

Sustainable Use of Marine Living Resources

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I. Introduction

The purpose of this paper is to review the progress made between Rio and Johannesburg in the area of fisheries and to assess against that background the achievements of the WSSD Plan of Implementation.

The political declaration adopted at the WSSD not only referred back to the Stockholm Declaration of 1972, but it also “reaffirmed” Agenda 21 adopted at the Rio Summit in 1992.¹ In that sense, what was agreed to at WSSD in regard to fisheries was not exactly new. However, that many of the problems identified both at Rio and at Johannesburg as regards fisheries have been well known for a very long time. For example, there was a conference called in London in 1945² which identified most of the problems facing fisheries today, including overcapacity, overfishing, and depletion of resources, discarding, and lack of data management of resources on the high seas³. Readers will recognize a disturbingly modern ring to these issues.

It is enough for our present purposes however to focus on the period from Rio to WSSD, and on the outcomes of WSSD as far as they concern fisheries as that is a sufficiently epic tale in itself even if it has many links extending to the era before Rio, or for that matter, Stockholm.

What is troubling, however, is that there is now overwhelming evidence that it is much easier to write grand declarations and to propose solutions, while progress at the level of implementation is inordinately slower. Sadly, WSSD and its Plan of Implementation is likely to provide yet more evidence of this.

II. The Era from Rio to Johannesburg

The era that began with Rio closely followed one of the more important events in the failure of fisheries management: the closure of the Canadian Atlantic North-

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¹ See para. 8 of the resolution adopted. Report of the World Summit on Sustainable Development, A/Conf. 199/20.

² International Overfishing Conference London vol 7 25 March – 5 April 1946 London HMSO Miscellaneous 7 (1946) 1-12.

³ For more detailed analysis of the period between Rio and WSSD, see W. Edeson “Towards Long Term Sustainable Use: Some Recent Developments in the Legal Regime of Fisheries” in A. Boyle and D. Freestone (eds.) *International Law and Sustainable Development* Oxford, 1999; L. Juda “Rio Plus Ten: The Evolution of International Marine Fisheries Governance” *Ocean Development and International Law* 33 (2002) 109.

ern Cod fishery. As the point was put by J. Caddy and K. Cochrane, "What makes this event particularly significant was that the Canadian approach to fisheries assessment and management was seen by many as being among the best in the world."⁴

The era, or the decade, between Rio and WSSD was rich in developments in the form of both soft law and hard law instruments, however, it was short on actual achievements. In other words implementation of the achievements lagged well behind the instruments that were developed.

The main achievements of Rio and Agenda 21 as far as fisheries is concerned are: it set firmly in place the notion of precaution, not simply in fisheries but across the board with respect to environmental degradation; it recognized the problems of unregulated fishing, overcapitalization, reflagging of vessels to avoid compliance with conservation and management measures; and it recognized the integral and interdependent nature of the earth.

Rio, together with Agenda 21, also was the first major international instrument that at least implicitly recognized that the problem of fisheries management was not so much to manage the fish as to manage those who fished. This is now accepted as self evident.⁵

What was of greater concern was that Rio and Agenda 21 avoided recognizing a more integrated approach to fisheries management which an approach such as the large marine ecosystem would have permitted, instead, it retained the distinctive zoning approach laid down in the 1982 UN Convention on the Law of the Sea (hereafter referred to as the 1982 UN Convention), dealing with high seas and exclusive economic zones separately. This is hardly surprising, of course, as few would have wanted the carefully negotiated package emanating from UNCLOS III and finding its establishment in the 1982 UN Convention to be undone so easily. However, there is little doubt that this protection of the 1982 UN Convention regime came at an environmental price.

One thing certainly remained unchanged: the style of WSSD continues to resemble that of UNCED, which was described, not unfairly, as "a text of uneasy compromises, delicately balanced interests, and dimly discernible contradictions, held together by the interpretative vagueness of classic UN-ese"⁶.

It is proposed now to canvass the main achievements since Rio which built on its proposals. It will be against these that we can measure most effectively the achievements of WSSD itself. These will be considered in two contexts: the legally binding instruments introduced as a result of UNCED, and the non legally binding instruments, often referred to as soft law or voluntary instruments introduced in the era between Rio and Johannesburg.

⁴ "A Review of Fisheries Management Past and Present, and some Future Perspectives for the Third Millennium" *Ocean and Coastal Management* 44 (2001) 653 at 660.

⁵ Caddy and K. Cochrane, *ibid.*, 662.

⁶ I.M. Porras "The Rio Declaration: A New Basis for International Cooperation" in P. Sands (ed.) *Greening International Law* (1993) 20.

1. Legally Binding Instruments

The two main achievements of the post Rio era in the area of fisheries management are the completion of the FAO Agreement to Promote Compliance with International Conservation and Management Measures by Fishing Vessels on the High Seas, though now more generally known, and referred to here as, the FAO Compliance Agreement, and the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (referred to hereafter as the UN Fish Stocks Agreement). Another achievement of this era is of course the Convention on Biological Diversity, however, it is only recently that it is having a significant impact on fisheries management issues, partly as a consequence of the emphasis being placed on the need for ecosystem approaches to fisheries management.

The 1982 UN Convention, in dealing with fisheries issues, had focused on issues concerning the exclusive economic zone, and had to a large extent ignored the problem of high seas fishing. It soon became clear that the 1982 UN Convention would need to be supplemented in some way in order to address high seas issues. More importantly, although a progressive text for its time, in particular in its setting out for the first time a global obligation for States to "protect and preserve the marine environment"⁷, the conservation objectives of the Convention itself⁸ were seen to be setting too modest a standard; they were soon overtaken by new concepts, such as the notion of long term sustainable use, the precautionary approach, and the ecosystem approach. A fascinating study in its own right is: how have these changes been achieved without actually being seen to amend the 1982 UN Convention itself?

A. The FAO Compliance Agreement⁹

UNCED, in calling for a conference to address straddling fish stocks and highly migratory fish stocks, had also called for steps to be taken to prevent the practice reflagging of vessels with a view to avoiding the application of high seas conservation and management measures determined by regional fisheries organizations. The problem in its essence was that only vessels flying the flags of the parties to the organization could be compelled to comply with the conservation measures determined by it. Some vessels were becoming registered in countries which were not bound by the conservation measures in question. The vessel could then fish with

⁷ Article 192.

⁸ Articles 61 and 119. Note also Article 194.5.

⁹ For more detailed discussion of this Agreement, see W. Edeson, D. Freestone and E. Gudmundsdottir, "Legislating for Sustainable Fisheries: A Guide to Implementing the 1993 FAO Compliance Agreement and the 1995 UN Fish Stocks Agreement" World Bank Law, Justice, and Development Series 2001.

impunity in the area subject to the conservation measures, claiming that it was not bound by the measures under international law because its State of registration was not a party. The FAO was requested to formulate an agreement to address this matter, and between 1991 and 1993, an agreement was negotiated under Article XIV of the FAO Constitution. The Agreement was adopted by the FAO Conference on 24 November 1993 by resolution 15/93, and opened for acceptance. It will come into effect upon the receipt of the twenty-fifth instrument of acceptance¹⁰.

Its application (Article II) is aimed at all vessels that are used or intended for fishing on the high seas except that a Party may exempt fishing vessels of less than 24 metres in length.¹¹

Article III is the most important clause in the Agreement, for it sets out the responsibility of the flag State. The clause is long and subject to important qualifications, but in essence it places an obligation on the flag State to take "such measures as may be necessary to ensure that fishing vessels entitled to fly its flag do not engage in any activity that undermines the effectiveness of international conservation and management measures" (para. 1 (a)). It continues: "In particular, no Party shall allow any fishing vessel entitled to fly its flag to be used for fishing on the high seas unless it has been authorized to be so used by the appropriate authority or authorities of that Party. A fishing vessel so authorized shall fish in accordance with the conditions of the authorization" (Article III.2). Further duties are imposed to give content to these basic obligations, including provisions concerning: not granting an authorization unless the flag State is able to exercise effectively its responsibilities in respect of the vessel, non authorization of a vessel still under suspension, the requirement that vessel be marked so as to be readily identified in accordance with generally accepted standards, such as the FAO vessel marking scheme, the requirement of information on the operations of a vessel, and the imposition of sanctions of sufficient gravity as to be effective in securing compliance with requirements of the Agreement.

Under Article IV, each Party is required to maintain for the purpose of the Agreement a record of fishing vessels entitled to fly its flag and authorized for use on the high seas, and to take such measures as are necessary to ensure that all such vessels are entered on that record.

Article V deals with international co-operation. Amongst the matters referred to there are the exchange of information, including evidentiary material, relating to activities of fishing vessels in order to assist the flag State in identifying those vessels flying its flag reported to have engaged in activities undermining the effectiveness of conservation and management measures. There is also provision for co-op-

¹⁰ It entered into force on 24 April 2003.

¹¹ A special provision is made for a region such as the Mediterranean where the exemption for such vessel would not apply except that the coastal States of such a region may agree either directly or through an appropriate regional fisheries organization, to establish a minimum length of fishing vessel below which this Agreement shall not apply to vessels flying the flag of a coastal State of such a region and operating exclusively within it.

eration by the port State where a vessel is voluntarily in a port, and is believed to have undermined the effectiveness of international conservation and management measures, and the parties are urged to enter into co-operative agreements or arrangements of mutual assistance on a global, regional, subregional or bilateral basis so as to promote the achievement of the objectives of the Agreement.

Article VI deals with Exchange of Information, and each Party is to make available to FAO certain information required to be maintained in the record of fishing vessels. This information is to be circulated periodically by FAO. Parties are to inform FAO promptly of additions and deletions, including the reasons for deletion of a vessel from the record. Further, each Party is required to inform promptly FAO of all information regarding activities of fishing vessels flying its flag that undermine the effectiveness of international conservation and management measures, including the identity of the vessel and of any measures imposed. This information may be subject to national legislation regarding confidentiality. Each Party which has reasonable grounds to believe that a fishing vessel not entitled to fly its flag has engaged in activity which undermines the effectiveness of conservation and management measures, is to draw this to the attention of the flag State concerned, and may as appropriate, provide FAO with a summary of such evidence. Each Party is also required to inform FAO of situations in which it has granted an authorization in respect of a vessel previously registered in the territory of another Party where a period of suspension has not expired, or where an authorization to fish has been withdrawn.

The Agreement also has clauses dealing with co-operation with developing countries, non-parties, Settlement of Disputes and final clauses.

Even before the Agreement entered into force, it was in some respects already being implemented, as certain countries had started to provide information on their vessels in accordance with the Agreement.¹²

B. UN Fish Stocks Agreement

The 1995 UN Fish Stocks Agreement has entered into force, and has done much to give effect to the specific principles set out in the Rio Declaration and Agenda 21, many of which find reflection in the general principles set out in Article 5 of the Agreement. In addition, there is a very comprehensive article dealing with the application of the precautionary approach to the conservation, management and exploitation of straddling fish stocks and highly migratory fish stocks. This approach had been placed firmly in the international arena by Rio and Agenda 21.

The Agreement is quite complex and detailed, and, while certain parts of it are intended to refer to highly migratory fish stocks and straddling fish stocks, other parts are more general in character. Also, it uses the terms States and States Party in

¹² According to the fisheries FAO fisheries website (www.fao.org), Canada, USA, Japan, Norway and 13 EC countries are providing vessel authorization data.

order to distinguish between those parts which are intended to be only binding on the parties themselves, and in other contexts, it uses the term States to suggest a wider application.

Although the UN Fish Stocks Agreement has entered into force, and must rank as one of the achievements of the Rio process which had called for the convening of a conference to discuss these issues, it has not been without controversy, especially as regards its high seas boarding and inspection provisions. While attempts to refer to it have recently been controversial, it is significant that in WSSD, there were no political qualifications placed on the references to it as has been the situation in other contexts.¹³

Its main elements are: It requires coastal States and high seas fishing States fishing for highly migratory fish stocks and straddling fish stocks to ensure that the conservation and management measures established for the EEZ and the high seas are compatible; it sets out certain general principles for the conservation and management of such stocks, as well as the (albeit limited) reference to the need for an ecosystem approach; it sets out the precautionary approach, including a detailed annex which has guidelines for the application of that approach in the conservation and management of straddling fish stocks and highly migratory fish stocks, it sets out the duties of flag States with respect to controlling the activities of their vessels on the high seas; it has detailed rules on the establishment and operation of regional fisheries organizations and arrangements; it introduces innovative provisions regarding high seas enforcement. It also has special provisions dealing with the problem of "free riders" (vessels whose flag State is not participating in the establishment of applicable conservation and management measures), as well as an innovative provision on port State control.

Another important innovation, not addressed in the WSSD context, is that for the first time in the UN context, it took some tentative steps towards addressing the issue of "fishing entities", the euphemism employed for Taiwan Province of China.

The Agreement has been the subject of much commentary and analysis and it is not intended to embark on that process here. Looking ahead to the WSSD texts, we find that the UN Fish Stocks Agreement is reaffirmed, but what stands out as the subject that has made the most progress is the more forthright promotion of ecosystem approaches. This will be discussed further later in this paper.

¹³ See further W. Edeson "Soft and Hard Law Aspects of Fisheries Issues: Some Recent Global and Regional Approaches", 165. Paper presented to the Meeting Organized by the University of Virginia School of Law, May 2001 published in *The Stockholm Declaration and Law of the Marine Environment*. M. Nordquist, J. Norton Moore, and S. Mahmoudi (eds.) Kluwer Law 2003.

2. Soft Law Instruments

The achievements in the decade following Rio and leading up to WSSD can be seen much more dramatically in the area of soft law, or voluntary, legally non binding instruments, of which UNCED was probably the most important of the decade. Without in any way intending to open up a debate about the role of soft law in international law, it is in these instruments that the greatest progress can be measured. Further, many of the elements found in WSSD can be traced back to these soft law instruments.

A. Code of Conduct for Responsible Fisheries

Of all of these instruments, it is the Code of Conduct for Responsible Fisheries which has provided the greatest focus for development of fisheries principles. Adopted unanimously by the FAO Conference in 1995, and drawing directly on the Rio Declaration and Chapter 17 of Agenda 21, it has also been the framework in which many of the more recent instruments have been drafted. Thus, in addition to the Code itself, the international plans of action have been developed under the aegis of the Code.

The Code is a long document, which has both general and specific parts. It is structured so that it has a statement of general principles followed by articles which give specific content to the general principles.

The General Principles are set out in article 6. In effect, article 6 provides the outline of the Code. To outline the entire Code would be a very big task, but it is useful to do so at least with respect to the General Principles. Even these principles are lengthy, containing at times many important qualifications and restrictions more suited to a binding legal instrument, and what follows is itself a brief summary of their main elements. These principles urge that States should¹⁴:

- conserve aquatic ecosystems, recognizing that the right to fish carries with it an obligation to act in a responsible manner;
- promote the interests of food security, taking into account both present and future generations;
- prevent overfishing and excess capacity;
- base conservation and management decisions on the best scientific evidence available, taking into account traditional knowledge of the resources and their habitat;
- apply the precautionary approach;
- develop further selective and environmentally safe fishing gear, in order to maintain biodiversity, minimize waste, catch of non-target species, etc.;
- maintain the nutritional value, quality and safety in fish and fish products;

¹⁴ It should be noted that “should” is used throughout the Code of Conduct, consistently with its status as a voluntary instrument.

- protect and rehabilitate critical fisheries habitats;
- ensure fisheries interests are accommodated in the multiple uses of the coastal zone and are integrated into coastal area management;
- ensure compliance with and enforcement of conservation and management measures and establish effective mechanisms to monitor and control activities of fishing vessels and fishing support vessels;
- exercise effective flag State control in order to ensure the proper application of the Code;
- cooperate through subregional, regional and global fisheries management organizations;
- ensure transparent and timely decision making processes;
- conduct fish trade in accordance with the principles, rights, and obligations established in the WTO Agreement;
- cooperate to prevent disputes, and resolve them in a timely, peaceful and cooperative manner, including entering into provisional arrangements;
- promote awareness of responsible fisheries through education and training, as well as involving fishers and fishfarmers in the policy formulation and implementation process;
- ensure that fish facilities and equipment are safe and healthy and that internationally agreed standards are met;
- protect the rights of fishers and fish workers, especially those engaged in subsistence, small scale and subsistence and artisanal fisheries;
- promote the diversification of income and diet through aquaculture.

B. International Plans of Action

There have been four International Plans of Action (IPOAs) formulated at FAO under the Code of Conduct, all of which directly concern fisheries management. These first three are: the International Plan of Action for Reducing Incidental Catch of Seabirds in Longline Fisheries, the International Plan of Action for Conservation and Management of Sharks, the International Plan of Action for the Management of Fishing Capacity (referred to hereafter as IPOA-Capacity). These three IPOAs were adopted by the Committee on Fisheries (COFI) at its twenty-third session in February 1999, and endorsed by the FAO Council in June 1999. The fourth, the International Plan of Action to Prevent, Deter, and Eliminate Illegal, Unreported and Unregulated Fishing, was adopted at the 24th Session of COFI in February 2001, and endorsed by the FAO Council at its 120th Session, June 2001. (It will be referred to hereafter as IPOA-IUU.)

C. IPOA-CAPACITY

Of the first three IPOAs, only the one concerning capacity need concern us here. The other two, concerning seabirds and sharks, are very specific in their fo-

cus. Overcapacity had come to be recognised by many as one of the underlying causes of overfishing. It had been raised at COFI, following which FAO organised a Technical Working Group on the Management of fishing capacity in La Jolla, USA from 15 to 18 April 1998, followed by an FAO Consultation from 26 to 30 October 1998. Several of the provisions found within it overlap with the provisions of earlier instruments, such as the Compliance agreement¹⁵. In essence, the IPOA-Capacity is a voluntary instrument which is applicable to all States and regional fisheries organisations whose fishers engage in capture fisheries. It sets out urgent actions and identifies mechanisms to promote implementation. The urgent actions include assessment and monitoring of fishing capacity and the preparation of and implementation of national plans, as well as the exchange of scientific and technical information on issues related to the management of fishing capacity. As will be seen later, this instrument contains several deadlines, and these provide important indicators as to how the deadlines set out in the WSSD Plan of Implementation might be met. This is discussed further below in the context of the WSSD itself.

It is still too early to assess the impact of this IPOA. Part of the difficulty is that the problem of capacity is linked to other problems such as the ease with which vessels can be reflagged and chartered. However, they are clearly intended to be one of a number of approaches being adopted to tackle the overall problem of overfishing and the harmful side-effects of fishing.

D. IPOA-IUU

The International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing is clearly the most ambitious of these IPOAs. It begins with an introduction (Part I) which outlines the background to the basic problem as well as a short history of the initiative. This is followed by Part II which defines the components “illegal”, “unreported”, and “unregulated”, as well as setting out its legal context.

The Plan then sets out in Part III objectives and principles, which are derived from the objectives and principles used in the earlier IPOAs.¹⁶ It states the basic objective of the IPOA-IUU as being “to prevent, deter and eliminate IUU fishing by providing all States with comprehensive, effective and transparent measures by which to act, including through appropriate regional fisheries management organizations established in accordance with international law”.¹⁷ Part IV is the heart of the Plan. It deals with the implementation of measures to prevent, deter and elim-

¹⁵ Thus, paras. 16 to 21 largely cover the area already addressed in that Agreement, except that the paragraphs contemplate action being taken even if a State is not a party to that Agreement, while other provisions call for the entry into force of recent agreements such as the Compliance agreement and the 1995 UN Fish Stocks Agreement.

¹⁶ These are the International Plan of Action for Reducing Incidental Catch of Seabirds in Long-line Fisheries, the International Plan of Action for Conservation and Management of Sharks, and the International Plan of Action for the Management of Fishing Capacity.

¹⁷ Para. 8.

inate IUU fishing, which are covered under major headings concerning all State responsibilities, flag State responsibilities, coastal State measures, port State measures, internationally agreed market related measures, research, and regional fisheries management organizations. There are separate parts on the special requirements of developing countries (Part V), reporting, and the role of FAO (Part VI).

While much of the IPOA-IUU reaffirms basic provisions of the 1982 UN Convention, the 1993 FAO Compliance Agreement, the 1995 UN Fish Stocks Agreement, and the Code of Conduct, the IPOA-IUU does develop much more detailed actions than are to be found in the existing instruments referred to. Amongst the more novel aspects are: provisions on trade measures, port State controls, and controls over nationals. More importantly, even though it does cover much old ground, the IPOA-IUU does provide a renewed impetus for States and regional fisheries bodies to address these issues, and this impetus has been renewed in the WSSD Plan of Implementation.

E. The Jakarta Mandate on Marine and Coastal Diversity

The Jakarta Mandate on Marine and Coastal Diversity was adopted in 1995 at the Conference of the Parties to the Convention on Biological Diversity. Its programme of work, adopted in 1998, focuses on integrated marine and coastal area management, the sustainable use of living resources, protected areas, mariculture and alien species. Its objective is to assist the implementation of the Jakarta Mandate at the national, regional and global level. It identifies key operational objectives and priority activities within the five key programme elements, namely, implementation of integrated marine and coastal area management, marine and coastal living resources, marine and coastal protected areas, mariculture and alien species and genotypes.

Although its focus is less on fisheries management than the instruments already considered here, it is relied on in the WSSD. As the ecosystem approach is brought into greater prominence, work done under this Mandate and under the Convention on Biological Diversity will itself come to play a more important role in fisheries management issues.

F. Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem

The Conference on Responsible fisheries in the Marine Ecosystem was held in Reykjavik, Iceland from 1 to 4 October 2001. Quite apart from the fact that the meeting had been sponsored by two whaling States, Iceland and Norway, it provided a battleground for the whaling issue in general, which emerged over the outwardly mundane question of the impact of marine mammals on the marine ecosystem. The drafting of the Declaration was a terminological minefield, with the choice between phrases such as "management of marine living resources" and "fisheries management" becoming in themselves part of the battle over the final

text. Some paragraphs can only be understood in the context of the battle that was taking place between the pro and anti whaling groups present. The text also provided another battle ground over whether or not to include references to the 1995 UN Fish Stocks Agreement, and dissatisfaction with that Agreement was sufficiently strong to preclude any reference to it (and by default, to the FAO Compliance Agreement).¹⁸ In the midst of this international bureaucratic drama, a declaration nonetheless emerged which provided strong support for ecosystem approaches to management of the marine living resources. It also received strong references of support in the WSSD Plan of Implementation.

Other statements: It would be wrong to suggest that the above instruments were the only occasions between Rio and Johannesburg in which progress was made. The deliberations of the UN General Assembly in its resolutions on marine affairs, the discussions at the Commission for Sustainable Development, as well as political declarations such as the ministerial declarations made at FAO also provided support to the evolution of the Rio principles, including Agenda 21 and which provided the important political basis on which WSSD was able to succeed. However, the instruments reviewed above were the most important, and they were also referred to in the WSSD Plan of Implementation itself.

III. WSSD

1. The Plan of Implementation of WSSD

The Plan of Implementation draws heavily, as might be expected, on the Rio Declaration and on Agenda 21. This is especially so with respect to Principle 7 which refers to the “common but differentiated responsibilities of States”. In the introductory chapeaux to paras. 30 and 31, which are the principle paragraphs in the WSSD Plan of Implementation concerning fisheries issues, emphasis is placed on sustainability, in para. 30 by referring to “sustainable development” and in para. 31 by referring to “sustainable fisheries”.

The Plan of Implementation also picks up the instruments referred to above, either by calling for widespread ratification of binding instruments, or by calling for the implementation of the most important of these instruments. It also utilizes the same loose, verbose, UN-ese style that permeates UNCED and the subsequent instruments.

The achievements of WSSD as regards fisheries can be organized into the following categories

- (1) Specific Time Frames;
- (2) General Objectives: (a) those relating to international instruments; (b) institutional arrangements; (c) related issues: aquaculture, biodiversity, and fishing entities.

¹⁸ For a discussion of this aspect of the Declaration see Edeson, *supra* note 13.

(1) Specific Time Frames

One of the major achievements of WSSD, certainly in the area of fisheries, is that the Plan of Implementation has set out specific time frames for action. While some of these are highly optimistic, the setting of these goals can only be helpful in prodding States and other actors into action.

Briefly, the important time frames set out for fisheries concern, by 2004, to develop and implement national plans of action to put into effect the IPOA-IUU; by 2005, to develop and implement national and regional plans of action to put into effect the IPOA-Capacity; by 2010, to implement the ecosystem approach; by 2012, to establish representative networks of marine protected areas; by 2015, to restore depleted stocks and the achievement of maximum sustainable yield.

It is now proposed to consider these particular objectives which have specific time frames, as they are undoubtedly the most important achievement of the WSSD Plan of implementation as it concerns fisheries. It is difficult to assign a ranking of importance among these. Following the chronological order in which the various objectives are to be achieved has a certain logical appeal but little else to recommend it. Thus, as the WSSD gives central importance to putting into effect the FAO plans of action, especially the IPOA-Capacity and the IPOA-IUU, it is proposed to start with these two. Further, these two provide ample evidence of the difficulties that lie ahead in achieving these objectives.

ON the FAO Plans of Action, the WSSD Plan of Implementation said, in para. 31:

“(d) Urgently develop and implement national and, where appropriate, regional plans of action, to put into effect the international plans of action of the Food and Agriculture Organization of the United Nations, in particular the International Plan of Action for the Management of Fishing Capacity by 2005 and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing by 2004. Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by flag States, to further the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing.”

(a) IPOA-Capacity (2005)

To take the IPOA-Capacity, it is worth mentioning that the instrument itself set out some important time frames. Indeed, the IPOA itself states: “The immediate objective [of the IPOA] is for States and regional fisheries organizations, to achieve world-wide, preferably by 2003, but not later than 2005, an efficient, equitable and transparent management of fishing capacity.”

However, some of the difficulties in achieving these time frames can be gauged from the fact that the same IPOA also set out other time frames, some of which are well behind schedule.

Thus, in para. 12 of the IPOA-Capacity, it is stated that there should be held a technical consultation to be held as early as possible in 1999 on the definition and

measurement of fishing capacity, and the subsequent preparation of technical guidelines for data collection and analysis. The technical consultation took place in Mexico in December 1999. Although the technical guidelines have not been published, a number of papers have been prepared on the subject.¹⁹

Further, in para. 13, it is stated that “States should proceed, by the end of 2000, with a preliminary assessment of the fishing capacity deployed at the national level in relation to all the fleets of principal fisheries and update this assessment periodically.”

In para. 14, “States should proceed, by the end of 2001, with the systematic identification of national fisheries and fleets requiring urgent measures and update this analysis periodically.”

Finally, in para. 21, “States should develop, adopt and make public, by the end of 2002, national plans for the management of fishing capacity and, if required, reduce fishing capacity ...”.

Despite these deadlines already included in the IPOA-Capacity, in the tables provided to COFI 2003, it is stated that only 9 countries have implemented plans of action to reduce capacity while 42 have indicated that they have done so partially.²⁰ This is hardly rapid progress, and it already gives some indication of how difficult it will be to achieve progress within the timeframes proposed by the WSSD Plan of Implementation.

This is underscored by the fact that the Code of Conduct for Responsible Fisheries, adopted in 1995, in para. 7.6.3, had already said:

“Where excess fishing capacity exists, mechanisms should be established to reduce capacity to levels commensurate with the sustainable use of fisheries resources so as to ensure that fishers operate under economic conditions that promote responsible fisheries. Such mechanisms should include monitoring the capacity of fishing fleets.”

While progress is almost certainly being made, and without in any way wishing to underestimate the economic and social difficulties of achieving these objectives, there already existed strong statements of the objective to reduce capacity that are only partially being matched by comparable action.

¹⁹ D. Gréboval (ed.), *Managing Fishing Capacity: Selected papers on Underlying Concepts and Issues*, *FAO Fisheries Technical Paper*, No. 386, Rome, FAO 1999, 206 p.; S. Cunningham and D. Gréboval, *Managing Fishing Capacity: A Review of Policy and Technical Issues*, *FAO Fisheries Technical Paper*, No. 386, Rome, FAO 2001, 60 p. [Also available in French]; S. Pascoe, J.E. Kirkley, D. Gréboval and P.C.J. Morrison, *Measuring and Assessing Capacity in Fisheries: Issues and Methods*, *FAO Fisheries Technical Paper*, No. 433, Rome, FAO 2003, 214 p. [In print]; S. Pascoe and D. Gréboval (eds.), *Papers presented at the Expert Consultation on the Measurement of Fishing Capacity, Mexico City, 29 November-3 December 1999* *FAO Fisheries Report*, No. 615 (Suppl.), Rome, FAO 2003, 321 p. [in print].

²⁰ Progress on the Implementation of the Code of Conduct for Responsible Fisheries and related plans of action, COFI 2003/3.

(b) IPOA-IUU (2004)

Probably the most ambitious but possibly also the most important of the time-frames set down by the WSSD Plan of Implementation is the goal to “urgently develop and implement national, and where appropriate, regional plans of action” to prevent, deter and eliminate IUU fishing by 2004. It should be noted that this is only to implement plans of action rather than to eliminate IUU fishing as such. Even so, it is a truly ambitious goal, as the IPOA-IUU has many aspects and is very comprehensive indeed. In a study prepared by David Balton on the “Implementation of the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing”²¹, the outline alone of national plans of action takes up some three pages of tightly listed elements, the headings of which alone are enough to convey their wide scope: all State responsibilities, flag State responsibilities, coastal State measures, port State measures, internationally agreed market measures, implementation of IPOA-IUU through regional fisheries management organizations, and special requirements of developing countries. The check list of recommended actions utilizes the same headings, and which sets out in detail, though even so only in summary form, takes up eight pages alone. Some of the recommended actions are truly wide, for example, the second recommended action is “All States should fully implement the Code of Conduct and its related International Plans of Action.”

The implementation of the Code of Conduct for Responsible Fisheries alone without its accompanying plans of action, it will be apparent from the summary of its major principles above²², is an epic task. Despite the fact that the Code of Conduct has been in existence since 1995, progress on its implementation has hardly been rapid. Thus, laudable though it is to set this out as an objective, and bearing in mind that it has in one way or another been an objective of the international community at least since 1995, but arguably also since Rio 1992, or even earlier to the extent that some of the elements were already covered by the 1982 UN Convention, it seems somewhat unrealistic to expect much progress on this front by 2004, even if we are only talking of developing and implementing national plans of action.²³

The FAO Advisory Committee on Fisheries Research, at its fourth session in Rome (10 to 13 December 2002) gave an interesting perspective on the implementation of the IPOA-IUU. This is in itself important as one aspect of this IPOA is its focus on the need for improved data collection.

At para. 51 of its report, it said:

“The Committee noted the urgency of the early implementation of the IPOA on IUU fishing in order to attain effective fisheries management. From a scientific point of view, it

²¹ FAO Technical Guidelines for Responsible Fisheries No 9, Rome 2002.

²² See above p 361.

²³ This objective is backed up by a specific objective to establish effective monitoring, reporting and enforcement and control of fishing vessels, including by flag States, and to further the IPOA-IUU.

stressed the importance of the link between this IPOA and the requirement to obtain timely and accurate data on the rate of harvests of target and non target fish stocks for resources assessment and monitoring purposes. In this regard, the Committee recommended that every effort be made to fully utilize various systems of catch, fish trade and vessel monitoring systems that are being put in place or upgraded to be harmonized with and in support of the scientific requirements for accurate and fine-scale data on spatial distribution of fish harvesting activities, catches and catch rates. With regard to fish product traceability and catch certification schemes, the Committee recalled its earlier recommendation of more research being directed towards forensic techniques and product marking systems.”

(c) Restoration of depleted stocks and the objective of maximum sustainable yield (2015)

Para. 31 (a) set out the following objective and time frame: “Maintain or restore stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015.”

This is undoubtedly one of the more important statements in the WSSD. Only time will tell whether it will join the list of unkept objectives, or if it is yet another one that is easier to write than to achieve.

More importantly, the WSSD retains maximum sustainable yield as the key objective. This was set out in the 1982 UN Convention, repeated in Rio (Agenda 21, para. 17.46), and the UN Fish Stocks Agreement (article 5b), the Code of Conduct (article 7.2.1) despite the fact that the objective of maximum sustainable yield is from a scientific point of view no longer regarded as a state of the art description of a fisheries conservation objective. However, this point is less significant than it might appear as the formal abandonment of maximum sustainable yield would almost certainly have triggered a debate as to whether we were amending the 1982 UN Convention. More importantly, both in the Rio Declaration and in the UN Fish Stocks Agreement, precautionary approaches are being urged, while the WSSD Plan of Implementation additionally urges the adoption of an ecosystem approach to fisheries management, as well as the promotion of marine biodiversity.

The Advisory Committee on Fisheries Research considered also this objective. It stated in part:

“While noting the complementarity of this WSSD target with the mandates provided in the UN Convention on the Law of the Sea and the Code of Conduct for Responsible Fisheries, the Committee observed that from a scientific point of view the timeline given for this target was either too pessimistic or too optimistic depending on the dynamics of fish populations and the influence of unpredictable environmental factors on stock recovery. The committee also observed that the conditions of a healthy fish stock are inadequately described through an MSY-related abundance measure.”²⁴

²⁴ Para. 54.

(d) The Ecosystem approach (2010 and 2012)

The ecosystem approach is reflected in several paragraphs of the WSSD Plan of Implementation.

Thus, in para. 30(d): “Encourage the application by 2010 of the ecosystem approach, noting the Reykjavik Declaration on Responsible Fisheries in the marine Ecosystem and decision V/6 of the conference of the Parties to the Convention on Biological Diversity.”

Another, more specific goal that also brings in the ecosystem approach is para. 32(c):

“Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors.”

It will be noted that both of these paragraphs involve relatively long term deadlines.

The development of the ecosystem approach builds on the Reykjavik Declaration; however, it is also an extraordinarily ambitious objective, as it is one that only a few States will be in a position to put into practice. That said, there can be little doubt that the single species approach to fisheries management, which has been the predominant approach to date, has obvious limitations, indeed, even a multi-species approach, which became necessary where fishing is taking place for more than one species, is also seen only as a step forward, but from a scientific point of view, inadequate.

For progress to be made here, it will be necessary to define certain concepts and terms. At one level, urging the adoption of an ecosystem approach in the context of fisheries could mean little more than ensuring that a very broad range of factors is considered when formulating fisheries management issues. At another level, it could involve assessing species interactions, at another level again, it could involve making very sophisticated assessments about the relative value of one species versus another. This in effect underlies the whaling issue and which became so problematic at the Reykjavik meeting referred to above, and it brings out some of the complexity that can be opened up once it is said that an ecosystem approach is to be adopted.

The FAO Advisory Committee on Fisheries Research at its meeting in Rome from 10 to 13 December 2002 was the first Committee at FAO following WSSD to consider the WSSD Plan of Implementation from a fisheries perspective. In discussing new guidelines which are under preparation on the ecosystem approach to fisheries, it said:

“Implementing [an ecosystem approach to fisheries] was, in effect, implementing sustainable development in the context of marine capture fisheries, as specified in the Code of Conduct. It represented the merging of two related but different paradigms – ecosystem

management that focuses on ecosystem well-being and fisheries management that focused more on human well-being.”²⁵

In para. 53 of its report, it said in reference to the objective of encouraging the ecosystem approach by 2010:

“... the transition towards an ecosystem approach to fisheries management was an incremental and progressive process. Thus calling for an ecosystem approach by a specific date was meaningless unless a target level of achievement was defined in an operational sense. However, the committee welcomed WSSD’s time bound call for EAF [ecosystem approach to fisheries] since it clearly indicated the priority that should be given to the adoption of this approach.”

The Advisory Committee on Fisheries Research also added:

“The committee noted the evolution in thinking about the biological components of fisheries systems from single species to ecosystems. This evolution also included harvesting sub-components (or fleets), and it acknowledged the diversity of human values and objectives for fisheries. However, rarely, if ever, is the complexity of global markets considered in an ecosystem context. The committee stressed that markets and trade of fish and fish products was in a sense analogous to food webs and energy flow within the biotic component of fishery systems, and potentially, it was just as important in terms of conservation and sustainable livelihoods.”²⁶

An Expert Consultation on Ecosystem based Fisheries Management was held in Reykjavik, Iceland, from 16 to 19 September 2002 to develop technical guidelines for best practice with regard to introducing ecosystems considerations into fisheries management. The guidelines “attempt to operationalise EAF [Ecosystem Approach to Fisheries] by recognizing that it is an extension of current management practices, but broadens these to take into account the biotic, abiotic and human components of ecosystems within which fisheries operate”.²⁷

In an important article by J. Caddy and K. Cochrane, the difficult task ahead for fisheries managers in embracing the ecosystem approach is put into context in their wide ranging review of fisheries management:

“Even while fisheries management struggles to get to grips with single species issues, it is increasingly being called on to take a multispecies and ecosystem perspective. However, there are still few case studies with more than few years duration which illustrate how these concepts are to be applied, and the difficulties are already apparent to all.”²⁸

²⁵ Para. 31.

²⁶ Para. 66.

²⁷ Report to COFI, 25th Session February 2003, COFI/2003/Inf.13. For an excellent discussion of the Reykjavik Declaration, and the ecosystem in general, see “Ecosystem-Based Fisheries Management, Commercial Fisheries, Marine Mammals and the 2001 Reykjavik Declaration in the Context of International Law”, to be published in the *International Journal of Marine and Coastal Law*.

²⁸ “A Review of Fisheries Management Past and Present, and some Future Perspectives for the Third Millennium” *Ocean and Coastal Management* 44 (2001) 653 at 666.

(e) Establishment by 2012 a representative network of MPAs

Para. 33(c) states:

“Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use; watershed planning and the integration of marine and coastal areas management into key sectors.”

This objective relates more to conservation of biodiversity, coastal area management, and the Djakarta Mandate. However the relevance of it to fisheries is self evident. The requirement that the marine protected areas are to be consistent with international law will inevitably impose certain constraints as to what can be achieved here from a purely environmental perspective.

(f) Global reporting and assessment of the marine environment by 2004

Para. 36 (b) states: “Establish by 2004 a regular process under the United Nations for global reporting and assessment of the state of the marine environment, including socio-economic aspects, both current and foreseeable, building on existing regional assessments.”

From a fisheries point of view, attention can be drawn to the information already made available in SOFIA (State of the World Fisheries and Aquaculture), FIGIS (Fisheries Global Information System), FIRMS (Fisheries Resources Management Systems) and the UN Atlas. It needs to be seen how this fisheries specific information is worked into a more broad based marine environment context within the UN system.

In addition to these specific goals, it should be mentioned for the sake of completeness that several of the objectives set in respect of biodiversity will have an impact on fisheries management issues. Thus, for example in that context, there is a reference in para. 44 to “the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity will require the provision of new and additional financial and technical resources to developing countries”.

(2) General objectives

(a) Those relating to international instruments

The WSSD Plan of Implementation contains the usual litany of calls to ratify, accede to or give effect to a number of international instruments, without which any such instrument is apparently regarded as incomplete.

Thus, we find in para. 30(a) “invite States to ratify or accede to and implement the United Nations Convention on the Law of the Sea, which provides the overall legal framework for ocean activities.” In para. 31 (b): “Ratify or accede to and ef-

fectively implement the relevant United Nations and, where appropriate, associated regional fisheries agreements or arrangements, noting in particular” the UN Fish Stocks Agreement and the FAO Compliance Agreement. Again, in para. 32(e): “Implement the RAMSAR Convention, including its joint work programme with the Convention on Biological Diversity, and the programme of action called for by the International Coral Reef Initiative to strengthen joint management plan and international networking for wetland ecosystems in coastal zones, including coral reefs, mangroves, seaweed beds and tidal mud flats.”

Turning to the soft law instruments, we find the following:

Para. 31(c): “Implement the 1995 Code of Conduct for Responsible Fisheries, taking note of the special requirements of developing countries as noted in its article 5, and the relevant international plans of action and technical guidelines of the Food and Agriculture Organization of the United Nations.”

And para. 30(b): “Promote the implementation of chapter 17 of Agenda 21, which provides the programme of action for achieving the sustainable development of oceans, coastal areas and seas through its programme areas of integrated management and sustainable development of coastal areas, including exclusive economic zones.”

These calls are hardly new. Sadly, they can be found in several other places, such as the Rio Declaration, Agenda 21, FAO Ministerial declarations, and regularly in resolutions of the General Assembly concerning oceans issues. The question has to be asked whether this largely useless repetition of the message is debasing the importance of the message itself. Certainly, where these are not backed up by specific programmes to assist countries to give effect to these objectives, they seem quite hollow.²⁹

(b) Institutional arrangements

The Plan of Implementation contains a number of proposals to promote consultation and coordination. Those which have a direct bearing on fisheries issues are:

Para. 30 (c): “Establish an effective, transparent and regular inter-agency coordination mechanism on ocean and coastal issues within the United Nations system.”

Para. 30 (h): “Take note of the work of the open ended informal consultative process established by the United Nations General Assembly in its resolution 54/33 in order to facilitate the annual review by the Assembly of developments in ocean affairs and the upcoming review of its effectiveness and utility to be held at its fifty-seventh session under the terms of the above mentioned resolution.”

Para. 30 (f): “Strengthen regional cooperation and coordination between the relevant regional organizations and programmes, the UNEP regional seas pro-

²⁹ For a discussion of the role of FAO in helping countries to give effect to certain of these instruments, see W. Edison “Implementing the 1982 UN Convention, the FAO Compliance Agreement, and the UN Fish Stocks Agreement” *Current Fisheries Issues and the Food and Agriculture Organization of the United Nations, Centre for Oceans Law and Policy* 2000.

grammes, regional fisheries management organizations and other regional science, health and development organizations.”

It will be noted that these proposals are open ended, and without any time frame. Given that there already exists the Commission on Sustainable Development, it may be that it will be in this context that the proposal probably will need to go forward, at least in the first instance.

These specific fisheries provisions also need to be seen against the even more sweeping provisions dealt with in Part XI Institutional Framework for Sustainable Development. From a fisheries point of view, it is curious that the highly relevant work of regional fisheries organizations is given relatively scant attention³⁰, while the role of the General Assembly, the Economic and Social Council, and the Commission on Sustainable Development are given very prominent roles.

(c) Related issues: aquaculture, biodiversity, and fishing

For the sake of completeness, mention should be made of three other subjects closely linked to fisheries as such. These are aquaculture, biodiversity and the problem of fishing entities.

(i) Aquaculture

Aquaculture is mentioned several times both directly and indirectly. Thus:

Para. 31(h): “Support the sustainable development of aquaculture, including small scale aquaculture, given its growing importance for food security and economic development.”

Further:

Para. 40 (d): “Promote programmes to enhance in a sustainable manner the productivity of land and the efficient use of water resources in agriculture, forestry, wetlands, artisanal fisheries and aquaculture, especially through indigenous and local community-based approaches.”

Apart from this specific mention, there are several other provisions that would impact on aquaculture activities. Thus, it is stated in para. 40 (c): “Increase understanding of the sustainable use, protection and management of water resources to advance long-term sustainability of freshwater, coastal and marine environments.”

However, most of the provisions on sustainable agriculture and the use of water would have varying degrees of relevance to aquaculture. The provisions do not involve any radical changes or introduce any new concepts to those found in the provisions on aquaculture in the Code of Conduct for Responsible Fisheries.

³⁰ Other than general references, only two are specifically referred to, namely the Caribbean Regional Fisheries Mechanism and such agreements as the Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. This is in the context of small island developing States: para. 58 of the Plan of Implementation.

(ii) Biodiversity

There have already been several references made to biodiversity in WSSD. It is not necessary in this paper to explore in full the aspects of the WSSD relating to biodiversity, except to mention that the links between fisheries and biodiversity, and its maintenance, is a strong theme of the WSSD itself.

(iii) Fishing entities

The Plan of Implementation makes no reference to the problem of fishing entities, despite the fact that their involvement one way or another in fisheries management is a major challenge facing the international community. Of course, the explanation for this omission is very simple: in the UN context, there are considerable political difficulties in involving Taiwan Province of China. However, the progress made in other fora such as Convention on the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, the International Commission for the Conservation of Atlantic Tuna, and to a lesser extent, the Indian Ocean Tuna Commission makes it curious that there was no attention paid to this critical issue for fisheries management.

IV. Conclusions

WSSD and its Plan of Implementation reveals, once more, the highly repetitive nature of these international instruments. There is also a risk that setting out these generalized objectives in the vague language gives a false impression of action rather than focusing on action itself which goes beyond a purely bureaucratic circulation of old ideas.

The fact that WSSD drew on many existing instruments in the fisheries area underlines the fact that there are already numerous instruments out there that need to be implemented. There is an urgent need to put efforts into implementing them rather than making further declarations or plans of action unless they are themselves accompanied by action to achieve their early implementation.

That said, the achievement of WSSD Plan of Implementation as regards fisheries is not that it has attempted to carve out new concepts in the way that Rio and Agenda 21 did, but in the fact that it has set, for the first time in a global all embracing instrument of this kind, specific timeframes. This will hopefully focus attention on where the real needs are, and to permit judgements to be made on where specific action is required. If even some of these time frames can be achieved, then WSSD will have been worthwhile so far as fisheries are concerned.

