

Western and Central Pacific Fisheries Commission  
**Seventh Regular Session of the Scientific Committee (SC 7)**

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## Introduction

The most recent data published on tuna stocks for consideration by the Scientific Committee of the Western and Central Pacific Fisheries Commission at its 7<sup>th</sup> Regular Session, continues to raise serious concerns related to the way in which these fisheries are managed and regulated. Overviews of the three major fisheries for skipjack, yellowfin and bigeye tuna over the region point to continuing exploitation close to historical high levels despite existing measures tailored to decrease fishing pressure on these resources.<sup>1</sup> The results show that the bigeye tuna stock in particular is highly vulnerable and is considered to be in an overfished state with continuing overfishing occurring.<sup>2</sup> Yellowfin tuna, although not considered to be overfished, nonetheless appear to be subject of variable depletion of their spawning biomass across the six regions of the WCPO,<sup>3</sup> with high levels of depletion in the Western Equatorial Region 3. Skipjack tuna stocks do not seem to be currently overfished,<sup>4</sup> but the estimates come with the *caveat* that catches since 2007 catches are in the vicinity of or slightly exceed the estimated MSY, and if maintained or increased will cause a decline in spawning stock biomass towards the MSY level. The assessments also note that skipjack is a very difficult species to assess.

Overall the current trend in these fisheries appears, simply, to be unsustainable. The long-term future of the region's fish stocks and that of the coastal nations dependent upon these resources are intertwined. Purse seine fishing on Fish Aggregation Devices (FADs) continues to drive unsustainable fishery catches in the absence of effective management measures. Catching, discarding and processing fish the way WCPFC members currently do undermines the viability of the fish stocks and, accordingly the viability of the fishing industry. Ultimately the wider marine ecosystem itself may be compromised unless these activities are brought under much tighter control.

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- <sup>1</sup> Williams P. Terawasi S. (2011). Overview of Tuna Fisheries in the Western And Central Pacific Ocean, Including Economic Conditions – 2010. WCPFC-SC7-2011/GN WP-1, available at <http://www.wcpfc.int/meetings/2011/7th-regular-session-scientific-committee>.
  - <sup>2</sup> Davies, N. Hoyle, S., Harley, S., Langley, A., Kleiber, P. & Hampton, J. (2011). Stock Assessment of Bigeye Tuna in the Western and Central Pacific Ocean WCPFC-SC7-2011/SA-WP-02, available at <http://www.wcpfc.int/doc/sa-wp-02/stock-assessment-bigeye-tuna-western-and-central-pacific-ocean>.
  - <sup>3</sup> Langley, A., Hoyle, S. & Hampton, J. (2011). Stock Assessment of Yellowfin Tuna in the Western and Central Pacific Ocean WCPFC-SC7-2011/SA-WP-02, available at <http://www.wcpfc.int/system/files/documents/meetings/scientific-committee/7th-regular-session/stock-status-theme/working-papers/SC7-SA-WP-03%20%5BYellowfin%20tuna%20stock%20assessment-rev.1%20-%2003Aug2011%5D.pdf>.
  - <sup>4</sup> Hoyle, S., Kleiber, P., Davies, N., Langley, A. & Hampton, J. (2011) Stock Assessment of skipjack tuna in the Western and Central Pacific Ocean. WCPFC-SC7-2011/SA-WP-04 (available at <http://www.wcpfc.int/system/files/documents/meetings/scientific-committee/7th-regular-session/stock-status-theme/working-papers/SC-7-SA-WP-04%20%5BSKJ%20Assessment%5D.pdf>).

## Alarming Data and Statistics

The fishery data and assessment suggest that bigeye tuna stocks are in a precarious state. This is despite the application of Conservation and Management Measure CMM-2008-01. Reported catches since the entry into force of this measure clearly show that it has not been successful in decreasing effort in the fishery.<sup>5</sup> The 2010 bigeye catch for WCP-CA was 108,997 tonnes, well above the estimated MSY level of 76,993 tonnes. Around 40% of this catch was taken in the purse seine fishery and was the third highest take on record.<sup>6</sup>

The evidence suggests that much of the problems related to the conservation of bigeye stocks are attributable to the use of FADs in the purse seine fishery. This not only results in substantial catches of juvenile bigeye tuna, but also in substantial misreporting of these catches as other species, principally yellowfin tuna.<sup>7</sup>

The following quote sums the situation up, highlighting the highly detrimental effects of the use of FADs on the productivity of the stock:

*“Analysis of current levels of fishing mortality and historical patterns in the mix of fishing gears indicates that MSY has been reduced to less than half its levels prior to 1970 through harvest of small juveniles. Because of that and overfishing, considerable potential yield from the bigeye tuna stock is being lost.”<sup>8</sup>*

In addition, poorly characterized and managed fisheries in the archipelagic and coastal areas of the Philippines and Indonesia may also be adversely impacting the fishery, as suggested by the data presented before this Committee.<sup>9</sup>

The accuracy of the 2010 bigeye catch estimates is also questionable on other grounds. In addition to misreporting of species, it is possible that the provisional reductions reported for catch of bigeye in the region as a whole may simply be an artifact. 2010 catch reductions have been attributed to reductions in the provisional estimates for the longline fishery.<sup>10</sup> This fleet segment is notable for frequent infringements and poor data reporting. This problem is further compounded by a lack of on-board observers to validate catch data.

Catch data and assessments for other commercial tuna species in the WCP-CA are also worrying. The reported yellowfin catch at 470,161 tonnes for the 2010 period was more than 50,000 tonnes higher than the 2009 catch level at 417,839.<sup>11</sup> Note also that the corrected purse-seine catches are not yet included in the official WCPFC catch figures. According to the stock assessment,<sup>12</sup> recent catches of yellowfin are more in the order of 550,000 t, which is considerably higher than the official reported average catch for yellowfin in 2005-2008 of 473,000 tonnes. Although not considered overfished, yellowfin are under high pressure, particularly in Region 3, where almost all fishing (95%) for this stock occurs.<sup>13</sup> The interrelationship of stocks in Region 3 with those in other regions is not clear meaning that some of the assumptions made in conducting the assessments may not actually be valid. While

<sup>5</sup> SPC-OFP (2010) Review of the Implementation and Effectiveness of CMM-2008-01 WCPFC7-2010/15.rev1, available at <http://www.wcpfc.int/doc/wcpfc7-2010-15/review-implementation-and-effectiveness-cmm-2008>.

<sup>6</sup> Ibid. 1.

<sup>7</sup> Hampton, J. & Williams, P. (2011) Misreporting of purse seine catches of skipjack and yellowfin-bigeye on logsheets WCPFC-SC7-2011/ST-WP-02, available at <http://www.wcpfc.int/doc/st-wp-02/misreporting-purse-seine-catches-skipjack-and-yellowfin-bigeye-logsheets>.

<sup>8</sup> Ibid. 2.

<sup>9</sup> Ibid. 2.

<sup>10</sup> Ibid. 1.

<sup>11</sup> Ibid. 1.

<sup>12</sup> Ibid. 3.

<sup>13</sup> Ibid. 3.

the assessments consider that the fishery is in a stable state,<sup>14</sup> the estimates of *MSY* for the principal model options (480,000–580,000 mt) are extremely close to the recent level of (estimated) catch from the fishery. It is entirely possible that the stocks are in a worse state than assessed given the substantial uncertainties and indeterminacies in the data. Furthermore, evidence again suggests that the purse seine fishery using FADs is having the greatest depleting impact on the stock, although significant increases in juvenile fishing mortality are attributable to the activities of Philippine and Indonesian surface fisheries.<sup>15</sup>

Skipjack catches remain high with the 2010 catch the second highest on record and with the historical increasing trend driven by the purse seine fleet.<sup>16</sup> An increasing dependence on the use of FADs to improve operational and cost efficiency has marked the intensification of this fishery. However, improving efficiencies and increasing catches through the use of FADs is coming at a cost to the more vulnerable and pressured bigeye stocks and other vulnerable marine species such as sharks.

A broad conclusion which can be distilled from the assessments published for the three key tuna species in the WCPO is that the domination of the fisheries by purse seining using FADs continues unabated. Accordingly, the levels of effort being directed at these stocks can be considered unsustainable. For bigeye tuna, this is an immediate, identified, problem, while for yellowfin tuna the problem is likely to become obvious in the future, though the warning signs are arguably already present.

## **Charting a Way Forward**

Given the failure of CMM-2008-01 to achieve the mandated 30% reduction in fishing effort on bigeye tuna and the uncertainties attached to the assessments and status of other key stocks, the Scientific Committee should direct its deliberations towards devising a robust series of management measures. As a matter of urgency a reduction in fishing effort needs to be achieved in the bigeye and yellowfin tuna fisheries.

Moreover, a precautionary and ecosystem-based approach to fisheries management requires the rejection of unsustainable fishing practices, the use of selective fishing techniques and area based management such as well-enforced marine reserves to ensure the sustainability of fisheries (see also annex). In addition, stocks should be exploited at levels that ensure that the uncertainties in the assessments are duly taken into account and there is a very high probability of not incurring in overfishing.

To ensure the sustainability of stocks, Greenpeace, therefore, urges the Scientific Committee to make the following recommendations to the Western and Central Pacific Commission:

- 1. Implement an immediate and necessary 50% effort reduction in tuna fishing effort across the entire WCPO fisheries based on the average 2001-2004 levels;*
- 2. Adopt and implement a complete year-round ban on the use of FADs in association with purse seine fishing;*
- 3. Ban all tuna fishing in the four high seas enclaves between the Pacific Island Countries;*
- 4. Fast track fishing capacity reduction and re-allocate the remaining fishing opportunities in a way that is environmentally and socially responsible, in line with the principles outlined in the annex to this briefing;*
- 5. Implement the ecosystem-based approach to the management of tuna resources within well-defined precautionary limits.*

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<sup>14</sup> Ibid. 3.

<sup>15</sup> Ibid. 3.

<sup>16</sup> Ibid. 1.

## **Annex 1: reducing capacity in an environmentally and socially responsible way**

The precautionary and the ecosystem-based approaches to fisheries management must form the basis upon which fishing mortality and capacity/power limits are set. In allocating fishing opportunities an objective approach to meet environmental and social objectives could be based on:

1. A set of environmental and social access criteria and management principles to which countries commit as a prerequisite to establishing shares/quotas (as proposed by GP at the Kobe II workshop in Brisbane in 2010):
  - environmental impacts: level of by-catch; damage to the marine environment, including impact on species composition and the marine food web;
  - history of compliance/flag State performance;
  - amount and quality of data provided;
  - employment provided at sea and on land;
  - quality of the fish produced and delivered to market;
  - energy consumption per unit of fish caught;
  - socio-economic benefits provided, especially to coastal fishing communities
2. A concrete and effective system including a timeline to provide all States participating in the exploitation of tuna resources with the means to fulfil their conservation and management obligations (scientific assessment, MCS, etc), including the development of management tools adapted to small-scale/artisanal fisheries;
3. An implementation (weighting) system for the criteria which would establish equitable shares of tuna resources, on the understanding that that environmental sustainability is a prerequisite to achieving social and economic objectives;
4. An access regime which would give local fishing communities in a given fishing area (distinct from an EEZ) priority access and prevent permanent transfer/ownership and concentration of fishing rights by States and/or companies/operators. Fishing interests from outside the area can apply for access if they can demonstrate that their fishing activities not only fulfil the agreed criteria but also contribute to the local economy;
5. That fishing capacity/power limits be set and the level of abundance of fish stocks and the fishing power/capacity of the fleets be re-estimated regularly to avoid overexploitation and/or IUU fishing.