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BOOK OF ABSTRACTS

6TH MEETING
OF YOUNG RESEARCHERS OF UNIVERSITY OF PORTO



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CREDITS

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Life Cycle Assessment of fish and seafood products: an overview

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The importance of the environmental impacts of the fish sector is revealed in the attention that is being paid by recent research works. Several studies are available concerning the impact assessment associated to the fishing sector. Most of these studies made use of the LCA tool to assess the life cycle impact of the seafood and fish products.

LCA tool considers the material and energy resources associated with the capture, processing and transformation, distribution and consumption of fish and seafood. This tool covers a wide range of activities associated with the fish and seafood products. Due to this complete consideration this tool highlights the critical points of fish and seafood products.

A review of 33 studies focusing on several issues related to the fishing sector is made. The selected publications focus on several categories, namely, on the impact of the fishing fleet; on the processing of fish and seafood products; on the environmental impact of meals and diets and finally on the carbon footprint of the fish sector.

Several methods are being used for the impact assessment, namely CML Baseline 2001, Eco-indicator 99, EDIP and for the assessment of the carbon footprint the IPCC 2007 was used. A number of fishing countries are being in focus, namely, Spain, Iceland, Sweden, Denmark, Norway, Canada and United Kingdom. These studies also focus on economic and mass allocation for several functional units.

The main achievements focus on the analysis of the several methods used, the functional unit, the impact categories identified and in the main life cycle stages that contribute to the overall impact. At the end a sum up on the published LCA studies from the fish sector is made. In addition, opportunities to perform further studies in respect to the fish and seafood national consumption are identified.