

SOUTH PACIFIC COMMISSION

TWENTY-FOURTH REGIONAL TECHNICAL MEETING ON FISHERIES
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INTRODUCTION OF A CERTIFICATE IN FISHERIES STUDIES
(Paper prepared by the Secretariat)

BACKGROUND

1 Programmes of technical and vocational training oriented towards the marine sector are carried out in almost all countries and territories of the region. The types of programme being offered vary from training for seagoing crew on merchant vessels, through marine engineering and inshore vessel pilotage qualifications, to courses in boat construction and repair and marine refrigeration. However, until recently, few national colleges or technical schools offered courses specifically designed for the fisheries sector or that included broad coverage of the many and varied skills required by fisheries officers, self-employed fishermen, and managers of fish receiving stations or businesses based on marine products.

2 It is only in the last three or four years that the number of national institutions offering fisheries-oriented programmes suitable for fisheries officers and fishermen has begun to grow. Courses are now in place or planned at the Papua New Guinea National Fisheries College, the Solomon Islands College of Higher Education, the Micronesian Maritime Academy, the New Caledonian Ecole des Metiers de la Mer, the Fiji Institute of Technology, the Vanuatu Fisheries Training Centre, and perhaps others. In most cases, however, these national programmes do not fully meet fisheries sector requirements and need to be supplemented by specialised types of training not locally available.

3 Historically, therefore, the needs of Pacific Island Fisheries Administrations for technical and vocational training have mainly been met at a regional or international level. In particular, during the past fifteen years or so, the "Pacific Island Fisheries Officer Training Course" (SPC/Nelson course) run jointly by SPC and the Nelson Polytechnic in New Zealand, and the "Diploma in Tropical Fisheries" (DTF) programme formerly offered by the University of the South Pacific (USP) through the Institute of Marine Resources (IMR), have met a major portion of the needs of Pacific Island Fisheries Departments for technical and vocational training for fisheries officers. Other programmes that have trained and certified Pacific Island fisheries officers include those run by the Australian Maritime College, and those of Hull University and Humberside College (formerly Grimsby College of Technology) in the UK.

4 In addition, numerous specialised short courses have been offered inside and outside the region. These have included programmes run by SPC, FFA and other regional organisations in response to country request, and other programmes both within and outside the region involving a variety of national and international technical, educational and funding agencies. A characteristic of this type of short course is that certification is normally on an "attendance" basis, i.e. performance is not formally assessed, participants are not subjected to testing or examination, and the certificates issued do not form part of any recognised national or international system of qualifications. As a result, governments and other employers are inclined to discount such certification when considering staff appointment and promotion.

5 In the late 1980's, the University of the South Pacific (USP) terminated the DTF programme following a review (Clift 1989) which concluded that the Diploma no longer met the needs of the region. The review recommended:

that the Diploma be upgraded to a higher academic standard, and structured so that attendance could be credited towards a degree course;

that the needs of a majority of students currently attending the Diploma programme were for a Certificate course of study at a lower academic and more practical, work-related level.

6 A USP Council meeting held shortly after the Clift review considered that the development of such a Certificate course was outside the responsibility of the University. However, this was not taken to be the Council's final position on the subject, and the Professor of Marine Studies was mandated by the University to develop a five-year plan for the Marine Studies Programme (MSP). Substantial dialogue between USP and SPC occurred during this time, and the possibility of a collaborative approach to a Certificate programme was discussed in depth.

7 In 1990 the 22nd RTMF considered a suggestion that one way to establish the proposed course was to expand and upgrade the SPC/ Nelson course to Certificate level. The proposal noted:

"it is anticipated that the majority of the course work will be conducted at a Pacific venue in conjunction with USP, making use of and strengthening the very strong practical components of the existing SPC Pacific Island Fisheries Officers course, and combining this with the breadth of academic resources of USP. Such a combined SPC/USP Certificate would not only provide the practical skills needed for the early entrant level of fisheries officer, the Certificate would have regional standing educationally and therefore acceptance within the respective national public service systems". (SPC/ Fisheries 22/ WP 18).

8 In reviewing this proposal the meeting agreed that consideration of the issue should be deferred until the completion of the SPC survey of Human Resource Development (HRD) and Planning in the Pacific Islands Fisheries Sector. The survey, which was carried out in 1991, reported its findings in detail to the 23rd RTMF, and made the following statements regarding the development of a Certificate-level course:

"Our survey has identified this (Fisheries Certificate Training) as an area of significant need. It is the belief of the team that such a qualification would complement the Diploma courses which USP proposes to implement and allow persons with lesser academic ability to gain relevant education and skills training. While this may lead on to a Diploma course, it is not considered that the two courses of study need be inter-related through credits.

"This Certificate of Fisheries Studies could be completed in about one year and, as well as including skills necessary for the technician level, would also include basic writing, science, and mathematical skills to an appropriate level. It should also include extension and administration skills, as well as an awareness of departmental procedures".

9 After considering the survey results, the 23rd RTMF

"requested the South Pacific Commission, the University of the South Pacific, and the Nelson Polytechnic to commence planning for the introduction of the proposed Certificate in Fisheries Studies as soon as possible".

10 In response to this recommendation, the Secretariat has examined the concept of a joint certificate in some depth. The major issues considered have been the course content, and the institutional arrangements under which the programme might be established. Two principal approaches to establishing the course have also been considered: upgrading the present SPC/ Nelson course to Certificate level, which would thus involve the loss of the Nelson course as it stands at present; and instituting a separate certificate programme.

COURSE CONTENT

11 Discussions at various regional fisheries gatherings over the past two years, coupled with inputs from SPC member countries and training institutions indicates that the Certificate in Fisheries Studies (CFS) programme should take about 12 months to complete, and should encompass the overall curriculum of the present SPC/ Nelson course with additional basic sciences and specialty options. In addition, it is clear that in training for a wide range of potential employment situations, a wide range of subject matter is required. Offering a compulsory core programme supplemented by a range of optional subjects would allow for the inclusion of employment-related specialisations within the course.

12 The following outline of subject areas is offered for consideration. There is potential for considerable flexibility in the development of these (and other) components.

Academic subjects. Compulsory study of English, Maths, Biology, and either Chemistry or Physics to a level equivalent to third year high school;

Vocational subjects (based on existing SPC/ Nelson Course). Programme would include Practical netting and Seamanship, General fishing subjects, Navigation and chartwork, Fish handling and quality control, Outboard motor repair and maintenance, Engineering Workshop Practice, Marine Engineering, Electronic fish finders, Boat maintenance and use of hand tools, Survival and safety at sea, Record keeping and basic book keeping, and Computer studies;

Specialised subjects. Options that could be offered include basic studies in Fisheries science and research, Post harvest technology, Practical fishing, Computers and data analysis, Commercial fishing and fisheries technology, Business management, Fishery management, negotiation and licensing, Aquaculture, and Engineering. Other options could be developed as required.

13 The level at which the academic courses might be offered requires careful consideration. Student performance during the DTF programme suggests that DTF preliminary courses would be too demanding for the proposed CFS programme, and that a school certificate equivalent may be the most appropriate.

14 An advantage of basing part of the curriculum on the existing SPC/ Nelson course is the possibility that some of the more than 150 individuals who have already successfully completed this programme could then be considered as having partially fulfilled the Certificate course requirements.

15 It should be emphasised that a full course curriculum cannot be developed without more detailed information on the numbers of potential trainees, and on the types of employment the trainees will subsequently undertake. Several member governments have advised of a shortage of fisheries technicians in a broad range of fields, including resource survey, statistical information collection, data processing, and fisheries centre management, but there is still little hard information available that indicates the actual numbers of persons requiring training in which particular areas. The results of the HRD survey underlined the considerable difficulties involved in gathering this type of data.

16 Because detailed planning and development of a CFS programme will be extremely difficult until an indication of specific numbers is obtained, ascertaining potential enrolment figures and the quantifying interest in the major fields of specialisation should be considered a high priority. It is worth recalling that many of the problems USP experienced with the DTF course arose because, after the first few years of running the course, the requisite numbers of suitable candidates were not available.

SPC/ USP/ NELSON POLYTECHNIC COLLABORATION

17 The MSP 5-year plan emphasises the willingness of USP to collaborate with SPC and Nelson Polytechnic in the development of a regional CFS programme. However, during the past two years, USP has continued to move away from supporting non-degree programmes, and towards placing a greater onus on national teaching institutions to provide vocational training and University preparatory courses. The teaching capacity of the former IMR has now been absorbed into the the Marine Studies Programme (MSP) in the School of Pure and Applied Science (SPAS). In addition to the CFS, the MSP is charged with the development of five other certificate and diploma programmes. All of these have an academic orientation, leaving the CFS as the only technical/vocational programme. There can be little doubt that official USP policy will give the academic programmes priority over the CFS programme.

18 The steps taken by the University towards relocating the Institute of Marine Resources to Honiara are not yet complete. Ultimately the relocation should present excellent opportunities for developing a CFS programme component in Honiara. However, at present the new Institute exists as a concept only, and does not yet have buildings, staff or funding. There is little prospect of a change in this situation in the immediate future. There is therefore no capacity to undertake such a collaborative programme in the short term, although USP staff have indicated their willingness to act in a consultative and advisory capacity in developing the CFS programme.

19 The temporary closure of IMR during relocation to Honiara, and the implementation of USP's policy to move away from non-academic courses, have essentially closed off the original option of a joint SPC/ USP/ Nelson Polytechnic programme, at least until the IMR facility in Honiara is operational. In the interim, several national institutions in the region have expressed interest in participating in the programme, and specifically in offering certain modules or components that are within their competence.

20 It would be philosophically more appropriate for the proposed CFS programme to take advantage of these opportunities wherever possible in order to promote the development of training capabilities within the region. In view of this situation, the Secretariat has considered several alternative arrangements that might enable greater participation by national training institutions in the proposed programme.

ALTERNATIVE INSTITUTIONAL ARRANGEMENTS

Single-Institution Course

21 This option would involve all of the teaching being done at one institution, and, from an organisational perspective, would be by far the easiest to implement. Although support would probably be available from regional agencies and others for curriculum and programme development, this approach would require considerable commitment from the selected training institution.

22 At the present time, there is no national or regional training institution within the region that could offer the entire CFS programme. A number of extra-regional bodies, including Nelson Polytechnic, could offer most of the programme, although one or two of the specialised subjects may need to be carried out in a Pacific Islands location. Although Nelson Polytechnic has extensive experience in the training of Pacific Islanders, it may be appropriate for other international institutions with experience in certificate level training to be given the opportunity to participate in the development of the programme, or to assist in a consultative or developmental capacity.

23 However, in line with guidance received from SPC member countries, SPC is committed to supporting the development of training capacities within the region, rather than outside it. Promoting the expansion of an exclusively extra-regional programme which could ultimately compete with national institutions for participants and resources could be a retrograde step in this regard.

24 A further important consideration is that funding for programmes outside the region is considerably more difficult to secure than funding for activities carried out by institutions within the region. This situation is likely to worsen in the foreseeable future, and could be a serious impediment to development of the programme.

Multi-Institution Course

25 The option proposed by the HRD study team and recommended by the 23rd RTMF, involved programme components being carried out as blocks at USP and Nelson Polytechnic. Although this option no longer appears to be available, the possibility that several institutions might combine to offer different components of a regional CFS programme is worthy of further consideration.

26 In the original proposal involving USP and Nelson Polytechnic, it was intended that both blocks would be offered in a single teaching year. However, an alternative model might be based on the Earth Sciences Certificate jointly offered by SOPAC, USP, and the Victoria University of Wellington, which involves three teaching modules over a three-year period.

27 Another option that has been discussed between representatives of SPC, USP and Nelson Polytechnic is a modular arrangement comprising the following components:

a block course equivalent to the present SPC/ Nelson course as a first module (offered either by Nelson or other institutions);

programmes in English and basic sciences as a second module. These could be run through USP's extension mode in countries with a USP extension centre, or through locally equivalent bodies (e.g. Community College of Micronesia) in countries outside USP's extension range;

specialised fields of study in a variety of subjects through a number of regional or national institutions as a third module.

28 This approach would have several benefits. It would spread the workload associated with teaching the programme, provide the opportunity for national training institutions to offer some components, enable the development of a parallel system serving Francophone countries if this was required, and promote the standardisation of training curricula among countries of the region. However, the funding, organisational and coordinative requirements for such a programme, including the development of evaluation mechanisms for the training components offered by different institutions, would be extremely burdensome.

Points System

29 Although worthwhile as learning experiences, most short regional training courses only award attendance certificates, and therefore lack credibility in terms of employment opportunity or promotion. Consideration could be given to building on the multi-institution course described above by developing a points system for short course participation which would contribute to the awarding of a Certificate. Attendance at short courses could supplement or replace some of the specialised subjects within the programme. The combination of a certain number of points with the passing of the compulsory modules would then constitute the Certificate award.

30 There are a number of spin-off benefits to offering greater credibility to short courses, since the evaluation of both the training programme and the individual participants would by necessity have to be substantially improved. However, the coordination and management of a points system would be even more administratively complex than the multi-institution course, and very time-consuming for the organisation charged with this responsibility.

SPC PERSPECTIVE

31 The proposal presented to the 22nd RTMF specifically suggested upgrading the present SPC/ Nelson course to Certificate level. Although since that time a general consensus on the need for a Certificate programme appears to have developed, the relationship between the Certificate and the present SPC/ Nelson course has not been discussed in depth. The MSP 5-year plan implies that the Certificate would replace the SPC/ Nelson course, but the Commission has received no firm suggestions or recommendations on this issue from its member countries.

32 Nelson Polytechnic and the SPC Regional Fisheries Training Programme have enjoyed a longstanding association through the operation of the SPC/ Nelson course. The work and study programme of the course, developed over a 13-year period with regular syllabus reviews, provides Pacific Island countries with a practical, technical fisheries course which has been extremely popular. Nominations continue to be about double the number of places available, suggesting an ongoing need for the course as it is currently offered.

33 There is no technical reason why the content of the Nelson Course could not be expanded to bring the course up to a Certificate standard, either as a single-institution course, or as part of a multi-institution programme. However, one of the strengths of the present SPC/ Nelson course is that the programme is suited to individuals who may have extensive work experience or aptitude but do not have a strong background of formal education. Upgrading the present course may reduce the potential for such people to be accepted into it, or, having been accepted, to successfully complete it.

34 The Secretariat believes that, even if a Certificate level course is established, there will still be an ongoing need for the lower-level training offered by the SPC/ Nelson course. It may be that a Certificate programme, when established, would compete with the SPC/ Nelson course for participants, thus leading to a reduction in demand for the places on the course. In this case, consideration would need to be given to reducing the frequency of the SPC/ Nelson course, or making alternative arrangements to provide the type of training it offers at a reduced level. However, the Secretariat believes that this issue need not be addressed until after the Certificate course has been put in place, and recommends against replacing a proven successful programme with one whose success and aptness is not yet tested.

35 When the CFS was first proposed by the Clift review as a reduced form of the DTF course, it was envisaged as a USP activity. Following the reluctance of the USP Council to offer this type of programme, it was suggested that a joint SPC/ USP programme might be more acceptable institutionally. Discussion of the proposed syllabus made it clear that many of the vocational elements were outside USP's areas of interest or capacity to teach, and that the continued involvement of a technical institution such as Nelson Polytechnic would be necessary. Subsequently, a number of other institutions, both within and outside the region, have expressed interest in the programme and indicated a capability and willingness to offer components of it. In the interim, the temporary closure of IMR has compounded the situation and made it impossible to implement the joint certificate as originally envisaged.

36 The major advantage of organising training at a regional level is that it can provide a recognised international standard. The DTF programme previously offered by USP was used by several countries as a benchmark qualification for entry to fisheries positions in the civil service. Part of the justification for a regional CFS programme is that it would gain similar recognition, thus providing countries with a form of broad practical training for fisheries officers which also allows those officers to obtain a qualification recognised by employers considering appointments or promotions.

37 However, it must be asked whether this is sufficient justification to offer the Certificate at a regional level. As noted earlier, a number of national institutions have just begun to develop fisheries-oriented courses in recent years. A more appropriate approach to meeting national vocational training requirements might be through the development and harmonisation of national standards within the region, and through activities aimed at strengthening in-country training programmes in national institutions. SPC is committed to seeing national institutions expand their technical and vocational training capacities, and the RFTP is willing to provide all possible support in this area.

38 The RFTP has an organising and coordinating function and would not be involved in teaching the CFS programme. However, irrespective of the institutional arrangements selected, the RFTP would expect to be substantially involved in developing the CFS programme curriculum. The organisational requirements of the programme are such that, in accepting responsibility for it, the RFTP's capacity to undertake additional regional training responsibilities would diminish, perhaps greatly depending on the programme format. The recommended option of a multi-institution block course involving USP and Nelson Polytechnic no longer appears possible. While there is a strong case for the involvement of national institutions, the only institutions presently capable of offering the CFS as a single-institution block course doing this at present are outside the region. The more flexible multi-institution modular approach or the points system, which would enable greater participation by national training institutions, will require a level of organisation and coordination that may be unacceptably burdensome.

RECOMMENDATIONS

39 In view of the above, the Secretariat believes that it is inappropriate to proceed with the implementation of a CFS programme at this time. The principal reasons can be summarised as follows:

the initial institutional arrangements proposed no longer appear possible, and all alternative institutional arrangements are compromises with major disadvantages;

there is still a need for more detailed information on numbers of trainees and potential employment situations before the development of a regional Certificate course format and content can be completed;

the advantages to approaching vocational and technical training at a regional rather than a national level are not sufficiently convincing, and require re-evaluation in the light of the increasing number of national-level bodies now beginning to offer vocational fisheries subjects.

40 The Secretariat therefore recommends the following course of action:

that the SPC/ Nelson course not be upgraded to a Certificate programme, but continue in its present form;

that the institution of the proposed Certificate programme be postponed pending the re-establishment of IMR in the Solomon Islands. Once IMR is functional, the concept of the Certificate as a multi-institutional course involving modules at IMR, Nelson Polytechnic, and possibly other institutions, be re-examined;

in the interim, that the SPC RFTP make a concerted effort to canvass each SPC member country with the aim of further documenting the vocational fisheries sector training requirements of the region and the likely future demand for both a Certificate programme, and the present SPC/ Nelson course;

that the SPC RFTP consult extensively with training institutions in the region in order to determine the extent to which they could participate in a CFS programme, and with a view to moving towards standardisation of national vocational fisheries training curricula.

41 The meeting is invited to consider and discuss these suggestions and make recommendations as appropriate to the South Pacific Conference.