WhiteFish R4A project

Background, concept, status and results

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About Nofima

Nofima is a private, non-profit research institute owned by the Norwegian government with head office in Tromsø and over 400 employees in six different locations around Norway.

Nofima was founded in 2008 when four former public food research institutes merged:
• Norconserv – canned and preserved foods, Stavanger
• Matforsk – food from agriculture, Ås
• Akvaforsk – aquaculture related research, Sunndalsøra
• Fiskeriforskning – seafood and processing, Tromsø

Main areas of work:
• Aquaculture and fisheries – raw materials
• Food from agriculture and aquaculture – processes and products
• Consumer and market research, which includes:
  • Consumer research, buying behaviour, food and context
  • Innovation and product development
  • Traceability, sustainability, environmental accounting

Turnover in 2011 was 60 Million Euros
Research for SME associations aims at developing technical solutions to problems common to a large number of SMEs in specific industrial sectors or segments of the value chain. Projects can, for example, aim to develop or conform to European norms and standards, and to meet regulatory requirements in areas such as health, safety and environmental protection. Projects must be driven by the SME associations, which are given the opportunity to subcontract research to RTD performers in order to acquire the necessary technological knowledge for their members.
# R4A project WhiteFish

**SME Assoc.**
- LIU, IS
- SF, IS
- Rafisk, NO
- Krav, SE
- FMA, UK

**SMEs**
- Saemark, IS
- Hermes, NO
- Feldt’s, SE
- Atlantic, UK

**RTOs**
- Matis, IS
- Nofima, NO
- SIK, SE
- WUR, NL

**Owners**
- 36 month duration, 01/2012 – 12/2014
- 2.9 MEUR total size, 2 MEUR EU contribution
- Project will deliver a freely available self-assessment tool for sustainability, to be used by individual SMEs, and also European ‘Good Practice’ standard for documenting sustainability in the captured fish industry
Overall objective

The overall WHITEFISH objective is to strengthen the competitiveness of the European cod and haddock industry by documenting and disseminating the relevant and desirable characteristics the products have, in particular in relation to sustainability, environmental impact and transparency.
WhiteFish specific objectives

1. To develop a method called “Batch-based Calculation of Sustainability Impact” (BCSI) which is based on the data already recorded by the industry, which can be used by the industry itself, and which enable specific environmental / sustainability impact calculations on individual product batches.

2. To test and validate the BCSI method in three different cod/haddock supply chains. To train the SME-AGs in those chains to use the method thus ensuring that it is suitable for the intended target group.
WhiteFish specific objectives

3. To produce guidelines for SME-AG and SME participants on how to calculate sustainability impact in the captured fish industry using the BCSI method.

4. To produce recommendations for SME-AGs and SME participants with respect to what data related to sustainability they should record regularly to automate the impact calculation process.

5. To publish the details of the BCSI method as a low level European standard (a CEN Workshop Agreement or CWA) to ensure transparency, impartiality and widespread uptake.
Pilot cases

1. Cod and haddock sold as whole and frozen, originating in Norway with SME participant Hermes

2. Cod and haddock exported as whole fresh and as fresh fillets, originating in Iceland with SME participant Saemark and imported to UK by SME participant Atlantic Fresh

3. Cod and haddock consumer products sold in Sweden by SME participant Feldts Fisk
BCSI development in pilot cases

First run, case 1 and case 2:
Only indicators/data already recorded in the traceability system

Second run, all three cases:
All indicators that seem relevant for calculation of environmental and social sustainability impact in these chains.

Third run, case 2 and case 3:
Only indicators/data with low cost and high benefit used. Data that it would be feasible for the companies themselves to keep recording later on to automate sustainability impact calculation.
Spiral development model
Traceability:

Ability to trace the history, application or location of an entity by means of recorded identifications.

In a product sense, it may relate to

- the origin of materials and parts
- the product processing history
- the distribution and location of the product after delivery
R&D challenges

1) How do we achieve food product traceability?
   • Getting companies to record the relevant data
   • Getting them to send the data in understandable format
   • Getting those who receive the data to read and use it
   • Develop methods and standards for labeling and identification (barcode, RF-ID)
   • Develop methods and standards for information interchange
   • Develop methods and standards for verifying claims
   1996-2010

2) Once we have food product traceability, how do we use it to add value for the companies?
   2008-?????
Drivers for documentation of seafood

Certification (BRC, IFS, ISO 22000, ..)

HACCP

Food safety
Common Food Law

Legislation

Traceability requirements

Trace contamination, Enable recall

Labeling laws

§18, §19

Labour/cost reduction

Avoid repunching

Optimal production

Industrial statistics

Make or buy

Profiling Feedback-loops

Integration of systems

Chain communication

Competitive advantage

Product attributes

Environmental load, food miles, emissions, resource use

Non-IUU fish

Consumer preference

Documentation of sustainability

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How to engage with WhiteFish

- Reports, presentations, posters and scientific papers at project website
- Results from impact calculation using existing data only available now
- Results from full sustainability impact calculation available late 2013
- First outline of final, reduced model for practical use in SMEs available early 2014
- Internal hearing within project early 2014
- Open hearing towards European standard from June 2014, also testing of tool

http://www.whitefishproject.org/
Thank you for your attention

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