

<b>Algemene gegevens</b>	
PPS-nummer	AF-EU-13026
Titel	Securefish
BAPS nummer	BO-32.02-009-001
Topsector en innovatiethema	AF thema 7&9 Product- en Maaktechnologie
Projectleider (onderzoek)	FBR: Paul Bartels and Nina Waldhauer IMARES holds the DLO contact
PPS-coördinator (namens private partij)	-
Contactpersoon overheid	Cor Wever
Status (lopend of afgerond)	afgerond
Type onderzoek (F, T of V)	Toegepast
Werkelijke startdatum	1-1-2012
Werkelijke einddatum	31-01-2014
Korte omschrijving bijdrage DLO aan project	<p>Securefish: improving food and nutritional security by reducing post-harvest losses in the fisheries sector</p> <p>Objective of this project is to create more food and nutritional security in the fish chain for especially non-western countries while decreasing the negative impact on the environment, according to the idea of "2x more with 2x less".</p> <p>In the international fishery sector about half of the caught fish is not eaten by the consumer. Improving the chain from boat to consumer table by using more sustainable processing tools will decrease this waste. Less waste will also improve the environment. Also the use of solar energy and enzymatic processes will improve the sustainability.</p> <p>As a part of the European Union KBBE.2011.2.5-02 project "Securefish" International cooperation worldwide has been established to implement new sustainable processes and healthy products, such as valuable proteins, active peptides, vitamins and minerals.</p> <p>Improvement of drying technologies with high quality products will give a sustainable alternative at ambient temperature to the cold chain with perishable products. Resulting new equipment, processes and management tools will be used by small and medium sized companies (SME's) worldwide, including in The Netherlands. Some of these SME's are already involved.</p>

<b>Highlights</b>
<p>The project results give a base to the design of a sustainable fish chain including processing, creating more added value. The project is directed to non-western countries, but results can also be used for processing fish discards in EU, especially The Netherlands. A VIP project has been started in 2014 for processing discards in The Netherlands because of new regulations in 2015 for fishing.</p> <p>Mild drying forms an objective in the "Topsectoren" strategic plans. A demonstration</p>

apparatus has been constructed in 2013 for Atmospheric Freeze Drying (AFD) by a small Dutch company Ebbebs Engineering bv, partner in Securefish. An updated optimised design has been created in 2014. This dryer type gives a much cheaper answer to quality drying of food products than vacuum freeze drying. For international trade drying forms a well-known, accepted and more-and-more wanted preservation method. Projects are under development to use AFD also for vegetables/herbs/pharmaceuticals and to use the knowledge also to enrich other food chains with more protein (insects/micro-organisms).

#### **Opgeleverde producten in 2014**

Newsletter FBR about Securefish atmospheric freeze dryer:

<http://www.wageningenur.nl/nl/Expertises-Dienstverlening/Onderzoeksinstituten/food-biobased-research/Show/Droger-bestrijdt-verspilling-vis-in-Afrika.htm>

You Tube film about Securefish atmospheric freeze dryer and food security in Africa:

<http://youtu.be/cq9Ft7wBAEq>