



FP 7 EU PROJECT THEME [KBBE.2011.2.5-02] [Reducing post-harvest losses for increased food security — SICA]

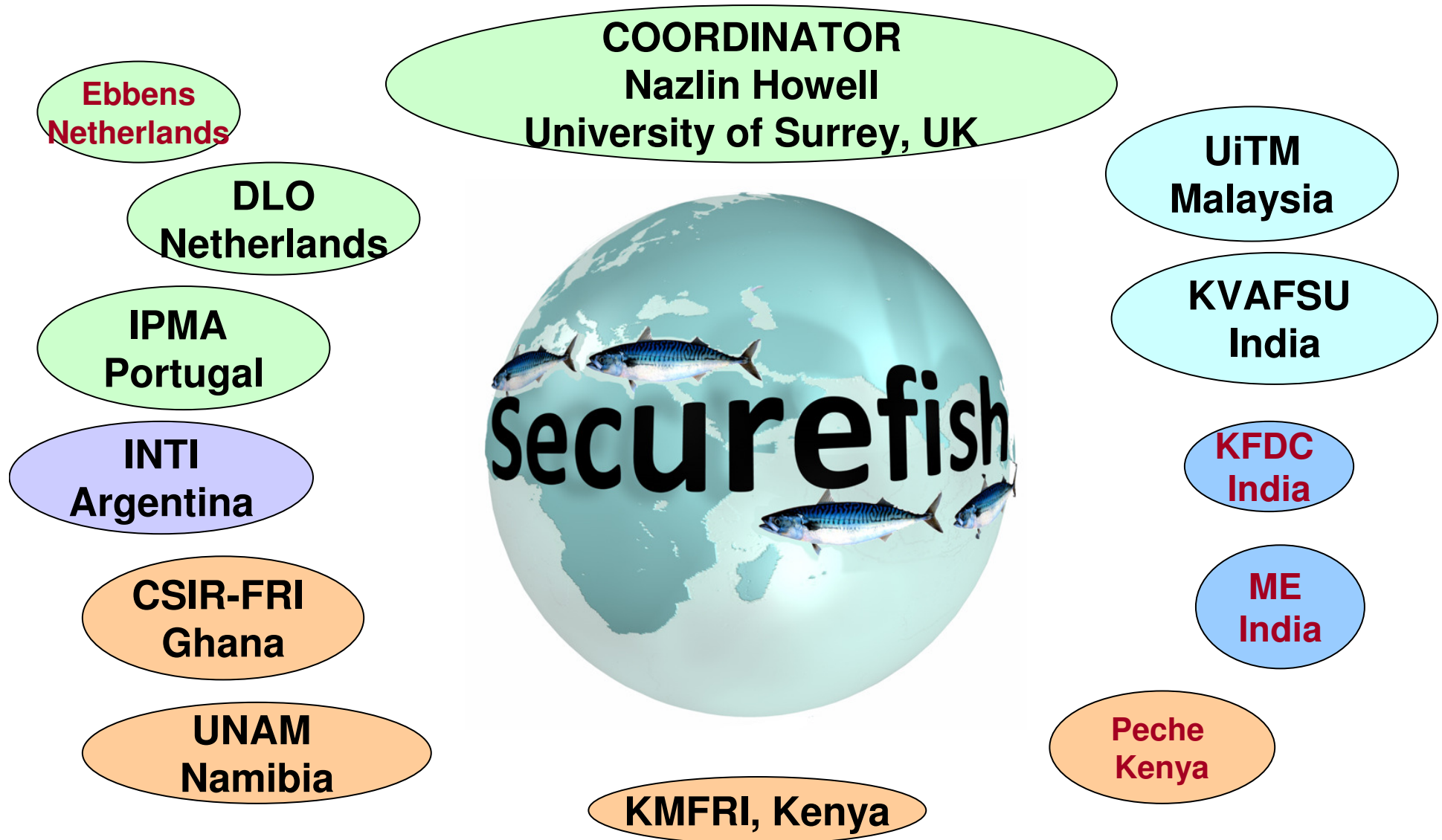
PROJECT TITLE: IMPROVING FOOD SECURITY BY REDUCING POST HARVEST LOSSES IN THE FISHERIES SECTOR

ACRONYM: SECUREFISH

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**LISBON WORKSHOP, PORTUGAL
3 DECEMBER 2014**

EU FP7-KBBE-2011-5 // Number: 289282
IMPROVING FOOD SECURITY BY REDUCING POST HARVEST
LOSSES IN THE FISHERIES SECTOR



GENERAL OBJECTIVES OF SECUREFISH

- To contribute to the **UN Millennium Development Goals and post 2015 MDG to protect human health** by
 - increasing safe and nutritious food supplies
 - strengthening local technological capacity
 - developing tools for assuring and managing quality.
- To **protect the environment** through a better understanding of the environmental impact on and from the fisheries sector and improved technology to manage changes.

FOOD SECURITY: CHALLENGES AND OPTIONS

SECUREFISH provides options within the food chain to improve processing, preservation, food safety and nutrition



Role of fisheries and overall objective

- **A sustainable fisheries sector is essential for food security, hunger mitigation and nutrition.**
- **1 billion people depend on fish for protein.**
- **44 million people are employed in fishing, fish production worth \$150 billion and affects 560 million people globally.**
- **Environmentally friendly – no methane, deforestation.**
- **However, **problems** of fish shortages due to climate change, overfishing, environmental pollution, poor management and post harvest losses.**
- **To counteract these problems, the overall objective of SECUREFISH is to reduce post harvest losses.**

THE SPECIFIC OBJECTIVES OF SECUREFISH

SECUREFISH OBJECTIVE 1

To reduce post harvest losses in the fisheries sector to improve food security.

SECUREFISH will target post harvest losses from

- **by-catch;**
- **by-products and co-products of processing -filleting**
- **inadequate preservation processes that threaten fish supplies and quality.**



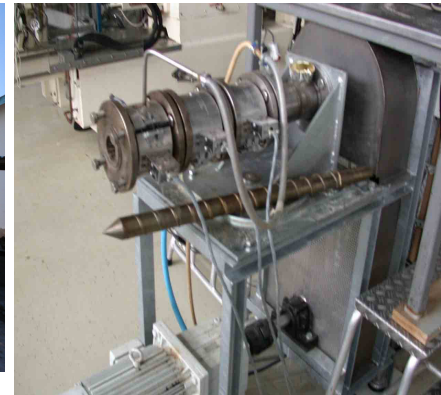
SECUREFISH OBJECTIVE 2

SECUREFISH will develop three innovative processing methods:

i) Solar drying and wind

ii) Solar assisted extrusion

iii) Continuous atmosphere freeze-drying (CAFD)



SECUREFISH OBJECTIVE 3

To generate higher-value products from co-products from fish processing (WP3).

50% of fish lost during processing causing pollution.

Innovatively, SECUREFISH uses

Low-value waste material from fish filleting (heads, viscera, skin, frames)

Protein recovered from waste water and processed using low energy centrifugation and further purification of water by ultrafiltration

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VALUE-ADDED PRODUCTS

- Fish skin collagen and gelatin

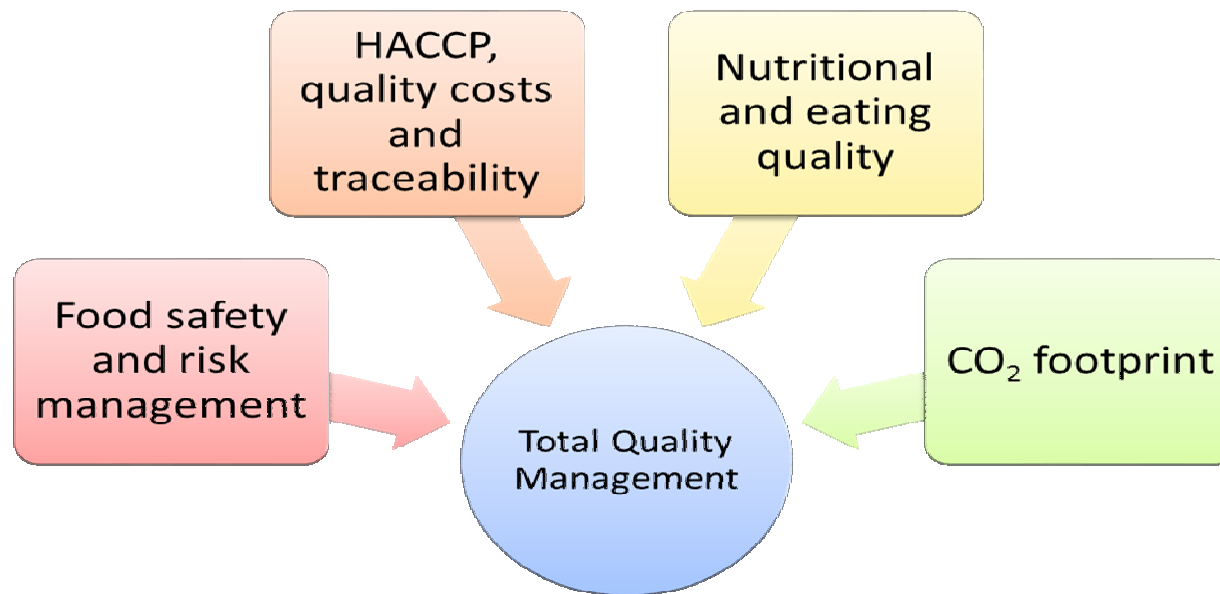
NOVEL FUNCTIONAL FOODS

- Bioactive peptides (Nutraceuticals)
- Hydrolysates for emulsions

SECUREFISH OBJECTIVE 4

To improve the quality and safety of food by devising an effective tool for commodity chain analysis and total food chain management (WP4).

- These results constitute a scientific basis for the adopting new technology for safety, nutrition and environmental benefits.
- This quality control tool is flexible enough for implementation in any fish product chain and be widely acceptable.



SECUREFISH OBJECTIVE 5

To implement improved technology, added-value products and a total quality management tool (WP 2-4) in real-life third-country conditions in Africa, Asia and Latin America (WP5).

SECUREFISH has studied

Three fish product chains from harvest to consumption

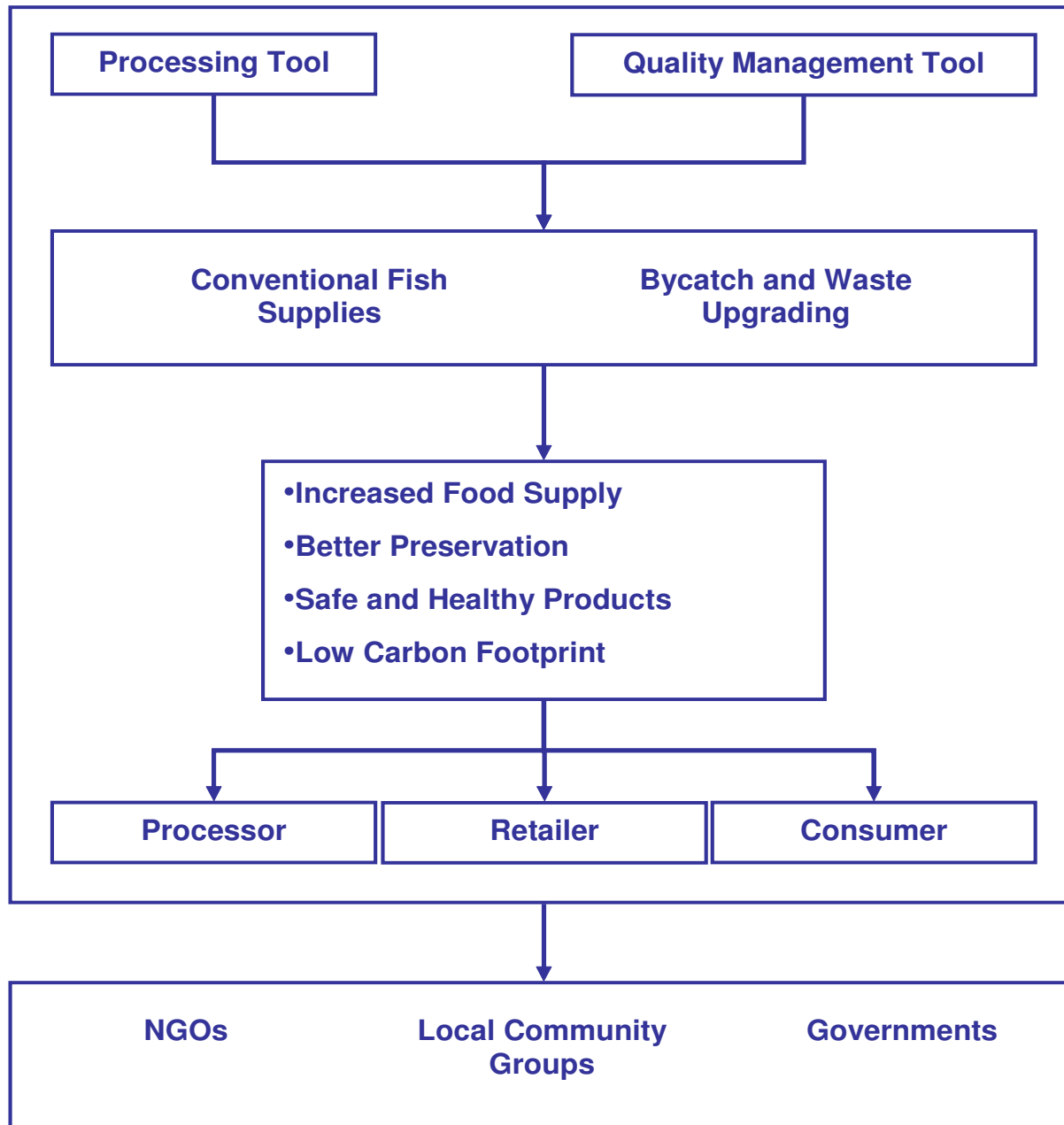
- solar dried**
 - extruded or**
 - CAFD**
-
- Marketable products were monitored for safety and quality using the processing and quality management tools**
 - Sustainable products are being made in partnership with SMEs, using best practices including handling, transport and storage.**

SECUREFISH OBJECTIVE 6

Dissemination, education and training (WP6) to ensure that the outcomes of SECUREFISH are implemented long after the project.

- The technological results, guidelines and other outcomes have been disseminated widely to all countries via publications, conferences, websites (www.securefish.net) to stakeholders.**
- Information is promoted and imparted to consumers, food manufacturers, processors and retailers by organising meetings and workshops.**
- Education and training of researchers, MSc and PhD students and exchanges between partners and training in local communities is actively undertaken by partners.**

SECUREFISH ACHIEVED OBJECTIVES AND MADE A HUGE IMPACT!



Achievements and Impacts

SECUREFISH is making a huge impact in developing countries and Europe through

- (i) Increased competitiveness and innovation particularly for SMEs and local communities**
- (ii) Economic benefit by reducing post harvest losses and increasing fish supplies**
- (iii) Scientific breakthroughs including new healthy food products and new technology that is energy and water efficient thus mitigating climate change**
- (iv) Societal impacts: improving education, employment, nutrition and sustainability of an important food sector and**
- (v) Contributing to food standards and policies through quality management guidelines.**



Acknowledgements

This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration.

Thank you

www.securefish.net

Interactive discussion

Were the results useful to you?

How do you see these results benefiting your organisation or country?

Would you take up the technology?

Would you like us to send you a copy of the total management tool manual?

Are there any suggestions for further work?