## **ANNEX: Regional examples**

# A. WCPFC: West and Central Pacific tuna fisheries under threat from overcapacity, non-compliance and IUU fishing

#### A.1. Overview

The Western and Central Pacific Ocean (WCPO) is home to over 20 island nations and the world's largest tuna fishery. The fishery resources are estimated to be worth approximately US\$5 billion annually. The WCPO now supplies close to 60% of the global tuna supply. A record catch of approximately 2.5 million tonnes of tuna was reported in 2008 following a historical record setting catch in 2007. This trend in increasing catches continues despite recent scientific warnings of overfishing of two commercially important species - bigeye and yellowfin tuna.

Efforts to return Pacific bigeye and yellowfin tuna stocks to long-term sustainable levels and to protect the broader marine environment by capping harvest limits have drastically failed so far, with record catches of threatened stocks persisting, regardless of regional management measures to prevent further increases in catch levels. For example, in 2008 the yellowfin catch was the highest on record and 17% higher than the previous record set ten years earlier in the absence of a regional tuna management regime. Additionally, total catch for the overfished bigeye in 2008 was the second highest on record.<sup>3</sup>

Why is this occurring? There has been a drastic influx of heavily subsidised foreign fishing vessels operating in the WCPO over the last decade or so. There are approximately 6087 vessels on record that are authorised to fish in the WCPO, although this figure could well be below the true amount. <sup>4</sup> A staggering 84% of these recorded vessels are flagged to the seven largest tuna fishing nations; Japan, Taiwan, Korea, China, USA, Philippines and the EU. Vessels flagged to Taiwan and Japan alone comprise of over 50% of vessels authorised to operate in the WCPO.<sup>5</sup>

In 2007 more than 65% of the tuna caught in the Pacific, worth over US\$2.5 billion, was taken by distant water fishing nations (DWFN) fleets. It is further speculated that the capacity and share of fishing effort accruing to these distant water fishing nations is much larger since a considerable portion of fishing vessels from these states are not accounted for as a result of

Williams P. Terawasi S. 2009. Overview of Tuna Fisheries in the Western And Central Pacific Ocean, Including Economic Conditions – 2008. WCPFC-SC5-2009/GN WP-1. At <a href="http://www.wcpfc.int/doc/gnwp-01/williams-pand-p-terawasi-overview-tuna-fisheries-western-and-central-pacific-ocean-inc">http://www.wcpfc.int/doc/gnwp-01/williams-pand-p-terawasi-overview-tuna-fisheries-western-and-central-pacific-ocean-inc</a>.

WCPFC estimates based on total offshore landings from the convention area <a href="http://www.wcpfc.int/frequently-asked-questions-and-brochures">http://www.wcpfc.int/frequently-asked-questions-and-brochures</a>

Yellowfin catch for 2008 (539,481 mt – 22% of total catch) was the highest on record and nearly 77,000 mt (17%) higher than the previous record in 1998 (462,786 mt). The WCP–CA bigeye catch for 2008 (157,054 mt – 6% of total catch) was the second highest on record (slightly lower than the record catch taken in 2004 – 157,173 mt). Final Report of The Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean. Scientific Committee Fifth Regular Session, 10-21 August 2009, Port Vila, Vanuatu. http://www.wcpfc.int/

Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean Record of Fishing Vessels Authorised to Fish in the Convention Area. http://www.wcpfc.int/record-fishing-vessel-database

Calculations based on figures derived from WCPFC Record of Fishing Vessels Authorised To Fish in the Convention Area at <a href="http://www.wcpfc.int/record-fishing-vessel-database">http://www.wcpfc.int/record-fishing-vessel-database</a> accessed 07/06/2010

WCPFC Yearbook 2007, table 97. At http://www.wcpfc.int/doc/wcpfc-tuna-fishery-yearbook-2007

using so called 'flags-of-convenience' that ultimately disguise the true extent of DWFN capacity in the WCPO.

The foreign fleets operate far from their port states via often inequitable access arrangements with Pacific Island Countries and Territories (PICTs) who's Exclusive Economic Zones (EEZs) are relatively abundant with tuna. DWFNs take many times the amount of tuna taken by locally operated vessels. Furthermore, these fleets also dominate offshore fishing in the high seas areas where participation by Pacific Island Countries is minimal due to a lack of fleet capacity to undertake this type of fishing. Furthermore, developing coastal states often lack the capacity to monitor and provide surveillance for their EEZs, leaving these waters wide open to plunder by both legitimate and illegal fleets.

Fleets from these industrialised countries continue to grow with the advent of new and efficient fishing technology. These countries own and operate the majority of purse seine fleets in the WCPO. The majority of purse seine fishing is carried out by four main DWFN fleets – Japan, Korea, Chinese-Taipei and USA.<sup>8</sup> This fishing method is infamous for its destructive by-catch capabilities of juvenile tuna, which is exacerbating overfishing in the WCPO. In 2005 it was estimated that purse seine fishing capacity for yellowfin and bigeye in the WCPO was already 11-28% greater than needed to take the available catch.<sup>9</sup> In 2008, purse seine vessels set a catch record of 1,783,669 mt or 74% of total tuna catch from the WCPO. Similarly, overcapacity in the longline fleet is estimated to be greater than 20%.

Such growth in the number of fishing vessels in both small-scale and large-scale longline fishing fleets, coupled with higher productivity due to improving technologies and efficiencies of the purse seine fleets, is a significant threat to the sustainability of WCPO tuna resources. Despite attempts over the last few years to restrict capacity through strategies aimed primarily at controlling effort and catch levels – capacity to fish in the WCPO continues to grow, as reflected in the unabated record fishing levels and the current overfishing of bigeye and yellowfin. Due to insufficient observer coverage on longline vessels (at less than 5%) and ongoing transshipments and bunkering at sea, IUU fishing in the region is rife. This is contributing to overcapacity in this sector of the tuna fishery.<sup>10</sup>

#### A.2. Allocation in the WCPFC Convention Area

It is accepted that overcapacity and overfishing are symptoms of the same underlying management problem: the absence of well-defined access rights. While the solution to this problem is to implement effective rights-based fisheries management programmes or allocation systems, such solutions are not simple because of the numerous considerations that need to be taken into account to ensure fairness/equity is attained in reaching sustainability.

Attempts to determine a well defined total allowable catch (TAC), total allowable effort (TAE), as well as adequate participatory rights and opportunities under the WCPFC have been

Greenpeace (2007). Taking tuna out of the can; a rescue plan for world's favourite fish. http://www.greenpeace.org/international/en/publications/reports/taking-tuna-out-of-the-can/

Williams P. Terawasi S. 2009. Overview of Tuna Fisheries in the Western And Central Pacific Ocean, Including Economic Conditions – 2008. WCPFC-SC5-2009/GN WP-1. At <a href="http://www.wcpfc.int/doc/gnwp-">http://www.wcpfc.int/doc/gnwp-</a> 01/williams-p and-p-terawasi-overview-tuna-fisheries-western-and-central-pacific-ocean-inc.

Reid, C., J. Kirkley, D. Squires & J. Ye 2005. An analysis of the fishing capacity of the global tuna purse-seine fleet. FAO fish. Proceed. No. 2.

http://oceans.greenpeace.org/en/documents-reports/plundering-pacific, www.greenpeace.org/.../resources/.../defending-our-pacific-2008-su.pdf and http://www.greenpeace.org/international/en/publications/reports/defending-our-pacific2009-summaryreport

problematic since the establishment of the Convention.<sup>11</sup> Commission-wide discussions on explicit allocation models or approaches in the WCPFC have essentially ground to a halt.<sup>12</sup> As outlined in the main part of this document, efforts to agree on a mutually acceptable process that defines limits on catch and effort, establishes who should bear the burden of any reductions with regards to allocation, as well as determines the degree to which allocation is based on past fishing history are all central to the current impasse.

Until now DWFNs have stalled any suggestion of an allocation scheme that would result in a reduction of its fishing opportunities in the WCPO. DWFN fleets have considerable opportunities in the high seas under current arrangements and are therefore not keen on any allocation discussion that will result in significant losses of fishing opportunities in these areas. <sup>13</sup>

Unless the WCPFC addresses this issue, the WCPO will continue to be plagued with the problem that without a limit on the capacity of fishing vessels, there will continue to be an economically and ecologically damaging "race to fish" that leads to overexploitation, overcapacity and an incentive to conduct IUU fishing.<sup>14</sup>

#### A.3. Conservation Measures and Capacity/Effort Reduction in the WCPFC

In the absence of a broad allocation scheme, the WCPFC has instead relied on a number of non-binding resolutions on capacity, as well as a number of legally binding conservation and management measures (CMMs) for target stocks that provide catch limits and catch reduction objectives based on historical catches. However, these fall far short of comprehensively addressing the issue overcapacity.

**Capacity:** The first of the non-binding resolutions adopted by the Commission in 1999 aimed at restraining any increase in capacity and urged States and entities to "exercise reasonable restraint" in respect to any regional expansion of fishing effort or capacity. A resolution in 2003 (recognising the failure of the 1999 resolution) urged States and entities that had "continued to breach" earlier resolutions to reduce overcapacity. In 2005, a further resolution was introduced that vaguely aimed to address the issue of new entrants, requiring member states that entered the WCPFC after 1999 to work with other Commission members to reduce any overcapacity it created as a result of joining. These reductions could also be achieved through reduction of equivalent fishing capacity of other fishing vessels.

These resolutions have been either blatantly ignored or easily bypassed through the use of flags of convenience (FOC). For example, Taiwan has a long history of using and building FOC vessels. Data from vessels registries between 2001 and 2003 showed that of the 51 fishing vessels over 24 metres built in Taiwan, 50 were flagged in FOC countries by the end of 2003 and only one was flagged in Taiwan. In 2005 at least 114 vessels were registered in FOC

The Multilateral High Level Conferences on South Pacific Tuna Fisheries, 1997 – 2000.

The allocation issue was last discussed at length at the 3<sup>rd</sup> regular session of the commission 11-15 December 2006, Apia, Samoa to discuss consultancy paper by Marine Resource Assessment Group (MRAG).

Secretariat Paper WCPFC4-2007/14 presented to the Western and Central Fisheries Commission Fourth Regular Session 3 -7 December, 2007 Tumon, Guam, USA.

Western and Central Pacific Fisheries Commission (WCPFC), Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean Third Regular Session, Final Report, 11-15 December 2006, Apia, Samoa, 2006; Marine Resource Assessment Group (MRAG) 2006 Allocation Issues for WCPFC Tuna Resources: A Report for the WCPFC Secretariat, 2006, available at www.wcpfpc.int

http://www.wcpfc.int/system/files/documents/conservation-and-management-measures-and-resolutions/resolutions-western-and-central-pacif/WCPFC2\_Records\_H.pdf

countries but their owner or operator was located in Taiwan. However, the true number is believed to be much higher since this data only includes vessels where the owner is easily identifiable in the Lloyds ship register. Furthermore, a report by the Japanese delegation claimed that between 2000 and 2003 the number of Taiwanese FOC purse seiners increased from 11 to 28 and the number of Taiwanese FOC longliners increased from 10 to 55 between 2000 and 2002, before falling to 40 in September 2003. Questions are also raised over the links of the recent US flagged purse seine entrants to the WCPO fishery (2008-2009) with Taiwanese fishing interests.

There is clearly a need for the WCPFC to implement binding measures that comprehensively address the issue of excess fishing capacity.

**Big Eye and Yellowfin:** In 2008, a complex CMM (CMM 2008-01) was adopted comprising of a mixture of catch and effort limits, time/area closures, and reductions for bigeye and yellowfin tuna in the WCPO.<sup>19</sup> In 2009 regional scientists declared that the measure would not achieve the 30% reductions in fishing mortality sought. The problem remained clear, the measure did little to tackle the overcapacity issue head-on and instead bowed to political pressure to accept the 30% limit rather than the initial 50% recommended by scientists. There were also significant exemptions in place that allowed for overcapacity of the fishery to remain. For example, the purse seine measure is exempt to vessels under an existing treaty with the US that allows up to 40 purse seine vessels in certain PICT EEZs. In addition, the US large longline fleet has a lower bigeye mortality reduction objective of 10%.<sup>20</sup>

The closure of the two high seas pockets would be rendered ineffective without further closures of high seas pockets situated farther east. At the 6<sup>th</sup> WCPFC annual session in 2009, the additional closures of high seas areas and pockets were considered – the proposal was ultimately dropped because the DWFN's were not keen on losing access to this productive high seas areas.<sup>21</sup>

There is clearly a need for strengthening the measure, including the removal of all exemptions. Scientific advice now recommends a 50% reduction on bigeye mortality to be implemented along with a suite of measures including additional closure of high seas areas and high seas pockets further east in the WCPO; a ban or 80% reduction on FAD fishing; and an extension of the closure period.<sup>22</sup> Greenpeace believes that the use of fish aggregations devices (FADs)

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Gianni, M. & Simpson, W. 2005. The Changing Nature of High Seas Fishing: how flags of convenience provide cover for illegal, unreported and unregulated fishing. Australian Department of Agriculture, Fisheries and Forestry, International Transport Workers' Federation, and WWF International.

Japanese WCPFC Delegation. 2004. Information Paper On Expansion Of Fishing Capacity In The WCPFC Area During The Preparatory Conference Process. Preparatory Conference for the Commission For The Conservation And Management Of Highly Migratory Fish Stocks In The Western And Central Pacific.

http://www.wcpfc.int/system/files/documents/preparitory-conference/conference-documents/papers-submitted-delegations/WCPFC PrepCon DP29%28Japan%29.pdf

Christopher Pala (2009). U.S. increases catches of bigeye tuna. The move puts the country at odds with other nations' practices and ts own record. *Environ. Sci. Technol.*, 2009, 43 (15), p 5554 **DOI:** 10.1021/es9018546

The measure sought to limit high seas purse seine effort in days to 2004 or 2001-2004 average levels and reduce fishing mortality on bigeye by 30% based on these baseline years, with no further increases in catch of yellowfin. Hampton, J., and Harley, S., 2009, Assessment of the potential implications of application of CMM 2008-01 to bigeye and yellowfin tuna. WCPFC-SC5-2009/GN-WP-17.

Western and Central Pacific Fisheries Commission (WCPFC), Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean Sixth Regular Session, Final Report, 7-11 December 2009, Paperete, French Polynesia.

Reference footnote 13

should be totally banned as these significantly contribute toward yellowfin and bigeye overfishing due to high numbers of juveniles being caught as bycatch, <sup>23</sup> as well as endangered marine life such as sharks and turtles. FADs also increase the fishing capacity of purse seiners in a way that is difficult to control and measure.

### A.4. Data Provision, Availability and Accuracy

Members are required to submit catch and effort data, and size composition data for all fleets in specified format. However, this data submission has been poor. Overall there has been a lack of urgency in providing obligatory data under management measures to the WCPFC. This has resulted in WCPFC data often being inconsistent and incomplete. It is often submitted late, making it impossible to monitor quotas or accurately determine the status of the stocks. For example, by 31 August 2009, the previous year's aggregate catch and effort data had not been provided for certain fishing gears for five members and no aggregate data at all for two cooperating non members (CNM) and two countries seeking CNM status.<sup>24</sup> This lack of data contributes to a substantial level of uncertainty, which translates into a reduced lack of confidence in results of fisheries models as well as management measures.

#### A.5. The WCPFC Record of Fishing Vessels

The regional vessels record should provide a clear picture of the fishing capacity deployed by countries in the different WCPFC fisheries. Members are obligated to provide specific information regarding vessels listed on its national record of fishing vessels that are entitled to fly its flag, and authorized to fish in the Convention Area beyond its area of national jurisdiction. This information must be received within a specified timeframe for the vessel to be placed on the registry and authorised to fish in the WCPO.

An overview of the WCPFC Record of Fishing Vessels shows many gaps in the information reported by member countries. A recent report showed that there are significant issues associated with anomalies in the type and quality of information provided by members. For example, vessels are failing to provide information on communication equipment and devices and/or satellite phone contact numbers; photographic evidence; previous names and flags; where and when a vessel was built; carrying capacity; freezer type and number; fish hold capacity; and information regarding licensing conditions with relation to authorised fish species, authorised fishing areas and time periods.

In 2007, the proportion of incomplete records by information type included; name and address of owner or owners (36%); International Radio Call Sign (42%); colour photograph of the vessel (68%); and form and number of the authorisation granted by the flag State including any specific areas, species and time periods for which it is valid (82%). Indonesia, that has a considerable fishing fleet, provided only 34.5% of the required information. Other DWNS had poor vessel

The Associative Dynamics of Tropical Tuna to a Large-Scale Anchored FAD Array, at http://www.soest.hawaii.edu/biolog/holland\_itano\_png.

WCPFC Technical Compliance Committee Fifth Regular Session, 4 September, 2009 Pohnpei, FSM. Secretariat Paper; Review Of CCMs Implementation Of, And Compliance With, Conservation and Management Measures. Available at <a href="http://www.wcpfc.int/doc/wcpfc-tcc5-200931-rev1/review-ccms-implementation-and-compliance-with-conservation-and-managemen">http://www.wcpfc.int/doc/wcpfc-tcc5-200931-rev1/review-ccms-implementation-and-compliance-with-conservation-and-managemen</a>

Status of and developments related to the WCPFC record of fishing vessels. Working Paper presented to the 5<sup>th</sup> Regular Session of the Technical and Compliance Committee of the Western and Central Fisheries Commission. 1- 6 October 2009, Pohnpei, Federated States of Micronesia. Available <a href="http://www.wcpfc.int/doc/wcpfc-tcc5-200917/status-and-developments-related-wcpfc-record-fishing-vessels">http://www.wcpfc.int/doc/wcpfc-tcc5-200917/status-and-developments-related-wcpfc-record-fishing-vessels</a>

information compliance records including EU (64.5%), Taiwan (79%), Japan (78%) and the US  $(72\%)^{26}$ 

There is clearly a need for an updated record of fishing vessels in the WCPFC, especially in the fight against IUU fishing, which is a key factor exacerbating overcapacity. In the Pacific alone, the IUU catch is estimated to be around \$US 134-\$400 million per year, or 4 times greater than the money the PICs receive in access fees from their tuna resources.<sup>27</sup> Without greater cooperation and coordination, it will be a near-impossible task to ensure unscrupulous operators are no longer operating at sea.

## B. ICCAT: The Mediterranean bluefin tuna fishery: overcapacity, poor data and subsidies driving overfishing

#### **B.1. Overview**

The Atlantic bluefin tuna fishery has unfortunately become an illustration of mismanagement in tuna fisheries.<sup>28</sup> The western Atlantic bluefin tuna stock has not recovered following more than 10 years of a rebuilding plan.<sup>29</sup> IUU fishing levels in the eastern bluefin tuna fishery have been estimated to be as high as double the TAC in recent years<sup>30</sup> and the stock is considered to be in high risk of collapse. ICCAT contracting parties have consistently failed to follow scientific advice and to comply with their obligations in managing this stock. By not putting limits on this fishery in the Mediterranean, huge investments have gone into building up an enormous fishing and farming capacity in less than one decade. 31 This expansion has been aided by a shocking level of both financial and political support by Mediterranean governments.

In 2007 the fleet was large enough to catch over 60,000 tonnes of eastern bluefin tuna, double the legal quota and at least five times more than the level recommended by scientists to avoid stock collapse. The European purse seine fleet was capable of catching 10% of its 2008 annual quota in just three days at the height of the season.<sup>32</sup> In 2009, when the quota had been reduced to 22,000 tonnes of bluefin tuna, a very conservative calculation made by the ICCAT estimated the fleet capacity at over 28,000 tonnes.<sup>33</sup>

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Greenpeace, "Pirates of the Pacific: Loopholes and solutions in the fight against illegal, unreported and unregulated fishing in the Pacific" (2004) and Richards, A. Fisheries Monitoring, Control and Surveillance in the Western and Central Pacific Ocean Region, Forum Fisheries Report #03/25, Solomon Islands, See also UK, Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries: FINAL REPORT, (July 2005) at http://www.dfid.gov.uk/pubs/files/illegal-fishingmrag-report.pdf.

In 2008, the independent panel conducting the ICCAT performance review recommended "the suspension of fishing on bluefin tuna in the eastern Atlantic and Mediterranean". According to the panel "the management by ICCAT CPCs of this bluefin tuna fishery in the Mediterranean is widely seen as an international disgrace", and is "a fundamental failing of ICCAT processes, of CPCs commitment to compliance, good governance and adherence to international law." G.D. Hurry, M. Hayashi and J.J. Maguire. Report of the Independent Performance Review at ICCAT. September 2008.

ICCAT Recommendation 98-07 to establish a rebuilding program for western Atlantic bluefin tuna.

The ICCAT scientific committee estimated a catch of 61,000 t of eastern bluefin tuna in 2007, as compared to an agreed TAC of 19,500 tonnes that year. Report of the Standing Committee on Research and Statistics. September 29 to October 3, 2008. Madrid, Spain.

This expansion was allowed for a fleet targeting an already overexploited stock. Greenpeace had raised early warnings on the depletion of the eastern stock of bluefin tuna already in the 90's, even before the tuna fattening business started to take off in the region. See Gual, Assumpta. 1999. The bluefin tuna in the Eastern Atlantic and Mediterranean: Chronicle of a death foretold. Greenpeace International.

European Commission. Bluefin tuna campaign: Commission announces closure of purse seine fishery. 13 June 2008.

Based on Doc. No. COC-15A, 25 February 2010.

How did we get there? From 2000 – one year after the IPOA Capacity was approved – to 2004, over 23 million € were spent in building new vessels with European Community funds. Another 34 million € were spent in moderinising fishing vessels over the same period. The Mediterranean countries also expanded their tuna fishing fleets and farms. The A 2008 report by the WWF estimated that in the Mediterranean Sea "a total of 229 new high-tech tuna seiners were commissioned from 1997, including 25 vessels under construction. The 2nd ICCAT working group on the management of fishing capacity noted the "apparent increase in purse seiners targeting bluefin tuna in the Mediterranean between 2005 and 2007. The situation was aggravated by the lack of requirements to phase out fishing capacity before introducing new vessels, as well as the desire of many ICCAT members with smaller tuna fleets to develop their fisheries. The situation with farming capacity in the region is not better. With a total reported capacity of 69,482 tonnes in 2008, over three times the total TAC for all gears at the time, tuna farms represent a huge loophole for illegal catches.

#### **B.2.** Allocation in the ICCAT Convention Area

Although the ICCAT basic texts do not contain provisions addressing the allocation of resources, ICCAT members are bound by a recommendation agreed to that effect which outlines criteria for the allocation of fishing possibilities.<sup>40</sup> These Criteria are non-binding but, according to the independent review panel, are also "quite ambiguous in formulation, thus causing a number of difficulties and complaints in actual application."

It is clear that one main criteria continues to take precedent over the rest: historical catches. Just three CPCs- the European Union, Japan and Chinese Taipei- receive the lion share of the ICCAT quota allocation by fish stock. For example, they receive 89.89% of the North Atlantic albacore quota; 70.61% of the blue marlin quota; 70.45% of the bigeye tuna quota; 65.20% of the Eastern bluefin tuna quota; 62.95% of the South Atlantic albacore quota; 60.27% of the white marlin quota; and 51.03% of the North Atlantic swordfish quota.

In this context it is not surprising that the ICCAT independent review panel mentioned the "concerns about transparency within ICCAT both in decision making and in resource allocation"

ECORYS Nederland BV. The Socio-Economic Impact of Possible Commission Proposals Pertaining to Conservation of Atlantic Bluefin Tuna. Final Report. Rotterdam, 5 March 2010.

These figures are minimum estimates since additional funding from European countries national, regional and local authorities may have been also used.

Just as an example, WWF gathered evidence on the ongoing building of ten new industrial bluefin tuna seiners in Croatia, where 18 new units were built in just the last two years. WWF. Race for the last bluefin intensifies - 10 new vessels uncovered in Croatia. Bluefin Tuna Bulletin #52.

WWF, 2008. Race for the last bluefin – Capacity of the purse seine fleet targeting bluefin tuna in the Mediterranean Sea.

PLE – 101/2008. Report of the 2<sup>nd</sup> Meeting of the Working Group on Capacity. 15 – 16 July 2008, Madrid, Spain.

This resulted in French purse seiners being reflagged to other Mediterranean countries, particularly Libya, while they were still operated by their former French shipowners.

<sup>40</sup> ICCAT Recommendation 01-05 on Criteria for the Allocation of Fishing Possibilities set out the basic criteria for the allocation of fishing opportunities. These include past and present fishing activity, the status of stocks, compliance, or data submission and scientific research by qualifying participants. Those relating to the status of the qualifying participants comprise the interests of artisanal, subsistence and small scale coastal fishers, the needs of the coastal fishing communities, coastal States, national food security or domestic consumption, income resulting from exports, and employment of qualifying participants.

G.D. Hurry, M. Hayashi and J.J. Maguire. Report of the Independent Performance Review at ICCAT. September 2008.

<sup>&</sup>lt;sup>42</sup> The following estimates are based on the ICCAT Compliance Tables contained in ICCAT COC-304-D-09.

The EU has the biggest share of the TAC on the bluefin tuna fishery (56.39%), North and South Atlantic swordfish fishery (43.78% and 32.31%), North Atlantic Albacore (75.99%) and is responsible for the largest catch of yellowfin and skipjack tuna (37.50% and 29.88%), both species not managed through quotas. Additionally it ranges second in the bigeye tuna quota (25.81%). Japan, not being a coastal State, is the largest quota holder of bigeye tuna (26.89%) and blue marlin (46.58%), as well as third quota holder of North Atlantic albacore (2.11%) and responsible for the third largest catch of yellowfin tuna (9.40%). Chinese Taipei is the largest quota holder of South Atlantic albacore (55.27%) and white marlin (50.24%), second quota holder of North Atlantic albacore (11.79%) and blue marlin (18.31%) and the third quota holder of bigeye tuna (17.75%).

and concluded that one of the main challenges before the Commission is "the fair allocation of resources amongst members to balance the perceived historical rights of the distant water fishing nations and developed countries to harvest the fish stocks with the aspirations of developing and small island developing countries."

## **B.3. ICCAT** working groups on the management of fishing capacity

In recognition of the clear link between the compliance problems in the bluefin tuna fishery and overcapacity, ICCAT organised the two Intersessional Working Groups on Fishing Capacity in 2007 and 2008. The first of these working groups highlighted that ICCAT does not have estimates of fishing capacity for most of the fisheries under its mandate, although "the available scientific information indicates there is some degree of over-capacity in the fisheries affecting six stocks of concern to the Commission" These working groups confirmed the difficulties in estimating and managing capacity, including the lack of crucial information needed to ensure effective management of fishing capacity. They stressed however that action on addressing overcapacity does not have to wait until there are sound estimates of fishing capacity. Although this may seem obvious, RFMOs must take more precautionary steps to address key issues, to avoid the situation that problems are further exacerbated and more drastic actions need to be taken at a later date.

#### B.4. Failure to comply with basic data submission obligations

Too often at ICCAT, catch data is inconsistent, incomplete and is submitted late, making it impossible to monitor quotas or accurately determine the status of the stocks. Even in a fishery under such public scrutiny as the Atlantic bluefin tuna fishery, reporting is extremely poor. In June 2008, ICCAT scientists were unable to provide a new assessment of the bluefin tuna population because basic catch data and size information was not available. This resulted in a letter of complaint from scientists addressed to the ICCAT Chairman.<sup>48</sup>

At the last ICCAT annual meeting, it was decided that the situation was not acceptable and that the chairman of the ICCAT committee on compliance would address letters of concern to a number of parties with regards to their lack of adherence to their obligations under ICCAT. 40 out of the 42 letters sent to ICCAT CPCs included non compliance to catch and effort data submission obligations as a key point of concern.

Some sources of data which could be crucial to understand fishing patterns, areas and effort have been hidden from scrutiny on the basis of confidentiality requirements. For example, ICCAT Recommendation 07-08, calls on ICCAT parties to "take the necessary measures to assure that all messages [VMS] shall be treated in a confidential manner". This has meant that in the past that the ICCAT scientific committee only have access to such information when the data is "three years old or more". This lack of access to data is not acceptable if key information is missing from data analysis.

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<sup>44</sup> G.D. Hurry, M. Hayashi and J.J. Maguire. Report of the Independent Performance Review at ICCAT. September 2008

<sup>&</sup>lt;sup>45</sup> Report of the 1<sup>st</sup> Meeting of the Working Group on Capacity. Raleigh, North Carolina, July 16 to 18, 2007.

 <sup>&</sup>quot;When the problems associated with overcapacity have become sufficiently obvious and important, fishery managers have taken a variety of actions to control the level and use of fishing capacity. Generally, this has been done in the absence of quantitative estimates of fishing capacity. However, capacity analyses can assist in predicting and monitoring the success of such actions." Report of the 1st Meeting of the Working Group on Capacity. Raleigh, North Carolina, July 16 to 18, 2007.
Report of the 2nd Meeting of the Working Group on Capacity. Madrid, July 15 to 16, 2008.

<sup>&</sup>quot;We only have Task I (total catch) and Task II (catch/effort and size samples) from three of the CPCs that have quotas in the Eastern Atlantic and Mediterranean, which amount to less than 15% of the Total Allowable Catch [...] Consequently, we will not be able to evaluate the status of the eastern stock as of 2007, nor we will be able to carry out the review of the progress of the plan that has been requested from us." ICCAT CIRCULAR #1227/08. Letter from scientists participating at BFT stock assessment session to ICCAT chair. Madrid, 27 June 2008.

## **B.5. The ICCAT record of fishing vessels**

The ICCAT Record of Fishing Vessels<sup>49</sup> should provide a clear picture of the fishing capacity deployed by countries in the different ICCAT fisheries. However, the vessels that are listed do not always correspond to those that are actually fishing. For example, a recent Greenpeace report published in 2007<sup>50</sup> found that the difference between registered vessels and those active in the ICCAT area was particularly high in the case of some large scale longline fleets. At the time 505 Japanese long-line fishing vessels were included in the record in contrast to the 199 vessels that the Japanese Government reported to ICCAT to be operating that year.<sup>51</sup> Recently the situation has improved slightly. The ICCAT Record today lists 296 Japanese longliners<sup>52</sup>, whereas Japan declares in its last available national report that "the number of the Japanese longliners that operated in the Atlantic in the 2006 and 2007 calendar year was estimated to be 201 and 174, respectively."<sup>53</sup> In the case of Korea, the ICCAT Record of Fishing Vessels contains 192 longline fishing vessels flagged to this country. Korea's 2008 national report to ICCAT states that "in 2007, one Korean purse seiner (chartered from Malta) and 20 Korean longliners operated in the ICCAT area".<sup>54,55</sup>

An overview of the ICCAT Record of Fishing Vessels also shows many gaps in the information available from many countries, particularly concerning ownership of the vessels included in the register, and periods for when fishing licenses are granted. A vessel's IMO number does not have to be submitted to the ICCAT Secretariat, despite being of paramount importance for the prevention of reflagging and tracking fishing vessels over their lifetime. <sup>56</sup>

### B.6. Crisis response to overcapacity in the bluefin tuna fishery: a way forward?

In response to the overcapacity problems in the bluefin fishery, ICCAT agreed in 2008 on measures to reduce overcapacity in the fishery.<sup>57</sup> Recommendation 08-05 contains some interesting elements including:

- fishing capacity should be commensurate with the allocated quota;
- each ICCAT CPC participating in the fishery has the obligation to submit a fishing management plan;
- an immediate freeze of capacity as a starting point, applicable to not only fishing vessels but also tuna farms. This freeze would not apply to some developing States that demonstrate their need to develop their fishing capacity in order to fully use their quota;
- a binding target on overcapacity reduction;
- a process to estimate overcapacity based on an estimation of the potential catch rate by each fleet segment based on "best catch rates" and "potential catch rates, relying on information provided by the ICCAT scientific committee.

<sup>49</sup> Available at http://iccat.es/vessels.asp.

Losada, Sebastian. Pirate Booty: How ICCAT is failing to curb IUU fishing. Greenpeace, September 2007.

Annual Report of Japan. ICCAT Report for Biennial Period, 2006-07. Part I (2006) – Vol 3.

As accessed on 26 April 2010.

Annual Report of Japan. ICCAT Report for Biennial Period, 2008-09. Part I (2008) – Vol 3.

Annual Report of Korea. ICCAT Report for Biennial Period, 2008-09. Part I (2008) – Vol 3.

A situation very similar to that pictured in 2007 in the above mentioned Greenpeace report: "The ICCAT Record of Fishing Vessels contains 202 longline fishing vessels flagged to Korea. However, Korea's 2006 national report to ICCAT staes that in 2004 and 2005 there were 13 Korean longliners fishing for tuna and tuna-like species in the Atlantic Ocean".

Although ICCAT has requested its Contracting Parties to provide IMO numbers of their flagged vessels and explain how this issue is dealt with at domestic level, this is not mandatory. See ICCAT Circular #202/07.

Articles 40 to 53 of ICCAT Recommendation 08-05 to establish a multiannual recovery plan for bluefin tuna in the Eastern Atlantic and Mediterranean

Whilst these measures have been seen as a good starting point, challenges with regards to the reliability of data and figures still plague effective assessments of fleet capacity. <sup>58</sup> Furthermore, the unfair allocation of bluefin tuna quotas among ICCAT CPCs, particularly coastal states in this fishery is still not addressed.

# C. The Indian Ocean Tuna Commission (IOTC): Lack of data and unreliable reporting seriously undermining fisheries management

#### C.1. Overview

The catch of the sixteen tuna and tuna-like species covered by the IOTC Agreement have repeatedly exceeded 1 million tonnes since 1993. Tunas represent 85% of this total. However, these figures do not reflect the true total, as the fleets under flags of convenience usually do not report their catches. The Indian Ocean catch has increased from 18 % of the world-wide total ten years ago to 24 % at present. <sup>59</sup>

Although the IOTC is a relatively recent convention (it was established in the mid-1990s, <sup>60</sup> around the same time as the negotiation and adoption of the UN Fish Stocks Agreement), the Panel which reviewed its performance in January 2009 concluded that "the IOTC Agreement is outdated as it does not take account of modern principles for fisheries management. The absence of concepts such as the precautionary approach and an ecosystem based approach to fisheries management are considered to be major weaknesses." <sup>61</sup> In addition to the failure to incorporate these fundamental management principles, the Panel considered that the IOTC was also lagging behind in adopting a number of basic compliance and enforcement measures that have been used in other tuna RFMOs.

Since the Review however, a number of key measures, including market-related measures, <sup>62</sup> port State measures based on the recently agreed FAO Port State agreement to deter IUU fishing, <sup>63</sup> as well as strengthening the Compliance Committee <sup>64</sup> have been adopted at the last IOTC meeting in March 2010.

The IOTC manages a number of different fish species, and the relative importance of the various fishing nations varies considerably from species to species. For 2008, taking into account all species (tropical tuna, albacore, billfish, smaller tuna such as kawakawa, Spanish mackerel etc, sharks), total declared catches in 2008 were1.475 million tonnes. The EU was responsible for the largest share (15.2%) followed by Indonesia (14.8%), India (10.6%), Iran (9.7%) and Sri Lanka (9.6%). Apart from the EU, the next largest DWFN fleet is Taiwan at 7th place with 4.7% of total catches. If tropical tuna (bigeye, yellowfin, skipjack) alone are considered, the EU dominates with ¼ of the catches, followed distantly by the Maldives with

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See PA2-623/2009. Underestimation of Potential Catch Rates and Overcapacity in the Bluefin Tuna Fishery as Calcualted in Document PA2-620. NGO Statement to Panel 2 by Greenpeace, WWF and the Pew Environment Group.

http://www.iotc.org/English/info/background.php

http://www.fao.org/fishery/org/iotc\_inst/en The Agreement for the Establishment of the Indian Ocean Tuna Commission was concluded under Article XIV of the FAO Constitution. It was approved by the FAO Council in November 1993 and came into force upon accession of the tenth Member in March 1996.

http://www.iotc.org/files/misc/performance%20review/IOTC-2009-PRP-R[E].pdf

Resolution 10/10 Concerning Market Related Measures

http://www.fao.org/Legal/treaties/037t-e.pdf

catches at half the level of the EU catches. It is important to note that, in the IOTC Convention Area (and in contrast to a number of other ocean areas), a large share of tuna and tuna-like species is caught by small-scale vessels and artisanal fishing fleets from certain developing coastal States, who are wanting to expand their fleets further<sup>65</sup>. Certain fisheries can be important to their local economies and markets rather than export markets, where they would have to compete with fleets from industrialised countries.

Moreover, poor reporting and reliability of available data means that there is a high level of uncertainty with respect to total catches and the status of certain stocks. There are concerns about the status of two of the most important tuna stocks, especially yellowfin and to a lesser extent bigeye. Swordfish is thought to be fully exploited. Only albacore and skipjack are considered to be within safe limits, but the scientists warn that even the normally resilient skipjack should be carefully watched. Other tunas are unknown due to poor data and lack of assessments.

## C.2. Allocation in the IOTC Convention Area: A plan of action for the conservation and management of tropical tuna stocks

The Performance Review Panel examined the "extent to which the RFMO agrees on the allocation of allowable catch or levels of fishing effort, including taking into account requests for participation from new members or participants as reflected in UNFSA Article 11". It concluded that "the Commission has not made any explicit decisions on allocation of TAC or TAE" and recommended that "IOTC should explore the advantages and disadvantages of implementing an allocation system of fishing quota, expressed as TAC or TAE system. Such an investigation should include consideration of how significant catches by current non-Members would be accounted for."

Following the recommendations of the Panel, , the IOTC adopted a plan of Action<sup>66</sup> at its 2010 Commission meeting which includes provisions relevant to allocation. This resolution explicitly states that "the implementation of a TAC without a quota allocation would result in an inequitable distribution of the catches and fishing opportunities among the IOTC Members and Cooperating non-Contracting Parties (CPCs) and non CPCs". Key points in the action plan include:

- establishment of an allocation system (Quota) or any other relevant measures based on the Scientific Committee recommendations for the main targeted species under the IOTC competence;
- advice on the best reporting requirement of the artisanal tuna fisheries and implementation of an appropriate data collection system;
- a technical committee meeting shall be held prior to the Commission Plenary session in 2011 to discuss allocation criteria for the management of Indian Ocean tuna resources and recommend an allocation quota system or any other relevant measures. CPCs are encouraged to submit proposals one month prior to the meeting;
- the Commission shall adopt an allocation quota system or any other relevant measure for the yellowfin and bigeye tunas at its plenary session in 2012.

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http://www.iotc.org/English/data/databases.php

Resolution 10/01 For the conservation and management of tropical tunas stocks in the IOTC area of Competence - This resolution is applicable in 2011 and 2012 to all vessels of 24 meters overall length and over, and under 24 meters if they fish outside their EEZ, fishing within the IOTC area of competence.

Implementing those action points means that countries with high recorded catches and those who intend to increase or are increasing their catches must find an equitable allocation system while stabilising or decreasing exploitation levels. Failing that, fishing capacity and mortality will inevitably soar to levels which would cause stock overexploitation and collapse.

## C.3. Management of fishing capacity in the IOTC: Data Provision, Availability and Accuracy

Management of fisheries in the IOTC Convention Area has been strongly undermined by the lack of accurate data available on catches and fleet activities in the region. The Performance Review Panel concluded that "the quantitative data provided for many of the stocks under the IOTC Agreement is very limited. This is due to lack of compliance, a large proportion of catches being taken by artisanal fisheries, for which there is very limited information, and lack of cooperation of non-Members of the IOTC. The data submitted to the Commission is frequently of poor quality. This contributes to high levels of uncertainty concerning the status of many stocks under the IOTC mandate."

**Fishing Capacity:** In 2008, the IOTC noted that no estimates of overall fishing capacity were available and requested "the Scientific Committee to address this matter as soon as possible... ... so that estimates of fishing capacity for the Indian Ocean are available at the next session." A Working Party on Fishing Capacity was established to address the issue in the IOTC Convention Area and terms of reference were drafted. On 22 October 2009, this Working Party met in Mombasa (Kenya) to attempt to provide an evaluation of fishing capacity, and possibly provide recommendations on capacity management or reduction programmes.

The IOTC Secretariat presented the preliminary results of a study on estimates of "Input fishing capacity of vessels fishing for tropical tunas, albacore and swordfish in the IOTC Area of Competence" An attempt was made to take IUU fishing capacity into account by using estimated catches. In the preliminary results presented by the Secretariat, it was estimated that there are around 9,000 vessels of different sizes that use various gears fishing for tunas or swordfish in the IOTC Area. Although the overall number of vessels appears to be stable, the number of large-scale vessels seems to be decreasing (in particular longliners), while the number of medium-scale vessels is increasing (in particular gillnetters and longliners).

The study noted that there was a lack of information on:

- fleets (number of vessels, especially longliners/gillnetters), length/size, tonnage, fish carrying capacity, age)
- ownership (national/non-national)
- area of operation
- target species (not known for 99% of the vessels; vessels are classified by target species, but can change target species, especially longliners)
- catch quantities and composition, which is not always available by gear type and vessel size

The main conclusion of the meeting was that basic information such as detailed data on catches, fleets and effort were simply not available, especially for artisanal fleets<sup>68</sup>. Considering the abysmal lack of such indispensable data, the Working Party on Fishing Capacity concluded

<sup>67</sup> IOTC-2009-WPFC-03

http://www.iotc.org/files/proceedings/2009/wpfc/IOTC-2009-WPFC-R[E].pdf

that it could not provide recommendations on optimum capacity levels which would require more accurate data.

**No up-to-date list of active fishing vessels**: At the 2010 IOTC Commission meeting, the Compliance Committee noted that only five CPCs had provided lists of active vessels or fleet development plans as requested by IOTC Resolution 09/02<sup>69</sup> and urged all CPCs concerned to report this information before the next meeting of the Compliance Committee in 2011. The Commission set a deadline of 31 December 2010 for CPCs which expressed their wish to submit new or revised fleet development plans. If the fleet development plans materialise, 900 additional vessels of various sizes targeting different species may become active in the area.

At the same time, reporting on vessels that are actively fishing is far from satisfactory. The Performance Review Panel concluded that "The submission of compliance data, most notably data on active vessels to the Compliance Committee does not allow for timely assessment of compliance. The data on active vessels appear not to be fully provided by some Members."

IOTC requires<sup>70</sup> CPCs with vessels fishing for tunas and swordfish to submit every year a list of vessels active in the area during the previous year (all vessels larger than 24 metres or those less than 24 metres operating in waters outside the EEZ of the flag state). These lists need to contain the following information for each vessel: IOTC number; name and registration number; IMO number, if available; previous flag (if any); international radio call sign (if any); vessel type, length, and gross tonnage (GT); name and address of owner, and/or charterer, and/or operator; main target species; and period of authorisation.

### C.4. Improving compliance in the IOTC area is key

The Performance Review Panel concluded that "there is a poor record of compliance and limited tools for addressing non-compliance." Since then, new tools have been adopted by the IOTC and the Compliance Committee has been strengthened.

Among the new compliance measures adopted, it is interesting to note that paragraph 5 of Resolution 10/10 concerning market related measures states that: "In the case of CPCs, actions such as the reduction of existing quotas or catch limits should be implemented to the extent possible before consideration is given to the application of market related measure."

In conclusion, the IOTC has agreed a number of measures in an attempt to improve the management of fishing activities and the conservation of species under its responsibility. The coming months will tell if countries that are exploiting these resources have the political will to translate these measures from paper to actual change on the Indian ocean. The failure to do so riskis an even more intensive and chaotic rush for tuna and other species, leading to further overexploitation and eventual collapse of the resources that so many coastal communities depend upon.

http://www.iotc.org/files/proceedings/2010/s/IOTC-2010-S14-CoC17-Add1[E].pdf

Resolution 10/08 Concerning a record of active vessels fishing for tunas and swordfish in the IOTC area