Economic Indicators fish610.080 EAFM Tools: Atlantis

Haley Frater

February 12, 2025

1/2

Calculating economic indicators

The economic indicators: revenue, cost and profit can be calculated from the model. A different method is used for demersal and pelagic species because oil use in demersal fisheries are mainly because of trawling (60

Economic indicators for demersal species

Economic indicators where calculated for five demersal species (cod, haddock, saithe, redfish and Greenland halibut) in the Atlantis model for Icelandic waters.

The price was taken as the average for the year 2012. The price depend on the weight of the demersal fish except for Greenland halibut.

The cost of harvesting per ton is assumed to be a function of the total biomass, i.e. as the biomass increases the cost of harvesting per ton decreases. The change in biomass is based on the biomass in the status quo scenario in the year 2012. The function is in a power of 0.8 which make it not linear, i.e. if the biomass is doubled the cost does not decrease by 50

Copyright 2023, Haley Frater

This work is licensed under the Creative Commons Attribution-ShareAlike License. To view a copy of this license, visit http://creativecommons.org/licenses/by-sa/1.0/ or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA.

