Report of the

WORKSHOP ON ECONOMIC STRENGTHENING OF FISHERIES INDUSTRIES IN SMALL ISLAND DEVELOPING STATES IN THE SOUTH PACIFIC

Apia, Samoa, 14 - 18 September 1998
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WORKSHOP ON ECONOMIC STRENGTHENING OF FISHERIES INDUSTRIES
IN SMALL ISLAND DEVELOPING STATES IN THE SOUTH PACIFIC

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This is the report of the Workshop on Economic Strengthening of Fisheries Industries in Small Island Developing States in the South Pacific. The workshop was held at the FAO Subregional Office for the Pacific Islands, Apia, Samoa, from 14 to 18 September 1998.

The report comprises a record of the proceedings of the workshop, concluding with the recommendations and follow-up proposals of the working groups. The appendixes to the report include the programme of the workshop and the list of workshop participants. Selected papers as presented by their authors at the workshop are published as a supplement to this report.

The report was prepared in the FAO Subregional Office for the Pacific Islands and in the FAO Fishery Industries Division and edited by Dr. Uwe Tietze, Fishery Industry Officer, Fishing Technology Service, Fishery Industries Division, FAO Fisheries Department, Rome and by Mr. Masanami Izumi, Regional Fishery Officer, FAO Subregional Office for the Pacific Islands, Samoa.

Distribution:
- FAO Subregional Office for the Pacific Islands (SAPA)
- Workshop Participants
- FAO Fisheries Department
- FAO Fisheries Field Projects
- FAO Regional Fisheries Officers
- Directors of Fisheries
ABSTRACT

This is the report of the Workshop on Economic Strengthening of Fisheries Industries in Small Island Developing States (SIDS) in the South Pacific, held in Apia, Samoa, from 14 to 18 September 1998. The workshop was organized and funded by the FAO Fishery Industries Division in cooperation with the FAO Subregional Office for the Pacific Islands (SAPA) which hosted the workshop. Messrs Masanami Izumi and Gilles Hosch, FAO SAPA, acted as Meeting Officer and Assistant Meeting Officer, respectively, while Drs D. Doulman, E. Ruckes and U. Tietze, FAO Rome, performed their duties as principal resource persons and technical secretary of the workshop, respectively.

The workshop was attended by 46 participants including participants and representatives of FAO member countries in the South Pacific, i.e., Fiji, Samoa, Cook Islands, Tonga, Solomon Islands and Papua New Guinea, participants from non FAO member countries and territories such as Kiribati, Nauru, as well as representatives of regional organizations, institutions and donors such as the Forum Secretariat, the South Pacific Forum Fisheries Agency (FFA), the Western Pacific Regional Fishery Management Council (WPRFMC), the Secretariat of the Pacific Community, the United Nations Development Programme (UNDP), the Australian Agency for International Development (AusAID), the New Zealand School of Fisheries, the Asia Pacific Rural and Agricultural Credit Association (APRACA) and the University of the South Pacific (USP).

The main issues which were addressed in the workshop included the enhancement and conservation of aquatic resources and environment as precondition for sustainable fishery industries development, the economically viable and sustainable management of fishery enterprises, the strengthening of aquaculture enterprises in the South Pacific, the promotion of fish utilization and trade, fisheries education and training, investment and credit support, the fiscal and regulatory environment of fishery enterprise development and the role of fisheries administrations in strengthening of fisheries enterprises. The workshop formulated a number of recommendations addressed to national Governments, regional organizations and bilateral and multilateral donors as well as proposals for follow-up activities and for better regional cooperation in strengthening fisheries industries in Small Island Developing States in the South Pacific.
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<tr>
<td>AOSIS</td>
<td>Alliance of Small Islands Developing States</td>
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<td>APRACA</td>
<td>Asia Pacific Rural and Aricultural Credit Association</td>
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<td>AusAID</td>
<td>Australian Agency for International Development</td>
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<td>CFC</td>
<td>Common Fund for Commodities</td>
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<td>CPUE</td>
<td>Catch Per Unit of Effort</td>
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<td>DANIDA</td>
<td>Danish International Development Agency</td>
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<td>EEZ</td>
<td>Exclusive Economic Zone</td>
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<td>ESCAP</td>
<td>United Nations Economic and Social Commission for Asia and the Pacific</td>
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<td>EU</td>
<td>European Union</td>
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<td>FADs</td>
<td>Fish Aggregation Devices or Fish Aggregating Devices</td>
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<td>FAO</td>
<td>Food and Agriculture Organisation of the United Nations</td>
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<td>FFA</td>
<td>Forum Fisheries Agency</td>
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<td>Forum Sec</td>
<td>Forum Secretariat</td>
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<td>HACCP</td>
<td>Hazard Analysis and Critical Control Point</td>
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<td>HRD</td>
<td>Human Resource Development</td>
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<td>ICLARM</td>
<td>International Centre for Living Aquatic Resources Management</td>
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<td>IMR</td>
<td>Institute of Marine Resources</td>
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<td>MHLC</td>
<td>Multilateral High Level Conference on Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific Ocean</td>
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<td>MPA</td>
<td>Marine Protected Area</td>
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<td>MTN</td>
<td>Multilateral Trade Negotiations</td>
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<td>NZSOF</td>
<td>New Zealand School of Fisheries</td>
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<td>R &amp; D</td>
<td>Research and Development</td>
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<td>RFC</td>
<td>Rural Fishing Centre</td>
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<td>RFEP</td>
<td>Rural Fishing Enterprises Project</td>
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<td>RTMF</td>
<td>Regional Technical Meeting on Fisheries</td>
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<td>SAPA</td>
<td>FAO Sub-Regional Office for the Pacific Islands</td>
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<td>SIDS</td>
<td>Small Island Developing States</td>
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<td>SPADP</td>
<td>FAO South Pacific Aquaculture Development Project</td>
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<td>SPC</td>
<td>Secretariat of the Pacific Community</td>
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<td>SPOCC</td>
<td>South Pacific Organisations Co-ordinating Committee</td>
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<td>SPPF</td>
<td>South Pacific Project Facility</td>
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<td>SPREP</td>
<td>South Pacific Regional Environment Programme</td>
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<td>SPS</td>
<td>Sanitary and Phytosanitary Measures</td>
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<td>TBT</td>
<td>Technical Barriers to Trade</td>
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<td>TCDP</td>
<td>Technical Cooperation among Developing Countries</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organisation</td>
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<td>USP</td>
<td>The University of the South Pacific</td>
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<td>VMS</td>
<td>Vessel Monitoring System</td>
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<td>WPRFMC</td>
<td>Western Pacific Regional Fishery Management Council</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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<td>WWF</td>
<td>World Wildlife Fund</td>
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1. BACKGROUND AND OBJECTIVES

The Workshop on Economic Strengthening of Fisheries Industries in Small Island Developing States (SIDS) in the South Pacific is the second regional workshop for SIDS that was organized by the Fishery Industries Division of FAO, in close cooperation with the FAO Sub-Regional Office for the Pacific Islands. The first workshop for SIDS in the Caribbean was held in Port of Spain, Trinidad and Tobago, from 24 to 28 June 1996. It focused on the role of financial institutions in strengthening national fisheries industries and privatization of fisheries investment in Small Island Developing States in the Caribbean.

The overall objectives of FAO’s Programme of Fisheries Assistance to Small Island Developing States (SIDS) are to enable these States to adopt and implement policies and measures that would strengthen the capacity of their fisheries administrations, ensure the conservation, management, development and utilisation of their fisheries resources in a sustainable manner, ensure the enhancement of national food security and that the utilisation of their fisheries resources contributes to national economic and social development on a sustainable basis. With a clear focus on the special fisheries needs of SIDS, the programme is complementing other initiatives which are being undertaken within the United Nations System such as the implementation of the 1994 Programme of Action for the Sustainable Development of Small Island States.

FAO’s programme of assistance to SIDS addresses six separate but closely related areas in the fisheries sector, e.g., institutional strengthening and national capacity building, enhanced conservation and management of EEZ fisheries, improved post-harvest fish management and marketing, aquaculture development and inland fisheries conservation, management and development and strengthening the economic role of national fisheries industries and the privatization of fisheries investments.

The workshop, the proceedings and recommendations of which are described in this report, focused on the latter area and aimed to strengthen the economic role of national fisheries industries in the South Pacific and their contribution to generating income, employment and revenue. The workshop also promoted public and private investment in the fisheries sector with the ultimate objective to improve food security at the national and regional level.

The workshop as well as its recommendations and follow-up proposals thus contribute to the commitments of the ROME DECLARATION, particularly to COMMITMENT SIX, and to the WORLD FOOD SUMMIT Plan of Action as they promote optimal allocation and use of public and private investments in support of sustainable fisheries.

Prior to the workshop, a preparatory mission to selected countries in the South Pacific was undertaken during which the issues which were discussed during the workshop were identified in close cooperation and consultation with concerned Government agencies, private sector fishery entrepreneurs, representatives of donor agencies, regional institutions and organizations and long distance fishing nations which are involved in the region.
2. ATTENDANCE

The workshop was attended by 46 participants including participants from FAO member and non-member countries in the South Pacific i.e. Fiji, Samoa, Cook Islands, Tonga, Solomon Islands, Papua New Guinea, Kiribati and Nauru as well as by representatives and observers of regional organizations, institutions and donors such as the Forum Secretariat, the Forum Fisheries Agency, the Western Pacific Regional Fishery Management Council (WPRFMC), the Secretariat of the Pacific Community (SPC), the United Nations Development Programme (UNDP), AusAID, the New Zealand School of Fisheries, the Asia Pacific Rural and Agricultural Credit Association (APRACA) and the University of the South Pacific (USP). The list of participants is shown in APPENDIX I.

3. PROCEEDINGS

The programme of the workshop was divided into different segments, which related to the main issues that were addressed in the workshop i.e., the enhancement and conservation of aquatic resources and environment as pre-condition for sustainable fishery industries development, the economically viable and sustainable management of fishery enterprises, the strengthening of aquaculture enterprises in the South Pacific, the promotion of fish utilisation and trade, fisheries education and training, investment and credit support, the fiscal and regulatory environment for fishery enterprise development and the role of fisheries administrations in strengthening of fisheries enterprises.

Presentation and discussion of country papers followed this. The workshop concluded with working groups which formulated recommendations addressed to national Governments, regional organizations and bi-lateral and multi-lateral donors. The working groups also formulated proposals for follow-up activities and for better regional cooperation in strengthening fisheries industries in Small Island Developing States in the South Pacific. APPENDIX II has the programme of the workshop.

3.1 Opening Ceremony

The opening session commenced with prayers and a blessing by Susuga (Rev.) Siolo Tauati, Congregational Christian Church of Samoa, Vaivase-uta.

This was followed by an opening address, which was delivered by Dr Vili A Fuavao, FAO Sub-Regional Representative for the Pacific. Dr. Fuavao drew the attention of the workshop participants to the FAO Programme of Fisheries Assistance for Small Island Developing States (SIDS) which in part, addressed the strengthening of the economic role of national fisheries industries and the privatization of fisheries investments. The speaker highlighted that this area was particularly important for SIDS in the South Pacific as it was directly related to the generation of income and employment and as fisheries was an economically very important sector in the countries in the South Pacific.

Dr Fuavao then drew the attention of the participants to the fact that the workshop was taking place at a time when structural adjustment processes in many countries of the region and related policy changes were taking place and that these changes had a direct impact on the fisheries sector. The speaker concluded that a re-orientation of policy was needed to sustain and enhance the economic and social role and importance of the fisheries sector in the
national economies of the countries of the region. In this context Dr Fuavao expressed his hope that the workshop would contribute to a better understanding of how to strengthen the economic role of the fisheries sectors of the countries in the South Pacific and also of how to promote public and private sector investment in fisheries in the region.

Dr Fuavao concluded his opening remarks by extending a warm welcome to the participants and by wishing them a productive and enjoyable stay in Apia.

The keynote address was delivered by the Honourable Minister of Women Affairs and Statistics and Acting Minister of Agriculture, Forestry, Fisheries and Meteorological Services, Mr Leniu Avamagalo. The Honourable Minister extended a warm welcome to all participants and particularly to those from overseas. He highlighted that SIDS in the South Pacific depended heavily on their marine resources for the economic and social well being of their populations and that the development of their fisheries was seen as a major means for promoting economic development. While management of tuna stocks was discussed at the international and regional levels, there was an urgent need to take a closer look at how domestic fisheries industries could be strengthened.

The Honourable Minister then drew the attention of the workshop participants to the fact that while in the past, inshore fisheries resources have often been overlooked, fisheries management programmes were now being introduced in many countries of the region with a special emphasis on community based fisheries management programmes, together with the introduction of sustainable fishing practices and environmental conservation and rehabilitation programmes.

The Honourable Minister expressed his hope that the workshop would offer an opportunity for a fruitful exchange of experiences from within and outside the region and he thanked FAO and its Sub-Regional Office for the South Pacific for having organized the workshop. Concluding the presentation it was stressed that sustainable economic strengthening of fisheries industries could only be achieved on the basis of effective fisheries management and environmental conservation and rehabilitation. The Honourable Minister then formally declared the workshop open.

3.2 Working Sessions

3.2.1 Introductory Sessions

3.2.1.1 Overview of Proceedings and Organisational Arrangements

Mr Masanami Izumi, FAO Sub-Regional Fishery Officer, gave an overview of the administrative and organisational arrangements. He then proposed Mr Mafi ‘Aka’u’ola, Deputy Secretary, Ministry of Fisheries, Tonga, as Chairman. The proposal was unanimously adopted.

Dr U.Tietze, FAO Fishery Industry Officer and Technical Secretary of the workshop, elaborated on the expected outcome of the workshop which included policy recommendations at the regional and national level as well as follow-up recommendations addressed to FAO, regional organizations, and multi-lateral and bi-lateral development agencies. In order to prepare these recommendations and follow-up proposals it was suggested to convene three
working groups which would meet on Thursday afternoon and present their recommendations and findings on Friday morning in the concluding plenary session.

The Technical Secretary suggested the following topics to be discussed by the working groups:

Working Group I: resource and environmental management, conservation and rehabilitation as precondition for economic strengthening of fisheries industries

Working Group II: economic strengthening of fishery enterprises, aquaculture, fish utilisation and marketing

Working Group III: role of fisheries administrations and associations in economic strengthening of fishery enterprises and creation of a conducive fiscal and regulatory environment for fishery industry development

The workshop participants unanimously endorsed the proposed working group arrangements.

3.2.1.2 FAO Programme of Fisheries Assistance for Small Island Developing States (SIDS)

Dr David Doulman of FAO introduced the paper prepared for this topic entitled "FAO Programme of Fisheries Assistance for Small Island Developing States". He outlined the background to the programme, noting that consultations had taken place with the Alliance of Small Island Developing States (AOSIS) in elaborating the Programme. Dr Doulman added that the objectives of the programme were to enable SIDS to strengthen national capacity in fisheries at all levels, to improve fisheries management and utilisation/marketing, and to enhance the contribution of fisheries to food security.

Dr Doulman advised the workshop that the programme would address six areas: (i) institutional strengthening and national capacity building; (ii) enhanced conservation and management of EEZ fisheries; (iii) improved post-harvest fish management and marketing; (iv) safety at sea; (v) strengthening the economic role of national fisheries industries and the privatization of fisheries investments; and (vi) aquaculture and inland fisheries conservation, management and development.

With respect to funding, the workshop was informed that FAO had already made approaches to the international donor community for support. Implementation of the programme would be on a regional and sub-regional basis, possibly in collaboration with regional and international fishery mandated organizations. Dr Doulman added that, subject to funding, the programme would be established for a period of five years. He also noted that contact would be maintained with AOSIS concerning implementation and that Fa o's Committee on Fisheries would monitor progress with implementation of the Programme. The paper as prepared and presented by Dr. D. J. Doulman is reproduced in Fisheries Technical Report No. R596, Suppl.

In the discussion following the presentation, questions were asked and answered regarding coverage and funding of the SIDS programme as well as regarding the activities envisaged to be undertaken under each of the six programme areas.
3.2.2 Enhancement and Conservation of Aquatic Resources and Environment

The subject matter enhancement and conservation of aquatic resources and environment as preconditions for fishery industry development was divided into different topics as follows.

3.2.2.1 Community-Based Management of Subsistence Fisheries in Tropical Regions

The paper on this topic was introduced by Mr Autalavou Taua, Fisheries Division, Samoa. In his presentation, Mr Taua pointed out that many subsistence fishers in tropical regions live in discrete communities, which had some degree of control of adjacent waters. This provided an ideal basis on which to motivate communities to manage their own marine resources.

The speaker then described a fisheries extension programme in Samoa, which encouraged each village community to define its key problems, discuss causes, propose solutions, and take appropriate action. Village groups, including women’s and untitled men’s groups, had provided information which had then been recorded as problem/solution trees on portable white-boards. The extension process had culminated in a community-owned Fisheries Management Plan, which listed the resource management and conservation undertakings of the community. These undertakings ranged from enforcing laws banning destructive fishing methods to protecting critical marine habitats.

During the 42 months of the AusAID-funded Fisheries Extension and Training Project, of which Phase I was completed in August 1998, the extension process had been initiated in 70 villages, of which 53 had produced village fisheries management plans. The speaker further explained that an unexpectedly large number i.e. 48 of these villages had chosen to establish community-owned Marine Protected Areas.

In the discussion following the presentation, a number of questions were raised regarding the village-level implementation of the project and observations and suggestions made. Questions were asked and responded to regarding the establishment of fish reserves, the extend and nature of fishery management measures, on the types of fishing promoted outside the lagoon etc. Other questions were raised and answered regarding the process of drafting and institutionalising village by-laws concerning fishery management measures, sanctions in case of violation of these by-laws and the role of fisheries administration and law enforcing agencies.

Regarding the utilisation of the catch it was pointed out by the presenter of the paper that the major part of the catch was sold and/or consumed in the village itself while the minor part was marketed outside the village. It was observed that this particular utilisation pattern found in Samoa might actually facilitate the adoption of community based fishery management practices by the villages as market forces played a lesser role as in cases where most of the catch was sold outside the village.

An intervention from the Secretariat suggested to possibly complement the introduction of fishery management and conservation methods at community level by
management and research activities which would harmonise and co-ordinate fisheries management and conservation at island and national level and also improve the understanding of the marine and coastal ecosystems at these levels and the communication and cooperation between villages, islands and regions. In this context, it was also observed that Samoa might find it gainful to study the experiences which were presently being made in the Philippines with the decentralisation of fisheries management and the introduction of community based fisheries management measures and with the approaches which were being developed and followed in this country.

With regard to improving the understanding the eco-system, an intervention explained how this matter was being pursued in Hawaii country through ecological and resource mapping exercises such as the mapping of fish habitats.

A number of countries expressed their interest in applying the approaches used in Samoa and it was mentioned, that this could be promoted under FAO’s TCDC programme if a country made a formal request to FAO SAPA.

In conjunction with the presentation of the Samoa’s Fisheries Division on “Community-based management of subsistence fisheries in tropical regions” on the first day, the video titled “Who Cares About Fish” produced by AusAID and by the Samoa Fisheries Division was shown later on in the programme.

3.2.2.2 Stock Enhancement of Tropical Inshore Species

In his presentation, Dr. J. D. Bell of the ICLARM Coastal Aquaculture Centre, Solomon Islands, made reference to two papers prepared by him i.e. "Enhancement of Marine Fisheries Resources" and "Transfer of Technology on Marine Ranching to Small Island States". The latter paper was presented by him at the International Symposium on Marine Ranching held in Ishikawa, Japan, 13-16 September 1996 and is being published as part of the proceedings of the symposium.

The speaker commenced his presentation by stressing that over-exploited fisheries may needed to be restored through restocking and that there were presently many stocks of aquatic organisms being exploited which were limited by the supply of juveniles. Consequently the speaker noted much interest in stock enhancement, which differed from restocking in that it was aimed at improving harvests by increasing recruitment to match the carrying capacity of the habitat.

It was then explained that both restocking and stock enhancement programmes involved the release of juveniles reared in hatcheries or the collection, rearing and transplantation of wild juveniles. Optimised release strategies and increased fitness for life in the wild was required. The speaker then explained that the effects of restocking was measured by the recruitment of progeny from restocked individuals, whereas the success of stock enhancement can be measured by comparing the value of released individuals in market landings with the cost of producing and releasing the juveniles. Marking released juveniles to distinguish them from wild stock, or large-scale sampling of the target population, and unenhanced control populations were also needed to measure the success of stock enhancement.
Dr. Bell informed the participants that several programmes for stock enhancement of demersal marine species had documented encouraging rates of survival of released juveniles and were reported to be economically viable. In other cases, high production costs for producing juveniles, or low rates of survival, indicate that stock enhancement is not a viable option. Careless enhancement programs could diminish the diversity of a species' gene pool, introduce diseases, and alter the structure of communities in unacceptable ways. Decisions to use stock enhancement should be based on thorough pilot studies including analyses of the range of projected economic and social benefits.

The presenter also explained where SIDS could obtain the technology needed to implement stock enhancement programmes and indicated that bi-lateral support would be required to apply this technology and establish restocking and stock enhancement programmes. Such bi-lateral support would need to be long-term perspective (10-15 years), but should eventually be replaced by a levy on the fishery to cover the cost of producing the juveniles released to increase or maintain the productivity of the fishery each year.

In the discussion following the presentation it was observed that scallop stocking in Japan has been successful. It was also suggested that economic viability would depend on large-scale operations involving hatcheries or spat collection. In response to these observations it was remarked that while viability of stock enhancement in the South Pacific was yet to be proven, there was strong evidence that it could be viable in the case of certain species such as sea cucumbers.

Another intervention raised the question of private sector involvement in stock enhancement. In response to this question it was observed that at present, enhancement activities were exclusively supported by donors and that the private sector was understandably waiting for the results of on-going research and experiments before becoming involved.

Other interventions focused on giant clam culture experiments in Samoa, culture periods for sea cucumbers and on the need for proper management to ensure that the economic gains of stock enhancement programmes were not lost through lack of appropriate regulations.

3.2.2.3 Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific Ocean and its Implications for Fishery Enterprises in the South Pacific

Mr Tony Kingston of FFA introduced his paper entitled “Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific Ocean" and summarised the process and the outcome of the Multilateral High-Level Conference (MHLC) on Conservation and Management of Highly Migratory Fish Stocks in the Central and Western Pacific Ocean which sought to conclude a regional fisheries arrangement for tuna stocks in the central and western Pacific Ocean within the framework of the 1982 United Nations Convention on the Law of the Sea and the 1995 Implementing Agreement.

The presenter noted that there was considerable work yet to be done if the Conference Chair’s deadline of June 2000 was to be met for the conclusion of the Conference. It was also pointed out that Pacific Island countries must be prepared to play an active role in the
Conference if they were to be satisfied with its outcome. With respect to the private sector, Mr Kingston expressed the view that although there might be financial implications for the fishing industry, it would certainly benefit from the gains of enhanced conservation and management of the region’s tuna stocks.

In discussion following the presentation, it was noted that private sector involvement in the MHLC process had been limited on the part of FFA member countries to Papua New Guinea and Solomon Islands. However, for other participants in the Conference such as Indonesia and the Philippines, and for the high seas fishing nations, industry participation in the respective delegations had been significant. Several workshop participants expressed the view that it would be beneficial for island countries to encourage greater industry participation in the development of national and regional positions for the MHLC process.

In response to a question regarding the possible introduction of an eco-labelling scheme for the region’s tuna fisheries, Mr Kingston suggested that the objectives of such a scheme were consistent with the MHLC objective of sustainable conservation and management. Mr Kingston, however, also commented that the operational aspects of such a scheme - such as defining a criteria for sustainable caught tuna, the monitoring of such tuna through the marketing chain, and the overall a administration/implementation of the scheme would need to be carefully developed, and widely supported before such a scheme could possibly succeed.

The participant from the Secretariat of the Pacific Community, Dr Tim Adams, advised the workshop that a forthcoming SPC Regional Technical Meeting on Fisheries (RTMF) in October would consider the issue of eco-labelling in general, and the possibility of developing a project on eco-labelling for South Pacific tuna in particular.

In response to a question concerning the possible link between Vessel Monitoring Systems (VMS) and eco-labelling, Mr Kingston noted that FFA’s VMS was now technically operational. He indicated that while there may be some scope to link VMS with any future eco-labelling scheme, this would be limited by the fact that VMS will not monitor the actual fishing practices employed on-board the vessel.

The paper presented by Mr. Kingston is reproduced in Fisheries Technical Report No. R596, Suppl.

### 3.2.3 Management and Strengthening of Fishery and Aquaculture Enterprises

The subject matter management and strengthening of fishery and aquaculture enterprises enhancement and conservation of aquatic resources and environment as preconditions for fishery industry development was divided into different topics as follows.

#### 3.2.3.1 Efficient Management of Artisanal/Small-Scale Fisheries Development Centres and their Role in Strengthening Micro-Enterprises in the Fisheries Sector

In his presentation on the topic, Mr R H. Lindley, Project Adviser of the Rural Fishing/Enterprise Project, Solomon Islands, gave an overview of the objectives and results of an EU funded Rural Fishing Enterprises Project (RFEP) which had been implemented in
Solomon Islands from 1989 to 1998. The project aimed to alleviate rural poverty through promotion of small-scale commercial fishing in rural areas of the Solomon Islands.

The Solomon Islands Fisheries Division, with help from the RFEP, tried to rehabilitate 7 Rural Fishing Centres (RFCs) in rural areas of the country which had been established with bi-lateral aid assistance and subsequently encountered operational difficulties. The speaker explained that the RFEP specifically aimed to put in place operational support and human resource development activities which were necessary for the effective functioning of the RFCs but which were identified as not having been adequately addressed in the original project that had mainly focussed on infrastructure development.

After several years of operation of the rehabilitated centres, however, it became apparent that the extraction of shallow reef and deep bottom fish for markets in the capital, Honiara, and overseas, as presently practised, does not generate enough income to make the fishing operations of the fishermen who supply fish to the centres profitable. Mr. Lindley pointed out that the small-scale fishing enterprises were effectively subsidised by the RFCs, which paid a fixed price for the fish landed, marketed the fish and maintained the boats used by the fishermen. The subsidies to the fishermen enabling them to make a profit meant that the RFCs in turn made a loss. This loss was still being made up by the RFEP.

The speaker concluded his presentation by suggesting that the ultimate success or failure of the centres will depend to a great extent on efficient management. Management shortcomings were exacerbating the other problems encountered, which were related to vessel maintenance costs, shipping logistics, lack of throughput, and low fish prices.

In the discussion following the presentation it was observed that while the project seemed to have achieved its social objectives it has failed to achieve its commercial objectives. As far as subsidies are concerned, it was pointed out that there were no fuel subsidies and tax exemptions for the fisheries sector in Solomon Islands and that the costs of transport were considerable as the project was operating in a very remote area.

Regarding the profitability of the centres, several questions were asked whether the project tried to get involved in value-added fish products and in targeting export markets as this might have improved the profitability of the centres. In response to these queries, it was explained that the project had not done that but instead had been selling fresh/chilled fish through traditional marketing channels.

Other interventions focussed on the prospects of developing eco-tourism in areas where the projects was operating as a more viable solution to creating feasible enterprises which benefit the small-scale fisheries sector.

The paper presented by Mr. Lindley is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.3.2 Joint Ventures

The paper "Joint Ventures in Fisheries Development: their Potential and Investment Alternatives" was presented by the author, Dr. David Doulman and is reproduced in Fisheries Technical Report No. R596, Suppl. The presenter provided a review of the role of joint venture investment in the development of the industrial fisheries sectors highlighting the
experiences of various countries in this regard. In the light of these experiences the question was raised whether joint ventures were the most efficient and financially sound means to promote fishery industry development. The speaker then suggested that alternative joint venture and investment structures should be considered in the decision making process and concluded that fostering strong private sector participation in the fishing industry may be the preferable path to follow.

During the discussion, the experience of New Zealand with joint ventures was shared with the workshop participants. In New Zealand, joint ventures were essentially between private sector partners with the government taking a transitory position.

Another question was raised whether in the case of pearl culture, it might be preferable to conclude joint ventures with a consortium of resource owners rather than with the government. Other workshop participants considered this as feasible as resource owners would probably insist on rent payments from the producing company, which reflected the value of the resource while this might not always be the case if Government is entering in joint venture with a foreign private company.

A case study of a joint venture in a Small Island Developing State in the South Pacific titled “Joint Ventures in Fish Capture and Processing/Marketing: A Case Study of Solomon Taiyo” was distributed to the participants of the workshop but not discussed as the author of the case study could not be present in the workshop. The paper is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.3.4 Samoa’s Domestic Longline Fishery

Mr Savali Time of the Fisheries Division of Samoa presented a case study of achievements and development prospects of Samoa's domestic longline fisheries entitled "Alia longline fishery in Samoa" by Ueta Fa’asili and Savali Time which is reproduced in Fisheries Technical Report No. R596, Suppl. The presentation commenced with an overview of marine capture fisheries in Samoa and then explained how the longline fishery developed in Samoa.

The speaker explained that the development of the off-shore fishery in Samoa had been initiated under a FAO/DANIDA project in the 1970s, which had resulted in the local production of a 28 ft catamaran, called Alia, which was powered by a 40 hp outboard engine. About 120 plywood versions of these crafts were built between 1975 and 1979. Subsequently, over 200 aluminium versions were built, some of which were exported to other countries. Most commercial fishing catamarans were fitted with up to four wooden hand-reels to retrieve trolling lines in the case of pelagic fish (mainly tuna), or drop-lines in the case of demersal fish (deepwater snappers).

The longline fishery was seen by the speaker as having been very successful and it was pointed out that it was providing substantial amounts of income for fishermen and boat owners and that it had created over 1,000 jobs both for men and for women.

An estimate by the Fisheries Division of Samoa based on port sampling indicated an estimate of 6,000 Mt of fish landed by Samoa's longline fishery in 1997 valued at about $23.35 million. Of the 6,000 Mt, which were landed in 1997, about 90% were exported and 10% were consumed locally.
Mr. Savali Time then went on to explain current problems of the longline fishing industry and pointed out that there were over 200 Alia fishing boats active in the longline fishery out of which over 90 were based in Apia. The speaker considered this number of fishing boats too large to be operated in the small fishing grounds within their range. The FAO/DANIDA Alia type of fishing boat can only operate within a certain distance given its limited fuel capacity.

The speaker then explained that with the view to extend the operational range of the local fleet, a number of fishing boats had been built in excess of the size recommended by the FAO/DANIDA project. The Fisheries Division was concerned that a number of these larger fishing boats had been lost at sea involving the loss of about 20 lives. The Fisheries Division believed that the larger versions of the old designs might not be safe.

The presentation was concluded by a description of action taken by the Government to resolve the current safety problems. These include the following:

- A fishermen radio communication network where every fishing boat is required under legislation to carry a two-way radio
- Government is advocating a larger version of the current FAO Alia design which is properly designed so that its seaworthiness improves
- Free training on fish handling.
- Free training on fishing gear and methods.
- Rebate on fuel (Fishermen fuel subsidy) where custom duty on fuel is exempted.
- Training for fish exporters on HACCP plans.

In the discussion following the presentation it was observed that while the number of Alia fishing boats had been steadily increasing the catch per unit of effort had been steadily declining. It was also observed by the bank in Samoa which had financed many of the fishing boats now in operation that repayment of loans was deteriorating because of lower catch rates and that the bank had stopped to extend new loans.

The question was raised whether in this context, Government was considering introducing entry limitations and was monitoring the level of exploitation of resources in relation to the capacity of the Alia fleet. The workshop was informed that this was not the case.

Other interventions related to the insurance cover of fishing boats which was in principal available but more and more difficult to obtain because of the recent losses of boats, to safety regulations for fishing boats which had recently been introduced by Government, to training of crew of fishing boats and to marketing of fish and related regulations. With regard to the latter it was observed that setting and implementation of quality standards for fish products in Samoa was presently left to the private sector and that the Government did not play an active role.
3.2.3.5 Appropriate Fishing Craft Design

In his presentation, Mr Tony Hill, Director of Hillbuilt Boats, Samoa, gave an overview of the Samoan Seafood Industry, of the regulatory framework regarding maritime construction standards and of certification requirements of crews of fishing boats in Samoa. He then went on to describe the major constraints to fisheries development as well as the progress made so far.

The speaker then informed the audience that Hillbuilt Boats along with other local boat builders were preparing themselves for the construction of a newly designed fishing boat with an extended range and that in the past year, boat builders had undergone skills training in the use of new/or upgraded welding equipment and improved their welding techniques appropriate for thicker aluminium sheets. Boatbuilders also tried to work more closely with the Fisherman’s Association of Samoa and planned to form an association or an advisory group.

The speaker concluded his presentation by stating that the proposed safety standards survey by the Maritime Division in Samoa has been welcomed by the fishery industry.

The discussion following Mr Hill’s presentation focussed on the reasons for the accidents at sea in which many Alia boats had been lost. These included poor construction and unsuitable modification of the original design, fishing outside their normal range and the lack of trained crew and safety equipment.

Other questions were raised regarding the cost of the newly designed boat, its carrying capacity, the skills and qualifications needed to construct, maintain and operate the boats as well as on its economic efficiency.

It was also observed during the discussion that at present the majority of exporters of fish from Samoa did not insist that fishermen from whom they procured fish used ice on board their fishing boats. It was mentioned that this could possibly lead to a rejection of imports of fish from Samoa, which would very negatively effect the fishery industry in Samoa.

3.2.3.6 Development of Commercial and Export-Oriented Aquaculture

Mr Hideyuki Tanaka, Chief Technical Advisor of the FAO South Pacific Aquaculture Development Project (SPADP) briefed the workshop participants on background and history of SPADP. He pointed out that before the start of SPADP, aquaculture played hardly any role in the region. The speaker also pointed out that aquaculture practices, which failed in the past, were mostly domestically oriented.

Summarising the prospects and constraints of aquaculture in SIDS in the South Pacific, Mr. Tanaka suggested that

1) aquaculture development is vital even in small ocean islands, and it will be more and more important in the future both from an economic and a food security point of view
2) Aquaculture will become an important industry which will contribute greatly to earnings of foreign currency even in islands which are located far away from markets if the species to be cultured and the commodities to be marketed are selected appropriately.

3) Export-oriented aquaculture will become economically much more important than domestic-oriented aquaculture.

The speaker then identified pearls, algae and aquarium organisms as most promising organisms to be cultured as well as other unique commodities which could cater to niche markets. He urged that aquaculture development was also important in small islands from coastal fisheries resource management point of view and advised on a set up of regional research networks for establishing a systematic R&D on new aquaculture commodities as well as further development in the region.

In the discussion following the presentation, tuna farming in Okinawa was referred to as Hawaii was looking into possibilities for ocean aquaculture. The potential of tourism-oriented aquaculture was also discussed. Mr. Tanaka mentioned that the tourism-oriented aquaculture could be a component of marine parks in association with the establishment of marine reserves. A comment was made that tourism was usually a source of potential conflict with aquaculture development, though there might be some attractive aspects for tourists especially with regard to giant clam garden.

In response to a question on the potential of Polycheata worm farming in Samoa to be used as bait for recreational fishing, Mr. Tanaka advised on its potential market in Japan as such live baits were imported to Japan in quantity and Samoa would have an advantage in marketing its produce during the high-price season in Japan. The speaker then suggested that USP might want to conduct a biological study on this species. Another intervention mentioned that there was a market for live bait also in Australia but that Australia did not allow the import of live bait.

- Case Study

Prior to the workshop, a case study on management and strengthening of fishery enterprises had been prepared for the workshop. As the author could not be present in the workshop, due to other unforeseen short-term commitments, the study entitled "Development Prospects and Constraints of Domestic Fisheries Enterprises - A Case Study of Alatini Fisheries, Tonga", prepared by Ms. Tricia Emberson, Alatini Fisheries Co. Ltd. could not be formally introduced but was distributed to the participants of the workshop and used as reference and background material. It is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.4 Strengthening of Fish Utilisation and Trade

3.2.4.1 HACCP-Based Quality Insurance for Seafood

The author, Mr Steve Roberts, Post-harvest Fisheries Consultant, presented the paper on implementation of HACCP for the seafood industry in the Pacific Region.
The presentation focused on the work accomplished by FAO and SPC in introducing HACCP in the fishing industry in the South Pacific. Although successful in ensuring exports could continue to the US after the implementation of the US HACCP rules, the work programme remained incomplete and a number of follow-up actions needed to be taken in the immediate future in order to open new trade opportunities and to avoid negative consequences of the lack of appropriate inspection systems.

The speaker identified two critical areas for follow-up:

1) assistance to establish or up-grade national controlling authorities;
2) further training for the exporters to raise the competency of HACCP and production line staff to the next level.

A review of a short UNDP funded HACCP project undertaken in Fiji, Samoa and Tonga in August/September 1998 showed that HACCP had been implemented by companies at least to basic, satisfactory level. The exporting companies perceived HACCP as beneficial and significant quality improvements were confirmed in complimentary reports from importers in the US.

During the discussion that followed, clarifications were given on the nature of the training provided and the substantial record keeping requirements of the HACCP approach, as well as to the implications of the national competent authority required by the EU import regime for fishery products.

3.2.4.2 Possible Impact of WTO and LOME IV Convention

By way of introduction to the subject “Possible impact of WTO Agreements and Lome IV Convention on Fish Trade in the South Pacific Region”, Dr E Ruckes of FAO highlighted basic facts of international trade in fishery products amounting to US$ 50,000 million per year and the 50% share in it achieved by developing countries over time. The speaker pointed out that fishery products were the most international foodstuff and yielded net exports for developing countries higher than other agricultural commodities.

The presentation provided a brief description of the provisions of the Uruguay Round Agreements most relevant for fisheries, i.e., the,

- Agreement on Sanitary and Phytosanitary Measures (SPS);
- Agreement on Technical Barriers to Trade (TBT);
- Agreement on Subsidies and Countervailing Measures.

Example of the SPS had been the earlier presentation on HACCP and reference was made to eco-labelling of products from marine capture fisheries as an example related to TBT. The subsidy agreement was mentioned in the context of the possible coverage of fisheries in future Multilateral Trade Negotiations (MTN).

It was acknowledged that Lome IV preferences had been eroded due to the lower MFN rates of tariff concessions of the Uruguay Round, in principle, but that there were no information about the benefits granted to fisheries under Lome IV nor the impact of the
possible erosion. The speaker was suggested that countries may consider focusing on the technical assistance component of the Lome Conventions when negotiating a successor agreement rather than spending much effort on preferences of tariff rates which are likely to continue to decline and possibly will approach zero sometime in the future.

The FAO priority programme of assistance to developing countries in the implementation of the Uruguay Round Agreement and the preparation of future MFN was mentioned as an example that there are not only restrictions, regulations and barriers in the area of international fish trade but also opportunities for receiving technical assistance. As an example of financial cooperation the cooperation between the Sub-Committee on Fish Trade of the FAO Committee of Fisheries and the Common Fund for Commodities (CFC) was explained. With Papua New Guinea and Samoa as members of the CFC, participants were invited to identify project ideas, which could be of interest for the Common Fund. The paper presented by Dr. Ruckes is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.5 The Role of Education and Training in Strengthening of Fishery Industries

3.2.5.1 Support to Fishery Industry Development through Fisheries Education and Research

Prof. Robin South of the University of the South Pacific (USP) explained the USP’s role in HRD in the fisheries sector. Because of the complex nature of the fishery industry, the speaker expressed the importance of an integrated approach in the fisheries HRD and the need for regional co-ordination of fisheries training, education and research under a clear understanding of the differences between training and education. After explaining the availability of training data bases on various topics relevant to the fishery industry in the USP, he highlighted the USP’s activities in relation to technical training, marine awareness, education and research.

The speaker explained established collaboration with various institutes at international, regional and country levels for maintaining fishery- and marine-related research activities. His recommendations on HRD were accorded with the FAO’s (1997) recommendations in Fisheries and Aquaculture in the South Pacific: Situation and Outlook in 1996. The paper presented by Prof. South is reproduced in Fisheries Technical Report No. R596, Suppl..

In response to a question, the speaker explained the progress of regional training programmes on post-harvest methods for which a facility had recently been completed within the new USP’s Marine Studies campus by the Japanese Government’s grant. Since an accommodation facility for up to 30 trainees was also attached, the USP was ready to co-ordinate regional training or workshop on post-harvest methods in collaboration with SPC. However, the timing of such training needed to be adjusted with the USP schedule.

In response to another question on the progress of the establishment of the Institute of Marine Resources in the Solomon Islands (IMR), Prof. South explained that the site of 2 ha was next to the ICLARM Coastal Aquaculture Centre, and the first phase of construction including office and laboratory was nearly finished. The EU was being approached for funding of the second phase of IMR.
In response to an inquiry on staff training of the USP, Prof. South explained the recent staff training arrangement through several institutes and universities in Canada, NZ and Japan. There was a comment that there were positive effects on the retention of scientific staff by overseas training in the advanced research institutes. Meanwhile, it was pointed out that small countries had difficulties in filling vacant posts vacated by overseas trainees. There was a statement from the Forum Secretariat on the availability of training opportunities, subject to the approval of the concerned working group.

3.2.5.2 Pacific Community’s Recent Training Initiatives for the Private Sector

Two speakers presented the topic. The first speaker, Mr Michel Blanc of the Secretariat of the Pacific Community (SPC), gave an overview of role and work of the SPC’s Fisheries Training Section. He drew the attention of the audience to the fact that from 1984 onwards, the training section had gradually increased its assistance to the private sector especially in the areas of management training and safety-at-sea training.

With reference to his paper entitled “Assistance to Pacific Island Fisheries Enterprises through SPC/NZ School of Fisheries Partnership”, the speaker went on to describe the training courses which were organized in cooperation with the New Zealand School of Fisheries (NZSOF) for fisheries enterprise managers and skippers. The audience was also informed of a new training course on seafood production systems for women managers to be conducted for the first time in April 1999 at the NZSOF.

The speaker then went on to describe SPC’s campaign on safety-at-sea targeted at small fishing boats which started in 1995. Under the safety-at-sea programme, a training course was being developed for new entrants in the longline fishing industry. The speaker also informed the audience of a training course for potential Pacific Island crews on US purse-seiners to be conducted in the later part of 1998. Other training activities conducted by SPC were on ‘sashimi’ tuna handling and grading, fishing with fish aggregation devices (FADs) and included short-term training courses on various topics.

The presentation was continued by Mr Hugh Walton of the NZSOF who elaborated on NZSOF’s efforts in staff enhancement for the pacific seafood industry and in support of joint ventures.

During the discussion following the presentations a question was asked regarding the duration of the training courses offered by the NZSOF. In response to this question, it was explained that the NZSOF was flexible to adjust the duration of training courses to the requirements of the trainees. Other interventions highlighted the need for on-the-job training and a planned on-board on-the-job training programme in Tonga was mentioned as an example. The importance of monitoring of the impact of training programmes and follow-up on-the-job advice and support to trainees were also stressed in the discussion. This was considered particularly important in the case of HACCP training courses.

3.2.6 The Code of Conduct for Responsible Fisheries

Dr D. Doulman of FAO Workshop presented a paper entitled “Code of Conduct for Responsible Fisheries, a Mechanism for Promoting Structural Change and Adjustment in the
Fisheries Sector” This paper is reproduced in Fisheries Technical Report No. R596, Suppl. The presentation outlined the origins of the Code of Conduct which led to its adoption by the FAO Conference in October 1995. The purpose and objectives of the Code were highlighted, together with its structure and steps being taken by FAO to facilitate the Code's implementation.

The speaker noted that the Code of Conduct is of particular importance to South Pacific countries in view of the regions high dependence on fisheries resources for food, social and economic development, and the need to ensure that fisheries are exploited in a long-term sustainable manner.

The workshop was advised that in accordance with its goal of regionally adapting the Code of Conduct, FAO was proposing to mount a regional workshop in the South Pacific, possibly in 1999.

Workshop participants welcomed this FAO initiative as a means of further facilitating the implementation of the Code in the South Pacific and encouraged FAO to proceed with planning and related arrangements for the workshop.

With respect to the voluntary nature of the Code, a question was posed as to whether in future the status of the Code might be changed so that it would become a binding instrument. The view of the Secretariat was that this was unlikely to occur but it was pointed out that Governments could incorporate provisions of the Code into national legislation, if they so desired, thereby achieving the same effect as a binding instrument.

The participant from the University of the South Pacific, Professor Robin South, informed the workshop that his institution already had considerable experience with the conduct of training programmes using the UN TRAIN-X methodology. He added that the University stood ready to participate in Code of Conduct training programmes, as envisaged by TRAINFISH, if FAO perceived such participation as being appropriate.

In the discussion, the speaker noted that fishery industry was playing a key role in implementing the Code of Conduct. In many countries, industry organizations were sensitising fishermen, processors, etc to the need to pursue responsible practices within the sector. Dr Ruckes of FAO added that the WWF/UNILEVER initiative to establish the Marine Stewardship Council was in fact geared towards supporting the implementation of the Code.

3.2.7 Investment/Credit Support and Fiscal and Regulatory Environment for Fishery Enterprise Development

3.2.7.1 Small and Medium - Scale Enterprise Finance in Asia and Changes in the Context of Deregulation and Financial Crisis of Fisheries Credit

In his presentation, Mr Bishnu Shrestha, Managing Director of APRACA (Asia Pacific Rural and Agricultural Credit Association) Consultancy Services, gave an overview of the financing of small and medium-scale enterprises in Asia, including fishery industries, and of the changes brought about in the course of deregulation and as a result of the recent financial crisis. He stressed that small and medium enterprises in agriculture and fisheries
contributed a sizeable portion of the production for domestic consumption and exports and was strategic for a balanced national development and for poverty alleviation.

The presentation then went on to describe some of the credit/financing programmes, policies and schemes which were in operation in Asian countries. Changes and adjustments of these programmes and policies were accompanied by institutional reforms which were characterised by the transformation of specialised credit and banking operations to universal banking.

Mr Shrestha then went on to elaborate on specific aspects of lending policies and procedures, interest rates, linkages with subsidy programmes, collateral substitutes for small and medium-scale enterprises and on sources of funds used in credit programmes.

Concluding his presentation, the speaker summarised the immediate effects of the recent financial crises which also included steps to strengthen rural financial institutions and co-operatives for financing of small and medium-scale enterprises.

In the discussion following Mr Shrestha’s presentation, it was highlighted that large sections of the fishery industry that were export-oriented had actually benefited from the crisis because of favourable exchange rates. The sector could not take full advantage, however, as credit supply had been reduced because of bank failures, restrictive monetary policies of Government and of increasing interest rates. Questions focused on the definitions of small and medium-scale enterprises, collateral substitutes and on the question of the role of subsidies.

### 3.2.7.2 Fisheries Credit in Papua New Guinea

Mr Chris Saelon of the Rural Development Bank of Papua New Guinea gave an overview of the provision of credit to the fisheries sector of Papua New Guinea. He explained that the bank had financed in the past large-scale commercial fishing units as well as small-scale fishing units and pointed out that loan recovery has not been satisfactory and that the commercial vessels had shown a much worse performance than the artisanal vessels because of poor management of the commercial fishing vessels and of competition of foreign fishing vessels. In the small-scale sector loan repayment deteriorated after too many boats had been financed by the bank.

Mr Saelon concluded his presentation by explaining that the Rural Development Bank of PNG was presently undergoing an institutional reform and also was trying to improve its capitalisation through borrowing from financial institutions abroad and through more efficient cooperation with Government agencies including the fisheries administration.

In the discussion following the presentation the question was asked whether the fisheries administration did not provide guidance which could have avoided the over investment in artisanal fishery and the response indicated that this had not been the case in the past.

Other questions focused on interest rates and subsidies and it was explained that interest rates applied by the Rural Development Bank of PNG were well below commercial
market rates and that equity requirements of borrowers which were as high as 40% were met by Government subsidies rather than by the borrowers themselves.

It was also observed during the discussion that the past, fisheries lending programmes of the Agricultural Development Bank of PNG had a number of shortcomings as they were supply rather than demand driven, incorporated a high subsidy component and had to be implemented by a bank which did not have any in-house competence in fisheries but had to rely on other Government agencies for identification of loan applicants, appraisal of loan applications and of investment opportunities, and for supervision of loan use.

In this context, the secretariat pointed out that experiences in Asian and other developing countries clearly indicated that above shortcomings invariably lead to poor repayment of loans and lack of positive economic impact of the credit programme and that demand oriented non-subsidised credit programmes associated with competent loan appraisal and supervision have a much better economic impact and financial performance.

In response to another question the speaker pointed out that the bank was planning to involve the two canneries in PNG in credit programmes to the small-scale fishery sector, among other things, in loan recovery as they ultimately benefited from these programmes.

3.2.7.3 Fisheries Credit in Samoa

Mr Aukusitino Rasch of the Development Bank of Samoa gave an overview of the lending operations of his bank to the commercial and traditional fisheries sectors in Samoa. He explained that there has been a considerable growth in commercial capture fisheries in Samoa, which was accompanied, by a growth of exports.

The growth in the industry was also accompanied by a growth of problems which included the loss of fishing boats because of lack of experience and training of the crew, the rejects of exports from canneries in American Samoa because of poor quality and by an overcapacity of the fishing fleet operating close to Apia which were also indicated by a declining CPUE. Because of these problems and of the forthcoming introduction of strict safety regulations under which it was doubtful whether a large part of the present fleet would be allowed to continue its operation, the bank had temporarily stopped lending but was planning to commence lending again next year after a comprehensive review of the sector.

The presentation continued with an overview of lending procedures and policies and it was explained how the bank in recent year had adopted a demand oriented, non-subsidised and flexible lending strategy and improved its overall loan recovery and performance.

The discussion following the presentation focused on the question how exporters had responded to the rejection of exports and it was explained that with one notable exception, exporters were still accepting fish not preserved in ice and thereby risking further rejects.

Other interventions observed that the decline of the CPUE might not necessarily be due to overcapacity but to seasonal fluctuations in the tuna fisheries.

Questions were also asked and replied to regarding the loan recovery in fisheries lending which was given as 80%.
3.2.7.4 Fisheries Credit in Solomon Islands

The participant from Solomon Islands, Mr Jonathan Bana of the Development Bank of Solomon Islands, presented a paper on “The Study of Fisheries Sub-Sector in Solomon Islands Economy: Problems, Constraints and Opportunities.”

Mr Bana identified weak management, weak business skills, unrealistic production forecasts and lack of infrastructure and storage facilities as the most serious problems affecting the performance of the fisheries sub-sector in Solomon Islands. The speaker mentioned that the Development Bank of the Solomon Islands was in the process of reviewing its lending policy for the Fisheries Sector in Solomon Island with a view to adjust the policy to the new Fisheries Act and its supporting set of policies approved by the Government early 1998. In connection with the on-going review the bank intended to approach the Western Pacific Regional Fisheries Management Council (WPRFMC) as a possible funding sources for strengthening and developing fishery enterprises in Solomon Islands.

- Case Studies

Prior to the workshop, a case study on investment and credit programmes entitled "Investment and Credit Support in the South Pacific - Some Case Studies from the Tuna Long Line Fishery" had been prepared by Mr. P. W. Philipson, South Pacific. As the author could not be present in the workshop due to unforeseen short-term commitments, the paper could not be formally introduced but was distributed to the participants of the workshop and used as reference and background material. It is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.7.4 Fiscal Policies and Measures

In his presentation, Dr U. Tietze of FAO explained that during the preparatory mission for the workshop carried out last year, private sector entrepreneurs in the region had expressed a strong interest in comparing and documenting the various duties, taxes, fees and other fiscal measures which effect the economic efficiency and viability of the fishery industry in the region.

In order to obtain this information, a questionnaire had been prepared and distributed to FAO member countries and other countries participating in the workshop. Only seven countries/state/territories had responded i.e. Cook Islands, Solomon Islands, Tonga, Hawaii, American Samoa, Guam and Northern Mariana Islands.

The presentation then went on to give an overview of the findings of the inquiry and it was highlighted that the U.S. State/Territories in the Pacific had significant lower taxes on fuel and lower import duties than the other four countries that had responded to the questionnaire. It thus seemed that the fiscal environment in the former countries where tax exemptions were also available on request was more conducive to enterprise development than the fiscal environment in the latter countries.

In the discussion following the presentation it was pointed out that only few countries had responded to the questionnaire and that the information provided was not complete in all cases. It was suggested that the working groups which would prepare recommendations for
follow-up activities might want to consider to carry out a more comprehensive study on the same topic after the workshop.

3.2.8 The Role of Fisheries Administrations in Strengthening of Fisheries Enterprises

3.2.8.1 Corporate Planning and the Role of Fishery Administration and Private Sector

A paper entitled “Corporate planning and the role of fisheries administration and public sector in strengthening of fishery industries” was presented by the author Mr Samisoni Naisua, Ministry of Agriculture, Fisheries and Forests in Fiji. The strategic planning approach of the Ministry, its change over time and the changing role of the fisheries administration were highlighted.

The speaker pointed out that the role of the public sector role as an engine for policy change required the Ministry of Agriculture, Fisheries and Forests to respond to the need for corporate planning, to aim at increasing the effectiveness of its actions and at providing more room for private sector initiatives leading to well defined policies and strategies in the fisheries sector.

Several fishery commodity development programmes had been prepared and funding had been allocated, including for aquaculture. Subsequently, the Fisheries Division's focus and priority activities for the next six months were described. The “smart partnership” philosophy between government and private industry was the guiding principle for the cooperation and the mechanism for assisting the private sector. The paper presented by Mr. Samisoni Naisua is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.8.2 The Role of Fishermen Associations in Strengthening of Fisheries Industries in Pacific Island Countries

Mr Hugh Walton, of the New Zealand School of Fisheries, presented a paper entitled “The Role of Fishermen Associations in Strengthening Fishing Industries in Pacific Island Countries.” His presentation addressed the types of associations, the rationale for establishing associations and an evaluation of why fisheries associations are successful and why they fail.

The speaker then considered the role of associations in contemporary fisheries and the formalisation of associations. He concluded that there was no clear model for the development of associations though he also that consultative systems exist in some island countries. However, two key considerations were to be taken into account in the development of fishermen associations: adequate funding and the capacity to accommodate change.
3.2.9 Presentations by Donors, Regional Organizations and Countries

3.2.9.1 Past and Future Assistance of Bi-and Multi–lateral Development Agencies in Support of Strengthening and Development of Fisheries Enterprises

- AusAID

Mr. Geoff Miller of the Pacific Regional Division of AusAID presented his workshop paper entitled “Australian Assistance to Strengthen and Develop Pacific Fisheries Enterprises" and briefed the participants on the nature of Australia’s fisheries assistance to the region. He explained that the AusAID fisheries programmes did not directly target the private sector and that assistance is provided through regional organizations as well as bilaterally. The speaker acknowledged that FFA and SPC were the competent organizations for execution of regional assistance programmes and the audience was informed that Australia would provide about A$ 5 million in 1998 for these organizations.

The speaker suggested that AusAID programmes were helpful for private sector development and stressed that bilateral programmes were designed and implemented according to Government priority. Attention was drawn to bi-lateral fisheries programmes which had recently been implemented in Samoa and Tonga. The paper presented by Mr. Miller is reproduced in Fisheries Technical Report No. R596, Suppl.

During the discussion, in response to interventions, Mr Miller explained the various schemes in support of the private sector, which were sponsored and supported by AusAID. These included the Australian Volunteer Services Scheme for short-term business consultancy. He also informed about a credit scheme available for the private fisheries sector in the South Pacific for which applications could be sent through the Australian High Commission in each country.

- UNDP

Mr Tom Twining-Ward of UNDP's Apia Office briefed the workshop participants on UNDP’s programmes related to SIDS issues in the South Pacific. The UNDP funded Strategic Action Programme for the Pacific Small Island Developing States had been endorsed at the South Pacific Forum in 1997, and approved by the Global Environment Facility with a budget of US$12.3 million for 5 years.

The speaker highlighted that UNDP’s focus was on long-term conservation and sustainable management of coastal and ocean resources and that UNDP appreciates the important role of the fisheries sector. Within the Strategic Action Programme, there were two programmes relevant to fisheries: (1) Integrated Coastal and Watershed Management and (2) Oceanic Fisheries Management. These would be sub-contracted to SPREP, FFA and SPC, respectively.

- The Western Pacific Regional Fishery Management Council (WPRFMC)

In her presentation Ms Kitty Simonds, Executive Director of WPRFMC, gave an overview of the work and functions of the Western Pacific Regional Fishery Management Council. She pointed out that the management of pelagic fisheries was of particular
importance to the Council as the harvest of highly migratory species was the major fishing industry in the Council’s area. The Council’s initial priority had been to restrict foreign fishing and to allow domestic fishermen more opportunities to catch fish.

The speaker then explained how the Council supported the development and strengthening of fisheries enterprises in its region by implementing policy and regulations through a process that provides for checks a balance among fishery managers, fishermen, scientists and others.

The Council had also prepared management plans for the fisheries targeting open ocean species, bottomfish and lobster fisheries and the precious coral fishery. In this context it was pointed out that the Council had used the plan development process to involve a precautionary, yet supportive, attitude towards harvesting and preserving fish stocks. The paper presented by Ms. Simonds is reproduced in Fisheries Technical Report No. R596, Suppl.

In discussion following the presentation, Ms Simonds noted that VMS was used on all longline vessels operating in fisheries managed by the Council. While initial opposition to the use of the VMS had been apparent from industry, this was no longer the case since the fishing industry was assured that information transmitted was secure and fishermen knew that they could use the system to improve safety at sea.

- Forum Secretariat

Mr John Low of the Forum Secretariat presented his paper entitled “The Coordination Role of the South Pacific Forum Secretariat with particular Reference to UNCLOS and Marine Sector Initiatives,” and in so doing he briefly explained the current SPOCC process concerning the co-ordination of activities in the marine sector. He highlighted the role of the South Pacific Organizations Co-ordinating Committee (SPOCC), noting the Committee’s focus on the need to achieve cost-effectiveness and to avoid duplication. In addition, Mr Low explained that the SPOCC Marine Sector Working group was working under terms of reference approved by SPOCC in June 1998.

Mr Low suggested that Annex 3 to his paper might be referred to in the working groups, as gaps had been identified among activities being undertaken in the region. He encouraged participants to contact the Forum Secretariat if they had queries concerning SPOCC’s Marine Sector Working group. The paper was well received by participants as a useful and comprehensive document on regional co-ordination on marine sector issues. Annex 3 of Mr. Low's paper is reproduced in Fisheries Technical Report No. R596, Suppl.

3.2.9.2 Country presentations

- Solomon Islands

The participant, from Solomon Islands, Mr Simon Alekera, provided an overview of fisheries in his country. He noted that a tuna management plan was in the process of being elaborated and that a new Fisheries Act had been approved in 1998. The government was currently working on a new set of policies to support that legislation. It was pointed out that
although inshore fisheries overall in Solomon Islands were generally not overexploited there were areas of the country where overfishing was problematic.

With respect to the tuna industry, the participant advised the workshop that Solomon Islands had a long established industry. He added that while there was a strong foreign presence in the tuna industry the government was keen to promote the development of a small-scale longline industry for the benefit of national entrepreneurs.

- Cook Islands

Constraints to the strengthening of the private sector in fisheries were highlighted by the participant from Cook Islands, Mr Ian Bertram. These constraints included a lack of capital for investment; limited entrepreneurial and management skills; lack of investment capital; lack of infrastructure; the dispersed and isolated nature of islands; mixed species inshore fisheries and heavy fishing pressure in some coastal areas. It was noted that the Cook Islands currently have limited capacity to target oceanic fisheries.

The presentation underscored the importance of the blacklip pearl oyster fishery that is a leading export earner for Cook Islands. It was also pointed out that good potential seemed to exist for the export of aquarium fish despite of high freight costs. It was further noted that opportunities were available for the private sector to supply reef fish to the tourist industry. This fish currently sells at the lucrative price of NZ$ 5.00 - $17.00 per kg in Rarotonga.

The Cook Islands government was elaborating a policy to further strengthen the private sector in fisheries. The speaker explained that the government would not in future compete with the private sector in fishing activities and in the provision of ice to the industry. Rather the government will confine its activities to such areas as research, policy development, training etc. The government will also actively promote and assist traditional leaders and island councils in community-based resources management.

- Kiribati

The participant from Kiribati, Mr. R. Beniamina, informed the workshop that the strengthening of private enterprises in his country was being pursued within two national policy frameworks i.e. the macro-economic policy and the marine resources sector policy. With respect to the marine sector policy, the workshop was advised that the goal of this policy was to maximise returns from marine resources while utilising resources on a sustainable basis.

With respect to the promotion of the private sector, the Fisheries Division was encouraging local entrepreneurs to utilise offshore resources; seeking to ensure that the public sector did not have a more advantageous position in commercial activities vis-à-vis the private sector; strengthening fisheries research, including stock assessment; improving fisheries legislation and regulations; and strengthening training, advice and assessment.

It was proposed that a number of initiatives might be taken to enhance the role of the private sector. These initiatives could include reducing duty on imported fishing gear; diversifying fisheries activities, spreading of financial risks; applying the precautionary approach in situations of uncertainty and fiscal policy adjustments to reduce tax burdens. In
the area of fisheries diversification it was noted that the promotion of sports fishing, seaweed and sponge culture offered promise.

- Tonga

The participant from Tonga and Chairman of the workshop, Mr. M. 'Akau'ola advised the workshop that his government expected that the fisheries sector would play a major role in the economy in the coming years. Strong private sector involvement was emerging, with some Tongans who were resident overseas investing in fisheries.

It was pointed out that inshore fisheries in Tonga were heavily exploited and depleted and that aquaculture was viewed by the government as being very important. For offshore fisheries, it was noted that tuna was the main focus for development. Currently, six longline vessels were operating, but by the end of 1998 it was expected that the number would increase to 12 vessels. However, the government’s objective was to increase the number of longliners to 20 vessels, and subsequently, to a greater number if assessments indicated that the resource could sustain such expansion.

Information relating to seaweed development in Tonga was provided for the information of the workshop. A seaweed export trial project expected that in 1998, 1,500 metric tonnes (net weight) would be produced. Currently 70 employees are working on the seaweed project that was described as a very labour intensive industry. However, in future the number of employees was expected to rise to 300 employees in peak season.

Workshop participants and the speaker noted that the constraints to the development of the private sector, as described in the case study prepared by Ms. Emberson of ’Alatini: Fisheries Co., Ltd., were generally valid.

- Nauru

As the presenter from Nauru was unavailable, the country paper was distributed to the participants.

- Guam

The participant from Guam, Dr. Paul Callaghan, informed the workshop that the fisheries sector of Guam was comprised of four main components: small boat trolling and bottom fishing, charter boat tours, aquaculture activities and transhipment of pelagic fish. However, Guam remained a net importer of fish. The speaker then mentioned that Guam represented a potential market for fish from many island countries. Airline services to and from Guam were extensive.

The workshop was informed that fishermen in Guam were exempt from fuel taxes and the 4 percent gross receipts (sales) tax on fish sales. In addition, the Government provided support to the private sector in Guam through the maintenance of fish aggregating devices in coastal waters. The Government also provided support to the Guam Fishermen's Cooperative.

Concerning constraints and difficulties facing the private sector in Guam, the participants noted that the supply of low-grade tuna rejected for export depressed fish prices
received by local fishermen. There was also a lack of dry-dock facilities for vessels greater than 45 feet; a lack of affordable credit for financing the purchase of new vessels and a lack of vessel insurance at a reasonable cost.

- Samoa

Since the presenter from Samoa was unavailable, the country paper was distributed to the participants.

4. RECOMMENDATIONS OF WORKING GROUPS

As agreed on the first day of the workshop, the participants were divided into three working groups to discuss the following topics respectively.

Working Group I: resource and environmental management, conservation and rehabilitation as precondition for economic strengthening of fisheries industries and related training and education needs.

Working Group II: economic strengthening of fishery enterprises, aquaculture, fish utilisation and marketing and related training and education needs.

Working Group III: the role of fisheries administrations, associations in economic strengthening of fishery enterprises and creation of a conducive fiscal and regulatory environment for fishery industry development related training and education needs.

The recommendations of the working groups were presented in plenary as summarised below:

Working Group I: The chairperson of the group, Mr Ian Bertram (Cook Islands), reported on two key issues i.e. the implementation of the Code of Conduct for Responsible Fisheries and the promotion of policies on the sustainable use of resources as general priority policies and measures. The group identified the needs for a new fishing methods study, marine protected area research, data acquisition improvement, regional aquaculture strategy development, coastal development plan and training.

Working Group II: The chairperson of the group, Mr Lindsay Chapman (SPC), reported the recommendations of the group which related to documentation of export procedures & charges and taxes, duties and tariffs applying to the fishing industries in the region, to a study on the role of fisheries administrations, to the improvement of communication between fisheries department, fishing industries, financial institutions and regional organizations, to identification and documentation on quarantine barriers and CITES application procedures and to the public profile of the fishing industry. It was recommended that APRACA (Asia Pacific Rural and Agricultural Credit Association) should conduct research and studies in South Pacific Islands for promotion of small and medium scale fisheries enterprises.

Working Group III: The chairperson of the group, Ms Kitty Simonds (WPRFMC), reported on the recommendations made by her group which related to strengthening the cooperation between the government and the private sector, to adopting the smart partnership philosophy,
to the improvement of government administrative procedures such as streamlining approval processes for licensing, infrastructure, investments and construction and to training needs.

A comprehensive and comparative study and analysis of taxes and fiscal charges levied on the private sector in the South Pacific including a review of policies of government toward the private sector were recommended as one of the follow-up activities.

The reports of the working groups were discussed and the recommendations were finalised and unanimously adopted as shown below:

**Recommendations of Working Group I:**

*Resource and Environmental Management, Conservation and Rehabilitation as Precondition for Economic Strengthening of Fisheries Industries*

Members of Working Group I: Chair: Ian Bertram, Rapporteur: Johann Bell, Members: Dorothy Harris, Anne Trevor, Autalavou Taua, Jennifer Kallie; Robin South

1. **Priority Policies and Measures**

In general:

- Encourage implementation of the code of conduct for responsible fisheries
- Promote policies on sustainable use of resources

Specifically:

- Preservation/improvement of habitats through integrated coastal zone management and rehabilitation
- Legislation to prohibit destructive fishing practices (in terms of habitat and by-catch)
- Encourage community-based marine conservation areas/fisheries reserves (and supporting policies in areas of education, opportunities for women and appropriate by-laws)
- Closure of entire fishery were stocks are at chronically low levels
- Implementation of restocking programs to fast-track restoration of fisheries
- Use of stock enhancement to increase the productivity of operational fisheries
- Provision of alternative sources of income to compensate for loss of access (e.g. promote aquaculture, develop recreational and/or offshore fisheries)
- Investigate alternative markets/value adding to maintain return from reduced fisheries as they undergo rebuilding
• Promote multidiscipline approach to management of fisheries to ensure that management measures are socially acceptable

Short-term impacts

• Initial financial-social hardship due to measure to rebuild stocks
• Greater dependence on imported, processed foods
• Increased pressure on areas, stocks or species that remain open to fishing after closures are introduced

Long-term impacts

• Improved supply of fresh fish
• Increased opportunities to manage stocks in a way that maximises economic and social benefits
• Increased revenue from aquaculture
• Improved capacity to predict trends in fisheries
• Improved attractiveness of environment with spinoffs to tourism industry
• Better acceptance of need for conservation of marine resources by the community

2. Type of Research and Development Activities to be Undertaken

• Investigations of new, environmentally sound methods for fishing

• Research on marine protected areas (MPAs) to determine the best locations, time needed to restore stocks, and the impact of declaration on local communities, in terms of short-term loss of access to the resource and longer-term benefits through replenishment of nearby areas that remain open to fishing.

• Connectivity/linkages between reefs/islands/countries to determine effects of management (or lack of management) of areas within the range of a species on other areas within the range

• Development of a Regional Aquaculture Strategy, which should include:
  - Research to develop and test economically sustainable methods of aquaculture
- Research to develop and test effective and responsible methods for restocking and stock enhancement (see papers for details)

- Educational and training of personnel to implement aquaculture and stock enhancement, and postgraduate research to educate national scientists

- Dissemination of viable methods to the private sectors and SIDS

- Assistance with related issues, such as marketing, licensing, quarantine and surveys to identify suitable sites for aquaculture (including willingness of communities to participate)

- Transfer of information in the National Environmental Strategies (1993) into National Coastal Development Plans

3. Possibilities for Involving the Private Sector

- Some investment by private sector in establishment of MPAs is likely where there are advantages to tourism, although scientific questions will need to be addressed by regional organizations

- Issues of connectivity are unlikely to be funded by private sector

- Few opportunities within aquaculture, restocking and stock enhancement until research methods have been developed and are proven to be profitable. However the private sector is expected to engage in bioprospecting and culture of prospects for production of pharmaceuticals

- Partial funding from multinationals (e.g. petroleum companies) is possible for development of national coastal development plans

4. Training

- Grass roots awareness programs on the importance of marine resources

- Modifications to curricula, e.g. building on other regional and national initiatives (UNESCO)

- Distance education in fisheries science and resource management skills, including computing skills

- Scholarships for undergraduate, post-graduate students to improve high-level education and training

- Need for appropriate placements and career paths upon return from training

- Provision and regular replacement of computing facilities for national fisheries departments
5. Follow up Activities and Support

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R = Regional, N = National

6. That each government in the region be encouraged to limit fishing effort or licenses (including aquaculture acreage) according to their own national circumstances.

7. That the fishing industries, Fisheries Departments and financing institutions work closer together and promote the free-flow of information, especially for new projects, for better project and credit management in the fisheries sector.

- need for training in small business management for fishermen

8. That there be better communication between financing institutions and regional organizations in relation to fisheries issues

9. That APRACA include specialized training in assessing fishing and aquaculture projects.

10. That a review be undertaken to identify and document quarantine barriers and the procedures of CITES (Convention on the International Trade in Endangered Species of Wild Fauna and Flora) criteria when exporting marine products (especially aquaculture products) from the region to international markets both within and outside the region.
11. That there would be merit in raising the public profile of the fishing industry as being responsible and environmentally concerned, regarding the harvesting, processing, and cultivation of marine resources.

**Recommendations of Working Group II:**

**Economic Strengthening of Fishery and Aquaculture Enterprises, Fish Utilisation and Trade and Supporting Investment and Credit Programmes**

Members of Working Group II: Chair: Lindsay Chapmen; Members: Tanaka Hideyuki; Rimeta Beniamina; Jonathan Bana; Paul Callaghan; Robert Lindley; Tony Kingston; Chris Saelon; Lloyd Joseph, Aukusitino Rasch.

Group Recommendations:

1. That a study be undertaken to document all export procedures and charges in Pacific countries and territories, to look at streamlining these procedures and charges, whilst insuring quality product is being exported.

2. That a study be undertaken to document all taxes, duties and tariffs that apply to the fishing industries in the region, showing any concessions or exemptions that may apply.

3. That support be given to the review being co-ordinated by the Forum Secretariat on fuel and utility pricing policies in the region as it relates to fishing enterprises.

4. That a study be undertaken to look at the implications of removing trade barriers on fisheries products (inshore, offshore and aquaculture), and commercial fishing equipment in the region.

5. That a study or review be conducted on how fisheries administrations are structured, including their roles, responsibilities and interaction with the private sector.

6. That each Government in the region be encouraged to limit fishing effort or licenses (including aquaculture acreage) according to their own national circumstances.

7. That the fishing industries, fisheries departments and financing institutions work closer together and promote a free-flow of information especially for new projects and for better project and credit management in the fisheries sector.

8 That there be better communication between financing institutions and regional organizations in relation to fisheries issues.

9 That the Asia Pacific Rural and Agricultural Credit Association (APRACA) conducts specialised training for the proper assessment of fisheries and aquaculture projects.

10. That a review be undertaken to identify and document quarantine barriers and the application of CITES (Convention on the International Trade in Endangered Species of Wild Fauna and Flora) criteria and procedures when exporting marine products (especially aquaculture products) from the region to international markets both within and outside the region.
11. That there would be merit in raising the public profile of the fishing industry as being responsible and environmentally concerned, regarding the harvesting, processing, and cultivation of marine resources.

**Recommendations of Working Group III:**

**Role of fisheries administrations and associations in economic strengthening of fishery enterprises and creation of a conducive fiscal and regulatory environment for fishery industry development**

Members of Working Group III: Chair: Kitty Simonds; Members: Ramos Agege, Simon Alekera, John Low, Samisoni Naisua, David Douman

General Recommendations:

The Government should refocus its activities and services away from market intervention to a facilitation role. These include:

- Managing and regulating fishery resources in collaboration with the resource custodians and other nations
- Collecting and processing information to support policy decisions
- Supporting infrastructure development where economically justifiable
- Creating an enabling environment for stable investment, both foreign and domestic
- Providing training and basic research
- Improving access to market information

Specific Recommendations and Follow-up Proposals:

1. Cooperation between the Government and the Private Sector (industry, civil society and NGOs) should incorporate the Smart Partnership Philosophy. This would involve establishing a formal consultative mechanism between government and the private sector to ensure that private sector interests are incorporated into government policies that affect the sector. In this connection, the private sector should participate in decisions on research, management programs, training, investment and infrastructure. As a matter of principle, the government should provide the physical infrastructure to support the private sector and the private sector should be prepared to pay an economic charge for the use of such infrastructure.

2. Government Process: Governments should improve administrative procedures such as streamlining approval processes for licensing, infrastructure, investments, construction, etc. Most importantly, the government process must be transparent for there need to be a high degree of trust between the government and the private sector.
3. Fees: Government should rationalize taxes and user charges so that the private sector is not disadvantaged vis-a-vis other industries. A recent FAO/AusAID study in Tonga highlighted this point.

4. Training: Government should gear training to meet the needs of the private sector and the industry should contribute to the cost of training. To ensure that the training matches the needs of the private sector, the sector should be regularly consulted concerning training requirements.

5. Follow-up: A comprehensive and comparative study and analysis of taxes and fiscal charges levied on the private sector should be undertaken in the South Pacific. Terms of reference for the study should be clearly defined. The study should also include a review of policies of the government toward the private sector.

5. CLOSING SESSION

The workshop closed after Dr Uwe Tietze, Technical Secretary of the workshop, Dr Vili Fuavao, FAO Sub-Regional Representative for the Pacific, and Mr Mafi ‘Akau’ola, Chairman, had thanked all the participants for their contributions to the workshop, and Mr Samisoni Naisua, Representative of Fiji, on behalf of the participants expressed the workshop’s thanks for the work of FAO Sub-Regional Office for the Pacific Islands, Secretariat and Chairman.
APPENDIX I

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# APPENDIX II

## PROGRAMME

<table>
<thead>
<tr>
<th>Monday 14.9.98</th>
<th>Time</th>
<th>Programme</th>
<th>Presented By</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>08:00</td>
<td>Registration of the Workshop participants</td>
<td></td>
</tr>
<tr>
<td></td>
<td>09:00-09:30</td>
<td>Opening of Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prayers &amp; Blessing  (Rev. Siolo Tauati)</td>
<td>FAO Sub-Regional Representative</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Opening Address  (Dr. Vili Fuavao)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Keynote Address  (Hon. Leniu Avanmagalo)</td>
<td>Minister of Women Affairs and Statistics</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Group Photo</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:00-10:30</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10:30-11:00</td>
<td>Introduction to Workshop</td>
<td>FAO / SAPA</td>
</tr>
<tr>
<td></td>
<td>11:00-11:15</td>
<td>Overview of FAO's programme of fisheries assistance to small island development states (SIDS)</td>
<td>FAO / HQ</td>
</tr>
<tr>
<td></td>
<td></td>
<td>A. Enhancement and conservation of aquatic resources and environment as precondition for sustainable fishery industries development:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11:15:12:00</td>
<td>Community-based management systems for conservation and enhancement of inshore fisheries resources in the South Pacific</td>
<td>Samoa Fisheries Division</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fiji Economic Planning and Statistics Division (only paper distributed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12:00</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14:15-15:00</td>
<td>Stock enhancement of tropical inshore species</td>
<td>ICLARM</td>
</tr>
<tr>
<td></td>
<td>15:00-15:15</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15:15-16:00</td>
<td>Conservation and management of highly migratory fish stocks in the Central and Western Pacific Ocean and its implications for fishery enterprises in the South Pacific</td>
<td>FFA</td>
</tr>
</tbody>
</table>
### B. Economically viable and sustainable management of fishery enterprises

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>16:00-16:45</td>
<td>Efficient management of artisanal/small-scale fisheries development centres and their role in strengthening micro-enterprises in the fisheries sector</td>
<td>Solomon Fisheries Division/EU Project</td>
</tr>
<tr>
<td>16:45-17:30</td>
<td>Important features of successful joint ventures</td>
<td>FAO / HQ</td>
</tr>
<tr>
<td>17:30</td>
<td>Joint ventures in fish capture and processing/marketing - a case study of Solomon Taiyo</td>
<td>ESCAP* (only paper distributed)</td>
</tr>
</tbody>
</table>

**Tuesday, 15.9.98**

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:15</td>
<td>Video presentation on community-based management and conservation (video title: &quot;Who cares about fish&quot; produced by AusAID and Samoa Fisheries Division)</td>
<td>Samoa Fisheries Division</td>
</tr>
<tr>
<td>09:15-09:45</td>
<td>A case study of achievements and development prospects of Samoa's domestic longline fishery</td>
<td>Samoa Fisheries Division</td>
</tr>
<tr>
<td>09:45-10:15</td>
<td>Appropriate fishing craft design for the development of locally based longline fishing enterprises</td>
<td>Hillbuilt Boats (Samoa)</td>
</tr>
<tr>
<td>10:15-10:30</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>10:30</td>
<td>Development prospects and constraints of domestic fisheries enterprises - a case study of Alatini Fisheries, Tonga</td>
<td>Alatini Fisheries (Tonga)*</td>
</tr>
</tbody>
</table>

### D. Strengthening of Aquaculture enterprises in the South Pacific:

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:30-12:30</td>
<td>Development of commercial and export-oriented aquaculture</td>
<td>FAO/SPADP</td>
</tr>
</tbody>
</table>

### C. Strengthening of fish utilisation and trade:

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented BY</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:30-13:50</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>13:50-14:15</td>
<td>Development of commercial and export-oriented aquaculture (continued)</td>
<td>FAO/SPADP</td>
</tr>
<tr>
<td>14:15-15:00</td>
<td>HACCP-based quality assurance for seafood</td>
<td>SPC</td>
</tr>
<tr>
<td>Time</td>
<td>Programme</td>
<td>Presented By</td>
</tr>
<tr>
<td>-------------</td>
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</tr>
<tr>
<td>15:00-15:20</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>15:20-16:00</td>
<td>Possible impact of WTO and LOME IV Convention on fish trade in the South Pacific region</td>
<td>FAO/HQ</td>
</tr>
<tr>
<td>16:00-16:30</td>
<td>Support to fishery industry development through fisheries education and research</td>
<td>USP</td>
</tr>
<tr>
<td>16:30-17:00</td>
<td>Assistance to Pacific Island fisheries enterprises through SPC/NZ School of Fisheries Partnership</td>
<td>SPC</td>
</tr>
<tr>
<td>17:00-17:15</td>
<td>The NZ School of Fisheries and fisheries training for the Pacific Island seafood industry</td>
<td>NZ School of Fisheries, Nelson Polytechnic</td>
</tr>
<tr>
<td>17:15-17:45</td>
<td>SPECIAL SESSION: &quot;The Role of the Code of Conduct for Responsible Fisheries&quot;</td>
<td>FAO / HQ</td>
</tr>
</tbody>
</table>

Wednesday, 16.9.98

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented By</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:45</td>
<td>Small and medium-scale enterprise finance in Asia and changes in the context of deregulation and financial crisis</td>
<td>APRACA</td>
</tr>
<tr>
<td>09:45-10:10</td>
<td>Fisheries credit in Papua New Guinea</td>
<td>Rural Development Bank of PNG</td>
</tr>
<tr>
<td>10:10-10:30</td>
<td>Fisheries credit in Samoa</td>
<td>Development Bank of Samoa</td>
</tr>
<tr>
<td>10:30</td>
<td>A case study on investment and credit support in the South Pacific</td>
<td>SPPF*</td>
</tr>
<tr>
<td>10:30-10:50</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>11:15-12:00</td>
<td>Corporate planning and the role of fisheries administration and public sector in strengthening of fishery industries</td>
<td>Fiji Fisheries Division</td>
</tr>
<tr>
<td>12:00-13:30</td>
<td>Lunch break</td>
<td></td>
</tr>
</tbody>
</table>
### Time Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Programme</th>
<th>Presented By</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:20</td>
<td>Past and future assistance of bi and multilateral development agencies in support of strengthening and development of fisheries enterprises (continued)</td>
<td>WPRFMC</td>
</tr>
<tr>
<td>09:20-10:30</td>
<td>Presentations by countries participating in Workshop on their policies for strengthening of their fisheries industries</td>
<td>Solomon Islands, Cook Islands, Kiribati, Nauru*</td>
</tr>
<tr>
<td>10:30-10:50</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>10:50-11:45</td>
<td>Presentations by countries participating in Workshop on their policies for strengthening of their fisheries industries (continued)</td>
<td>Tonga, Guam, Samoa*, Development Bank of Solomon Islands</td>
</tr>
<tr>
<td>11:45-12:00</td>
<td>Past and future assistance of bi and multilateral development agencies in support of strengthening and development of fisheries enterprises (continued)</td>
<td>Forum Secretariat</td>
</tr>
<tr>
<td>12:00-13:30</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>13:30-13:50</td>
<td>Comparison of fiscal policies for the fisheries sector in the South Pacific states and other states competing in same export markets</td>
<td>FAO/HQ</td>
</tr>
<tr>
<td>13:50-15:00</td>
<td>Group discussion: recommendations and follow-up proposals for strengthening of fisheries industries with special reference to issues A-H</td>
<td>Working Groups I, II &amp; III</td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td></td>
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<tr>
<td>--------------</td>
<td>---------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>15:00-15:15</td>
<td><em>Tea break</em></td>
<td></td>
</tr>
<tr>
<td>18:00</td>
<td><em>Reception hosted by the FAO Sub-Regional Representative for the Pacific at the FAO SAPA</em></td>
<td></td>
</tr>
</tbody>
</table>

**Friday, 18.9.98**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>10:00-10:30</td>
<td><em>Morning tea</em></td>
</tr>
<tr>
<td>10:30-11:15</td>
<td>Report on recommendations and follow-up proposals Working Groups I, II &amp; III</td>
</tr>
<tr>
<td>11:15-12:00</td>
<td>Closing of Workshop</td>
</tr>
</tbody>
</table>
This is the report of the Workshop on Economic Strengthening of Fisheries Industries in Small Island Developing States in the South Pacific, held in Apia, Samoa from 14 to 18 September 1998. The workshop was organized and funded by FAO and hosted by the FAO Subregional Office for the Pacific Islands. The workshop was attended by 46 participants including representatives of FAO member countries, non-member countries and territories in the South Pacific as well as representatives of regional organizations, institutions and donors. The main issues addressed by the workshop included the enhancement and conservation of aquatic resources and environment as a precondition for sustainable fishery industries development; the economically viable and sustainable management of fishery enterprises; the strengthening of aquaculture enterprises in the South Pacific; the promotion of fish utilization and trade; fisheries education and training; investment and credit support; the fiscal and regulatory environment of fishery enterprise development; and the role of fisheries administrations in strengthening of fisheries enterprises. The workshop formulated a number of recommendations addressed to national governments, regional organizations and bilateral and multilateral donors as well as proposals for follow-up activities and for better regional cooperation in strengthening fisheries industries in small island developing States in the South Pacific.