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A summary report
produced by WWF and
WDCS based on a study
by Economics for the
Environment Consultancy
(eftec)

Sink or Swim

The Economics of Whaling Today



“The whaling industry, like any other industry, has to obey the market. If there is no profitability, there is no foundation for resuming with the killing of whales.”

**Einar K. Guðfinsson,
former Minister of Fisheries, Iceland, 2007**

BACKGROUND

Whales have been hunted commercially for centuries. Historically, the main demand was for oil made from their blubber, which was used for fuel. In 1946, the International Convention for the Regulation of Whaling (ICRW) was signed, subsequently establishing the International Whaling Commission (IWC) to regulate whaling and conserve whale stocks. The IWC started out essentially as a whalers' club, with only 15 members, all of which were whaling nations. It had no provisions to detect and punish over-hunting and it paid scant attention to the sustainability of whaling. The results were disastrous for whales. Some species, such as blue and right whales, were hunted to near extinction; reduced to less than 5 per cent of their original population abundance. Yet it must be seen in the context of its time, which far pre-dated any environmental or conservation treaties, or awareness of the need to utilise wild species sustainably.

In 1982, a growing conservation movement within the IWC secured a ban on commercial whaling. The 'moratorium' came into effect in 1986. It applied to all whale species in all waters and left just a handful of 'aboriginal' hunts to continue for subsistence purposes. However, Japan continued to hunt whales for commercial purposes under

the guise of scientific whaling, using a loophole in the ICRW. Norway also continued commercial whaling registering an official objection to the moratorium. Iceland has engaged in both scientific and commercial whaling since 2003. Indeed, since 1986 more than 31,000 whales have been killed for commercial purposes.

Whilst anecdotal information has suggested that commercial (including scientific) whaling operations would not be economically viable were it not for significant government subsidies, no comprehensive economic analysis of whaling in these countries currently exists. To help fill this gap, and further inform the global debate about commercial whaling, WWF and WDCS commissioned an independent economist to examine the available information on whaling in Norway and Japan and assess the commercial sustainability of whaling in those countries.

Iceland, which also carries out whaling after objecting to the moratorium, is not included in this analysis because the Icelandic government has commissioned the University of Iceland's Institute of Economic Studies to undertake a macro-economic review of the influence of whaling on the Icelandic economy. WWF and WDCS look forward to the results of this review.



Spotlight on the Whaling Industry

JAPAN

Since 1986 Japan has killed more than 12,000 whales under the scientific whaling loophole (Article VIII of the ICRW). Its two separate hunts have dramatically increased in both scope and scale over that period, to include common minke, Antarctic minke, fin, sperm, Bryde's and sei whales.

The Japanese Government issues research whaling permits to the Institute of Cetacean Research (ICR) which, in turn, contracts a single whaling company, Kyodo Senpaku, to provide the vessels and crew. The ICR releases the products from the hunts twice a year to Kyodo Senpaku to sell at a price fixed by the ICR and Ministry of Fisheries to wholesalers, processors and local authorities.¹ The primary purpose of the sale is to cover the costs of whaling and research, and although recent market conditions are taken into account, in recent years ICR has set prices rather high relative to demand. Wholesalers and retailers, however, are subject to market forces and their prices reflect current market conditions. In recent years margins have been squeezed and there have been



reports of unsold meat and retailers cutting prices to 'get it off their shelves'. Wholesalers and retailers may be willing to support losses in the short run, in order to maintain their rights to purchase and sell whaling by-products in future years, but in the long run these losses are not sustainable.

Furthermore actual sales have been less than planned sales in recent years. For example, in 2006/7 planned sales were US\$ 58.0 million² while actual sales

Since 1986 more than 31,000 whales have been killed for commercial purposes

1. "Policies governing the distribution of by-products from scientific and small-scale coastal whaling in Japan." Aiko Endo, Masahiro Yamao Marine Policy 31 (2007) 169–181

2. Local currency figures are converted throughout using purchasing power parities in the base year, then the US GDP deflator for 2008 values.

were US\$ 46.5 million. In 2007/8 planned sales were US\$64.6 million and actual sales were US\$48.8 million.

Even though ICR sets prices high relative to demand, they are not high enough to cover all costs. High subsidies are required to maintain Japan's "scientific whaling" operations, and these subsidies have increased in recent years as the hunts have expanded. There are three

main sources of subsidy: the National Subsidy for the Nishin Maru research whaling programme (JARPA) in Antarctica, a commissioning fee for the coastal research whaling fleet off Japan, and a recently added budget supplement to cover costs involved in dealing with recent protest activities surrounding the JARPA hunt.

JAPAN KEY FINDINGS

- Sales of whale meat, blubber and other products have made losses for almost all of the last 20 years. Overall sales of whaling by-products have made a loss of around US\$ 223 million since 1988 (see figure A).
- In 2008/09 the whaling industry in Japan needed a subsidy approaching US\$ 12 million in order to break even.⁸
- Overall cumulative subsidies reported since 1988 come to \$164 million.
- Wholesale prices of whale meat per kg in Japan have been falling since 1994, starting at just over US\$ 30/kg in 1994, and declining to US\$ 16.4/kg in 2006.
- The average amount of whale products in stockpile inventories in the main cold-stores (about 40% of total refrigeration capacity) shows an increase from around 1500 tonnes in 1997 to around 4000 tonnes in recent years (since 2005).

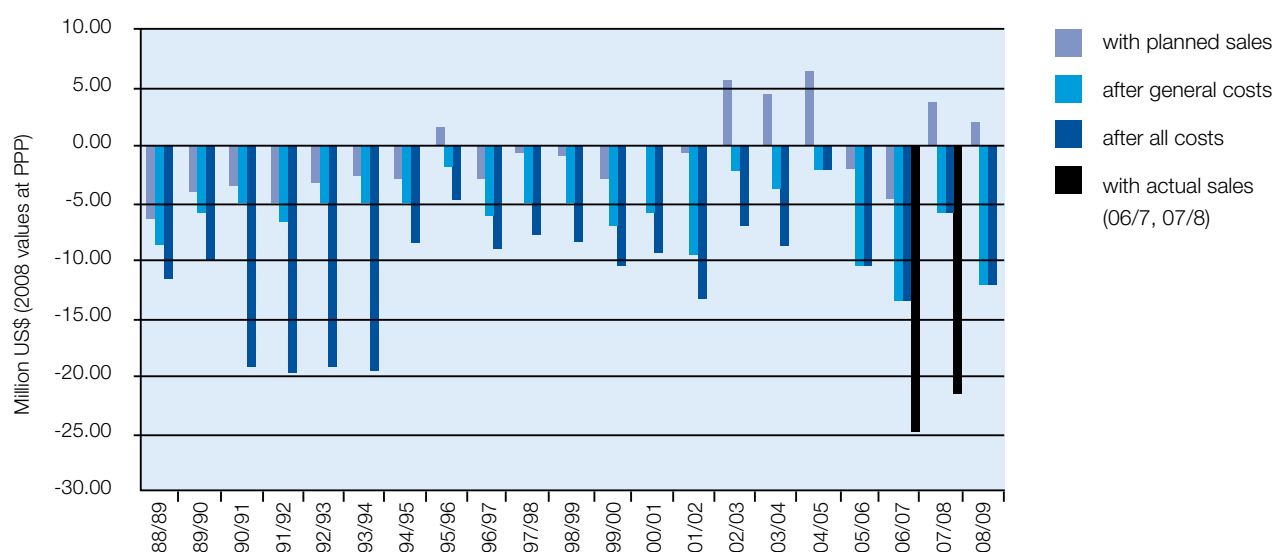
Japan and the global economic recession

- Japan's GDP fell 9.1 per cent from the first quarter in 2008 to the first quarter of 2009.³
- The first quarter 2009 average of the Nikkei 225 index was down 40 per cent compared to the first quarter average of the index in 2008.⁴
- International exports fell from US\$ 70.0 billion in the first quarter of 2008 to US\$ 44.7 billion, a fall of 36.2 per cent;⁵ fisheries exports fell 12.7 per cent between 2008 and 2009.⁶
- Unemployment rose by 1.3 million people between the third quarter of 2008 and the first quarter of 2009.⁷



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Figure A: Japanese research whaling: sales of by-products minus all costs involved in production, 1988/9-2008/9.



3. Quarterly National Accounts (GDP Constant Prices), OECD Statistics, Retrieved June 8, 2009. <http://webnet.oecd.org/wbos/>

4. Historical Prices, NIKKEI 225 (^N225), Yahoo! Finance. Retrieved June 8, 2009. <http://finance.yahoo.com/q/hp?s=^N225>

5. International Trade (MEI), OECD Statistics, Retrieved June 8, 2009. <http://webnet.oecd.org/wbos/>

6. Monthly Information on Imports and Exports Agricultural, Forestry and Fisheries Products, International Department, Ministry of Agriculture, Forestry and Fisheries. Japan. Retrieved June 8, 2009. <http://www.maff.go.jp/toukei/geppo/geppo-e.html>

7. Labour Force Statistics (MEI), OECD Statistics, Retrieved June 8, 2009. <http://webnet.oecd.org/wbos/>



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NORWAY

Prior to the adoption of the commercial whaling moratorium by the IWC and the corresponding bans on international commercial trade in whale products by CITES (see box p.6), Norway killed approximately 2,000 minke whales per year, and exported more than 51% of the products from these kills to Japan. Since Norway's resumption of commercial whaling under its objection in 1994 it has killed 7,333 minke whales through 2008. Its self-assigned whaling quotas have risen in recent years, from 425 in 1996 to 885 in 2009. However, the actual take often falls far short (on average by 30%) of the allocated quota and only once in the past ten years (2001), has the quota actually been met.

The Norwegian government supports its whaling industry through subsidies for fuel (via tax exemptions), transport and storage costs, research and

development of new products from whales such as health supplements, and even US\$ 880,000 for the disposal of hundreds of tonnes of contaminated whale blubber, much of which was actually used in pet food.

It was not possible in the course of this study to derive estimates of the profitability of Norwegian whaling enterprises, as data on the operational costs of Norwegian whaling were not available. However the declining number of whaling vessels, low fixed prices, new regulations to restrict landings and significant reductions in the amount of whale meat bought by registered buyers in recent years all suggest that financial margins are tight.⁹ Furthermore, the fact that only around 70 per cent of whaling quotas have actually been taken in recent years suggests that taking the full quota would not have been profitable.

Norway and the global economic recession

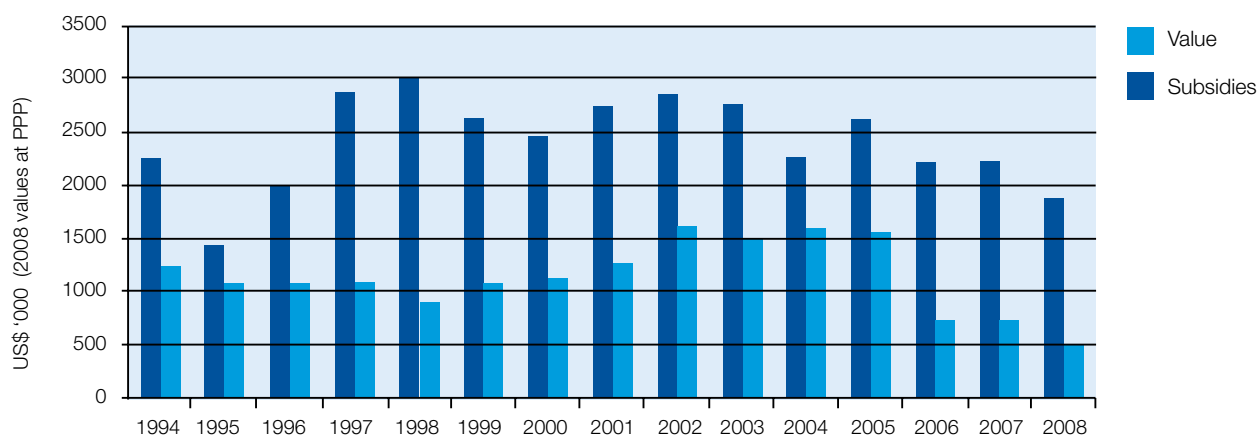
- Norway's GDP fell by 0.3 per cent from the first quarter of 2008 to the first quarter of 2009.
- The 2009 first quarter average for the Oslo OBX Index was down by 43.7 per cent compared to the index in the first quarter of 2008.¹⁰
- International exports fell from US\$ 14.6 billion in the first quarter of 2008 to US\$ 9.6 billion in the first quarter of 2009, a fall of 34.2 per cent.

8. These figures are derived from data in ICR reports, and calculated by assessing the value of planned sales against all identified costs incurred.

9. Norges Rafisklaget Arsberetning 2008.

10. Historical Prices, Oslo OBX Index (XOBX.OL), Yahoo! Finance. Retrieved June 8, 2009. <http://finance.yahoo.com/q/hp?s=XOBX.OL>

Figure B: Norwegian Råfisklaget whale meat landings values and known, measured subsidies, 1994-2008.



Note 1: Norwegian subsidies in the last 3 years were lower due to the elimination of the inspection scheme on whaling boats, which was replaced with an electronic logbook system. The inspection scheme cost US\$ 0.8 million on average over the period in question. Inspection schemes are a critical part of any well managed and efficient whaling operation. The IWC has agreed that the moratorium on

commercial whaling should not be lifted until an inspection and observation scheme is in place to ensure that agreed catch limits are not exceeded.¹¹

Note 2: This figure is not a comprehensive picture of Norwegian subsidies, but an expression of the subsidies totals on which data were available for this study.

NORWAY KEY FINDINGS

- The Government has spent US\$ 20 million since 1993 in direct and indirect assistance to support its whaling industry.
- Since 1992, the Government has spent more than US\$ 4.9 million on public information, public relations and lobbying campaigns in support of its whaling and sealing industries.
- The Government spent an additional US\$ 10.5 million covering the costs of an inspection programme¹³ on whaling operations from 1993 until 2006, when it was scrapped due to the losses it was causing the fleet.
- Government subsidies have been equal to almost half of the gross value of all whale meat landings made through the Råfisklaget, the Norwegian Fishermen's Sales Organisation¹⁴ (see figure B).
- Volumes of whale meat landed have declined from a post-moratorium high of 754 tonnes in 1998 to 558 tonnes in 2008. There has also been a significant reduction in the number of whaling boats; from 35 in 2002 to 24 in 2009.

International trade in whale products



CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) has banned international commercial trade in the products of whale species that are protected from commercial whaling by the IWC. The three nations currently engaged in commercial whaling activities (Japan, Norway

and Iceland) took reservations to several of the CITES Appendix I listings,¹² enabling them to trade in whale meat of certain species with other nations holding the same reservation, or with non-parties to CITES. Although current levels of international trade are small in the context of overall consumption of whaling products, exports from Norway and Iceland to Japan are increasing both in frequency and scale. Norway, Japan and Iceland's multiple challenges to the CITES Appendix I listings, by submitting proposals to transfer certain species from CITES Appendix I to II (1997, 2000, 2002 and 2005) suggest that the resumption of international commercial trade of whale products and the securing of new export markets is considered by the three countries to be important to the economic future of commercial whaling.

11. IWC Secretariat website: www.iwcoffice.org/conservation/rms.htm

12. CITES Appendix I species cannot be traded internationally for primarily commercial purposes, and Appendix II listed species can be traded internationally for commercial purposes, but within strict regulations requiring determinations of sustainability and legality.

13. Inspectors, mostly practising veterinarians, were required on all Norwegian whaling vessels during a hunt to ensure proper methods of whale harvest and reporting were adhered to. The inspection programme was replaced by an electronic logbook system in 2006.

“The whaling industry is in a downward spiral”

Ulf Ellingsen, chairman of Ellingsen Seafood, Norway, 2008

CONCLUSION

The study concludes that direct and indirect subsidies have artificially reduced the cost of commercial whaling in both Norway and Japan. Combined with apparently declining markets for whale meat and the risk of negative impacts such as trade sanctions or tourism boycotts, it appears that commercial whaling is unlikely to produce benefits for either nation's economies or tax-payers in the absence of significant or even increased subsidies.

Whaling in Japan in particular is so heavily dependent on subsidies, it is unlikely to be commercially viable under present conditions. These subsidies form part of the large losses which have been made in the whaling industry for almost all of the last 20 years. The existence of increasing levels of unsold whale meat, coupled with a decline in prices, strongly suggests that demand for whale meat is declining. In Norway a decline in the amount of whale meat landed and a drop in the number of whaling vessels, combined with the consistent failure to take the full available quota, suggest that the domestic market for whale meat in Norway is quite limited and supports the conclusion that whaling in Norway is economically marginal. Taking into account the current restrictions on international commercial trade and the risks of negative impacts, for example on tourism, of conducting an activity widely regarded as unacceptable, the study suggests that a return to full commercial whaling would be very unlikely to produce sufficient benefit for either nation's economies and tax-payers to outweigh the negative repercussions. For example, the study reported that overseas tourists spend over US\$4.1 billion in Norway in 2008, 1,800 times more than the total value of whale meat landings that year.

The study not only highlights the inability of both Norway and Japan to make whaling economically sustainable, let alone profitable, but it leads to a conclusion that their business model – propping up a declining industry with large subsidies – would appear to be a



particularly unwise policy in the current global financial climate. Although whaling was once highly profitable, times have changed, and tastes are different; populations that once ate whale meat in large quantities now have greater access to, and prefer, other meats. Other once-valuable whale products now have cheaper alternatives. This economic situation contrasts strongly with the rapidly growing whale watching industry, which currently generates around US\$1.5 billion each year.¹⁵

Even though this study utilised all publicly available data, additional data inaccessible at this time would be needed to provide a complete economic analysis of the whaling industries in Japan and Norway. As both industries are heavily subsidised using public funds, economic information on these industries should be made publicly available by whaling industries and governments so that tax-

payers can understand the governments' spending decisions. The outcomes of the forementioned Icelandic macro-economic analysis on this subject are eagerly awaited.

WWF and WDCCS hope that the findings of this study will help inform decision making at the IWC. More importantly, is the message to decision makers and tax-payers in Norway, Japan, and other countries considering hunting whales for profit - this study strongly suggests that whaling is not an economically viable industry in the 21st century.

14. 80 per cent of whales are landed and sold via the Rafisklaget, the Norwegian Fishermen's Sales Organisation.

15. Hoyt, E. 2008. 'Whale Watching', Encyclopedia of Marine Mammals, 2nd Edition (Perrin, W.F., B. Wursig and J.G.M. Thewissen, eds.) Academic Press, San Diego, CA, pp1219-1223.



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<http://www.panda.org/iwc>

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