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**Pacific Cooperation Plan  
Preliminary Sector Analysis**

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## PACIFIC COOPERATION PLAN PRELIMINARY SECTOR ANALYSIS

### Fisheries Subsector

#### **1. Executive Summary**

Fisheries and aquaculture production in the Pacific Islands Forum and Community region is roughly estimated to be worth US\$850 million, not counting other economic benefits such as employment etc., whilst the value of fish caught in the Western and Central Pacific region by non-Pacific Island vessels is worth up to US\$2 billion.

Apart from skipjack tuna, most Pacific Island fish stocks, whether offshore or inshore, are felt to be at their maximum safe level of production, and extra economic benefit is likely to be derived not from increasing overall fishing effort in the region but from (a) developing higher-price markets and higher-value or higher-quality products (including live fish); (b) Pacific Island vessels substituting for distant water fishing vessels, or encouraging foreign vessels to land fish in Pacific Island countries for value-adding; (c) transcending the limits of natural marine systems through aquaculture; and (d) researching new fisheries for hitherto-unused marine organisms.

Before trying to increase the economic value of fisheries and aquaculture however, it will be essential for PICTs to consolidate and sustain the value of what they currently have. Whilst fisheries are renewable resources, the value of fisheries is vulnerable both to overfishing and (in the nearshore especially) to other human impacts such as pollution. Limits are already being brought to bear on the regional tuna fishery, and several critical inshore fisheries have been limited by government action. Everywhere there is a groundswell of support for strengthening traditional and community management systems for inshore fisheries, which can relieve some of the limitations on government. This trend is encouraging and this region can justifiably consider itself ahead of many other regions, including parts of the developed world, in applying sound governance principles to fisheries. However, specific attention is needed to improve the integrity of modern, offshore fisheries licencing systems, and a major challenge awaits any government that tries to effectively integrate coastal and marine areas into a whole-island management system in order to tackle land-based effects on the marine environment.

Regional cooperation is essential in the management of migratory fish species and distant-water fisheries. The region has an excellent record in this area, and is served by world-class regional agencies in the form of FFA (tuna fishery management) and SPC (fishery and marine ecosystem science). This cooperation on tuna fisheries has had positive knock-on effects for coastal and reef fisheries. Although less directly economically valuable, these coastal ecosystems are vastly more complex, and have great significance for rural food-security and coastal protection, as well as considerable economic value in their own right. Regional cooperation in the management of regionally-migratory fisheries needs to continue for the foreseeable future, whilst regional experience-sharing and support for coastal fisheries governance is still on the upward leg of a substantial learning curve, and provides considerable added-value for PICTS.

Some probable issues for the future are discussed, including the likelihood of increasing conflict between user-groups as resources hit their limits, the role of the Pacific Islands Regional Ocean

Policy, and the need for a regional decision on the future of regional marine spaces to accommodate different users. An ocean management regime that is robust in the face of inadequate information, and which contains “insurance”, is preferable to a regime that attempts to squeeze every last possible financial benefit out of the ocean.



## 2. Preamble

The fisheries sector, for the purpose of describing Pacific Islands regional cooperation, can be considered to be composed of two subsectors, each consisting of two economic-political components:

- ***Oceanic Fisheries***: Fisheries for migratory pelagic species that move between individual national marine exclusive economic zones or across boundaries. Four tuna species are important in the region (Skipjack, Yellowfin, Albacore, Bigeye), but there are occasionally fisheries targeting other oceanic species (e.g. swordfish, shark) and non-target catches need to be taken into account. Other types of oceanic fishery may become significant in future (e.g. benthic and mid-water fisheries). The two main components of oceanic fisheries currently are:-
  - *Distant Water tuna fisheries* – vessels fishing in other than their flag EEZs under access agreements, and on the high seas, usually from non-Pacific Island states. The majority of the catch is skipjack, taken by purse-seiners, but longliners are also significant and several other types of distant water fishery exist (e.g. albacore trolling): Current value – US\$2 billion (very approximately); landed volume - 1,650,000 tonnes (approximately)
  - *Pacific Island domestic tuna fisheries* – mostly smaller vessels fishing within their own EEZs. The majority of the Pacific Island vessels are longliners (catching albacore, bigeye, yellowfin, in varying proportions), but there are some Pacific Island-flagged or -based purse-seiners. Current value – US\$5-700 million; landed volume – 260,000 tonnes (note: this domestic component of the oceanic fishery has increased significantly over the past decade)
- ***Coastal Fisheries***: Fisheries for nearshore and coral reef species. Several hundred species are significant components of the catch, and in fisheries management terms, there are thousands of individual “stocks”. Not only fin-fish, but invertebrates are significant, particularly in export fisheries. Coastal fisheries are often classified into two components:-
  - *Domestic food fisheries* – are important for protein food security, particularly in rural areas and outer islands. With respect to their governance, a great deal of control over reef fisheries is still exercised by communities, and there has been a recent resurgence of traditional measures in many areas. In some islands however the traditional system has been too far eroded, and the management of the fishery needs strengthening with modern measures. Because they are so scattered, there is little reliable information available the extent and value of these fisheries, but estimates (the latest being from 1996<sup>1</sup>) put the value (at 1995 average local market prices) at around – US\$200 million; landed volume - 90,000 tonnes. In 1996 it was estimated that 80% of this fishery did not enter the cash economy, but commercialization is proceeding more rapidly in some PICTS.
  - *Coastal export fisheries* – are where the main problems of overfishing and sustainability in Pacific Island fisheries currently lie. Non-perishable invertebrates have been exported in the past (the trade in bêche-de-mer goes back several hundred years) but more recently live aquarium fishes<sup>2</sup> (50 years) and live reef food fishes (20 years) and live coral (10 years) have become significant exports. Current value – around US\$50-80 million<sup>3</sup>.

**Comment [RV1]:** Note: the way in which various “sectors” have been compartmentalized in the PP sector study template does not completely isolate regional fisheries cooperation into the “fisheries sector” compartment, since work being undertaken under the heading of “fisheries cooperation” includes aspects of employment, trade, investment, trade facilitation, private sector communication, media, IT, tourism, transport (and even forestry, agriculture and mining, as far as the need to take account of the effects of these sectors on the state of the marine environment) – indeed virtually every other single “sector”, including all the social sectors, is affected by fisheries, as probably all of the sectors affect each other in turn. Some description of the interactions of these different sectors might be useful at some stage via a matrix (eg: fisheries/health interact via nutrition & fish-poisoning; fisheries/culture via customary fisheries management & expressions of fishing in cultural traditions; fisheries/trade via, er, fish trade etc). Some of these interactions are more significant than others in terms of regional cooperation.

<sup>1</sup> SPC is currently working to develop better estimates, with project assistance from the European Union under the 8<sup>th</sup> and 9<sup>th</sup> EDF PRIPs. The existing information is summarized in Dalzell et al (see references)

<sup>2</sup> Fiji is apparently now the world’s fourth largest supplier of aquarium organisms.

<sup>3</sup> All of these value figures are very approximate, and are in need of regular re-assessment at both the national and regional levels. Many of the official figures are probably underestimates. The best current information is contained in Gillett et al (see references).

- A further category is often added. Although not strictly a fishery, and more conceptually akin to agriculture, marine and freshwater farming or *aquaculture* is already significant to some Pacific Island countries, and is likely to become increasingly significant as global populations grow. Its main current economic expression is in black pearl farming in Eastern Polynesia (the Cook Islands and French Polynesia, for ecological reasons, have much higher-density natural black pearl shell stocks). Although the market has been in something of a slump for the last couple of years, the trade in Pacific black pearls from eastern Polynesia is worth more than the current value of the entire coastal export fishery from the Pacific Islands as a whole. Other types of aquaculture are starting to become important for food and rural economies, including tilapia, prawn<sup>4</sup>, and various seaweeds. The current economic value of aquaculture production in PICTS is around US\$130-180 million (although most of this is in non-Forum PICTS)

With respect to the focus of the Forum, on economic growth, sustainable development, good governance and security:

- the fisheries sector is generally considered to be a major engine for *economic growth* by many Pacific Island countries, as well as many donors. A recent study by the Asian Development Bank concluded that an average of 10% of Pacific Island national GDP came from the fisheries sector<sup>5</sup>, once fisheries had been separated from agriculture under which it is usually lumped in national accounts. Although selling access to distant water tuna boats is important to some national economies, domestic tuna fisheries are important to others. Aquaculture, as noted, is important to eastern Polynesia, and coastal fishery exports (beche-de-mer, trochus shell, live fish etc) can also be economically significant for some islands. Although the ultimate ecological potential of living marine resources is more or less fixed (or even reducing, given increasing impacts of land-based development on the marine environment), the main component of the tuna fishery economy in the Pacific Islands region is provided by non Pacific Island fishing vessels, and there is scope to continue increasing the share enjoyed by Pacific Islands-based fisheries, and for increased value from better quality or new markets.
- Apart from some coastal export fishery problems, most Pacific Island fisheries are generally not overfished and likely to be able to contribute to *sustainable development* and food-security in Pacific Island economies for some time, particularly tuna fisheries. The sustainable aspect of fisheries is promoted through the application of management regimes for the various fisheries, including the recently agreed Western and Central Pacific Fisheries Convention.
- The principles of Pacific Island fisheries management, both oceanic and coastal, can be considered from many points of view to set a *governance* example for the rest of the world to follow – other regions are only just beginning to embrace the rights-based and stakeholder-involving decision-making process that have always characterized Pacific Island fisheries. On the other hand, the modern expressions of fisheries management in some countries, particularly licencing procedures, and various allegations of bribery and corruption, are in urgent need of cleaning up.
- Food-security is a major factor in fisheries planning. Border-security is also an issue in fisheries, with foreign fishing vessels licenced to fish in several countries, but the Niue Treaty to facilitate inter-island cooperation in fisheries surveillance and law enforcement is an innovation that may be emulated in other sectors in future. The regional electronic fisheries surveillance network is also a factor that is starting to bring together Pacific Island enforcement and military

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<sup>4</sup> “shrimp” is the correct terminology for marine species, but most people still know them as prawns.

<sup>5</sup> this average includes great variation between PICTS. In general Micronesian and Polynesian atoll countries have a much higher relative dependency on fisheries than most of Melanesia, with extremes ranging up to 95% of exports being composed of fishery products.

agencies as well, whilst aquatic quarantine and regulation of transboundary movement of live aquatic organisms is still at a very early stage in the region.

### 3. Key Historical Trends

Fisheries have played a significant role in the history of the region and, along with the need for land, were a major impetus for the original colonization of the islands by our ancestors, as the most readily-available nearshore resources were depleted and new resources beckoned. Traditional subsistence food-security has relied heavily upon fisheries as most Pacific Islands were originally devoid of land-mammals. It is likely that in some islands, historical fishing pressure on reefs has been even higher than it was today – many populations suffered crashes after first contact by Europeans, and food sources today are more diverse – and measures for coping with occasionally-scarce resources have evolved over the centuries on each island. Fisheries themselves were a major factor in persuading Europeans to settle in the Pacific, particularly the lure of beche-de-mer as trade goods once sandalwood resources were depleted in the early 19<sup>th</sup> century.

The industrial tuna fishery is a recent development by comparison, and assumed importance after the second world war, as Japanese distant water fishing vessels gradually explored and proved the oceanic fisheries of the Pacific. Tuna fishing in the region expanded greatly over the last three decades, but appears to have more or less reached a plateau – a cap related both to the world market price of tuna and the catchability of the resource, and further development can only proceed within this limit through increasing the Pacific Islands share of the fishery and increasing the value added to fishery through addressing higher-value markets and product development. Aquaculture, however, has considerable extra economic development potential.

It should be noted that the ranges of Western and Central Pacific tuna stocks overlap not only the Pacific Islands but also parts of Southeast Asia, and domestic fishing in Philippines and Indonesian waters has significant effects on regional tuna stocks. Even so, the WCP tuna fishery is considered to be one of the major global fisheries that has not been overfished (although concern has been expressed for the past two years, warning that current catches of bigeye tuna are unlikely to remain sustainable after the current “bloom” of young bigeye has run through its lifecycle). The recruitment and availability of tuna is strongly affected by climatic factors such as the El Nino southern oscillation event, and fisheries that are sustainable in good years are not necessarily sustainable in bad years.

Another trend has been the gradually increasing Pacific Islands share of this oceanic fishery. Although there was an early spike of Pacific Islands involvement in tuna fishing, where several countries set up small fleets of pole-and-line boats fishing mainly for skipjack to feed domestic canneries<sup>6</sup> in the 1970s and 80s, the fluctuating world market price of skipjack, and competition from purse-seiners, meant that most countries had to abandon this development route<sup>7</sup>. The more recent expansion by Pacific Islands has been through small and medium-scale longlining, and this has provided a comparatively high value for the lower volume of fish that it produces. Most of this Pacific Island longline-caught fish is high quality and airfreighted fresh overseas, although there is notable dependency on the Japanese market. There remain two major tuna canneries in the Forum region, but a more recent development has been the establishment of loining facilities in Marshall Islands, Fiji and Papua New Guinea which process raw tuna into cooked loins for shipment to canneries. In terms of both value and volume, the Pacific Islands share of the Pacific Islands tuna

<sup>6</sup> Papua New Guinea, Solomon Islands and Fiji were notable in this regard, but Tuvalu and Kiribati also invested in pole and line fishing

<sup>7</sup> Only the Solomon Islands retains a significant number of pole and line boats

catch is still much less than other fishing countries, with considerable prospect for taking over a larger share, should it become economically feasible and competitive.

In political terms, the “corralling” of the seas around land-masses into 200-mile Exclusive Economic Zones in the late 1970s was a significant event for the Pacific Islands, and the organization that was set up by island states to help them manage this vast new territory, the Forum Fisheries Agency, is in itself a living demonstration of the evolution of the tuna fishery. In June 2004, a new regional legal instrument came into force that provides the prospect of managing previously uncontrolled high seas fisheries – or at least tuna fisheries, and this high seas aspect, plus the overall limits of the regional tuna fishery, will be governed by a new Commission set up for the purpose.

#### **4. Anticipated Future Trends**

Many future potential developments (including things to be avoided) in the fishery sector are predictable, given the historical trajectory of fisheries in developed countries, and by projecting current trends.

In the shorter term, the main issues to be faced in the sector include:

- The advent of the new Western and Central Pacific Highly Migratory Fish Stocks Commission<sup>8</sup> and the need to develop a favourable political balance – the trade-off of some sovereign rights in return for shared control of tuna fisheries on the regional high seas – and to negotiate tuna fishery management and allocation systems that both effectively conserve the resource and retain maximum possible benefit for coastal states. Forum member states will need to maintain coherence and direction throughout this process and, through the Forum Fisheries Agency, will need to adjust and strengthen their vision of what the Commission needs to achieve. Part of this process involves the development of effective management regimes in the tuna fishery that still allow coastal states to further develop the value of their industries;
- The continuing commercialization of domestic and reef food fisheries, and challenges to traditional marine resource management and usage systems as economies develop out of subsistence lifestyles. This has run its course to a greater extent in northern Micronesia and eastern Polynesia than it has in much of Melanesia, and there is no single regional solution possible. However, a great deal remains to be gained from sharing experiences and pooling resources, particularly in assessing the status and prospects of these reef fisheries, and helping government to support traditional resource management without destroying it;
- The global anti-fishing lobby that is developing almost without reference to the effect that its occasionally mistaken advocacy is likely to have on small island developing states. Pacific Islands may need to become much more pro-active in redressing the perceptions of the international community where they are mistaken, or where they inappropriately assume that problems in other parts of the world are applicable to the Pacific Islands region. This is a particular worry now that the Pacific Islands have invested so much in longlining, and when Pacific Island tropical longliners do not have a high turtle bycatch, and no significant seabird bycatch, and do not unsustainably impact oceanic sharks, as longline fisheries in some other parts of the world are being accused of. Actions might include improving the monitoring of fisheries to get even more reliable data and firming up assessments of potentially impacted species; conveying these results in a directed way to UN oceans processes through better linkages with Pacific Islands Forum New

<sup>8</sup> One immediate dilemma is to arrive at a “vernacular” name for the Commission. “WTP Fisheries Commission” is overly inclusive (the Commission will have no jurisdiction over coastal fisheries or stocks confined to EEZs), whilst the “WTP Oceanic Fisheries Commission” is not acceptable to some.

York based missions, and through a coherent lobby within the FAO Committee on Fisheries; and generally setting up access and domestic licencing conditions that can be clearly seen to work to minimize the potential for unintended impacts of tuna fisheries.

In the longer term, issues to be faced are likely to include

- Increasing conflict between commercial, recreational and subsistence fisheries interests, in addition to the existing tension between conservation and fishing lobbies;
- Increasing numbers of fisheries running up against environmental limits, or even facing reduced limits as nearshore environments degrade, and as populations expand. If future economic development of fisheries is to remain sustainable then four strategies will have to be considered:
  - Living natural resource management systems will need to become even more *effective* in capping exploitation where necessary, and there will need to be significant investment in systems that can effectively monitor the status of resources and activities of fishers in order to trigger management actions, particularly industrial fisheries;
  - Future economic gains by Pacific Islands from fishing will come increasingly from improving product value<sup>9</sup>, developing new markets, and assuming a greater share in fisheries, rather than expanding local fisheries or developing new fisheries;
  - Fishing for farmed, rather than wild, fish will become increasingly economically feasible, and can capitalize upon one resource that Pacific Islands own in plenty – seawater. However, aquaculture brings along with it a whole suite of development problems and the field will require considerable attention if it is to remain environmentally and economically sustainable. For example, quarantine and introduced-species risk assessment and mitigation will need improvement, and there are likely to be political problems resulting from nearshore and seabed tenure and use rights disputes if legal systems are not appropriately set up in advance.
  - The downstream effects of land-based impacts on aquatic production systems, both fisheries and aquaculture, will need to be assessed, and mitigated or avoided where they are significant. This might be either through extending the influence of fisheries management into agriculture, forestry and urban planning processes, or developing practical and workable whole-island management regimes that integrate both watersheds and coastal marine areas.

For the long term, the Pacific Islands region needs a clear, shared, vision of how it wants to see the use of the Pacific Ocean developing. Do we want to follow the same path at sea as we did on land? Do we want to see the majority of the oceans turned into simplified, intensively managed and cropped "farmland" ecosystems, with a few wildlife reserves? There are suggestions that one way forward is to proactively *zone* the ocean, with different areas being set aside for different purposes, including fishing, sea-farming and trade routes, with a large area set aside for preservation. Quite how such boundaries might function in a three-dimensional fluid medium, where "spillover effects" are expected to be the norm, remains to be seen, but already there is an influential international lobby calling for 20-30% of the world's oceans to be set aside as no-take reserves or refuges, and this international issue will require regional debate.

The Pacific Islands region is in a position to set precedents that lead the world on some of these big decisions, since there is probably more commonality of purpose in this region than any other. Forum members have already blazed a trail for the rest of the world to follow in the management of regional tuna fisheries, including the application of the precautionary approach in the regional

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<sup>9</sup> In this respect, a general strategy of aiming for higher quality rather than higher quantity is likely to serve both resource-management interests, and the limitations faced by Pacific Island traders competing in overseas markets, particularly transport costs and labour rates;

ban on the use of long driftnets in the region that was expressed through the 1989 Wellington Convention.

The Pacific Islands Regional Ocean Policy has concisely consolidated the principles that have already been agreed by Forum countries to pertain to their stewardship of the Ocean. This fundamental high-level framework is now set to find some more definite modes of expression, such as the possible institution of the office of “Ocean Ombudsman” to provide independent reports to Pacific Community leaders on uses and abuses of the Pacific Ocean according to the principles of the Policy, and an integrated strategic action plan under the Policy will shortly be considered by the Forum.

However, one issue where the Pacific Islands need to set a better example to the rest of the world is in certain aspects of commercial fisheries governance. Although such problems are normal in some other regions of the world, recent reports of irregularities and alleged corruption with respect to fisheries licencing, in certain island countries, affect perceptions of the entire Pacific, and it would be wise for these practices to be eliminated before they become entrenched. Despite the publicity, such practices are not typical, by any means, of Pacific Island fishery management processes.

## **5. Preliminary Stocktake of Scope of Region Cooperation**

The fisheries sector is where intra-Forum cooperation has been most keenly and effectively operating in the Pacific Islands region over the past 30 years or so. This is primarily because of the nature of the oceanic fisheries sector, where both the main targeted fish stocks and the fleets that fish them are migratory. Regional cooperation has been necessary in order to manage the oceanic fishery, and this cooperation has spilled over into coastal parts of the fisheries sector overseen by the same people who cooperate so regularly on oceanic fisheries.

The strong regional cooperation in the sector has not only been because of “highly migratory” fisheries however. If that were the case then oceanic fisheries management cooperation in other regions would be equally strong, and not led by the Pacific. Cooperation has also been strong because Pacific Island states also enjoy a relative solidarity and commonality of interest, particularly in the early years of the tuna fishery, and the fact that the management regime in this region was set up *after* the UN Conferences on the International Law of the Sea were concluded, and 200-mile exclusive economic zones came into being, and thus the region did not labour under the legacy of a regime set up when there was no recognition of coastal State rights beyond territorial waters.

Indeed, this is one area where the Pacific Islands region is ahead of the rest of the world, which is now moving towards regional, rather than national and international, management of ocean affairs, and where the management of oceanic fisheries in this region has been held up as a model for other regions to follow (ref: IUCN etc).

As mentioned, the regular communication necessary for management of oceanic fisheries has had spillover benefits for other areas within the fisheries sector, and while there is no region-wide harmonisation of the regulation of coastal fisheries, there is much sharing of experiences and ideas between fisheries departments in different countries as a result.

In terms of “regional hardware”, the economic significance of regional cooperation has meant that a bigger regional infrastructure has been built up to serve the fisheries sector than any other sector except regional education. Within CROP agencies alone there are over 100 individuals working at

the regional level on fisheries issues – mostly oceanic fisheries, but with an increasing number helping countries develop capacity on coastal fisheries assessment, management and conservation, as the economic value of coastal fisheries expands. Apart from the history of the sector, and the prospects for further economic development, another reason for the high concentration of regional programmes in fisheries is possibly that, in most countries, fisheries development has not been a major priority for funding in **national** budgets, which concentrate on health, education and agriculture. The necessity for regional-level cooperation has allowed many countries to devolve some of their fisheries work to the regional level, particularly the smaller countries. The existence of regional fisheries assistance has thus effectively allowed many countries to get by with much lower national budgetary investment in certain areas of fisheries, particularly science, whilst the total amount spent at the regional level is probably much less than would have been required to duplicate this capability in each member country. Not every small island country *needs* a world-class tuna fishery scientist, but just requires a share of their services.

This lack of national budgetary investment in fisheries has changed significantly in certain countries within the last decade, particularly Papua New Guinea and Fiji, but fisheries departments are a fairly recent addition to most government portfolios, and most of the fisheries departments in the region can trace their roots back to encouragement and advisory support from regional fisheries organisations.

The Forum Fisheries Agency is the primary expression of regional cooperation in the oceanic fisheries, with the entire agency devoted to this subsector. Agreements concluded by FFA members since the establishment of FFA in 1979 include:

- i) Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Interest;
- ii) The Multilateral Treaty on Fisheries between the Governments of Certain Pacific Island States and the Government of the United States;
- iii) The Harmonised Minimum Terms and Conditions for Foreign Fishing Vessel Access;
- iv) The Niue Treaty on Cooperation Fisheries Surveillance and Law Enforcement in the South Pacific Region;
- v) The Palau Arrangement for the Management of the Western Pacific Purse Seine Fishery;
- vi) The Federated States of Micronesia Arrangement for Regional Fisheries Access;

As well as developing an internationally-enviable level of cooperation in oceanic fisheries management through FFA, the Pacific Islands region is also recognised as being served by excellent, international-standard fisheries science through the SPC Oceanic Fisheries Programme. The Secretariat of the Pacific Community has two fisheries programmes. The Oceanic Fisheries Programme concentrates on the science necessary to support regional and national tuna management, working very closely with the Forum Fisheries Agency, and the Coastal Fisheries Programme covers all aspects of Pacific Island *coastal* fisheries, from science to development and management, and the growing new subsector of aquaculture. The University of the South Pacific and the South Pacific Regional Environmental Programme, whilst specialising in higher education and environmental protection respectively, are both working in cross-cutting fields and employ several specialists whose main work is in the fisheries sector.

## **6. Assessment of Options**

Regional cooperation in the fisheries sector has been subject to a considerable level of planning over the decades, with a long-term scheme of action, consciously monitored, implemented and revised, and with very definite evolution noticeable. Some of this was expressed at the 10<sup>th</sup>

anniversary conference of FFA (see references), and part of the future was previsaged in the Forum Fisheries Convention itself, which expected that “additional international machinery” would need to be set up to fully implement the requirements of the Law of the Sea on highly migratory species management in the region, a prevision which is culminating in the setting-up of the new oceanic fisheries commission to implement the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. And the SPC Oceanic Fisheries Programme has moved along a well-defined phased track since the middle of the 1980s.

The focus of regional cooperation in oceanic fisheries management has shifted over the past 20 years from managing the operation of foreign fishing vessels under access arrangements to developing management plans at the national level to focus on the sustainability of the resource and options to increase the benefits to Pacific Island States from the exploitation of the tuna resources within their EEZs. This process involves all stakeholders, particularly the domestic private sector.

However, much remains to be done in ensuring that Pacific SIDSs are empowered to make the necessary legal, institutional and policy reforms for the implementation of the SAP and the WCPF Convention. With much of the catch and fishing in the western and central Pacific occurring in the waters of the Pacific SIDSs, successful implementation of the WCPF Convention depends heavily on the commitment and capacity of Pacific SIDSs to apply conservation and management measures in their waters that are compatible with arrangements for the high seas. It is expected that all Pacific SIDSs will have to upgrade and realign their oceanic fisheries management regimes and programmes to meet the responsibilities and standards arising from the establishment of the new Commission. For many, this may require major reforms of institutional structures to make the necessary incremental resources available at a time of general restraint on levels of core public service posts.

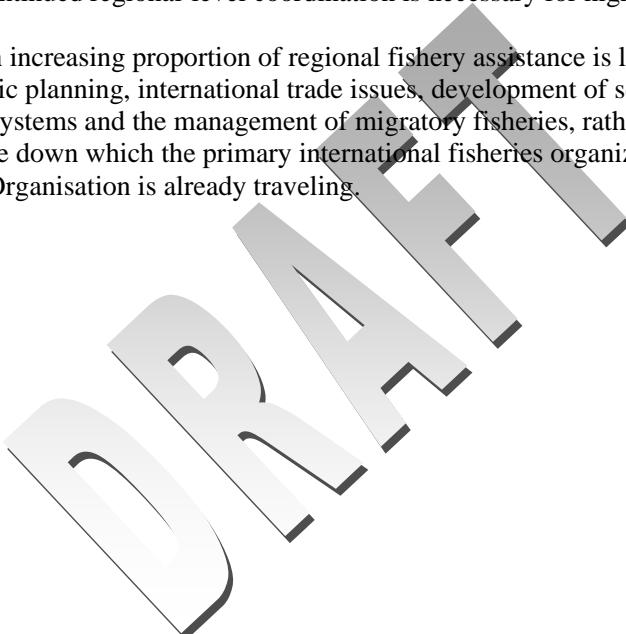
It can be generally concluded that regional cooperation has been of primary importance in the evolution of the Pacific Islands fisheries sector, probably more so than in any other sector. But how much this regional cooperation will continue to contribute to the sector depends both on the nature of the sector, and of national aspirations.

Oceanic fishery management and monitoring remains a transboundary issue, and will continue to require regional cooperation for as long as the fishery exists. However, coastal fisheries and aquaculture are mainly of national, or more usually local, scale and the advantages of regional cooperation lie mainly in economies of scale and the sharing of experiences regarding similar fisheries and farming systems between islands. Given the necessity for national fisheries administrations to cooperate in the management of migratory species, there are opportunities for the same fisheries administrations to maintain a common pool of expertise in the assessment, management and development of coastal fisheries. However one area of increasing importance across the entire fisheries sector, oceanic and coastal, is the desirability of cooperation to improve opportunities and values in extra-regional trade, where a common approach provides greater bargaining power, particularly in addressing quality and sustainability standards of import markets and the management of cross-border risks associated with aquarium and live reef fisheries and aquaculture trade.

Thanks to early regional cooperation, fisheries administrations are now firmly established in all PICTS. Although they are of varying degrees of self-sufficiency, purely regional assistance is not sufficient to cope with the everyday needs of local and national fishery management, and the regional level has concentrated increasingly on the strategic approach – of helping countries and

communities set up procedures and systems, policies and plans for pro-active management and stakeholder-based development – rather than helping with the day-to-day management of domestic fisheries. However, the assessment of the capacity and environmental limits of these wild resources is an area where direct hands-on involvement of regional organizations is still necessary, indeed which is still at a very early stage for many complex coastal and reef fishery ecosystems, and where continued regional-level coordination is necessary for highly-migratory resources..

In general, an increasing proportion of regional fishery assistance is likely to be based on fishery sector strategic planning, international trade issues, development of scientific data acquisition and information systems and the management of migratory fisheries, rather than direct assistance<sup>10</sup>. This is a route down which the primary international fisheries organization, the Food and Agriculture Organisation is already traveling.



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<sup>10</sup> Note that there is a danger of organizations losing touch with the grassroots – with the fishing community – as a result of this withdrawal from tactical to strategic involvement, and the greatest of care has to be taken for regional organizations to maintain contact with people who carry out, and are affected by, fishing.

## ANNEX 1 – Assessment matrix

Current Regional Cooperation Activities				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs	Costs to PICs		
Implementation of the WCPHM Fish Stocks Convention	AusAID, NZAID, GEF/UNDP, FFA members	Sustainable management framework for the four key tuna stocks of the WCPO.	Member contributions for the Commission still to be finalized.	Yes	1
Vessel Monitoring System	FFA members	Real time vessel position speed and direction information resulting in improved fisheries surveillance.	US\$70,000 covering 50% the cost of a VMS Officer in each country. The system itself operates on a full cost-recovery basis from the fishing industry.	Yes	1
Multilateral Treaty with the US	FFA members, USA	Mulilateral Fisheries Access Arrangement with US\$21 million payment per annum to Pacific Island Parties.	Budget to administer the Treaty approximately US\$530,000 per annum.	Yes	1
Palau Arrangement for the Management of the Purse Seine Fishery in the WCPO	FSM, Kiribati, Marshall Islands, Nauru, Palau, PNG, Solomon Islands	Arrangement aimed at sustainably managing the purse seine fishery and increasing returns to countries from licensing arrangements	Included as part of member contributions to FFA	Yes	1
FSM Arrangement for Regional Fisheries Access	FSM, Kiribati, Marshall Islands, Nauru, Palau, PNG, Solomon Islands	Preferential Access Arrangement for domestic purse seine vessels of the Parties. Revenue generated in 2003 and shared amongst Parties was approximately US\$3.1	Budget to administer the Arrangement approximately US\$31,000	Yes	1

Current Regional Cooperation Activities				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs	Costs to PICs		
		million.			
Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement	Currently Palau, Marshall Islands and the Federated States of Micronesia, and the Australian Defence Force through the Pacific Patrol Boat Programme	The sharing of surveillance assets increases the effectiveness of fisheries surveillance and law enforcement	Cost is dependent of the patrol hours spent under the Treaty by surveillance assets. Currently US\$425,000 per annum.	Yes	1
Implementation of Harmonised Minimum Terms and Conditions of Access	FFA members	Strong framework for monitoring foreign fishing vessel operations	Covered in member contributions to FFA.	Yes	1
Regional Aerial Surveillance	Australia, New Zealand, France, U.S.	Surveillance of foreign fishing vessel activity	Cost borne by providers of regional aerial surveillance (currently Australia, New Zealand and France) – currently estimated at US\$2,700,000 per annum.	Yes	1
Observer Training Courses	FFA, SPC & member countries	Strengthened national observer programmes for monitoring of fishing activities.	Cost borne by donors, mainly AusAID	Yes	1
Implementation of international treaty law obligations	FFA members	Identification of potential improvements in international law implementation	Cost borne by donors	Yes	1
Enhancements of fisheries enforcement and prosecutions	FFA members	Improved enforcement of fisheries laws	Cost borne by donors	Yes	1
Boarding and Inspection Training	FFA members	Improved enforcement of fisheries laws	Cost borne by donors	Yes	1
Assessment of status of	SPC members	Information to enable	Cost born by donors and by	Yes	1

Current Regional Cooperation Activities				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs	Costs to PICs		
stocks of 4 tuna species in the region		management to conserve and sustain these fisheries	participating countries, with an increasing percentage to be borne by fishing fleets		
Assessment of status of species associated with tuna fisheries	SPC members	Information to promote ecosystem-based management & conservation of endangered species	Outputs are largely incidental to tuna fishery monitoring and need increased attention	Yes	1
Understanding the WCP oceanic pelagic ecosystem	SPC members	Information to promote both ecosystem-based management and to improve targeting and reduce fuel use in fisheries	Costs borne largely by donors	Yes	1
Assessment of status of reef and coastal fisheries	SPC members	Information to assist governments and communities to maintain sustainable fisheries and island food security, and identify critical areas for conservation action	Costs borne partly by donors (EU), partly by member governments and partly by NGOs	Yes, but decreasing as national capacities improve	1
Regional oceanic fisheries databases	SPC members	Monitoring and analyzing highly migratory fisheries	Cost born by donors and by participating countries, with an increasing percentage to be borne by fishing fleets	Yes	1
Fisheries and aquaculture education and vocational training	SPC, USP and member countries	Developing national capacity for sustainable fisheries development	Regional cost borne by donors and by student fees	Yes	1
Sustainable Aquaculture Development support	SPC members	Access by govt to advice on planning and managing a new area of	Cost currently born by donors	Yes – a fairly new activity at	1

Current Regional Cooperation Activities				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs	Costs to PICs		
		private sector-led growth		regional level	
Coastal Fisheries Management Support	SPC members	Access to skills and technical support often not cost-effective to support at national level, & experience-sharing	Cost currently borne by donors	Yes	1
Sustainable Fisheries Development Support	SPC, FFA and member countries	Access by govt to advice on planning and managing a new area of private sector-led growth	Cost currently borne by donors	Yes	1
Regional Living Marine Resources Information Networking	SPC, FFA, USP, SPREP and member countries	Providing access to a shared pool of information and experience	Cost largely born by donors	Yes	1

Future Regional Cooperation Activities				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs	Costs to PICs		
Assessment of risks, mitigation and quarantine of transboundary movements of aquatic species		Protection of existing industry from introduced pathogens and of ecological support systems from invasive species			
International management of other regional high seas, or straddling, fisheries apart from tuna		Resource conservation and conformity with developing international standards			
Large-scale regional tagging of tuna		Allows assessment of fishery status that is not dependent upon accuracy of catch-effort data provided by fleets			
Regular comprehensive assessment of economic value of fisheries and fisheries trade, at national and regional levels.		Results in better economic and development planning, including information for papers such as this.			

Discontinued Regional Cooperation Activities (note: these are no longer major programmes, although occasional ad-hoc activities may occur)				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs (of stopping)	Costs to PICs		
Support for development of most reef and deepwater snapper fisheries		Limit of available development capacity already achieved by most PICTS for most reef			

Discontinued Regional Cooperation Activities (note: these are no longer major programmes, although occasional ad-hoc activities may occur)				Activity to Continue to future? Yes/No*	If yes, Indicate Priority Ranking
Nature of Cooperation	Partners in Cooperation	Benefits to PICs (of stopping)	Costs to PICs		
		resources			
Direct regional involvement in members bilateral negotiations with DWFN		Most PICTS already achieved self-sufficiency in negotiation capacity			
Direct regional support for postharvest advice (apart from training) and fishery trade promotion		Donors prefer to deliver this kind of assistance bilaterally, and to the private sector			
Sponsorship of trial fishing to develop or prove new commercial fisheries		Private sector is better at doing this directly, provided "strings attached" can be managed.			
Advising governments on setting up national fisheries administrations		National administrations now set up, and advice on reorganization now usually provided bilaterally, not regionally.			

## **ANNEX 2**

### **List of regional and international agreements involving Pacific Islands Forum states which have relevance to the fisheries sector.**

#### **Framework Instruments**

- Stockholm Declaration on the United Nations Conference on the Human Environment 1972
- United Nations Convention on the Law of the Sea 1982 (UNCLOS)
- Declaration on the UN Conference on Environment and Development 1992 (Rio Declaration)
- United Nations Conference on Environment and Development: Chapter 17 Agenda 21 1992

#### **Implementing Agreements**

- International Convention for the Regulation of Whaling 1946
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) 1973
- South Pacific Forum Fisheries Agency Convention (FFA Convention) 1979
- The United Nations Convention on the Law of the Sea 1982
- Nauru Agreement Concerning Cooperation in the Management of Fisheries of Common Concern 1982
- Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America 1987
- Agreement Among Pacific Island States Concerning the Implementation and Administration of the Treaty on Fisheries Between the Government of Certain Pacific Island States and the Government of the USA of 2 April 1987
- Convention for the Prohibition of Fishing Vessels with Long Driftnets in the South Pacific (Wellington Convention / Driftnet Convention) 1989
- Convention on Biodiversity 1992
- Niue Treaty on Cooperation in Fisheries Surveillance and Law Enforcement in the South Pacific Region (Niue Treaty) 1992
- Palau Arrangement for the Management of the Western Pacific Purse Seine Fishery 1992
- Convention for the Conservation of Southern Bluefin Tuna 1993
- FAO Agreement to Promote Compliance with Conservation and Management Measures by Fishing Vessels on the High Seas 1993
- Federated States of Micronesia Arrangement for Regional Fisheries Access
- FAO International Code of Conduct for Responsible Fisheries 1995
- UN Agreement for the Implementation of the Provisions of the UNCLOS of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks 1995
- Kyoto Declaration and Plan of Action on the Sustainable Contribution of Fisheries to the Food Security 1995
- Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean and Final Act 2000
- Implementing Plan of the World Summit on Sustainable Development 2002

### **Some Relevant References:**

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