

13. LEGAL DEVELOPMENTS IN THE CONSERVATION AND MANAGEMENT OF HIGHLY MIGRATORY AND STRADDLING FISH STOCKS IN THE WESTERN AND CENTRAL PACIFIC OCEAN

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KEY TERMS AND PHRASES

Archipelagic waters

Under article 49 of the United Nations Convention on the Law of the Sea (UNCLOS), the sovereignty of an archipelagic state extends to the waters enclosed by the archipelagic baselines drawn in accordance with article 47 and described as archipelagic waters. Archipelagic baselines may be drawn by joining the outermost points of the outermost islands and drying reefs of the archipelago provided that within such baselines are included the main islands and an area in which the ratio of the area of water to the area of land including atolls is between 1 to 1 and 9 to 1.

Artisanal

This term refers to the scale and techniques of fishing operations in the context of subsistence economy as opposed to industrial fishing operations.

Biomass

The term biomass refers to the total mass of living organisms of one or more species per unit of space.

Straddling stocks

Highly migratory species that move across vast expanses of ocean space and that cross international maritime boundaries, straddling the exclusive economic zones (EEZs) of one or more states and the high seas.

PACIFIC TUNA STOCKS: ECONOMIC SECURITY AND SUSTAINABLE DEVELOPMENT OF PACIFIC ISLAND COUNTRIES

The Pacific Ocean represents 12% of the world's oceans, and, its importance for Pacific islanders is such that in many ways, "it is the sea that holds the key to the future of Pacific Islands peoples".¹

The importance of marine resources to Pacific island countries (PICs) has been recognised in Chapter 17 (Programme G) of Agenda 21, the action plan for implementing sustainable development in the 21st century adopted as a soft law instrument² of the 1992 Rio United Nations Conference on Environment and Development (UNCED). Chapter 17 focuses upon the protection of the oceans and provides that:

Small Island States are ecologically fragile and vulnerable. Their small size, limited resources, geographic dispersion and isolation from markets, places them at a disadvantage economically and prevent economies of scale. For island developing states ocean and coastal environment is of strategic importance and constitutes a valuable development resource.³

The Western and Central Pacific Ocean (WCPO) provides the habitat for the world's largest and most valuable tuna resources, contributing over 50% of the world 3.4 million tonne catch.⁴ According to the 1988–1997 data compiled by the Secretariat of the Pacific Community, the Exclusive Economic Zones (EEZs) of PICs yield 78 % of the WCPO tuna catch⁵ with a 1998 estimated value of US\$ 1.3 billion.⁶ Given the limited economic development options available to PICs, as outlined in the previous quote, the importance of tuna resources and their exploitation to the economic security and sustainable development of the South Pacific are considerable and cannot be overstated. Indeed, as Aqorau and Bergin note, "for many of the PICs, tuna is not just a resource; it is the only resource that sustains their economies".⁷

PICs have traditionally exploited tuna resources for local consumption. However, artisanal fisheries in comparison with industrial fishing activities undertaken by Distant Water Fishing Nations (DWFNs) represent less than 10 % of the total tuna catch. The negotiation of bilateral and multilateral access agreements with DWFNs has therefore been the main strategy used by PICs to obtain benefits from the foreign exploitation of tuna stocks present in their EEZs. The Forum Fisheries Agency (FFA) has been particularly instrumental in facilitating the negotiation of such agreements. Its mandate is to promote regional cooperation and co-ordination amongst PICs in management, conservation and development of legislation and fisheries policies in connection with the tuna resources of its member countries as further discussed in this chapter.

The sustainability of the Pacific tuna stocks, although not immediately threatened except for the most valuable bigeye tuna species (mostly exploited for the sashimi market), must be considered in the global context of the collapse of northern hemisphere world fisheries (such as the north Atlantic cod) and the relocating to

southern oceans of intensive industrial fishing activities (south Atlantic, Indian and 'southern' oceans).

The current exploitation rates of the three main tuna species (skipjack, yellowfin, albacore) are considered low to moderate with stocks capable of supporting further increases in catch. In contrast, the status of the bigeye tuna stock is uncertain with increases in catches of juvenile fish raising concerns of over-fishing and declines in adult biomass.⁸ Despite the relative abundance of the Pacific tuna stocks, the fact that tuna species are considered highly migratory as well as straddling stocks raises a number of issues for the management and conservation of the tuna fisheries. Indeed, the mobility of tunas across their oceanic habitat characterises these species as an international resource to be harvested both within EEZs and in the high seas. Given this, the sustainability of tuna resources can only be ensured if management and conservation measures adopted within the EEZs are compatible with measures implemented on the high seas where the freedom of fishing prevails, subject to conditions that will be discussed in the next section of this chapter. In other words, the reliability of tuna fishing as an option for sustainable development for PICs is dependent upon the establishment of a legal framework for managing the resource that needs to be devised in collaboration with DWFNs. This negotiation process was initiated in 1994 with a series of Multilateral High Level Conferences (MHLC) which culminated in the adoption of the Regional Convention on the Conservation and Management of Tuna in the WCPO in August 2000.

RATIONALE FOR COOPERATION IN TUNA FISHERIES MANAGEMENT AND THE LAW OF THE SEA

The Convention on the Conservation and Management of Tuna in the WCPO is a regional outcome of a regulatory process in international fisheries that was first initiated at the global level by the adoption of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982. It was followed by the Agreement for the Implementation of the UNCLOS relating to the conservation and management of straddling fish stocks and highly migratory fish species (commonly known as the Implementing Agreement) in 1995.

The UNCLOS entered into force on 16th November 1994.⁹ It is a framework convention, which establishes rules governing all uses of the oceans and their resources. It embodies in one instrument traditional rules for the uses of the oceans (freedom of the high seas) and at the same time introduces new legal concepts (coastal states' sovereignty over EEZs, sea-bed as common heritage of mankind) and addresses new concerns such as the sustainable use of marine resources.

The EEZ concept brings under national jurisdiction large tracts of ocean space that previously belonged to the regime of the high seas. A coastal state has sovereign rights to explore and exploit, conserve and manage the natural resources in the EEZ (article 56.1(a)). In the exercise of such rights, UNCLOS permits coastal states to undertake enforcement measures, including boarding, inspection, arrest and judicial

proceedings (article 73.1). UNCLOS also imposes an obligation upon coastal states to “ensure through proper conservation and management measures that the maintenance of the living resources in the EEZ is not endangered by over-exploitation” (article 61.2). From this general obligation, two more specific obligations are derived. First, the coastal state is required to determine the total allowable catch (TAC) of the living resources in its EEZ, taking into account the best scientific evidence available. Secondly, the coastal state has the obligation to ensure an optimum utilisation of the living resources in the EEZ (article 62.1). If the coastal state cannot harvest the entire TAC, the coastal state is obliged to give access to the surplus to other states by agreement (article 62.2).

While the principle of sovereignty is useful to regulate an exclusive use of the 200 nautical miles zone seaward from the coastal state territorial sea baseline, it is of little relevance in regulating the exploitation of highly migratory fish species beyond the EEZ. This is because the principle of freedom of fishing in the high seas remains a central part of the “freedoms of the high seas” codified in Article 87 of UNCLOS.¹⁰ This freedom of fishing is only subject to the duty for fishing states “to seek to agree” with coastal states upon the conservation of these stocks in the adjacent area to the coastal states’ EEZs, in accordance with article 63.2 of UNCLOS. The limitation of the EEZ concept in managing highly migratory fish species is further demonstrated in article 64 of UNCLOS. This provides that coastal states and states whose nationals fish in the high seas shall cooperate to ensure conservation and promote the objective of optimum utilisation of such species within and beyond the exclusive economic zone. As pointed out by Hewison, the principle of freedom of fishing in the high seas was based on the assumption that the ocean’s resources were inexhaustible.¹¹ This assumption has now been replaced by a realisation that conservation and allocation measures were required to prevent over-exploitation. In the South Pacific, the issue of driftnet fishing and the subsequent ban imposed by PICs on this particularly devastating fishing method for marine resources certainly triggered this awareness.¹²

Moreover, the new competence of coastal states to maintain or restore populations of harvested species at levels that can produce the maximum sustainable yield, as provided in article 61.3 of UNCLOS, puts limitations on the access of DWFNs to fisheries resources. Subsequently DWFNs had to adjust strategically and search for alternative fishing grounds, the tendency being for DWFNs to fish immediately outside the 200 NM zones. This strategy of margin fishing (or unregulated fishing) cannot be considered illegal yet it is damaging to the interests of coastal states. For stocks whose biomass occurring outside the EEZ is sufficiently large, unregulated fishing in the high seas can seriously deplete the stock and render ineffective management measures taken inside the EEZ. In the case of Pacific tuna stocks, depletion of the stocks due to unregulated high seas fishing is unlikely to occur given the spatial distribution of the catch with a high proportion taken in the EEZs and archipelagic waters of coastal states. However, the lack of enforcement capacity of PICs in the regulation of fishing within their large EEZs calls for an increased

cooperation amongst PICs themselves as well as with DWFNs to make conservation and management measures applicable and effective.

While the principle of cooperation between coastal states and DWFNs was first laid down by UNCLOS, it has been further elaborated under the 1995 Implementing Agreement.¹³ Indeed with the Implementing Agreement,¹⁴ cooperation becomes a prerequisite to ensure the compatibility of the conservation and management measures for straddling and highly migratory fish stocks between areas under coastal states' jurisdiction (EEZs) and on the high seas (article 7.2). In other words, the Implementing Agreement acknowledges the necessity to consider highly migratory fish stocks as one biological unit over its entire range of distribution. This is clearly stated in Article 7.2 (d), which provides that:

In determining compatible conservation and management measures, states shall take into account the biological unity and other biological characteristics of the stocks and the relationship between the distribution of the stocks, the fisheries and the geographical particularities of the region concerned, including the extent to which the stocks occur and are fished in areas under national jurisdiction.

One issue raised by the requirement to ensure the compatibility of conservation and management measures on the high seas and in the EEZs is the setting of the total allowable catch (TAC). The Implementing Agreement does not specify whether or not the TAC should be set jointly by coastal states and DWFNs. As discussed further below, the setting of the TAC for Pacific tuna stocks has similarly been a contentious issue during the MHLC negotiations.

Another limitation of the Implementing Agreement is in the lack of enforcement rights to enable coastal states to impose compliance by states fishing for straddling stocks in the area beyond and adjacent to their fisheries zone. Under the Implementing Agreement, enforcement remains the prerogative of the flag state,¹⁵ as provided in article 19. Yet it is common knowledge that flag state enforcement has typically been characterised by its lack of effectiveness in international fisheries. Since enforcement of provisions is left to the state in which the vessel is registered (or whose flag it is entitled to fly), fishing operators tend to exert political pressures on flag state governments for them to be complacent when it comes to enforcement. In addition, most flag states do not have the technological ability to ensure that their nationals comply with international and foreign regulations of fishing activities often undertaken at a considerable distance.

The Implementing Agreement however provides the jurisdiction for port state enforcement. Under article 23 (2), a port state may inspect documents, fishing gear and catch on board. A port state may also adopt regulations to prohibit fishing vessels from landing catches or transshipping catches where it has been established that the catch has been taken in a manner that undermines the effectiveness of conservation and management measures on the high seas (article 23.3). Despite greater power granted to coastal states under these provisions, port state enforcement is only applicable to vessels fishing in the high seas that choose to use a coastal state port for

landing catches. It is common knowledge that today industrial fishing fleets are capable of undertaking transshipment of catches at sea, an activity that can easily escape port state¹⁶ and flag state control.

Perhaps the most proactive features of the Implementing Agreement in terms of enforcement are to be found in the provisions for international cooperation and regional agreements. Regarding international cooperation, states are to assist each other in the conduct of an investigation of an alleged violation of conservation and management measures and in the identification of vessels reported to have engaged in activities undermining the effectiveness of such measures (article 20.2 and 20.4). States are to establish arrangements to make available to prosecuting countries of any other state evidence relating to alleged violations of conservation and management measures (article 20.5). In addition, state members of a regional fisheries management organisation ought to take action to deter vessels that have violated conservation and management measures through recourse to regional proceedings established for that purpose (article 20.7). Finally, a flag state may authorise a coastal state to board and inspect a vessel on the high seas, providing there are reasonable grounds for believing that the vessel has been engaged in unauthorised fishing within an area under the jurisdiction of a coastal state (article 20.6).

Clearly the provisions of the Implementing Agreement regarding enforcement through regional cooperation provide some extended powers to coastal states, despite the fact that the exercise of such powers is dependent on the extent to which the flag state does or does not fulfill its enforcement obligations.

As discussed before, the central aim of the Implementing Agreement is to encourage international and, foremost, regional cooperation in the management of highly migratory fish species. In doing so, the Implementing Agreement primarily grants extended enforcement powers to coastal states that are parties to a regional arrangement or organisation for managing straddling and highly migratory fish species. This provides both an opportunity and an incentive for PICs to negotiate with DWFNs a regulatory regime for managing the Pacific tuna fishery. Indeed, such a strategy may be analysed as a logical outcome of the collaborative achievements of PICs themselves that were orchestrated by the FFA.

INTRA-REGIONAL COOPERATION BETWEEN PICs: THE ROLE AND ACHIEVEMENTS OF THE FFA IN RELATION TO THE PACIFIC TUNA FISHERIES

Since its establishment in 1979 under the Forum Fisheries Agency Convention,¹⁷ the FFA has played a pivotal role in promoting intra-regional cooperation and coordination, particularly with respect to the harmonisation of fisheries management policies, surveillance and enforcement, and relations with DWFNs. Major outcomes in the work of FFA include the adoption of harmonised Minimum Terms and Conditions (MTCs) of access for foreign fishing vessels that impose a list of rules on

all foreign fishing vessels, aimed at controlling the operations of such vessels in the EEZs of FFA member states.¹⁸

The MTCs were initially adopted in 1982 and revised in 1990 to strengthen the control of FFA member states over fishing operations by prohibiting transshipment at sea and requiring the maintenance and submission of catch logs on high seas fishing. In 1983, MTCs were complemented with a Regional Register used as a database and compliance mechanism holding details of all foreign fishing vessels operating in the region. The requirement of good standing being a prerequisite to obtain a licence to fish in the region, once the good standing status is withdrawn, the licencing bans remains with vessels even if sold or renamed.¹⁹ The prospect of change in status of the vessel on the Register and subsequently having access denied to the entire region has been sufficient to make vessel operators comply with the fisheries laws of FFA member states. This also facilitates compliance with court orders or the settlement of negotiations regarding the payment of compensation for infringements.²⁰

In 1995, the FFA launched a major initiative to implement a satellite-based vessel monitoring system (VMS) that will strengthen the effectiveness of existing monitoring and enforcement programmes such as military air and sea surveillance on fishing activities undertaken by New Zealand, Australia and France. The VMS will monitor the positions of fishing vessels using a global positioning system in near real time. Once implemented, the FFA VMS will require that any foreign fishing vessel wishing to apply for a licence (to fish in the waters of an FFA member country) be fitted with a VMS in addition to the licencing procedures normally required to become part of the Regional Register.

The FFA also provides assistance to members in drawing up bilateral and multilateral access agreements with DWFNs. Until recently, FFA member states have been leasing fishing rights to DWFNs through bilateral agreements. They are now interested in multilateral access agreements to promote more stability in fisheries relations. This trend was initiated in 1987 with the adoption of the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States. This treaty has been considered as a major achievement since it put an end to the dispute between PICs and the United States over the jurisdiction of tuna. For the first time the USA recognised the right of coastal states over highly migratory species contained within their EEZ and also agreed to pay for the right to fish them (*via* fishing licences). The treaty gave access to 50 US vessels to be licenced and to fish in the EEZs of 16 FFA member countries. Access is subject to regulatory conditions. Vessels are only permitted to catch tuna using purse-seiners. They must comply with the good standing requirements of the Regional register, they cannot fish within closed areas (internal waters, territorial sea and archipelagic waters) and they must carry FFA observers on board.

Despite such impressive achievements, it is important to emphasise the limitations of the FFA in so far as conservation and management of tuna stocks is concerned. The limitations of the FFA stem from its lack of a decision-making role. The FFA's

functions are administrative, facilitative and advisory. These functions prevent it from becoming a management agency. The need for an international management arrangement distinct from the FFA is even recognised in article III(2) of the Forum Fisheries Agency Convention which provides that:

...effective cooperation for the conservation and optimum utilisation of highly migratory species of the region will require the establishment of additional machinery to provide for co-operation between all coastal states in the region and all states involved in the harvesting of such resources.²¹

Indeed, one missing element if such a machinery was to be devised within the FFA would be the accession of DWFNs to the FFA Convention as a prerequisite to their participation. Although nothing in the Forum Fisheries Agency Convention prevents other states from acceding to it, one has to recall the initial controversy as to whether DWFNs could become members of FFA. The argument raised at that time was that the inclusion of DWFNs would dilute the agency's regional unity and weaken its bargaining position for asserting ownership of migratory tuna. That argument prevailed and the DWFNs were excluded from FFA membership. It was therefore necessary to envisage new avenues for cooperation beyond the FFA.

COOPERATION BETWEEN PICS AND DWFNS: THE MHLC NEGOTIATION PROCESS

In September 1996, South Pacific Forum leaders called the second Multilateral High Level Conference on the Conservation and Management of Highly Migratory Fish Stocks of the Central and Western Pacific (MHLC2), which was held in Majuro, Marshall Islands, during 10th–13th June 1997. The conference brought together member countries of the South Pacific Forum, other coastal states and territories, and those DWFNs with legitimate interest in the region's tuna fisheries, with a view to developing cooperative conservation and management measures consistent with international law.

The outcome of the conference resulted in the adoption of a Declaration of Principles (the 'Majuro Declaration') setting a framework on which future negotiations were to be based, with the aim to have them concluded by June 2000. From 1997 onwards, negotiations took place following the initial framework set by the Majuro Declaration which covered the following matters:

- (a) species and stocks to be covered by the arrangement;
- (b) geographical area to be covered;
- (c) membership and participation by observers;
- (d) mechanisms for decision-making and procedures for the settlement of disputes;
- (e) mechanisms for the collection and exchange of fisheries data, scientific research and stock assessment;

- (f) determination of conservation and management measures, including the application of the precautionary approach;
- (g) relationship with other regional and global fisheries organisations and arrangements;
- (h) procedures for monitoring, control, surveillance and enforcement; and
- (i) financial and administrative arrangements.

States participating in the negotiation process included all 16 member states of the FFA,²² the three French Pacific territories (New Caledonia, French Polynesia, Wallis and Futuna) and France, DWFNs (Canada, China, Japan, Korea, Taiwan, United States of America) and other coastal states in the region (Philippines and Indonesia). The United Kingdom did not attend despite being an eligible participant due to the presence of its one remaining territory in the region, Pitcairn Island.

From 30th August to 5th September 2000, a final round of negotiations was convened in Hawaii (MHL 7) which resulted in the adoption of the Convention on the Conservation and Management of Tuna in the Central and Western Pacific Ocean. Despite every effort made by the Chairman, Ambassador Satya Nandan, to have the Convention adopted by consensus in accordance with the rules of procedure of the Implementing Agreement, the persistent opposition of a number of states to the final draft prevented this approach. The Convention was therefore adopted by a two third majority vote, with 19 states in favor, 2 states voting against (Japan and Korea) and 3 abstentions (China, France and Tonga).

The final negotiation process necessarily involved protracted debates on a number of outstanding issues, which included decision-making, the status of fishing entities and participation by territories. The absence of consensus on the above issues resulted in the abstention or rejection of the final text by the states listed above. These issues will now be analysed in the light of the objectives set in the Convention.

The main objective of the Convention is listed in article 2, which provides:

the objective of this Convention is to ensure, through effective management, the long term conservation and sustainable use of highly migratory fish stocks in the western and central Pacific Ocean in accordance with the 1982 Convention and the Agreement.

Amongst the principles for conservation and management listed under article 5, it is provided that members of the Commission shall apply the precautionary approach in accordance with this Convention and all relevant internationally agreed standards and recommended practices and procedures.²³ The Convention is more than a framework agreement in that it provides for institutional arrangements to facilitate the implementation of the Convention provisions. A Commission is to be established with a secretariat and two committees dealing with compliance and scientific issues.²⁴ The Commission will be the decision-making body and will:

- determine the TAC in the Convention area and adopt such conservation and management measures as may be necessary to ensure the long-term sustainability of stocks (article 10.1(a));
- ensure that conservation and management measures on the high seas are compatible with areas under national jurisdiction (article 10.1(b));
- establish cooperative mechanisms for effective monitoring, control and surveillance and enforcement, including a vessel monitoring system (article 10.1(i));
- promote peaceful settlement of disputes (article 10.1(n));
- be responsible for compiling and disseminating statistical data while maintaining confidentiality (article 10.1(e)).

Further to article 10.1, paragraph 2 specifically lists the type of measures that the Commission may adopt in giving effect to article 10.1. These measures include: determining the quantity of any species or stocks which may be caught, the level of fishing effort, limitations of fishing capacity, including number of fishing vessels, types and sizes, areas and periods in which fishing may occur, the size of fish of any species that may be taken, the fishing gear which may be used.

DECISION-MAKING

At the outset, decision-making within the Commission has been identified as a delicate issue requiring adequate representation for all members as well as ensuring that decisions can be made in an efficient manner. Article 20 of the Convention provides that decision-making shall be by consensus as a general rule and refers to a three-fourths majority vote for decisions on questions of substance once efforts to reach a decision by consensus have been exhausted. In addition, mandatory consensus is required for all decisions pertaining to the rules of procedure for the conduct of the Commission and its subsidiary bodies' meetings (article 9.8), the budget of the Commission (article 18.1) and the allocation of the TAC (article 10.4). Given the scope of the decisions on conservation and management that may be taken by the Commission it is not surprising that some DWFNs, particularly Japan, felt threatened by the future power of the Commission and sought to obtain a decision-making process that would best secure their interests. This is illustrated by the Japanese proposal presented at the final round of negotiations which demanded the inclusion of an objection clause allowing for an objecting party to opt out of a decision. This proposal was supported by Korea but vigorously opposed by the Forum Fishery Committee (FFC) (which included all FFA member states) on the basis that a substantial compromise had already been reached during the previous session, which resulted in an increase of issues for which mandatory consensus was required, including budgetary arrangements and allocation of fishing opportunities. In addition, the FFC argued that most fora use a two-thirds majority rule for adopting substantive matters. Yet, in the case of substantive matters to be decided by the Commission the threshold had already been raised to a four-fifths majority in addition to decisions that are subject to consensus.

Not surprisingly, the FFC refused the Japanese proposal of inserting an objection clause in article 20 on decision-making on the grounds that it would make the regime ineffective in the light of previous international fisheries regimes. In addition, the FFC exerted some pressure to revert to a two-thirds majority vote as provided in the earlier drafts.

Yet, an ultimate compromise was made in order to secure the approval of Japan and Korea. A proposal was raised by the head of the American delegation for a voting system by chambers, which would be arithmetically detrimental to the FFC member states. The modified text proposed a three-fourths majority vote by chambers on questions of substance, instead of a four-fifths majority vote of members present and voting, as stipulated in the earlier draft convention adopted during MHLC 6. More specifically, the final text of the Convention identifies two chambers: one composed of FFA member states and the other chamber composed of non-members of the FFA.²⁵ Article 20.1 further states that “in no circumstances shall a proposal be defeated by two or fewer votes in either chamber”.

Despite the inclusion of these provisions Japan and Korea voted against the adoption of the Convention. In addition, Tonga made a statement referring to the vote in chambers as the tyranny of the majority and the surrender of the negotiation on decision-making process, and decided to abstain from voting on the final text of the Convention.

STATUS OF CHINESE TAIPEI AS A FISHING ENTITY

Given the substantial fishing activities of Taiwan in the region²⁶, it is therefore imperative for the effectiveness of the regime to ensure her participation in and compliance with the decisions taken by the future Commission. This proved difficult to achieve because of the diplomatic position of China. In the MHLC jargon, Taiwan is referred to as Chinese Taipei as a result of the non-recognition by China of Taiwan. One has to note here that while five FFC member states (Palau, Solomon Islands, Tuvalu, Nauru and the Marshall Islands) have diplomatic ties with Chinese Taipei and supported its inclusion as a contracting party, other FFC member states support the ‘one China policy’. At the outset, Chinese Taipei, which has participated as a full member in the MHLC process, sought to obtain contracting party status as a fishing entity. China has maintained throughout the negotiations that Chinese Taipei may only be allowed observer status, emphasising that the inter-governmental nature of the Convention amongst sovereign states ought to be preserved. During the FFC meetings of MHLC 7 a common position emerged that for Chinese Taipei’s participation to be secured, the text of the Convention would have to be modified in order to clarify the rights, duties and obligations of fishing entities. Such accommodation of Taiwanese interests is reflected in Annex I of the final text of the Convention, which provides that after the entry into force of this Convention, any fishing entity may agree to be bound by the regime established by this Convention. In addition, paragraph two of Annex I stipulates that any such fishing entity shall participate in the work of the Commission, including decision-making. To avoid any

further confusion, the text adds “[r]eferences thereto by the Commission or members of the Commission include, for the purposes of this Convention, such fishing entity as well as Contracting Parties”.²⁷ Despite such clarifications aimed at ensuring the full participation of Taiwan in the decision-making process of the Commission, the Taiwanese delegation made a declaration noting its disappointment regarding the status granted to Taiwan in the final text. The declaration stated that had Taiwan such capacity it would vote against the adoption of the Convention if such a procedure were used. On the other hand, Taiwan declared, she would have to approve the Convention if adopted by consensus. China remained opposed to the participation of fishing entities in the decision making process and on that basis decided to abstain from voting.

Having analysed the position of the states that either abstained or voted against the Convention, one needs to examine their likely implications on the future of the regime. It may be useful at this point to quote article 8(4) of the Implementing Agreement, which sets the requirement of participation in regional arrangements as a prerequisite to having access to regional fisheries as follows:

Only those States which are members of such organization or participants in such arrangement, or which agree to apply the conservation and management measures established by such organization or arrangement, shall have access to the fishery resources to which those measures apply.²⁸

Despite the Implementing Agreement not having entered into force, this provision can be seen as a strong incentive for the future accession of the two DWFNs that voted against the Convention, Japan and Korea, as well as China. Incidentally, the option of demanding DWFNs’ participation in the Convention as a prerequisite to access to the EEZs of coastal states was raised by the Papua New Guinea delegate during one of the MHLCT 7 FFC meetings. This was, however, in order to encourage the FFC Chairman to table the text as it was then, and to refuse any further dilution of the decision-making process. Before this option can be applied though, it would certainly have to be weighed against the benefits of Japanese aid in Pacific Island countries and the strings attached to it.

POTENTIAL BENEFITS AND SHORTCOMINGS OF THE WCPO TUNA CONVENTION

Precautionary Approach to fisheries management

A major strength of the WCPO Tuna Convention rests in the application of a precautionary approach for the conservation and management of fish stocks as referred to in article 5(c) and detailed in article 6 of the Convention. This is in line with article 6 and Annex II of the Implementing Agreement, which sets a precedent by incorporating this approach in the management and conservation of straddling and highly migratory fish stocks. The precautionary approach illustrates a paradigm shift from the maximum sustainable yield (MSY) approach, previously used as a method for determining the potential reproductive productivity of a stock and setting

a catch limit based on this determination. As Macdonald notes,²⁹ using MSY as a management tool led to many variables being ignored in allocation decisions, particularly biological variables such as minimum reproductive biomass, safe biological limits, optimum recruitment³⁰ levels and maximum statistical probability of ecological and economic collapse. The MSY approach led to the adoption of politically motivated catch quotas and in a vast number of species being overexploited.³¹ Because of past failures of fisheries management to act in the face of scientific uncertainty in stock assessments, a new paradigm began to emerge relying upon a precautionary approach to fisheries management. In other words, caution is required when information is uncertain, unreliable or inadequate. This approach is reflected in article 6(2) of the Convention, which provides that “the absence of adequate scientific information shall not be used as a reason for postponing or failing to take conservation and management measures”. When contrasting this approach with the previously prevailing attitude that fishing activities were left unregulated until there was an absolute proof of over-fishing, the paradigm shift is quite obvious. Yet it does not seem to be fully achieved since a strict interpretation of the precautionary principle would shift the burden of the proof to the proponent to prove that the proposed action (in this case fishing) does not degrade or have a negative impact on the resource. Macdonald³² rightly argued that such a strict interpretation of the precautionary principle is not applicable to fisheries management, except in extreme cases as in the case of the high seas driftnet fishing ban imposed by the Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific.³³ Instead, a more pragmatic interpretation has been applied in both the Implementing Agreement (article 6.3(b)) and the WCPO Tuna Convention (article 6.1(a), (b)) which require the setting of precautionary reference points to prevent over-fishing. The precautionary reference points are target levels of fishing effort designed to ensure that the abundance of fish stocks is maintained to a level above that which can produce the MSY. In setting precautionary reference points the resilience and reproductive capacity of stocks as well as major sources of uncertainty related to the knowledge of the stocks and the fisheries exploiting them are taken into account. In addition, article 6.3 of the Convention provides that:

members of the Commission shall take measures to ensure that, when reference points are approached, they will not be exceeded. In the event they are exceeded, members of the Commission shall, without delay, take the action determined under paragraph 1(a) to restore the stocks.

Finally, the development of data collection and research programmes to assess the impact of fishing on non-target and associated (or dependent) species and the adoption of plans to protect habitats of special concern are other applications of the precautionary approach provided for in article 6.1(c) of the Convention.

If effectively implemented, the provisions listed above will certainly have major implications for fishing activities in the WCPO, which explains the concerns raised by Japan over the application of the precautionary approach and its attempts to delete paragraph 1 of article 6 from the text of the Convention.³⁴ However, the likelihood

of implementation of the precautionary approach will depend on the decisions adopted by the Commission, subject to a vote by chambers where consensus fails. Furthermore, the Commission in adopting decisions will take into account the reports and any recommendations made by the Scientific Committee. The Scientific Committee in turn will review assessments and analyses prepared by scientific experts before making any recommendation to the Commission.³⁵

This raises at least two questions. Will the Commission be capable of adopting conservation measures in the face of scientific uncertainty? Past experience in fisheries management has shown that lack of data and the consequent scientific uncertainty provide powerful arguments to reluctant states not to adopt proposed conservation measures. The example of the Commission for the Conservation of Antarctic Marine Living Resources, and the delay of eleven years after the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) in adopting precautionary catch limits on krill, reveals the difficulty of implementing a precautionary approach to fisheries management.³⁶

Secondly, will the members of the Commission provide accurate data concerning catch of target and non-target species and fishing effort in order to facilitate the work of the Scientific Committee? It is noteworthy that the Convention provides an incentive to that effect in article 10.3(e). This article lists the contributions of participants to conservation and management of the stocks, including the provision by them of accurate data and their contribution to the conduct of scientific research among the criteria to be taken into account by the Commission for the allocation of the TAC.³⁸

The setting of the TAC

As demonstrated by Tony Lewis, the spatial distribution of the tuna catches shows a high proportion of the catch taken in the EEZs of coastal states. The legal implications of this are considerable in terms of ensuring the compatibility of the conservation measures throughout the range of stock, that is within EEZs and in the high seas.³⁹ This concern is addressed in article 8.3 of the Convention, which provides that coastal states should ensure that the measures applied to highly migratory fish stocks within areas under national jurisdiction do not undermine the effectiveness of measures adopted by the Commission in respect of the same stocks.

One issue raised by the requirement to ensure the compatibility of conservation and management measures on the high seas and in the EEZs is the setting of the TAC which has been a contentious issue during the MHLC negotiations. FFA member states maintained that the Commission should only be allowed to set fishing quotas for the high seas, leaving coastal states the sovereign right to set national quotas and determine the conditions of access to their EEZs. Yet, one difficulty in this argument is the fact that only a few PICs have actually set their own TAC within their EEZ, even if most are currently reviewing and amending their fisheries legislation and adopting national tuna management plans to address this issue. Fishing nations on the other hand argued that the Commission should allocate quotas throughout the

region, both in zone and on the high seas, thus questioning the sovereign right of coastal states to set national fishing quotas. The Convention implicitly recognises the right of coastal states to set national quotas by reference to compliance with national laws as part of the terms and conditions for fishing prescribed in Annex III. However, it does not clearly spell out a precise formula to be used by the Commission for determining the TAC within the Convention area. Despite this, article 10.3 refers to criteria to be developed by the Commission for the setting of the TAC. Such criteria are to be developed mainly taking into account:

- the status of the stocks and the existing level of fishing effort in the fishery;
- the historic catch in an area;
- the needs of small island developing states whose economies are highly dependent on the exploitation of marine resources;
- the fishing interests and aspirations of coastal states in whose areas of national jurisdiction the stocks also occur.

In addition, any decisions relating to the allocation of the TAC are to be taken by consensus, as mentioned before. Past experience in fisheries regimes operating under consensus shows that the threat of veto by one or more fishing nations is likely to succeed in preventing the imposition of quotas. From a conservation perspective, the fact that the Commission will only be empowered to limit catch or effort in the area of application of the Convention in general also presents some difficulties given the somewhat unclear delimitation of the Convention area itself as discussed in the next section.

Area of application of the convention

In order to be effective, conservation and management measures ideally need to cover the full range of tuna stocks, that is an area covering the 50°N to 50°S and from the coasts of Asia to the longitude of 150°W. For the skipjack tuna, its main distribution is between 45 degrees of latitude north and 40 degrees latitude south, the stock being concentrated west of 150 degrees longitude west. The Convention area therefore covers most of the skipjack stock since the easternmost boundary of the Convention is at 130 degrees longitude west. Similarly, for the yellowfin tuna whose distribution is between 40 degrees latitude north and 40 degrees latitude south, with higher abundance in the western Pacific, most of the stock distribution is covered within the Convention area.

However, the main problem area for the skipjack and the yellowfin tuna is with respect to the western boundary. Twenty-three *per cent* of the total skipjack catches and 32% of yellowfin catches occur outside the Convention area, in the Philippines and Indonesia archipelagic waters. As pointed out by Hampton:

Unless compatible management of these fisheries can be guaranteed, having such large portions of the total catch outside of the management regime has the potential to severely limit the effectiveness of management measures.⁴⁰

A boundary problem also occurs for the bigeye since its distribution is continuous from the east coast of the Pacific ocean to the west coast, to capture the entire stock distribution ideally the Convention area would have to be extended to the coast of the Americas. The eastern boundary stops at 130 degrees longitude West and only 150 degrees longitude West at the latitude of Kiribati. Cooperation will therefore be required with the Inter-American Tropical Tuna Commission (IATTC) in the management of the bigeye stock, already considered endangered and the most valuable species. In addition, 16% of the total bigeye catch occurs to the west of the Convention area in the archipelagic waters of Philippines and Indonesia.⁴¹ For the albacore, 10 to 20 % of the total north Pacific catch occurs east of the Convention area and cooperative management with the North American trawl fleet would be required.⁴²

Despite attempts being made to set a northern boundary at 50 degrees north, this was rejected by some delegations and the final text of the Convention only defines the western and northern boundaries of the Convention area by reference to the migratory range of the stocks. Such open-ended boundaries raise concerns about possible enforcement of the measures adopted by the Commission in the future. In an attempt to address this issue, a proposition was made at MHLC 5 to establish sub-committees to deal with the both northern and western areas. This proposition was initially opposed by the FFC as it was felt it would weaken the decision-making power of the Commission and was only partly retained with the establishment of the Northern Committee. The Northern Committee is to be composed of member states situated in such area and those fishing in the area.⁴³ Its role is:

...to make recommendations on the implementation of conservation and management measures that may be adopted by the Commission for the area north of 20 degrees parallel north latitude and on the formulation of such measures in respect of stocks which occur mostly in this area.⁴⁴

Concerns were raised during FFC meetings of MHLC 7 over recommendations that may be formulated by the Northern Committee in relation to stocks also occurring within the jurisdiction of FFA member states. According to Lewis,⁴⁵ the stocks concerned would represent 20% of skipjack, 14% of bigeye and 12% of yellowfin since these species occur throughout the range. The risk of establishing a Northern Committee mostly composed of fishing nations with potential to overturn the decisions made by the Commission was therefore identified. To a large extent, these concerns are set aside by the fact that the Northern Committee has no decision-making power but only acts as an advisory body to the Commission. Besides, recommendations formulated by the Committee must be adopted by consensus and the Commission is entitled to take decisions regarding stocks occurring north of 20 degrees latitude north in the absence of any recommendation formulated by the Committee. Yet, in case the Commission does not accept the recommendation of the Committee on any matter, it shall return the matter to the Committee for further consideration. The Convention does not explicitly state how such matters should be

dealt with and article 11.7 simply provides that “the Committee shall reconsider the matter in the light of the views expressed by the Commission”.

As illustrated above, the limitations in the boundaries of the Convention area show the need to develop cooperative and compatible management measures with the IATTC which are not secured at present. These geographical and biological limitations in the area of application of the Convention also reflect the unsuccessful attempt to fully cover the species range by bringing into the negotiations additional coastal states that may have different interests to those of PICs. This is so in the case of Indonesia and the Philippines who refused to have their archipelagic waters included within the Convention area despite their vote in favour of the adoption of the Convention. Reference to the particular status of Indonesia and the Philippines is made, albeit rather implicitly, in article 3.2 of the Convention, which provides that:

nothing in this Convention shall constitute recognition of the claims or positions of any members of the Commission concerning the legal status and extent of waters and zones claimed by any such members.

Despite the fact that the Convention does not clearly spell out the non-applicability of conservation and management measures to the archipelagic waters, this has been clearly expressed by Indonesia in the following statement made at MHLC 6:

We therefore like to interpret, as far as we are concerned, and in conformity with article 64 [of the Law of the Sea Convention] that the notion of ‘throughout the range of stocks’ cannot be interpreted to include these stocks within archipelagic waters.⁴⁶

Another western boundary limitation to note concerns the exclusion of South-East Asia waters from the Convention area which are not part of the Pacific Ocean. There was a general agreement among MHLC participants that the benefits that may have been gained in terms of fisheries management and conservation did not outweigh the difficulties in bringing into the negotiation states claiming sovereignty in the South China Sea, an area currently subject to territorial disputes.⁴⁷

Compliance and Enforcement

Compliance and enforcement mechanisms devised by the WCPO Tuna Convention range from the establishment of an observer programme, the requirement of VMS and the regulation of transshipment, to high seas boarding and inspections provisions. The establishment of a regional observer programme was initially opposed by some DWFNs, mainly Japan, Korea, China and Chinese Taipei because it was perceived as a challenge to flag state authority. Despite this, the idea of establishing an observer programme was retained although concessions were made for the Commission to develop further procedures and guidelines in order to ensure the confidentiality of the data collected by observers.⁴⁸ The role of observers is to collect catch and other scientific data and to monitor the implementation of the conservation and management measures adopted by the Commission. In other words, it is an important tool to facilitate compliance with the fisheries regime. However, no

agreement was reached on the issue of funding for the observer programme, an issue that is left to the Commission to resolve.

The VMS is incorporated as one of the instruments for facilitating compliance through the requirement for fishing vessels operating on the high seas to use near real-time satellite position fixing transmitters. This requirement is listed in article 24.8 as part of the duties of flag states. The VMS will be operated by the Commission, under rules of procedures for protecting the confidentiality of information received. Compatibility between national and high seas VMS is ensured through cooperation between the members of the Commission. Each member of the Commission whose flagged fishing vessels operate in areas under the national jurisdiction of another member shall require those vessels to use near real-time satellite position fixing transmitters in accordance with the standards and procedures determined by the coastal state. Finally, any member of the Commission may request that waters under its national jurisdiction be included within the area covered by a VMS. Simultaneous and direct transmission of information on vessels' positions to the Commission and the flag state raised concerns during the negotiations from Japan and other fishing nations who maintained that this would undermine flag state jurisdiction. Article 24.8 strikes a compromise by providing that the Commission should directly receive from the VMS, and simultaneously with the flag state where that state so requires.

The regulation of transshipment on the high seas (also referred to as transshipment at sea) is provided for under article 29 and article 4 of Annex III of the Convention. Prohibition of transshipment at sea is already part of the MTCs of fisheries access to EEZs set by FFA member states. Consequently the FFC's position was to support the prohibition of transshipment on the high seas so as to ensure accurate reporting of catch. However, that proposal was generally rejected, except for the transshipment at sea by purse-seiner vessels operating in the Convention area, which is prohibited under article 29.5. For other fishing activities, article 29.1 of the Convention does not impose a similar prohibition but only refers to members of the Convention which "shall encourage their fishing vessels, to the extent applicable, to conduct transshipment in port". Transshipment at sea is thus generally permitted (except for purse-seiners) provided it takes place in accordance with the terms and conditions set out in article 4 of Annex III of the Convention. Such terms and conditions create an obligation for the vessel operator to comply with any procedures established by the Commission to verify the quantity and species transshipped, hence allowing access and use of facilities and equipment necessary for any person authorised by the Commission to undertake such duties.⁴⁹

Compliance and enforcement provisions are detailed in article 25 of the Convention, based on flag state responsibility to investigate any alleged violation by fishing vessels flying its flag of the Convention's provisions or conservation and management measures adopted by the Commission. Serious violations of the provisions of the Convention are defined in the Convention by reference to article 21.11(a) to (h) of the Implementing Agreement.⁵⁰ For fishing vessels on the high seas that have been

engaged in unauthorised fishing within an area under the national jurisdiction of a member of the Commission, cooperation is required between the flag state and the member of the Commission concerned regarding boarding and inspection on the high seas. It will be one of the Commission's tasks to establish procedures for boarding and inspection of fishing vessels on the high seas in the Convention area within two years of the Convention coming into force. If after two years the Commission cannot agree on any procedures or alternative mechanism to boarding and inspection, the provisions of article 21 and 22 of the Implementing Agreement will be applied as if they were part of the Convention.

CONCLUSION

The analysis of overlapping legal, spatial and biological boundary issues shows the complexity of devising a legal regime for tuna in the WCPO that is both effective and accommodating to the interests of all parties. However, despite major concessions made to fishing states and entities in the decision-making process of the Commission, the latter has the potential to develop an effective conservation regime by applying a precautionary approach to fisheries management.

The fact that two DWFNs, Japan and Korea, voted against the adoption of the Convention should not be seen as a major obstacle to the future of the regime, given the legal basis existing for linking access to fisheries in the region to their participation in the regional fisheries' organisation that the Convention creates. In addition, had the Convention not been signed and negotiations reopened in a few years, it would have been extremely difficult for PICs to defend their long term interest in the sustainability of the fisheries given the increasing level of fishing activities that would have certainly taken place by then.

The coming into force of the Convention, upon ratification by three states north of the 20 degrees parallel North latitude and seven states South of that latitude, along with funding arrangements, will ultimately determine the political willingness of states participating in the MHLC process to make the new regime effective. Meanwhile, the interim regime established by way of a Preparatory Conference will be responsible for preparing practical and administrative arrangements for the future of the Commission⁵¹ so that when the Convention comes into force, the Commission will be able to start its work.

ENDNOTES

- 1 South, G.R. 1993. Custodians of the Ocean in Wadell, E. Naidu, V. and Hau'ofa, E. (eds.) *A New Oceania: rediscovering our sea of islands*. Suva: University of the South Pacific, p 106.
- 2 In public international law, a soft law instrument is one that has no legally binding force. The Rio Declaration on Environment and Development and the Forest Principles are also soft law instruments adopted during the UNCED.
- 3 United Nations A/CONF.151/26. 1992. Report of the United Nations Conference on Environment and Development: Chapter 17 Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and their protection, rational use and development of their living resources, para 17.130.
- 4 Lawson, T.A. (ed.) 1999. *Tuna fishery Yearbook 1998*. Noumea, New Caledonia: Oceanic Fisheries Programme, Secretariat of the Pacific Community.
- 5 Lewis, A.D. 1999 The Status of Pacific Tuna Stocks: The interaction of biological, boundary and legal issues in the conservation and management of highly migratory species. Paper presented at the *Pacem in Maribus XXVII* Conference, 7th–12th November 1999. University of the South Pacific, Suva, Fiji.
- 6 Van Santen, G. and Muller P. 2000. Working Apart or Together: The case for a Common Approach to Management of the Tuna Resources in Exclusive Economic Zones of Pacific Island Countries Pacific Islands. *Discussion Paper Series No. 10*. Washington: The World Bank.
- 7 Aqorau, T. and Bergin, A. 1998. The UN Fish Stocks Agreement – A New Era for International Cooperation to Conserve Tuna in the Central Western Pacific Ocean *Ocean Development and International Law* 29:21–42, p 36.
- 8 Lawson, T.A. (ed) 1999. Above, n 4 at p 5.
- 9 The Convention today has 132 parties. In the Pacific, the following countries are parties to UNCLOS: Cook Islands, Fiji Islands, Marshall Islands, FSM, Nauru, PNG, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu.
- 10 The freedoms of the high seas defined in Article 87 of UNCLOS include: freedom of navigation; freedom of overflight; freedom to lay submarine cables and pipelines; freedom to construct artificial islands and other installations; freedom of fishing; and freedom of scientific research.
- 11 Hewison, G.J. 1999. Balancing the freedom of fishing and coastal state jurisdiction. In Hey, E. (ed.) *Developments in International Fisheries Law*. The Netherlands: Kluwer Law International. p 166.
- 12 About the issue of driftnet fishing see Hewison, G.J. 1993. High Seas Driftnet Fishing in the South Pacific and the Law of the Sea. *Georgetown International Environmental Law Review* Vol. 5: 313–374.
- 13 According to article 40, the Implementing Agreement shall enter into force 30 days after the date of deposit of the thirtieth instrument of ratification or accession. As at April 2001, there have been 28 ratifications.

- 14 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10th December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, opened for signature 4th December 1995. UN Doc. A/CONF. 164/33(1995), 34 I.L.M. 1542.
- 15 Under article 91.1 of UNCLOS, every state shall fix the conditions for the grant of its nationality to ships, for the registration of ships in its territory, and the right to fly its flag. Ships have the nationality of the state whose flag they are entitled to fly. There must be a genuine link between the state and the ship. Further, Article 94 details the duties of the flag state which shall effectively exercise its jurisdiction and control in administrative, technical and social matters over ships flying its flag.
- 16 Under article 23 of the Implementing Agreement, a port state may, *inter alia*, inspect documents, fishing gear and catch on board fishing vessels, when such vessels are voluntarily in its ports or at its offshore terminals. States may adopt regulations empowering the relevant national authorities to prohibit landings and transshipments where it has been established that the catch has been taken in a manner which undermines the effectiveness of subregional, regional or global conservation and management measures on the high seas.
- 17 South Pacific Forum Fisheries Agency Convention. In Campbell, B. and Lodge, M. (eds.) 1993. *Regional Compendium of Fisheries Legislation (Western Pacific Region)*. Rome: Food and Agriculture Organisation.
- 18 For example, requirements for vessel identification, catch and position reporting, catch and effort logsheets, transshipment and observers.
- 19 Withdrawal of good standing may be proposed by any FFA member state, based on alleged infringements. After the alleged infringement has been investigated and supportive evidence provided, the Director of FFA must notify the vessel operator of a withdrawal request. Approval for withdrawal of good standing requires a favourable response from at least 10 of the FFA member countries.
- 20 For example, in 1991, an unlicensed Taiwanese purse-seiner was photographed by an Australian surveillance plane inside Tuvalu's EEZ. The owners paid \$AUS 75,000 to avoid the threat of blacklisting on the register.
- 21 Article III(2) of the South Pacific Forum Fisheries Agency Convention in Campbell, B. & Lodge, M. (eds.) 1993. Above, n 17.
- 22 Australia, Cook Islands, FSM, Fiji Islands, Kiribati, Marshall Islands, Nauru, New Zealand, Niue, Palau, PNG, Solomon Islands, Tonga, Tuvalu, Vanuatu.
- 23 Article 5(c).
- 24 See article 9 "Establishment of the Commission"; article 10 "Functions of the Commission"; article 11 "Subsidiary bodies of the Commission"; article 12 "Functions of the Scientific Committee"; article 14 "Functions of the Technical and Compliance Committee"; article 15 "the Secretariat".
- 25 Article 20.2.
- 26 The Taiwanese purse-seiner catch represented 167,037 metric tonnes (mt) in 1997 and 258,693 mt in 1998, having increased their catch by nearly 100,000 mt and making larger gains than Korea, Japan and the USA, the main DWFNs involved in the fishery.

- 27 Annex I (2), Final Text of the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.
- 28 See above, n 14, article 8(4).
- 29 Macdonald, J. 1995. Appreciating the Precautionary Principle as an Ethical Evolution in Ocean Management. *Ocean Development and International Law* 26:255–286.
- 30 The term ‘recruitment’ refers to the addition to a population from all causes (reproduction, immigration, stocking) and more specifically in this context to numbers born.
- 31 For supportive evidence of the limitations of the MSY approach in fisheries management, see Macdonald, J. 1995. Above, n 29 at p.271; and Hewison, G.J. 1993. Above, n 11 at p 166.
- 32 Macdonald, J. 1995. Above, n 29 at p 263.
- 33 The Convention for the Prohibition of Fishing with Long Driftnets in the South Pacific, opened for signature 29th November 1989, 29 I.L.M. 1454 (entered into force 4th May 1990).
- 34 For example, Japan would no longer be able to argue that, in the absence of scientific data, no conservation and management measures can be adopted since this position would be in contradiction of article 6.1 of the Convention.
- 35 See article 12.2(b). This includes findings on the status of target and non-target or associated species, in accordance with article 12.2(c).
- 36 For a discussion on the effectiveness of the CCAMLR regime, see Cordonnery, L. 1998. Environmental Protection in Antarctica: drawing lessons from the CCAMLR model for the implementation of the Madrid Protocol. *Ocean Development and International Law* 29:125–146.
- 37 As provided in article 5(i) of the Convention.
- 38 Article 10.3(e).
- 39 Lewis, A.D. 1999. The Status of Pacific Tuna Stocks: The interaction of biological, boundary and legal issues in the conservation and management of highly migratory species. Paper presented at the XXVII *Pacem in Maribus* Conference, 7th–12th November 1999, University of the South Pacific, Suva, Fiji.
- 40 Hampton, J. 1999. Working Paper MHLHC–2: The Convention Area. Paper presented at the 12th Meeting of the Standing Committee on Tuna and Billfish, 16th–23rd June 1999, Papeete, Tahiti, Oceanic Fisheries Program: Secretariat of the Pacific Community, Noumea, New Caledonia.
- 41 Hampton, J. 1995. Above, n 40.
- 42 Hampton, J. 1995. Above, n 40.
- 43 That is: USA, Canada, Japan, Korea, Taiwan, China, in addition to New Zealand because of New Zealand flagged fishing vessels operating in the northern Pacific Ocean.
- 44 Article 11.7 of the Convention.
- 45 Lewis, T. personal communication 1st September, 2000.
- 46 Statement by the delegation of Indonesia. *Sixth Session of the MHLHC*, 12th–19th April 2000, Honolulu, Hawaii, p 15.

- 47 See Valencia, M. 2000. Domestic Politics Fuels Northeast Asian Maritime Disputes. *Asia Pacific Issues: Analysis from the East-West Center* No.43, April 2000.
- 48 Article 28.7 (a, b).
- 49 That is: full access to the bridge, fish on board and areas which may be used to hold, process, weigh and store fish and full access to the vessel's records, including its log and documentation for the purpose of inspection and photocopying, as detailed in article 4.2 of Annex III of the Convention.
- 50 A serious violation under article 21.11 of the Implementing Agreement means either:
“(a) fishing without a license, authorisation or permit issued by the flag state; (b) failing to maintain accurate record of catch and catch related data; (c) fishing in a closed area or during a closed season or after attainment of a quota established by a relevant regional organisation; (d) directed fishing for a stock subject to a moratorium; (e) using prohibited fishing gear; (f) falsifying or concealing the markings, identification or registration of a fishing vessel; (g) concealing, tampering or disposing of evidence relating to an investigation; (h) multiple violations which together constitute a serious disregard of conservation and management measures; or (i) such other violations as may be specified in procedures established by the relevant organisation”.
- 51 Such as institutional arrangements for the establishment of the Commission, its rules of procedure, meetings, initial budget, location of the headquarters, *et cetera*.

Review questions

1. What is the relevance of traditional and customary practices for managing natural resources in the South Pacific region?
2. What are the advantages of establishing mandatory EIAs for development projects? What problems are associated with undertaking EIAs in the Pacific region?
3. What is the relationship between sustainable development and good governance? To what extent do co-management initiatives fall within the aims of decentralisation?
4. Explain the importance for sustainable fisheries management of ensuring that conservation and management measures applicable in the EEZs are compatible with those that apply on the high seas. Compare the relevant provisions of the Implementing Agreement and the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Focus on the criteria and factors to be taken into consideration in fulfilling this compatibility requirement.

Further readings

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