to the effective human resource development planning within the region and has made 109 recommendations directly to national governments and formulated 47 recommendations of a more general nature to address issues common to most countries visited. It is considered that these recommendations, if acted upon, will considerably improve the possibility for effective human resource development planning.

The major themes or issues which have emerged as a result of this study, and upon which the team has based its recommendations, include the following:

- the lack of effective regional coordination of education and training;
- the absence of long-term human resource development plans;
- the "project-oriented" approach to fisheries development in the absence of overall fisheries policy;
- the lack of personnel information for use by regional donor and educational institutions;
- the lack of public awareness about fisheries resources, careers, and the principles of sustainable development;
- the failure of government systems, e.g. personnel and education, to keep up with the pace of development;
- the lack of effort in resource assessment;
- the reluctance by donor agencies to support in-country and/or regional educational institutions;
- the immediate need for management training for senior fisheries staff, and;
- the need to provide development opportunities to support privatisation;

## **BACKGROUND**

The management and development of the fisheries sector of Pacific Island countries depend to a very large extent on the leadership and skills of the very limited qualified human resource base available to government fisheries organisations. The private sector, in most countries, is not well developed for several reasons, including; geographic location, economic capability, and the state of the resource itself. Accordingly, the private sector contributes very little to the labour pool upon which fisheries organisations can draw. Indeed, the situation is

such that government employees, in many countries, are called on to manage a private business resulting from direct government intervention.

During the last decade, staff in relatively small fishery organisations have undertaken, with considerable assistance from aid donors, a large amount of education and training to meet the growing demands placed upon them both by government and private sector initiatives. Great progress has been made, but lingering concerns continue to exist with respect to the effectiveness of the education and training received.

A survey of the existing education and training being undertaken and the education and training needs of the region's fisheries organisations was completed in 1985/86 by the Regional Fisheries Training Project of the South Pacific Commission. The survey illustrated a diversity of problems associated with training. Most countries at that time identified lack of skilled manpower as the principal constraint to effective fisheries development.

As a result of a widely expressed concern over issues related to training and human resource development, SPC obtained funding from the International Centre for Ocean Development (ICOD) Canada, to support the Human Resource Development study.

## OBJECTIVES

The objectives of the study were stated in the Terms of Reference as follows:

1. *Update the existing information already collated by SPC on fisheries personnel in island fisheries administrations, regional organisations, and elsewhere.*
2. *Through review of existing documentation (five-year plans, existing staff development plans, etc.) and by in-country discussion with senior fisheries and government personnel, develop on an individual country basis a perspective of future fisheries management and development programmes planned in the countries, intended staff numbers, and mixes of skills and levels of competence required for the effective conduct of such programmes.*
3. *Review existing plans for staff development and, where appropriate, provide advice on updating such plans.*
4. *Draw conclusions on future requirements for training in both qualitative and quantitative terms at all levels (both academic and vocational).*
5. *At all stages of the consultancy liaise with regional and national educational establishments to inform them of the purpose of the study and seek their perspective.*

## Comments:

Educational institutions and regional organisations have made it clear that a personnel database covering all regional fishery workers is needed. Such a database, if updated on a regular basis and developed to include the educational and training needs identified in national human resource development plans, would become an extremely valuable tool in developing educational and training programmes to predict and meet national and regional needs. The SPC's Regional Fisheries Training Project currently maintains an electronic database on regional staff who have taken SPC-sponsored courses. This database holds records on approximately 331 regional workers.

Prior to this study, each country visited was requested to provide personnel information

on each established employee. An appropriate format was distributed before the team's visit, with the hope that the completed forms could be collected on site. Unfortunately, due to communication difficulties and the absence of key fisheries staff attending to other priorities, the forms were not completed for many countries. The short time in each country did not permit collection of the necessary data; a task which for many reasons (i.e. distances, staff absences, jurisdictional boundaries [federal vs provincial]), is very difficult and time consuming. In any event, the team managed to collect data on a total of 252 employees, about 30% of the total estimated 849 fishery workers in the countries visited. Time did not permit the collection of similar data for regional or private-sector organisations.

For each country visited, the study has provided a brief overview of the fishery, current objectives, future development plans where available, and a description of the country's fishery organisation. The task of identifying staff members, mixes of skills, and levels of competence required for the effective conduct of future development programmes could only be accomplished in a very preliminary fashion. Most countries have in place fiscal and staffing restraint programmes which will remain in effect for the foreseeable future. In addition, many countries were visited at the end of their national planning cycles and new development plans (sectoral and national) were in the early stages of development.

The study reviewed whatever staff development plans were available. Unfortunately, no country visited had a government-approved human resource plan which listed future training and education requirement priorities in the fisheries sector, or how and when development will take place in a planned way to meet established fishery goals and objectives. In countries where education and training requirements were documented in submissions to national development planners or public service reviews, advice has been provided in the report for those countries.

The study team took the opportunity of visiting most of the educational and training institutions in the countries visited. The visits sensitised staff of these institutions to the needs of the fisheries sector and the purpose of the study. In all cases, the staff expressed the need for improved communications between educational institutions, national governments, regional organisations and aid donors. Most institutions demonstrated a helpful attitude and a willingness to be flexible in curriculum development to meet the specific collective needs of longer-term human resource development plans.

In addition to fisheries sector staff (both public and private), discussions took place with staff of Public Service Commissions or their equivalent, Planning Offices, and Education Departments. A great deal of information in the report relates to the personnel policies and practices of the countries visited. While it is perhaps not in the power of fisheries organisations to change national personnel policies, they may be in a position to influence future changes, or make minor changes of their own that assist in human resource development planning. There is no doubt that personnel policies (or the lack of policies noted in several countries) present major obstacles to effective career planning.

One of the team members (G.R. South) spent considerable time and effort with education officials to enable the study to describe the educational system of each country. Most of the information gathered by Dr South has been included in the report as the team believes that the status of the primary and secondary school systems in most Pacific Island countries presents a major constraint on the future development of national fishery organisations. It is hoped that this information will also prove useful to future studies and/or initiatives in the development of curricula related to marine resources and needed public awareness programmes.

For each of the 16 countries of the region that were visited the team has produced individual reports which together contain more than 100 national recommendations. Copies of these reports were sent to the heads of fisheries organisations of each country for comment and correction and, where we have received a response, these corrections have been incorporated. The team attempted to make national recommendations in keeping with the practicalities of country circumstances.

## **RESTRAINTS TO HUMAN RESOURCE DEVELOPMENT PLANNING**

The study report was concentrated in two sections dealing initially with restraints to Human Resource Development and secondly with Education and Training Issues. In reporting on regional situations it is impossible to account for the tremendous diversity of national situations and the study found it difficult to generalise, as each country has different development priorities, labour pools, customs and economic status. Therefore, a reader of the report from Fiji or Papua New Guinea may feel that certain restraints do not necessarily apply; whereas, the reader from Tuvalu or Palau may relate to most and, indeed, identify others that the team has missed.

### **National educational systems**

The capacity of school systems and educational standards vary widely throughout the Pacific. Some countries do not have compulsory education as the school facilities could not handle all the potential students. For the small number of students who qualify for university entrance, comprehensive scholarships are necessary because, with the exception of three countries visited, such education must be obtained overseas.

In general, there are poor communication links between resource managers and educators in terms of both curriculum development and future employment opportunities. It is interesting to note that there is a trend away from the use of old curricula primarily inherited from metropolitan countries. Curricula, in most countries now include national elements. However, it was felt by the team that these positive changes have yet to include sufficient material on marine resources.

Most countries continue to experience a shortage of teachers and school supplies, particularly at the secondary school level. Because of curricula and these two shortcomings, science literacy is low, resulting in a high failure rate for students seeking to meet the relatively high recruitment standards required for fishery sector employment.

### **Economic capabilities:**

Most countries do not have the capability to fund human resource development internally and must rely heavily on outside aid. Such aid is often tied to specific educational opportunities which do not always fit the country's needs precisely.

The public service is, in the majority of countries visited, either the largest or the only major employer. The private sector cannot play a role in developing needed staff skills for the public service as it does in developed countries. In all countries visited some form of government spending restraint was not in place. These restraint programmes include staffing freezes, public service cutbacks, elevated approval levels for any personnel action which has a cost attached, reduced working hours, and a reluctance to release key staff for development opportunities.

### **Competition for scarce human resources**

A university graduate is a valuable commodity in most developing countries. Professional positions in all Pacific island fisheries departments require such a qualification or a diploma in a related field e.g. Tropical Fisheries. Competition between government departments for graduates can be strong, resulting in inter-departmental movements and perhaps rapid advancement.

Unfortunately, it would appear that fisheries departments suffer from an outward migration, making it difficult to maintain continuity of adequate skill levels. To meet national priorities, B.Sc. graduates are often encouraged to enter a field other than fisheries. For example, in Fiji the pay for teachers has been elevated to meet severe staff shortages. The Fisheries Division cannot compete for a B.Sc. graduate, as the pay differential is large (approximately \$F2,000).

In the past, fisheries departments have concentrated their efforts in developing scientific and technical expertise to meet fisheries development needs. Such expertise is indeed required but the Survey Team noted that many of the staff returning to the departments with a BSc or a diploma in Tropical Fisheries (for example) are being employed in work areas within the department for which they were not educated. Many are employed in general project management, administration, financial management, etc. Others have had to assume responsibility for overseeing the privatisation of fishery activities which requires skills and education in such areas as small business management, marketing and post harvest fish handling. Technical areas such as stock assessment are receiving less than adequate attention as a result of qualified staff being reassigned to meet other priorities.

In addition to this in-country competition, wage disparities between adjacent countries, and the attractive salaries associated with positions in regional agencies often attract the better qualified fishery workers. For island countries closely associated with metropolitan nations the problem is worse. These countries have suffered a major 'brain drain' as their citizens may constitutionally remain overseas in the United States or New Zealand, and do so for better career and salary opportunities.

### **Personnel management systems and practices**

Most countries still depend on personnel policy systems and practices inherited from the colonial past. Some have been modified slightly to meet local needs, but most have not. Such systems were designed for much larger bureaucracies and human resource pools, and present many barriers to appropriate career progression in developing countries.

For example, most job classification systems do not recognise specialisation in fisheries, e.g. research, extension, enforcement, licensing. Selection standards, for the most part, demand a university degree or a diploma in order for an individual to be recruited as a fishery officer, regardless of the specific area of work. Such barriers to upward mobility often lead to lateral movement at the lower levels, frustrations, low morale, low productivity, and the neglect of some hard-working, talented, dedicated but unqualified staff in selection for higher-level positions.

Perhaps it is unreasonable to expect rapid major changes in these established systems. However, a better understanding of how these systems work would prove helpful. In general, there appears to be poor communication between central agencies and specialised government departments, as well as between subordinates and superiors.

Donors, educational institutions and regional organisations must deal with a wide range of differing centralised or decentralised systems to coordinate and approve training,

in some cases even requiring the approval of the Head of State. Other countries allow such training and education to take place on a bilateral basis between departments and outside funding agencies. By prior agreement, some regional agencies must deal exclusively with Foreign Affairs Departments even though circumstances have changed in-country and alternate central agency bodies have been established to coordinate aid-funded training (e.g. PNG). It is easy to understand the frustrations experienced by both sides as overseas agencies must adjust their lines of communication to meet differing national systems.

In summary, it would appear that personnel management systems have not kept pace with the development of fisheries and the organisations which have been established to manage them.

### **Lack of effective regional coordination**

National governments must know what they want when it comes to regional coordination and assistance. They must feel free to express their opinions and give direction to organisations established to serve their national needs. All too often, it appears that, direction of this type is not being received by regional organisations, donors or educational institutions. This will be efficiently achieved only if those regional organisations whose mandate includes fishery management, research and training, work in close harmony with one another. While there has been good progress towards this goal in recent years, the team is of the opinion that a much greater effort should be made by FFA, SPC, SOPAC and SPREP to better coordinate their human resource development activities in the interest of the countries they serve.

Even if each country chooses to develop its own long-term human resource development plan, without regional coordination, educational institutions will lack sufficient lead time to plan the required educational programmes because they must address the collective needs of the region if they are to be cost-effective.

### **Colonial histories**

There are many good and bad points associated with the colonial histories of Pacific island countries. On the good side, expatriates are made available on a subsidised basis and citizens of former colonial states enjoy access to educational aid packages in preference to those from other countries. For some countries a constitutional right exists to employment and citizenship in metropolitan countries.

From the negative perspective, previous sections of this report have already referred to the 'brain drain' that is taking place, and the inherited school curricula and personnel systems that are still in place. In addition, many officials interviewed criticised the fact that most educational aid demanded that training only take place in the country providing the aid and that such education was not always relevant to Pacific island needs. There remains a perception that in the short term, very little can be done to change this situation so as to allow more aid to flow to in-country and regional institutions.

### **Lack of personnel data**

As previously noted, very little data on fisheries staff exist in-country. For this

reason the study did not obtain all of the necessary data for a regional personnel database to be used by donors, educational and regional institutions. With the information that was already computerised by the SPC Regional Fisheries Training Project, and the information collected by this survey, it is estimated that about one-third of the data required to effectively plan for courses and other development programmes are now available.

In any planning exercise there must be a commitment made by those who benefit to ensure processes are followed to provide up-to-date information, so that others may get on with their own planning e.g. donors and educational institutions. If senior fisheries staff do not see a regional database as beneficial, this commitment will not be there and the lack of personnel data, with training needs added at a later date, will continue to be a serious restraint to effective human resource development.

### **Lack of flexibility to meet changing priorities**

The long time-frames involved in managing sustainable fisheries are often in conflict with shorter national three or five-year plans, and the even shorter planning time-frames associated with changing country priorities and donor-inspired programme shifts. Both national plans and donor-inspired projects are normally associated with the economic development of particular fisheries and little or no flexibility exists to shift attention rapidly to longer-range issues.

Most countries are also very vulnerable to staff shifts, sometimes resulting in a complete inability to address identified objectives. Because most departments do not have a depth of staff skills, even small shifts can be dramatic, resulting in major disruption to work programmes.

### **Low visibility of marine resources management**

It was a surprising given the high profile within fisheries divisions to note that, in most countries, marine resource management does not enjoy high visibility with the general public and government central agencies. Despite the fact that the newly extended EEZs in the region present a potential (sometimes the only real potential) for economic growth, fishery organisations, by and large, remain relatively small and receive little priority from scholarship committees.

Until such time as the economic value of a fishery is clearly documented and presented to government, and the public gains awareness of this value and the need for effective conservation and management initiatives, little will change. It is encouraging to note the initiatives which have been taken in some countries to promote fishery awareness in schools.

### **Project orientation**

It is fair to say that much has been achieved in recent years in the development of educational levels and technical skills. Much credit must be given to national governments, regional organisations and donor agencies for the progress which has been made. Unfortunately, a great deal of effort has been aimed directly at economic development in the absence of sound sustainable development policy. Aid is often tied directly to specific economic development projects and cannot be easily shifted. It is currently much easier to get funding for gear, engines, vessels, fishing tutors, etc. than to assist with conservation education, planning, policy and regulatory development, data collection, stock assessment,

etc. Donors do not always support what is vital, but what is expeditious. Some country officials have earnestly stated that more attention needs to be paid to areas of assistance and development which relate directly to ensuring sustainable use of inshore resources for the future.

### **Power of the donors**

There is, indeed, a perception in Pacific island countries that the donor is in control and must not be offended. It is perceived that the donors establish the terms of development, demand training in metropolitan countries, and are not very flexible when negative feedback is given. In one country the team witnessed a staff member being sent on a course already completed in the past because he was the only person available to go and the fisheries manager feared that he would offend the donor if no one was sent.

The team's interviews with donor agencies nevertheless revealed an openness to providing more assistance to in-country training, a wish for more national input into course design and more feedback, some flexibility in providing more support for regional educational institutions, and a desire to discuss distortions in the training process caused by widely varying allowances and access opportunities.

### **Social/cultural differences**

Social and cultural imperatives vary widely in Pacific island countries, resulting in different human resource development needs. Each country's development plan must recognise demographic patterns. In the Marshall Islands the annual population growth rate is 4%, with an average age of 15 years; the situation is much different in Western Samoa and the Cook Islands, where population are actively decreasing through emigration to New Zealand and elsewhere.

Culture can be viewed as a constraint on human resource development. The division of power between villages, provinces or states, and national governments, is sometimes quite complicated. An extreme example would be PNG with its 781 languages and 19 provinces.

### **Lack of planning capability**

Fishery organisations in Pacific island countries do not, as a rule, have any staff with experience or training in the fundamentals of planning. Most rely on the usually very small staff of central government agencies or regional organisations to develop the input for national development plans. This lack of planning capability, which must in part address the complicated jurisdictional and cultural issues, is a major restraint to the development of human resource plans.

### **Lack of human resource development plans**

Over the last five to ten years, most fisheries departments in the Pacific have experienced a period of rapid staff growth. This period of expansion has been accompanied by a great amount of staff training and development, in response to the need for departments to undertake increasing work and responsibilities.

The stage has now been reached where many departments have close to the required staff numbers, and the period of rapid growth and the need for large amounts of training has passed. An analysis of past training and present development needs indicates that the development of staff has generally been on an *ad hoc* basis to meet short-term

objectives. There has been a substantial amount of inappropriate training and a lack of longer-term planning which would coordinate staff development with overall government and/or fisheries strategic plans. This has resulted in departments not having staff with the spread of abilities to meet objectives. If care is not taken, the simplistic solution to this becomes 'more training' or 'more staff'. While more training can usually be obtained, staff numbers are regulated by budgetary constraints decided outside of the fisheries department. Without adequate long-range planning, donors, educational institutions and regional organisations will be restrained in their ability to design specific programmes to meet national needs.

## **EDUCATION AND TRAINING ISSUES**

### **Technician level training**

The Diploma in Tropical Fisheries offered by the Institute of Marine Resources (IMR) at the University of the South Pacific (since 1975), underwent a major review in 1989 (Clift Report). This review was undertaken to ensure that the curriculum reflected the needs of the student and his department, and that the subjects and standards reflected work to be performed. The study examined the work being undertaken by diplomats, and the intended work which current students would undertake on their return home.

All diplomats who were working in fisheries were interviewed, or sent questionnaires; senior fisheries personnel were interviewed or sent questionnaires; and staff at the IMR were interviewed, as were students attending the course. The conclusions made in the Clift Report were that the Diploma, as it stood, no longer reflected the needs of the region

The USP has developed a five-year plan (South, 1991) which includes the introduction of an upgraded Diploma programme and there is also a proposal to introduce a Certificate in Fisheries Studies.

This has been identified as an area of significant need and it is generally agreed that such a qualification would complement the diploma courses which USP proposes to implement, and allow persons with a lesser academic ability to gain relevant education and skills training.

### **Experiential education**

The development of personnel is an ongoing and integrated process in which formal education and training courses are but one part. In every circumstance, a variety of educational and staff development avenues are available and these should be examined to ascertain which is the most appropriate to the particular situation. Possibly because of the job classification standards which exist in all countries, the emphasis within Pacific island fisheries departments has been placed on institutionalised training and education, leading to a recognised qualification. While such education has a role, recurring comments in most countries were that some people were well trained but lacked experience and, to a lesser extent, that the particular training had not resulted in improved performance.

It is proposed that countries and donors should place more emphasis on the development of staff through individually-designed programmes which integrate work experience through attachments coupled with short training courses, rather than sending staff to a longer academic course.

## **Staff Development Officer**

In the smaller fisheries departments, the chief executive officer would most likely have a personal knowledge of the abilities, training background and likely future duties of individual staff members.

Within larger departments, with more complex structures (e.g. Papua New Guinea, Fiji, Kiribati, Solomon Islands), it is perhaps important that there be one staff member responsible for staff development and training and that the position be of sufficient seniority to allow participation in staff development issues and policy decisions.

## **Management training**

A recurring theme during the study was the identification of the need for management training for more senior departmental staff. Specific subject areas identified for inclusion in management training were personnel, finance, organisational development, administrative procedures, delegation, and accountability methodologies. Perhaps such training could be designed in a modular format to ensure that specific skills and knowledge deficiencies were adequately addressed in a cost-efficient manner.

It is interesting to note that several key research staff members have been promoted to more senior management positions, or have been assigned programme management duties, to which their academic qualifications are not directly relevant.

## **Extension training**

Over the last three years, the South Pacific Commission has conducted an extension training project which has been helpful in increasing the extension skills of fisheries staff. Through the 'train the trainer' orientation in this project there now exists, in most countries or sub-regions, the ability to conduct extension and communication skills training in-country, perhaps with the help of other country trainers or, in some cases, with overseas trainers.

## **Inshore data collection and analysis**

The continued exploration and expansion of effort in inshore fisheries is of concern to senior fisheries staff in most countries. If the fisheries are to operate on a sustainable basis, some basic stock assessment - which underlies all successful resource management - must be undertaken. An increasing effort is being directed towards the collection of inshore data which, when analysed, will lead eventually to appropriate management measures.

In many the inshore data collected in the past, or currently being collected, is not being used effectively. Those who possess the necessary academic background for this work are not always being employed in the stock assessment area because other priorities and workload preclude the possibility of doing the necessary work involved with data analysis.

## **Aquaculture training**

In most countries visited, aquaculture has been identified as a development area for government and the private sector. At the moment, many national aquaculture programmes are in a period of change and there is considerable diversity of activity. These developments will require increased research and development effort and the development of the necessary training in technical, extension and marketing skills, together with the research

infrastructure necessary to support the industry over the next five to ten years. Cost-effective training and technology transfer will be best assured through the attachment of staff to regional centres of excellence specialising in specific species. Aquaculture development requires close cooperation and planning between all relevant institutions in the region.

### **Privatisation**

In many of the countries visited, national governments have the intention, in current or future development plans, to shift certain fisheries-related activities from the public to the private sector. It is realised that such a move is necessary to meet various economic priorities (employment, wealth, localisation) and gain necessary efficiencies in order to compete internationally. Current transitional initiatives take several forms, including joint ventures with international groups, government-owned but fishermen-operated vessels, and fishermen's cooperatives. Ongoing extension work is attempting to expand this shift to the private sector in rural areas.

Most countries are limited in the human resources available to cope with this shift to privatisation. Personnel requirements for private enterprise must, in almost all cases, be drawn from government institutions.

In conclusion, it is fair to say that the HRD survey has greatly assisted in documenting the problems faced in developing human resource capacities in the fisheries sector. It has assisted in the identification of priorities and goals for training and education in fisheries into the 1990's and outlined potential mechanisms for the achievement of these goals.

## **Recommendations**

- 1. The primary focus of regional and national attention should be on the overall improvement of educational standards, with a specific goal to improve science literacy in the population at large.**
- 2. A regionally coordinated mechanism to develop and share curriculum and educational materials should be established, focusing on marine and ocean studies at the primary and secondary school levels. An associated goal should be to develop cooperative, regional programmes for appropriate teacher training, while recognising individual national goals, curricula, and cultural differences.**
- 3. Improved liaison between education and fisheries departments must be developed.**
- 4. Possible incentive schemes should be investigated by national governments to encourage returnee graduates to work at home. Wherever possible and appropriate, donors should support such initiatives.**
- 5. National governments should develop employment schemes similar to Fiji's *Youth Employment Options* for students during school holidays and for school leavers. Such schemes may assist in the development of relevant experience in the labour market, public awareness, and encouragement for more students to seek careers in fields such as marine sciences.**
- 6. During periods of fiscal and staffing restraint, donors should give more consideration to providing temporary staff to replace key employees who are upgrading their education.**
- 7. Every attempt should be made within public services to redress the differences in classification and pay scales and so avoid unwarranted shifts from disciplines for which officers have been trained.**
- 8. Understandings should be sought between member countries which inhibit the recruitment of staff sent overseas for experiential education through attachments.**
- 9. Regional organisations should formalise a regional 'interchange' programme which would provide reciprocal exchanges of staff (not necessarily concurrent) for periods of one or two years, between countries and between countries and regional organisations. These exchanges may involve aid donor salary subsidisation, should not require an established position to facilitate, and should guarantee the return of the employees to their former positions at the termination of the agreed interchange assignment.**

10. Heads of fisheries organisations should make minor adjustments to national performance evaluation forms for use in their organisations. Changes should include a section on work objectives for the next reporting period, and a section on training needs, to ensure that human resource development plans are kept up-to-date.
11. Heads of fisheries organisations should take every opportunity to promote changes to national personnel policies and systems, where such changes will promote more effective and equitable career development and advancement.
12. Heads of fisheries organisations should encourage appropriate central government agencies to communicate more effectively the way in which job classification standards are applied, so that staff at all levels have a better understanding of the qualifications necessary for career advancement.
13. While systems and policies with respect to official contact with donors and outside institutions differ and are the prerogative of each state, donors and regional organisations should review their current practices and protocols to ensure that those central government agencies responsible for human resource development are communicated with directly, where protocols permit, or indirectly by correspondence copies, to ensure more prompt action.
14. A Regional Fisheries Education and Training Coordinator position should be established preferably within an existing regional institution or programme. The duties of the Coordinator would be to:
  - a) provide advice and assistance in national human resource development planning;
  - b) provide educational and training programme information;
  - c) undertake evaluations and follow-up on training activities;
  - d) act as a liaison between national administrations, educational and donor communities, and;
  - e) maintain a regional personnel database.
15. The Regional Fisheries Education and Training Coordinator should convene and chair an annual meeting of donors, educational institutions and

national government representatives to discuss human resource development issues. The meeting should be held in conjunction with a regular meeting of an appropriate regional organisation.

16. Donors should provide more support for in-country and regional education and training.
17. The completion and regular maintenance of an up-to-date fisheries personnel database should be a regional priority task assigned to the proposed Regional Fisheries Education and Training Coordinator.
18. Aid donors should focus more funding on the development of data collection and its analysis to meet long-term sustainable fisheries development objectives.
19. Regional organisations should lend their voices to those of several countries who wish to express their concern to the Australian government about the serious negative impact that the awarding of scholarships directly to recipients, without government consultation, has on national programmes.
20. Priority should be given to the establishment of long-term regional and national programmes aimed at an improvement in public awareness of marine resource issues. Targeted groups should include:
  - schools
  - the general public
  - the media (newspapers, T.V., radio)
  - resource owners/custodians
  - resource managers and decision makers
  - private sector members engaged in resource utilisation and management
  - national, regional and local groups with an interest in marine resource issues (environmental groups, natural history clubs, service organisations, scouts and guides, womens' groups, parent-teacher organisations, village councils, etc.)
21. If requested, assistance should be provided to fishery organisations attempting to describe the national economic impact and potential of the fisheries sector for presentation to central agencies.
22. Human resource development plans should reflect the need to give more support to fisheries policy and regulatory development.

23. Wherever possible and appropriate, donors should shift funding from economic development projects to the vital need to develop long range fishery policy.
24. An appointed Fisheries Education and Training Coordinator should encourage consideration by all concerned parties of the perception that donor policies may be distorting the training process.
25. In the preparation of fisheries human resource development plans, departments should, where appropriate, seek the assistance of outside agencies and donors for the provision of the necessary expertise and funding.
26. In larger fisheries organisations, human resource development plans should include the acquisition of necessary planning skills.
27. The preparation of fisheries human resource development plans should be a priority of national governments.
28. The South Pacific Commission, the University of the South Pacific, and the Nelson Polytechnic should commence planning as soon as possible for the introduction of the proposed Certificate in Fisheries Studies.
29. Regional agencies should develop short courses coupled with individualised experience opportunities to meet short-term skill shortages in such areas as post-harvest fish handling, enforcement, licensing, catch monitoring, and proposal writing.
30. Short courses and periods of attachment to gain valuable related experience should be formally recognised as qualifications for career advancement.
31. Aid donors should lend as much assistance to work attachments as they do to training and education where such needs have been identified.
32. Larger fisheries departments should have a designated position for a Staff Development Officer. Smaller departments should have the responsibility for staff development included as part of the duties of an existing senior-level position.
33. The Staff Development Officer should have

qualifications appropriate to develop human resource development plans, liaise with senior officials in central government agencies and regional organisations, draft proposals, evaluate training received, and counsel staff.

34. The Staff Development Officer should occupy a relatively senior position in the fisheries organisation, enabling input to personnel policy decisions made by the senior executive officer.
35. Appropriate existing short courses in areas such as personnel management, financial management, report writing, administrative procedures, and organisational dynamics should be identified or, if none exist within the region, designed by regional organisations or educational institutions.
36. Management courses should, at least initially, be aimed at the most senior staff of fishery organisations.
37. Donors should support the widely-expressed need for general management training by providing funding for the development and implementation of such courses, preferably in-country.
38. The 'training the trainers' model used by SPC for its extension courses has great merit and should be followed as an appropriate model in the design and delivery of future courses in other work areas.
39. Communication and extension skills should continue to be developed through the continuation of the current extension training programme until all staff who must deal directly with community leaders and fishermen have taken such a course.
40. An upgraded 'refresher' extension course should be developed and subsequently presented to those who have taken the current course.
41. Governments must place higher priority on data collection and analysis to support management efforts for vitally important and often overfished inshore stocks.
42. Regional scientists should continue to assist Pacific island fisheries staff in identifying and prioritising important vulnerable inshore stocks. (Much work has already been done in this regard).
43. The curricula previously developed for training in

resource assessment should be examined to ensure that basic data manipulation is emphasised.

44. Educational institutions and donors should focus on the need to assist with the privatisation of the fishery sector through the development of training and funding in such areas as post-harvest fish handling, processing, marketing and small business management.
45. Effective communications must be established between Micronesian, Melanesian and Polynesian aquaculture interests to ensure effective exchange of scientific knowledge and technology, and to minimise duplication of effort.
46. Recognised centres of excellence specialising in specific species should be identified and utilised as attachment training centres in the region.
47. Aid donors should fund extended attachments to the centres of excellence for staff development purposes.