The Sunken Billions. The Economic Justification for Fisheries Reform

Examples of Economic Studies on Specific Fisheries

Note: All studies estimate “economic rents” which are broadly equivalent to net economic benefits and profits.

**Bangladesh**

The hilsa shad (*Tenualosa ilisha*) fishery is the largest single species fishery in Bangladesh. The study indicates that the potential annual net economic benefits from the fishery are in the order of US$ 260 million compared to little or no net economic benefits under the existing management regime. The fishing effort (measured in standardized boat units) required to make hilsa fishery to attain sustainable maximum economic benefits is about one-third of the current fishing effort.

The Economic Potential of the Bangladesh Artisanal Hilsa Fishery. Study undertaken by Masud Ara Mome (Department of Fisheries, Bangladesh) through the Department of Economics, University of Iceland. Contact: masudara_momi@yahoo.co.uk

**Vietnam**

During 1986-2006, the fisheries in the Gulf of Tonkin developed rapidly. The total engine power increased eleven-fold while total catch increased less than threefold. The result was overexploitation of the near-shore fishery resources and subsequently of the resources throughout the Gulf of Tonkin. The study shows that the potential net economic benefits from improved management are some 56% greater than the current level while the catch could be achieved with approximately 46% of the current level of fishing.


**China**

Landings from the Bohai and Yellow Sea fisheries in 2006 was 4.4 million tons. The study estimates that the loss of potential net economic benefits in the fisheries of the Bohai and Yellow Sea to be in the order of US$1 billion annually, or approximately double the current level of net economic benefits (economic rents).

Fisheries in the Bohai and Yellow Sea. China Case Study for FAO/World Bank Rent Drain Project. Preapred by: Zijiang Yang, Chinese Academy of Fishery Sciences, zijy0505@cafs.ac.cn and Xiaojie Nie, Dalian Fisheries University, victory_sq@yahoo.co.uk

**Peru**

The Peruvian anchoveta fishery is the largest single stock fishery in the world. Partly driven by the El Nino phenomenon, the fishery has undergone boom and bust cycles since the 1960s. Weak governance has also contributed and resulted in excess fleet capacity in the order of 60-70%, while the excess processing capacity of the fish meal processing plants is between 65% and 80%. The economic costs of this excess capacity are estimated to be in the order of US$400 million per year. The Peruvian authorities have initiated reforms to improve the economic health of the fishery and address the social issues involved.

The Peruvian Anchoveta Sector: Costs and Benefits. A study undertaken by Carlos E. Paredes, Instituto del Perú, cpparedes@intelfin.com.pe and Maria Elena Gutierrez, Intelfin, mgtierrez@intelfin.com.pe
Namibia

Namibia’s fisheries are considered to be among the best managed fisheries in the developing world and its fisheries are an important source of employment and foreign exchange. Nevertheless this study shows that even in a comparatively well managed fishery considerable additional economic benefits can be secured. The study shows that the net economic benefits (economic rent) in the Namibian hake fishery in 2002 (N$ 222 million) could potentially quadruple to an estimated N$1200 million if the fish stock was allowed to recover and the fishing fleet was rationalized.

Case study of the Namibian hake fishery. A study by U. Rashid Sumaila and A. Dale Marsden for the FAO/World Bank rent drain project. Fisheries Economics Research Unit, Fisheries Centre, the University of British Columbia, Vancouver, BC, Canada.

Lake Victoria (Uganda, Tanzania and Kenya)

A study on Lake Victoria shows that the economic benefits from good fisheries governance is not restricted to ocean fisheries. To realize the economic benefits the study indicates that the fishing effort should be reduced by some 40%. This could rebuild the Nile Perch stocks from some 430 thousand tons to close to 900 thousand tons. The study shows that the fishery could earn some 2.5 times (US$180 million) the net economic returns that it is currently earning (US$72 million).

Rents and Rents Drain in the Lake Victoria Nile Perch Fishery. A study by Simon Wahome Warui, Ministry of Livestock and Fisheries Development Fisheries Department, Nairobi, Kenya in collaboration with the Department of Economics, University of Iceland. Email: samaki@samnet.com or simonwarui@yahoo.com

Norway, Iceland, Sweden, Denmark, United Kingdom

The loss of economic benefits in fisheries is not restricted to developing countries. Partly because of higher subsidies in developed countries the loss of economic rents can be even higher than in the developing world.

Potential rents and overcapacity in five European fisheries

<table>
<thead>
<tr>
<th>Country</th>
<th>Potential rents as % of landed value</th>
<th>% Reduction in the fleet required to achieve this level of rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>61</td>
<td>65</td>
</tr>
<tr>
<td>Iceland</td>
<td>51</td>
<td>50</td>
</tr>
<tr>
<td>Sweden</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Denmark</td>
<td>22</td>
<td>67</td>
</tr>
<tr>
<td>UK</td>
<td>32</td>
<td>79</td>
</tr>
</tbody>
</table>

Fisher’s behaviour with individual vessel quotas — Over-capacity and potential rent. Five case studies. Marine Policy 32 (2008) 920–927. Study undertaken by: Asche, Frank et. al. 2008. E-mail addresses: Frank.Asche@uis.no and was undertaken independently of the PROFISH Rent Drain project.